'It's in the blood!' Belief, knowledge, and practice in Italian migrant gardens of the Northern Rivers Region

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‘It’s in the blood!’

Belief, knowledge, and practice in
Italian migrant gardens of the
Northern Rivers Region.

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Master of Science

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Declaration

I certify that the work presented in this thesis is, to the best of my knowledge and belief, original, except as acknowledged in the text, and that the material has not been submitted, either in whole or in part, for a degree at this or any other university.

I acknowledge that I have read and understood the University's rules, requirements, procedures and policy relating to my higher degree research award and to my thesis. I certify that I have complied with the rules, requirements, procedures and policy of the University (as they may be from time to time).

Anna Du Chesne

Signature:........................................ Date:..................................
Abstract

This thesis explores the generation, adaptation and transmission of traditional knowledge in the home gardens of Italian migrants in the Northern Rivers Region of NSW. It investigates the scope of this knowledge across socio-ecological memory, resilience and home-making. This research, deploying an ethnoecological framework located within the biocultural diversity polemic, undertakes the examination of what the Italian migrant gardener does (practical, embodied knowledge), what they know (cognised knowledge), and the ethical worldview that situates them in nature. The research demonstrates how this group of Italian migrants negotiates diverse histories and knowledges to shape their identities through the narratives of gardening, and the familial bonds forged through cooking and consumption.
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This research begins and ends with the participant cohort, who willingly and enthusiastically invited me into their homes, showed me their gardens and offered me a meal, a little grappa or coffee. They made the interview process an extremely enjoyable experience. I hope that I can do justice to the richness of their stories in the following work.

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# Table of contents

Declaration .......................................................................................................................... i

Abstract ............................................................................................................................... ii

Acknowledgements ............................................................................................................. iii

Table of contents ................................................................................................................... v

List of figures ......................................................................................................................... xii

List of tables ......................................................................................................................... xiii

Abbreviations ....................................................................................................................... xiv

CHAPTER 1: Introduction ...................................................................................................... 1

  Organisation of thesis ......................................................................................................... 2

Conceptual framework ......................................................................................................... 4

  Ethnosciences: Ethnoecology and ethnobotany ................................................................. 5

  Ethnobotany ...................................................................................................................... 5

  Ethnoecology .................................................................................................................... 6

Epistemology: The problem of knowledge ......................................................................... 9

Defining traditional knowledge as knowledge-practice-belief .............................................. 11

  Cosmos, praxis, and corpus ............................................................................................... 12

Culture, memory and sense of place .................................................................................. 15

Culture, nature and diversity .............................................................................................. 16

Summary ............................................................................................................................... 18

CHAPTER 2: Literature review ............................................................................................. 20
Oral history.................................................................................................................. 53

Ethnobotanical methods ............................................................................................ 54

Free-listing....................................................................................................................... 54

Demographic survey ..................................................................................................... 55

Garden mapping and photographic survey ................................................................. 55

Home garden inventories ............................................................................................. 56

Voucher specimens ......................................................................................................... 57

Data analysis .................................................................................................................. 57

Qualitative analysis: Cultural consensus ....................................................................... 58

Thematic analysis ........................................................................................................... 59

Quantitative analysis: Frequency, ranking & abundance ............................................ 61

Domains of plant knowledge: Contextualisation ......................................................... 61

Where does this knowledge originate? ......................................................................... 63

Domains of plant knowledge: Frequency and salience ............................................... 65

Summary ....................................................................................................................... 66

CHAPTER 4: Where ...................................................................................................... 67

Australian setting: Native gardens and European influence ...................................... 67

CHAPTER 5: Who ......................................................................................................... 75

Italian migration to Australia ....................................................................................... 75

Identity: How Italian are you? ....................................................................................... 78

Summary ....................................................................................................................... 81
Cucina povera and gathering wild plants.............................................................. 145

Gathering wild food plants.................................................................................... 148

Fading memories and changing needs................................................................. 151

Maintenance and adaptation.................................................................................. 152

North and South: Regional identity....................................................................... 155

Roles and rules ........................................................................................................ 162

Who prepares the meals......................................................................................... 163

Summary .................................................................................................................. 165

CHAPTER 8: PRAXIS (How) ................................................................................... 168

Structure: Stakes, vines, sheds and cellars ......................................................... 168

Architecture ............................................................................................................. 173

Style: Backyards, raised beds, terracing and pots ............................................. 177

Plant interactions ..................................................................................................... 178

Animals...................................................................................................................... 178

Traditional garden management: Poison, pesticide, and compost .................. 181

Fertiliser ................................................................................................................... 181

Irrigation and tools................................................................................................ 184

Pests and diseases.................................................................................................. 185

Crop rotation and seasonal produce.................................................................... 190

Planting with the moon.......................................................................................... 193
Seeds: Saving, buying, and sharing ................................................................. 196

Selecting seeds or seedlings................................................................. 197

Smuggling seeds, sharing seeds ........................................................... 199

Summary .................................................................................................. 201

CHAPTER 9: Knowledge acquisition and transmission .......................... 203

It’s in the blood! ...................................................................................... 203

Family ...................................................................................................... 204

Childhood in the home garden ............................................................ 205

Home garden ......................................................................................... 206

Economy of affection: Sharing with others ........................................ 209

The importance of exchange in social relationships ........................... 210

Family tensions played out in the garden .......................................... 211

Summary .................................................................................................. 215

CHAPTER 10: Conclusion ......................................................................... 217

Who ........................................................................................................ 218

Cosmos .................................................................................................... 219

Corpus ...................................................................................................... 220

Food ......................................................................................................... 221

Praxis ......................................................................................................... 223

Garden ...................................................................................................... 224

Significance of research ....................................................................... 225
List of figures

Figure 1: Map of Richmond Tweed Statistical District, NSW .................................................. 45
Figure 2: Ida, aged 83, showing me how to pick pecans .......................................................... 96
Figure 3: *Endivia* from three gardens ..................................................................................... 106
Figure 4: Bananas growing in Peter’s backyard ........................................................................ 107
Figure 5: Ida’s geraniums ........................................................................................................... 117
Figure 6: Tina’s dahlias ............................................................................................................... 117
Figure 7: Sign outside Tina and Joe’s shop ................................................................................. 120
Figure 8: Romeo picking tomatoes (note the sandy soil) ............................................................ 121
Figure 9: Peter weeding his garden ........................................................................................... 121
Figure 10: Romeo and Lucy’s garden ......................................................................................... 122
Figure 11: A selection of the plants grown in Romeo and Lucy’s garden ................................. 123
Figure 12: Rosemary growing in Christina’s backyard ............................................................... 127
Figure 13: Grapevine in Frank and Glenda’s backyard ............................................................... 133
Figure 14: Robert and his family making salami ....................................................................... 136
Figure 15: Dandelion in Ida and Tina’s back yards .................................................................... 157
Figure 16: Robert gathering dandelion ....................................................................................... 157
Figure 17: Cucuzza in a market in Sicily .................................................................................... 159
Figure 18: Prickly pear in Frank’s backyard ................................................................................ 159
Figure 19: Tina’s garden ............................................................................................................ 167
Figure 20: Front garden of a research participant’s home ........................................................... 170
Figure 21: Terraced backyard with pots, statues and border gardens ....................................... 173
Figure 22: Example of grape trellising in Faye’s home garden .................................................. 174
Figure 23: Ida uses polystyrene boxes for rocket, leeks and parsley ......................................... 176
Figure 24: Tina harvesting coriander from her polystyrene boxes......................... 176

Figure 25: Vic’s backyard shed........................................................................ 176

Figure 26: Pumpkins stored in Tina and Joe’s shed........................................ 176

Figure 27: Peter in his cellar........................................................................... 176

Figure 28: The cellar door ................................................................................ 176

Figure 29: Faye’s raised bed garden................................................................. 177

Figure 30: Lucy and her calf ........................................................................... 180

Figure 31: Antonia and her chickens.............................................................. 180

Figure 32: Tina and Joe’s open compost......................................................... 183

Figure 33: Peter and Joan’s closed compost .................................................... 184

Figure 35: Carlo’s seed box ............................................................................ 198

Figure 36: Ida’s seed box ................................................................................. 198

List of tables

Table 1: Frequency and salience of the top 19 plants cited in free-lists............... 102

Table 2: Who gathers? .................................................................................... 150

Table 3: Food plants gathered in NRR and Italy ............................................. 154

Table 4: Lunar phases for sowing vegetable seeds ........................................ 196
Abbreviations

NRR: Northern Rivers Region
NSW: New South Wales
RTSD: Richmond Tweed Statistical District
TK: Traditional Knowledge
TEK: Traditional Ecological Knowledge
TKS: Traditional Knowledge Systems
CHAPTER 1: Introduction

This research investigates how the diverse Italian community in the Northern Rivers region maintains a shared sense of identity and sense of place through their use of traditional ecological knowledge, in their gardens and in the social relationships that they surround themselves with. This research explores the notion that to garden is to dwell—that is through the establishment of a garden migrants are able to (re)establish a sense of cultural identity through the cultivation of the land.

The intention of this thesis is to explore the generation, adaptation, and transmission of traditional knowledge. It investigates the scope of this knowledge across socio-ecological memory, resilience and home-making. The field through which these concepts are explored is the migrant home garden. This research, developing from within an ethnoecology framework, undertakes the examination of what people do (practical, embodied knowledge), what they know (cognised knowledge), and the ethical worldview that situates the gardener in nature.

The research draws on fieldwork conducted in home gardens of Italian migrants in the Northern Rivers Region (NRR) of NSW. These gardens are representations of migrant home making and offer a way into the exploration of knowledge and memory. They are unique sites due to their rural to peri-urban location and the climatic conditions that differ substantially from the regional (Italian) origins of the gardeners. This difference is noteworthy as the practical knowledge drawn upon by the gardeners is a mix of the ‘inheritances’, of traditional household gardening practices and the application of new learnt and observed ecological know-how. As a result, their knowledge is dynamic and is revised over time.
The broad application of this research aims to find its place within the scope of the biocultural diversity polemic. Multiple tensions are revealed at this intersection, including the desire for the continuation of traditional practices; the elders proclaimed ambivalences of the youth, which come in response to their grandchildren's lack of interest in the continuation of tradition; the continuum of convenience through to a perceived lack of time versus the importance of maintaining the traditional values of gardening and family life; and the uncertain climatic conditions resulting in crop failures and the inability to reproduce traditional food species.

The examination of TK is initiated in the gardens. The contents of the garden spill into the kitchen and the lives of the individual and family. Consequently, this research considers the produce of the garden, the food and culinary rituals as significant cultural markers of the Italian-Australian experience. The participants in the research are, like Cinotto’s (2013) Italian-Americans, creative innovators and cultural conservators, who negotiate diverse histories and knowledge. In short, this research investigates how Italian migrants shape their identities through the narratives of food and gardening.

Organisation of thesis

This thesis is organised with the following structure. This first chapter examines the theoretical framework in which this research sits. This examination provides the opportunity to clarify concepts and define terms. Chapter 2 offers a critical review the literature that is significant to the research. This literature review is divided into four sections: impact of migration on traditional knowledge; migration and plant use in Australia; migration and food in Australia; and gardens—growing food, medicine, and identity. The review sets the scene for the research and illuminates the gaps that are evident in the Australian setting.
Chapter 3 outlines the methodology and methods used in the creation of this research project. The chapter opens with a description of the research setting, in the Richmond Tweed Statistical District, in Northern NSW. Next, there is a discussion of the techniques and issues involved in sampling and the selection of research participants. Following this, details regarding ethnographic and ethnobotanical research methods used, including participant observation, interviews and free-listing, are discussed. Finally, detailed information on the methods of data analysis used is presented.

The subsequent chapters of this study are set out thematically, organised around the use of five interrogative pronouns: where, who, why, what, and how. Chapter 4 (Where) situates the research through a brief review of the history of Australian European gardens, from British invasion in 1788 to the present day. Chapter 5 (Who) details the history of Italian migration to Australia and the settlement of Italians in the Northern Rivers region, NSW. A discussion of the complexity of Italian identity and the impact felt following migration concludes this chapter.

The next three chapters examine the fieldwork data. Chapter 6 (Why) addresses the first of the three elements of traditional knowledge defined in the first chapter. This chapter outlines the beliefs and core values of the research participants, which form the basis for the implementation and (re)creation of traditional knowledge. Chapter 7 (What) reports the findings regarding the salience of plants grown and used in the research participants’ homes. The data gathered reveals multiple domains of plant knowledge. The interpretation of these is distinguished by the application of twin values: utilitarian salience and cultural salience. The chapter first explores the data gathered from the free-lists. Then reports on the utilitarian salience of the plant species identified. Following this, the cultural salience of these plants is explored. Chapter 8 (How) describes the continuation of traditional practices implemented in the maintenance and cultivation of the home garden.
Chapter 9 examines the transmission of traditional knowledge and the economy of affection that demonstrate community solidarity and fundamental notions of generosity inherent in *Italianità*. The chapter concludes with the exploration of the tensions evident in the transmission and continuation of traditional knowledge, as experienced by the research participants.

Chapter 10 draws the ideas discussed in this thesis together, reflecting on the position of the Italian migrant as gardener and purveyor of traditional knowledge. The question regarding the use of TK and its impact on *Italianità*, following migration is explored. A general picture is drawn of how the Italian migrant defines, maintains and recreates a sense of *Italianità* in the Richmond Tweed Statistical District, NSW. Based on this, future topics of research in the area of the application of TK to migrant gardens in the Australian setting are proposed.

**Conceptual framework**

As a foundation for analysis, this chapter presents the theoretical framework used to explore the research question. This research lies at the intersection of ethnoecology and ethnobotany. Within the field of ethnobotany, the relationship between people and plants is primary. Home gardens form a central role in this relationship. Within the perspective of ethnoecology, cognitive anthropological theory is utilised. Here the main area of concern is how people conceptualise nature. Finding itself within the broader field of socio-cultural anthropology, the question of how is utilised in the unveiling of the construction and maintenance of culture. This study of the traditional use
of plants and the management of home gardens by the Italian\(^1\) community is set primarily within this methodological field. Traditional knowledge is theorised as a key to decision making in the home garden with links to nutrition, food preparation, health, community and family.

**Ethnosciences: Ethnoecology and ethnobotany**

The research field of the ethnosciences is focused on the delineation of cultural information regarding specific domains such as medicine, plants and food. Within the areas of ethnobotany and ethnoecology, the current theory is moving towards a deeper integration of the social sciences, where the focus of much research has broadened its scope from ‘what’ to ‘how’. That is to how plant knowledge is developed and why particular plants are at the centre of this field of knowledge.

**Ethnobotany**

Ethnobotany may be broadly defined as the study of relationships between people and plants (Balick & Cox, 1996). Within this relationship, essentially one between nature and culture, distinct fields are recognised: (1) cognitive ethnobotany, how humans view and classify plants, and (2) economic botany, how humans utilise plants (Berlin, 1992). This research project, drawing from these two fields, utilises the discipline of ethnobotany to explore plant use and plant-human interrelationships embedded in dynamic ecosystems of natural and social components.

\(^1\) In this research the term “Italian” will be used to describe the participants in this study, inclusive of every generation and all levels of identification on the spectrum of *Italianità*. 
The history of the documentation of plant use spans centuries, with scientists, explorers, writers and philosophers gathering and studying plants in the pursuit of new knowledge. The evolution of ethnobotany as a scientific discipline has taken place alongside the development of empires and colonisation of new economies. The result of which was a dramatic increase of botanical knowledge towards the end of the 1800s (Davis, 1995). The increase in knowledge and information required the development of a robust theoretical framework and research agenda. The absence of a solid theoretical framework (de Albuquerque & Hanazaki, 2009; Heinrich, Edwards, Moerman, & Leonti, 2009; Reyes-García, Martí, McDade, Tanner, & Vadez, 2007) can be attributed to the varied (and chaotic) nature of both people and plants. The interdisciplinary nature of ethnobotany has resulted in the use of different theories borrowed from different disciplines.

A frequent criticism of ethnobotanical research is that it is descriptive with little practical application. The characteristic methodology employed in ethnobotanical research is the comprehensive surveying of a community’s plant use. Plants are often listed by both taxa, such as family or species, and area of use: food, fuel, construction, or medicinal. Other ethnobotanical methods include plot surveys, participant observation, semi-structured interviews, ‘field interviews’ in the gardens, and situations in which plant medicines are prepared, discussed and administered. Increasingly, quantitative ethnobotany, which employs rigorous methodology and statistical analyses to quantify plant value, has been deployed to indicate the need for conservation of certain plant families.

**Ethnoecology**

Ethnoecology has been described as ‘a way of looking’ (Martin, 1994; Nazarea, 1999) at nature via the relationships humans have with the environment. Central to these relationships is the role of cognition (understanding or
knowing) in shaping praxis. The science of ethnoecology concerns itself with human cognition of the elements of the environment (e.g. plants, animals, water, and soil) and the resultant classification of these elements (Nazarea, 1999). Slikkerveer (1999) states that ‘ethnoecology focuses primarily on the ideas, perceptions and classifications of the environmental relationships of members of a particular community or culture’ (p. 170). Utilising Slikkerveer’s definition, this research acknowledges the crossover between the concerns of ethnobotany and the scope of ethnoecological studies. More explicitly, together these disciplines encourage the researcher to explore the role of knowledge in framing behaviour with the result being a deeper understanding of the factors that motivate engagement with nature.

Ethnoecology is closely tied to the academic discourse of knowledge, finding its beginning in response to the post-modern imbalance between scientific and traditional knowledge. Within the discipline, it has been proposed that the distribution of truth needs to be reassessed in a more equitable and ethical manner (Ellen, 2004; Hunn, 1989; Nazarea, 1998). Contingent with the exploration of knowledge, ethnoecology is concerned with the continuation of biocultural diversity.

As a central dimension of ethnoecological analysis includes the management of crops, soils, and pests in agricultural production (small scale agriculture found in the home garden may be included here). Such an approach is useful in this research on the particular understandings that inform Italian migrants’ use of knowledge and techniques in the home garden. Additionally, the ecological and social components of the ethnoecological framework are valuable lenses through which to examine migrants’ responses to human-environment relationships. These responses are fashioned by unique historical and socio-cultural factors within which decisions and choices—regarding the cultivation of a garden—exist.
This research, revealing the complexity of traditional knowledge, deploys the concepts of situated knowledge and cognised models as frameworks drawn from ethnoecological theory. Explicit in Nazarea's (1999) conceptualisation of ethnoecology is the need to situate itself, its subject and its findings in broader schemes of articulation. Rendering the results of research more accurate and relevant, Nazarea (1999) proposes,

*Ethnoecology needs to come to terms with the situated nature of knowledge, the constraining as well as liberating effect of this locatedness, and the importance of history, power, and stake in shaping environmental perception, management and negotiation. I believe that this is potentially where ethnoecology can make the greatest contribution to interdisciplinary research and even to advocacy in such areas as conservation, sustainability, and equity, because no other approach can draw on a jeweller's toolkit that is so promising for illuminating nuances and dimensions that more operational, quantitative, and macro approaches tend to neglect or gloss over. (p. 19)*

Situated knowledge implies knowledge that is embedded in a particular culture. Nazarea (1998) conceives knowledge as being contingent upon culture, whereby the gender and socio-economic position of the participants situate knowing. Time and place for Nazarea refer to the participants’ position in history and culture.

Hunn (1982) expands on these ideas in his use of ‘cognised models’. Cognised models are the mental constructs that are used to construct and conceptualise operational reality. Hunn utilises this model in his understanding of a utilitarian hypothesis of cognition. He proposes that mental constructs of the environment can be influenced by one’s utilitarian relationship with it. That is to argue we only ‘know’ (see) those elements in the environment, which may be perceived as being ‘useful’. It follows then that despite sharing a common
environment different cultural groups, and knowledges, will perceive the environment in distinct ways, in both meaning and relationship.²

**Epistemology: The problem of knowledge**

This research begins with a discussion of knowledge. Any attempt to answer the question ‘What is knowledge?’ must consider the complexity of such an inquiry. McCarthy (1996) defines knowledge as ‘any and every set of ideas and acts accepted by one or another social group or society of people’ (p. 23). Examining this question as it pertains to the discipline of medical anthropology, Hsu (2012) details the trajectory of the ‘problem of knowledge’ stating that the result of this inquiry has led to a ‘social constructivist critique of science, highlighting the importance of practical tacit knowledge’ (p. 52). Barth (2002) explores this further, locating knowledge within ethnographic inquiry. Borrowing from Bertrand Russell, Barth states, ‘what a person knows...is dependent on that person’s own individual experience’ (p. 2). Knowledge then is a collection of accepted ideas and activities that are grounded in individual experience and tacit expression.

The problem of knowledge continues to be a central dilemma for the ethnosciences. Much has been written about the war of legitimacy between scientific knowledge and indigenous knowledge (Agrawal, 1995; Ellen, 2004; Holl, 2005). Science has claimed the a priori mantle of truth with the implication that, in any attempt towards validation, all other forms of knowing...

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² Regarding the use of 'knowledges', I would like to make a note on the limitations of language (and spellcheck). This spelling could be replaced with 'knowledge systems', indicating that everything is a system of thought. However, this fails to capture the idea that in this research, I am dealing with a complex web of knowledges (plural). It is for this reason that the use of the plural (knowledges) remains.
are subject to its framework (Ellen, 2004; Holl, 2005). The philosophical edges are located between an essentialist approach, which views nature through a biological approach containing universalist values, and a constructivist approach in which nature is understood to be socially constructed. This research, finding alignment with the constructivist view, focuses on traditional knowledge and its function in the development and continuation of culture.

Furthermore, there are intrinsic issues in the scientific enquiries that are common to the ethnosciences. Most studies within the ethnosciences are descriptive and enumerative (Etkin, 1993; Etkin & Elisabetsky, 2005). They have as a focus the recording of facts and collection of specimens, including vouchers. These records act as verifiable pieces of 'knowing that'. For example, it is known 'that' tomatoes are used in typical Italian cooking/foodways.

While the identification of what plants are used is part of this study, it also examines 'knowing how', the empirical action dimension, which is an aspect that has received relatively little attention in the ethnoscientific literature. Determining the difference between ‘knowing that’ and ‘knowing how’, Roland (1958) writes,

‘Knowing how’ refers to skills or operations, for example ‘knowing how’ to play chess, ‘knowing how’ to theorize, ‘knowing how’ to speak Russian; and that ‘knowing that’ refers to one’s ‘cognitive repertoire’ that is, to knowledge of actual propositions as, for instance, ‘knowing that’ Sussex is a county in England, ‘knowing that’ Messer is the German word for knife. (p. 380)

Roland goes on to distinguish practice as an essential element of 'knowing how'. That is, to state that one ‘knows how’ one must have spent an element
of time in practice or in practical application to gain the ‘knowing how’. The period spent learning and in practice is prior to ‘knowing how’. Unravelling these interlaced aspects of knowing through the examination of traditional knowledge is a focus of this research.

**Defining traditional knowledge as knowledge-practice-belief**

Traditional knowledge (TK) has been described as indigenous, local, intuitive, performative, holistic, practical, incremental, and egalitarian (Ellen, 2004).³ At its core, traditional knowledge is a way of understanding that is grasped through cognitive, technical and social practices. Intrinsic to such knowledge are daily-embodied relationships, to place and people. As outlined by Ellen (2004), the elements of knowledge are fluid, subject to constant change and processes of adaptation and negotiation.

> [Ways of understanding] are rooted in particular places and sets of experiences; are generated by people living in those places; are mostly orally-transmitted or transmitted through imitation and demonstration; are a consequence of practical engagement in everyday life constantly reinforced by experience and error; are the product of generations of intelligent reasoning. (Ellen, 2004, p. 413)

In recognition of this fluidity, ethnoecology offers a strong foundation for the exploration of traditional knowledge through the space provided to explore and uncover variation in the implementation of knowledge—across cultures and within cultures (Nazarea, 1999).

³ The terms traditional knowledge (TK) and traditional ecological knowledge (TEK) are used interchangeably in this research.
Cosmos, praxis, and corpus

Facts alone are meaningless in the absence of a conceptual framework and, consequently, a theory. (Toledo, 2002, p. 511)

To systematise and ground the growing number of studies on traditional ecological knowledge (TEK), Toledo calls for a conceptual framework. At the centre of this framework is the positioning of ‘concrete processes through which the informant ... produce and reproduce... material conditions’ (Toledo, 2002, p. 513). Through the central position of these processes, Toledo suggests that connections are explored between the technical, the symbolic, and the species grown, as these processes are embedded in the union of nature, production and culture.

Accordingly, TEK may be understood as knowledge-practice-belief complex (Berkes, 1999). This dynamic schema, which centralises place-specific and experiential knowledge, is founded on the definition given by Berkes, Colding, and Folke (2000) where traditional ecological knowledge is,

\[ \text{a cumulative body of knowledge, practice and belief evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship with living beings (including humans) with one another and with their environment. (p. 1252)} \]

This framework provides the epistemological foundation for this research. It is employed as the foundation from which to assess the complex relationship existent between people and plants while providing insight into the often unspoken or tacit beliefs that might play a determining role in the formation of the Italian migrant community members’ plant utilisation. Toledo’s framework sits securely alongside Berkes’ definition of TEK: knowledge (what/ corpus), practice (how/ praxis), and belief (why/ cosmos). The following definitions are drawn from both Toledo (1990, 2002) and Berkes (1993, 1999).
**Corpus** is the system of *knowledge*. It is the epistemological aspect of TEK, which encompasses an understanding of ecological relationships about biota, ecosystems, and places. Corpus contains the whole repertory of cognitive systems.

**Praxis** is the system of *practice* or the practical component of TEK. This refers to the application of accumulated, intergenerational knowledge, using best practices, economic relationships, expertise, skill, and formal or informal rules.

**Cosmos** is the system of *belief*. This includes the moral, ethical and spiritual values that make up a community’s worldview. These values manifest in traditional moral codes, moral judgments about right and wrong, and ritual celebrations associated with plants and animals.

Additionally, Berkes schema implies and integrates four levels of analysis:

- local ecological knowledge regarding animals, plants, soils and landscapes;
- practical knowledge of land and resource management systems;
- codified rules of behaviour implicit in social institutions and relations;
- worldviews, including belief systems, cultural ethics, and values that shape environmental perceptions.

Viewed from within these frameworks, knowledge is highly contextualised. The acquisition of knowledge takes place via direct engagement and physical interaction with both the local environment (Nabhan, 1998; Ohmagari & Berkes, 1997) and through the participants’ grasp of their culture’s cosmological foundation (Rappaport, 1999). Through locating TEK within a culturally specified space (home gardens), this research provides a holistic
representation of the reciprocity between community, knowledge, practice, belief, place and landscape. Utilising this definition of traditional knowledge enables a move away from the view that culture is a body of knowledge that is passed on to others as a complete set, to one in which culture is understood as a process of knowing or practice.

A note must be made concerning the nature of migrant traditional knowledge. It might be assumed that migrants from European nations are without traditional knowledge, the traditional being associated with indigenous or developing nations only. However, this is clearly erroneous. Molnár, Bartha, and Babai (2008) define European rural TEK as,

knowledge based upon decades of personal experience with the surrounding landscape, acquired through hands-on management of the landscape, containing centuries-old, communally stored experiences which is mostly independent of western science and connected to rituals of social life. (p. 18)

The question that arises, ‘What happens to TEK when migration takes place?’ is a central theme of this research project. Appreciating the dynamic nature of TEK, and supported by the knowledge-practice-belief framework, insight is found regarding the impact of migration. Viewing TEK as ‘situated knowledge’, we are lead away from an understanding of knowledge and culture as static, bound in time and space, towards a view of knowledge and culture that is both fluid and dynamic. Thus opening the way for an examination of the effects of migration on the maintenance and transference of TEK.
Culture, memory and sense of place

Culture and knowledge are bound. Geertz (1973) argues culture is ‘a historically transmitted pattern of meanings embodied in symbols; a system of inherited conception expressed in symbolic form by means of which men (sic.) communicate, perpetuate and develop their knowledge and attitudes towards life’ (p. 89). Knowledge is expressed through practices and grounded in beliefs. Techniques utilised in the cultivation of plants, the structure of gardens and the skills involved in the creation of cuisine are all manifestations of knowledge. The beliefs that encircle these practices are borne out of both memory and lived experience.

It follows then that memory preserves knowledge. It serves as a way of storing lived and learnt experience through time. Memory may be of knowing, belief, practice or skill. Lackey (2005) highlights the complexity of memory stating: ‘Memory not only has the capacity to preserve justified beliefs and knowledge; but also the capacity to generate these epistemic features in its own right’ (p. 656). This research acknowledges the centrality of memory through the documentation of traditional knowledge, practice and belief. Such recordings provide a form of memory banking, with the goal of recording the narratives of cultural history. Memory banking, as understood by Nazarea (1998), is ‘meant to capture “memories”, in a way that...complements the preservation and documentation of landraces, wild relatives and other crop cultivars’ (p. xii). Memory is personal and, as a result, situates the scientific data by providing multifocal contexts from which to view the whole plant.

Memory is also a sensual experience. The function of the senses in the memories of lived experience is explored in the work of Seremetakis (1996) and Holtzman (2006). Memory is viewed as having a spatial dimension; one that mixes emotional, psychological, and bodily experiences as a combined experience of the individual that forms a mental picture of the past. Utilising
a memory from her childhood in Italy—her first taste of a peach. Seremetakis proposes that these first encounters, as a child, act as the seeds sown in a fertile memory that are used by the mind and body as a framework, connecting subsequent tastes of a peach with her first experience of one.

Memories become embodied emotional experiences, triggered by contact with specific sounds, tastes, and scents. The socio-cultural relationship forged between memory and the senses is a powerful tool implemented in the transmission of knowledge across generations.

**Culture, nature and diversity**

At the centre of anthropological theory is the nature – culture dualism, the perpetuation of which is instrumental in generating other, often quite polarised, binary forms—such as indigenous/non-indigenous (Haila, 1999, 2000). Posey (1999) acknowledges the ‘inextricable link’ that underscores this dichotomy in the framing of the concept biocultural diversity. This union of biological and cultural diversity recognises the mutually self-supporting functionality of these concepts. An essential aspect of cultural diversity is the acknowledgement of a multitude of identities, which provides space for continued dialogue and the recognition of general commonalities. Culture may be viewed as ‘the embodiment of values, institutions and patterns of

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4 ‘The disappearance of Aphrodite’s peach is a double absence; it reveals the extent to which the senses are entangled with history, memory, forgetfulness, narrative and silence. That first peach of my childhood carried with it allusions to distant epochs where the relationship between food and the erotic was perhaps more explicit, named, and sacrilised; a relation that although fragmented and gone underground, was carried over through the centuries by the rodhákino, a fruit bearing myth in its form.’ (Seremetakis, 1996, p. 2)
behaviour. It is a composite whole representing a people’s historical experience, aspirations and worldview’ (Posey, 1999, p. xi).

The reciprocity of cultural and biological diversity is located in the field of knowledge. The practices, uses, and beliefs of culture inform biological diversity that in turn nourishes culture. The interactions between people and the environment, the biocultural relationship, are reflected in traditional knowledge systems (TKS). The past twenty years has seen a dramatic increase in awareness of the need for the conservation of such TKS. There has been an international call to recognise the risk of increased homogenisation of cultural and biological diversity, as seen in the development of the Convention on Biological Diversity in 1992 and the decision by the United Nations to declare 2011-2020 the Decade on Biodiversity.

Conservation of cultural diversity is intimately linked to the transference of knowledge and belief, with a direct impact on practice. Maffi (1999) points to language as a means of knowledge transference. Younger generations must endeavour to retain the knowledge, practices and beliefs previously preserved in local languages, as they carry cultural and social expertise before the TK disappears. Awareness of the necessity to transfer the content of languages or valuable local knowledge, practices and belief is what matters most. Language holds the stories, beliefs and memories of the past.

The recognition of worldviews, including values of respect, sharing, reciprocity, humility, and other belief systems, is an important aspect of culture (Berkes et al., 2000). These beliefs, values, and related social practices are manifestations of intangible cultural heritage. UNESCO (2005) defines intangible cultural heritage as a catalogue of non-physical characteristics, practices, representations, expressions, existing alongside the knowledge and skills that identify and define a group or civilization. Communities and individuals forge links to the notions of stewardship and biodiversity.
conservation through acknowledgement of cultural heritage and identity (Chapin, 2009). Responsiveness to environmental change and the generational transmission of knowledge tether TK to intangible cultural heritage (Berkes, 1999; UNESCO, 2005). Together intangible cultural heritage and traditional knowledge provide a platform for the expression and development of identity and cultural continuity as they contribute to cultural diversity.

Summary

In formulating a theoretical framework to manage this inquiry, I have drawn upon insights gained through anthropological and ethnoecological research (Gómez-Baggethun, Reyes-García, Olsson, & Montes, 2012; Hunn, 1989; Nazarea, 1999; Veteto, 2010). This research demonstrates the epistemological legitimacy and value of biocultural diversity inherent in traditional ecological knowledge. Consequently, ethnoecology and TEK are deployed as foundations for exploring the research field of Italian migrant home gardens.

At the centre of this research is the unravelling of the concept of knowledge in its many forms. The conceptual tools utilised to facilitate this process have been outlined in this chapter. Knowledge, practice, belief, culture, memory, and place form the foundation. These key areas of analysis, form links between the relationships individuals construct and maintain with nature and with each other. Additionally, these are also used to assess the continuation, maintenance, and adaptation of TEK across time and place, taking into account the effects of generational change and the impact of migration.

The thesis is constructed around the matrix of belief, knowledge, and practice. Each chapter is dedicated to one aspect of TEK. In reorganising their lexical formation from knowledge, practice, belief, I have prioritised belief in the construction of knowledge and practice. Following an in-depth review of the
literature on Italian migrants and analysis of the interview data, it became clear to me that the research participants’ foundation for knowledge and practice is their shared beliefs and worldview. As a result, the exploration of *cosmos*, or belief, is the obvious place to start. In reality, this reorganisation is little more than a structural device as the three aspects of TEK are intricately interdependent and interlinked.
CHAPTER 2: Literature review

This research, addressing the concepts discussed in the previous chapter, draws from three distinct areas of ethnoecological research:

- origins of ethnobotany and the impact of migration on TK;
- gardens and the construction of identity, culture and memory;
- contemporary use of traditional plants by migrants.

These form the basis for the literature review explored in the following chapter.

Origins of ethnobotany and the impact of migration on TK

The history of ethnobotany is closely tied to European colonialism (Balick & Cox, 1996; Voeks & Rashford, 2013). The expansionist worldview of European imperialism encouraged the exploration of the exotic, which resulted in the discovery and introduction of new plant (and animal) species to the Western palate. These included highly sought after spices (black pepper, nutmeg, and cinnamon); food crops (rice, potato, maize, and banana); flavourings (coffee, vanilla) and medicinal plants (cinchona). The introduction of these plants radically changed the way the Western world eats and how the Western world farms.

Modern ethnobotany emerged in the 19th century with scientists becoming explorers, their research taking place in distant, romanticised lands, where the ‘other’ was often viewed as primitive. The traditional knowledge of the ‘natives’ was perceived as static, ancient wisdom that was in need of protection as it was vulnerable to change (Voeks & Rashford, 2013).
Historically, ethnobotanical research has drawn heavily from a ‘discourse of loss’ (Nazarea, 2014), in which the loss of traditional knowledge and preservation of biological diversity in remote parts of the world are the driving concerns. It was only in the 1990s that ethnobotanists began publishing research on traditional knowledge and biodiversity present in the urban arena (Pieroni & Vandebroek, 2009). There was a widening of focus, encouraging the consideration of both the exotic ‘over there’ and the exotic ‘right here’ in the backyards of the developed Western world.

The central focus of the emerging urban ethnobotanical research is traditional knowledge of diaspora. These studies, located within the urban environment, expose migrant traditional knowledge as a relationship between old and new (Balick et al., 2000). In their discussion on the relevance of local ethnobotanical knowledge to diverse communities, Reyes-García et al. (2007) state that ‘ethnobotanical knowledge emerges from the interaction of a given culture or society with a local biophysical environment’ (p. 191). The implication is that ethnobotanical knowledge can be encountered in all communities – indigenous or non-indigenous, local or migrant.

In the urban setting the dynamic of ecological knowing, while recognisable as ‘commonplace’ (McClatchey, 2011) becomes ambiguous, contingent on multiple factors, both internal and external. These include the restraints of authenticity and truth, which are brought into the spotlight alongside issues of resilience and adaptation. Moving into the backyard, the field of research now invites the inclusion of urban (multi)cultures and traditional knowledges into the ethnobotanical discourse.

Pieroni and Vandebroek (2009) and Voeks and Rashford (2013) have documented the development of urban ethnobotanical studies and framed a new set of guiding questions concerning agency, contingency, continuity, and innovation of migrant TK. These include the following:
- What factors impact maintenance of TK?
- Do migrants transport culturally significant species?
- Does substitution of species occur?
- Is there experimentation taking place, allowing trialling, substituting and adopting new species?

These questions form the basis of this investigation into the maintenance and adaptation of traditional knowledge in the Italian migrant community in the Northern Rivers Region, NSW.

**Resilience and traditional knowledge**

The term resilience is used when investigating the ability of traditional knowledge to bounce back following migration. The implication is that change occurs, and difficulties are faced. It is undeniable that the ways in which people organise themselves collectively, particularly regarding home and work, has been in response to a shift from rural agricultural to urban industrial environments. These changes are reflected in the relationships people maintain with the plants they use.

One factor regularly cited as impacting on the resilience of TK is a perceived lack of access to known plant species. Voeks and Rashford (2013) question this assumption made in the literature regarding the migrant experience of arriving into a completely alien ecosystem. On the contrary, Pfeiffer & Voeks (2008) argue, the exchange of plant species across continents has allowed ‘European settlers and successive immigrants from Africa and Asia to recreate a semblance of their native ethnoflora’ (p. 6). Adopted species, acts of bringing the new into the old, are viewed as both culturally enriching and culturally facilitating, allowing traditional knowledge to be extended through the addition of new foods, medicines and narratives.
The presence of introduced garden plants and weeds play a fundamental role in the preservation of traditional uses of medicinal plant species by urban migrant communities, such as Cypriot and Sikhs in London (Sandhu & Heinrich, 2005; Yoeney, Prieto, Lardos, & Heinrich, 2010); Dominican curanderos in New York City (Balick et al., 2000; Vandebroek & Balick, 2012); and Mexican migrants to USA (Waldstein, 2006).

While the migrants’ new environments might not be completely unfamiliar, access to traditional medicinal and food plant species is often cited as one of the main factors that influence the resilience of TK. Lack of access to specific plant species may be the result of importation embargos or illegal status of the species (Ellena, Quave, & Pieroni, 2012; Muniz de Medeiros et al., 2012). Two recent studies echo these findings in their description of the coping strategies used by two Latin American migrant communities in London (Ceuterick, Vandebroek, & Pieroni, 2011; Ceuterick, Vandebroek, Torry, & Pieroni, 2008). These studies highlight key concerns in the study of migrant ethnobotany, including the preservation of culturally salient species, cultural diversity viewed as a positive influence, the adaptation and substitution of different types of plant species (dried, processed or food), and the use of social networks for the exchange of plant material. These strategies are viewed as key factors in TK resilience.

A further consideration concerning the resilience of TK is the notion of cultural keystone species. Ceuterick et al. (2011) consider the resilience of a plant species through the framework of salience. Cultural keystone species are recognised in migrant homes according to their continued use, despite difficulties growing or accessing these species including legal status or prohibitive climactic conditions (Ceuterick et al., 2011; Garibaldi & Turner, 2004). The identification of a cultural keystone species is based on its prominence within the traditional knowledge system. In migrant
communities, this may be assessed through the determination of the following (adapted from Garibaldi & Turner, 2004):

- intensity, type, and multiplicity of use;
- role in narratives, ceremonies, or symbolism;
- persistence and memory of use in relationship to cultural change;
- the level of unique position in the culture, e.g., it is difficult to replace with other available native species.

Questions regarding the agency of the individual migrant are considered in the assessment of resilience: Who are the key players in the maintenance of plant knowledge? How is knowledge transferred? Answering these and other questions determines the extent to which plants remain a central part of cultural dialogue.

**Gardens: Growing food, medicine, and identity**

The connections between people and place are created, sustained and challenged through numerous cultural forms, including many food-related practices. Many studies demonstrate that food is a potent symbol of cultural identity, forming one of the foundations that link the individual to a larger common group (Beoku-Betts, 1995; Counihan & Van Esterik, 2008; Leitch, 2003; Miele & Murdoch, 2002; Wilk, 1999). This research project aims to illustrate that plants grown as food, or medicine, share a similar strength of relationship to culture. Central to this relationship is the traditional knowledge, practices and beliefs that inform the choice of plant-based food and medicines maintained within the household. Obtaining these (plant-based food and medicines) is made simple through access to a home garden.

Gardens are a ubiquitous part of social and cultural space. As such, gardens are considered sites where identities are constructed. The aesthetic and
practical decisions regarding how plants are chosen, planted and cared for, are linked to the knowledge, practices and beliefs of the gardener (Taylor, 2008). The view of gardens as a primary juncture between nature and culture is reinforced by Franklin's (2002) statement that gardens are 'one of the most staggering nature–culture interfaces' (p. 5).

Gardens are spaces of multi-sensorial interaction where the cultivation of plants (as well as people) takes place (Bhatti & Church, 2004; Bhatti, Church, Claremont, & Stenner, 2009). The act of gardening is a dynamic process. It is a series of negotiated dialogues between human and plant that demands fluidity of attitudes and practices (Head & Muir, 2006; Power, 2005). It is this notion, fluidity, and adaptation, which require reflection in the case of the migrant gardener.

A brief overview of gardens in academic literature positions this research. Drawing from Kimber (2004), gardens are viewed through three distinct (theoretical) lenses:

- Garden plants as biological entities, where the garden produces material goods, food, fibre, and medicine;
- Garden plants as culture traits, here the garden is a social space bringing people together ‘in preparing foods for the local fiesta, by providing secluded trysting places for lovers’ (p. 269);
- Garden plants as design elements, where gardens are considered as locations of aesthetics, pleasure, and communication with the sublime.

Kimber (2004) suggests that culturally specific relationships with nature may be contemplated through an examination of garden aesthetics, infrastructure, horticulture, and food preparation. While this is a rich conceptualisation of gardens, the idea that gardens are functioning ecological entities is downplayed. Such a consideration is important if there is to be a full account
of gardens as biocultural spaces. The interdisciplinary nature of ethnobotany encourages the inclusion of this viewpoint.

Gardens are known by different names: ‘tropical gardens’ (WinklerPrins, 2002); ‘house-lot gardens’ (Christie, 2004); ‘backyard gardens’ (Head, Muir, & Hampel, 2004); ‘household gardens’ (Larder, Lyons, & Woolcock, 2012); ‘kitchen gardens’ (Ninez, 1987); and ‘dooryard gardens’ (Kimber, 1973). A significant portion of the literature surveyed examines gardens in developing nations with a focus on tropical gardens. There is less literature available that examines home gardens in Western industrialised countries particularly from the perspective of plants as cultural markers.5

Four recurring themes emerge from the literature on home gardens. These themes provide the structure for the following section of the literature review:

- Gardens as sites of biodiversity, reservoirs of endangered species and sites of experimentation;
- Gardens as sites of food and medicinal plant security;
- Gardens as economic and social spaces;
- Gardens as sites of cultural transmission.

**Gardens as sites of biodiversity**

The most commonly mentioned feature of home garden systems is their high-cultivated plant diversity (Bellows, Alcaraz, & Vivar, 2010; Corlett, Dean, & Grivetti, 2003; Galluzzi, Eyzaguirre, & Negri, 2010; Huai & Hamilton, 2009; 5 Historical reflection on the garden as aspect of building a new national identity in the Australian colonies is explored in the writing of Holmes, K., Martin, S. K., & Mirmohamadi, K. (2008). Reading the garden: The settlement of Australia. Carlton, Australia: Melbourne University Publishing.)
Zaldivar, Rocha, Castro, & Barrantes, 2002). Viewing diversity as linked to culture, Lamont, Eshbaugh, and Greenberg (1999) highlight the influence of cultural background on species composition in home gardens. Concluding that cultural background has a direct effect, Agelet, Bonet, and Vallés (2000) establish food preference as a further impact on cultivated diversity. The authors acknowledge that the preparation of traditional food requires the planting of specific herbs in the home garden. Home garden composition, according to Trinh et al. (2003), is responsive to a complex interplay of elements such as taste preferences of household members, local food culture and customs, and market forces. Home gardens are sites of experimentation, for the introduction and testing of local, exotic and new species and varieties of cultivated plants. Furthermore, home gardens are reservoirs of crop germplasm and endangered species (Buchmann, 2009; Galluzzi et al., 2010; Trinh et al., 2003). The restoration of heirloom varieties is one example of biodiversity conservation occurring in urban home gardens (Galluzzi & Negri, 2010).

**Gardens as sites of food and medicinal plant security**

Home gardens are used for the production of food plants, fruits, and medicinals. This use is hardly surprising as cultivation is the essence of gardening. Of additional significance are the statistics regarding gardening households’ home-grown supply of vegetables, fruits, and herbs. A study of Vietnamese home gardens (Trinh et al. 2003) estimates home-grown supply to be more than 50%. Such figures confirm the views of investigators arguing that home gardens, in developing nations, are an essential element of food security (Ali, 2005; Bellows et al., 2010; Buchmann, 2009).

While this research is primarily concerned with tropical home gardens (in Bangladesh, Mexico, and Cuba), new research is emerging from the urban home garden in developed nations. In the urban setting, gardens were once
viewed primarily as private places serving as decorative spaces with aesthetics guiding ornamentals as primary plant choice (Taylor, 2008). This perspective has broadened with the advent of the urban agriculture movement. Backyard gardens are now seen as central to community food security and the provision of a more nutritious diet (Larder et al., 2012; Taylor & Lovell, 2014).

The cultivation of food and medicinal plants are the main reasons people tend home gardens all over the world (Agelet et al., 2000; Finerman & Sackett, 2003; Lamont et al., 1999; Trinh et al., 2003; Vogl & Vogl-Lukasser, 2003; Zaldivar et al., 2002). We are reminded by Etkin (1994) and Etkin and Ross (1991) that while medicinal plants may be of great importance to science, they often have multiple roles within the community as food, cosmetics, and decoration. The significance of this is that a plant may be both food and medicine. Andean home gardens have been found to be comprehensively dedicated to the cultivation of medicinal plants, where the contents of the gardens are viewed as historical narratives of each family's health status (Finerman & Sackett, 2003). Additionally, medicinal plants are grown in the areas close to the house, so that they are easily accessible when needed (Frei, Sticher, & Heinrich, 2000).

The practice of providing food, through gardening, is linked to the preservation of health. Perceptions of the medicinal properties of plant food are explored in a recent study of home gardens in South India (Torri & Hollenberg, 2012). The line between food and medicine is blurred in the relationship these gardeners have with their produce. Following a knowledge-use continuum, women who had greater knowledge of the medicinal properties of the food plants grown are more likely to use them in healing. Bellows et al. (2010) echo these findings in their investigation of the knowledge and use of traditional plant remedies by Oaxacan women migrants. The lack of distinction between food and medicinal plants is further explored
in Thomas and Damme’s (2010) survey of Bolivian Amazon home gardens where 79% of introduced food plants are also used medicinally.

Considering the factors that provoke the use of a particular plant as food and medicine, chemosensory perception can be considered. The bitter taste, in particular, has been identified as key to the selection of a plant as a medicine (Brett & Heinrich, 1998). This choice is evident in the perceived medicinal benefit of the consumption of Mediterranean wild greens (Nebel & Heinrich, 2009; Pieroni, Nebel, Quave, Münz, & Heinrich, 2002; Stepp & Moerman, 2001).

**Gardens as economic and social spaces**

Home gardens play both an economic and social role. Often community relationships are formed based on the sharing of food from the garden (Corlett et al., 2003; Morgan, Rocha, & Poynting, 2005). Within this space, social networks are critical for the exchange of plant material as well as for learning and cultural transmission (Buchmann, 2009; Ceuterick et al., 2011; WinklerPrins, 2002). Also, urban home gardens can be an important means of self-expression and source of pride or satisfaction drawn from self-sufficiency (Mazumdar & Mazumdar, 2012; Morgan et al., 2005). Gardens are multifunctional spaces, at once places of recreation and play, while providing space for reflection and prayer (Mazumdar & Mazumdar, 2012; Thomasson, 1994; Winterbotttom, 2007).

Gardens are economically valuable as they provide for the household by reducing expenditure and sometimes yielding produce for sale (Christie, 2004; Corlett et al., 2003). Access to urban markets or commercial food outlets has an impact on the cultivation of the home garden, as the availability of produce determines what is grown (Ali, 2005). However, the economic value of a plant may be overridden by cultural importance. Vietnamese home
gardens provide families with culturally important food plants which Trinh et al. (2003) argue, act as an important impetus for the preservation of species of low commercial value. This trend was also found in the home gardens of Northern Spain (Reyes-García et al., 2012).

**Gardens as sites of cultural transmission**

The cultivation of home gardens is a demonstration of resilience in the face of globalisation and urbanisation (Buchmann, 2009; Calvet-Mir, Gómez-Baggethun, & Reyes-García, 2012; Galluzzi et al., 2010). The home garden is where cultural knowledge is passed from one generation to the next. This transmission of culture is played out in the gardens across the globe (Eyssartier, Ladio, & Lozada, 2008; Minkoff-Zern, 2012; Philander, Makunga, & Platten, 2011). For the migrant gardener, these ‘reconstructed landscapes’ provide a sense of purpose, easing isolation and feelings of uselessness experienced upon arrival at their new homes (Corlett et al., 2003). The act of creating a garden, according to Armstrong (1997), offers a way for the migrant to begin to make ‘the unfamiliar place become familiar’ (p. 61).

A garden is an ideal place from which to explore the effects of migration on the transmission of TEK. Head et al. (2004) and Kimber (2004) locate this complex dialogue within the garden and in doing so demonstrate how plants function as records of culture traits. Garden design and the plants grown, assist migrants in the maintenance of their cultural identities and adaptation to life in new places (Corlett et al., 2003; Winterbotttom, 2007).

Studies by Graham and Connell (2006) and Morgan et al. (2005) explore the migrant home garden in Australia as a place where cultural identities evolve, and are expressed through plant choice and preference. Traditional herbs, vegetables, fruits and flowers in the domestic gardens of Vietnamese, Greek and Italian migrants’ strengthen the ties to specific cultural identities,
memories and practices (Graham & Connell, 2006). The tension between gardening for recreation versus productivity is explored in both studies. Morgan et al. (2005) reveal that the gardens of migrants are primarily spaces of creative labour where food, medicine and animal products are grown and prepared.

In much of the literature, gardens are viewed as a gendered space (Bellows et al., 2010; Howard, 2006; Reyes-García et al., 2010; Voeks, 2007; Vogl & Vogl-Lukasser, 2003; Vogl-Lukasser, Vogl, Gütler, & Heckler, 2010). Finerman and Sackett (2003) emphasise the importance of home gardens as markers of ‘women’s status, ethnic identity, cultural heritage, and biodiversity’ (p. 479). Gardens affirm the identity of women in the community as both providers of food and health care and predict their social status and relationships with other women.

Gardens can be read as narratives of the migrant experience of relocation, efforts to retain the ‘old ways’, and as acts of place-making that reveal the country of origin. Lozada, Ladio, and Weigandt (2006) write about learning ‘as doing’ as a method of traditional botanical knowledge transmission between generations. This act takes place in the home garden as well as in the surrounding forests where the gathering of wild plant species occurs. Gardening is perceived as an integral determinant of social, cultural, economic and physical well-being in migrant communities (Somerset, Harris, Wenham, & Rowe, 2010).

**Contemporary use of traditional plants by migrants**

**Migration, food and plant use in Australia**

Australia has a rich network of multicultural communities. Despite this, migrants arriving in Australia, for the most part, encounter the residue of the
past social policy of assimilation, and as such are encouraged towards integration and acculturation. The conservative socio-political stance that migrants should ‘blend in’ remains predominant. The social invisibility of the assimilated migrant is perceived through their absence in areas of academic discourse. This is apparent in the lack of explicit ethnobotanical research regarding the use of traditional plants by migrants to Australia. Notwithstanding the research that examines the traditional ecological knowledges of indigenous Australians, it is fair to suggest that the ethnosciences, as a discipline, is underrepresented in Australian research output.

As stated above, the study of a community’s traditional knowledge following migration is an emerging field of research globally. In Australia, the scope of published research on migrant plant use is primarily concerned with the obstacle traditional medicinal plant use represents in the efficacious implementation Western medical care. Drawing from the many cultural and ethnic groups in Australia, this broad body of research focuses on the nutritional status and diet-related chronic illness; mental health and psychological distress; care in the pre and post-partum setting; and access to care through the utilisation of health promotion and prevention programs. Universal access to the government-funded health care (Medicare) may be a player in the dominance of the Western medical system, despite the wealth of traditional medicinal knowledge these groups bring with them. The plausibility of medical pluralism is much questioned in ethnobotanical and ethnopharmacological research (Bellows et al., 2010). In response to the claim that TK is weakened through exposure to biomedicine, Giovannini, Reyes-García, Waldstein, and Heinrich (2011) argue the maintenance of knowledge of traditional medicines and the use of pharmaceuticals can co-exist.

Seeking to answer the questions posed by Pieroni and Vandebroek (2009) and Voeks and Rashford (2013) (see pp. 20-21 above), a systematic review of the
literature took place. Research that focused on medical diagnosis or public health programs was excluded. Additionally, studies that examined restaurant culture and the impact on tourism were also excluded. The search was broadened to include ‘food’ and ‘cuisine’ as there were very few studies that had plant use as the central concern of the research. The few notable exceptions include research on the use of medicinal plants, food as a means of identity construction and the use of food as medicine.

**Use of traditional medicinal plants**

Research on medicinal plants within the context of migration is an emergent field of interest that, at present, is under-represented in the Australian setting. The three studies discussed below are of interest due to their use of an emic perspective and the inclusion of ethnobotanical elements such as identification of plant species. Additionally, these studies address the impact of migration on the maintenance and adaptation of TK.

Han (2000) and Han and Ballis (2007) studied the use of hanbang herbal medicine by Korean migrants in Melbourne. Han's (2000) area of focus is the health seeking strategies of Korean men and their efforts to stay healthy in Australia. His research shows that both the ‘freely’ available government-funded health care (Medicare) and Korean traditional herbal medicine are utilised. The choices of these men are influenced by socio-economic need, as health, in the eyes of these men, is equated with ‘capacity to work’.

A key finding of Han and Ballis (2007) is the utilisation of both traditional and western medical models of healthcare by the Korean migrant community. Han (2000) argues that TK remains resilient despite the effects of migration and free health care due to the greater acceptance of complementary and alternative medicine (CAM) within both the Korean domestic and Australian societies.
Pirker, Haselmair, Kuhn, Schunko, and Vogl (2012) compare the TK of Tyrolean migrants across three continents: Australia, Peru, Brazil, and Austria. Their research investigates the change in environment and social condition as possible factors that impact resilience of traditional plant knowledge. Adaptation practices, such as substitution and replacement, occur across the field study sites. The species that were most resilient are identified as culturally salient species. Significant species were identified across the four research sites: garlic (*Allium sativum*), wormwood (*Artemisia absinthium*), cabbage (*Brassica oleracea*), chamomile (*Matricaria spp*), and ribwort (*Plantago spp*). Interestingly, Pirker et al. (2012) state that the shift away from the use of traditional medicinal plants towards biomedical health care is a factor in the loss of TK.

In response to US studies that indicate Hmong refugees have the lowest rates of use of Western medicine within the South East Asian migrant community, Wang (2005) studied the use of health care by the Hmong community in Sydney. The study found that while a modified form of traditional medicine is used, Western medicine is the first choice of the Sydney Hmong community. Factors related to choice include minimal costs, access to long term health education, and intra-community acceptance of the Western medical model. Despite the general preference for Western medical care, the influence of the elderly Hmong, recognised as the holders of traditional knowledge, ensures the continued use of traditional medicines and shamanic practices. The belief in shamans is widespread across the community, as there remains a strong connection to Hmong spiritual lore. However, belief in the powers of the shaman was not reflected in the use of traditional medicines, as many in the community indicated that it was ‘easier to change their behaviour than their beliefs.’
Recognition of migrant food as ‘medicine’.

The medical properties of food are the focus of much of the Australian research on migrant foodways. This is investigated through nutritional health outcomes and perceived benefits of the study group following their traditional diet. Two communities are widely represented in the literature: migrants from the Mediterranean region—Italian, Greeks, Macedonian and Maltese; and the most recent group of migrants from Sub-Saharan Africa.

The popularity of the Mediterranean diet is reflected in the Australian research output. Su, Rowley, Itsiopoulos, and O’Dea (2002) isolate the nutritional benefits of wild green vegetables including sow thistle, amaranth, purslane, chicory, endive, and dandelion, due to their concentrations of lutein and \( \beta \)-carotene. Their research proposes the high intake of these vegetables equates with good health for Greek migrants in Melbourne. Kouris-Blazos (2002) research outlines the ‘morbidity-mortality paradox’ as experienced in Melbourne’s Greek migrant community. Here the maintenance of traditional cuisine—leafy vegetables, onions, garlic, tomatoes, capsicum, lemon juice, herbs, legumes, and fish—is recognised as protective in spite of the community’s high prevalence of cardiovascular disease risk factors. Wahlqvist, Kouris-Blazos, Trichopoulos, and Polychronopoulos (1991) further reveal the wisdom of the Greek cuisine and way of life. In their analysis, emic beliefs concerning the health benefits of food plants and herbs are privileged and followed by brief statements of evidence. These provide unique examples of the examination of food as medicine or folk food-medicines.

The impact of migration on food choices is explored in the Sub-Sahara African migrant community (Burns, 2004; Pereira, Larder, & Somerset, 2010; Wilson, Renzaho, McCabe, & Swinburn, 2010). The authors’ findings suggest a lack of access to and substitution of traditional foods, along with low socio-economic
status, result in poor health outcomes and an increased risk of obesity. Seeking the middle ground, the authors recommend that migrant communities retain the best of traditional food while adapting healthy foods from the host country.

**Memory and identity: Migration and food in Australia**

In the examination of literature from the social sciences, it was evident that within the Australian academy, migration, food and memory have been widely researched. There is a strong body of work in which food is used as a device to explore the impact of migration and the (re)creation of home/space. However, anthropological examinations of migrant traditional knowledge, of plant practices and beliefs, remain a minor note in the literature. The few exceptions are discussed below.

Traditional plant knowledge, beliefs and practices are examined in Kwiatkowski’s (2004) analysis of the Polish tradition of foraging for mushrooms in the forests of the Southern Highlands of NSW. This traditional practice is perceived as a way of recreating the ‘homelandscape.’ The focus here is on the ethnic place and space with a view of nature as a space that triggers memory through sound and smell. The nostalgic view that is recreated in the experience of the familiar, including visions of tall pines and the smell of pine resin, transports the Polish migrant back to the forests of their youth. Mushroom-picking is viewed as a key component of in Polish TK. The pickers must know both the species of mushroom and how to prepare it to avoid poisoning. Kwiatkowski notes that early Polish foragers encountered an alien environment with unfamiliar mushroom species. It was only when the plantations of radiata pine were discovered that three familiar species of edible mushroom—the saffron milk cap or pine mushroom (*Lactarius deliciosus*), and two types of slippery jacks (*Suillus luteus* and *S. granulatus*)—become available.
Cardona (2003, 2004) explores the preparation and eating of food by Sydney’s Cuban migrants as a method of retaining cultural identity. Preparing Cuban food in the home is identified as the primary strategy used to maintain cultural identity. Difficulties regarding access to traditional plant food are linked to the physical and cultural distances between Australia and Cuba. Traditional food staples include taro, cassava, boiled or fried bananas, avocado, sapote, sweet mango, coconut, guava, and pawpaw. Early migrants would have found few of these traditional foods in Australian supermarkets. The arrival of other migrant groups brought an increase of multicultural and ethnic food stores. The Cuban migrants celebrated these arrivals, as they were able to find substitute food items and continue their traditional cuisine. The type of food, its preparation, sharing, and consumption, are all key components of the Cuban worldview. The sensual experience of food and the evocation of memory through taste, smell, and touch, is viewed as a positive nostalgia—a desire of ‘being there here’ (Hage as cited in Cardona, 2004, p. 151). The Cuban experience, of shopping in and borrowing from different migrant stores, enhanced the resilience of their traditional knowledge. Turner, Davidson-Hunt, and O’Flaherty (2003) name this the ‘cultural edge effect’. The edges are the ethnic borders that overlap to provide an opportunity for diversity and exchange.

Reviewing the relationship between homemaking and migration in the Australian setting is central to the work of social theorist Ghassan Hage. In ‘On other belongings’, Hage (2013) recalls a recent visit to his mother’s house in country NSW. He is untouched by the visit, finding nothing inside the house that moves him. ‘Then,’ he writes,

I went to the backyard, and there something quite spectacular happened to me. The backyard was unkempt. There was no lawn, but a chaotic entanglement of high and low vegetation. Nonetheless, there, amid the chaos, I could discern three
Standing in the backyard, Hage recalls his mother sitting on his back steps in his house in Beirut telling a story of planting these trees. He remarks that the sight of these trees did not make him nostalgic for Lebanon, rather he felt ‘more Australian’. Making sense of this, he writes that it was the ‘memory of my grandfather planting the trees. It was the practice that symbolised a specific relation to the land that made me feel rooted. And the trees stood there as a metonymic extension of that practice and that relation’ (p. 148). Hage distinguishes the roots he found in Australia as ‘not roots that keep you grounded, [but] roots that stay with you as you move’ (p. 149). These are the roots that form personal histories that cross generations, place and culture(s).

**Transmission of knowledge through narrative**

Following Sutton’s (2001) declaration that ‘food narratives become crucial elements in the construction of personal history’ (p. 51), this section of the review examines the ways in which food is linked to the assertion of identity. The constructs of memory and transmission of ‘know-how’ through performance are the central themes of the studies reviewed.

The theme of food as historical narrative, within the context of Italian migration to Australia, is explored in the research of Bosworth (1991) and James (2004). Bosworth’s study centres on a group of women from Puglia and Sicily. His research highlighted their memories when food was an instrument of division between ‘us’ and ‘them’ and the subsequent adaptation of recipes to a new social and economic reality. Remarking on the impact of women’s involvement in the paid workforce, Bosworth points to the transition of both the women preparing the food and the impossibility of the lengthy preparation time for traditional recipes.
James (2004) utilises *aroma* as a trigger for memory. The performance of Italian-Australian culture is viewed through the consideration of two qualities central to Italian food—taste and flavour. Describing the ‘reliable beauty of aroma’ (p. 23), James explores the ways in which food and the sharing of food reinforce culture through embodied practice. Accenting the preparation of ‘staple foods’ such as tomato sauce, good wine, and fresh bread, James argues that these are the ‘instantiations of cultural truths and conduits of vast commensal cultural repertoires’ (p. 35). Thus engaging in their preparation engenders a lived experience of culture.

Kalivas (2009) explores the food traditions of the Greek migrant community in Melbourne, Victoria. Following migration, she argues the process of learning to cook is akin to learning one’s cultural heritage. Lessons are learnt through the combination of ‘practical knowledge’ absorbed through observation, an apprenticeship in which ‘practice makes perfect’ and where the mastering of cooking techniques draws upon desired images and tastes from the past.

The literature reviewed reveals that personal experience and instruction, gained by helping mothers and grandmothers prepare meals, as an informal apprenticeship, is central to migrants’ knowledge acquisition. Performance, through participation and preparation of food, is viewed as an essential aspect of knowing. These performances to some extent are reliant on memory and as such they are malleable. It is the *aroma*, the sensual essence of cultural identity, which is transmitted perhaps more so than the ‘facts’.

However, food is prepared not simply to project cultural identity or to make food edible; it is also prepared to strengthen social relationships and affirm a sense of belonging. Much of the development of this belonging takes place when experiencing a situation for the first time—either in childhood or migration. Writing on an Italian migrant family’s reinvention of ‘home’ in
suburban Australia, Duruz (2001) draws attention to the position of the one who remembers. Taken at face value, the sensual memories of food preparation and consumption are those primarily of a child:

_This is a gaze that effects a return to the world of childhood and to the pleasures of exploring its minute textures — to its’ tasting, touching, smelling, hearing. However, it is also a return to the primary position of the one who eats, who is nurtured, who is fed._ (Duruz, 2001, p. 26)

This point is made to highlight the half-truth of memory. Duruz concludes that the ‘cook's-eye-view’ might tell a different story, of adversity, long hours of hard work and time spent away from the family.

Risson (2014) expands upon these ideas in her examination of the Greek migrant café in Australian rural towns. The childhood memories of the Greek migrants are infused with the sweetness of nostalgia. Risson argues that for Greek–Australians, theirs was a two-fold nostalgia, expressed as longing for the homeland and childhood. Food then becomes an essential fragment of an ‘imagined childhood-homeland world’ (p. 13). It offers the sole means towards the satisfaction of such longings, which exist in a perpetual state of hungering for more.

**Summary**

The interdisciplinary nature of ethnobotany provides a fertile space from which to view the world. The complexities of the migrant experience can be understood through this multidimensional lens. The above review clearly demonstrates the social, political, economic and cultural imperatives in the conservation of biological and cultural diversities.

The number of studies on migrant ethnobotany in the urban setting is growing worldwide. It is of interest that this is not reflected in Australian research.
While migrant foodways in Australia has been researched widely, there are very few studies that investigate the broader plant relationships maintained by migrant groups. This research aims to address this gap by acknowledging the importance of biocultural diversity. There is much scope to investigate the ways in which people (migrant groups in Australia) adapt to changing needs and changing environments, through the examination of the continuation and adaptation of TEK.

The garden then is an ideal location in which to investigate such issues. As land(scape), the garden connects us to emotions, identity, feelings of nationalism, and memory. Meaning is found through conversations about place, dwelling, and discourse on the region, territory, and nation. Viewed in this way the garden is generative—enabling, producing and transforming lives, lived experience and cultural identity. The garden as a dynamic and sensual environment provides a way into the traditional ecological knowledge and practices utilised by migrants in their efforts to establish continuity between their adopted home and older homeland.
CHAPTER 3: Overview of methodology

The methodology that best suits my research is both interpretive and critical. Interpretive as my primary aim is to explore and explain in order to understand while a critical approach has the result of change, action, or empowerment. A qualitative methodology enables the comprehension of the phenomenon under study; synthesis of representation, including links and relationships; theoretical analysis of how and why these relationships appear the way they do; and re-contextualisation of the new knowledge (Morse, 1994).

This research moves beyond a simple inventory of botanical taxa through the implementation of Etkin’s (1988, 1993) ethnographic field methodology. A distinguishing feature of ethnographic field methods in ethnobotanical research is the rigorous collection of anthropological data such as the criteria for selection of plant, therapeutic objectives and cultural importance (Balick & Cox, 1996; Etkin, 1993). In this research project, this occurs alongside botanical inventory through the implementation of techniques such as free-listing, mapping and photographic recording (Christie, 2004; Quinlan, 2005). Following this approach, and informed by Heinrich et al. (2009), qualitative and quantitative methods are applied.

One of the strengths of this study is the use of various techniques to support a systematic exploration of the research question. In order to achieve this goal a combination of methods was used, with an across method triangulation. Denzin (2009, p. 297) defines triangulation as ‘the combination of methodologies in the study of the same phenomenon’. By

See page 52 for elaboration of the free-list method
collecting different datasets, the research is able to examine the phenomena from multiple viewpoints providing greater accuracy.

The domain of inquiry is cognitive, as the research explains how ‘people know and conceptualize plants’ (Stepp, 2005, p. 211). Within this cognitive anthropological framework, the analysis focuses on both the plants themselves, and on the organisation given to these in the minds of the individuals studied. Utilising a systematic arrangement, these conceptualisations are organised into broad domains. Additionally, the taxonomic classification of plants grown (i.e. the free-listing) is qualified via the meaning ascribed to each plant.

The research was conducted in two phases. Phase One employed the interpretive methodology of ethnographic fieldwork and participant observation. The interpretive approach, as detailed by Denzin (1989), includes the implementation of ‘thick description’. This concept, introduced by Geertz (1973), views (local) knowledge as a system of symbols which has a defining structure. At its centre, the use of ‘thick description’ impels the researcher to recognise the broader social meaning in the common everyday event.

Phase Two involved a critical analysis of the ethnographic data gathered and the use of quantitative methods recognised in the field of ethnobotany—specifically free-listing. Cultural significance is subsequently correlated to knowledge, use, belief, and expertise or status as a gardener. The degree of TK resilience or adaptation via substitution and replacement is then assessed through investigation of the use of species, highlighting the implications for global issues such as biocultural diversity and maintenance of TK.

A qualitative research approach was chosen, as the aim of the research is an in-depth understanding of people’s practical experiences and knowledge. This took priority over a generalisation of findings. As description and narration of lived experience lie at the heart of qualitative
methodologies (Patton, 2002), this research is built upon a collection of memories and stories gathered in the homes and gardens of the Italian migrants interviewed.

Setting: Richmond Tweed Statistical District

Lismore and surrounding areas

The Richmond Tweed Statistic District (RTSD) encompasses the Lismore Shire with the Tweed Shire in the north, Byron Shire and Ballina Shire in the east, the Richmond Valley Council area in the south and southeast, and the Kyogle Council area in the northwest (see Figure 1). Lismore city lies on the Wilson’s River, in the Northern Rivers Region of New South Wales (28.8167° S, 153.2833° E), 730 kilometres north of the state capital, Sydney. The climate in the region is subtropical, with mild to warm temperatures throughout the year and substantial rainfall. The area covered by the RTSD is a rural and urban area. More than 60% of the population live in the urban areas. Rural land is dedicated mainly to dairy farming, and the cultivation of macadamia nut, coffee, tea tree, tropical fruit, and sugar.

The RTSD was chosen as the research setting due to the long history of Italian settlement in the region. The Italian community in the RTSD, though small, numbers as one of the largest settlements of Italian migrants in regional NSW. The 2011 census states that in the RTSD, 995 residents speak Italian as their primary language in the home. This is equal to 1.4% of the total Italian speakers in NSW. Equally significant is the number of people, residing in RTSD, who identify as having Italian

7 Language spoken at home (LGA) ITALIAN (ABS, 2014, 2015)
Ballina: 145; Byron: 155; Kyogle: 19; Lismore: 363; Richmond Valley: 65; Tweed: 248.
RTSD: 995 = 1.2% of total Italian speakers in NSW: 83,173
RTSD: 995 = 0.3% of total Italian speakers in Australia: 299,834
ancestry. A total of 6117 individuals acknowledge their direct link to Italy as either first, second or third generation Italians.8

Data was gathered both formally and informally through conversations and interviews with members of the Italian community in their gardens and homes. The gardens which were visited and mapped are in the Richmond Valley hinterland: Alstonville, Coraki, Goonellabah, Leycester, and Lismore (see Figure 1). Other gardens in the Richmond Valley coastal area—Burringbar, Mullumbimby, Ocean Shores, and Yelgun—were also visited.

![Figure 1: Map of Richmond Tweed Statistical District, NSW with sites of garden interviews indicated.](image)

8 Ancestry by Birthplace of Parents (LGA) ITALY (ABS, 2014, 2015)
RTSD total: 6117
Ballina: 997; Byron: 726; Kyogle: 122; Lismore: 1904; Richmond Valley: 525; Tweed: 18
Sampling

Key informants were chosen from within the Italian migrant community. In the early stages of the research, these informants were essential in the collaborative identification of pertinent areas of research. Bernard (2011) distinguishes key informants from specialist informants. The key informant assists in the identification of the specialist informants. These specialist informants were selected based on their knowledge of the traditional use of plants and interest in gardening. Snowball sampling\(^9\) was used for the further selection of informants. The relatively small size of the Italo-Australian community in the RTSD warrants such non-probability sampling.

Initially, I had planned to ask the specialist informants to identify three members of the community with knowledge of TK. These were then to be asked to identify informants until the list is exhausted (Bernard, 2011). Structured and neatly organised selection may take place in some research; however, I experienced the recruitment process to be a far more circumscribed set of moves. I was always heard with polite interest, which was usually followed by gentle refusal to take part due to lack of time or a feeling of lack of expertise. I began the research with the impression that my ideas about the Italian community had been misinformed. No one was an expert, and everyone was too busy.

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\(^9\) Snowball sampling, also called chain referral sampling, is a non-probability sampling technique in which existing participants are asked to suggest other informants from their social network. This allows access to ‘hidden populations’; potential informants not otherwise easily accessible to the researcher. (Bernard, 2011)
In an attempt to overcome this block, I repositioned my sampling stance to one of purposive sampling\(^\text{10}\). As Bernard (2011) states, in purposive sampling, ‘you decide the purpose you want informants to serve, and you go out to find some’ (p. 190). I surveyed all university staff members whom I had identified as having Italian heritage. My presence in the community and my role in the university brought me into contact with the sample I was seeking. Finally, I included people and gardens encountered by chance in the study, with the hope that such random sampling might allow some generalisation of conclusions (Vogl, Vogl-Lukasser, & Puri, 2004). In the final months of my project, while discussing my project at community events or informally with friends and colleagues, I was repeatedly given new leads. Key members of the community were now ready and willing to show me their gardens and to share their stories. The ties made through the early days of participant observation were a key element of this opening.

The participants selected for these interviews were chosen on the basis of their Italian heritage, interest in gardens, knowledge of plants and a willingness to participate. Participants predominantly included home gardeners; however, some were involved in community gardens or were once commercial growers. Twenty of the participants were currently working an established garden. The participants were either Italian-born, second generation or third generation Italian Australians.

**Methods used**

A range of different data collecting techniques was used, according to the nature of the data. As a result, there was some overlap of techniques. The

\(^{10}\) Purposive sampling is a technique in which the researcher follows a deliberate choice in the selection of informants. This choice is based on the qualities the informant possesses. (Bernard, 2011)
methods used include participant observation, informal and semi-structured interviews, garden visits, mapping and free-list activities.

Participant observation enriched the quality of the data collected by providing information required to develop interview questions and to assess the data collected from the other methods (DeWalt & DeWalt, 2011). The semi-structured interviews were held in the latter part of the study (Bernard, 2011). This enabled the development of a rapport with the community and encouraged a greater feeling of ease in the interview. Time spent in the community allowed the building of relationships and trust. In the case where there was initial contact through a university colleague or friend of a friend, this already established relationship acted as a passageway into the back garden.

**Participant observation**

Participant observation was primarily used as an opportunity to gain insights, develop meaningful relationships, and formulate specific research questions (Bernard, 2011). During the time spent within the community, I was more observer than participant. As the research is focused on the home garden and plants used in the home, my role of participant was limited due to the reticence of the home/garden owner to have me ‘work’. They were bound by their code of hospitality, and I was given the role of guest. While a guest, I was still active as an observer, concentrating on the following themes:

- knowledge, beliefs, and practices of the community concerning domestic plants
- local people’s knowledge of domestic plants
- the emic classifications of plants
- the factors which interact with the resource perception and utilisation of plants
- the belief in the efficacy of plants as therapeutic agents.
At the beginning of the project, I was introduced to known individuals by members of the academic community from the University. Often these people had been participants in previous studies. We met at the local farmers market, and I was invited to participate in *Carnivale*, held annually in April at New Italy. I was warned that the women I would be working with might take some time to welcome me, as they were wary of outsiders. In order to gain trust I took part in the preparation of the shared meal, working alongside them and demonstrating my sincerity and willingness to be a part of their community—even if just for a few hours.

During my visits to the local farmers’ markets, I was able to establish my genuine interest in the stallholders’ produce. There are a number of farmers markets in the region, and many of the Italian stallholders are present at more than one market. As a regular market goer, I was able to strike up a conversation, meet family members, share stories and inquire about the produce a few times a week.

**Interviews**

My intention was to interview a broad range of people in the Italian community, focusing on gardeners and individuals across generations. Two types of interview were held: semi-structured in-depth and *in situ* garden visits including, where feasible, garden mapping.

Semi-structured interviews provided the scaffold from which to assess the diffusion of ethnobotanical knowledge within the community. This involved the collection of general information such as the following:

- demographic data:
  a. name
  b. gender
  c. age
  d. employment/ ‘role’ within the community
  e. place of residence; region of origin
• botanical data:
  a. scientific and vernacular/folk name(s)
  b. use of plant—medicinal, food, health food, culinary herb, ritual (use categories were gleaned from the free-list exercises)
  c. parts used in preparation (as food or medicine)
  d. combination, if used with other plants
  e. the method of preparation and processing
  f. belief regarding plants efficacy—taste? pharmacological? story?
  g. collection requirements for a plant to be the most effective e.g. place and period of gathering, season, time of day/night
  h. storage of plant

• cultural significance and beliefs:
  a. knowledge of stories about the plant
  b. knowledge of proverbs (sayings or songs) in which plant appears
  c. use of a plant in religious celebrations—Easter, Christmas, etc.
  d. significance or symbolism of use at these times
  e. plants that evoke memories of home

• transmission:
  a. the method of learning about plants
  b. primary ‘teacher’
  c. the impetus for learning—children? interest? duty?

(adapted from Alexiades, 1996; Berlin & Berlin, 2005)

While semi-structured interviews provide a flexible structure from which to navigate the interview, a list of questions and topics to be covered was used as an interview guide. This guide ensured that each interview addressed the same set of questions while allowing the interviewer to follow leads (Alexiades, 1996; Bernard, 2011). Careful construction of the interview questions provided an efficient tool to elicit the above criteria. Additionally, the interview schedule included qualitative variables regarding plant selection as a method of social construction of identity. The questions asked were framed around behaviour, opinions and values,
feelings, sensory experience, knowledge and level of expertise regarding the use and cultivation of plants (Alexiades, 1996). The open-ended design of the semi-structured interviews allowed for minimum control of informants’ responses, yet because the same questions were asked, comparison across informants was possible (Bernard, 2011). All the interviews were digitally recorded with the prior consent of each informant.

The interviews varied in length. The shortest lasted for 45 minutes and the longest half a day, with numerous coffee and meal breaks. This was an important aspect of the interviews; time was to be forgotten and the sharing of stories, food and wine, encouraged. The participants were prompted to discuss their degree of connection to the Italian language and other aspects of traditional culture; thoughts about Italian identity and key aspects of Italian cultural heritage as personally defined; and aspects of Italian culture that are currently ‘at risk’, and if (and how) they should be preserved. Ample time was allowed for participants to add their own topics.

The interview guide (see Appendix 6: Interview guide and questions) was brought to each of the interviews. Initially, I was quite conscious of its presence and offered an extremely stilted interview style, still learning the art of remaining in two worlds—that of the researcher, consciously picking up on queues, noting important details and aiming for reflexivity. The other was of the engaged listener, the delighted guest who found it difficult to refuse the offer of a sample of homemade grappa.

The interviews were held with individual gardeners and family units. My aim was to conduct semi-structured interviews with 60 to 80 participants. This was reduced following the initial confirmation review process by the university research committee. The final number of 26 semi-structured in-depth interviews was agreed upon as sufficient to access the required data.
The research participant group included 13 men and 13 women (see Appendix 1: Demographic data).

Each semi-structured interview included the following:

- free-list exercise;
- semi-structured interview (guide);
- structured questionnaire, which contained a demographic survey and specific questions regarding relative belief of the importance of specific plants or gardening techniques.

The interviews were held in the place of the participants choosing. More than half were held in the participants' home, with an *in situ* walk through the garden. The garden visits were immensely gratifying experiences, for both the participant(s) and myself. These visits took place at the end of the more formal 'sit down' part of the interview. With heads already full of stories, memories continued to pour forth as we left the confines of the house for the unseen garden. Once in the garden, the owner-gardener took the lead, stopping to point out special plants, to share growing techniques and often to lament the effects of changeable weather. The use of interviews *in situ*, such as in home gardens, is considered one of the most reliable methods to record accurate recognition and knowledge about plants (Thomas, Vandebroek, & Van Damme, 2007). These are also referred to as ‘field interviews’ (Alexiades, 1996). Through the use of audio and photographic equipment, the situations in which plants are grown and enjoyed were observed and recorded. The advantage of being in the garden (field) is that the ethnobotanist is able to overcome the 'abstractions of theory and conversation' (Etkin, 1993, p. 99) and be in a position to record spontaneous commentary that might not have occurred otherwise. The remainder of the interviews were held in cafes or at the participants’ place of employment.

There were a number of informal conversations that occurred spontaneously throughout the fieldwork period. These were not counted
systematically, although I am confident I discussed my research topic with close to 50 people associated with the Italian community. The reason for the discrepancy between the number of people with whom I informally spoke, and the number of people with whom I conducted official interviews, is due to the level of time and formality required. Many found it difficult to commit time and energy for an interview, answering a set of formal interview questions in addition to the impromptu casual conversations they had already had with me.

**Oral history**

The interviews are viewed as ‘oral history’, that is verbal recollections of events from one’s lifetime (Veale & Schilling, 2004). I have chosen to use oral history as a method in recognition of the informant as participant and creator of (their) lived experience of culture as knowledge, practice, and belief. Historical conceptualisation is recognised as an effective method of gaining a broad vision of reality (Medeiros, da Silva, da Silva Sousa, & Silva, 2014). At the centre of historical recall is memory. There has been recent debate among scholars in ethnobotany, regarding the problematic use of memory in the retrieval of past plant use (Leonti, 2014). Additional methods, including participant observation and referral to historical texts, are used to complement this approach, filling the gaps of memory and completing the complex whole of lived (migrant) experience. Crucial to the analysis of the data gathered in this thesis was an understanding of how contemporary constructions of Italian identity are historically grounded.

Blending with Geertz’ (1973) understanding of the thick description, an oral history approach may assist in recognising the internal and external influences that both affect and are affected by the participants (Agee, 2002). It is important to reveal and understand the culture of environments and people, which encompass all of ‘the webs of significance’ (Geertz, 1973, p. 5), that branch off in different directions. In thick description, the nuances that exist are important. These are the
things that are not apparent at first glance. It takes time and multiple perspectives to differentiate and understand them. Thick description gets under the surface of the ethnographic data, describing not only what took place, but also what it means and how it relates to the phenomenon being studied (Geertz, 1973).

**Ethnobotanical methods**

**Free-listing**

Free-listing is a technique used to elicit a list of items in a cultural domain, a set of related concepts about a topic, using open-ended questions (Quinlan, 2005). Twenty to thirty informants are a sufficient sample size for eliciting a free-list (Weller & Romney, 1988). Free-lists were collected throughout the fieldwork period. Initially, these were used to determine the different ways plants grown (or commonly used) in the respondents’ homes contribute to a sense of cultural identity. Following the initial elicitation from the informants, the question was slightly changed, in the hope of exhausting the list of items. The free-list topic was given as *List all of the typical plants grown in an Italian’s garden*. To ensure validity and reliability of the responses probes, such as, ‘Can you tell me more?’ were used. After the informants had finished listing and selecting, I inquired as to why they made the choices they made (Weller & Romney, 1988). The data obtained from the free-lists has been supplemented with interpretive data gleaned from the other methods used. A total of 39 free-lists, gathered while visiting community groups and interview participants, were generated.

The free-list data collected at the Italian Seniors Day Club was gathered following a brief introduction to my research project. The Italians present were all women aged in their mid-60s to late 80s. Only one man, a husband, was present, and he declined to complete the free-list exercise. Although prior arrangement for my visit had been made, my arrival was met with
surprise. The group was already deep into their card game (scopa), and I feared my presence would be an intrusion in this focused room. Fortunately, soon after my arrival, morning tea was served, and the fruitcake I had bought to share was a welcome addition. I took this opportunity to introduce myself to the room and discuss my project. The women were then asked to complete the free-list. Many of the group would not be deterred from their card game and played on. However, 20 women did participate, and the activity produced much interest with many of the women collaborating on their lists, calling out, sharing and reminding others of the key plants. The group volunteers, also Italian descendants, also took part.

The discussions and informal interviews that followed this activity provided much information, which was useful in understanding the complexities of this community of Italian migrants. The issues that arose included the impact of grown children leaving home and moving away; the inevitability of aging and widowhood on one’s ability and interest to maintain a garden; and the impact of the loss of language and differing dialects, and the pursuant difficulty in communication between individuals from different regions in Italy.

**Demographic survey**

The interview guide solicited demographic data (see Appendix 7: Demographic questionnaire) including birthplace, the length of time in Australia, parents’ birthplace, language spoken at home and reasons for migrating to Australia. Results were used to determine factors affecting ethnicity and to infer, for example, how the continued use of regional dialect impacts on the continuation of the use of traditional plants.

**Garden mapping and photographic survey**

Gardens may be viewed as the equivalent of ‘ethnobotanical footprints’, tangible arenas of people-plant interactions (Alexiades, 1996). Mapping is
an attempt to contain this living record of the collaboration between human and plant. Garden design and layout, the inclusion of work areas, storage spaces, sacred groves or seedling beds were mapped and photographed. These methods were used as an alternative to taking voucher specimens (Thomas et al., 2007), creating a record of who grows what, where, when, how and why. Photographs are used in this thesis to demonstrate how Italianità [Italianness] is presented in the homes and gardens of the RTSD.

Twelve gardens were mapped. These were chosen based on the participants’ expertise as gardeners or holders of traditional plant knowledge. An important consideration was their willingness to invite me into their homes. Mapping of the gardens permits the analysis of the spatial configuration of each plot (Kimber, 1973). The maps were used to illustrate the variation among home gardens, and to suggest patterns across individual households.

**Home garden inventories**

Each inventory included the following:

- details of the owner: location of the garden, age, and gender of the main gardener, years of tending the garden;
- type and descriptions of the garden: size, distance to the house, terrain;
- plants details: name in dialect, common name, if possible the scientific name and varieties, special features, use, the source of plant and/or seed, years of cultivating particular plants. (Buchmann, 2009; Vogl et al., 2004)

The informants identified each plant using either dialect or English. Binomials were added with the assistance of SCU Herbarium staff (Vic Szabo), and online plant databases (The Plant List; Tropicos.org).
Taxonomic rules were followed (Bennett & Balick, 2014; Nesbitt, McBurney, Broin, & Beentje, 2010).

**Voucher specimens**

Voucher specimens are recognised as an essential element of ethnobotanical research (Bennett & Balick, 2014; Heinrich & Verpoorte, 2014; Rivera et al., 2014). Questions arise as to the availability, permission, and ethics of taking voucher specimens from individual's home gardens (Grasser, Schunko, & Vogl, 2012; Vogl-Lukasser et al., 2010). Often the plants in a garden are of low yield, a valuable source of food or with an already thought out destination in a meal. The decision was made to take specimens of only those plants that were difficult to identify or unique to the project. The plants found in the gardens visited, noted in the free-lists and interviews are predominantly well-known species. Where there was a plant mentioned which was unknown to me, I relied upon photography to record an image. These were used to verify the scientific plant name and where possible and appropriate, cultivars were identified.

**Data analysis**

The participants were fluent in English and had varying levels of Italian (dialect). The interviews were conducted in English. All interviews were digitally recorded and transcribed in full. When Italian phases were used, they were noted and translated by a family member present or translated at a later date by a native speaker. Notes were taken during the interviews and were added to the interview transcriptions. The research participants were often contacted for follow-up conversations, enabling the clarification of concepts and the collection of information that had been missed or glossed over.
Qualitative analysis: Cultural consensus

Narratives and oral histories locate the plant species grown and used in the home and garden in a rich web of memory. Each participant brings to the research findings a unique view, yet from these memories shared experience and understanding emerge as themes.

Cultural consensus theory, according to Weller (2007) is a ‘collection of analytical techniques and models that can be used to estimate cultural beliefs and the degree to which individuals know or report those beliefs’ (p. 229). Through the estimation of ‘culturally correct responses’, cultural consensus theory determines the extent of informants’ cultural knowledge or accuracy across the group. Weller (2007) argues that three assumptions must be met in order to use cultural consensus theory:

- each informant should give answers independently of other informants,
- questions should all be on the same topic and at the same level of difficulty,
- cultural consensus theory is only applicable if there is a single set of answers to the questions.

Cultural consensus analysis was used to identify the level agreement between respondents concerning the domain of plants found in the home and was also used to ascertain the competence each informant has in the domain (Weller & Romney, 1988). Consensus analysis has been found to be successful with a small number of informants when there is a high degree of sharing within the group. The first stage involved free-listing, in which informants are asked to list terms or phrases relating to a particular domain. Terms and statements about home garden plants and were selected based on their frequency of appearance.
Thematic analysis

Ryan and Bernard (2003) propose twelve different techniques for the identification of themes. These include scrutiny techniques and processing techniques. Drawing from these, I focused on the following:

- repetitions: referral to ideas that are repeated throughout the interview or text,
- indigenous typologies or cultural domains,
- analogies and metaphors: used to express individuals experience and thoughts,
- missing data: ask what is missing? Care must be taken when using this technique, as what is left out might be representative of cultural assumptions. What is left out is what everyone already knows. This technique was used to best effect through gathering short responses to open-ended questions.

The importance of themes was measured according to how often they appeared, the themes’ pervasiveness across different cultural practices, and how participants responded when the theme was not honoured.

All ethnographic data gathered, through observation and interview questions, underwent thematic content analysis. This involved the technique of isolating themes, topics, and issues through a close reading of the collected interview transcripts. Significant statements were extracted, then analysed and organised thematically. After all of the interviews had been transcribed, they were listened to consecutively; marking emerging patterns and themes in the borders of the written transcript text. From seeing these trends emerge, in combination with being very familiar with the data, I was able to recognise trends emerging further and develop into concepts. Following the identification of categories and concepts arising from the text, themes were created which were positioned in and against the themes established in the literature. Microsoft Excel was used to aid
the organisation and collation of the data gathered. The interview transcripts were uploaded into Excel, coded and quotes were selected. Following this lengthy process, I endeavoured to uncover what was being said, being taken for granted or implied and what missing or de-emphasised (Bernard, 2011). Such qualitative data analysis provided the necessary cultural understanding that formed the backdrop and enhanced data generated by quantitative methods.

The limitations of thematic analysis are concerned with the barrier of language. While the primary language used in all interactions was English, there was often spontaneous use of dialect by the participant. I have a rudimentary grasp of classical (Florentine) Italian, learnt at an undergraduate level. It must be considered that, as I lack fluency across dialects used, there might have been misinterpretations of metaphors, missing data, etc.

Field notes were either recorded during observation, soon after or on the same evening. Field notes do not record everything. According to Emerson, Fretz, and Shaw (2001) they are selective,

> a form of representation, that is, a way of reducing just-observed events, persons and places to written accounts...[a form of] descriptive writing [that] embodies and reflects particular purposes and commitments, and...also involves active processes of interpretation and sense–making. (p. 353)

The field notes were later typed up which helped to understand them and generated some additional reflective commentary. The process of analysis and enquiry continued up until the point of writing down the findings. Following the recommendation given by Schiellerup (2008), a great deal of the analysis was done in the process of drafting and redrafting.
Quantitative analysis: Frequency, ranking & abundance

The analysis of free-list data concentrated on two measures of an item's importance. A primary indicator of salience was the frequency each term was mentioned—the frequency distribution of the number of informants that mention the plant. The rank or order the items appear in this list implies the cultural significance of the species. This may be verified through preference ranking (Cotton, 1996), where the informant is asked to organise the list in order of importance or significance. The data is collated, and a total value is calculated, determining the overall ranking of the plant.

Additionally, the correlation between each informant's responses and the group as a whole was measured. This association is useful for identifying knowledgeable individuals who may be nominated for more in-depth interviewing (Borgatti, 1994). The abundance of items on a list implies expert status.

Examining the garden as a socio-ecological space, it is evident that the home garden provides further functions 'beyond food production' (Calvet-Mir et al., 2012). Consequently, in this research, the cultural, as well as utilitarian functions of the Italian migrant home garden, are explored. Two principal spheres of knowledge were examined while gathering the interview data. These are plants cultivated in the garden and food used in the home. The first part of this chapter examines the plants grown in the home garden through the perspective of utilitarian salience. The second part of the chapter examines the cultural salience of food plants used in the home.

Domains of plant knowledge: Contextualisation

Drawing from Geertz' interpretation of culture as 'webs of significance [that man] himself has spun', these webs of meaning may be analysed 'not
[as] an experimental science in search of law but an interpretive one in search of meaning’ (1973, p. 5). In the analysis of culture Geertz calls for comparative conceptualisation:

> How does one move along (across, over, amid, through, between) cases, instances, and granular observations to broader, more elevated [...] perceptions? If anthropologists [...] are not to be mere peddlers of singularities [...] they must contrive to place such singularities in an informing proximity, connect them in such a way as to cause them to cast light on one another. Contextualization is the name of the game. (2000, p. xi)

Determining the basis for the organisation of ethnobotanical knowledge into specific domains, Ellen (1996) joins Geertz’ call for contextualisation. Knowledge, Ellen argues, is embedded in both context and ‘abstract’ function.

> All human knowledge is represented and articulated not only through the systematic lens of general-purpose classifications, such as those offered by science but also through the domains constructed around specialised applied knowledge. (Ellen, 1996, p. 462)

The context of this research is the home garden. The home and garden are sites of *Italianità*, locations where cultural traditions and knowledge are learnt and shared. Rituals, shared meals and plants grown reveal a TK that grounds, situates and supports the individual as a member of a community.

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11 Geertz (1973) in *The Interpretation of Cultures* defines culture and thick description as follows: ‘Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning. It is explication I am after, construing social expressions on their surface enigmatical.’ (p. 5)
Where does this knowledge originate?

Knowledge is perceived as a process of adaptive learning within dynamic social-ecological systems. Including a dynamic view of culture redirects the understanding of knowledge towards a transformational process of knowing. The transmission of knowledge becomes the development of agency within the structured context of social-ecological systems. Furthermore, the concept of tradition is questioned, or rather the use of the word when codifying 'knowledge'. This chapter explores the argument that knowledge in practice is both old (traditional) and new (contemporary): a dynamic continuum and synthesis.

Key discourses of knowledge are language and practice (Maffi, 2005; Toledo, 2002). It is the stories in the minds and memories of the gardener that act as the repository of knowledge/ corpus. Toledo argues that memory is the most important resource of any rural producer. This claim is based on the understanding that the knowledge retained in a participant’s mind is obtained from three experiential sources:

1. cultural-historic experience, built and transmitted across generations;
2. shared experiences of the generation;
3. personal experience gained through participation, observation, trial and error.

These knowledge constructs are then tested through practice, with the aim of determining the extent to which there is success in the application of knowledge and the outcome. For the Italian migrants of the NRR, the utilisation of their TK has been considerably successful. The results are seen in the relatively short cultural-historic experiences of the first Italian migrants to settle in the region. This group was able to turn the nutrient-bare soil found in Woodburn/New Italy settlement into rich fertile land, recreating traditional farming practices from ‘home’, initially building small home gardens which provided sustenance and more broadly
resulting in prize winning silk from the silk worms found on the mulberry trees. Contemporarily, the Italian migrants in the region are learning to adapt to a changing climate, the effects of shifting seed stock and diminishing personal time to ‘be in the garden’. This knowledge was then shared across the generations, which will be explored further in this chapter. Finally, the contemporary gardening stories of the research participants interviewed, provide a detailed account of reframing and adapting these knowledges through participation, observation, trial and error.

This research starts with the assumption that there will be differences and peculiarities (when contrasted with other gardens) found in the homes and gardens of the Italian migrant. This hypothesis rests upon the understanding of cultural difference. Thus in order to review these assumptions it is essential to understand the context of cultural difference. Returning to Nazarea’s (1998) notion of situated knowledge, and utilising the qualitative aspects of knowledge systems, this analysis must review culture as well as the positioning of the individual (gardener) within it—taking into account gender and socio-economic status. Accordingly, the gardens and gardeners are viewed through a lens that takes into account their position in a particular time and space (generation, arrival, departure and region of origin).

Building upon this notion of situated knowledge is Hunn (1982) conception of a utilitarian view of knowledge or knowing. The understanding is that ‘what we know informs what we see’, that is our relationship to the environment (in which we are situated) is subject to the degree to which we find it useful. Thus, the perception of use may be wide-ranging, dependent on the individual or stakeholder. A single environment may contain multiple meanings and ideologies (Veteto, 2010). This research attempts to identify themes that are shared by a single group (Italian migrants living in the Northern Rivers region of NSW)—a group, which, however, contains a diversity of regional perspectives. The filter(s)
through which these themes are seen are cultural and utilitarian salience. These contain shared themes such as the importance of taste, continuation of tradition, and the pivot of family responsibility.

**Domains of plant knowledge: Frequency and salience**

At the beginning of this research project, it was important to identify the essential elements of the Italian migrant home garden. This was achieved through the application of systematic interviewing techniques, as outlined by Weller and Romney (1988). The first task was to determine the boundaries of the specific cultural and ecological domains. Weller and Romney define a domain as ‘an organized set of words, concepts or sentences, all on the same level of contrast, that jointly refer to a single conceptual sphere’ (1988, p. 9). The field explored in this research are the plants grown in an Italian migrant garden. The collection of related terms, the domains, were identified through the use of a free-list activity. Free-lists are used to identify the most salient or significant elements in a certain domain. Here free-lists were utilised as an elicitation technique, confirming culturally relevant plant species and providing a view into the space between the borders of the domain. Free-lists were used in the first instance in the investigation of Italian migrants’ knowledge of plant species. Informants were asked to 'list all of the typical plants grown in an Italian's garden'. The free-lists were also used as an analytical tool, to determine scope and variation of informants’ knowledge. The data obtained from the free-lists was gathered to examine the following:

1. plants that are considered culturally salient
2. non-Italian (local/ Australian) versus Italian (traditional) plants

While the domain ‘Italian plants’ is broad, it provides an overview of cultivated plants and simultaneously provided the opportunity to elicit other sub-domains (such as food – including vegetables, fruits, medicines, etc.). The inclusion of non-Italian plants, such as mango, encourages the
inquiry of the fluidity of local/traditional knowledge maintenance and adaptation. During the collection of free-lists, it became obvious that for many of the participants it was difficult to separate the plants grown in the garden and those used in the home (or kitchen). The inclusion of plants used in the home kitchen is explored in the second half of this chapter.

ANTHROPAC (Borgatti, 1996) was used to analyse the free-list data. The software combines each participant’s list, calculating the frequency of species listed and ranking each item. ANTHROPAC also calculates a salience score. Salience may be understood via two distinct indices: the position of an item on a list, and the number of lists in which the item appears (Weller & Romney, 1988). High salience demonstrates high frequency as well as high rank—that is the plant appears more often and earlier in the free-lists. Consensus is determined via the understanding that plants mentioned frequently (across all lists) indicated common knowledge within the cultural domain (Romney, Weller, & Batchelder, 1986).

**Summary**

Engaging with multiple methods has provided multiple viewpoints from which to explore and understand the traditional knowledge. Each method formed distinct levels of connection, encouraging the participants to share their knowledge through spoken or sensual language. The aim of which was to access concrete as well as tacit forms of knowing.
CHAPTER 4: Where

Australian setting: Native gardens and European influence

I love a sunburnt country,
a land of sweeping plains,
of ragged mountain ranges,
of droughts and flooding rains

*Dorothea Mackellar, 1908/1971*

The history of Australian gardens began within days of the first white invasion. According to Baskin and Dixon’s (1996) account of the British settlement of Sydney Cove in 1788, the first gardens were planted within three days of the arrival of the First Fleet. For this first of many migrant groups, food was a priority and securing it through productive gardens was an imperative. The sequela of which was the transportation of a wide variety of new plant materials. Sir Joseph Banks, who had participated in the 1770 expedition through the Pacific to Botany Bay and who was therefore acquainted with the landscape, took on the task of selecting the necessary species. Malouf (as cited in Evans, 2009, p. 63) portrays Banks’ selection of seeds and cuttings as ‘the equipping of an ark load of plants ... the makings of a very practical little Garden of Eden’. The aim of this settlement project, at Botany Bay, was to develop a sustainable source of food through agriculture.

The expansion of the British Empire, through acts of colonisation and invasion, included the introduction of exotic species to these landscapes. These expansive activities took place in the spirit of new knowledge,  

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12 Here, I am referring to European gardens. See Appendix 8 for a brief historical timeline of Australian/European gardens. For more on pre-colonial Aboriginal agricultural systems, see Pascoe, B. (2014). *Dark emu: Black seeds. Agriculture or accident?* Broome, Australia: Magabala Books.
science and economy. The economic benefit was the primary motivation in the transplantation of these exotics to the colonies. Two important examples of this, both driven by Banks, were the introduction of tea to British Colonial India in 1790 (Hastings, 1986), and of significance to this research, the introduction of Mediterranean plants to Botany Bay.

The earliest record of Mediterranean crops sent to Australian is found in the 1786-98 inventories of Sir Joseph Banks (Frost, 1993). Included in these inventories from the First Fleet, are records of olive, grapevine, fig, mulberry, orange, and lemon (Dunstan & McIntyre, 2014; Frost, 1993; Hill, 1998). The climate of the new colonies was seen as suitable for the production of Mediterranean crops, expressed by Banks in his *Scheme of plants for Botany Bay* [c. October 1786]:

*In a Climate similar to that of the South of France which Botany Bay probably is the Following vegetables that are propagated by engrafting because they cannot be obtained from seed will be highly useful. (Banks, as cited in Frost, 1993, p. 6)*

It was hoped that successful cultivation of these crops would free Britain from trade restrictions with Southern Mediterranean countries (Dunstan & McIntyre, 2014). At the same time, successful food crops would ensure survival and alleviate the ‘tyranny of distance’. A factor to note here is that these crops were introduced primarily for commercial purposes, enabling the development of the agricultural sector.

The forces that determined the introduction of radically new and unknown species to the land named *terra nullius* were, for the most part, blind to the alternate possibilities represented in the traditional knowledge of the Indigenous Australians. Arriving in mid-summer, the British were met by harsh climatic conditions that resulted in crop failures and difficulties in feeding the colony. As a result, Clarke (2008) asserts, the early settlers were forced to ‘turn their attention to the wild resources in the surrounding bush’ (p. 25). Despite the absence of, what colonist William
Bradley termed ‘cultivated ground’, settlers were able to locate wild plants that resembled known European species such as sorrel, samphire, spinach, parsley, and currants (Clarke, 2008). Additional evidence of the use of native plants as culinary substitutes can be found in Mina Rawson’s cookbooks published in the 1890s (A. Wessell, personal communication, February 13, 2015). While there were accounts of early colonists eating local flora and fauna, this experimentation virtually disappeared once agriculture became established.

Viewing colonisation as an act of control, it is revealing to note that a dominant factor in the push for Mediterranean crops was the view that these represented a civilisation that drew from the ‘high culture’ of the Greco-Roman classical tradition (Dunstan & Mcintyre, 2014). In practical terms, the belief was that the barren, inhospitable Australian landscape would benefit from such hardy crops. However, of equal importance was the hope that the small landowners would take on the sober and ordered behaviours of the traditional Southern European farmer.  

Looking beyond the economic benefits of Mediterranean crop cultivation, Sidney (as cited in Dunstan & Mcintyre, 2014, p. 41), writing in 1852, celebrated the romantic ideal of the Mediterranean life where,

> every striving man who rears a race of industrious children, may sit under the shadow of his own vine and his own fig tree — not without work, but with little care — living on his own land, looking down the valleys to his herds — towards the hills to his flocks, amid the humming of bees, which know no winters.

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13 This perception of southern Europeans as sober and hardworking was based on the Classicist idea that was popular during the 1850s (Dunstan & Mcintyre, 2014). Few southern Europeans had migrated to Australia up to this point. The reality of the southern European ‘peril’ would be felt in Australian cultural life at the turn of the century and with the implementation of the Immigration Exclusion Act 1901, precursor to the White Australia Policy (see Andreoni, 2003; Dewhirst, 2008).
The impact of these aspirations for civilised life rippled out to new migrants. Assisted and targeted skilled labour migration encouraged Southern Europeans to share their knowledge of viticulture and migrate to Australia. Towards the end of the 1890s, the dream of the Mediterranean landscape began to fade as land ownership reforms failed and competing industries, such as mining and pastoralism took hold. However, the pursuit of this ideal shaped the Australian vision of what ‘agriculture should pursue and, indeed, what many Australians now aspire to’ (Dunstan & McIntyre, 2014, p. 50). Mediterranean plant species were introduced with an agricultural scale of production in mind. The personal garden also figured strongly in the narratives of new settlers.

Historically, Australian gardens have been marked by an impasse between the native and colonial landscape. From the First Fleet until the time of Federation (1788-1901), the early European migrants’ ‘remembered’ garden has been viewed as an imperial and colonial legacy (Seddon, 1997; Timms, 2006). Upon arriving, the European settlers cultivated their vision of civilisation through their interactions and attempts to control and tame the landscape around them. Invariably the gardener was met by nature in her attempts to resist control.

Fox (2004) reveals that few colonial gardeners attempted to position their worldview alongside the perspective of Indigenous Australians. They chose to garden as they had ‘back home’ and dealt with the vicissitudes of the harsh environment as best they could. At the same time, the European colonial legacy was being challenged due to an increasing public trend towards the inclusion of unique Australian native plants (Baskin & Dixon, 1996; Morgan, 2013).

Answering the question ‘Why garden?’ Wegner (2010) asserts that the principle motivations of early colonial settlers in rural Queensland were based on,
[the] need for fresh food, aesthetics, climate mitigation, expectations of class and gender, socialisation of children, nostalgia, the desire to provide civilized domestic refuges in the hostile environment of raw mining towns and tropical savannah, and the simple love of plants (p. 347).

Throughout the literature, there is evidence that the act of creating a new landscape through gardening is rich with evocative memory. As such, gardens become places of sentiment and nostalgia.

Understanding that ‘planting a garden is an act of anticipation...memory and settlement’, Holmes, Martin, and Mirmohamadi (2008, p. 3) acknowledge that the establishment of gardens was one of the first activities undertaken by the new settlers. The urge to garden continued following the establishment of the colonies. Settlers were encouraged to plant gardens with seeds brought from elsewhere. Writing to possible future migrants, Henry Widowson in 1825 observed,

The garden is justly esteemed one of the most essential requisites about a house and has consequently received much attention in Tasmania...I should recommend everyone to purchase a quantity of the best kind of seed previous to leaving England. (cited in Holmes, Mirmohamadi, & Martin, 2004, p. 8)

Increasingly throughout 1900 to 1940, a hybridised culture of gardening emerged, in which native plants were cultivated alongside exotics (Head & Muir, 2004; Head et al., 2004). For Tyrrell (2007) the history of gardening in Australia ‘provides key examples of how ecological circumstances and culture met and fused as hybrid landscapes as men and women strove to implement their dreams of the garden’ (p. 347).

The establishment of gardens in Australia is bound together with the development of suburban life. Morgan (2013) points to the post-war policy of decentralisation, wherein Australian government strategy moved in the direction of establishing rural and suburban communities which would bolster the nation. The allocation of the quarter acre block and the ubiquity
of the backyard fence (re)enforced ‘a strong consciousness of the individual boundary’ (Seddon, 1997, p. 150). At a time of national insecurity, in the years following World War II, the dream of owning a home and garden, became the foundation of the suburban sanctuary. Following the war, European migrants, particularly from southern and eastern Europe, arrived bringing traditional gardening practices of their homelands with them (Gaynor, 2006; Head et al., 2004). European migrants viewed the garden as a utilitarian and productive space, with the aim self-sufficiency and thrift. Diligence in the garden was reflected in the use of space, with both front and back yards being dedicated to food production; flowers present as ancillary ornament or companion plants (Head et al., 2004).

The Australia to which these migrants arrived had similar aspirations of autonomy that, according to Davison (2005),

was as much environmental as expressly political and made possible by intensive systems of domestic production, such as backyard agriculture and waste management, home and furniture building and repair, clothes-making and food preserving.

Despite the similarity of aspiration, the selective xenophobia of post-war (white) Australia maintained the tensions of difference based on race and the colour of one’s skin. This was demonstrated in the government policies of selective immigration, most notably in the White Australia policy (1901-1972), where British and northern Europeans were privileged and the southern European regarded with suspicion. For the Italian migrants arriving at the turn of the century, ‘the “colour” [of their skin] was always an issue’ (Andreoni, 2003, p. 81). The new migrants managed this prejudice through acts of resistance and compromise. As Dewhirst (2008) illustrates while ‘Italian migrants might have wished to remain culturally Italian, whiteness meant adherence to a British-Australian model of assimilation’ (p. 38).
The apparently successful compromise of these migrants might explain the thesis proposed by Michael Symons (1982) in his history of Australian foodways, *One Continuous Picnic*. Symons writes,

*There has never been the creative interplay between society and the soil...almost no food has ever been grown by the person who eats it, almost no food preserved in the home and, indeed, very little preparation by a family cook. This is the uncultivated continent. Our history is without peasants.*

(p. 7)

These assertions are puzzling and sit in stark contrast to the findings of this research and the literature surveyed. It appears that Symons has overlooked the other Australians—the Southern European migrants—who maintained their ‘peasant’ traditions quietly behind closed doors, in their backyards and on their tables.

Bringing the reader to the sharp end of modernity, Seddon’s (1990) description of the multiplicity of garden design found in Australia distinguishes six variations: the nostalgia garden, the tidy suburban garden, the nice show of colour, the Italian garden, the collection or prize specimen garden and the native garden. Firmly locating these examples in suburbia, Seddon (1990) points to the tendency of Australian gardeners to favour tidiness over the possibility of chaos represented in the native Australian flora. This distinction is even found in the Italian garden; wherein Seddon identifies two types of garden—the chaotic abundance of tomatoes and vines in the front yard or the austerity of the concrete ‘hose-down garden’ (p. 12).

**Summary**

The history of Australian gardens is a story of the alteration of the Australian colonial landscape through horticulture, acclimatisation, plant exploration, and agriculture (Holmes et al., 2008). British settlers used the garden to colonise Australia, and in turn to nurture a sense of home in a new landscape. This practice of claiming ownership of the land through the
cultivation of a garden was an expression of hope and faith in the future. These hopes and dreams have been played out in the gardens of each successive wave of migrants to Australia. Issues of belonging, attachment and connection to the new country are expressed in the garden though the choice of plants, both included and excluded.

The nature of a garden is to be adaptive, and equally, this is evident in the changing position of the garden as an act of belonging. No longer simply a matter of re-establishing the garden of the 'homeland', the contemporary migrant garden embraces memories of both homes in the cultivation of Australian native species alongside specific culturally significant species. Yet, the creation of the migrant home garden is not without conflict. The continuation of the Italian backyard garden is in opposition to the shift seen in mainstream Australian suburban backyards away from the functional ‘chooks and veggies’ to spaces designed for recreation or indoor/outdoor entertaining. Equally, the ‘disturbing aesthetic’ (Lozanovska, 2008) of the migrant garden is unsettling as it challenges Australia’s comfortable familiarity with the dominant English colonial garden or the revived (post-1970s) Australian native garden.

The creation of cultural landscapes begins in the cultivation of the home gardens. The European urge to control nature is manifest in the (re)construction of remembered environments and landscapes. This act of ‘clearing’, defined by Fox (2004), is the destruction of one landscape to create another. On a domestic scale, the construction of a home garden provides key examples of how ecological circumstances and culture fuse to become hybrid landscapes in which migrants attempt to realise their dreams of settlement in Australia (Tyrrell, 2007).
CHAPTER 5: Who

Italian migration to Australia

Italian migration to Australia has been taking place since the early 1800s. Italian migrants were participants in early European colonisation, the gold rush era, and post-war development. Consequently, Italians have played an important role in the development of Australia as a nation.

The history of Italian migration to Australia is well documented and has been broadly researched (Castles, Alcorso, Rando, & Vasta, 1992; Cresciani, 2003; Iuliano & Baldassar, 2008; Price, 1968; Ware, 1981). The early studies typically focus on the regional origin of the migrant group and draw their subsequent conclusions based on state or regional frames of analysis. Examples that stand out include research on a small group of Swiss-Italians from Ticino, who settled in Daylesford, Victoria in 1850s (Carlson, 1997); Calabrian migrant settlements in Adelaide, South Australia (Marino & Chiro, 2013, 2014); and Sicilian and Pugliese fishing communities in Western Australia (Bosworth, 1991). The Italian-Australian migrant community in the Richmond Tweed region is predominantly from the Veneto region. Studies on the Veneti in Australia include those by Baldassar and Pesman (2005) and Cornwall (2007). Alongside this is a rich body of work dedicated to the story of the New Italy settlement (Clifford, 1889; Kijas & Gahan, 2013; Niau, 1936; Thompson, 1980; Tinker, 1989; Volpato, 1983).

The Italian migrant population in the Richmond Tweed region is one of the largest such communities in regional NSW. The 2011 census states that in the Richmond Tweed Statistical District (RTSD), 995 residents speak Italian as their primary language in the home. This is equal to 1.4% of the total Italian speakers in NSW (Australian Bureau of Statistics, 2014).
The origin of the Italian settlement in the region dates back to 1881 when 217 migrants arrived in Sydney. Those that survived the heroic journey from Italy came together and established their own settlement, New Italy, located in Woodburn on the Richmond River, in Northern New South Wales. New Italy is of historic importance as it represents the first successful attempt to bring the agricultural practices and technology, traditions and customs of the Italian villager to Australia. The Italians who settled in the Northern Rivers, from the 1880s to 1960s, followed a pattern of chain migration where the pioneer settled, only to be followed by his relatives, extended family, and paesani from his home village (Price, 1968). This pattern resulted in a concentration of migrants from distinct regions in specific localities, forming a network of close community ties, which aided the continuation of the cultural identity of the new arrivals.

Seven families first came to New Italy in 1882, and an additional 19 followed them one year later. Price (1968) suggests that the Veneti, who settled in the NRR, worked in agriculture, primarily tobacco and bananas and were largely absent in small-scale market gardening or catering. It was in the home gardens of the settlement of New Italy, and later in Lismore, where the newly arrived Italian migrant grew the vegetables, herbs and produce required to recreate the self-sufficiency in food production that they left behind in their rural communities in Italy (Nellor & Domanski, 2011).

The agricultural history of Italians, according to Pascoe (1987), had been ‘one of continuous, plodding effort to cultivate quite uncompromising land’ (p. 132). Transferred to Australia, this ‘plodding effort’ was adhered to. Migrants farmed with ‘little or no machinery, planting crops to the last centimetre of soil, utilising simple animal fertilisers and adopting ingenious methods of irrigation’ (Carlson, 1997, p. 380). Following a visit

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14 The Northern Rivers region (NRR) is the common name for the Richmond Tweed Statistical District (RTSD)
to New Italy, a Sydney journalist wrote that he found a community that was hard working, able to turn a poor soil into a fertile garden, growing fruits and vegetables including grapes, melons, lemons and pumpkin (New Italy Museum, 2011). Clifford (1889), sent to New Italy to write a report for the NSW government, lists the following plant species as the most successful crops cultivated for personal use: ‘grapes, lemons, citrons, apples, peaches, loquats, mulberries, figs, bananas, sweet potatoes, maize, oats, barley, lucerne, sugar-cane, onions, cabbage, lettuce, peas, tobacco, etc.’ (p. 15)

In his description, Clifford provides detail of the practice of viticulture in which wine was made for home consumption. The importance of grapes is evident in the fact that by 1889, half to 2 ½ acres of every settlement block were dedicated to the cultivation of grapes (Clifford, 1889, p. 16). Additionally, he reflects on the possibility of the colony’s future success in silviculture. The future of this community was bound together with the cultivation of food and cooking, alongside the celebration of language and traditions.

Throughout the literature, links to ‘home’ and the maintenance of dialect are viewed as central factors in the formation of the communities of Italian migrants throughout Australia. The majority of Italian migrants or descendants in Australia continue to identify as Italians or claim Italian ancestry, despite having Australian citizenship. The recent report, *Italian diaspora in Australia: The current and potential links with the homeland* (2012), reveals that Italian language proficiency and strong ties to Italy are cited as factors that shape this sense of Italian identity. These twin factors are evidenced in the strength of Italian migrant community groups, sports clubs and ‘enclaves’ that are found throughout Australian and in the NRR.

Shadowing the reading of this literature, the following questions arise:

- Do enduring links to Italy have an effect on traditional ecological knowledge, practices, and beliefs?
• Is the retention of the ‘old ways’ or traditional methods, in the face of modernity, a significant self-identification pattern consolidating this firm foundation of cultural identity?

• How does this impact on the transference, maintenance, and continuation of knowledge?

While there is a considerable body of work documenting the Italian presence in Australia, there is a large gap within the broader ethnobotanical and anthropological literature regarding the Italian migrants’ use of traditional plant knowledge within the Australian setting. Primarily, research into the lives and histories of the Italian migrant community in Australia has to date placed the sociological or political at the centre. However, a number of studies explore the unifying nature of food, and the impact of its creation and consumption in bringing the community together through the replaying of traditional rituals, such as the communal killing of a pig (far il porcel) (Baldassar & Pesman, 2005; Bosworth, 1991; James, 2004).

Identity: How Italian are you?

The significance of identity ebbs and flows with circumstance and as such it may be worn and discarded as needed. This flexibility disrupts any essentialised notions of identity, as it is multiple and fluid. The identity that arises is often evoked through connection to a particular place or group. In this research, the participants draw upon fluid and multiple identities, maintaining allegiance to both their hometowns in Italy and to their new homes in Australia.

The notion of what it means to 'be Italian' is problematic. This is due in part to the essential lack of singularity in the collection of regional states now called Italy. As Sassatelli (2006) articulates, this absence of unity may in fact, be considered the main characteristic of what it means to be Italian.
Generations of scholars of Italy have agreed, to the point of rendering it a conceptual common-place, that there is no shared national culture and identity, and that what characterises Italy is precisely diversity, notably due to its late unification as a nation-state. However, it does not take much of a leap of (postmodern) imagination to then say that this pastiched diversity is Italy. Essentialism, thrown out of the door, tends to enter back through the window: that very lack can eventually be taken as the essence of Italy, colouring every aspect of it. (Sassatelli 2006, p. 95).

Scholars, such as Gabaccia (2013), argue that this lack of national unity stems from the political as well as the personal. Historically, loyalties were to ones patria (hometown) or paese (village) and not with the nation. These hometown loyalties were built on close family and neighbourhood connections, and, as a result, a sense of loss was keenly felt when individuals migrated. When travelling abroad, the allegiances of the migrants remained first and foremost to their families, then their hometown and region. This is evident in my conversations with the research participants, for when asked where they were from, each participant provided detailed descriptions of their region, and when they determined that I was familiar with it, would draw me further into their lives by sharing the name of their hometown. Across the generations, the participants recollected the names of the birthplaces of ancestors, revealing the tensions implicit in marrying outside of one's village or desiring to return 'home' to a (grand) parent's paese. The notion of home is stretched and elastic—existent in memory or through story for those that have never visited—and yet, the idea of home is maintained via a process of redefinition through integration and adaptation.

While most of the research participants identified as being transnational citizens, this duality often causes a sense of collision expressed through their 'hyphenated identities' (Baldassar & Pyke, 2014). When asked about their preference—'Italian', 'Australian'; or 'Italian-Australian','Australian-Italian'—most replied that they often feel more Australian when in Italy, despite the pull of nostalgia and feeling of connection to the 'homeland'.
Conversely, when in Australia most of the research participants reported they felt more Italian than Australian, often recalling memories of difference. These memories typically occurred outside the home, where they discovered that their childhood school lunch that smelled strange. As adults, this perceived difference is not as problematic as it was for the child. The more recent arrivals claim they are able to express their Italianità in an environment that views modern Mediterranean European culture as something to be admired. The disparity of acceptance across the generations may be understood via the Gramscian concept of the due Italie (Carlson, 1997), in which the socio-political distance between the North and the South is delineated as the high culture of the elites and the quotidian grind of the poor. The fluidity of migrant Italianità, once viewed with suspicion based on the poverty of the (mostly Southern) peasantry, is repositioned in modernity to the (mostly Northern) high culture of fashion, sophistication and fast cars.

The experience of identity and culture can be viewed through the analysis (by the researcher) and implementation, conscious or not (by the participant), of the traditional knowledge matrix within the home garden. Within this matrix, as is explored in this thesis, a repertoire of skills, beliefs and knowing direct and inform a sense of belonging. This way of being in the world is infused with possibility and grounded in memory, framing the desire to make ‘here like there’ (Brook, 2003, p. 227). One aspect of possibility is felt via a confrontation with change and experienced as a continual return to the past and an embrace of the new. The tension here

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15 The South in this research is understood as the area referred to in Italy as il mezzogiorno (‘the South’). This area contains the regions of Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria and Sicily. The North contains the regions of Valle d’Aosta, Piedmont, Liguria, Lombardy, Emilia-Romagna, Veneto, Friuli-Venezia Giulia, and Trentino Alto-Adige.
is due, in part, to the insecurity of migration. The potential to lose one's identity is felt when one does not have access to the elements contained in the socio-ecological relationships that enable the continuation of one's knowledge, practices, and beliefs.

Before moving further into the lives of this group of Italian migrants, a few key concepts require clarification. This research borrows from Baldassar & Pyke's (2014) organisation of the waves of migration. The research participants are conceived through the following five time periods:

- early (1800s)
- pre-[Second World] war (1900-1945)
- post-war (1950s-1960s)
- recent (post 1970s)
- and the ‘new’ migration (post-2000)

Regarding the term first generation migrant, this research follows the definition given by the Australian Bureau of Statistics (2003) that ‘first generation Australians are people living in Australia who were born overseas. Second generation Australians are Australian-born people living in Australia, with at least one overseas-born parent’.

**Summary**

The Italian community in regional NSW is a unique settlement with a long history and networks throughout the state. The Italian migrants who came to Australia were primarily from rural agricultural backgrounds. This lead to the view of the Italian migrant as a market gardener or greengrocer — a perception embedded in Australia's cultural lexicon. The perceived cohesion within the Italian migrant community, imposed through loss and hardship, is demonstrated through the high percentage of Italian spoken at home and involvement in Italian community social clubs. In spite of
strong of regional differences, the continuity of language (dialect or Italian) and commitment to community indicates a strong cultural identity.

It is only through migration that the idea of Italian became a reality; regional allegiance outweighed any sense of national unity or identity. As such, the perception of Italianità must be viewed through layers of migration, loss of regional connection and a process of re-identification as ‘Italian’ through the act of migration.

This research project aims to identify the extent to which plants play a part in the formation of this sense of Italianità. The evidence from the ethnobotanical literature establishes the use of plants as food, medicine and folklore as a central part of contemporary Italian life. This research will assess the extent to which this is true in the homes and gardens of Italian migrants and their descendants, in the Northern Rivers Region.
CHAPTER 6: COSMOS (Why)

Belief, worldview, and tradition

Acknowledging the complexity and fluidity of migrant Italianità, the following chapter examines the core values and beliefs expressed by the research participants. These generalised core values act as a starting point for an exploration of the maintenance and expression of traditional knowledge within the homes and gardens of this group.

A worldview or cosmology, according to Berkes et al. (2000), includes basic beliefs pertaining to religion and ethics, which provides a structure from within which knowledge and understanding are produced. The forms of culture, its core values and ethics, are shaped by this shared worldview. In this research, I position the concept cosmos from within a Western European context.

Cosmos, according to Toledo (2002), is a worldview in which the land (Nature) is viewed as sacred. As such it is to be interpreted as the overarching system of beliefs that guide and regulate one’s use of nature. The inclusion of cosmos, or worldview, in the examination of knowledge, allows the positioning and distinction of the cultural or ethnic. This cosmological framework is essentially an indigenous one, in which one’s relationship with nature and the ‘natural way of things’ lies at the centre of the universal wheel of culture and identity.

Marking the differences between indigenous and Western cosmologies, Toledo argues that such a sacred quality may be ‘almost absent from Western thinking’ (p. 515). Notwithstanding Toledo’s assertion, appreciation and respect for the power of nature is evident in Western European knowledge traditions (Hooke, 2012a, 2012b). Taking this concept a step further, in this research cosmos is found to be a unifying set of secular beliefs that forms an ethical code that determines the implementation of both corpus and praxis. Within this code of ethics, a set
of values and attitudes concerning work, health and productivity are all entangled in a complex code of responsibility to family and community.

Reviewing the history of Italian gardens in Australia, Chessell (2004) records the intimate relationship that existed between the gardener and nature. She writes, ‘the daily ritual of working with nature developed ethical, almost spiritual dimensions and became traditions about the moral way to live’ (p. 4). This spiritual relationship with nature developed, in the Italian peasant farmer, a sense of awe and respect for the possibility of abundance. Additionally, faith in the rhythm of the seasons and the value of hard work were instilled. These elements form the code of ethics, values and beliefs that continue to guide the Italian migrant gardener.

Social capital

The complex code of ethics, values and belief termed *cosmos* may also be understood through the inclusion of the concept of social capital wherein the elements of social networks, shared values and emergent trust are constructed (Baldassar, 2008). Carpiano (2006) explores the concept of social capital, stating that it includes notions of ‘interpersonal trust, norms of reciprocity, and social engagement that foster community and social participation’ (p. 165). The interwoven networks created and maintained, enlivened by shared values and beliefs, enable the promulgation of knowledge and practice.

This understanding finds root in Bourdieu’s work on social capital. Bourdieu positions social capital as a key element of belonging or membership to a group. Social capital may then be understood as, ‘the aggregate of actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group’ (Bourdieu as cited in Carpiano, 2006, p. 169). In this research, the inclusion of these concepts enables the examination of the sustaining
acts of a community, in its effort to survive in a migrant space. Central to these ideas is Bourdieu’s constructs of doxa and habitus. Doxa is understood as embodied knowledge that is grounded in practice. It is the shared beliefs, opinions and agreed upon ‘rules’ that taken on as unquestioned truths. It is ‘that which goes without saying because it comes without saying’ (1977, p. 167). Habit, understood by Bourdieu, is a set of dispositions, values and attitudes instilled since childhood. The habitus – embodied history, internalized as a second nature and so forgotten as history – is the active presence of the whole past of which it is the product’ (Bourdieu, 1990, p. 56). Habitus is a practice of orientation, embedding values and shared beliefs, through the ‘insignificant techniques of the body’ (Bourdieu, 1984, p. 466) such as the manner of eating, self-expression or, in this research, maintenance of a garden.

The position of worldview (cosmos) in relation to a set of collective values and their relationship to identity has been widely explored. Hartley (1995) defines values as enduring beliefs, which ‘transcend specific objects and situations’ (p. 9) and as such may be used to enact control over social conduct. Chiro (2008) refers to the development of a collective identity as when group members become aware that they share similar attitudes towards certain group values. Similarly, Smolicz (1992) distinguishes a set of ‘core values’ as forming the most fundamental composition of a group’s culture.

Members of the same cultural group hold each of these core values in varying degrees of importance. However, there will be a few core values that are of fundamental importance for the continuity and integrity of the culture (group). These may be considered the hinges around which a group’s cultural identity is organised. For Smolicz (1992) ‘the removal of such hinges, through modernization or forced assimilation to the dominant group, would lead to the collapse of the whole building’ (p. 107). Core values include family, language, resourcefulness, resilience, a persistent work ethic, and gender roles.
Family

The family is a cornerstone of Italian identity both in Italy and abroad. Within Italian society and the boundaries of family subsequent generations are taught traditional values. These values are often expressed in the home through the defined roles of family members and the expectation that these roles will be maintained. Baldassar (1999) locates the importance of the family domain in its role in creating individuals ‘who will in turn re-establish a similar paramount reality’ for their children (p. 7). The process of establishing oneself—sistemarsi—through marriage and the re-creation of family, are ties that bind members to the core cultural values. The family is central, and everything outside the family is considered ‘not Italian’ (Baldassar, 1999; Smolicz, 1981).

The family home is the site of these transmissions of cultural values. The corollary of which is the centrality of establishing a home (and garden) in which to provide the space necessary to demonstrate Italianità. Among the research participants, the position of family and the home as foundations of identity and belonging is clear. The act of gardening, for many, has the primary role of producing enough food so that the family (immediate and extended) has enough to eat. When asked why they garden, many responded that the garden was for eating and little else. While other reasons might be evident, these are downplayed in the shadow of the overriding core value of family and the responsibility implicit in sustaining such a unit.

Considering the role of Italian migrant women, Martin (as cited in Baldassar, 1999, p. 13) notes that ‘although the family is the site of female oppression, it is an extraordinarily ambiguous and contradictory site’. The family home is the seat of a woman’s power, the place from which she guards the moral order. The provision of a good meal, a well-presented home and generosity towards a guest are all demonstrations of the responsibilities of a ‘good woman’ (James, 2004). The ambiguity of a
woman's role lies in between the position of power in her family domain, and the denial of freedom to challenge this structure (Baldassar, 1999). Additionally, the complex roles within families often follow a strict line of behaviour in which the wider society (other members of the community) acts as a form of 'communal authority' where concerns about 'what others will think' or the 'politics of reputation' (Baldassar, 1999, p. 16) act as guiding forces. According to Smolicz, the family supersedes all other values, highlighting the transcendence of family over the continuation of language, another key core value.

**Language**

The preference for the inter-familial dialect, which takes precedence over a national 'Italian' (Smolicz names the 'literary standard' Italian), is offered as further evidence of the primacy of familial relations within Italo-Australian society. The use of such dialects allows language to transcend communication. The language used in the home takes on the symbolic representation of ethnic identity and provides a marker, which is a defining value for 'authentic' group membership (Smolicz, 1981). Language and the ability to speak dialect was a recurring theme during the interviews and conversations with the research participants. The ability to speak dialect and to have someone to share that knowledge with was highly valued.

Community groups, such as the St Carthage Friday elders group, provided the opportunity for many widows and elderly women to come together and speak in dialect. The younger generation, concerned that they had very little knowledge of true Italian and only a little more of their family dialect, decided to teach themselves Italian to build a stronger emotional connection to their sense of identity as an Italian. Language continues to be the key vehicle for the transmission of knowledge and connection to identity.
Resourcefulness and resilience

For the research participants, the values related to work in the home garden are connected to family life, relationships and solidarity. Armstrong (1998) identifies these values as diligence, self-sufficiency, independence and resourcefulness. The family unit provides the necessary labour force for this work with every member contributing to the family production dynamic. Each is encouraged to contribute to the maintenance and security of the family resources, with children given simple tasks, such as weeding the garden beds, caring for the chickens, collecting the eggs or helping to sow the seeds in a new garden bed.

The family, as constructed by the Italian migrants in the Northern Rivers Region (NRR), once operated under a form of patriarchy tied to una mentalità tradizionale (a traditional mentality) (Carlson, 1997). The position of the father or male elder as head of the family continues to a lesser extent today. The following passage from an interview with Robert provides a rich distillation of the themes discussed in this chapter. These themes include the roles of patriarch and wife, the coming together of extended family and the joy of a shared meal.

Robert: Yes, yes–every event involves, revolves around food. Like every Italian family, it didn’t matter if it was a Sunday or like a big festa [party] or any general day–it was always, you know someone bringing something from the garden to cook. You never went out to restaurants or...Why would you go out to restaurants when you could cook all this amazing food at home?

Anna: What kind of food would you have at a particular event? Can you think of one? Was it seasonal?

Robert: Well, a great one was the artichokes, like when the artichokes come on. Nonna would call up and say, ‘Alright everyone come over!’ And there would be about 15 people around the table just eating artichokes. And that was it, just artichokes.
Anna: How do you eat them?

Robert: She used to stuff them - keep them all and just make a mixture of salami, bread, parsley, Parmesan cheese, eggs - make that and then stuff that all in the leaves. And then onions and peas and she would fry them off in a bit of water, and stick the whole artichoke in that and then cook it for about two or three hours.

Anna: Yum - how amazing!

Robert: Yeah, and then pull the leaves of and then you come to this little chunk of cheese and bread...And then you get to the heart...And you would have like this little treat at the end... And then all the peas, you would have this soup at the bottom, and you have bread, lapping that up...so yeah...we had that...

Anna: It is quite an amazing event! Your whole family is there, and your grandmother has made the food and it feels like, even how you are talking about, that there is a lot of joy.

Robert: Well, yeah—you could say, my grandfather, he would always sit at the head of the table, and he would always have a smile on his face because when he was our age when he was a kid he was starving! So for him to bring, to flee what he fled and to, you know, provide something for—to create a family and provide for them, he was just so content. He would have a glass of wine, a cigarette hanging out the side of his mouth, and that was it—you know, I’ve done it!

The story of Robert’s grandfather’s arrival in the Northern Rivers follows the pattern of chain migration in which a male member of the family unit is first to arrive, secure employment and then send for his immediate then extended family. Initially, the work available was menial, plantation work or labouring. In the NRR, many of the relatives of the Italian migrants interviewed arrived and took up work growing tobacco or bananas. Arriving in Australia in the mid-1950s, another research participant, Tina and her husband, experienced the transition into their new homeland as an emotional and economic trial. When asked about where she learnt how to garden, Tina related the following story. This is a story that is shared by
many young women who, on leaving their old life behind, arrived in Australia and faced the burden of a different kind of poverty and a life where seemingly there was ‘nothing good’.

**Tina:** No...no, no, no there was nothing, I learn it all here. My mamma was, me was young married, and I come here. Here was no too good, I come in Nimbin, there was not much, there was a banana man, I was young, my husband want to come here because there was a brother here, and me was not so happy when I come here...I wasn't happy at all.

**Anna:** Why?

**Tina:** Because it was different, a different country, it was a different country. When I come here, I was a journalist...

**Anna:** You were a journalist?

**Tina:** Yes! A long time ago...well, my life here was not very happy was it...because my life was there. But when he (my husband) come and no money, no house, no car...

**Anna:** It’s not easy, heh?

**Tina:** No, no, no...not easy at all - I tell you! And he (a friend) said why you come? You have all the fruit, all of – my, my mama, my papa they got the wheat and everything (in Italy). And here? You got all, all of these dead trees – trees everywhere. But it was not because I didn’t like it - it was different, different - completely different.

**Anna:** So when you came here you saw all of the dead trees.

**Tina:** No here.

**Anna:** In Nimbin?

**Tina:** What you got there? You got banana, banana was not much good, the grapes was not much good – no money – after we wanted to make the house.

**Anna:** Is that what made you start to garden? To grow food?

**Tina:** I was a gardener there for us. Too, all of the time, you know because I didn't want to buy any shop...all of the time...
- I made the cheese, I made the ricotta...ha! Very hard! Very hard!

Anna: So when you came...how many years ago now?

Tina: 50 years...ahhh it would be 50...

The foreign landscape, in which the desolate terrain and eucalyptus were mistaken for ‘dead trees’, must have been quite a shock to encounter. And yet, despite this melancholy, Tina’s story also reveals the centrality of resourcefulness and resilience in the lives of women who left their homes in Italy to be with their husbands or fathers in Australia.

It is clear that the cultivation of a home garden and access to traditional food allows the migrant gardener to recreate a site where traditional knowledges, practices, and beliefs can be rekindled. This re-creation of ‘home’ involves a complex transition. As in Tina’s case above, it was often the case that these gardening traditions were not the primary role of the migrant before migration. While the knowledge and beliefs may have been known or witnessed, with grandparents or parents maintaining a garden, many of the migrants that arrived in Australia ‘became’ gardeners to secure financial independence. What is intrinsic to this decision-making process is the cultural value of financial security and self-sufficiency.

It was with the arrival of women that home gardens began to be established in an effort to grow suitable food (Bosworth, 1991). This was food that was affordable and culturally central to the tastes and memories of the migrants. In the passage below, Faye describes the garden she remembers from her childhood. It was here that her mother demonstrated to her children the necessity of resourcefulness and ‘making do with what you’ve got’.

Anna: So, how did they get by with the food? Australian cuisine was nothing (like what they had known in Italy)

Faye: Well, they grew – well, they didn’t (eat Australian food) they did all of their own. Well, what they could afford
because we grew up on, until about the age of five or six, sweet potato because mum had sweet, she had this little [...] and there was sweet potato all around. She made everything out of sweet potato. She even made, as long as she had flour – well, she even made, even the pasta, like she would use – because the flour was expensive – she would use a little bit of flour and a bit of potato. So it was like – she would grow her own tomatoes. She was working in farms where there was tomatoes growing and all that.

Christina: There was a lot of improvising!

Faye: Yes, it was, a lot of improvising

Anna: So, the idea then of how we adapt to where we live...

Faye: Well, she had to, she didn't have a choice. She had three children, and she would go out and pick peas and beans and it was like, well you know, that's what we had to eat here because that's what we've got. She didn't have everything that she had in Italy. As long as she had tomatoes and things like that... Yeah, so, yeah... I mean we never had a watermelon until I was about 10 when I had my first watermelon. Dad brought home a huge light green watermelon for Christmas, and I couldn't work it out what it was! (Laughter!) He had it under his arm... Isn't that funny!
Work ethic

The work ethic of the Italian migrant, fleeing *la miseria*\(^{16}\) to come to a new land to establish a better life, is the dominant narrative of the migrant. The core values of resourcefulness and self-sufficiency are sustained despite this escape from poverty. Be it that experienced by the first Italian migrants to arrive in the 1880s, the second wave of post-World War II, or the most recent migrants who speak of fleeing ‘la crisis’ (the global financial crisis) to come to Australia for a better chance.

Responsibility for the care of the extended family meant that there was a push to leave Italy to find work with the goal of returning to Italy as soon as a fortune had been made. Living abroad, money would be sent back to the family in the village. Robert explains:

*Robert:* *It was in between World War I and World War II... So, my two grandfathers came out, and they worked in the cane fields, and they got put into concentration camps when the war broke out.*

*Anna:* *It’s incredible isn’t!*

*Robert:* *Because they were allies with Germany, and all that, and then that happened – and my grandmother, one of my grandmothers, when she came out she hadn’t seen her father - she was 13. So, she was born, and her father was in Australia, so she was 13 when she met him.*

*Anna:* *So what happened?*

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\(^{16}\) *La miseria* is a term that is frequently used in the literature to describe the centuries of poverty (from the early 18\(^{th}\) century to the late 20\(^{th}\) century) endured by Italian peasant classes, both in the North and South. Often cited as the central impetus of Italian peasant migration, *la miseria* is considered a state of mind that encompasses the qualities of frugality, resourcefulness and strong familial ties (Friedmann, 1953; Redfield & Friedmann, 2006).
Robert: He left, so he left Sicily.

Anna: To set up home here?

Robert: To set up home, he sent money back for 13 years and finally after he got his family out, after 13 years. So she grew up without and then come to Australia and met her father for the first time...there's so many of them that did that.

Gender

The role of gender in both the home and the cultivation of home gardens in the Italian-Australian community is complex. Carlson (1997), in her history of early Italian migration to Australia, reveals the blurring of gender roles in the home. She explains, ‘Working together on the land, the distinction between domestic and productive work was irrelevant’ (p. 382). First generation migrant women were responsible for nurturing, and housework, as well as caring for the animals and the selling of produce. The men worked alongside their wives, preparing food and working on the family banana or tobacco plantation.

Much of the literature cites women as being the purveyors of cultural practice, particularly in the realm of food (Beoku-Betts, 1995). However, today in the Italian-Australian community, the construction, maintenance, and cultivation of the garden is a family affair. Principally, men tend the back yard garden and women look after the front garden. Reflecting the family structures of the early migrant cohort, this remains a dynamic arrangement, with cases of both working together in all areas of the garden. Equally, the preparation of food continues to be the domain of both women and men. Depending on the generation and nationality of the spouse, for example in the case where the family is mixed, with an Italian husband and Australian wife, the husband spent more time in the kitchen preparing ‘typical’ Italian food. The concern of caring for the family is commonly linked to the role of women. However, I would argue that this is a narrow understanding of care. Within the Italian community, cultivating,
preparing and celebrating food is central to the notion of care and is whole family activity.

Notwithstanding, this notion of caring for the family, there is a gender division of labour within the home of the Italian migrants interviewed. This is primarily located in the construction of space. As mentioned above, the garden is often divided into the backyard, the male domain primarily responsible for the cultivation of food crops; and the ornamental front garden, the visual feast for the outside world, which is predominantly the woman’s domain. Additionally, in the backyard or under the house is the cantina (cellar). In these cool dark rooms, the wine and grappa are stored. These are overwhelmingly the private domains of men. While there has been some loosening of the gender divide here, with some participants stating ‘I don’t care—anyone can come in’, the impression of others (women) is that while they might be allowed to enter—it is not their place.

Anna: And so he has a wine press does he?

Adrianna: Yeah, he has a little cellar under the house. I’m never allowed to go in there...

Anna: Did your granddad ever teach you how to make wine? Or show you how to make wine?

Adrianna: No, the cellar was like the place we weren’t allowed to go to. I still, I barely know what it looks like – I see these little steps and all dark...

Anna: Who’s allowed to go there?

Adrianna: Just my nonno goes there – it’s his err...

Anna: And his son?

Adrianna: Yes, I guess my uncle, my mum’s brother. Not so much my dad - yeah - it’s just my nonno’s space.

Italian migrant women are often positioned in academic literature as ‘subjugated’ actors within a closed patriarchal family (Iacovetta, 1987). Contrary to this narrow view, the women interviewed all display an
overwhelming fortitude, strength and capacity to maintain traditions and to ‘continue on’. This is particularly true where the husband (patriarch) has passed away or is no longer able to contribute due to poor health. In the case of the elderly women interviewed (Ida, Tina and Faye aged 83, 73 and 65) each works hard maintaining her farm and garden. Perhaps in a demonstration of respect and remembrance, they all reflected on the possibility that their husbands would be ashamed of the state their gardens were currently in.

Figure 2: Ida, aged 83, showing me how to pick pecans.

Summary

The significance of the family in the lives of Italian migrants in the Northern Rivers region is undeniable. The roles and responsibilities implicit in the family unit are played out across the generations and take root in both Italy and Australia. Allegiance to the family and village continues today, despite modernisation and the growth of a more global Italian identity. The position of the family as anchor and guide for the
individual is evident in the continuation of family gatherings, in which food and wine are prepared and enjoyed, and in the ongoing work ethic of diligence and resourcefulness. This solidarity is demonstrated in the structure and choice of plants grown in the Italian home garden. The decisions made by the individual, regarding what is to be included and what is to be excluded (grown or not grown) demonstrates participation in the shared collective identity, thus underscoring a sense of belonging.

Following migration, there is a process of both affirmation and transformation of the values of the family domain. Values are taken from the home and undergo change. At the same time, changes are brought into the home via contact and connection to the new environment. The determining of one’s cultural identity is then a process whereby the individual assesses and assumes attitudes to the core values of their particular cultural group. Shared values, which provoke equivalent emotional and active responses within the group, are experienced through shared memories, hopes and aspirations forming a collective identity. Italians migrants and their descendants, in the NRR, are such a collective.

Taking into consideration the literature on the cultural traditions of pre-industrial peasant communities (Del Giudice, 2000; Glenn, 2013) strategies of co-operation form the core of the traditional patrilineal family structure. The strict codes create strong ties, facilitating the exchange of knowledge and practices essential to a ‘good life’. The stereotypical Italian family is an extended family with patriarchal head and busy domestic wife. This may in longer fit in the modern Italy. However, the generation of Italians and their descendants who arrived before the 1970s, before the economic shifts that brought about changes to Italian social and working life, remain closely tied to the older form of the family—even though they too face social changes brought on by modernisation here in Australia. Baldassar (1999b) acknowledging this trend concludes that the Italian diaspora ‘even in an avowedly assimilationist place like Australia, can
produce communities which are more—in this case—“Italian” than the home country’ (p. 296).

The application of the ethical code discussed in this chapter, in the formation of knowledge and the practice of gardening, is developed and explored in the following chapters. The process of knowing and acting are grounded in the unity of the family space. The maintenance of networks and family ties is investigated through the analysis of salience of plants grown and shared in the migrant garden.
CHAPTER 7: CORPUS (What)

Knowledge: What we know determines what we grow

*Any landscape is comprised not only of what lies before our eyes but what lies inside our heads*

(Meinig, as cited in Nazarea, 1999, p. 8)

In the examination of plants grown and used by Italian gardeners, an emic perspective is favoured as the research participants were often unsure of the exact names of the plant species they were growing. Sitting alongside the more static list of species favoured in the homes and gardens of the Italian migrant (see Appendix 3: Plant lists), the emic interpretation followed in this chapter aims to explore the context in which these plants are grown. The questions guiding this analysis include:

- What are the factors that determine the use and cultivation of plants in the home?
- How is the species combination selected?
- Where does this knowledge originate?

Domains of plant knowledge: Why do you grow what you grow?

The aim of this chapter is to review the cognised knowledge of the Italian migrant gardeners interviewed. This is achieved through the determination of the domains of knowledge that make up the TK held by the research participants. The concept of categories or domains of knowledge is pragmatic as these are drawn from the research participants via an emic understanding. From their perspective, there is a clear distinction made regarding the reasons why a plant species is cultivated. This distinction lies between tangible use and cultural values. This became evident early in the project and subsequently for every plant grown in the garden, each gardener was asked, ‘Why do you grow this plant?’ Their
responses were recorded and coded into categories of utilitarian or cultural salience (or agreement).

Following the analysis of the free-lists and interview data, use categories for 157 plant species were determined. In the category of utilitarian salience, the domains of plant knowledge elicited include food, medicine, food-medicines, beverages, ornamentals, fodder, and plants for market sale. Further, the participants listed additional useful reasons for the cultivation of specific plant species including ease of local adaptation, the quality of the crop produced and the production of fertile seed. In the category of cultural salience, the domains of plant knowledge include wild plant gathering, specific culinary preferences, taste and flavour, ritual and the continuation of traditions.

Interpreting utilitarian to mean ‘useful application’, the domains listed under utilitarian salience, for the most part, are well situated. A difficulty arises in the classification of food as this domain exhibits both utilitarian and cultural salience. Food demonstrates utilitarian salience as it plays a fundamental role in supporting the nutritional needs and supplementation of the family diet. Food is also a central component in the application as medicine, with taste and flavour, subdomains of the category of food, being often cited reasons determining a plant’s use as medicine. Additionally, food in the Italian migrant community is undeniably saturated with cultural significance. Food plants grown in home gardens are used in the kitchen, undergoing a transformation through simple preparation, becoming ‘cuisine’. The recipes and techniques followed are rich with cultural significance. Thus, to avoid an artificial distancing between use and cultural value, food (both grown and used in the home) is explored in detail in the section on cultural salience. It might well be impossible to separate utility from cultural significance, as both categories are the weft and weave of the knowledge stored in the home and garden. The separation of the categories does afford a closer examination of the two questions asked: what do you grow (utility) and why do you grow it
The inclusion of cultural salience fleshes out the factual utility of species, through the approbation of memory and story.

Whilst conducting the free-list activity, I was able to observe the research participants' attempts to recall important plants. The participants responded to the activity by (mentally) returning to their own gardens, by thinking about the plants that they grow today or that they grew before, in Italy or as children in Australia. I was concerned that this might not provide the answer to my initial question, what plants are typically Italian? However, their memories and their own garden may have been the easiest place for them to start, as these are the places they know the best. Equally, I might be lead down a different path that reflects the living embodied status of this traditional knowledge.

There were two groups of free-lists collected. The first collection took place during a meeting of local catholic elders at St Carthage’s Community Centre. Twenty elderly women participated in this single meeting. All participants were Italian and predominantly born in Treviso, Veneto or Friuli. The remainder of the free-lists were collected as part of the semi-structured interviews in the homes and gardens of research participants. There were a total of 19 free-lists collected from this group.

**Free-list results**

The 39 collected free-lists accounted for 100 species of plant from 43 families. A complete list of plant species cited during the free-list activity is included in Appendix 2: Free-list data. The most important families in terms of the number of species represented across free-lists were Asteraceae (10 species), Brassicaceae (8 species), Fabaceae (7 species), Lamiaceae (7 species), Cucurbitaceae (5 species), Rosaceae (5 species), and Solanaceae (5 species). In terms of number of citations, the most important families were Lamiaceae (89 citations), Asteraceae (59 citations), Solanaceae (57 citations), Apiaceae (42 citations), Fabaceae (32 citations).
citations), Cucurbitaceae (31 citations), and Rutaceae (31 citations), which between them accounted for 67% of the total citations.

Table 1: Frequency and salience of the top 19 plants cited in free-lists

<table>
<thead>
<tr>
<th>Plant name</th>
<th>Frequency</th>
<th>Smith's S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosemary</td>
<td>33</td>
<td>0.556</td>
</tr>
<tr>
<td>Tomato</td>
<td>27</td>
<td>0.473</td>
</tr>
<tr>
<td>Radicchio</td>
<td>24</td>
<td>0.479</td>
</tr>
<tr>
<td>Sage</td>
<td>23</td>
<td>0.335</td>
</tr>
<tr>
<td>Parsley</td>
<td>22</td>
<td>0.363</td>
</tr>
<tr>
<td>Basil</td>
<td>19</td>
<td>0.266</td>
</tr>
<tr>
<td>Garlic</td>
<td>14</td>
<td>0.201</td>
</tr>
<tr>
<td>Lettuce</td>
<td>12</td>
<td>0.218</td>
</tr>
<tr>
<td>Zucchini</td>
<td>12</td>
<td>0.143</td>
</tr>
<tr>
<td>Beans</td>
<td>12</td>
<td>0.164</td>
</tr>
<tr>
<td>Grape</td>
<td>11</td>
<td>0.170</td>
</tr>
<tr>
<td>Rocket</td>
<td>11</td>
<td>0.172</td>
</tr>
<tr>
<td>Lemon</td>
<td>11</td>
<td>0.120</td>
</tr>
<tr>
<td>Cucumber</td>
<td>11</td>
<td>0.141</td>
</tr>
<tr>
<td>Eggplant</td>
<td>10</td>
<td>0.126</td>
</tr>
<tr>
<td>Fig</td>
<td>10</td>
<td>0.097</td>
</tr>
<tr>
<td>Chilli</td>
<td>8</td>
<td>0.103</td>
</tr>
<tr>
<td>Salad</td>
<td>8</td>
<td>0.066</td>
</tr>
<tr>
<td>Spinach</td>
<td>8</td>
<td>0.152</td>
</tr>
</tbody>
</table>

Following the distinction made by Weller and Romney (1988), two discrete indicators are used when determining salience. The first indicator is the position (or rank) of an item on a list. The items that appear first on the list are considered to be 'more' salient. Secondly, the proportion of lists (or frequency) on which the item appears is considered. The items that appear most frequently are considered 'more' salient. Combining the two figures, the overall salience of the item is determined.
Examining the salience or importance of the free-list citations, the plants cited first (position) in a list were *radicchio* (8 lists), rosemary (5 lists), parsley (4 lists), tomato (4 lists), and basil (2 lists). These are also among the most frequently cited plant species (proportion), however, their rank is altered based on the total number of citations. Table 1 provides further detail regarding the most frequently cited plant species.

Of the ‘top seven’ most frequently cited plants, five are cultivated culinary herbs. The salience of these plants is reflected in the importance of their use in the preparation of ‘good’ Italian food. This is discussed further in this chapter in the section on cultural salience. Few fruit species are listed, however, those that are—grapes, figs and lemon—also reflect their common usage in Italian foodways. Additionally, there is a strong consensus amongst the research participants, regarding the top five plant species, which include rosemary, tomato, *radicchio*, sage, and parsley.

Plant species were given in English and a variety of Italian dialects (mainly Sicilian or Venetian). This resulted in a duplication of terms. Analysis of the free-lists reveals a number of examples of under-differentiation, where a single plant name is used for a number of similar plant species (Nebel & Heinrich, 2009; Pieroni et al., 2002). Examples include bean, berry, *cicoria*, citrus, lettuce, and lentil.

Of interest is the appearance of *cicoria* on the free-lists. It's low ranking, only mentioned four times, is surprising due to the reported high frequency of its use throughout the formal and informal interviews. This discrepancy may be due to a number of factors: primarily, due to under-differentiation. As the informants often use dialect when naming the leafy greens grown in their gardens, the distinction between *cicoria*, *radicchio*, *endivia* and dandelion is not a clear one. This group of leafy greens share a set of common characteristics—they were once gathered in the wild. However, they are now cultivated in the garden; they are springtime vegetables; they are bitter to taste and enjoyed for their ‘cleansing’ action.
An additional reason for its low frequency is traditionally *cicoria* viewed as a crop that is gathered in the wild and many informants remarked on the difficulty cultivating *cicoria* in the NRR climate.

*Rober*: You get cicorias and all that - but they don't really grow that well here because it's too hot.

While much of the confusion regarding the naming must be due to my own lack of familiarity with the species, it can also be argued that the young leaves of these plants may be hard to distinguish (Nebel & Heinrich, 2009). Perhaps unsurprisingly, in my attempt to understand the differences between these plants, I was often given competing information.

If the issue is predominantly one of under-differentiation, this is particularly relevant as these plants are now being sold at local farmers markets and as seedlings in plant nurseries. Seed companies, such as The Italian Gardener, are often marketing *cicoria* as Italian dandelion. The follow on from this confusion in nomenclature is seen at the local farmers markets. The stallholders are selling species which are incorrectly named—in particular ‘red dandelion’ leaves are sold as dandelion when, in fact, they are not true dandelions at all; they are simply members of the same family, Asteraceae (*Cichorium intybus* L.). Beyers’ (2008) exploration of Italian migrant food culture in Belgium uncovers a similar example. She noted that although migrants in her study referred to dandelions, the plant used was actually the leaves of wild chicory (*C. intybus*).

One obvious differentiation made by the Italian migrant gardeners in this research is that they gather wild dandelion while they purposefully cultivate *cicoria, endivia*, and *radicchio*. When asked to clarify the difference between *radicchio* and *cicoria* Johnnie told me, ‘*Radicchio* is the Italian lettuce. *Cicoria* is the root of the Italian lettuce, they grow underground, and the top part of the lettuce is called *radicchio*’. The difference between *endivia* and *radicchio* is equally simple, ‘All of the red leaf lettuce is *radicchio* and the green ones *endivia*’. 
Additionally, the free-lists contain many examples of the use of generic utilitarian terms. Examples include flowers, herbs, *minestra*, *insalata* (salad), stone fruit, green vegetable, and Italian-style vegetable. In the first analysis, one of the most thought-provoking examples was *insalata*. During the interviews, that followed the free-lists, this term (*insalata*) was often used. I asked for clarification regarding the use of the term, and I was told it could be interpreted as either leafy green vegetable, lettuce or the meal ‘salad’. Due to the frequency of the use of the term *insalata*, it has a high rank. However, informed by Berlin (1992), in this context *insalata* is considered a generic utilitarian term and not a folk species or genus.

There were a number of plants listed that are generally considered non-Italian plants. These included avocado, banana, custard apple, dragon fruit, ginger, guava, kiwi, macadamia, papaya, passionfruit, pawpaw, pomegranate, and persimmon. These plants are common to the NRR region, thriving due to the suitability of the climate. Significantly, these are all fruit trees (with the exception of ginger) and were typically well established in the gardens visited, indicating that these plants required minimal care (or had been planted by previous owners). The inclusion of these, in the free-lists and interviews, is a demonstration of the adaptability of the migrant gardeners to their new environment. Additionally, there is a long history of Italian migrants working with these plants (bananas in particular). For many of the gardeners this group of plants also represented the opportunity for experimentation and economic return as bananas, avocados, custard apples and papayas are easily sold at local markets or home front fruit stalls.
Figure 3: Endivia from three gardens: Frank & Glenda; Romeo & Lucy and Tina & Joe
There was a total of 157 plant species recorded during the period of data gathering. 100 of these were drawn from the free-list activity. Not all of the plants listed were under current cultivation in the home gardens visited. In total, 77 of the plants cited on the free-lists were found in situ, being currently under cultivation, with 25 not under current cultivation. The remaining 55 plants species, not cited in the free-lists, were currently being cultivated. Appendix 3: Plant lists contains the complete list of plants, generated from the interviews and free-lists.

Figure 4: Bananas growing in Peter's backyard
Utilitarian salience

Usefulness of species grown is multifaceted. The ecological, economic and agronomic reasons followed by the gardener, used in the decisions to grow, maintain and discontinue crop varieties may be understood as utilitarian salience. In the literature, these factors are often placed as the primary reasons how gardeners (farmers) structure their decision-making processes. The species grown in Italian migrant gardens are primarily used as food, medicinals or ornamentals. Practical considerations, such as the quality of the produce, ease of growing, size of produce, yield and disease or pest resistance, are all factors in the gardeners’ decision to continue the cultivation of a species.

Aside from these categories, the gardeners made mention of the garden as ‘refuge’ for wild animals. However, more often than not these animals were also considered pests and a threat to production. One gardener made specific mention of the decision to plant Australian native trees as a way to encourage native birds into the garden. These birds were seen as a key element of the ecology of the garden.

Medicinal plants and food-medicine

When asked directly which plants are used as medicine or to treat illness/disease, most of the informants were quizzical. As I pressed on, asking the question in different ways, if become clear to me that this was not the question to ask. Detailed knowledge of plant species used as medicinals is typically the domain of expert healers in the community (Pieroni, 2000). The individuals that took part in this research felt little resonance with such forms of expert ‘plant wisdom’ with which they associated the term medicine. Their knowledge, regarding the application of medicinal plants, rests in the transference of family wisdom rather than expertise. This is an example of the distinction between knowledges—scientific/expert and local/lay (Fonte, 2008). Allowing the space for and validation of lay
‘wisdom’ was achieved through a reframing of the question. The research participants gave more detailed responses when the question was reframed to explicitly include home remedies, encouraging a reflection of childhood remedies and practices. Moreover, when first asked, the question overlooked the subtle belief construct regarding health and disease shared by the participants. Within the older generation (specifically those that arrived in Australia between 40 and 60 years ago) there was a sense of pride expressed due to their ongoing health and lack of need for medical care—traditional or biomedical. Rather than asking directly, ‘what do you do when you get sick/ feel unwell?’, a more indirect prompt towards reflection and recollection on the health or illness of others, sidestepped the issue of pride in one’s benne essere (wellbeing).

The plants that were recognised as having health giving qualities were associated with other primary use categories—specifically food. The importance of food as a medicinal substance has been understood since the time of Hippocrates in the 5th Century BC. Attempting to reconcile the food-medicine divide existent in contemporary western medical sciences, the use of food plants as medicine has been widely researched in the ethnosciences (Etkin, 1993; Rivera et al., 2005; Vandebroek & Balick, 2014). It is evident that the categorisation of food as medicine is highly contextualised, and strongly influenced by family and tradition (Jennings, Merrell, Thompson, & Heinrich, 2015). It is widely acknowledged that food-medicine is a blurred and overlapping concept that sits on a continuum between phytochemical constituents and traditional belief.

While discussing medicinal plants and illness, the informants drew upon memories of childhood in Italy or the early days of arrival in Australia. They continue to use many of the plants listed in their homes based on specific medicinal actions. Fresh green vegetables, fruits and spices are perceived to be healthy and, therefore, having a protective effect against disease. These plant foods are enjoyed for their taste as well as for their medicinal impact.
There were 21 botanical taxa used as both food-medicine by the Italian migrants interviewed. They belong to 13 botanical families, of which Asteraceae (4) and Lamiaceae (3) are the most frequent (Appendix 3: Plant lists).

Primarily viewed as food species the following plants were also recognised as having ‘health giving’ properties. These plants include garlic (Allium sativum L.), cabbage (Brassica oleracea L.), turnip greens (Brassica rapa L.), chestnut (Castanea sativa Mill.), endive (Cichorium endivia L. spp.), chicory (C. intybus L. spp.), lemon (Citrus limon (L.) Osbeck), fennel (Foeniculum vulgare Mill.), prickly pear (Opuntia ficus-indica (L.) Mill.), Bay laurel (Laurus nobilis L.), basil (Ocimum basilicum L.), rosemary (Rosmarinus officinalis L.), sage (Salvia officinalis L.), dandelion (Taraxacum officinale Weber.), grape (Vitis vinifera L.), and plant product coffee (Coffea arabica L).

A number of berries were used as an additional flavouring to medicinal alcoholic beverages: strawberry (Fragaria x ananassa (Duchesne ex Weston) Duchesne ex Rozier), cherry (Prunus avium L.), and blueberry (Vaccinium myrtillus L.).

A small group of plants were cited as being cultivated for their medicinal properties only. These included: aloe vera (Aloe vera (L.), Burm. f.), pennywort (Centella asiatica L.), lavender (Lavandula angustifolia Mill.), mallow (Malva sylvestris L.), chamomile (Matricaria recutita L.), peppermint (Mentha x. piperita L.), tobacco (Nicotiana tabacum L.), anise (Pimpinella anisum L.), and rue (Ruta graveolens L.).

The use of food plants as medicine sits at the core of the group’s beliefs about health. High quality, fresh food is recognised as essential to good health. The reasons given for the use of specific medicinal preparations reflects this belief. Data drawn from the interviews and from observation
form the basis of this analysis. Three categories of were identified in which to position these ‘food medicines’: 17

- cleansing plants
- plants used as condiments or for additional flavour which are recognised as having a digestive or carminative action and
- home-made digestive spirits or aromatised grappa

The plants considered cleansing are the most cited. These plants are included in the diet throughout the year and display strong cultural salience, thus demonstrating the difficulty in separating utilitarian and cultural salience categories. The plants are prepared in a variety of ways and enjoyed primarily due to their flavour and the taste preference of the informant. The bitter taste is viewed as an important component of a ‘good meal’ with the understanding that fresh green leafy vegetables are best.

There is a recognition that the bitter taste of vegetables such as kale (B. oleracea L.), rape (B. rapa L.), endive (C. endivia L.), radicchio (C. intybus), and dandelion (T. officinale Weber.), are associated with good digestion—which is equated with good health. Cleansing may be understood as good digestion, as a result of supporting the intestine and liver (Nebel et al., 2009). The importance of the bitter taste in the use of traditional (non-cultivated) food plants as medicinals highlighted in Pieroni et al. (2002) study. One recipe given for the preparation of endivia and cicoria involves boiling the vegetable leaves then drinking the water. This is considered to be ‘good for the estomago’.

17 These categories were described by Pieroni (2000) in his study of food medicines used in Northern Italy.
In Australia, the informants are able to cultivate and use these plants throughout the year. However, many remember springtime in Italy as the season when these plants would be gathered from the land around their homes. Peter remarked that the arrival of bruscandoli—the young shoots of wild hops (*Humulus lupulus* L.)—was a sign that spring had arrived. He and his family would collect the shoots and prepare them with rice or on their own. For Peter, the health benefit of this plant is closely related to the return of the sun after a long winter and the strength of the new season.

Taste also drives the use of food medicine plants as condiments and flavouring. Aromatic herbs such as anise, fennel (seed and bulb), garlic, rosemary, sage, and thyme are used to aid digestion. These are added to ‘rich’ or ‘heavy’ meals such as in the case of fennel seeds in pork sausage or salami. Additionally, bay leaf is added to meals to ‘cut the acid’. The leaves are prepared as a tea—*aqua d’lauro*—that may be drunk after a rich meal to ‘settle the stomach’. Other condiments, such as lemon, chilli or vinegar are added to aid the digestion of a meal.

Wine and grappa are considered general tonics, as well as specific aids for digestion. Many of the informants related stories of being given wine or grappa as children as the first point of care. Homemade grappa is infused (aromatised) with a variety of aromatic herbs, including anise and rue. Fresh fruits are also used to add flavour to the grappa. *Limoncello* continues to be made by many of the informants (predominantly those from the South). The use of wild fruits such as *mirtilli* (blueberry), cherry, and strawberry is remembered from Italy (by those from the North). Medicinal wine recipes, such as *vin brulé*, are prepared at the first signs of a cold or flu. Lucy and Romeo shared their recipe with me:

*Romeo*: A virus you get in then the wine you cook it

*Lucy*: Oh yes, if you got the flu that’s what they do. It’s like mulled wine; I don’t know what they call it, in Italian si chiama vin brulé ...you get the wine, and you put a stick of cinnamon, and he put a few pieces of lemon skin but not the
white part of the lemon, just the skin and what do you put? Say for a cup – about three or four cloves, normal cloves and then ummm cinnamon.

**Romeo:** Sometimes, I put a bit of scorsa (peel)

**Lucy:** Yes, but not much. I generally put the cinnamon bark, the cloves, the lemon peel and a bit of sugar...in red wine but you can do it in even with white. You bring it to a boil, and then when it’s boiling, you lower the heat and just set a match to it and burn the alcohol.

**Romeo:** You burn all the alcohol.

**Lucy:**...you put the match and let it burn off all the alcohol and then if you got a cold or something it will make you sweat it out—that’s how you do it.

Common medicinal plant species are also utilised, such as *M. recutita* L. (chamomile) and *M. x. piperita* L. (peppermint). These are prepared as teas. Chamomile may be cultivated or bought in the shop as tea bags. It is used as a digestive as well as a general sedative or relaxant, especially for children. Sage was mentioned by many of the informants as being a very important plant. Its primary medicinal use is for dental health and as a substitute for toothpaste. A whole leaf is used and rubbed against the teeth and gums.

**Faye:** Well, we always...Northern Italy, they always used sage for cleaning their teeth.

**Anna:** How would you prepare that?

**Faye:** You don’t prepare it. You just rub your teeth with the leaf...Because auntie’s brother-in-law never brushed his teeth ever in his life. He’s only just died – he was 87 and his teeth pearly white...No fillings – yeah he was 87, and he never brushed his teeth once in his life. And he always cleaned them with sage leaves. That’s all he ever did.

Whole sage leaves were also used when children had mouth infection (thrush). A whole fresh leaf, with a little bit of sugar, was given to the child, and they would be instructed to wipe their mouth out with it.
The treatment of colds and flu is another area in which home-grown plant medicine is applied. Many of the research participants said they increased the use of garlic in food preparation when they were feeling unwell. Prickly pear is also used, prepared as *tisane di fico d’India*. The spines/spikes are removed, and the leaf is then boiled. This is then added to an infusion of chamomile flowers and used for respiratory or chest infections. While sharing this recipe, Antonia remarked on the addition of sugar to the tea. She was concerned that her children’s health would not improve if she followed her mother-in-law’s recipe, which called for teaspoons of sugar. She decided that honey would be a better substitute.

Many of the informants utilise plant products as tonics or strengthening foods. A key strengthening food plant named by the informants is chestnut.

*Alice: Up to a few years ago if you came from the mountains you didn’t really use flour or salt because you had chestnuts. It was easier to have everything out of chestnuts.*

For northern Italian migrants, chestnuts represented an important element of subsistence. They were gathered from the mountains close to their homes and were used in place of hard to obtain flours (wheat, corn) to make cakes, bread and pastas. Chestnut was also prepared as a coffee substitute.

Another strengthening food and a favourite breakfast drink was a raw egg with espresso. Many of the research participants recall that this was a special beverage prepared for them in the mornings before school. Coffee (espresso) is prepared in a percolator (*cafetera*) on the stove. In a favourite mug, two egg yolks and one to two teaspoons of sugar are beaten together until it is ‘thick and creamy’. While this is being prepared, milk is brought to the boil in another saucepan. When the coffee is ready, it is added to the mug so that it is one-third full. The hot milk is added last. This was given as an energy drink that would provide sustenance for the long day ahead.
Coffee was a highly prized plant beverage, which was often in limited supply during the first years of arrival for many of the migrants that arrived pre and post-World War II. Upon arrival to Australia, many of the elderly informants remembered the difficulty in accessing fresh or good quality coffee. Following WW2, it was also difficult to get coffee in Italy. There were many plants used as coffee substitutes in Italy, including chestnut (*Castanea sativa* Mill.), chicory (*C. intybus*), corn (*Zea mais* L.), dandelion (*T. officinale*), rye (*Secale cereal* L.), soy (*Glycine max* (L.) Merr.), and wheat (*Triticum spp.*).

**Peter:** Well, during the war you couldn’t get proper coffee in Italy so they used to drink anything that they can roast. They used to ... even corn! They would get the corn, and they would roast properly and then they cook at real well, and then they grind it out and make coffee! And chicory was the same. And even wheat, they used to use. And segala - what do you call it? It's a type of wheat with a longer grain... (rye)

The group of migrants that arrived in Australia following the war were thus used to the difficulties presented by poverty and conflict. If coffee was available it would be mixed with chicory or another substitute to ensure that the beans would last. Romeo calls this mixed coffee ‘*café mato*’ (mad coffee). Lucy continues the story:

**Lucy:** Because they couldn't afford to buy coffee beans, and they didn't have olives ... and my mother used to say that my grandmother, because she was the oldest of the house and she was basically the boss and granddad, her grandfather died - my great-grandfather - and they would always buy her a few pure beans, just for her, you know because she was old, and no one else had 'em. Yeah, at that time... yes, chicory and they would use a bit of soya beans too...yes there was a lot, all that they could buy is coffee and chicory and then...my mother didn’t have pure coffee, pure coffee beans until my auntie came in ’55, ’56. ’56 my auntie, come in January I think, till she came my mother never had pure coffee...And then my auntie because she had been in...she had worked in a bar in Italy and always had espresso she couldn’t live without her coffee (much laughter) oh dear!
Today, coffee is enjoyed freely. None of the research participants use substitutes. Coffee is drunk in moderation, following the rule of a *cafe latte* in the morning and perhaps a small black coffee in the afternoon for ‘extra energy’. Ida, 83, claimed she would have a small, strong coffee in the afternoon to help her round up her cows. One of the younger research participants, Alice, who had recently arrived in Australia, claimed that she had only just learnt about dandelion coffee, ‘The dandelion coffee, I just learnt about that here—I didn’t know that. I used to use the flowers to make bracelets, but that’s just it’.

**Ornamental**

Ornamental plants are grown primarily for aesthetic enjoyment. All of the gardens visited contained some ornamental plants or trees, and these are grown in pots or border gardens. Predominantly, the ornamental garden is located at the front of the house. However, there were often pot plants arranged around the entertaining area—the location of which differed depending on the layout of the home.

Women are the main carers and creators of the ornamental plant space. However, a few of the participants stated that their fathers or grandfathers also had a keen interest in the plants grown. The decision to cultivate particular flowering plants is often tied to memories of a grandparent or parent’s gardens. Walking through Antonia’s garden, she was keen to point out the bougainvillea and geraniums, which were favourite plants of her father back in Italy.

The interviewees primarily expressed the belief that the exchange of ornamental plants is a low priority. One exception is the rose bushes in Romeo and Lucy’s garden. A woman in Texas, NSW, had given Romeo some cuttings after he had admired the ‘seven or eight varieties’ she had growing in her garden. Another participant, Ida, told me she had recently started
to grow ornamentals to be used at family events such as church weddings or function.

It is interesting to note the invisibility of these plants in the language of many of the participants. The most popular ornamental plants were easily named and recognised by the informants as either roses or geraniums. There were many examples in the interview where the flowering plants could not be named. This might indicate that another gardener, not present in the interview, either cared for these plants or that many of these plants were simply purchased based on their aesthetics, the interplay of colour or scent.

**Figure 5:** Ida’s geraniums  
**Figure 6:** Tina’s dahlias
Economic and market value

Eight of the 12 gardens visited involved some level of cultivation of crops for sale or use in commercial cooking. Of these, three were currently working market gardens. The produce from these gardens is sold in local fruit shops or stalls located at the front of the house. Tina, Peter and Tony have been growing food to sell to the local community for the past 50 years; Alice recently began to sell small amounts of produce from her garden at the local farmers market, and Robert relies on his garden to provide the ingredients for his catering business. When discussing the reasons why certain plants are grown in their gardens, these four participants made a clear distinction between the species they grew for themselves and those that were for sale. Barry related the following regarding his father’s (Tony) ability to make a profit from his garden:

*Barry:* Dad’s about 78. But he’s got rows and rows and rows and rows of beans. Well, he could have a couple of rows of beans, a couple of rows of tomatoes, a couple of rows of lettuce and you have a little bit of everything. And he was telling me last week that he made $500 out of his garden – see, he’s still trying to make money out of! So you know, it’s in his blood.

The remaining four gardens had previously been used for the cultivation of commercial species. The decision to stop commercial cultivation came down to a variety of reasons though predominantly these were uncertain weather and competitive markets. Romeo and Lucy, when they had a good crop, would sell their grapes to other winemakers however they haven’t done this in the past few years due to low yields caused by “too much rain”. Additionally, due to changes in government regulation, Romeo and Lucy had to stop growing tobacco after 35 years of continuous production.

Romeo and Lucy learnt about tobacco in Texas, NSW. In Coraki, their tobacco was planted in poor sandy soil, which has previously been used only for scattered grazing. Seedlings were first raised in seedbeds then planted out in early summer to be harvested, dried, and graded in autumn.
All planting in the 1950s was done manually with the only assistance being a horse pulling a scarifier. They picked, dried and graded the tobacco by hand. Romeo and Lucy told stories of the whole family working together ensuring the work was all done in time.

**Romeo:** One thing I tell you, I miss my tobacco – when I grow tobacco, here, well because it’s very [??] the tobacco, when you’ve got the crop in the paddock, you make a lot of money, there’s nothing, there’s only grass. But when we pick it, and dry it through the dryer, then you can predict what you want to do. Because it was through the government the money was guaranteed. When I grew the tobacco because tobacco is a fantastic crop, a terrible crop, a painful crop because...

**Lucy:** It’s a lot of work.

**Romeo:** You have to spend a lot of money before you get some, and sometimes you get rain, and you get spoil in five minutes.

**Lucy:** He lost the lot.

**Romeo:** But when we discovered, I think it is nice after you get an inch of rain and after the rain go... I go there in the building, and I go and talk with the tobacco...

**Anna:** You go and talk with the tobacco? Lovely, lovely!

**Romeo:** Beautiful, beautiful!

**Lucy:** But he didn’t work the tobacco all by himself. Who do you reckon worked with him all of the time? (Laughter) anyway...

**Anna:** And the boys? Did they go to?

**Romeo:** Oh yes! They do as much...another thing when it is cooked, you know, to make it a better condition, to make it a soft, the smell – it’s something beautiful!

Romeo also tried to sell his garden produce to the supermarkets and at the local farmers market but was discouraged by the market value. However, Romeo remains optimistic and continues to seek alternatives to using his land for economic gain. Recently, a local essential oil company has
contracted him and Lucy to harvest the tea trees on their property. They use the old machinery from the tobacco harvesting to prepare the tea tree for sale.

**Lucy:** Well, Australian Essential Oils, *occasionally they get orders*, they even got one from France last year because we did, we’re go and cut it—because we’ve got tea tree in the paddock. But one we planted, as an experiment, anyway—we going cut the tea tree and we tried it, but you've got to dry it at a low temperature, so it stays green. And Romeo's got a gadget that, first he started with an old lawn mower but then he got this thing like, you know the road sweeper things? All done up, and then he pulls it and the leaves fall to the bottom. So then, I sieve it in a couple of mesh, meshy, like a round circle thing with a bit of netting, I sieve it to get most of the branches off and then we sell it like that to these people.

**Romeo:** It's beautiful. It's unbelievable.

Other reasons for growing plants in the garden include the quality of the produce and the ability of species to adapt to the local conditions. There is also the indirect utility of the cultivated plants such as the deployment of excess crops for animal fodder and the planting of root crops as an aid to encourage appreciation and interest in young children.
Figure 8: Romeo picking tomatoes (note the sandy soil)

Figure 9: Peter weeding his garden
Figure 10: Romeo and Lucy’s garden. From the left: Eggplants, tomatoes, kaffir lime and more tomatoes
Figure 11: A selection of the plants grown in Romeo and Lucy’s garden

Eggplant

Tomato

Zucchini

Tomato (Principe Borghese)

Asparagus

Melon

Rockmelon

Cherry guava

Chestnut

Persimmon
Cultural salience

This section considers the food plants grown and used in the home through the perspective of cultural salience. A definition of cultural salience includes specific criteria related to culturally defined preferences and influences including tradition and memory, culinary heritage and tastes, beliefs and rituals, and values that are learned and shared. In the analysis of the cultivation of food plants in Italian migrant gardens of the NRR, key elements of cultural preferences and influences are understood. These elements include the role of the garden in the provision of ingredients for traditional cuisine and the maintenance and transference of cultural inheritance. Together these elements enable the preservation of embodied knowledge and the creation of exchange networks, which enhance their cultural heritage and increase cultural capital (Head et al., 2004). Particular culinary preferences and the importance of taste have been identified as two of the most salient associations linking agro-biodiversity and culture (Nazarea, 2006; Sutton, 2001). Correspondingly, these were the most cited motivations for cultivating distinct plant species in this study.

The cultural salience of specific culinary preferences begins with the consideration that the cultivation, preparation and consumption of food are key acts in the consolidation of ethnicity. Within this broad understanding, this section begins with an examination of specific culinary preferences via an analysis of specific preferences of taste and flavour. As ethnicity or cultural identity is multifactorial, this concept is then further explored at the level of regional food practices. These practices, specifically gathering wild plants and the cucina povera, form the contested differences between the North and South, which are viewed through the gaze of abondanza and povertà. Following this, the rituals involved in the cultivation, preparation and celebration of food are discussed. Finally, the tensions played out in the role of food in the confirmation of belonging and
fitting in and the frictions experienced between the elders and youth are explored.

Food is a significant cultural marker of the Italian-Australian experience. The centrality of food to Italian life is emphasised by the community interviewed through the maintenance of their gardens. The participants in the research negotiate diverse histories, knowledge and experience, acting as creative innovators and cultural conservators.

**Why food?**

Food has long been understood to be a significant marker of cultural identity. Italian food historian, Massimo Montanari, contends that food is a ‘decisive element in human identity and...one of the most effective instruments with which to communicate it’ (2004, p. VII). While food is essential for the physical constitution and the maintenance of social life, food is never ‘just food’ (Caplan, 1997, p. 3). It represents the collective and states who we are, where we come from and who we want to be (Belasco, 2002). Food is a cultural product through which ethnicity is constructed, reproduced, negotiated and realised. Consequently, migrant foodways are social constructs, which allow migrants to sustain identities and negotiate their cultural differences and similarities (Gvion, 2009).

Knowledge concerning the cultivation and preparation of food is passed down from generation to generation. The rules of eating and ways of sharing are dispensed and absorbed during childhood. Lupton (1996) argues that the location of this knowledge-sharing in the home, among family and kinship groups, is a pivotal aspect of the creation of community. Performing the methods learnt regarding the cultivation and preparation of food is an embodied demonstration of group membership. The celebration of this belonging takes place through the act of eating. For migrant groups commensality, the act of ‘eating together’, is fundamental
to the formation of social and cultural bonds, while simultaneously disseminating their ethnic foodways into new societies.

Defined through a domestic social space, knowledge and experience of food is continually negotiated, contested and ultimately perpetuated. The themes that punctuate the interviews explore the understory of food through the discussion of what foods are eaten and when, who prepares them and how, and the ruminations and memories attached to various dishes and meals. These details reveal important elements of social relationships, traditions, personal histories and regional differences. These themes also examine the search for familiar flavours and ingredients, exploring the ways in which migrants adapt new ingredients to familiar recipes and recreated dishes from the past to maintain links to a distant homeland. Individually and collectively, the cultivation, preparation and consumption of food are forms of ‘homemaking’. An early attempt to make a home is the establishment of a home garden and the cultivation of familiar and foreign crops.

**Taste as an ethnic marker**

Notions of ethnicity are context driven and are defined through difference. Mintz (2008) points out that food becomes ‘ethnic’ only after its transference to a new land whereupon this difference becomes visible. Food, as a marker of ethnicity, once perceived as ‘different’ then contrasts with the normal and every day. With its centrality to daily life and conveyance of evocative, sensual impact, food carries a heavy symbolic load (Holtzman, 2006). In the Italian migrant community studied, the cultivation, preparation and consumption of traditional foods act as assertions of belonging to a family, city or region.

According to popular sentiment, Italian cuisine and foodways are integral to the narrative of Italianità (Montanari, 2004, 2013a, 2013b). In the process of unpacking this stereotype, signifiers such as taste, flavour and
freshness emerge as cultural cornerstones of Italian cuisine. Taste, in this context, is primarily concerned with gustatory function and less so with the Bourdieusian notion of taste as aesthetic preference. Flavour is more nuanced, embracing both aroma (smell) and gustation (taste). And at the heart of Italian food lies freshness. The best food is taken directly from nature, writes Barzini (1964), as ‘everything is eaten fresh and in its proper season when it is at its absolute best... Nothing is picked before its time and allowed to ripen in storage’ (p. 52). For the research participants, ‘good’ food should be like Italian food—that is ‘fresh’. ‘Absolute best’ produce is understood as plant foods that are rich in taste, flavour and freshness. An essential element of enjoying good food is eating it fresh, and it can be no fresher than straight from the garden.

Figure 12: Rosemary growing in Christina’s backyard
The basics

Adrianna: Yeah, I mean there is always the typical basil, rosemary, parsley, tomatoes - they are like the basics...

Specific culinary tastes and flavours are essential aspects of Italianità. Adrianna sets up the parameters of taste, flavour and freshness in her designation of ‘the basics’. This group includes basil, rosemary, parsley, and tomatoes. These ‘basics’ foreground the use of culinary herbs in the creation of traditional tastes and flavours. The pursuit of flavour is also a leading factor in Anita’s decision to plant herbs in the garden.

Anita: I was more involved in that than garden foods, it was more herbs and things that we need to add the flavour. You know, you sort of learn to add the flavour, we learnt to flavour with fresh herbs and things from the garden. Whereas other people learn to flavour with processed products. And I noticed that change from being married to an Aussie guy and his family.

The preference for fresh herbs within Italian cuisine is contextualised in Montanari’s (2013a) historical review of the importance of ‘roots, herbs and fruits, raw or cooked eaten in Italy’ (p. 23). The significance of this preference continues in Italy as demonstrated in Counihan’s (1988) description of Tuscan tomato sauce. It is the odorì, ‘the seasoning herbs consisting of basil, parsley, carrots, celery, and sometimes onion’, that are the ‘essential ingredients’ (p. 62).

While the basics are easy to access and remain central to the flavours and tastes preferred, the species that are hardest to obtain, retain the greatest emotional and cultural significance. The most prominent example of this in the interviews with the research participants is cicoria.

Marco: Yeah, so I think that they chose it because that is what they knew - vegetables and things - they would grow, one of the ones that I forgot to tell you, was cicoria, we eat quite a bit of that and that’s almost all of what we eat is our own because I don’t think they have it around the shops here, I could be wrong.
**Anna:** Cicoria, it’s the long thin one?

**Marco:** It would be different varieties, they would have.

**Anna:** Because there is endivia as well?

**Marco:** I wouldn’t be able to tell you about the varieties themselves I don’t know that much but the long one but also dad like to grow the red one and he sort of like wrap it in paper and stuff like that - he’s got a technique so he keeps the bulb nice and tender and a bit less bitter and stuff like that so... That is probably the one that he puts the most effort into.

Equally, Lucy recalls that upon arrival to Australia her family were able to make do with what they had as long as they had a few bitter greens growing.

**Lucy:** you do with what you have... you had to make do, and the main thing that they always had was radicchio, ruccola, and that sort of thing. The veggies they grew.

*Cicoria* is significant in this study as it represents a specific sense of belonging that is not easily accessible or freely available. The basics are easy to obtain, found in any shop or supermarket, and as such their cultural significance is not as fraught. Species that are hard to find in the shops demand the development of alternative methods of supply, most typically their cultivation in the home garden.

Carlo relies on a friend in Brisbane to send him the seeds so he can cultivate his favourite bitter green from home, in Positano.

**Carlo:** Gennaro is from [...] He lives in Brisbane. The sends us seeds in the post. He sends broccoli – broccolo [rape] that you can’t get here. Novantini or sesantini... we eat the leaves. It grows mainly in the south, in Campagna. We call it quarantini, sesantini, novantini – it grows in 40, 60 or 90 days. It has huge leaves. Italians plant it in winter. We make scarolla – we cook it with capers and olives.
The group of plants collectively known as *cicoria*, including *endivia*, dandelion, and *radicchio*, were prized species in each of the home gardens visited. While Marco is not able to tell me about the scientific name or variety, he can discuss the required growing technique used to ensure a particular taste and flavour. In Marco’s case, the preferred taste is bitter.

As noted elsewhere in this thesis/earlier in this chapter, bitter is a highly cited taste preference. Robert reflects on the importance of the bitter taste in Italian culture:

*R Roberts*: Italians have this – they love bitter – at five o’clock you have the passeggio, you have the digestive, and it is always bitter. You know like a Campari, all of those bitter drinks come through, because everybody loves bitter things. Coffee, hands down, first thing in the morning, you wake up in the morning, and the first thing you have is a bitter drink!

Discussing the plants that are most important in their garden, Glenda and Frank pointed out their patch of endive. When I reached out to taste some Frank offered the following advice:

*Frank*: Look you can have a taste—it’s very bitter. But when you cook with it, it brings out a beautiful flavour! It’s really, yeah; people can’t believe when they taste that and then after it’s been cooked it’s beautiful...spit it out if you don’t like it!

In our discussion on the importance of the bitter taste to Italian culture and his fond memories of tasting bitter greens in Italy, Robert pinpoints a key reason that motivates Italian migrants to cultivate a garden.

*R Roberts*: We’re quite, we grow a lot to produce that you get in Italy here. The things I miss a lot are the bitter greens that you get in Italy because they are phenomenal—those beautiful radicchios, you get all of those amazing salad leaves that at the market (Mullumbimby Farmer’s Market) wouldn’t work because people don’t know what to do with them... it’s not feasible for the farmer. That’s why you go to an Italian; that’s why they have gardens most of the Italians!
Anna: To grow their own?

Robert: To grow their own little specialty things

Robert’s statement sets up an implied cultural split and separation between the authentic or real Italian and the pretender or ‘ignorant’ outsider. This distinction creates notions of correct tastes between the one that knows and the one that copies. Preparing traditional, local or favourite family recipes requires a certain amount of embodied sensory memory—one that cannot be manufactured or assumed. To be really Italian, it has to be ‘in your blood’. The participants held the belief that one is born Italian, in contrast to the belief that one becomes or chooses to be Italian.

Once the basics have been guaranteed, another level of ‘true’ Italianità emerges. Proper preparation is now essential for the creation of ‘correct taste’. Alice’s description of stupid sauce explores this cultural split further:

Alice: This place that I used to work, with Greg, we used to grow a lot of tomatoes—like too many, he didn’t want to chuck them, so he was making sauce. But it was such a stupid sauce!

Anna: It wasn’t a good sauce?

Alice: No! He was chucking things into the sauce, spices and stuff. No! That’s not the way!

Anna: So these things—that you know—that it is not the way, how did you know?

Alice: That’s just from hanging around my mum. Because I’m not good at cooking all. But to us, the passata means to be easy and simple. And then when you want to make the sauce then you can add whatever. But just the passata? It’s just boiling tomatoes, let them boiled for a long time and when they’re stuck on the bottom you see. You don’t add spices with that! I mean...what’s that!

Within the field of food studies, notions of origin and authenticity are problematic (Appadurai, 1986) and are in part due to the transnational
histories of popular plant species (Mintz, 2008). The preparation of food is decidedly idiosyncratic, full of variation and often laden with emotional and familial memory. The construction of a food culture does not start and end with the first creation of a meal. Every time a meal is prepared, in its myriad variations, the cook is participating in the creation, maintenance and adaptation of culture. This point is made to emphasise the role ordinary Italian migrants, living in the NRR, play in the construction of culture. This is not to ignore the role of memory in handed down oral recipes and ‘ways of doing’. Rather, it is about highlighting the dynamic nature of knowledge. The continuation of the preparation of traditional food depends on a degree of fluidity and adaptation so that the recipes may be retold over and over again from person to person. Ingold (2000) reiterates suggesting cooking techniques and skills ‘are not transmitted from generation to generation but are regrown in each’ (p. 5). From this perspective, traditions are both dynamic and creative, taking place from with a perspective of dwelling.

Despite differences in techniques of preparation, specific tastes and flavours remain key markers of Italianità. This is particularly evident through the practice of traditional cooking techniques in pursuit of specific flavours. Following the end of the grape harvest, the vines are pruned and then used as firewood. Robert, a third generation Italian migrant, shares his delight at the flavour achieved:

\[\text{\ldots}\]

18 Mintz (2008) remarks that there is no other 'borrowing history that compares to how the Americans would affect Italian cuisine, where the intensely creative integration of tomatoes, sweet peppers, hot peppers, potatoes, maize, squashes and many beans in the local diet was quiet remarkable' (p. 517).
I love the way, different cooking techniques...we use grapevines. So after the harvest, after everything is done, and like all of the vines have died off, you go and do the pruning. Like a big thing is, you get the grapevines, you burn them down, and you cook sausages over them because it creates another flavour. So you know, some cultures, they'll use cherry wood because it creates another flavour, that's another great thing because it releases something else and it brings another amazing thing to food. You'll sit there and go, to cook, still to this day, to eat our sausages over coals, over grapevines, will be ten, fifty times better than cooked in a pan.

In migrant communities, the memory of food acts as a forge creating an identity and sense of tradition that is often a stronger or perhaps hyper-real version of that which was left behind. Reflecting on the experience of Italian migrants in Western Australia, Baldassar (2010) explains, ‘living in Australia has resulted in regional identities becoming “Italianised” perhaps more than they have in Italy’ (p. 121). Migration results in the creation of a unified sense of Italianità. In the lives of the research
participants, following migration, food became a pivotal factor in determining what it meant to be Italian.

**Food related rituals**

Every research participant, at different points in their lives, has taken part in the preparation of *casalingha* (homemade) products. These products commonly include *passata* (tomato sauce), wine, salami, cheese and pasta. Lupton (1996) argues that involvement in the preparation and consumption of particular foods joins people together into a shared ‘community ... [within] the same food culture’, as ‘food is instrumental in marking differences between cultures, serving to strengthen group identity’ (p. 25). For example, the harvesting and preparation of tomatoes for *passata* and grapes to make wine are events for celebration. Slowly, however, the focus of these events is shifting. In the past, these rituals took place to preserve the harvest for leaner times (Montanari, 2013a). This attitude towards food reflected a tradition of thrift and sobriety. In the preparation of meals, nothing was wasted, extras were preserved and leftovers recycled. Today, in the NNR, the frequency of these family get-togethers is on the decline. These events are now special occasions in which the competing responsibilities of family members must be negotiated. Typically, the elderly parents contact the sons and daughters and attempt to bring the family together to ensure that everyone returns to bottle the wine and kill the pig.

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19 ‘The techniques of preservation (which throughout history endowed us with salted and dried meats and fish, cheeses, jams, and other delicious products) are doubly rooted in ‘home cooking,’ having originated in a domestic economy that was intended to provide a reassuring and durable larder for the needs of the family during hard times.’ (Montanari, 2013a, p. 81)
Robert: We still make salami, we make sun dried tomatoes, my uncle’s got a winery, so we sit there.

Anna: So do you do that regularly or is it just at the end of harvest that you would make the sun dried tomatoes?

Robert: Yes, the sun-dried tomatoes are usually at the end of the summer. Dad will just do a few here and there. We’ve got olive trees, and he does all of his olives, and the salami is done every year at in June or July, depending on when we can all get up there.

Anna: And so, is that the salami day when you all get together? Is it like the passata day?

Robert: Yep, we do that as well. Yes, it’s the same – instead of having a tomato you have a pig, on the table, and it’s bloody cold. Because you know, it’s minus two degrees in the morning, compared to summertime.

Anna: (laughter) Yes, it’s a different time of year!

Robert: But they are good, keeping those traditions alive is definitely what you need.

The rituals surrounding the preparation and consumption of food are fundamental to migrants hoping to maintain some sense of cultural continuity in their new homeland. Food is a constant that provides a connection, despite the generational differences, between grandparents, parents and children. This connection is celebrated and ‘ritualised’ through the sharing of a meal.

Robert: You never went out to restaurants or... Why would you go out to restaurants when you could cook all this amazing food at home? Yes, and it gets people talking. Often people don’t want to talk about things but if you start eating, it will change your whole day. You sit there and go ‘this is really good today’.
Sharing food ensures the survival of both the family and the community at a material and social level. Coming together to share a meal maintains familial ties loosened through time and external responsibilities. Such meals ritualise the everyday (eating), creating a performance in which the social, cultural and familial tensions and expectations are acted out and negotiated by those present, establishing a sense of reciprocity, creating a social and moral obligation. All of the research participants continue to prepare these foods and acknowledge the importance of maintaining the family get-togethers in which the food is gathered, prepared and exchanged.

Younger second generation migrants such as Kate, related stories of participating in food rituals in spite of a lack of awareness that these were ‘essential’ elements of Italianità.
**Kate**: So, I make my own pasta sauces and funnily enough, not something that I was ever encouraged to do. I just wanted to make my own pasta sauces, and then later on I found out that it was a really stereotypically Italian thing to do! (Laughter!) But I like my own pasta sauces better. So I carry these recipes with me in my head.

**Belonging and fitting in**

Regardless of the type of migration pathway, year of arrival, or generation, the themes of memory and nostalgia, surround food and drink, play important roles in maintaining social, cultural and familiar ties to homelands and are often cited as ways in which homesickness is eased (Hage, 1997, 2010). Diner (2009) and Gabaccia (1998) highlight the often unspoken issues of syncretism and parochialism in the settlement of migrant groups that brings to light the tensions at play regarding the availability of food products and competing traditions.

A way of understanding the importance of food in the migrant experience is through the concept of ‘homemaking’. Babacan (2006) links the notion of homemaking and belonging to space and place. In doing so, she returns to Heidegger’s concept of dwelling, an act of construction and cultivation, in which one dwells with a sense of security away from possible harm or danger due to the close relationship with, and the preservation of, nature. Taking this notion of dwelling into account, it is then possible to ‘explore the meaning of space and place that is established through thought, action, experience and spirituality that enable celebration and practice of culture and locale’ (Babacan, 2006 p. 115). The practice of cultivating, preparing and consuming food becomes a catalyst for the creation of a complex sense of ‘home’. Hage (1997, 2010) argues that production and consumption of ethnic food are fundamental for migrants in their struggle to bring to Australia some traces of ‘the imagined past “home”, [traces] of another time and another space’ (1997, p. 106).
Homemaking is intimately linked to home cooking. In his exploration of the term ‘home cooking’, Montanari (2013a) defines and offers a sketch of the ‘correct’ methods of food preparation as experienced from within Italian culture.

‘Home’ cooking should also imply that one knows where the products originated (whether from the vegetable garden or from the market is of no importance), that one knows their quality and price, that one knows how to appreciate them and use them in season... in short, that one possesses a wide range of abilities that enable one to oversee the process of preparing meals, more or less from beginning to end. (Montanari, 2013a, p. 80)

‘Home cooking’ turns its back on convenience and pre-packaged food. Food prepared ‘at home’ is familial, an expression of fidelity and conviviality. This is food that is to be shared and not to be consumed in isolation. ‘Foods of the domestic tradition have a taste,’ Montanari continues, ‘and an aftertaste, that can revive scents and dissents associated with personal relations, private occasions, collective holidays, and common rituals. Without this, we can have home recipes, but not “home cooking” (2013a, p. 81).

Alongside the centrality of family and the importance of home, memories of difference and alienation derived from being stigmatised for eating ‘strange’ food are reflected in the experiences of the research participants. Such memories are part of what Holtzman (2006) distinguishes as the ‘less pleasant’ sensualities that are often ignored in the study of food and memory. These embodied feelings of shame and isolation are often subverted through simultaneous attempts to fit in and to rebel. As a result of attempts to fit in, the consumption of food ‘from the old country’ typically took place in private, so as not to draw attention to difference.

Further, food tastes and customs were often altered in order to accommodate outsiders and encourage a sense of belonging or fitting in. This desire to assimilate was most keenly felt by the children of Italian
born and second generation Australian migrants. These children, now adults, recall the embarrassment felt when bringing a ‘smelly’ lunch to school. Questioned about experiences during her childhood, Anita, Faye’s youngest daughter, recalled asking her parents to change their food habits and serve Australian food when school friends came to visit. However, Anita was also keen to retain her cultural roots.

**Anita:** We were the only kids that had schnitzel with parsley and garlic in the crumbs. You know, you succumbed to what is the normal society, but you always twist it, to keep your traditional taste in there.

The sense of pride expressed by the research participants in their maintenance of traditional food practices is a demonstration of resistance to assimilation and a manifestation of the urge to remember. This is evidenced in the preference for food grown in Italy due to its superior flavour. Marco, a second generation Italian in his early twenties, remarks that even though he doesn’t believe this to be true, he can understand the opinion held by his father.

**Marco:** I think that it probably has a lot to do with his fondness for Italy, and the Italian culture and things like that. And the couple of times that we have been over there they like to take us out and show us how it tastes a lot better. Having said that, like he would not move back to Italy, he definitely calls Australia his home. I think in relation to food and things like that he still has those feelings.

The preference apropos where food is grown is an expression of cultural identification. Romeo prefers to identify with a taste that is so intrinsically Italian that it must be grown there. This is ultimately preferable to the socio-political reality of contemporary Italy. The sensory power of nostalgia is the ‘thing’ or ‘feeling’ that Romeo seeks – a sense of how things used to be. This is also an attempt to retain cultural and social capital through the reference to a prior knowledge of taste (‘it tastes better in Italy’) that cannot be immediately quantified. Thus, memory is not innocent or naïve in its (re)constructed meaning. Duruz (1999) argues,
‘memories are reworked as scripts for...cultural remembering and investment...[becoming] forms of myth making in the present’ (p. 232). The recording of these memories is important as they offer insight into ‘everyday imagined geographies’ of Italianità (Duruz, 2010, p. 53).

**Recipes from memory**

Belasco (2008) points to the impact of nostalgia on the meaning given to food through remembering. It is through memory that food becomes a powerful and sensual trigger for asserting cultural identity and belonging. Romeo told me of his aunt in Northern Italy who used to cook chicken using the shoots of walnut and peach to give flavour.

*Romeo*: *I remember when I was young, my auntie she cook, she was a beautiful cook - when she cooked something, chook, we called it capone, come si' chiami qui non so...*

*Lucy*: *It’s like a steer, like a rooster, you know how they cut them.*

*Romeo*: *They don’t do that to them anymore now.*

*Lucy*: *They do then in France.*

*Romeo*: *And she got her the Walnut, peaches and she picked the...She knows everything*

*Lucy*: *She knew how to cook it.*

*Anna*: *Did you say walnut and peach?*

*Romeo*: *Yes, yes but only the shoots just to give the flavour*

*Anna*: *All of these secrets (laughter) all of these good cooks!*

*Romeo*: *Yes, she was a good cook.*

Lucy recalls a memory of her childhood in which her family would in the summertime take their cattle up into the mountains to graze. While they were there, her uncles would use a scythe to cut hay for the cattle, and her aunties would gather wild cherries and wild nuts, including hazelnuts and
walnuts. Further, Romeo told me that as a boy he would gather ‘the wild blackberries you would find along the side of creek - they were not so big but they were beautiful’.

Demonstrating the flexibility of specific ingredients, Lucy shares with me her recipe for peperonata. In our discussion, she lists her preferences and touches on the visual and textural sensualities that define her cooking.

_Lucy_: Whereas we do things — pepperoni, peperonata, we like to make peperonata, you've probably tasted that? We put eggplant.

_Anna_: And red capsicum?

_Lucy_: I like to have the three colours.

_Anna_: Green as well?

_Lucy_: Whatever you have got you can make with it... pepperoni, melanzane, cibolla... And tomato. And that's all it is.

_Anna_: The cibolla, is that red, is that red onion?

_Lucy_: It doesn't matter — as long as it has onions because the onion gives it — but I like the eggplant, some people put potato in it. But potato is very funny in the melanzane, because if you've got too much tomato and potato isn't cooked first it never cooks, it's like — how do I explain myself?

While discussing plants with the interview participants, food invariably became the central theme. While I was discussing traditional bitter greens with Christina and Faye, Anita overheard and called out from across the house—‘Redecchi’! 

_Faye_: Yeah, this is we had it all of the time, even as kids — Anita loves the radicchio!

20 _Redecchi_ is Venetian dialect for _radicchio_.

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141
Anita: I loooove radicchio!

Faye: Cut up really fine with red onion, onion through it and you know, red wine vinegar. I mean, we used to have our own red wine vinegar. Yeah, see we used to have our own and make our own wine vinegar. I've still got the [...] pot, in there. It used to have the mother of the vinegar in it, which is the blog of slop.

Anita: We used to have it in everything!

Later sharing her mother’s recipe:

Faye: Well, there you go – Northern Italy again, it’s more onion than garlic. Like they do have, but they have more onion. You could have a – like the radicchio – like mum fries the olive oil in garlic and put the radicchio through it, and makes hers like a warm salad. But up there they have a cold with red wine vinegar and olive oil, and red onion or onion in it....There’s a few leaves out there.

Anita: That’s my favourite food, that’s my favourite dish.

Faye: And she never ate it with a fork, she always just grabbed it her fingers and bread...Didn’t you, Anita! (Laughs)

There is a striking similarity in the recipes remembered for the preparation of radicchio, fresh with vinegar and a bit of oil:

Lucy: And they used to con d’olio di radicchio, a bit of lard or whatever they had or panceta, and they would fry it and then they would add a little bit of vinegar and the only thing is that when they put it over the veggies you had to eat it straight away otherwise it would cook it.

Romeo: Straightaway or you would cook it! But it was all right; it was right.

As memory is rooted in the past, the moments shared were largely from childhood or from key events that marked a period of transition in the participant’s life—migration, arrival, or return.
Povertà e abondanza

I found, first of all, the meaning, the consumable, edible meaning, of a simple word, lost in the dictionary among thousands of others—the meaning of the word abundance. (Pellegrino, as cited in Del Giudice, 2001, p. 50)

The trajectory of Italian food within the sphere of the migrant space is a movement from povertà towards abondanza. The above quote describes the sense of awakening experienced by Pellegrino following his migration to America in the 1930s. The lives of the migrants prior to migration were coloured by an insecurity grown out of long-term poverty. Daily foods included wild vegetable greens, lentil soups and breads made of the cheapest grains. Access to feast foods—such as meats and wheat based breads and pasta—was limited to special events. The insecurity felt, as an impact of povertà, was found in every aspect of life, ensuring that ties to the local and familial were of the utmost importance.

Italian peasantry, living through la miseria, did not consider the enjoyment of food beyond its nutritional benefit. Defining features of the future Italian cuisine were shaped during this period. Noted for their resourcefulness, they were able to turn the most ordinary of plants into meals for the whole family. In the same way, the forces of poverty forged the characteristic solidarity in the community, which propelled the farming communities in Italy to co-operate or perish. Such parochial loyalties or campanilismo would shape and influence patterns of migration in the future—to America, Canada and Australia (Iuliano & Baldassar, 2008).

For many Italian migrants setting off for Australia, the decision to leave home and family was entwined with stories of harsh deprivation and poverty. The search for food was a motivating force in which the only option was migration and settlement in a new country full of uncertainties. The role of food is fraught with contradiction. Food enriched the family unit acting as the glue that held communities and families together, while
simultaneously being the cause of alienation and difference, inferiority and shame, in the broader (non-Italian) community.

Skilled in resilience and resourcefulness the migrants that arrived in Australia, post-World War II, were quick to adapt to their new environment. The oldest of the research participants recounted numerous events which detail the narrative of starvation, perhaps unjustly romanticised in the literature as *cucina povera*, that lead their parents to leave their hometowns. Including accounts of gathering food in the wild, their *cucina povera* was a cuisine that supplemented their already meagre diets and was considered a necessity of survival. They ate to survive rather than for pleasure.

*Every fruit you can imagine grows in this place in all seasons. Hens lay 200 eggs a day, sheep eliminate ricotta cheese, ovens continually produce bread, cakes and pizza, and you can find marzipan trees and cookies of every kind. There is no sickness or poverty, everyone has the title of baron or duke, and there are no tariffs. Therefore, if you are hungry and tired, my friend, forget your salads and vegetables, and come with me to il Paese di Cuccagna [the Land of Cockaigne].*

La piacevole historia di Cuccagna (1715)

(*The delightful story of Cockaigne, as cited in Del Giudice, 2001, p. 11*)

The above quote, from a song sung in the streets of Naples in 1715, imagines a utopian land of gastronomic abundance. Del Giudice, utilising this ‘imagined state’ as a motif of the aspirations of an impoverished people towards a land of plenty, contends that this place existed in the popular lexicon of Italians (and European folk traditions generally) for centuries. This ‘land of plenty’ provided an idealised destination point, wherein travel to America, *laMerica* and subsequently to Australia, was envisioned as a journey to the golden land (Gabaccia, 2006; Glenn, 2013; Montanari, 2013b).
This dream of abundance brought on the impulse to leave the family home, as if on an epic journey towards salvation. Once the migrants arrived the myth was typically shattered, however, the hope of possibility always remained. Placing hope and fortune at the centre, the early migrants utilised the skills and characteristics of hard work and resilience. The result of which was a home, a garden and a family to provide for. Today, despite the abundance of food now available, the migrants in the community (for the most part) hold onto their traditions of simplicity, resourcefulness and frugality. The ritualisation of abundance is found in the celebration of harvest and the communal preparation of passata or wine, as well as in the weekly extended family meal.

*Cucina povera* and gathering wild plants

*Romeo:* You come to Australia, the food you buy here, it all the food—the Italian food—is all food that the poor people eat, only the poor people.

*Anna:* Yes, it’s amazing isn’t it! And we spend our money to eat like an Italian, but the poor Italian.

*Romeo:* That’s right, the Italian was so poor, [but] he wasn’t fat (much laughter!)

A prominent, albeit romantic, characterisation of *cucina povera* (the food of the poor) is founded upon an idealised relationship to nature. This intimacy with the environment highlights not only the opposition proposed by Levi-Strauss between the raw and the cooked but also the use of the wild and uncultivated (Ortoleva & Torino, 1992). Many of the ingredients and dishes represented as ‘typical’ peasant food were eaten due to need following centuries of impoverishment and an absence of meat protein. Despite its humble origins, *cucina povera* has retained prominence as a historic demarcation between the culinary regimes of different classes. Calling for a more accurate historical examination of the dialectic between continuity and change, Ortoleva (1992) argues that the development and transformation of *cucina povera* is the result of a series
of successive adjustments and adaptations rather than a static culinary
code. If there is a single defining feature of *cucina povera*, it is the use of
few ingredients, mostly those that are gathered freely in the wild.

Despite the problematic use of the term and its repositioning within the
comfortable confines of ‘armchair nostalgia’ (Appadurai as cited in
Holtzman, 2006, p. 367), *cucina povera* underpins many of the
contemporary food practices discussed in this study. The core principles
of simplicity and freshness are essential elements of the food prepared by
the research participants. While few chose to name their food philosophy
directly, many recounted memories of poverty and resilience in the
cultivation and preparation of food.

*Ida*: Oh, Anna! Oh, Anna! ...No, no they were more hungry at
home (in Italy!) They were more hungry at home...they were
more hungry in Italy. Yes, mum used to say, especially if she
was feeding, you know, the kids were little – she said you
would go home, and you would eat dahlias if they gave them
to you...you know she was so hungry

*Anna*: What would they eat?

*Ida*: Well, they had, there were some people like Matt, my
husband - they went hungry...because they didn’t have a lot
of land, enough sort of. But my mum, they had land, and
there was always plenty of cheese, as much as they wanted,
they had polenta as much as they wanted - there was
nothing fancy but

*Anna*: But there was food.

*Ida*: My grandmother she used to eat half an egg because
she used to think it was too much to eat a whole one...And
Matt (Ida’s husband) would eat chestnuts...Yes, yes - on the
hills they grew wild actually. Mum - they had chestnuts as
well. It’s funny the chestnuts in those days used to keep for
a long time.

Stories of poverty did not end with the departure from Italy. It was often
the case the poverty followed the new arrivals. Below Lucy describes her
mother’s reaction to the lack of beans to make *minestra di fragoli*
**Lucy:** I remember my mother saying, she says, ‘Ahh, you know when I first come from Italy’, she says, ‘Over in Italy we have minestra di fragoli – you know the thick bean soup - all the time’, she said and ‘Here’, she said, she asked my grandfather because he must have, must have knew because he had been here since 1925 and she said, ‘Can’t you find beans here?’, ‘Oh no, there are bit hard to find’ [Lucy laughing as she tell this story]. And they would have broth every time, with no beans! That’s it because you know, she reckons in Italy sometimes they have beans that night, and if there was any leftover they add milk to it and have it the next morning! (much laughter) I couldn’t come at anything like they used to make milk soup with rice.

**Romeo:** It was hard!

Lentils continue to be a staple food for many of the research participants. Recipes currently prepared include *pasta fragoli*, *pasta lentec* and *pasta* with *ciccd*.

According to Gvion (2006), ‘cuisines of poverty’ are systems of practical knowledge, which demand the development of self-reliance as a means to survive. Familiarity with the landscape surrounding the home and presence of a variety of food sources becomes a strategy for subsistence. It was in these familiar landscapes, in the forests and fields where wild plants grow, that *cucina povera* was engrained.

The generation of participants, who arrived in Australia prior to World War II, knew where to find wild foods in their hometowns. They were familiar with techniques of preservation and frugal use of produce in their recipes that guaranteed the best use of food items. Resourcefulness, perceived throughout the gardens and homes of each research participant, in their practice of recycling of materials and the preparation of foodstuffs

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21 *pasta fragoli* – pasta with beans; *pasta lentec* – pasta with lentils; *pasta* with *ciccd* – pasta with chickpeas.
for the future, was a key aspect of povertà. Gathering wild food plants was an additional component of this resourcefulness.

**Gathering wild food plants**

The use of wild gathered food plants is a practice that is central to traditional plant knowledge, use and belief in Italy (Leonti, Nebel, Rivera, & Heinrich, 2006; Nebel & Heinrich, 2009; Nebel, Pieroni, & Heinrich, 2006; Pieroni, 2001; Pieroni et al., 2002; Turner et al., 2011). Pieroni, Quave, Giusti, and Papp (2012), examine the status of wild plant use among Italian migrants in Romania. A causal factor identified in the loss of traditional knowledge and use of edible wild plants is the loss of Italian language. Nebel and Heinrich (2009), recognise the substantial role of contemporary use wild food plants in the traditional livelihood of rural Mediterranean areas. The practice of oral transmission of the peasants’ or shepherds’ knowledge increased the risk of loss of their valuable information. This is a shared concern of many authors, despite the relative abundance of botanical families (wild and cultivated species), many practices are no longer used and survive only as memories in the minds of the elderly (Signorini, Piredda, & Bruschi, 2009).

Historically, gathering wild food plants may be viewed through the lens of poverty. Before World War II and the spread of industrial agriculture across Italy (and Europe), families relied upon the foods gathered in the wild to supplement their diets (Leonti et al., 2006; Rivera et al., 2006). During the early years of migration to Australia (1920s to 1940s), the oldest of the research participants found little that was familiar. This group, resorting to the old traditions of home, attempted to gather plants from the fields and the bush around them. This continuity of practice is not uncommon, as several studies have shown that following migration wild food continues to be collected. Studies by di Tizio, Łuczaj, Quave, Redžić, and Pieroni (2012) and Pieroni and Gray (2008), reveal that the plants gathered are usually the same species found in the country of origin rather
than the common species of the new country. However, the research participants in this study claim that initially gathering wild food plants was a difficult tradition to pursue. This was due to the unique, and as yet unknown, landscape and the resultant hesitant encounter with new Australian native species.

Nevertheless, they were not deterred. Many species similar to those from their hometowns were found in the Australian bushland surrounding their new homes. Mushrooms and berries were discovered in the bush that looked and tasted just like the ones back in Italy. The group of elderly Italian migrants, now aged between 60 and 86, are still collecting wild food plants in the NRR. The elderly population interviewed has a strong sense of the practice of wild food gathering. As children, they experienced the povertà in Italy or were exposed to its impact via the resourcefulness of their parents. Arriving in Australia, their parents brought with them the stories and narratives of poverty and passed on this knowledge to their children. Despite the fact that the elderly participants have a strong sense of wild food gathering only a few continue to gather wild food. This ‘strong sense’ has its foundation in memories of gathering plants in Italy and in family stories.

Gathering wild food plants is a much-evoked childhood memory, with 20 of the 25 research participants recalling taking part in the gathering of wild plants in Italy and Australia. Those that did not gather wild plants grew up in urban Italian cities or their parents in Australia did not engage in the practice. In spite of the strength of these memories, few participants continue to gather wild plants today, with most choosing to cultivate the remembered wild plant species in their gardens. Those that continue to collect or cultivate these plants species are all aged between 60 and 86 and are either Italian-born or second generation migrants. Robert, aged 28, is an exception to this group, and he is the only younger participant to continue the tradition. He does so due to his specific interest in
maintaining the traditions of his family and as a means of asserting his cultural identity through his Italian food catering business.

<table>
<thead>
<tr>
<th>Memories of picking as children. Age: 25-50 years</th>
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<tbody>
<tr>
<td>1st generation</td>
</tr>
<tr>
<td>Alice</td>
</tr>
<tr>
<td>Antonia *</td>
</tr>
<tr>
<td>Carlo *</td>
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<table>
<thead>
<tr>
<th>Memories of picking as children. Age: 50-85 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st generation</td>
</tr>
<tr>
<td>Kevin *</td>
</tr>
<tr>
<td>Lucy # *</td>
</tr>
<tr>
<td>Peter *</td>
</tr>
<tr>
<td>Romeo # *</td>
</tr>
<tr>
<td>Tina # *</td>
</tr>
<tr>
<td>Vic *</td>
</tr>
</tbody>
</table>

Table 2: Who gathers? * Key: # continues to gather; * cultivates wild species

The multiple factors that account for the participation in the collection of wild food include age, income, access, gender and cultural traditions. The research participants cited recreation as the most common motivation for the collection of wild food plants in Australia. Further, ‘going out to collect wild plants’ was cited as a way of promoting collective bonding as it brings the family together. For many, the memories of childhood early mornings are retained as events in which the family woke early to gather wild plants, such as mushrooms, wild asparagus or berries. The possibility of missing out on the shared meal that followed often acted as the primary motivation to ‘get out of bed’. Memories of grandparents, parents, aunties and uncles sharing their knowledge of wild plant species, including important information regarding the locations in which to find them, and the responsibility of the gatherer to leave ‘some for others’, are cherished.

In the following, Robert recounts going to shoot some rabbits and the dangers of staying in bed:

Robert: We used to go and shoot rabbits with my father and grandfather. We would go out, and they would be like ‘Let's
go shoot some rabbits!’ We would all go when the asparagus was on. My father would take us, and we would go and get asparagus... Early in the morning was the best time, they would all burst up, and you had to get there before everyone else got there. There was big rivalry!

Anna: And what did you guys think about that, when you had to get up early in the morning as kids? Was it something that you looked forward to?

Robert: Yeah, because I used to love eating them, that was the thing, but some days I would be like, ‘Uhrf! I’m not doing that; you go do it!’ And he would come back with buckets, [and] you missed out!

Fading memories and changing needs

Traditional knowledge is diminished in younger generations. Cited causes include assimilation and environmental change (Schulp, Thuiller, & Verburg, 2014). The younger generation, migrant descendants and migrants of the third wave, are less interested in wild food collecting. Aged in their 20s to late 30s, they have memories of foraging in Italy and are suspicious of the practice here in Australia.

Alice: Here, in Australia? I’m not sure if I would trust what they have here. I am a bit scared because we haven’t been here for thousands and thousands of years. While in Europe, they’ve always been eating like that.

This group of young Italian-Australians is aware of the trend of wild food that has become fashionable in high-end restaurants around the world and claim to be sceptical of these trends. Robert has been preparing his ‘grandmothers food’ for the past few years. He actively gathers wild food for his market stall and collaborates with other young European chefs—most recently a young chef from Spain. He is inspired by his family history and recognises the beauty and simplicity to be found in wild food. Passionate about the continuation of his family stories, and his grandmother’s recipes, he expresses his knowledge and cultural traditions through the preparation and collection of the fresh wild ingredients. While
he lists his ingredients, describing them as ‘wild’, he claims that he is ‘just doing’ what his family has always done.

Throughout the interviews, it became apparent that wild food is a significant ingredient in Italian traditional cuisine. Gathering and eating wild food is seen as part of people's identity. The ability to locate and recognise wild food is considered a mark of local and regional know-how. Their initial lack of familiarity with the landscape and ‘new species’ is a maintaining factor in the imperative to create a home garden upon arrival to Australia. Seeking familiarity of tastes and flavours from home, the Italian migrants continue to cultivate species that were once foraged and central to the <em>cucina povera</em> of their memories.

**Maintenance and adaptation**

Maintenance of local knowledge is in direct conflict with migration. The collection of wild food requires knowledge of species identification and preparation. In this research, it is apparent that the elderly Italian migrants remain confident in the identification and use of wild foods. However, this knowledge has been gained through the experience and observation of their elders. Thus, there is a (re)construction of a new local knowledge. This knowledge is scaffolded around the practices and beliefs of the old. It is via the gathering of wild food that the complex interplay of local knowledge and traditional beliefs is played out. Specified knowledge is shared via direct experience and observation during family outings.

Gathering wild plants species, such as mushrooms, also demands the transference of information regarding the precise identification of species and correct methods of preparation. The knowledge required to collect wild mushrooms is of particular interest. Each research participant was asked to identify the family member who passed on this knowledge and whether they were confident to continue this practice without their expertise. Many told stories of their grandparents or parents arriving and continuing the practice of gathering wild food species. Christina and Barry
narrated tales of elderly grandparents ‘going off into the bush’ to find unknown mushrooms. The dangers presented with unknown species meant that household pets – usually the cat – were fed first. The more adventurous participant would prepare the mushrooms, and if illness prevailed, the hospital would be contacted. This was a common story, in which family members or neighbours would be found intoxicated and hallucinating due to the effects of the mushroom.

**Barry:** I remember us picking mushrooms, and I can remember one of our neighbours (laughter) picked the wrong type of mushroom and ended up in hospital.

**Anna:** And was he Italian?

**Barry:** No, she was Italian. She was born here in Australia and both her parents were Italian, they migrated out here...Both her and her daughter picked these mushrooms, and they both were tripping, and they had to be taken to the hospital.

There were many challenges to be faced including different ecosystems and environment. This meant that there were many different plant species available. This also resulted in a process of adaptation and inclusion of new species. Familiar with the practice of gathering wild plants, migrants were keen to learn from the already established practices of the ‘locals’. An example of this is Romeo’s story of collecting New Zealand spinach (*Tetragonia tetragonioides*).

**Lucy:** It’s like Romeo said, the fellow where we used to live, down the other side of Texas (NSW), he used to go in the bush, and get like a wild spinach.

**Romeo:** It’s that New Zealand spinach. And they tell me this to make, when they go after a week raining, they go in the bush, and they come back full. But they never tell me the spot!

Following migration, it may be argued that the practice of gathering wild food takes on greater importance than the species collected. The
transference of knowledge to and within new locations is played out in the gathering of wild plants.

<table>
<thead>
<tr>
<th>Plants gathered ‘in the wild’ in NRR</th>
<th>Plants gathered in Italy</th>
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</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td><strong>Italian</strong></td>
</tr>
<tr>
<td>Chestnut</td>
<td>castagne</td>
</tr>
<tr>
<td>Chicory</td>
<td>cicoria</td>
</tr>
<tr>
<td>Dandelion</td>
<td>grisol (girasol?)</td>
</tr>
<tr>
<td>Mushrooms</td>
<td>Mushrooms</td>
</tr>
<tr>
<td>Wild asparagus</td>
<td>Wild asparagus</td>
</tr>
<tr>
<td>Wild blackberries</td>
<td>more</td>
</tr>
<tr>
<td>Mulberries</td>
<td>Wild blueberries</td>
</tr>
<tr>
<td>Wild raspberries</td>
<td>Wild strawberries</td>
</tr>
<tr>
<td>Wild fennel</td>
<td>Wild hops</td>
</tr>
<tr>
<td>New Zealand spinach</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3:** Food plants gathered in NRR and Italy
North and South: Regional identity

The *cucina povera* relies on a few simple ingredients, including bread, vegetables, fruit, fish, and olive oil, to create a variety of interesting meals. Creative combination of only a few ingredients is a central feature of Italian traditional cooking, both of the North and the South. However, this creativity if guided by established rules that predict correct flavour, taste and texture. These are the elements that Montanari (2013a) speaks of when he argues for the possibility ‘to speak of a “national” gastronomic heritage, because the written tradition, the expression of an elite cuisine, over the centuries represented and transmitted a culture in which everyone could recognize fragments of his own identity’ (p. 25).

Robert: Everyone has a garden in Italy, every person has a garden. Now, if you go down to the markets, and all the market produce is amazing, especially down in Sicily, everyone grows there are things — but I don’t know about the North, I’ve never lived in the North. When I went travelling through Tuscany for work, it was completely different aspect, they are a lot more higher end, they are trying to hit this real high end. While in Sicily everybody’s just, you know, growing food. You walk into their backyard, and they’ve got a pig, they’ve got tomatoes.

A perceived cultural distance between the North and South is observed in Robert’s description of the apparent motivation to garden. His identification of difference is based on historic generalisations of Northern modernity versus Southern poverty. These contrasting representations were utilised in political stratagems aimed at consolidating the power of the North and silencing the rebellion of the South (Moe, 2002). The largely rural landscape of the South represented hardship and poverty. The results of which were resilience and strong familial ties. It was evident in the interviews that, to some extent, these stereotypes remain in use among the research participants. These are distinctions based on history, pride and regional identity. Bringing these characteristics into the garden, Peter
started the discussion about the difference between the North and the South with his allotment of plant species:

Peter: *We call them cucuzzari (Southerners), and they call us polentone (Northerners).*

Montanari (2013b) claims ‘certain foods have an identity powerful enough to become the symbol of a people, a community, a place’ (p. 167). Reflecting on the properties of these foods may provide some insight into their concealed meaning. Cucuzza is a long gourd-like vegetable that grows like a weed, requires minimal care and has little taste. Polenta is a traditionally slow cooked dish requiring constant stirring and is typically made from corn meal. As it is a grain, it requires greater technology to produce and is common in the diets of Northern Italians. Additionally, the term ‘polenta-eaters’ and other food terms initially used disparagingly are used today as a proud signifier of identity (Montanari, 2013b).

**Figure 17:** Cucuzza in a market in Sicily.

Photo taken by Robert Costanzo, 2013.
The research participants frequently distinguished the types of food and plants found in the North and the South of Italy. These differences were founded on the belief that climatic and socio-political variation were embedded in the two regions. When asked about the continuation of wild plant collection, Frank replied:

**Frank:** More in the south, I don’t know, more the south... I think Northerners are more industrial, and the Southerners are more the gardeners... and there’s, there’s probably high unemployment down south, so a lot of them do have their gardens.
Throughout our conversation, Faye repeatedly drew my attention to the distinction between the North and the South. As her mother came from the South, Faye remembers the food she grew up and identifies them with a Southern flavour. These include grapes, olives, basil, parsley, and wheat for pasta dough and pizza—her family grew and milled their own wheat. It was only after she met and married her husband, who came from the North, that she was introduced to sage and rosemary. Faye discusses the use of specific flavours as a method of determining the regional origin of salami and sausages.

**Faye:** Yeah, they do a little bit but more oregano, fennel – like even in their sausages they’ll have fennel seeds whereas Northern Italy don’t have fennel seeds, they have pepper. And Southern Italy has fennel seeds in the sausages.

**Anna:** And what about chilli?

**Faye:** Yeah, chilli! Yeah, they use chilli and fennel, but Northern Italy doesn’t have that sort of flavour.

Equally, Adrianna locates herself and her family as Southerners in her remarks on the type of vegetables cultivated in her family garden. She also compares the poverty of the Southern cuisine to the more abundant produce available in the North.

**Adrianna:** My family from the South, it’s very dry and vegetables are a luxury – like their staple food is bread and stuff...I think for me, when I see how tiny my grandparents’ yard is, is indicative of that...and when I see my friend Gennaro’s yard, his family is from Calabrese, which is more North, and their garden is huge. I think there is a bit of difference, depending on which paese you come from... you really kind of carry that across.

Geographically, Calabria is situated in the south of Italy. However, Adrianna locates this neighbouring region ‘more’ in the North. Seeking clarification, I asked Robert about the importance of region of origin in the determination of identity. He replied that cannot say you are Italian, 'You
have to say what region you are from, yes definitely!' because there are big differences. He continued:

**Robert:** Oh, hell yes! Even if you go to Calabria, they are completely different. It's a three-mile piece of water [the distance between Sicily and the mainland]. And they are all so passionate! And they all believe that their region is the best... Or their little region within a region is the best.

This is especially true regarding the regional nature of Italian food. Regional pride is evident in every aspect of life and particularly in the cultivation, preparation and enjoyment of food. This sense of pride is reflected in the plant species grown in gardens in Australia. Frank pointed out that it was possible to determine the regional origin of the owner of the garden due to the presence of particular plants.

**Frank:** Well when we do (look) prickly pear in a garden always gives it away! And they're more, I think they're more Southerners, too. So it's almost as if you can pick the region, yeah like you can pick they're Sicilians.

![Figure 18: Prickly pear in Frank's backyard](image)
Every food item has an identifying feature that can determine its regional origin. Bread, another example, can be found across Italy. And yet even here there are regional differences in the type of bread prepared and consumed.

**Christina**: But there are all big on bread!

**Faye**: Yeah, everywhere you go there’s bread! (Laughter!) Northern Italy has more dry crusty bread, and southern Italy has more, you know like pizzas or focaccia. They are more dense and with more olive oil flavouring, you know olive flavour. So it’s a completely different taste. But they don’t use a lot of Rosemary there, they do a little bit – it is more oregano down there.

The impact of food flavour is so great that it (the flavour) takes on the identity of a nation or region. For Faye the flavours are all very different, olive oil in the South and butter in the North. Robert agrees, stating, ‘that’s where the difference is between the North and the South of Italy. There’s just a different flavour there’. He continues with his description of the differences between butter and olive oil:

**Robert**: Yes, the North is butter. And the South is olive oil, I don’t use any butter in my cooking, and if I do, I find it strange. I just don’t have any dishes that will need it. Like even sweets, they use lard, in Sicily. Because there is no dairy! Down in Sicily, it’s too barren; it’s too dry... They are running sheep and pigs. Definitely no green pastures like in Switzerland or anything like that. That’s what the North is!

Discussing the plants grown in their garden both Lucy and Romeo remarked on the plants that are ‘more Southern’ or ‘more Northern’. Chilli is more in the South and capsicum in the North, *fave* (broad beans) more Sardinian and *borlotti* and green beans more in the North, lemons and oranges are more in the South, and apples and peaches are more in the North. Lucy and Romeo discussed the different methods used to prepare turnips based on regional origin. Here the use of green leaves sits firmly within the South while the Northerners use the root itself.
Lucy: And yet we have a fellow he comes he sometimes, he doesn’t want the turnip underneath – you know the purple top turnip? We like to eat them because my kids when they were small we’d peel them and they would just eat them like that.

Romeo: Because he came from South Italy, and they do that.

Lucy: And he is a Southerner, but all he eats is the leaves. He likes to cook the tops, whereas we like the turnips. I sliced them and do them in a salad, a bit of carrot and a bit of capsicum.

During our discussion, Christina mentions that pumpkin is thought of as ‘pig food’ in Italy. Neither of the women is able to provide a reason why it is called this. However, Faye remarks that it was rarely seen in the South. She tells me that instead of pumpkin, zucchini or cucuzza would be grown and prepared with stuffing.

Explaining why Italians love to garden, Robert highlights the distinction between the two Italies:

Robert: Well, I think back in the day, you couldn’t afford to buy it, and you’ve got such rich soil...Everyone had their little piece of land...especially Sicily, which is the fruit bowl of Italy. That’s what it was, and Sicily was, and that used to be Italy. So everyone worked the land...that is why they always look at Southerners as if they’re always poor, they’re farmers, they’re nothing. People up in the North, they are the industrialists, you’ve got all the cars and the ...

Anna: The Fiats and the high class

Robert: Yeah, exactly, and they have got all of their artists and all of that stuff...the South is real Italy anyway!

In the examination of the regional differences and the reflections of the research participants, there is an implicit distinction made between the diet of the poor and the diet of the wealthy. This may also be interpreted as the diet of the traditional peasant and the diet of modern convenience. There is a fundamental tension occurring in the confrontation with
modernity, changing gender/ work roles and the ability to prepare ‘traditional’ recipes. The ongoing commitment to the lengthy preparation of passata or verdure sott’olio (vegetables pickled in olive oil), is for many of the participants, a dying art.

Roles and rules

There is space within the discourse on food to find room for meaning that moves beyond the actual food item. The importance of who prepares the food and when it is eaten is entwined and thus foundational to the act of Italianità. Memory and nostalgia are relied upon to reproduce these roles. Additionally, recognition of regional origin and hometown roots are utilised to add further definition to cultural association and identity. This distinction is seen clearly in the division between the North and the South.

The reflections of the research participants reveal the act of cultivating, preparing and consuming food is the most important aspect of culture. This is particularly evident in the roles and rules of eating played out as essential elements of Italian migrant culture. Counihan’s (1988) description of her research in Florence highlights the significance of the correct method of preparation to achieve the correct taste while illustrating the strong bond that links food and locality:

Although Florentines will banter endlessly about the ‘right’ way to cook a basic dish like spaghetti with tomato sauce, they recognize that their cuisine is different from all others in Italy. Their cuisine is simple but delicious, they say, based on the strong flavours of garlic, onion, basil, parsley, and pepper... Florentines are passionate about their own cooking and establish their cultural identity through their attachment to it. (Counihan, 1999, p. 7)

The rules, such as whether a pasta is to be served hot or cold, when to add cheese and whether a cappuccino can be consumed after a meal, all reveal a kind of ‘insider knowledge’.
Who prepares the meals

The food of the home is expressed as cantina (osteria) food. This research sits squarely in the field of the home, with the above section on food affording a glimpse into the domain of women. The traditional preparation of food is divided along strict gender lines. As noted previous chapters, the division of roles along the lines of gender is one of the defining elements of Italian culture. There is a clear division of labour along the lines of gender between the preparation of passata and the making of wine. Passata was the domain of women and wine making was reserved for men.

When asked about food preparation, not surprisingly, most of the older research participants continue to engage in the traditional gendered separation of duties.

Anna: Do you, you’re the one that cooks the most?

Lucy: Yeah. He used to cook, in his younger days. Because he batched for a long time, but now he couldn’t be bothered, all he can do is criticise. (Laughter).

Anna: And you, Romeo, you’re in the garden more?

Lucy: Yeah, if I go and pinch something that doesn't suit him, he complains.

For the most part, however, in the NNR these lines of separation are less sharply drawn, with many participants relating stories that cross the gender lines. Robert declared early on in our conversations that, as a chef, his only aim is to prepare food just like his nonna had done at home. Christina remarked on a recent visit to Faye’s house in which she found Faye and a group of friends making grappa:

Christina: She (Faye) had the grappa going the other day! She had the still going; I come around, and the old ladies are all sitting around the still.

Faye: Don’t advertise that!
Christina: It's illegal!

Anna: Is it?

Faye: Not for your own use – we only made about 15 bottles between and that's between us all. And it was only from my grapes.

The continued preparation of traditional foods marks the home as a site of belonging and delineates the active process of homemaking. The establishment of new migrant homes and gardens shaped an environment that assuaged an experience of acute alienation. Italians in the NRR negotiate their experience of Italianità in varying degrees, incorporating and negotiating identity through symbols such as food and gardens, which extend out into shared cultural activities.

Hage (1997, p. 109) contends, food provides 'intimations of security', as it signifies a set of culturally determined set of needs regarding basic nutrition. It also creates an 'intimation of familiarity' as people know 'what to do with it, how to cook it, how to present it and how to eat it'. Additionally food provides the space, which invites 'practices of commonality' in which members of the migrant group come together to share food from 'home'. The preparation of food is one way in which migrants attempt to 'conquer their sense of loss and despair as they gave up their lives in Italy and forged a new identity' (Caputo, 2011, p. 181).

Conducting interviews in the home allowed a two-way exchange and a reversal of roles. As a mark of respect and hospitality, I was always offered lunch or afternoon tea. Food eased the conversation, offering a way for the participants to demonstrate their skill and knowledge. Over a meal, our conversation would focus on the techniques used to draw out flavour, the origin of the ingredients and the significance of a dish in the family’s history. Accepting invitations into the family home, I was given access to the tacit rules and codes of eating not normally available to an outsider. Our roles reversed, the participant became the leader of the conversation. Taking control, they shared home secrets regarding food preparation and
instructed me in the appropriate etiquette and codes of consumption. During our mealt ime conversations, the participants transformed food into metaphors for culture, community and identity.

**Summary**

This chapter begins with commentary on the relationship between food and memory. Reflecting on the interconnection between memory and food, Holtzman (2006) observes that food is ‘a locus for historically constructed identity’ (p. 364). Additionally, food in the research setting may become an ‘excuse to realize the ethnographic encounter’ as well as ‘the vehicle to fill it with social meanings’ (Rimoldi, 2013, p. 778).

The study of migrant food practices encourages the definition of cultural authenticities. This follows the conceptualisation by Bourdieu (1984) of a ‘distinction mass’, wherein each culture emphasis is placed on the peculiarities and differences in contrast to the anonymity of western industrialisation. It is precisely through the act of preparing food from home that Italian-Australians in the NNR are able to access and demonstrate their culture as both legacy and heritage. The kitchen is rooted, indeed ‘ingrained’ in the habits of the individual. Memory of the flavours and smells are tools for the recovery of personal history, starting from childhood.

Food for the Italian migrants in this research acts as a marker determining insider and outsider status. Cultivation, preparation and consumption of food are used to create and reinforce cultural identity. The identity might not be strictly (or purely) Italian, rather is more accurately is a manifestation and an expression of a new identity, as Italian-Australians. The (re)invention of Italianità is achieved through the utilisation of memory and the transmission of knowledge across generations.

Categories of belonging, such as food, come loaded with stereotypes—of worldviews, values, ritualised practices, performed traditions and codified
knowledges. It is through the recognition and acknowledgement of difference that cultural knowledge of food become specialised. ‘The construction, persistence, and replication of ethnic identity occur not through a linear process of presentation and reception, but rather through a relational dialectic of negotiation, contestation, self-fashioning, and a representation’ (Brulotte & Di Giovine, 2014, p. 4). The cultivation of Bourdieu’s (1984) notion of ‘taste’, acts as a signifier for an individual’s authenticity as member of a certain ethnic or cultural group.

In this research, it is evident that there are multiple variations of Italian-Australian food. Food becomes a device employed to construct an ‘imagined community’. This is evident to the discussion surrounding the regional nature of Italian food, in particular via the distinction made between the North and the South. In considering the concept terroir (taste of a place), food is explicitly linked to a specific environment, to a memory of how it tasted back in the home country. Environmental conditions such as soil type, climate and terrain, imbue food with a unique set of sensory characteristics such as taste, smell and texture, which become the aim and endpoint for the migrant gardener and consumer.

The home garden provides a site from which to examine the links that are forged and maintained between new homes and older homelands. This chapter focuses on the ways that food—as a carrier of knowledge, memory, and culture—connects people to place in both old ways and new. A key driver for the construction of home gardens is the cultivation of specific food plants. The time spent in the garden is an attempt to ward off the risk of losing connection to homeland vis-à-vis the disconnection of taste, ingredients and practices. The identification as Italian (or Italian-Australian) necessitates a balancing act between the maintenance of the rules of Italian eating and the potential loss of flavour as a result of becoming too Australian.
Figure 19: Tina’s garden

- Basil
- Rosemary and parsley
- Orange
- Prickly pear
- Fig
- Broccoli
- Banana
- Mixed lettuce
- Shallots
- Dragon fruit
CHAPTER 8: PRAXIS (How)

This research, developing from within an ethnoecology framework, undertakes the examination of what people do (practical, embodied knowledge), what they know (cognised knowledge) and the ethical worldview that situates the gardener in nature (Toledo, 2002). This chapter explores the organisation and traditional management techniques employed by the Italian migrant gardeners interviewed. While there were many unique aspects of the gardens visited, there are undeniable threads of tradition that may be gathered and woven together, in a demonstration of the practical application of the knowledge held by the research participants.

The data is primarily drawn from the informal interviews and conversations that took place during the garden walk. Additional support for the ideas expressed in the informal conversations was found in a close review of the semi-structured interviews. Following each visit, extensive field notes and observations about the unique structural elements of the gardens were recorded. The themes that emerged and were encountered across the gardens include a distinct spatial arrangement of the gardens; architectural features; traditional management techniques and considerations including irrigation, soil conditioning, weeding and use of chemical sprays. Finally, the traditional practice of planting according to the phases of the moon and the value of saving and sharing seeds is discussed.

Structure: Stakes, vines, sheds and cellars

The gardens surveyed contain multiple sites of cultivation. During the data collection period, I visited 12 home gardens. Each garden visit included a sit down semi-structured interview that took place upon my arrival. The gardener and I would sit together and in many cases another member of the family would be present. Each gardener was asked to complete a free-
list activity regarding plants known. Following the semi-structured interview and free-list activity, I would ask if I could be taken into the garden. Often, this is where the interviews became more personal, more practical and less formal. Being in the garden provided a space for spontaneous reflection, questioning and sharing of knowledge.

In the examination of the gardens, large and small, it is necessary to recognise that they are located in rural and peri-urban settings. One third of the gardens visited are on acreage; small farms with a dedicated area for the home garden. The remainder of the sites are located in peri-urban areas – many on a typical Australian ¼ acre block with a large back yard, dedicated to cultivation of crops. Other gardens were situated on slightly larger (3/4 to 1 acre) blocks of land. In this research, all of the gardens are distinguished by well thought out use of space (in many there is concrete replacing lawns).

The gardens range in size, from large blocks of land (5) to small garden plots (7). Each garden told a story of the gardener and their history on the land. The structural components of the garden and the management techniques implemented reflect the practical knowledge capacity of the gardener. The large gardens were owned and managed by elderly first generation Italian migrants. This group of gardeners had been living and working on their land for an average of 30 or more years. These large blocks of land were attached to fields, farmland or national forest and parklands. The average area of these small farms is 50 acres. A portion of the produce from the gardens was sold for profit, either at a local market or in a small shop attached to the front of the house. The focus of the analysis in these gardens was in the area immediately surrounding the house – the front and back yards.

Other gardens visited were smaller in size (12m²; 2m x 6m etc.). The size of these gardens reflected the location of the land. These home gardens were in peri-urban Lismore surrounds. Being located in the more densely
populated suburbs, these home gardens reflected a different kind of practical knowledge use. Spatial concerns were a dependent factor, with the organisation of the garden reflecting these.

The spatial arrangement of all of the gardens may be divided into four distinct areas:

- **vegetable** garden beds where vegetables are grown intensively and seasonally
- **herb** garden (medicinal or culinary): are either inter planted within the vegetable garden or planted in pots towards the edge of the garden and close the back door of the house.
- **trees** (fruit, nut, ornamental or medicinal): planted outside the vegetable garden, as shade (pine) or in clusters (e.g.: citrus) or accidentally (mango). Fruit trees require a greater length of time to harvest and are therefore indicated long term or established gardens.
- **ornamental** garden: located at the front of the house. Often ornamentals are grown in pots and are maintained by the woman in the house.

*Figure 20: Front garden of a research participant’s home.*
Home gardens surround the house. The most obvious distinction in the structure of the home garden is the division found between the front and the back of the house. The backyard is typically the location of the vegetable garden while the front yard serves as the location for ornamental display. The backyard is where the serious cultivation takes place. Behind the façade of the front garden, the land at the back of the house is highly utilised and extensively cultivated. Below, Christina and Faye provide a clear description of how a typical Italian migrant garden would be organised.

Christina: My grandmother was a fantastic gardener, and I guess I just observed that you didn't grow a garden under a tree...

Faye: No, that’s right, no!

Christina: ...you needed a certain amount of light, you needed a certain amount of care and ground and – so it's earthy, it's grounding...It’s the way the gardens are set up too, I think. When you think about being a little girl ...the gardens were set up more formally in a funny sort of way – in the front. But out the back, it's all garden.

Faye: Yes, it all garden

Christina: The whole thing, the whole backyard...

Faye: ...is vegetables

Christina: ...is dug up and there's a trellis and an organised compost area...and the rosemary bush is usually about this big in this wide [Christina shows a large plant]. And the rocket and the kale – it's all green, really, in a lot of ways.

Faye: And it's just all veggie garden...They don't have, like – well, they got flowers, but they haven't got all – they've got fruit that they can pick

Christina: It is mainly planted in between

Faye: All around the bottom of it, or down the side.
The vegetable gardens are all within walking distance of the house, close to the back door, and near to where the kitchen is located. This allows easy access to fresh produce to be used in meal preparation. The vegetable gardens are laid out in a series of boxed, distinct and often raised or terraced beds. Each row is separated by small paths, which are either worn into the terrain through repeated use or marked out to facilitate access. These paths provide straightforward access to the garden—encouraging easy planting, watering, weeding and harvesting. Only a few of the home gardens visited used fencing, either as separation from house or as protection from pests. Almost all gardens were open, an extension of the living space of the home. Carlo and Antonia’s garden was the only garden that was fenced in.

Each garden has a unique arrangement of species. The spatial arrangement of the garden allows the gardener to demonstrate further elements of their practical knowledge and skill. In the gardens grown and remembered, every available bit of space is dedicated to the cultivation of food or beauty. There is a careful arrangement of plants, an engagement with the environment that is constantly being monitored and adjusted, in an effort to yield successful harvest. One example is the decisions regarding the distance between trees, which results in an equal distribution of sunlight, nutrients and water.

Independent of the length of time the gardener had been tending their land elements of traditional Australian garden design were evident. One such design element (Timms, 2006) that was commonly seen was border gardens. These are small (50cm-1m) garden beds that act as borders, abutting the fence line and close to the edges of the house structure. This style of garden, containing border beds, was mostly found in the front yard of the homes visited. In between the two beds (fence line and house) lawn is planted or in the more stereotypic Mediterranean garden—cement is laid. There was a lack of consensus amongst the gardeners as to the benefit of laying cement and replacing lawn. The older gardeners saw this as a
time saving activity, freeing them up to work in the garden proper. They prioritised the cultivation of food in the vegetable garden, over the pulling of weeds from the lawn. The younger gardeners found cement a harsh and unnecessary choice employed by their parents or grandparents. The use of cement as a ‘ground cover’ might also reflect the utilitarian nature of the Italian migrant garden. This is a space of work more than it is a space for reflection or spiritual engagement with nature (Freeman, Dickinson, Porter, & van Heezik, 2012; Kiesling & Manning, 2010; Mazumdar & Mazumdar, 2009).

**Architecture**

During the initial interviews, each gardener was asked to identify key features of an Italian garden: ‘If you were to walk past a house and look into the garden, what are the features you would see that would make you think “Ahh! An Italian lives here”’. This question prompted a discussion on the distinct structure of an Italian backyard, regarding plant species organisation, and most notably, the architecture of the garden.
Adrianna: It’s just so maintained. They put a lot of effort in - you either see them actually active in the garden or you can tell that they have been there that morning. I guess there is that typical, there's the stakes, there's the tyres, there always things in place...they are so pedantic about their garden - they feel that their garden won't survive without them, in a way - they have to constantly nurture it - rather than let it do its’ thing.

Figure 22: Example of grape trellising in Faye’s home garden

The visual elements which define an Italian migrant garden also act as indicators for the species grown in the garden. Stakes are used to support tomatoes; trellises are for grapevines, beans, and passion fruits; tyres become makeshift seedling houses. Polystyrene boxes repurposed as seedling beds, litter the backyards of most of the gardens visited. Often these structures appear provisional and are well used, another indicator of the resourceful and utilitarian nature of the garden and the gardener.

Other key architectural features of the back yard are the small sheds that act as multifunctional spaces. The shed contains the tools used to maintain the garden, including handheld (three prong hoe), secateurs, axes, small
machinery (tractors) and bags of manure. These sheds also act as storages spaces for seeds, bought or saved. Many of the larger sheds had separate rooms in which the wine press was stored. Here overflowing crates of empty bottles, jars and lids lay ready for the next winemaking session. Separate to these storage sheds is the cellar. The cellar, if there is sufficient space, is usually found under the house. These cool dark rooms are prized areas of the home. Wine and grappa are stored here. In Peter’s cellar, the wine and grappa were organised onto shelves, with different coloured bottle tops marking the different vintage of the wine. The cellar also stores the jars of pickled vegetables, *passata* and jams made throughout the year.

The Southern Italian gardeners interviewed all expressed an interest in establishing a pizza oven in the backyard. Frank built his own and proudly referred to it throughout the interview. The pizza oven often dictates what is grown in the garden, with Frank and Glenda both reflecting that the reason they grow *endivia* is because it tastes so good on pizza. Others, like Carlo, dream of the day when the garden is fully established, of finishing it off by building his pizza oven.
Figure 23: Ida uses polystyrene boxes for rocket, leeks and parsley

Figure 24: Tina harvesting coriander from her polystyrene boxes

Figure 25: Vic’s backyard shed

Figure 26: Pumpkins stored in Tina and Joe’s shed

Figure 27: Peter in his cellar

Figure 28: The cellar door
Style: Backyards, raised beds, terracing and pots

There are a variety of styles of the backyard garden structure. All are dictated by an efficient use of space. Two main types of structure are utilised: raised garden beds and terracing. The decision to use raised beds reflected the age of the gardener. Those that used raised beds commented on the benefit of the height offered and the avoidance of back pain due to reduced stooping when weeding or harvesting. The decision to terrace the garden is borne primary out of a need to manage difficult terrain. The use of terracing demonstrates clever problem solving, dealing with a steep slope the gardener may opt for this hard landscape feature. The terracing feature has the disadvantage of lack of easy access due to the steep and narrow paths between beds. The terraced garden represents the most common style of garden the research participants remembered from their childhoods in Italy. Its use, in their new homes in the NRR, demonstrates the direct application of TK as practical ‘knowing how’.
Furthermore, many gardeners viewed the use of pots as a temporary measure, to be relied upon while waiting to establish their own home or purchase equipment to make a ‘real’ garden. All of the participants, regardless of the status of their gardens, grew some plants in pots.

**Plant interactions**

Many of the gardeners take plant interactions into account. This leads to the decision to plant certain species alongside other friendly plants. An example of this can be found in the garden of Romeo and Lucy. Long-time tobacco growers (38 years) they both remarked on the benefit of planting other Solanaceae family plants amongst the tobacco plants.

*Lucy:* We already had the plants and everything, but you see even on the tobacco we would always put, every row tobacco we would have plant of tomatoes.

*Romeo:* In the end, you know, tomatoes, capsicum - we did that because when you use it.

*Lucy:* When you spray insecticides for one, it affects the others.

*Romeo:* It did it for the other one too.

*Lucy:* Towards one end he would have the capsicum... yeah, so that's what we did. Because the ground was treated for the tobacco, the nematodes, it was treated because tobacco was a quick crop – once you have planted it out in 90 days, you started to harvest. So, the tomatoes with their, we put them at the end, so we always had them.

**Animals**

Animals were a central part of life on Italian settlements in the early days of migration. Many of the informants related stories of the care and benefit of maintaining a small collection of animals. Cattle, sheep and goats were kept to provide fresh milk for cheese or curd. Pigs were reared for slaughter, providing the meat to *far il porcel*—to make salami. Chickens provided eggs and meat. Rabbits and pigeons were caught wild. Memories
of caring for animals are associated with family get-togethers and the sharing of produce. Barry recalled spending his afternoons as a boy, down the road at his auntie's house, watching as she made cheese from the fresh cow's milk. These sit in contrast to the difficulties faced rearing livestock today. Frank reflected that his father now buys a pig to make his salami, as he is no longer able to keep one on his land.

Today few maintain animals in their home gardens. Those that do, have sufficient land to support only a few chickens and a single cow or goat. The care of animals is labour intensive and the elderly informants who continue to have animals do so with the understanding that these animals are now pets more than producers, in spite of the fact they will be slaughtered for their meat.

Chickens remain a popular choice as they serve many purposes: they provide eggs, compost food scraps, the manure can be used as fertiliser, and they are family pets for the children. Faye keeps 80 chickens and collects the eggs herself. Christina was open in her admiration of her friend’s work ethic declaring, 'That's a lot of eggs every day!' She sells the eggs and uses them in her commercial cooking and homemade pasta.
Figure 30: Lucy and her calf

Figure 31: Antonia and her chickens
Traditional garden management: Poison, pesticide, and compost

Management practices are implemented and determined due to a number of factors, including the species grown and the challenges presented by the environment. There are many factors which impact on species selection, such as cultural importance, use in cuisine, taste, aesthetic appearance or scent. Other factors, such as speed and ease of growing, result in the choice of certain species as primary crops when establishing a garden (e.g. beans and scallions). Many species become established in the gardens due to favourable environmental conditions, which encourage propagation and growth. These conditions include adequate sun and good soil. Other less favourable conditions, such as humidity and rain, are the main factors in the failure of garden crops. The gardeners interviewed all made reference to changing climatic conditions and the difficulties of growing specific species. For Robert, as a young gardener, knowledge of the land must underpin all successful gardening.

Robert: But the thing is – to know your piece of land, that’s the hardest thing. You’ve got microclimates, if you’re facing the north or if you are facing the south you can’t grow things. It’s general knowledge of land that’s how – like in Sicily, all of these pieces of land have been passed down from generation to generation, and they know what’s going to happen. Like they understand that this time of year this is going to grow and that sort of die out as we are all - industrial farming has wiped that out, unfortunately.

The interviews reveal a number of traditional garden management practices, identified by the research participants, are still in use. These include methods of soil conditioning and fertilisation, specifically the use of manure and compost, pest management, hand weeding, seedling care, and seed saving.

Fertiliser

Every gardener identified the importance of the use of natural fertilisers. Access to local manure (cattle, horse or chicken) is preferred. As many
gardeners do not have access to fresh manure directly from their own land, it is purchased locally. Others have chickens and use this manure on their gardens. Chicken manure is the most common soil conditioner used by the gardeners, with all but four gardeners stating that it was their preferred kind. The manure is collected from neighbours, bought in bags (labelled Dynamic Lifter) or gathered from their own backyard chooks. While this manure is deemed an efficient and low-cost alternative to chemical pesticides, it still requires time to be matured and prepared.

The Northern Rivers Livestock Exchange (Casino sale yards) is the central hub of cattle sales. Peter goes to the sale yard twice a year to purchase cow manure. He buys ten bags at a time. The manure is then kept at another property, not in his home in North Lismore, to mature for six months. Peter proudly told me that was all he did, ‘That’s all I put on the ground, cow manure and the other chook stuff that you buy’.

Horse manure is another popular fertiliser. Romeo and Lucy agree that manures are particularly good soil conditioners, breaking down clay soils and building up sandy soils. Horse manure is preferred as it deters the nematodes present in their garden.

**Romeo:** [The soil is] too sandy, and we subject to nematode. That one is eating tomatoes, but we can use - with horse manure they don’t kill it, and it controls the tomato for three months it gives you time to begin up.

**Lucy:** Because the nematode is actually a worm. It’s like a little knot, if you pull a plant out you’ll see it, it’s like a little nodule and apparently there’s worms in it. But they said if you put horse manure in the worm farm you’ll kill the worms, so... It has something that the cow manure doesn’t

**Romeo:** The cow eats it two times, the horse it’s just there, it’s just what you want.

This practical knowledge about the use of manures is based on observation and informed by sharing knowledge and experience with other gardeners.
Knowledge regarding the use of manure is also informed by memories of traditional techniques practised in the past. Peter relates a story of before the Second World War in Italy:

**Peter:** Before the Second World War we never used artificial fertilisers. And we have 30 heads of cattle all tied up inside, morning and afternoon you got to clean their beds out, and we used to have a, we used to call it concimaya in Italy, where you put confine...with all of the cow shit we had...all little gutters around and all of the urine used to go into those gutters and then they put the - where they slept at night, their beds, which were made out of hay and so in the morning you clean out all of the dirty stuff and put new stuff in and you stack it up, and you put it like this—and we had a, it would have been 15m long and 20m wide and then you put the urine on top of it, a couple of times a week to keep it moist and 12 months after we had a heap – I don't know how many cubic metres but we had 35 hectares, and we used to cultivate everything on that...

Peter's memory of the concimaya provides an example of retained practical 'know how'. This knowledge is shared and dispensed as a demonstration of his experience as a gardener. This practical knowledge also reveals that effective use of animal manure is reliant on a period of
composting. There are a variety of methods of composting being practised. Most follow the creation of a distinct compost area, some use plastic bins, others choose an open compost which incorporates both garden and kitchen waste. A couple of gardeners are using worm farms and castings. Every gardener acknowledged the importance of the use of organic waste from the kitchen or garden. Vic and Teresa have only recently started using a composting system, as previously they had chickens, which were fed the kitchen scraps. Due to the limited space in their new home, they can no longer keep chickens and have implemented a composting system to transform their scraps into fertiliser.

![Figure 33: Peter and Joan's closed compost](image)

**Irrigation and tools**

Dependent of the size of the garden, a variety of irrigation techniques are utilised: sprinklers, handheld hoses, and hosepipes. Larger gardens use hosepipe irrigation systems. However, every gardener reported a sense of enjoyment and satisfaction felt with the time spent watering the garden. These moments encourage quiet contemplation and checking in with the
state of the garden (and more often than not) with the gardener him/herself.\

There are a variety of tools utilised in the gardens. The use of hand tools is the most common. This is primarily seen in the smaller sized gardens. The larger gardens, with farmland attached, depend on small machinery (such as tractors) for land clearing and laying out beds.

**Pests and diseases**

One of the chief concerns noted in the garden narratives centred on the use of chemicals in the home garden. The desire to grow plants in an incompatible and inconsistent climate is a cause of great frustration for many of the gardeners. The use of herbicides, pesticides and fungicides is acknowledged as one way around the issues faced by the imposition caused by a changing and unpredictable climate. However, their use sits in stark contrast to the traditional beliefs and ethical relationship with nature (*cosmos*) held by the gardeners. It is here, in this contested space, that it is possible to explore the continuation and strength of traditional worldview. The importance of freshness, inclusive of the idea of ‘chemical free’, holds sway over the cultivation of climatically challenged plant species. All gardeners express distrust and suspicion regarding the use of chemicals in their gardens. However, while discussing the plants grown, many made apologetic reference to the use of pesticides or fungicides. None of the

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22 When the research participants spoke of connecting with nature, they understood this to be happening in the overall activity of tending the garden rather than in a separate space, or set period of time. Communion with nature, for this group, is a private act that occurs at different times while in the garden – in the quiet of the morning while watering the garden or resting in the patio with a cup of tea after a days work. It was also present while marvelling at the success of an asparagus as it breaks through the soil.
Gardeners made reference to the use of herbicides, and all expressed a sense of satisfaction and enjoyment in the practice of manual weeding.

The enjoyment gained from the act of gardening is closely tied to avoidance of chemicals. Frank and Glenda cite the ability to determine which chemicals and sprays are used in the garden, as one of the factors they most enjoy about gardening.

Frank: *I enjoy doing it, but it’s probably the cleanliness of it. I don’t spray at all, one little bit. Just a little bit of fertiliser but it’s all dynamic lifter which is all natural anyway so…*

Glenda: *Yes, the no chemicals [is important]*

While discussing the use of sprays, links are made to health and the importance of fresh food. Managing and maintaining their own gardens means that the gardeners can be assured of fresh, clean food. Practical knowledge regarding how the food was grown and where it comes from are used as measures of cleanliness and freshness. Romeo and Lucy, both first generation migrants, shared their view of the simplicity of ‘true’ organic gardening and their traditional understanding of chemical-free production.

Lucy: *Because he likes to know what he’s eating, where it’s come from.*

Romeo: *People they go in town and made by organic stuff - I don’t believe in that. In the big shop… They pack them up as organic. No, no, no - organic is that one (points to his garden)*

Lucy: *He means he knows what he put in*

Romeo: *[I] put in a bit of manure, I spray - I spray just after the rain because you know this stinking beetles*

Anna: *Yes, yes*

Romeo: *They never eat nothing… but what I eat it I know it’s good*
Relying on the garden to provide fresh food allows many of the gardeners to avoid the deleterious effects of ‘processed foods’. However, sometimes sourcing ‘fresh’ and avoiding the supermarket is problematic. The gardeners all demonstrated a distrust of the supermarkets and suspicion concerning the produce sold. For Johnnie, Peter and Jo buying food in the supermarket is fraught with uncertainty.

**Johnnie:** Well, I think it is because you don’t know what you’re buying in the shop... It’s hydroponic... You don’t know what chemicals are used on the veggies

**Peter:** And they’re using sprays. If it’s not organically grown, they are using DDT and all of this sort of stuff.

According to Romeo and Lucy, the supermarkets go to the ‘big farmers’ who do not know how to grow food. The suspicion arises because, in order to grow such large quantities of food, the big farmer must be using poisons: ‘To keep the food very clean they’d have to use a heap of poisons’. Romeo returns to the central concern of the Italian migrant gardener: ‘It’s not natural!’ Romeo’s suspicions affirm trust in his own practical understanding of how to grow tasty produce.

In the management of insect pests, alternatives to chemical sprays are sought. Barry voices the concerns of many of the farmers in his statement: ‘I don’t want to use chemical sprays unless I have to. [I was told] you can buy a chilli and garlic spray from Bunning’s for about $30 a bottle’. However, instead of purchasing natural spray, Barry was considering making his own.

Managing native animals, bandicoots, possums, and birds is a constant part of maintaining a garden in the Northern Rivers Region. Kevin and Vic utilise a common preventative practice. In an effort to discourage the bandicoots, they both use ‘a hard gutter’ around the young plants. This can also take the form of a fenced in area, which has deeply dug corrugated iron border, which blocks all native animal digging attempts. Birds are also a problem for many of the gardeners. Tina tells me she can no longer grow
grapes to sell as the ‘birds eat the lot - nothing!’ She jokes with me that while she sells her vegetables in her front shop, the wallabies come into her garden for a free feed. Johnnie described his father, Peter’s, attempt at discouraging the native bird, currawong:

Peter: I’ve got a problem with the currawong... When the tomatoes start to get reddish - boom! - they fly down and dig into it.

Johnnie: I remember that dad used to put stakes at each end to the garden and try string from one stake to the other end crisscross...

Peter: So they wouldn’t dive down

Johnnie: To keep the birds away

Anna: That’s a great idea!

Peter: Yes, but they figured it out ...I had that, and they did it – so now I’ve got netting, and I put sticks and all netting around it so they can’t land (laughter). I’ll show you after.

Figure 34: Peter showing the netting used to protect his tomatoes
The gardeners had all experienced the ill effects of using a chemical spray. Ida warned against the use of chemical sprays like grazon\textsuperscript{23} because of the effects it had on her orange trees.

\textit{Ida:} Matt [Ida’s deceased husband] sprayed with grazon, the nut grass and you know he cut it back, and he added some manure, and it died...[but] the tree got sick and he put another one but this one is not doing so well either...

\textit{Anna:} Yes, you can see that in the leaves.

\textit{Ida:} Don’t use grazon - it is a dreadful thing.

Managing the effect of the climate, for many of the gardeners, requires considering the use of chemical sprays. Fungicides are used by many of the gardeners because of the climate. When Lucy and Romeo grew tobacco, they were required to follow strict rules about the use of chemical sprays. Romeo believed that once the tobacco was cured the chemical residue of the sprays was removed. Both firmly believe that once chemicals, fungicides or pesticides, are used the plants were weakened.

\textit{Lucy:} You see, when we had tobacco, we were controlled with the poisons, before food was controlled. I remember...

\textit{Romeo:} Yes, yes but when you cook them a little. When we cook it...

\textit{Lucy:} Cure it, Romeo, cure it!

\textit{Romeo:} Yes, yes, cure it - gone!

\textit{Anna:} But tobacco is a difficult plan to grow without pesticides, isn’t it?

\textit{Lucy:} It’s not so much the pesticides here, it’s more the fungicides because of the wet weather

\textsuperscript{23}Grazon (picloram) is a systemic herbicide.
**Romeo:** No, the fungicide is yeah

**Lucy:** But otherwise once, once they didn't use so many poisons

**Romeo:** Yes, because they started with that and once you start to use the poison, the plant becomes weaker. I never spray nothing, and it came out perfect! You see it's got its own defence but when you start to... You make them weaker

**Lucy:** It's the same with anything it's like I've seen people go from normal growing to growing organic - it takes a long time to them to get back because they've done... they unbalanced the plant. It gets used to one way and then there's another.

**Crop rotation and seasonal produce**

Every gardener was aware of the importance of rotating crops, reflecting on the practice of utilising different beds at different times of the year. However, few were able to provide specific examples of when this occurs. Peter considered the specific needs of the tomato, in particular, the high nutrient requirements of the plant. These needs mean for Peter that the plant must be moved after every season and cannot be cultivated in the same spot year in and year out.

**Peter:** They’re hard to grow in the same spot all of the time

**Johnnie:** Yes, I stopped growing tomatoes because it takes up too much space and they’re hard to grow

**Peter:** Yes, tomatoes are a hard thing to grow.

**Johnnie:** They grow better with dad.

**Peter:** You’ve got to put a lot of manure in.

Every gardener agreed that the cyclic nature of maintaining a garden, in accordance with the seasons, is a central feature of an Italian migrant garden. Robert highlighted this in his observation that ‘in the Italian garden, it's always evolving. You're always planning; you've always got
new things going in' and reflecting on his grandfather's garden Robert explains 'his vegetables—he would grow tomatoes, zucchini, eggplants—you know, they would always be changing depending on the season'. Kim agreed, observing her grandparent's garden was 'cyclic as well, so they would use different vegetables at different times of the year...So you have to adapt to whatever is fresh at the time'.

All of the gardeners acknowledge that growing specific crops successfully depends on following the seasons. The season often dictates the species and sometimes the variety grown. In Peter and Jo's garden different types of tomatoes are grown depending on the time of year—marmande (beefsteak variety) in winter and grosse lisse in summer.

The seasonality of the garden spreads across the trellises and tyres into the lives of the family. Harvesting periods culminate in family and communal events, such as passata day and vendemmia (grape harvest). Throughout the year, there is cause for celebration and opportunity to gather the family together. Robert family prepares tomatoes for sun drying at the end of the summer harvest. These events depend upon collaboration and result in abundant sharing. The produce is stored in jars or bottles and kept in sheds or given away, with the understanding that there will always be food available to be used at a later date.

It might not always be possible to plant according to the season. Not following the seasons, however, is fraught with trial and error. Barry tried growing rocket and was 'semi-successful'. The lack of success was due to his failure to follow the seasons. He reflected, 'I planted it at the wrong time of the year because I only bought them about a month or so ago. And you start having problems with insects'. Equally, other gardeners, like Frank and Glenda, acknowledge the centrality of the seasons to traditional Italian gardening practices. However, they resist the seasons due to the preference for a particular plant.
Frank: Yes [seasonality] is [important]. But I love my endive, so I try to grow that all year and that seems to work, you've just got to pick it before it starts going to seed. But traditionally it's just a winter crop but I have it, I grow it all through the summer because we use it so often. Mainly in cooking and well, in the pizza oven especially.

Growing crops that followed the seasons ensured the garden was used 'correctly' and that the family always had fresh food. For Carlo and Antonia, everything was grown with the seasons, 'We always have something for every season. I have a big family. The garden was a big provider.'

While reflecting on the importance of seasons in the garden, many stories of Italy and memories of seasonal wild food plants were recounted. Availability of wild plants like radicchio and bruscandoli acted as markers for the change of the seasons. The best radicchio was to be found in autumn, before the frost of winter set in and killed the outer leaves. However, there was an element of luck and hope in the chance of being lucky to find one where the heart stays 'beautiful and sweet'. In springtime, the appearance of bruscandoli (wild hops) would indicate the turning of winter into spring. The hops vine begins to shoot when the sun comes after the four months of cold weather and snow.

The significance of the practice of gardening with the seasons is evident in the multiple fields of knowledge it affects and relates to. Transference of practical knowledge regarding the maintenance and season care of the garden is shared throughout the year. Adrianna reports that she has observed her grandmother's practice of pruning fruit trees in 'autumn and winter, but never in spring and summer'. She was then able to apply this knowledge to the care of her own backyard garden. Saving seeds is also tied closely to the understanding of seasonal gardening. Again, Adrianna comments that she has observed that her family ‘...more like recycle their own gardens, so when it gets into summer they'll plant the seeds from the previous year'.
Planting with the moon

Close attention to the lunar cycle is a European tradition revealing an intimate relationship with nature (Grasser et al., 2012; Tavenner, 1918). Bernardi (as cited in Del Giudice, 2000) reveals that in traditional Italian farming practice, ‘empirical observation of the moon’s phases dictated many agricultural activities: harvesting of grain, cutting of trees, planting of seeds’ (p. 17). The cycle of the moon may be clearly observed if one lived rurally, where the strength of a full moon’s brilliance lights up the countryside. This informal code of knowledge is passed on through observation and ensures a deep connection to nature.

Of the gardeners interviewed, only a third were currently following management practices that took into account lunar rhythms. Planting, sowing seeds and harvesting are the main activities that gardeners reported were important to consider the phases of the moon. While the active use of these methods took place in only a few gardens, all reported knowledge of the traditional belief in the benefit of utilising the moon in the production of healthy crops.

Robert recalls his grandfather would always talk about when to plant with the moon stating, 'He was a big believer in all of that kind of stuff'. Robert related a story about when he was visiting a farm in Adelaide:

Robert: I was sitting there, and they were explaining it (biodynamic farming), and I thought – that's just how my grandfather does it, it's not anything special! (Laughs) You know, it's not like some new inventive thing...That's just general farming; this was before all of the sprays and all that.

The gardeners who practice planting with the lunar cycles are members of the older generation of Italian migrants. Romeo and Lucy first raised the notion of planting with the moon when I asked them about traditional garden management practices.
Lucy: Well, if you ask about those plants, gardens and food they used to go with the moon, everything went with the moon because the moon governs the tides, it governs the everything.

Romeo: When you plant potato, never plant the potato with a full moon.

Anna: Never?

Romeo: You know why?

Anna: No.

Romeo: You make a lot of the top and nothing in the bottom.

Lucy: On top and nothing underneath. He means that anything you grow underground like carrots, potatoes, turnips or anything like that you always look at the moon not rising because underneath.

Romeo: Chicory, salads, all that stuff we put the seeds, we put in the full moon because of the way - after you just water, it's the best.

When asked the reason they follow this planting technique, Lucy and Romeo responded with the observation that they did not know why, 'that's just what I learned from my father'. All harvesting, planting and even bottling the wine is done in accordance to the phases of the moon.

Lucy: Even when we used to grow tobacco we used to look at the moon...He even looks at that when he bottles his wine.

Romeo: I go always with the moon.

Lucy: Yes, we always do with the moon, that's how my mother used to do it - whenever she had to plant something she would look at the moon. I think it's always something that's handed down.

Romeo: Why do you bother about the moon? But it's clear - it's the way we work!
Another first generation elderly Italian migrant, Peter, when asked if he followed the moon, revealed that he took particular care with *radicchio* and the moon.

**Peter:** Yes, yes - if you grow anything, like the radicchio, for instance—that has got to have a heart—if you plant it, and I noticed it because I tried, because years ago I didn't believe the old knew everything that they say, so I just tried it out—you plant it on the rise of the moon and instead of making a heart, it grows straight up and seed.

**Anna:** Yeah, ok - so when is the best time to plant?

**Peter:** Radicchio—on the downturn of the moon. Transplanted it doesn't matter but seeded, you've got to seed it on the downturn on the moon. Because I tried, one year I had a calendar and I didn't look at it properly, and I planted it on the rise.

**Anna:** And it didn't work?

**Peter:** No, it all gone to seed

Following the moon is closely tied to historical observations that plant seeds take and mature best under specific lunar periods. The practices followed by the Italian migrants interviewed are documented in Table 4. Following the lunar cycle, the gardener plants root crops, such as potato and carrot, during the waning moon and plants lettuce and other greens either on the full moon or just after the full moon, during the waning moon. These rules are in contrast to the laws developed as the biodynamic method of gardening, developed by Rudolf Steiner (1997). Biodynamic philosophy recommends planting aboveground crops during the waxing moon, as there is increasing illumination and planting belowground crops during the waning moon (decreasing light). Drawing from Tavenner’s (1918) analysis of ancient Roman farming methods, the popular practice of following the lunar cycles was firmly established in the prevailing Roman cultural beliefs. All planting took place either just before the moon began to increase or during the waxing moon. The implication is clear - as the moon increases so shall the planted crop or orchard increase.
Examining the interview data, the methods of planting with the moon did not match the ancient wisdom referred to by Tavenner nor the practical knowledge expressed by Steiner. Despite this gap, the research participants held a strong conviction that their practice ensured healthy, vital and tasty produce. It was the act of being in tune with the rhythm of the planets and the practical application of a learnt tradition that was essential.

<table>
<thead>
<tr>
<th>Name</th>
<th>Italian Name</th>
<th>Moon’s phase for sowing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabbage</td>
<td>cavolo</td>
<td>Full moon</td>
</tr>
<tr>
<td>Carrot</td>
<td>carota</td>
<td>Waning moon</td>
</tr>
<tr>
<td>Celery</td>
<td>sedano</td>
<td>Waning moon</td>
</tr>
<tr>
<td>Chicory</td>
<td>cicoria</td>
<td>Full/ waning moon</td>
</tr>
<tr>
<td>Garlic</td>
<td>aglio</td>
<td>Waning moon</td>
</tr>
<tr>
<td>Lettuce</td>
<td>insalata</td>
<td>Full/ waning moon</td>
</tr>
<tr>
<td>Onion</td>
<td>cipolla</td>
<td>Waning moon</td>
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<tr>
<td>Parsley</td>
<td>prezzemolo</td>
<td>Waning moon</td>
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<tr>
<td>Potato</td>
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<td>Waning moon</td>
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<tr>
<td>Radicchio</td>
<td>radicchio</td>
<td>Full/ waning moon</td>
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<td>Radish</td>
<td>ravanello</td>
<td>Waning moon</td>
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<tr>
<td>Spinach</td>
<td>spinaci</td>
<td>Waning moon</td>
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Table 4: Lunar phases for sowing vegetable seeds

Seeds: Saving, buying, and sharing

Seeds, seedlings and vegetative propagates are all used by gardeners to grow plants in their home gardens. Plants grown from seed include those grown from direct sowing and arising naturally. Plants of seedling origin are either purchased or obtained from family members or neighbours. Most of the food and fruit producing species are propagated from seeds and/or seedlings. Additionally, varieties of citrus are grown from branch cuttings.

*Marco*: Dad does [save seeds] – for quite a few plants. Often things like watermelon and stuff like that, when he wants to plant those sorts of things. So about one-third to half of what we plant would be seeds that dads kept. And the other half or 2/3 would be bought stuff.
Exchange of garden produce is a prominent feature of the social relationships of the Italian migrant group studied. Seeds and seedlings are common features in these (Italian migrant) exchange networks. The exchange of seeds encourages and supports experimentation while ensuring crop genetic redistribution and availability of seed stock that has adapted to local environmental conditions (Thomasson, 1994). Every gardener interviewed expressed an enjoyment and keen appreciation for experimentation.

Each gardener was asked to reflect on the importance of the origin of his or her seed stock. The plant and seed stock used in the home garden is either sourced form self-saved seeds (by the gardeners themselves); purchased from a local hardware store or market; or received as a gift or exchange from within the gardeners, often extensive, social network.

**Carlo:** We use both. The seeds are more resistant to pest. Seedlings are the starters, and the structure makes them grow. It is important where the seeds come from. I have a friend in Brisbane, Gennaro, who sends me seeds. His father sends him the seeds from Italy. I collect and save seeds, one year after the other. These are the most resistant. It is the best way to do it.

**Selecting seeds or seedlings**

The main advantages attributed to the use of seeds are ease of growing and availability. Disadvantages include reduced survival and more susceptibility to damage from wild animals (such as kangaroos, possums, birds). Seedlings are cited as demonstrating better survival rate and also provide a simple control of species identity. A combination of seeds and seedlings are used in all of the gardens. There is a perception that seeds are the more labour intensive option and the one might be considered ‘lazy’ to settle for seedlings. In response to this distinction, when asked whether his father would have used seedlings, Frank responded:
Frank: No, dad used to get - no he used to do the same. I remember, it was just an old hardware store – they didn’t have brand names in those days – and they used to have them wrapped in wet newspaper with a whole stack of seedlings, they used to bring them home and plant them out. So it was something that he used to do as well.

The transportation of seedlings and cuttings wrapped in newspaper continues today. Robert told me he still gets cuttings of rosemary, wrapped in ‘little pieces of rolled up newspaper, that are wet with a few rubber bands around it’. These little packages are carried from the gardens of friends and relatives.

Christina: They looked after their seeds, I remember. There was a seed bank when I was a little girl.

All of the gardeners interviewed save seeds. Saving and sharing seeds ensure the availability of difficult to access species. The performance of seeds is a common topic of conversation among family members. When visiting each other’s homes, often requests are made for seeds saved from a particularly successful crop. There is a range of factors that motivate the gardener to save plant seeds—taste, pest resistance and fertility.
Another important factor that determines seed saving is the availability of the species. *Endivia* and *radicchio* are two examples where seeds are saved due to the difficulty finding original seed stock. Peter saves seeds from his radicchio and most of his lettuce, first allowing these plants to go to seed and finally collecting and saving the seeds.

*Romeo*: No, no - if you've got a variety, say like the radicchio, I like, I make my seed, this one

*Lucy*: But here you can't get the seed

*Romeo*: To start you have to buy it when I see the quality grow bigger I make my own seed

When asked directly if they saved seeds, often gardeners would downplay this practice. Ida told me she didn’t really save seeds and then at the end of our walk around her garden she took me to her shed where she showed me where she kept her seeds—she had a box that was overflowing with small seed packets, a collection of seed filled jars and a few small bundles of newspaper in which seeds were drying. Ida saved seeds in spite of the fact that she will not eat the plant. An example of this is capsicum. Walking through the garden, Ida noted the capsicum and remarks that they were ‘good ones’. She told me she would save the seeds and replant them, even though she is not sure what to do with all of the fruits, as she cannot eat capsicum as it ‘repeats’ on her.

**Smuggling seeds, sharing seeds**

Upon arrival in Australia, it was found that many Italian migrants had bought seed stock with them (Agutter et al., 2013). All of the gardeners relate stories of relatives or friends attempting to ‘smuggle’ in seeds from their hometowns in Italy.

*Faye*: She brought some with her, she brought a few with her. And that then other Italians sort of brought some in as well.
Peter first brought his seeds from Italy. When he needed more, he turned to the local parish bishop.

**Peter:** Yes, the first time I went back I got the one I wanted. And I took it with me which you weren't allowed... [laughter!]

**Anna:** But everybody does.

**Johnnie:** And do you still grow that exactly the same one?

**Peter:** No, I got it from, where do I get it from? I got it from the Bishop. See the Bishop we had here in Lismore he used to love gardening. And I made a garden for him.

One obstacle that bemused the elderly Italians was the legal restrictions surrounding the importation of seeds and plant stock, into Australia. On a recent trip to Italy, Lucy and Romeo were stopped at customs and had their bags searched.

**Lucy:** You see when we went to Italy last, we bought the seeds, they were all in packets, they were sealed and everything. But because I struck a girl [customs official] there... And that was a real good, even the sage; they have a quality of sage that I thought we've never had it here, it's got a bigger leaf, and it's a bigger bush - perhaps it might have been like that because of the climate too, I won't say that... And there were a couple of other seeds that we had never seen them here, and there were already known with the brand - Scaravatti I think it was. They all had the brand and everything on them, but she wouldn't let them through. ‘Oh,’ I said. And she said ‘Have you got anything else, here the bags? Have a look’. ‘No’, I said. I had them on top; it wasn't as if I was hiding them. But still, she wouldn't let them through.

**Anna:** This is Australia. This is really hard.

**Lucy:** I understand in one way, Romeo

**Romeo:** No, no, no - but they legal that one!
These laws did not seem fair. The experience of government-enforced restriction resulted in the lack of access to specific plant species, in Romeo and Lucy's case, to a specific species of sage.

Many of the seed stock have been passed down through the family for generations. Visiting Vic and Teresa’s garden, Vic was proud to point out the chilli bush that was growing wild.

*Kevin:* Well, there's things, see these chillies that are growing wild, they've been handed down from our grandfather, from mum's dad.

*Anna:* The seeds?

*Kevin:* Yeah, the same seeds.

The process of saving seeds is central to the continuation and domestication of most basic crops (Nazarea, 2005). The research participants interact with seeds through the collection, selection and sharing. The decision to use and save a specific seed is an indicator of its perceived potency and potential.

**Summary**

This chapter identifies the continued use of a set of traditional garden management practices by the Italian migrant gardeners interviewed. Prominent among these applications of practical knowledge are soil conditioning, preparation of fertilisers and composting, planting following the rhythm of the moon, and the decisions that guide the saving of seeds.

The acquisition of this knowledge is closely tied to its application, with the individual gardener ‘learning’ first through observation and then testing this through doing, a process of trial and error. The practice of planting in accordance with the lunar cycle is an interesting example of this process. The participants’ responses reveal that the decisions made regarding when to plant are based on practices observed and remembered from
childhood. These are then tested, with the result of re-establishing the tradition as an ongoing practice.

Much of this know-how has been passed on through the family and within the community. It is the application of this ‘knowing how’ that is unique, with the result of ‘new’ practical knowledge developed and shared throughout the community. The practical knowledge discussed in this chapter offers a fascinating insight into the continuation and adaptation of TK, with the outcome of successful and abundant gardens. Finally, the practical application and subsequent maintenance of traditional knowledge are facilitated through the privacy of the garden. How do the choices made, regarding the plants grown in their gardens and organisation (landscaping) of these plants, impact on the lived experience of Italianità?
CHAPTER 9: Knowledge acquisition and transmission

It’s in the blood!

Answering the question ‘Why garden?’ a common reply was ‘Yeah, it just came natural. Yeah, it’s in the blood’. This statement, ‘in the blood’, implies that the act of maintaining a gardening carries a kind of genetic legacy. This notion of inherited know-how may be viewed through the process of transmission of cultural traits. Cavalli-Sforza, Feldman, Chen, and Dornbusch (1982) clarify, asserting that ‘cultural transmission is the process of acquisition of behaviours, attitudes, or technology through imprinting, conditioning, imitation, active teaching and learning or combinations of these’ (p. 19). Different modes of transmission are distinguished including vertical (from parent to a child); horizontal (between peers, or members of the same generation) and oblique (from an older generation e.g. grandparent). Reyes-García et al. (2009) identify three aspects of how individuals learn cultural knowledge: the most intensive time of learning new knowledge is childhood, learning is most profound when it is applied or put into practice, and direct contact with nature is required to learn folk biological knowledge. Finding agreement, Ingold (2000) contends that learning through doing, the reification of knowledge is not transmitted across generations as a ready-made corpus of information but rather consists of continual regeneration in the contexts of learners’ practical engagement with their surroundings.

The importance of childhood and the place of memory in the (re)construction of culture is undeniable. It is as children that the most intense phase of cultural instruction takes place. Much of this transmission is tacit knowledge, with both actors (the giver and the receiver) often unaware that they are passing on cultural beliefs and practices. Crumley (2002) privileges this relationship, named ‘social memory’, with the understanding that regardless of the level of attention to the lessons on behaviour or belief, this knowledge is transmitted across the generations.
In this research these lessons are delivered during a variety of events and occasions, predominantly occurring informally within the family; engaging with the practical experience in the garden or the kitchen, and significantly, during the early years of childhood.

**Family**

The family is central in the transmission of explicit cultural knowledge. Pontecorvo & Fasulo’s (1999) study reveals how the negotiation of cultural meaning takes place around the family dining table. Within the group of Italian migrants interviewed, the transmission of traditional knowledge typically takes place during shared family meals and informal conversations with elders. Typically the mode of transmission is vertical or oblique, with the elder retaining a position of expert across all domains. It is evident that it is within the secure space provided by the family unit where cultural traditions are ‘nourished and sustained’ (Wilson, 2007, p. 160). The structure of the family allows the continuation and transference of TK to younger generations who no longer need the security of traditional ties. The family (and activities with the family) become reference points for cultural ways. Even though, as argued by Wilson, younger generations of migrants, move from 'being' Italian to 'feeling' Italian.

Anna: And did you learn gardening from watching your family, from watching your grandfather?

Robert: Yeah—he wouldn’t sit you down and say this is how it’s done. It would be hands-on, you would be like—grab this and do it. You wouldn’t ask questions, you just grow up with it, you don’t sit there and...It was always good! He would always talk about, you know, to plant when the moon—like the new moon. He was a big believer in all of that kind of stuff.
Childhood in the home garden

The home garden becomes the cultural schoolyard, a place of observation and experimentation. Children participate in the garden throughout their upbringing, helping in the harvest and observing the challenges and obstacles. There are multiple opportunities to discuss or question the knowledge that is shared. Learning as a child, knowledge stays forever – Carlo doesn’t mind hard work because he has been doing this since he was a child. It was a part of his family life, walking long distances to spend time with his aunt in her garden.

**Carlo:** I am in the garden daily, anything between 5 minutes to half of the day. Regular basis—I nurture the soil. You have to if you want to get results. Here we have clay soil, which is hard. In Italy, it is volcanic soil—the best you can get! There is less maintenance. Here there is more. You have to move, mulch and water every day—it is hard work. I grew up with it. Because I learnt it as a child. They push you to do it, and the further you get, you enjoy the feeling that you get back, even as a child.

**Anna:** Are you able to pass your knowledge on to your children?

**Antonia:** The kids are 9, 6 and 4 years old, they are too young…

**Carlo:** We try to…It is different; they have not grown up with the whole family—everyone did it. You are the same in Italy. Here, you are the only one in the area. It is difficult for them to understand the importance of gardening. They play sometimes and pull carrots and fennel. When I was growing up, I would go to my auntie’s place and play in her garden too. We would walk for 50 minutes to get there.

However, there appears to be a period in a child’s life, late adolescence, where the connection for garden and family is tested. The reflections of the research participants reveal that it was in the early childhood years that the wonder of the garden was greatest. Following late adolescence, there is a gap of engagement within the family and consequently, in the
garden. Many of the participants reflected that they missed a great deal due to their lack of interest in their teenage years.

**Frank:** I didn’t really take much interest when I was at home.

**Anna:** It’s funny that isn’t is as kids - you sort of take it for granted.

**Frank:** yeah, I suppose I just missed it.

**Anna:** What were you doing instead?

**Frank:** Oh I was probably out partying! Yeah, riding motorbikes with friends - and that sort of thing - but yeah, when I was young I was probably too young and when I was old enough to do it I was out with friends.

A significant portion of the knowledge held by the research participants was learnt as children. The strongest reflections and memories are during the early school years when the children were aged between six and fifteen. This was when the family outings to the mountains took place, when grandparents were still alive and when the family unit was strongest.

**Anna:** Did this sort of stuff – did you learn it from your dad? Or your granddad?

**Peter:** yes, they both used to – they both used to have one million rules, they used to tell us every day, but we didn’t pay attention (chuckles)

**Anna:** you only take them on later, when you need them.

**Home garden**

Characteristically, non-verbal practices that are performed while gardening result in the transference of knowledge. Barthel, Folke, and Colding (2010) consider the transmission of such practices and knowledge via twofold aspects of socio-ecological memory – participation and reification. In the gardens of the Italian-Australians interviewed the features of participation include imitation of childhood experiences and seed and plant exchange. Imitation of practices is an important feature of
the transmission of knowledge related to gardening. Individual trial-and-error practices generate experiences in individuals and modify ecological practices, which may or may not be transmitted via mimicking or oral means to others. When asked about how she learnt to garden Ida exclaimed ‘Oh! I just saw them do it... We didn’t have to be taught - we just saw’.

The garden is a space in which the allowance of trial and error is encouraged and in which gardeners monitor how local ecological processes, plants and various organisms respond to their management practices. Additionally, knowledge transfer is ritualised during seasonal celebrations in which passata, salami, and wine are produced.

The importance of trust and the weight of an elders experience and know-how is expressed in Adrianna’s description of turning outside the family to get advice.

Adrianna: And one of my friends, an Australian friend, gave me this stupid advice because like I had each tied to a bamboo stick because I guess I just kind of replicate what I see that my grandparents place. And he goes you can’t do that because you need to give the trunk opportunity, you need to give the plant an opportunity to strengthen its trunk from swaying in the wind. So he loosened it for me. And what happened was the weight of the lemons – it must have been windy while I was gone - and it actually just snapped. And I was really kind of pissed off about it. But you know, it will be the last time I take advice from an Australian!

A further aspect the transmission of socio-ecological memory identified by Barthel et al. (2010) is oral communication. This characteristic of knowledge-sharing is particularly vibrant in the lives of the Italian-Australian gardeners interviewed. Identifying as members of a diaspora, the maintenance of communication with relatives in Italy is an important element of the continuation of their hyphenated identities. Invariably these conversations with relatives (here and abroad) turn to a discussion on the weather and the status of the garden. Carlo explains:
Carlo: I speak on the phone to my mum and my brother to get advice. We chat about what we each have in our gardens: ‘What are you growing (in Italy)?’ ‘This is what I am growing [in Ocean Shores]’. We share and compare stories. My brother likes to give advice. He had more time with my father. He has my father’s knowledge.

Abstractions of practice and knowledge are made concrete through the implementation of the (often) unspoken values of the family. As identified in the previous chapter, the choices made regarding choice of specific (traditional) plants, the exclusion of pesticides, and the practice of organic soil fertilisation are examples of this ‘reification’ (Barthel et al. 2010). Equally important are the tacit rules of conduct regarding roles, which fall across established gender divisions, wherein the man does ‘hard labour’ digging trenches and establishing garden beds, and the woman maintains and nurtures once the work has been done.

A common garden practice employed more than half (56%) of the gardeners interviewed is grafting. Following his dad’s example, Frank had begun to graft a few citrus trees. The transmission of knowledge took place informally, through observation rather than direct instruction.

Frank: So yeah, I’ve done a bit of grafting in the past. Different types of citrus onto other rootstocks and that and that was something dad used to do.

Anna: And so did he teach you how to do that?

Frank: No, no – I just remember watching him do it, and I didn’t take a lot of interest but yeah, I just remembered. But I’ve done a horticultural course, like years ago

Frank learnt this technique while he was a teenager and reflected that he had wasted his time not learning more from his father while he could.

Frank: But he was just too set down there and getting too old to move. But he was quite amazed that I had actually bought this block

Glenda: yeah he was, he was surprised!
Frank: Yeah.

Glenda: ‘What do you want all of this land for!’ he said

Frank: I think I might have said to him - ‘it's in the blood!’ And he was absolutely, yeah he loved it. He and mum, he came up the first time – they never came up together – and then mum would come up, she would go up for a holiday at her sisters and we would go and bring her back for the day. And she would be saying the dad just didn’t stop talking about it for months

Economy of affection: Sharing with others

Sharing produce from the garden and products made in the home takes centre place in the Italian migrant community. Hyden describes this as an ‘economy of affection’, defining it as ‘a network of support and interaction among structurally defined groups connected by blood, kin, community or other affinities’ (as cited in WinklerPrins & De Souza, 2005, p. 118). Such a system of exchange is based on the premise of gift giving as opposed to the direct exchange of bartering. Family comes first.

Robert: My grandfather used to say ‘We just grow food!’ It's just for eating and making sure the family has something to eat, and that's it. Yeah, that's the key – if you can feed your family, then you're done. It's just that these days you have just these days you've got to pay bills and stuff like that, unfortunately. That's just a personal thing.

Within the group of gardeners interviewed, many engage in sharing of produce to members outside the family including neighbours, workmates and friends. Frank describes sharing seeds with his friends Tina and Joe:

Frank: when dad bought certain [plants] like those long type capo's there, we used to give them [Tina and Joe] some seedlings and they used to give us – well when we go over there they give us, they load us up...
The importance of exchange in social relationships

Exchanged crosses borders and localities, across the country and internationally; food, produce, plants, seeds and seedlings are shared. These exchanges cement the relationships between friends and families, with the gardens as storehouses for the remembrance of families' life histories. Carlo and Antonia share produce with their neighbours as well as receive seeds from friends in Brisbane. These seeds are typically brought in (smuggled?) from Italy and then posted to Ocean Shores.

Memory and identity are interwoven; within the garden cultural memory is imprinted on different species. The most prominent plants with cultural significance have been identified by Adrianna as ‘the basics’. These are the essential herbs – rosemary, parsley, basil, and tomato, without which a meal might not be considered a meal.

Frank recalled his father used to travel up from Wollongong, NSW to visit him and Glenda. He would always bring something with him to share.

**Frank:** Yeah, and dad always used to, oh he only came up a couple of times, and he used to come up with a little suitcase full of plants and seedlings and all of that. Yeah, so I suppose it's just an inbuilt passion I guess – that's the only way I can describe it.

Peter shares his knowledge and his produce as he recognises that it is essential to keep the traditions alive. He and his son Johnnie are working together on Johnnie's garden.

**Johnnie:** yes, I originally put the, asked dad to help me get started, just to spend some time with my dad and to tell me the tradition of veggie gardens

**Anna:** People from your generation, Peter, have all of this knowledge – like all of those million rules –

**Peter:** And it's not used! It's just used for themselves but not tell anyone, that's what I do – but if somebody asks, I tell them but like an Italian man said to me, he works in the
camera shop, he said I haven’t got any radicchio seeds, and I said I’ll give you some!

Anna: So will you give John seed to his garden?

Johnnie: He’s given me some radicchio seeds.

Peter: I always give radicchio but the rest you can buy...

All of the gardeners interviewed share some of what they grow with relatives. This is generally a reciprocated engagement; that crosses generations and genders. Most also share their garden produce with friends and neighbours. In general, the gardeners who have larger gardens, and higher yield, share more than other.

Anna: And the produce that you get, you just eat at home?

Peter: I use it for us at home, there’s not enough to sell.

Joan: Yes, just at home and we supply Kimberly and Tony, Janine and John

Johnnie: Yes, I come and take some lettuce. Stopped growing tomatoes because it takes up too much space and they had to grow

Peter: Yes, tomatoes are a hard thing to grow.

Johnnie: They grow better with dad.

Family tensions played out in the garden

Falling just short of Nazarea’s (2014) ‘sombre discourse of loss’, the participants articulated concern and anxiety regarding the future of traditional gardening and food preparation practices. Their concerns are multifaceted and, for the most part, pertain to apprehension regarding the future of their children. Based on their struggles, the elders view farming as problematic as there is limited potential for economic stability. Romeo and Lucy agree and have urged their children not to return to the farm.
Anna: Are boys interested in staying on the farm? And learning about the ways?

Lucy: The ones that have been away, the three oldest now, they come back to the farm, it's like as if...

Romeo: They've lost it, they've lost it.

Lucy: They are more interested in their own life, they've been away too long. Like, Marco was away for about eight years in Canberra, and then he came home. I think he wanted a break from Canberra or whatever, so he came home...

Romeo: But I don't want them in the farm because there is no future. If there's something in the future, yes! We own, we can give it to them but for what? I've got a few cattle there....

Lucy: They worth nothing ...they can't live off that...In one way, but they can't make like, one of them wanted to come home one time and make a living. But you can't guarantee a living, you see when we had tobacco we had a certain quota, and we knew we could sell so much if we made it. You know, providing those storms are right... But now the only way you could live off a farm now if you went into hydroponic. Like, I don't know if you know, have you ever been to a place in, near Wardel? There's an Italian family there they grow tomatoes all year round...

There is a conflict between the desire to see their children better situated and the perception that they are no longer interested in the old ways or that they have 'lost it'. This lack of interest is coupled with diminished time to pursue the old ways. Barry views this lack of interest as a result of a sensation of disconnection to the family and thus to tradition.

Barry: I think that you know how families, I think families today become generally more disconnected than they were years ago... And that's not good. It's a bit sad in a way. I don't know why...I think it's because people have got such busy lives and they tend to, the family that they spend their time with now is their very, very immediate family - their sons and daughters and their kids and that's probably about it. It's not that they don't want to spend time with...it's just that they've got other priorities.
There is a common regret in the research participants aged in their 40s and 50s, that they did not pay enough attention to their parents when they were younger. As a result, they did not learn the traditions and are now attempting to reconstruct family meals through memory. In response to my question regarding the importance of maintaining traditions Frank and Glenda replied:

**Frank:** How important? Well, it wasn’t earlier in the piece, but it certainly is now. Well, I wish I had had paid more attention then, back in the old days but like the pizzas that we make now and how I remembered, the recipes and that sort of thing. It’s only just going off memory and not so much; I guess it would have helped make them but a lot of things we just make up the memory, I guess. And it’s the same with the garden.

**Glenda:** Often Frank will say, ‘I’m sure mum did it this way’.

**Frank:** Yes, we do a pasta broccoli dish, and they’re okay but how close they were to the original one I’m not sure.

Additional conflicts are evident in the youngest group of research participants. Robert, Alice, Adrianna and Anita all remarked on their desire to continue tradition and the difficulty convincing their parents that this was a viable path. While it is problematic to maintain a farm, the younger generation are encouraged to maintain a garden as it is seen as a more manageable option. Significantly, during the period of fieldwork, it became evident that in the minds of many of the research participants the ‘garden’ is equal to the ‘farm’. The only difference perceived was one of size. A garden was typically thought of as a small piece of land dedicated to the cultivation of useful species. However, the elements of a ‘farm’—livestock, land under cultivation, sheds, tractors, small machinery, diverse forms of breeding and cultivation—were present in many of the ‘gardens’.

Robert explains that his parents are only reacting to the difficulties evident in the economics of modern food production.
Robert: We got told to move. They said don’t stay on the farm, leave, because they saw it as –

Anna: Your brothers and sisters?

Robert: Yeah—my grandparents made it and then my father and my uncle they did well out of the farm but they could see that the whole thing was changing. It had all become you had to be big or be nothing. The supermarkets came in and told farmers to do this. So we got told don’t even bother being on the farm, go off and do something else...Well, we’re stuffed! The average age of a farm is 60 or 65. All of my generation, they all left the farm, I mean, I don’t know anyone in my class that stayed. We all grew up on a farm and left because we were told to...It’s not—shit, we need to put people back on the land!

Alice is a young Italian, who has recently migrated to Australia. She also believes the disruption of traditional culture in Italy is due to the increasing drive towards convenience.

Alice: Yes, I think all of my mum’s generation, they started having everything easy. So throw away food, just buy a new one, go to the supermarket. When my grandma was alive during the war, she always told me, they’d eat the skin of the potatoes. So now when I see people who [throw away food with] black spots, I think—my grandmother used to be the skin of potatoes, and she survived - don't be so fussy! So she used to save everything. Too many tomatoes – she would save them for the sauce—all of these kind of things. She didn't throw away food.

Reflecting on the role of education, Alice is concerned that children who now live in urban areas are more removed from the garden and tradition. Equally, women are now in a position to expand their role outside of the family. Alice’s argument implies a negative connotation between the liberation of the Italian woman from the home and the decline of tradition.

Alice: Like, all the first five years of school they [should] teach you how to grow food and not to rely on supermarkets. They didn’t. They took us so far away from the ground. And like my mum, she’s son of the supermarket. She’s just started now growing but before she just used to go to the
supermarket and buy. I had to push her to buy something organic or something local, but she just doesn’t care because everything is in the supermarket. And it’s so easy...they started being ‘women’, with families and jobs.

Alice represents a growing voice in the younger Italian migrant community that views the return and maintenance of culture as important. For this group, maintaining traditions is achieved through the rejection of the ‘modern’ ways of doing things, such as dedicating time to a paid employment at the expense of a reduction of time necessary for the continuation of tradition. Alice concedes that not everyone, not even her sister, is like her group of friends.

Alice: Yes, because people of my age we talk about gardens! With my friends, we meet, and we ask ‘Hey, how is your lettuce going?’ It’s so weird- it’s so nice! My sister is not like that she just wants to go shopping. She was so bored when she was here; I just wanted to show her the garden. She came with her iPad, her iPhone, her computer—six pairs of shoes—hey, what are you doing!??

The younger generation is eager to continue the ‘old ways’, and the maintenance of the family farm and garden is central to this preservation. This is an issue for the younger group of research participants as they are aware that there is a transition between generations taking place. The impact of ageing parents and the lure of opportunities presented to the youth, bring the issues of continuation of traditional knowledge to a head.

Summary

The knowledge that is shared has at its core a fundamental cultural thread, which is fluid enough to allow interpretation based on experience and observation. Each home garden is a unique expression of this fundamental cultural thread. Thus, the garden is a location in which identity may be asserted via the unravelling of different cultural elements such as traditional beliefs and customs. The garden is a malleable cultural expression; the degree to which certain elements are visible is up to the
taste, perception and experience of the gardener. The garden is a venue for the transplantation of cultural markers, traditional management practices, and family celebrations. Thus enabling the continuation of food cultures, the extension of social exchange networks and transmission of knowledge. Together these interactions act as safeguards of socio-ecological memory and promote community resilience.
CHAPTER 10: Conclusion

This research is positioned within three areas of academic discourse: the contemporary use of traditional plants by migrants; ethnobotany in the urban environment; and the impact of migration (from rural to urban) on traditional knowledge. The garden is the field through which these themes are explored. The questions that drive this research examine how the use of TEK in the home and garden acts as a cultural signifier for Italian migrants and their descendants in the NRR.

Throughout the research, I have endeavoured to explore how models of the way the world functions, ideals for how the world should be, and the physical manifestation of the world as it is, underline people’s management and comprehension of their environment. This is achieved through the investigation of cognitive, technical and social practices of a small group of Italian migrants and their descendants living in the Northern Rivers region of NSW. Intrinsic to such knowledge are daily embodied relationships, to place and people.

Arising from these themes are additional questions regarding agency, contingency, continuity and innovation. The research positions these as factors that impact the maintenance of TK following migration. Utilising an ethnoecological framework, this thesis investigates the scope and nature of traditional ecological knowledge as the knowledge–belief–practice matrix. The impact of which is recognition of the fundamental value of traditional ecological knowledge in the continuation and broadening of biocultural diversity.

This research has highlighted how the diverse Italian community in the Northern Rivers region maintains a shared sense of identity and sense of place through their use of traditional ecological knowledge. Specifically, the continuation and development of Italianità take place through family
and community get-togethers, in which garden produce and wine are shared and celebrated.

Today four out of ten people in New South Wales are either migrants or the children of first generation migrants (Nellor & Domanski, 2011). As former migrants age, it is vital their stories and cultures are recorded. The spread of ethnobotanical knowledge internationally raises the issue of the disappearance of traditional practices, uses and techniques.

Who

The research quantifies the experience of a specific migrant group. Arriving in waves to Australia over the past 200 years, Italians have experienced periods of being ignored, vilified, and now ultimately accepted into Australian society. Their acceptance comes as a result of their desire to participate in all facets of Australian life, socially, politically, economically and culturally. The image of the Italian worker was fashioned from the time of the earliest arrivals, in the 1880’s. They demonstrated resourcefulness, and hard work, turning land abandoned by the British colonialists into abundantly cultivated gardens. These features garnered the respected of the dominant Australian society. However, there were other factors including the strength of family ties and the practice of endogamy, which created a less positive feeling and bred suspicion in the minds of White Australia.

Hard work and reliance on the family continue to be essential elements of *Italianità* for Italian migrants and their descendants. Connection to their cultural heritage is prioritised, and continual efforts are made by all to maintain key elements including the use of dialect, engagement in family celebrations, and importantly in this research the cultivation of a garden. Maintaining interaction with family in Italy is also an important driver for the continuation of TK in these migrant lives. Following Baldassar’s (1999b) hypothesis that Italians in diaspora create a hyper-real version of
the remembered (and imagined) version of Italy, many of the research participants reflected that the ‘old ways’ are being lost in Italy and that it is through their conscious use and maintenance of these practiced that the knowledge will continue.

**Cosmos**

Worldview and core beliefs are the starting point for the generation and continuation of traditional knowledge in the group of Italian migrants interviewed. The research participants demonstrated that strong family ties and imposed gender roles buttress the values of resourcefulness, resilience and hard work. The notion of *sistemarisi*—settling down to start a family—determines the responsibility to provide, assigns gender roles, and instils the value of hard work. This is significant because the act of participating in the cultivation of a garden and the preparation of its food demonstrates that the family is the centre of Italian migrant society in the NRR.

The family is central to the celebration of food and the enactment of ritual days—making wine, salami or *passata*. There are traditional gender roles performed on these days, wine being the domain of men and *passata* the domain of women. However, in the NRR the Italian migrants and their descendants reveal there are slippages – with individuals relating stories of shifting roles – a group of elder women sitting around the still and men and boys boiling bottles of *passata*.

The worldview and core beliefs, which provide the foundation for *Italianità* as experienced in the NRR, are reified through sensual memory in its embodied application. During the years following migration, this group has adapted and refashioned itself following the mood of society. This need to internalise beliefs and values finds expression in the home, and for this research, in the home garden. The strength of the core values in this community is a direct result of this internalisation.
This study demonstrates that migrant Italians and their descendants living in the NRR exercise agency through the act of cultivating a home garden. Agency is expressed via the family traditions and social network, embedded and reaffirmed in the practice of gardening. Notions of agency are also shown through the willingness of the group to adapt and explore creative solutions to perceived constraints of climate and access. Building upon other studies of urban ethnobotany, this study proposes a link between gardening and the exercise of agency. The maintenance of a garden, the cultivation of particular species, and the preparation of food following the ‘correct method’ are all manifestations of the ways in which Italianità is actively facilitated.

Corpus

The presence of core values established, the research then identifies the salience of plants cultivated and used in the home and garden. The body of traditional knowledge, corpus, reveals a distinction in the minds of the participants. There are two clear reasons for the cultivation of plants: tangible use and cultural importance. The participants identified the following as domains of plant use: food, medicine, food-medicines, beverages, ornamentals, fodder, and plants for market sale. Embedded in these categories is the additional element of cultural value as a guiding force in the choice of plant species grown or used in the home. This distinction provides a deeper investigation into use, as the element of cultural value acts as aroma, infusing the data with memory and story.

A prominent assumption regarding the factors that determine species selection in home gardens is the utility of the produce (Larder et al., 2012). However, this research views the act of gardening as an embodied practice where the concept of utility opens to the possibility of a broader understanding that considers traditional cultural influences.
Asking where knowledge is generated, the research concludes knowledge is gained through experience. The participants obtain knowledge from three experiential sources:

1. cultural experience, built and transmitted across generations
2. shared experiences of the generation
3. personal experience, through participation, observation, trial and error

A central idea of this thesis is that knowledge is process—in flux, and responsive to change through repeated varied attempts. Knowledge can be gained through a variety of situations. The core values and beliefs of the individual are elements in the decisions made whether to pursue or dismiss the ‘new’ experience.

The actors in the transmission of traditional knowledge are primarily family members. The most common form of transmission encountered in this research was oblique - between grandparents and children. The value given to family and the maintenance of familial relations is central to the ongoing respect and deference shown to elders.

Food

Food is essential to Italianità. The celebration of harvest, the inclusion of family and the sharing of knowledge all take place in its sphere. The values of providing for the family, resilience in making do with what is available, and pride in regional origins which privilege taste and technique, all stem from the food’s significance. Additionally, food provides the research participants with an opportunity to demonstrate their success and the abondanza evident in their generosity to guests and the wider community. These are all played out in the gardens of the research participants in the NRR.
The notion of salience is also explored in this research. The importance of a plant species is revealed through its frequency of use and in its positioning in the memories of the research participants. The most salient species identified by the research participants are cultivated culinary herbs. The salience of these plants is reflected in the importance of their use in the preparation of ‘good’ Italian food. Within the group of respondents, there is a clear distinction made between Northern and Southern Italy. Plant species have a corresponding salience, dependent on the regional origin of the gardener and the perceived origin of the plant. An example of this is orange. This crop has never been a popular crop in the Northern Italian migrants (see Clifford, 1889, p.17). The research participants that do mention oranges are Southerners, Sicilians or Calabrese.

The interplay between notions of taste, simplicity and freshness, the cultivation of a home garden and the expression of Italian cultural identity is a recurring theme that emerges throughout this research. These themes find expression as TK as adapted local knowledge through the practice of gathering wild plants. The adaptation of this knowledge, learnt in the old homeland and reified in the adopted home, is a demonstration of the endurance cucina povera in the worldview of the research participants. The core principles of this food system are simplicity, freshness, and few ingredients. The transference of the practical knowledge regarding choice, location, and preparation of wild plant species is a further example of the fluidity of TK. Evidence of knowledge as process is found in the advice given that one should learn ‘how’ by gathering at the side of an expert and of stories of misadventure involving the erroneous consumption of poisonous mushrooms, a dangerous mistake if attempting to learn TK through trial and error.

In this research, the use of green leafy vegetables in food preparation emerges as a potent symbol of Italianità. In an effort to experience the taste of bitter greens, such as cicoria, endivia, and radicchio, the research
participants were cultivating these traditionally wild plant species. Highly valued for their health giving properties, these green leafy vegetables held a central position in the Italian homes and gardens visited during the research. This value is underscored by the participants’ acknowledgement of the direct links between the cultivation of particular plant species (curly endive or Roma tomatoes) and the continuation of cultural identity.

Praxis

The practical expression of corpus is explored in praxis, and in this research, the garden acts as a site for this expression of practical knowledge. The research confirms that the Italian migrant community is actively engaged in the continuation of traditional ‘know how’, demonstrating the flexibility of knowledge in practice, and the willingness to adapt TK to a changing environment. The Italian migrant gardens are constructed spaces where families and individuals engage in the diverse elements of 'being in nature'. The backyard vegetable garden is predominantly viewed as a workspace, a place of function rather than aesthetic enjoyment. The ornamental front garden is the area in which entertainment of guests takes place.

Regarding the question of transference and maintenance of traditional knowledge, it is clear that the retention of the ‘old ways’ or traditional methods is an important self-identification pattern forming a firm foundation of cultural identity. However, despite discussions regarding authenticity, these ‘old ways’ are not static codified pieces of wisdom. They are responsive and reflect the influence and needs of the environment supporting Nazarea’s notion of situated knowledge.

It is evident in this research that knowledge is understood as a process of knowing or practice. Through engagement with traditional knowledge in the garden, the elements of knowledge, practice and belief undergo transference, adaptation and innovation. TK is found to be dynamic and
highly adaptive. The research findings sit alongside other recent studies (Quave et al., 2012; Vandebroek & Balick, 2012) that position TK as a dynamic field where experimentation, the adoption of new species and techniques, and the rejection of others are encouraged.

**Garden**

A prominent assumption regarding the factors that determine species selection in home gardens is the utility of the produce (Larder et al., 2012). However, viewing the act of gardening as an embodied practice, in this research the concept of utility is opened to the possibility of a broader understanding. The everyday knowledge and practice documented in the backyard gardens in this research are understood through the notion of dwelling.

Following Heidegger's observation ‘to dwell is to garden’, where ‘to dwell’ finds its root in two distinct activities, meaning both to build and to cultivate land, Cloke and Jones (2001) conclude that ‘dwelling is ... bound up with ideas of home, local, and concern or affection for nature and the environment’ (p. 651). Regarding migrant gardens, Bass Warner (1987) locates dwelling via the experience of people seeking land, food and re-establishment of identity. There are similar multiple means found in the home gardens of the Italian migrants interviewed. Of particular importance, for the research participants, is the notion of the re-establishment of cultural identity through the cultivation of land.

In an environment that was initially hostile, participants such as Tina and Ida, demonstrate the beneficial emotional impact of establishing a garden. For many of the respondents, the garden acts as a nurturing environment, affirming their connection to self and group identity. Establishing a private space, a garden, provided these migrants with the opportunity to ‘make here like there’. The garden then becomes a refuge, for traditional cultural knowledge, practices and beliefs.
Significance of research

*If we ignore these traditions on the assumption that we already have all the answers we need, we will never know what more we might have learned.* (Hunn, 1993, p. 15)

This study has identified and documented the domestic plants grown, used, and favoured by the Italian community in the NRR. The decision to cultivate these plants is determined through utilitarian function or cultural value.

In the exploration of knowledge as a construct, this research demonstrates that traditional knowledge is responsive to outside input, environmental influence, and is able to evolve dynamically dependent on the needs of the individual or group members. Additionally, it is apparent that for knowledge to maintain its relevance, it must find practical application and engagement with others.

This research demonstrates that knowledge is affirmed through the retelling of stories, establishing cultural identity and memory of authentic taste. This knowledge is expanded through practice as physically embodied action. The interplay between knowing and doing is then the platform on which TK develops and adapts. Further examples of this interaction include the recreation of a family recipe, the planting of a grandmother’s saved seeds, and the selection of a ripe melon based on the quality of the sound it produces when tapped.

Additionally, this research is valuable due to the absence of Australian data focusing on ethnoecological investigations of TEK in migrant groups. This research can act as a starting point and template for future investigation into the TK of Australian’s ethnically diverse population. Recognition gives value, and through the recording of domestic and the everyday, the wealth of Australia’s cultural diversity is privileged.
Recommendations for future directions

The importance of this research, and other research like it, is rooted in the growing worldwide concern regarding the impact of globalisation on environmental degradation and loss of traditional knowledge. This research, positioned within the field of ethnoecology, adds to an understanding of the links between biodiversity and culture. Thus highlighting the fundamental importance of access to nature and the ability to garden as forces that support the continuation of traditional cultures.

In the exploration of TEK, this research project employed a knowledge-belief-practice matrix, a framework more commonly used in the study of indigenous knowledge and people. Its use in the urban environment with non-indigenous individuals warrants further investigation. Additional in-depth research into existent TEK, alive in the diverse migrant communities in Australia, is needed. The recording of such knowledge can act as a contemporary comparison to the TEK held in the country of origin which will validate their knowledge through documentation, enrich the knowledge and understanding of ecological management practices in Australia, and as a consequence empower participants.
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Appendices

Appendix 1: Demographic data ..........................................................253
Appendix 2: Free-list data .................................................................256
Appendix 3: Plant lists ....................................................................262
Appendix 4: Garden inventories .......................................................277
Appendix 5: Participant information sheet ....................................279
Appendix 6: Interview guide and questions ....................................281
Appendix 7: Demographic questionnaire .......................................282
Appendix 8: Timeline .....................................................................283
### Appendix 1: Demographic data

#### Table 1: Research participants

<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Age/ year</th>
<th>Gen.</th>
<th>Region/ Origin</th>
<th>Current town</th>
<th>Arrival</th>
<th>Notes</th>
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</thead>
</table>
| 1 | Adrianna      | 21 (1993) | 2\textsuperscript{nd} | F: Lipari  
M: Gibellina, Sicily | Lismore      | Parents: 1969 | Grew up in Sydney  |
| 2 | Alice         | 25 (1988) | 1\textsuperscript{st} | B: Gattinara, Piedmont  | Lismore      | Arrived 2012 | Left Italy due to ‘la crisis’                                     |
| 3 | Antonia       | 37 (1977) | 2\textsuperscript{nd} | F: Positano, Naples     | Ocean Shores | 2009          | B: in Australia, M: Australian  
Grew up in Naples                                                        |
| 4 | Carlo         | 42 (1972) | 1\textsuperscript{st} | B: Calabria             | Ocean Shores | 2009          | Antonia and Carlo are married                                       |
| 5 | Barry         | 57 (1957) | 2\textsuperscript{nd} | GM & GF: Bibano, Treviso 
M: Veneto       | Lismore      | 1927 (GF)     | F: Born in Lismore  
Only family member who was                                               |
| 6 | Frank (& Glenda) | 58 (1956) | 2\textsuperscript{nd} | M: Sicily  
F: Sicily          | Alstonville  | Grew up in Wollongong   |                                                     |
| 7 | Kim           | 50 (1964) | 3\textsuperscript{rd} | GF: Gallarate, Lombardy | Burringbar   |                | Grew up in Canberra, Yamba                                           |
| 8 | Robert        | 28 (1986) | 3\textsuperscript{rd} | GM: Piedmonte di Etno, Sicily 
GF: Fiumefreddo, Sicily | Mullumbimby  | 1940s (GF)    | Grew up in Stanthorpe  
M & F born in Stanthorpe                                                 |
| 9 | Tina (& Joe)  | 70+       | 1\textsuperscript{st} | B: Tomasina, Sicily     | Lismore      | 1964 (50yrs ago) | Arrived as a young woman/ 
journalist  
First lived in Nimbin                                                   |
| 10| Romeo         | 82 (1932) | 1\textsuperscript{st} | B: Treviso              | Coraki       | 1955          | Followed GF, who was already here (1925)                            |
| 11| Lucy          | 66 (1948) | 1\textsuperscript{st} | B: Friuli               | Coraki       | 1949          |                                      
Followed GF, who was already here (1925)                                      |
| 12| Marco         | 28 (1986) | 2\textsuperscript{nd} | M: Friuli  
F: Treviso  | Coraki       |               | Marco is son of Romeo and Lucy                                        |
<p>| 13| Pietro        | 73 (1941) | 1\textsuperscript{st} | B: Friuli               | Lismore      | 1955          | Descendant of New Italian                                           |
| 14| Jo            | 70+       | 2\textsuperscript{nd} | F: Sicily               | Lismore      |               |                                                                  |</p>
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<thead>
<tr>
<th>Name</th>
<th>Age/ year</th>
<th>Gen.</th>
<th>Region/ Origin</th>
<th>Current town</th>
<th>Arrival</th>
<th>Notes</th>
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<tr>
<td>Johnnie</td>
<td>48 (1966)</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>M: Australia                                        F: Veneto</td>
<td>Lennox Heads</td>
<td></td>
<td>Pietro and Jo’s son Mother’s father Italian (Sicily)</td>
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<tr>
<td>Ida</td>
<td>86 (1929)</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>M: Veneto                                            F: Veneto</td>
<td>Leycester</td>
<td>F: 1927</td>
<td>Dad had found work at Main Camp, mum arrived in early October in 1928, in Main Camp. ...she didn’t last long, 11 months later I was born! And she cried when she heard I was coming!</td>
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<td>Christina</td>
<td>59 (1953)</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
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<td>Grandmother: Tuscany</td>
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<td>Faye</td>
<td>65 (1950)</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>M: Veneto                                            F: Veneto</td>
<td>Burringbar</td>
<td>1950</td>
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<td>Anita</td>
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<td>M: Veneto                                            F: Sicily</td>
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<td>Vic</td>
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<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
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<td></td>
<td>Vic and Kevin are brothers Kate is Vic’s daughter Kate’s mum is Australian</td>
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<tr>
<td>Kevin</td>
<td>60s</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
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<td>Kate</td>
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<td>3&lt;sup&gt;rd&lt;/sup&gt;</td>
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<td></td>
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<td>Paola</td>
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<tr>
<td>Alessandro</td>
<td>37</td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>B: Turin, Piedmont</td>
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<td>2007</td>
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<tr>
<td>Americo</td>
<td>60s</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>M:                                                  F:</td>
<td>Lismore</td>
<td></td>
<td>Chef at local Italo Club</td>
</tr>
<tr>
<td>Tony</td>
<td>78</td>
<td>2&lt;sup&gt;nd&lt;/sup&gt;/1&lt;sup&gt;st&lt;/sup&gt;</td>
<td>M: Bibano, Treviso                                             F: Bibano, Treviso</td>
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<td>1932</td>
<td>M pregnant with as travelled to Australia</td>
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Table 1.2: Demographic overview

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<td>Naples: 1</td>
<td>Burringbar: 4</td>
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<td>2nd – 13</td>
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<td>40s: 2</td>
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Table 1.3: Gardens visited

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</tr>
<tr>
<td>Antonia &amp; Carlo</td>
<td>Burringbar</td>
<td>Burringbar</td>
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<td>Christina</td>
<td>Ocean Shores</td>
<td>Alstonville</td>
</tr>
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<td>Faye &amp; Anita</td>
<td>Lismore</td>
<td>Lismore</td>
</tr>
<tr>
<td>Frank &amp; Glenda</td>
<td>Lismore</td>
<td>Lennox Head</td>
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<tr>
<td>Ida</td>
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<td>Lismore</td>
</tr>
<tr>
<td>Johnnie</td>
<td>Lismore</td>
<td>Lismore</td>
</tr>
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<td>Kate &amp; Kevin</td>
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<td>Lismore</td>
</tr>
<tr>
<td>Pietro &amp; Joan</td>
<td>Lismore</td>
<td>Lismore</td>
</tr>
<tr>
<td>Romeo &amp; Lucy</td>
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<td>Lismore</td>
</tr>
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<td>Tina &amp; Joe</td>
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<td>Vic &amp; Jo</td>
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Number of gardens visited is equal to the number of in situ garden interviews =12
## Appendix 2: Free-list data

**FREE-LIST**

Sensitivity level: HIGH  
Max respondents: 50  
Max items: 500  
Input dataset: C:\PLANTS\PLANTS.TXT

### SORTED BY FREQ

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Resp-group correlations saved as dataset C:\FLRESP
Corrected free-list written to ASCII file C:\FLFREE

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### Table 3.1: Food and medicinal plant names from free-list and walk through

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<td>Brassica rapa L subsp. rapa sylvestris var. esculenta 'Quarantina' 'Sessantini' 'Novantina'</td>
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<td>Cichorium endivia L. var. crispum (Mill.) Lam.</td>
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<td>Endivia</td>
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<td>Indivia</td>
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<td>M: Leaves are boiled to prepare a digestive drink (boil leaves &amp; drink the water)</td>
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<td>Cichorium intybus L.</td>
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<td>Cichorium intybus L. (Catalogna Group) 'Dentarella'</td>
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<th>Part</th>
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<td>35</td>
<td><em>Cichorium intybus</em> L. (Variegatum Group) 'Variegata di Castelfranco'</td>
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<td>Redecch (Veneto)</td>
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<td>Seeds saved, Moon cycle, Sale</td>
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<td><em>Citrullus lanatus</em> (Thunb.) Matsum. et Nakai</td>
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<td>Anguria</td>
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<tr>
<td>39</td>
<td><em>Citrus aurantifolia</em> (Christm.) Swingle</td>
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<td>Sale</td>
</tr>
<tr>
<td>40</td>
<td><em>Citrus limon</em> (L.) Osbeck 'Eureka'</td>
<td>Rutaceae</td>
<td>Limone</td>
<td>Fruit</td>
<td>C</td>
<td>FL</td>
<td>Sale, Local adaptation: M: Peel of the fruit, mixed with other herbs and plants, are used to prepare a decoction for cold and cough, M: Lemon peels are used to prepare digestive spirits, e.g., <em>limoncello</em>, M: Juice is said to be depurative, digestive and refreshing, Sale</td>
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<td><em>Citrus limon</em> (L.) Osbeck 'Meyer'</td>
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<td>Thick peel/ rind used in cooking</td>
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<td>52</td>
<td><em>Cucurbita ficifolia</em> Bouché</td>
<td>Cucurbitaceae</td>
<td>Jam melon</td>
<td>Fruit</td>
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<td>53</td>
<td><em>Cucurbita moschata</em> Duchesne</td>
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**Limoncello**

**Medicinal:**
Grappa
Fresh juice

**Food-medicine**

**Food:**
Fruit

**Food:**
Fruit

**Food:**
Fruit

**Food:**
Fruit

**Ornamental**

**Beverage:**
Breakfast drink

**Medicinal:**
Alertness

**Food-medicine**

**Food:**
Seasoning

**Food:**
Fruit

**Food:**
Vegetable

**Food:**
Vegetable

**Food:**
Vegetable

**Food:**
Vegetable
<table>
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<th>No.</th>
<th>Scientific Name</th>
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<th>Common Name</th>
<th>Part(s)</th>
<th>Code</th>
<th>Use</th>
<th>Notes</th>
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<tr>
<td>54</td>
<td><em>Cucurbita pepo</em> var. <em>texas</em> (Scheele) D.S.Decker</td>
<td>Cucurbitaceae</td>
<td>Zucchini Trotrollo (Sicilian)</td>
<td>Fruit</td>
<td>C</td>
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<td>Sale</td>
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<tr>
<td>55</td>
<td><em>Gynopogon citratus</em> (DC.) Stapf</td>
<td>Poaceae</td>
<td>Lemongrass</td>
<td>Leaf</td>
<td>C</td>
<td></td>
<td>Local adaptation Sale</td>
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<tr>
<td>56</td>
<td><em>Cynara cardunculus</em> L. subsp. <em>scolymus</em> (L.) Hayek</td>
<td>Asteraceae</td>
<td>Cardofi</td>
<td>Artichoke</td>
<td>Leaf</td>
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<tr>
<td>57</td>
<td><em>Daucus carota</em> L.</td>
<td>Apiaceae</td>
<td>Carote</td>
<td>Carrot</td>
<td>Root</td>
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<tr>
<td>58</td>
<td><em>Diploptis tenuifolia</em> (L.) D.C.</td>
<td>Brassicaceae</td>
<td>Rucola</td>
<td>Wild rocket</td>
<td>Leaf</td>
<td>C</td>
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<tr>
<td>59</td>
<td><em>Diospyros kaki</em> Thunb.</td>
<td>Ebenaceae</td>
<td>Cachi</td>
<td>Persimmon</td>
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<td>FL</td>
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<tr>
<td>60</td>
<td><em>Diospyros nigra</em> (J.F.Gmel.) Perrier</td>
<td>Ebenaceae</td>
<td>Sapote</td>
<td>Fruit</td>
<td>C</td>
<td></td>
<td>Local adaptation Experimentation Father grew in Italy</td>
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<td>61</td>
<td><em>Eriobotrya japonica</em> (Thunb.) Lindl.</td>
<td>Rosaceae</td>
<td>Nespoli</td>
<td>Loquat</td>
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<tr>
<td>62</td>
<td><em>Eruca sativa</em> Mill.</td>
<td>Brassicaceae</td>
<td>Rucola</td>
<td>Rocket</td>
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<td>63</td>
<td><em>Ficus carica</em> L.</td>
<td>Moraceae</td>
<td>Fico</td>
<td>Fig</td>
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<td>64</td>
<td><em>Foeniculum vulgare</em> Mill.</td>
<td>Apiaceae</td>
<td>Pinoccio selvatico</td>
<td>Wild fennel</td>
<td>Bulb</td>
<td>Seeds</td>
<td>C</td>
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<td>Scientific Name</td>
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<td>65</td>
<td><em>Foeniculum vulgare</em> Mill. var. <em>azoricum</em></td>
<td>Apiaceae</td>
<td>Finocchio</td>
<td>Fennel Seed</td>
<td>Food: Vegetable Medicine: Carminative</td>
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<tr>
<td>66</td>
<td><em>Fragaria x ananassa</em> (Duchesne ex Weston) Duchesne ex Rozier</td>
<td>Rosaceae</td>
<td>Fragole</td>
<td>Strawberry</td>
<td>Food: Fruit Beverage: Grappa Medicine: Grappa</td>
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<tr>
<td>67</td>
<td><em>Hylocereus undatus</em> (Haworth) Britton &amp; Rose</td>
<td>Cactaceae</td>
<td>Dragon fruit</td>
<td>Fruit</td>
<td>Food: Fruit Beverage: Grappa Medicine: Grappa</td>
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<tr>
<td>68</td>
<td><em>Ipomoea batatus</em> L.</td>
<td>Convolvulaceae</td>
<td>Sweet potato</td>
<td>Tuber</td>
<td>Food: Vegetable</td>
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<td>69</td>
<td><em>Juglans regia</em> L.</td>
<td>Juglandaceae</td>
<td>Noce</td>
<td>Walnut (kernel)</td>
<td>Food: Nut Beverage: nocillo</td>
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<tr>
<td>70</td>
<td><em>Lactuca sativa</em> L.</td>
<td>Asteraceae</td>
<td>Insalata</td>
<td>Lettuce Grand lace</td>
<td>Food: Vegetable</td>
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</tr>
</tbody>
</table>

**M:** All plant parts are prepared, eaten fresh in salad or cooked, as digestive and carminative. Seeds saved.
<table>
<thead>
<tr>
<th>Page</th>
<th>Common Name</th>
<th>Family</th>
<th>Genus</th>
<th>Species</th>
<th>Part</th>
<th>Medicinal</th>
<th>Food</th>
<th>Notes</th>
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<tr>
<td>71</td>
<td><em>Lactuca sativa</em> L. 'Brown Mignonette'</td>
<td>Asteraceae</td>
<td><em>Insalata</em></td>
<td><em>Brown mignonette</em></td>
<td>Leaf C</td>
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<td>Vegetable</td>
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<td>72</td>
<td><em>Lactuca sativa</em> L. 'Green Mignonette'</td>
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<td><em>Insalata</em></td>
<td><em>Green mignonette</em></td>
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<td>73</td>
<td><em>Lactuca sativa</em> L. var. <em>longifolia</em></td>
<td>Asteraceae</td>
<td><em>Insalata</em></td>
<td><em>Cos, baby</em></td>
<td>Leaf C</td>
<td>M: <em>Aqua d’lauro</em>: digestive tea Leaves (fresh or dried) are used in a decoction for abdominal pain or as a digestive. This preparation is considered safe for children Grandmother made perfumed bags for clothes</td>
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<td><em>Laurus nobilis</em> L.</td>
<td>Lauraceae</td>
<td><em>Lauro</em></td>
<td>Bay</td>
<td>Leaf C</td>
<td>Medicinal: Sedative Scent Food: Pulses Food: Fruit Food: Eaten as nut or nut paste</td>
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<td>75</td>
<td><em>Lavandula angustifolia</em> Mill.</td>
<td>Lamiaceae</td>
<td><em>Lavender</em></td>
<td>Flowers</td>
<td>Aerial parts Seed C FL</td>
<td>Medicinal: Sedative Scent</td>
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<td>76</td>
<td><em>Lens culinaris</em> Medik.</td>
<td>Fabaceae</td>
<td><em>Lentec</em></td>
<td>Lentil</td>
<td>Seed C</td>
<td>FL</td>
<td>Pulses</td>
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<td><em>Litchi chinensis</em> Sonn.</td>
<td>Sapindaceae</td>
<td><em>Litchi</em></td>
<td>Lychee</td>
<td>Fruit C</td>
<td>Sale</td>
<td>Fruit</td>
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<td>78</td>
<td><em>Macadamia integrifolia</em> Maiden &amp; Betche.</td>
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<td><em>Macadamia</em></td>
<td>Fruit (Kernel)</td>
<td>C</td>
<td>Local adaptation Common to area Sale</td>
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<td>79</td>
<td><em>Malus domestica</em> Borkh.</td>
<td>Rosaceae</td>
<td><em>Apple</em></td>
<td>Leaf C</td>
<td>FL</td>
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<td><em>Malva sylvestris</em> L.</td>
<td>Malvaceae</td>
<td><em>Malva</em></td>
<td>Mallow</td>
<td>Leaf C</td>
<td>FL</td>
<td>Medicinal: Anti-inflammatory</td>
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<td>81</td>
<td><em>Mangifera indica</em> L.</td>
<td>Anacardiaceae</td>
<td><em>Mango</em></td>
<td><em>Mango</em></td>
<td>Fruit C</td>
<td>M: Leaves applied to legs to alleviate aches and pains (tired legs) Accidental growth Local adaptation</td>
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<td>82</td>
<td><em>Matricaria recutita</em> L.</td>
<td>Asteraceae</td>
<td><em>Camomila</em></td>
<td><em>Chamomile</em></td>
<td>Flowering aerial parts C FL</td>
<td>M: Infusion of floral tops drunk as a sedative</td>
<td>Medicinal: Digestive Sedative Tea</td>
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<td>Code</td>
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<td>Genus</td>
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<td>Market Price</td>
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<td>Mentha x. piperita L.</td>
<td>Lamiaceae</td>
<td>Menta</td>
<td>Mint</td>
<td>Aerial parts</td>
<td>C FL</td>
<td>Infusion of floral tops recommended for children. M: In fusion of floral tops prepared as a digestive.</td>
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<td>Medicinal: Tea. Digestion.</td>
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<td>84</td>
<td>Morus alba L. and Morus nigra L.</td>
<td>Moraceae</td>
<td>Mora</td>
<td>Mulberry</td>
<td>Fruit</td>
<td>C W</td>
<td>Infusion of fresh or dry leaves recommended for children. M: Infusion of fresh or dry leaves prepared as a digestive.</td>
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<td>Leaf</td>
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<td>Fruit shared. Prize-winning silk.</td>
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<td>Food: Fruit. Silk blankets made by women, with wool from sheep.</td>
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<td>85</td>
<td>Musa spp.</td>
<td>Musaceae</td>
<td>Banane</td>
<td>Banana</td>
<td>Fruit</td>
<td>C W</td>
<td>Fruit shared. Prize-winning silk.</td>
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<td>Food: Fruit. Previous history of owning banana plantation.</td>
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<td>Nicotiana tabacum L.</td>
<td>Solanaceae</td>
<td>Tabacco</td>
<td>Tobacco</td>
<td>Leaf</td>
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<td>Fruit shared. Prize-winning silk.</td>
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<td>Food: Fruit. Local adaptation.</td>
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<td>87</td>
<td>Ocimum basilicum L.</td>
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<td>Basilico</td>
<td>Basil</td>
<td>Aerial parts</td>
<td>C FL</td>
<td>Fruit shared. Prize-winning silk.</td>
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<td>Leaf</td>
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<td>Medicinal: Seasoning sauces. M: Leaves are used as digestive aids, fresh or added to cuisine.</td>
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<td>88</td>
<td>Olea europaea L.</td>
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<td>Olive</td>
<td>Olive</td>
<td>Fruit</td>
<td>C FL</td>
<td>Medicinal: Digestion.</td>
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<td>Food: Seasoning.</td>
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<td>89</td>
<td>Opuntia ficus-indica (L.) Mill.</td>
<td>Cactaceae</td>
<td>Fico d'india</td>
<td>Prickly pear</td>
<td>Fruit</td>
<td>C FL</td>
<td>Food: Fruit. M: The ‘skin’ of cladodes is used is prepared with chamomile and honey/sugar to heal cough.</td>
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<td>Medicinal: Infusion with chamomile.</td>
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<td>Family</td>
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<td>90</td>
<td><em>Origanum majorana</em> L.</td>
<td>Lamiaceae</td>
<td>Maggioiana</td>
<td>Leaf</td>
<td>C</td>
<td>Food: Seasoning&lt;br&gt;Recommended as a respiratory tea for children&lt;br&gt;Food: Seasoning&lt;br&gt;Recommended as a respiratory tea for children.</td>
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<td>91</td>
<td><em>Origanum vulgare</em> L.</td>
<td>Lamiaceae</td>
<td>Oregano</td>
<td>Leaf</td>
<td>C</td>
<td>Food: Seasoning</td>
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<td>92</td>
<td><em>Passiflora edulis</em> Sims.</td>
<td>Passifloraceae</td>
<td>Passionfruit</td>
<td>Fruit</td>
<td>C</td>
<td>FL</td>
<td>Sale&lt;br&gt;Local adaptation&lt;br&gt;Experimentation&lt;br&gt;Infusion&lt;br&gt;Seeds saved</td>
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<tr>
<td>93</td>
<td><em>Persea americana</em> Mill. var. Haas</td>
<td>Lauraceae</td>
<td>Avocado</td>
<td>Fruit</td>
<td>C</td>
<td>FL</td>
<td>Food: Fruit&lt;br&gt;Local adaptation&lt;br&gt;Experimentation&lt;br&gt;Infusion&lt;br&gt;Seeds saved</td>
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<td>94</td>
<td><em>Petroselinum crispum</em> (Mill.) Fuss</td>
<td>Apiaceae</td>
<td>Prezzemollo</td>
<td>Aerial parts</td>
<td>C</td>
<td>FL</td>
<td>Seeds saved&lt;br&gt;Food: Condiment&lt;br&gt;Seasoning</td>
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<tr>
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<td><em>Petroselinum crispum</em> (Mill.) Fuss var. neapolitanum</td>
<td>Apiaceae</td>
<td>Prezzemollo</td>
<td>Italian parsley</td>
<td>Aerial parts</td>
<td>C</td>
<td>FL</td>
<td>Seeds saved&lt;br&gt;Food: Condiment&lt;br&gt;Seasoning</td>
</tr>
<tr>
<td>96</td>
<td><em>Phaseolus vulgaris</em> L.</td>
<td>Fabaceae</td>
<td>Fagioli</td>
<td>Seed</td>
<td>C</td>
<td>FL</td>
<td>Easy to grow&lt;br&gt;Sale&lt;br&gt;Key ingredient in minestrone (soup)&lt;br&gt;Dog's favourite&lt;br&gt;Easy to grow&lt;br&gt;Medicinal: Digestive&lt;br&gt;Add to grappa&lt;br&gt;Beverage: Add to grappa</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td><em>Phaseolus vulgaris</em> L. 'Borlotti'</td>
<td>Fabaceae</td>
<td>Fagioli</td>
<td>Bean, borlotti</td>
<td>Seed</td>
<td>C</td>
<td>FL</td>
<td>Easy to grow&lt;br&gt;Sale&lt;br&gt;Key ingredient in minestrone (soup)&lt;br&gt;Dog's favourite&lt;br&gt;Easy to grow&lt;br&gt;Medicinal: Digestive&lt;br&gt;Add to grappa&lt;br&gt;Beverage: Add to grappa</td>
</tr>
<tr>
<td>98</td>
<td><em>Phaseolus vulgaris</em> L. 'Purple King'</td>
<td>Fabaceae</td>
<td>Fagioli</td>
<td>Beans, purple</td>
<td>Seed</td>
<td>C</td>
<td>FL</td>
<td>Easy to grow&lt;br&gt;Sale&lt;br&gt;Key ingredient in minestrone (soup)&lt;br&gt;Dog's favourite&lt;br&gt;Easy to grow&lt;br&gt;Medicinal: Digestive&lt;br&gt;Add to grappa&lt;br&gt;Beverage: Add to grappa</td>
</tr>
<tr>
<td>99</td>
<td><em>Pimpinella anisum</em> L.</td>
<td>Apiaceae</td>
<td>Anise</td>
<td>Leaf</td>
<td>C</td>
<td>M: Leaf is used to make digestive spirits.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 100 | *Pisum sativum* L. | Fabaceae | Piselli | Pea | C | FL | Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegetable<br>Food: Vegeta
<table>
<thead>
<tr>
<th>No.</th>
<th>Species</th>
<th>Family</th>
<th>Part</th>
<th>Type</th>
<th>Use</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>104</td>
<td><em>Prunus domestica</em> L.</td>
<td>Rosaceae</td>
<td>Plum Fruit</td>
<td>C</td>
<td>FL Jam</td>
<td>Medicinal: Grappa, Food: Plum Fruit</td>
</tr>
<tr>
<td>105</td>
<td><em>Prunus dulcis</em> (Mill.) D.A. Webb var. <em>dulcis</em></td>
<td>Rosaceae</td>
<td>Almond Seed</td>
<td>FL FL</td>
<td>Typical ingredient in sweets, Jam</td>
<td>Food: Almond Seed</td>
</tr>
<tr>
<td>106</td>
<td><em>Prunus persica</em> L.</td>
<td>Rosaceae</td>
<td>Peach Fruit</td>
<td>C</td>
<td>FL</td>
<td>Food: Peach Fruit</td>
</tr>
<tr>
<td>107</td>
<td><em>Prunus persica</em> L. var. <em>nucipersica</em> (L.) C.K.Schneid</td>
<td>Rosaceae</td>
<td>Nectarine Fruit</td>
<td>C</td>
<td>FL</td>
<td>Fruit: Nectarine</td>
</tr>
<tr>
<td>108</td>
<td><em>Psidium guajava</em> L.</td>
<td>Myrtaceae</td>
<td>Guava Fruit</td>
<td>C</td>
<td>FL</td>
<td>Fruit: Guava</td>
</tr>
<tr>
<td>109</td>
<td><em>Punica granatum</em> L.</td>
<td>Lythraceae</td>
<td>Pomegranate Seed</td>
<td>C</td>
<td>FL</td>
<td>Food: Pomegranate</td>
</tr>
<tr>
<td>110</td>
<td><em>Pyrus communis</em> L.</td>
<td>Rosaceae</td>
<td>Pear Fruit</td>
<td>C</td>
<td>FL</td>
<td>Experimentation</td>
</tr>
<tr>
<td>111</td>
<td><em>Pyrus pyrifolia</em> (Burm.) Nak.</td>
<td>Rosaceae</td>
<td>Nashi Fruit</td>
<td>C</td>
<td>FL</td>
<td>Food: Nashi</td>
</tr>
<tr>
<td>112</td>
<td><em>Raphanus sativus</em> L.</td>
<td>Brassicaceae</td>
<td>Radish Root</td>
<td>C</td>
<td>FL</td>
<td>Food: Vegetable</td>
</tr>
<tr>
<td>113</td>
<td><em>Rosmarinus officinalis</em> L.</td>
<td>Lamiaceae</td>
<td>Rosemary Aerial parts</td>
<td>C</td>
<td>FL</td>
<td>M: Leaves are used as digestive, in cooking</td>
</tr>
<tr>
<td>114</td>
<td><em>Rubus</em> spp. (wild) incl. <em>R. fruticosus</em> G.N.Jones and <em>R. plicatus</em> Weihe &amp; Nees</td>
<td>Rosaceae</td>
<td>Wild blackberry Fruit</td>
<td>C W</td>
<td>Also gathered in wild Confusion with mulberry?</td>
<td>Food: Wild blackberry</td>
</tr>
<tr>
<td>115</td>
<td><em>Ruta graveolens</em> L.</td>
<td>Rutaceae</td>
<td>Rue Aerial parts</td>
<td>C</td>
<td>Used as additive to grappa</td>
<td>Beverage: Also gathered in wild Confusion with mulberry?</td>
</tr>
</tbody>
</table>

116  *Salvia officinalis* L.  

Lamiaceae  

Salvia  

Sage  

Leaf  

C  

FL  

**Medicinal:**  
M: Fresh leaves rubbed on gums to disinfect mouth; used to clean teeth  
M: Leaves are rubbed along gums of children to remove thrush  

**Food:**  
Used for *passata*  
Seasoning

117  *Solanum lycopersicum* L.  

Solanaceae  

Pomodoro  

Tomato  

Fruit  

C  

**Food:**  
Vegetable  
Used for *passata*

118  *Solanum lycopersicum* L.  

'Srosse Lisse'  

Solanaceae  

Pomodoro  

Tomato  

Fruit  

C  

**Food:**  
Vegetable

119  *Solanum lycopersicum* L.  

'Marmande'  

Solanaceae  

Pomodoro  

Tomato  

Fruit  

C  

**Food:**  
Vegetable

120  *Solanum lycopersicum* L.  

'Ox Heart'  

Solanaceae  

Pomodoro  

Tomato, beefsteak  

Fruit  

C  

**Food:**  
Vegetable  
Preferred variety for making pickles, relishes and chutneys.

121  *Solanum lycopersicum* L.  

'Principe Borghese'  

Solanaceae  

Pomodoro  

Tomato, Roma  

Fruit  

C  

**Food:**  
Vegetable  
Used to make *passata*  
Easy to grow  
Disease resistant

122  *Solanum lycopersicum* L.  

'Summer Star'  

Solanaceae  

Tomato  

Fruit  

C  

**Food:**  
Vegetable

123  *Solanum lycopersicum* L.  

'Tommy Toe'  

Solanaceae  

Pomodoro  

Tomato  

Fruit  

C  

**Food:**  
Vegetable  
Cherry tomato

124  *Solanum lycopersicum* L.  

var. *cerasiforme* (Duinal)  

D.M. Spooner, G.J. Anderson & R.K. Jansen  

Solanaceae  

Pomodoro  

Tomato, cherry  

Fruit  

C  

**Food:**  
Vegetable  
Cherry tomato  
Easy to grow

125  *Solanum melongena* L.  

Solanaceae  

Melanzane  

Eggplant  

Fruit  

C  

FL  

**Food:**  
Vegetable  
Sale

126  *Solanum tuberosum* L.  

Solanaceae  

Patate  

Potato  

Tuber  

C  

FL  

**Food:**  
Vegetable
<table>
<thead>
<tr>
<th>No.</th>
<th>Species</th>
<th>Family</th>
<th>Part(s)</th>
<th>Origin/Use</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>127</td>
<td><em>Spinacea oleracea</em> L.</td>
<td>Amaranthaceae</td>
<td>Spinaci Spinach Leaf</td>
<td>C FL Sale Seeds saved Broadleaf</td>
<td></td>
</tr>
<tr>
<td>128</td>
<td><em>Symphytum x uplandicum</em> Nyman</td>
<td>Boraginaceae</td>
<td>Comfrey Leaf</td>
<td>C</td>
<td>Chickens preferred food Seeds saved Gathered in backyard 'wild'</td>
</tr>
<tr>
<td>129</td>
<td><em>Taraxacum officinale</em> Weber</td>
<td>Asteraceae</td>
<td>Cicoria Dandelion Leaf W FL</td>
<td></td>
<td>Beverage: Coffee sub Food: Vegetable Medicinal: Bitter Urinary Fodder Food-medicine</td>
</tr>
<tr>
<td>130</td>
<td><em>Tetragonia tetragnioides</em> (Pall.) Kuntze</td>
<td>Aizoaceae</td>
<td>New Zealand spinach Warrigal greens Leaf Thyme LeafTwig C FL Experimentation Substitute for other spinach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>131</td>
<td><em>Thymus vulgaris</em> L.</td>
<td>Lamiaceae</td>
<td>Timo Thyme Leaf Twig</td>
<td>C FL</td>
<td>Food: Condiment Seasoning Fodder</td>
</tr>
<tr>
<td>132</td>
<td><em>Trifolium repens</em> L. or <em>Trifolium arvense</em> L.</td>
<td>Fabaceae</td>
<td>Trifoglio Clover Aerial parts</td>
<td>W</td>
<td>Feed to chickens Fruits are macerated in alcohol and prepared as digestive spirits</td>
</tr>
<tr>
<td>133</td>
<td><em>Vaccinium myrtillus</em> L.</td>
<td>Ericaceae</td>
<td>Mirtilli Blueberry Fruit</td>
<td>W Italy</td>
<td>Medicinal: Digestive Add to grappa Beverage: Add to grappa Food: Fruit Food: Vegetable</td>
</tr>
<tr>
<td>134</td>
<td><em>Vicia faba</em> L.</td>
<td>Fabaceae</td>
<td>Fava Broad bean Seed</td>
<td>C FL</td>
<td>Easy to grow Sale M: Fresh red fruits → Red wine /vino <em>Vin brule</em> – drunk when 'feeling</td>
</tr>
<tr>
<td>135</td>
<td><em>Vigna unguiculata</em> (L.) Walp. subsp. <em>sesquipedalis</em> (L.) Verde</td>
<td>Fabaceae</td>
<td>Fagioli Long bean snake Seed</td>
<td>C</td>
<td>Easy to grow Sale</td>
</tr>
<tr>
<td>136</td>
<td><em>Vitis vinifera</em> L.</td>
<td>Vitaceae</td>
<td>L'uva vino Grape Fruit Wood</td>
<td>C FL</td>
<td>Food: Fruit Vinegar Beverage:</td>
</tr>
</tbody>
</table>
unwell; boiled wine mixed with cinnamon, cloves, lemon peel and sugar. Recommended for children when unwell and have cough or cold.

M: Fruits → Wine → Grappa

Digestive wine/grappa prepared with combination of herbs or fruits: Anise, ruta, lemon, cherry, etc

M: Fruits → Wine → Vinegar

Digestive used in the preparation of salads and cooked greens (e.g. radicchio)

Wine
Grappa

Medicinal:

Wine
Grappa

Food-medicine

137  *Zea mays* L  Poaceae  Mais  Corn  Seed  C  FL  Coffee substitute
Easy to grow

Food: Cereal

Vegetable

Fodder

Beverage: Coffee sub

138  *Zingiber officinale* Roscoe  Zingiberaceae  Ginger  Rhizome  FL  FL  Grated root infused in hot water and drunk as a digestive

Ornamental:

Food: Spice

Medicinal

Digestive drink

Food-medicine
Table 3.2: Ornamental plants grown in Italian migrant gardens and included in free-lists (18 species)

<table>
<thead>
<tr>
<th>Botanical taxon</th>
<th>Botanical family</th>
<th>Common name</th>
<th>FL</th>
<th>Use</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anigozanthos 'Bush Pearl'</td>
<td>Haemodoraceae</td>
<td>Kangaroo paw</td>
<td>FL</td>
<td>Ornamental</td>
<td>Local adaptation Refugia Purple flower that fades to pink natives</td>
</tr>
<tr>
<td>Archontophoenix cunninghamiana H. Wendl. &amp; Drude</td>
<td>Areceae</td>
<td>Bangalow palm</td>
<td></td>
<td>Ornamental</td>
<td>Local adaptation</td>
</tr>
<tr>
<td>Bellis perennis L.</td>
<td>Asteraceae</td>
<td>Daisy</td>
<td></td>
<td>Ornamental</td>
<td></td>
</tr>
<tr>
<td>Bougainvillea glabra Choisy.</td>
<td>Nyctaginaceae</td>
<td>Bougainvillea</td>
<td>FL</td>
<td>Ornamental</td>
<td>Local adaptation Father grew in Italy</td>
</tr>
<tr>
<td>Chrysanthemum indicum L.</td>
<td>Asteraceae</td>
<td>Chrysanthemum</td>
<td>FL</td>
<td>Ornamental</td>
<td>Grown for family weddings</td>
</tr>
<tr>
<td>Dahlia pinnata Cav.</td>
<td>Asteraceae</td>
<td>Dahlia</td>
<td></td>
<td>Ornamental</td>
<td></td>
</tr>
<tr>
<td>Fuchsia spp. L.</td>
<td>Onagraceae</td>
<td>Fuchsia</td>
<td></td>
<td>Ornamental</td>
<td></td>
</tr>
<tr>
<td>Gerbera spp.</td>
<td>Asteraceae</td>
<td>Gerbera</td>
<td></td>
<td>Ornamental</td>
<td></td>
</tr>
<tr>
<td>Grevillea pteridifolia Knight</td>
<td>Proteaceae</td>
<td>Grevillea</td>
<td></td>
<td>Ornamental</td>
<td>Local adaptation Golden grevillea, small tree natives to attract</td>
</tr>
<tr>
<td>Hibiscus rosa-sinensis L.</td>
<td>Malvaceae</td>
<td>Hibiscus</td>
<td></td>
<td>Ornamental</td>
<td>Red flower</td>
</tr>
<tr>
<td>Magnolia grandiflora L.</td>
<td>Magnoliaceae</td>
<td>Magnolia</td>
<td></td>
<td>Ornamental</td>
<td>Grandmothers tree</td>
</tr>
<tr>
<td>Nasturtium officinal R. Br.</td>
<td>Nasturtium</td>
<td>Nasturtium</td>
<td></td>
<td>Ornamental</td>
<td>Added to salad</td>
</tr>
<tr>
<td>Ozothamnus diosmifolius (Vent) D.C.</td>
<td>Asteraceae</td>
<td>Rice flower</td>
<td></td>
<td>Ornamental</td>
<td>Local adaptation Native plant grown to attract native birds</td>
</tr>
<tr>
<td>Pelargonium spp.</td>
<td>Geraniaceae</td>
<td>Geranium</td>
<td>FL</td>
<td>Ornamental</td>
<td>Father grew in Italy</td>
</tr>
<tr>
<td>Pelargonium × hortorum</td>
<td>Apocynaceae</td>
<td>Frangipani</td>
<td></td>
<td>Ornamental</td>
<td>Pink flush</td>
</tr>
<tr>
<td>Plumeria spp. L.</td>
<td>Rosaceae</td>
<td>Roses</td>
<td>FL</td>
<td>Ornamental</td>
<td></td>
</tr>
<tr>
<td>Rosa spp.</td>
<td>Rosaceae</td>
<td>Marigold</td>
<td></td>
<td>Ornamental</td>
<td></td>
</tr>
<tr>
<td>Tagetes patula L.</td>
<td>Ericaceae</td>
<td>Azalea</td>
<td>FL</td>
<td>Ornamental</td>
<td>Orange/ red flower - not calendula</td>
</tr>
<tr>
<td>Azalea alabamensis (Rehder) Ashe</td>
<td>Ericaceae</td>
<td>Azalea</td>
<td>FL</td>
<td>Ornamental</td>
<td></td>
</tr>
<tr>
<td>Viola spp.</td>
<td>Violaceae</td>
<td>Violet</td>
<td>FL</td>
<td>Ornamental</td>
<td></td>
</tr>
</tbody>
</table>
# Appendix 4: Garden inventories

## Garden inventory: Romeo and Lucy

<table>
<thead>
<tr>
<th>Details of owner</th>
<th>Description of garden/ address</th>
<th>Voucher</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong> Romeo and Lucia Brunato</td>
<td><strong>Soil</strong> Sandy loam</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong> Romeo (82) Lucia (69)</td>
<td><strong>Terrain</strong> Flat to slightly undulating</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong> Romeo(M), Lucia (F)</td>
<td><strong>Size of garden</strong> Large</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Years gardening</strong> Romeo (72)</td>
<td><strong>Distance to house</strong> 50-100 metres</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lucia (59)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Plants details

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific/ cultivar</th>
<th>Use</th>
<th>Source/ Seed</th>
<th>Story/ Special</th>
<th>Yrs grown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riddichio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50+</td>
</tr>
<tr>
<td>Tomatoes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50+</td>
</tr>
<tr>
<td>Rocket Salad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50+</td>
</tr>
<tr>
<td>Silverbeet/Spinach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50+</td>
</tr>
<tr>
<td>Zucchini</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50+</td>
</tr>
<tr>
<td>Beans</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Corn</td>
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<td></td>
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<tr>
<td>Watermelon</td>
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<td></td>
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</tr>
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<td></td>
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<td>Squash</td>
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<tr>
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### Garden Inventory: Carlo and Antonia

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<thead>
<tr>
<th>Details of owner</th>
<th>Description of garden/address</th>
<th>Voucher</th>
<th>Date</th>
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<tbody>
<tr>
<td>Name</td>
<td>Soil: Clay</td>
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<tr>
<td>Age</td>
<td>Terrane: Terraced</td>
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<tr>
<td>Gender</td>
<td>Size of garden: 2x6m</td>
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<tr>
<td>Years gardening</td>
<td>Distance to house: 20m</td>
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#### Plants details

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<tr>
<th>Common name</th>
<th>Scientific/ cultivar</th>
<th>Use</th>
<th>Source/Seed</th>
<th>Story/ Special</th>
<th>Yrs grown</th>
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<tbody>
<tr>
<td>Tomatoes</td>
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<td>Seed</td>
<td></td>
<td>37 (5)</td>
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<tr>
<td>Cucumbers</td>
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<td>Eating</td>
<td>Seed</td>
<td></td>
<td>37 (5)</td>
</tr>
<tr>
<td>Radish</td>
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<td></td>
<td>Seed</td>
<td></td>
<td>37 (5)</td>
</tr>
<tr>
<td>Peas</td>
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<td>Seed</td>
<td></td>
<td>37 (5)</td>
</tr>
<tr>
<td>Coral</td>
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<td>Seed</td>
<td></td>
<td>37 (5)</td>
</tr>
<tr>
<td>Cantaloupe</td>
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<td>Seed</td>
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</tr>
<tr>
<td>Broccoli</td>
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<td>Seed</td>
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<td>37 (5)</td>
</tr>
<tr>
<td>Broccoli</td>
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<td>Seed</td>
<td></td>
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</tr>
<tr>
<td>Spinach</td>
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<td>Seed</td>
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</tr>
<tr>
<td>Cress</td>
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<td>Seed</td>
<td></td>
<td>37 (5)</td>
</tr>
<tr>
<td>Corn</td>
<td></td>
<td></td>
<td>Seed</td>
<td></td>
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<tr>
<td>Peppers</td>
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<td>Seed</td>
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<tr>
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<td>Seed</td>
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<tr>
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<td>Seed</td>
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<td>Seed</td>
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<td>37 (5)</td>
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<tr>
<td>Kale</td>
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<td></td>
<td>Seed</td>
<td></td>
<td>5</td>
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<tr>
<td>Broccoli</td>
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<td>Seed</td>
<td></td>
<td>37 (5)</td>
</tr>
<tr>
<td>Coriander</td>
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<td></td>
<td>Seed</td>
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</table>
Appendix 5: Participant information sheet

Project title: Do plants contribute to cultural identity? An ethnobotanical survey of Italian migrants' home gardens

Sono le piante contributive all'identità culturale? Una ricerca etnobotanica degli migranti Italiani e dei suoi orti

Researcher: Anna Du Chesne (MSc candidate)

Supervisors: Dr Hans Wohlmuth, Dr Sue Evans, Dr Adele Wessell & Prof Michael Heinrich

School: Southern Cross Plant Science, Southern Cross University.

Information about the research project:
The general aim of this research project is to document, describe and analyse the Italian community's knowledge and use of plants, as foods and medicine. This information will assist in our understanding of the relationship between the cultivation of plants and maintenance of traditional knowledge and cultural identity.

Your participation will involve answering questions about your knowledge of and experience in the use of plants, either in your home or in your garden. You will be asked to think about and tell us about the reasons you choose the plants, as foods or medicine, grown or used in your homes. This might mean that you will tell stories of your childhood or from your home village.

It is important to understand that your involvement in this study is voluntary. While we would be pleased to have you participate, we respect your right to decline. You are free to withdraw at any time, and there is no need to provide an explanation. No information will be disclosed to anyone outside the interview setting.

Your contribution
As a member of the Italian community, your assistance would be of immense value to this research project. You will be contributing to a growing body of knowledge on the continuation and maintenance of cultural identity and plant diversity. We hope this research will provide opportunity to strengthen the ties within the community through sharing experiences and learning from each other.

Lo scopo del progetto di ricerca
Lo scopo generale di questa ricerca di studio è di documentare e analizzare la conoscenza della comunità Italiana delle piante orticole e botaniche come usi culinari e medicinali. Queste informazioni assisteranno la nostro ricerca di studio a capire il rapporto tra la coltivazione delle piante orticole e la conoscenza tradizionale dell'identità culturale.

La sua partecipazione coinvolge nel rispondere delle domande riguardanti la sua conoscenza e l'esperienza dell'uso delle piante nel giardino della sua casa. Lei le sarà chiesta di pensare alle ragioni che riguardano la sua scelta delle piante, come cibo e come da uso medicinale coltivato nel giardino della sua casa. Questo significa che lei potrà raccontare delle storie della sua infanzia o del suo villaggio nativo.
È importante che lei comprenda che la sua partecipazione di questa ricerca di studio è volontaria. Mentre noi saremmo onorati per sua partecipazione e contributo, noi saremmo felici di rispettare la sua decisione nel declinare la sua partecipazione. Se lei decidesse di partecipare, potrà sempre ritirarsi a qualsiasi momento senza fornire nessuna spiegazione. Le informazione provvedute durante l’intervista non saranno rivelate a nessuna entità al di fuori di questa intervista.

Il suo contributo
Come membro della comunità Italiana la sua contribuzione a questo progetto di ricerca è di valore immenso. La sua contribuzione è sostanziale allo sviluppo della conoscenza, crescita e preservazione della identità culturale delle diversità delle piante orticole. Speriamo che questa ricerca fornirà l'opportunità per rinforzare i legami con la comunità attraverso la condivisione di esperienze e conoscenze reciproche.
Appendix 6: Interview guide and questions

Semi-structured interview guide:

1. Can you talk about what it means to be an Italian-Australian? How is this seen in your life – at home, in the garden, with your family and in the community? Do you know if others think the same or are there differences in how people feel? Why?

2. Thinking about typical Italian food, can you tell me about some of your experiences, as an Italian migrant, settling/ growing up in Australia? Was it easy to find the food plants/ fruits and vegetables you needed?

3. If there was difficulty finding the same/ correct species, were you able to substitute that plant for another? Can you give examples?

4. How important is growing and using traditional Italian food plants in your community? What influences your choices?

5. What are the most important Italian plants grown or used in your kitchen? Has this changed since you arrived in Australia?

6. Have you noticed new (non-Italian) plants being included in your garden and kitchens? If so, which ones?

7. Can you describe your reasons for growing a garden?
Appendix 7: Demographic questionnaire

Person #

Demographics:
1. Age:
2. Gender:

<table>
<thead>
<tr>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
</table>

3. Home language:
4. Other languages spoken:
5. Place where you grew up. Write name and circle regions:

<table>
<thead>
<tr>
<th>Northern</th>
<th>Southern</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
</table>

6. If born in Italy, what year did you leave Italy?
7. Age when left Italy:
8. Number of years living in Australia:
9. Other places lived after leaving Italy:
10. Occupation in Italy:
11. Occupation in Australia:

Plants, for food and medicine:
12. Which plants used or grown in your home remind you of Italy?
13. Which plant(s) do you consider represent Italian national cuisine?

Gardens:
16. Describe a typical Italian garden.
17. Do you grow your own food?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

18. If you grow Italian food plants:
   a) What do you grow most?
   b) How did you learn to grow Italian food plants?
   c) Who do you grow for?
   d) Do you teach anyone how to grow Italian food plants? If so, who? If not, why?

19. Can you tell me about some of the reasons you spend time growing a garden?
   Do you do so for physical exercise and wellbeing? to grow nutritious food and medicinal plants? Are there other reasons?

20. Free-lists: List the plant foods you associate most with Italy.
Appendix 8: Timeline

Australian gardens, settlement and migration

1788: Invasion. Evidence from First Fleet passenger logs that there were Italian convicts on board
1790: Free settlers arrive
1820: Practice of ‘clearing’ the landscape is common occurrence
1840: Gold rush: Development of rural market gardens (predominantly Italian and Chinese migrants)
1850: Nostalgia gardens: in an effort to affirm and continuation of ties to England
Groups of Swiss Italians (from Ticino) settled in Daylesford, Vic to participate in the Gold Rush era.
1890: First Italian migrants to NRR.
1900: Federation: Development of a National aesthetic
1910: Idea of suburban gardens conceived
1920: Increased interest in local food growing, in the period leading up to World War I, was due to a general lack of capital investment in property and infrastructure requiring residents to provide for themselves (Mullins, 1981)
1940: Second wave of Italian migrants arrive
‘Grow Your Own’ campaign: response to food shortages following end of WW2. Food cultivated in the domestic sphere in urban centres
1950: Suburban gardens:
‘Low maintenance’ gardens became popular resulting in the decline of the backyard food garden. Backyard became a site of recreation rather than production. More value was placed on providing space for the chlorinated swimming pool rather than the vegetable garden or chicken run (Mullins, 1981).
1960: Arrival of Southern European migrants. This group brought their gardening practiced with them. In Melbourne, the Italian migrant
community demonstrated their passion for gardening via the continuation of their traditions - 34% of Italian-born citizens keeping chickens compared to 7% of Australian-born residents (Halkett, 1976).

Rise in environmentalism, with a direct impact on the appreciation and restoration of native bushland. This appreciation was reflected in the increased use of native plants in home gardens.

1970: Third wave of Italian migrants

Emergence of the environmental movement places value on self-sufficiency and development of awareness of effects of global food system.

1980: Decade in which there is an increase supermarket power and increased urban density (Gaynor, 2006). These have direct impact on the access to and the viability of home grown food.

2000: Ideas of social responsibility and self-sufficiency are expressed through a return to nature. In Australia, there is a growing number of people maintaining a home food garden. The motivations are varied, including access to healthy food, perceived better taste and flavour, pleasure, and exercise (Edwards, 2011).

Works cited:


