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# Developing a Space for Children: An Internship with the Mullumbimby Community Garden

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**Developing a Space for Children:  
An Internship with the Mullumbimby Community Garden**

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Submitted in partial fulfillment of the requirements for Australia: Sustainability and  
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## ISP Ethics Review

This ISP paper by Eden Olsen (Student) has been reviewed by Peter Brennan (Academic Director) and does/does not\* conform to the ethical standards of the local community and the ethical and academic standards outlined in the SIT student and AD handbooks.

\*This paper does not conform to standards for the following reasons:

Academic Director: Peter Brennan

Signature: \_\_\_\_\_

Program: Australia: Sustainability and Environmental Action

Date: \_\_\_\_\_

## **ABSTRACT**

This paper aims to demonstrate my independent study project internship at the Mullumbimby Community Garden (MCG), an interactive learning site for the citizens of Byron Shire. As an intern I spent 152.5 hours from October 29<sup>th</sup> to November 23<sup>rd</sup> planting, planning projects, attending meetings, and helping to educate about the importance of sustainable food production. More specifically, I focused on the development of the Children's Garden, building vertical garden beds, planting the sensory garden, attending meetings, and helping to design and analyze costs for new structures to be implemented in the near future.

This study reaches further than my experiences in the garden and examines not only the things I learned during the internship, but also the importance of community gardens and children's gardens on a larger scale. The paper utilizes other studies to outline the history, background, and benefits of community gardens and also examines the importance of a children's space within these facilities. I also explore ways in which I can apply my new knowledge in project management, progressive farming methods, and creating children's gardens to help me with the food justice work I plan to undertake upon my return to the United States.

Every day of my internship I collected, recorded, and analyzed participant observations about the Children's Garden and the MCG as a whole. I conducted three interviews with Jeannette Martin, Georgie Bradley, and Andrea Peterson to give me a better understanding of the history, current activities, and problems inhibiting the growth of the Children's Garden. The paper draws conclusions about the environmental education, communication practices, commitment, acceptance, and positive reinforcement demonstrated by the members of the MCG and the Children's Garden Pod using the data I collected throughout my experience.

### **ISP Topic Codes**

Education	200
Environmental Education	232
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**Keywords:** Community Garden, Children, Environmental Education, Agriculture

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# **1. INTRODUCTION**

## **1.1 Focus and Rational**

The Mullumbimby Community Garden (MCG) was created as an interactive learning site for the citizens of Byron Shire (Martin 2011). The facility emphasizes the importance of organic gardening, composting, water conservation, energy efficiency, and recycling in community food spaces (Martin 2011). It has implemented many education tools including workshops, hands-on experiences, and classes to establish the importance of local food and community building. Part of the garden is divided into allotments that are sold to community members as a personal space for growing organic food. Another portion of the garden is designated for a set of public beds that are maintained and consumed by all members of the community garden and are also used for charity donations. Other important parts of the area include: a nursery, a composting workshop, chickens, a commercial growing area, a community kitchen and a biochar facility.

My position as an intern at the Mullumbimby Community Garden included taking part in meetings; planning events with the chairs of the garden; and planting, harvesting, and maintaining the garden beds and other facilities. Additionally, I completed a focus project helping to develop the Children's Garden. For this specific project I worked closely with Andrea Pedersen, the Children's Garden Pod leader, to help design and develop the space designated as a children's area. My specific duties were to build a set of vertical garden beds for the sensory garden, to help design and analyze costs for the new mud kitchen, to attend meetings, to maintain the garden as a whole, and to research effective ways to create spaces for children. I also acted as a volunteer organizer for the space, working as an advisor to many different people who came and volunteered in the Children's Garden on a daily basis.

The practices at the Mullumbimby Community Garden mesh well with my own beliefs as an environmentalist. I define sustainability as the fundamental change towards improving and maintaining a balanced social, economical, and environmental system. The Mullumbimby Community Garden embodies this definition because of its commitment to a sustainable and community-supported food system. The members of the garden are devoted to reducing their carbon footprint and are constantly supporting the



local economy, contributing to the community, and practicing safe environmental gardening methods.

## **1.2 Importance of Community Gardens**

During a time when our world faces environmental disasters such as peak oil and global climate change, communities have been compelled to implement sustainable living structures into their local areas. Many have turned to community gardens because of the positive environmental, social, and educational implications of these spaces. A community garden can be defined as any piece of land (publicly or privately held) that is cultivated by a group of people rather than a single family or individual. These gardens can occur in many different forms including: shared plots, personal allotments, and commercial growing areas (Flachs 2010, p. 1). During my internship at the Mullumbimby Community Garden I experienced the ways in which community gardens benefit local areas through development of environmental education, creation of community, and an emphasis on localization.

Although community gardening is portrayed as a recent trend in today's society, is not considered to be a new phenomenon. Bethany Rubin Henderson and Kimberly Hartsfield explain that community gardens in the United States began because of the poverty-stricken population during the depression in the 1890s (Henderson & Hartsfield 2009, p. 12). They go on to say that at the turn of the century governments in many different countries began planting community gardens in unused public spaces. This movement continued to gain popularity during World War I, World War II, and the Great Depression (Henderson & Hartsfield 2009, p. 12). Unfortunately, after the 1940s, the demand for these gardens deteriorated. It was not until thirty years later that they erupted in popularity again, mainly due to activism created by the back-to-the-earth movement that took place the 1970s (Henderson & Hartsfield 2009, p. 12).

On a Global scale, the idea of community gardening actually dates back to 18<sup>th</sup> century Europe, when plots were designated for impoverished peasants to grow their own food (Van den Berg, Van Winsum-Westra, De Vries, & Van Dillen, 2010, p. 1). As such, Community Gardening is an important part of our history. In his article, Andrew Flachs goes as far as to say that “community gardening is less a ‘return to the land’ than a

revitalization of a well-established process” simply because the idea has been present in human civilization for so long (Flachs 2010, p. 2).

Community gardens today present a wide range of resources and benefits to the local area. Zazel Loven explains that here are many reasons to consider implementing community gardens including: creating hope and inspiration through beauty, giving citizens a sense of place in their community, providing a space to share local knowledge, and educating the local population about environmental issues and sustainable food production (Loven 2005, p. 2). Additionally, studies have shown community gardens are of immense importance in the realm of politics because those involved in urban gardening tend to pay more attention to where their food is coming from (Flachs 2010, p. 4). These gardens can also create real change in terms of localization by promoting the consumption of local, healthy, and sustainable food (Flachs 2010, p. 3). Economical benefits of community gardens are also quite prominent. In low-income communities, community gardens are often used as a mechanism to feed those without food and teach about the health benefits of fresh, seasonal produce (Flachs 2010, p. 4). An income can also be generated if there is a surplus of food produced (Flachs 2010, p. 3). Surveys have even demonstrated that community gardens raise the physical fitness of those in the participating community quite drastically (Van den Berg, Van Winsum-Westra, De Vries, & Van Dillen, 2010, p. 6). Through these studies and experiences, one can understand the positive impact community gardens have had in innumerable communities worldwide.

### **1.3 Community Gardens in Australia**

Community gardens are growing in popularity in Australia because of environmental implications of the modern industrial world. According to Christine King, the social, environmental and health problems caused by conventional farming methods have transformed many agricultural institutions in Australia (King 2008, pp. 115-116). This has raised the popularity of organic farming, permaculture, biodynamics, community supported agriculture, farmers markets, and community gardens (King 2008, pp. 116-120). The Australian City Farms and Community Gardens Network (ACFCGN), explains that community gardens in Australia began in the 1970s due to an increased interest in environmental issues, as well as social changes and movements of the time (Australian City Farms and Community Gardens Network 2012). This network was

established in the 90s because of a study conducted in Australia that found community gardens did not have an efficient method of communication with each other (Crabtree 1999, p. 63). Since then, the network has become a huge tool for communication between community gardens all over Australia and a resource for those interested in starting a garden in their community. The success of this network is a testament to the growing popularity and awareness of community gardens in Australia.

Emanuele Gelsi describes community gardening in Australia as being connected to the foundation of permaculture in Tasmania by Bill Mollison and David Holmgren in the mid 1970s (Gelsi 1999). Gelsi argues that what makes Australian community gardens different than in other countries is the huge emphasis on permaculture principles and practices (1999). Interestingly, one of the reasons why communication through the ACFCGN is such a successful organization in New South Wales is because of their connections to the Sydney Permaculture Association, an important and innovative organization in Australia (Crabtree 1999, p. 64). This exemplifies the strong bond between permaculture organizations and community garden networks in Australia.

#### **1.4 History and Background of Mullumbimby and its Community Garden**

Mullumbimby, also known as the “Biggest Little Town in Australia,” was originally inhabited by the Aboriginal Bundjalung people of New South Wales (The Australian Women's Weekly 1964, p. 61). The word “Mullumbimby” comes from the Bundjalung word “mulubinba,” which is the name of a native fern found in the local area (Geographical Names Board 1994). Mullumbimby is surrounded by a variety of landscapes including tropical rainforests, beautiful beaches, ancient farmland, and rolling hills (The Sydney Morning Herald 2004). After being colonized in the 1850s by the British, the land has been used throughout history for hydroelectricity, dairies farming, and agriculture. Today Mullumbimby relies on tourism for a large portion of its economic income (Corbett 1981).

Mullumbimby is known, like its neighbor Nimbin, for the alternative lifestyle brought to the area in the late 1960s and 1970s (The Sydney Morning Herald 2004). After living in Mullumbimby for a month I recognized that this alternative lifestyle is still present within the town’s culture. A heavy emphasis is placed on recycling, composting, water conservation, and healthy food consumption. Not surprisingly, the Mullumbimby

Community Garden attracts a similar crowd because of the focus on sustainable living and the relationship the community garden has to the “back-to-the earth” movement.

The Mullumbimby Community Garden (MCG) is a perfect example of the sustainable community gardens that are popping up all over Australia. It is “an interactive facility for the people of Byron Shire—a place where families and individuals of all ages and abilities can share friendships, ideas, and knowledge” (Martin 2011). The garden was the brainchild of Jeannette Martin in 2006 and within a month, she had gained enough community support to create a committee to start the garden planning (Wells 2012, p. 3). In June 2006 the committee began to work with the Byron Shire Council to find a plot of land suitable for the project (Wells 2012, p. 3). Multiple difficulties associated with land rights, opposition from some people within the community, and structural issues postponed the opening of the garden until March 2008 (Wells 2012, p. 3). These barriers were overcome and the garden has now been functioning for four years. This vibrant space fosters community, builds relationships, and promotes environmental practices. More specifically, the garden prides itself on reducing waste, conserving water, creating research programs, embracing sustainable design, and conserving biodiversity (Wells 2012, pp. 4-5).

The MCG has implemented many educational tools including workshops, hands on experience, and courses to establish the importance of local food and community building (Martin 2011). Jeannette Martin explains that there are structures set up for all ages to participate in the garden and to learn more about sustainability (Martin 2011). She goes on to say that the MCG encompasses two types of community gardening as part of the facility. One area is divided into allotted garden spaces and then sold to community members as a personal space for growing organic food (Martin 2011). Another portion of the garden is designated for a set of public beds that are maintained and harvested by all members, as well as being used for charity donations (Martin 2011). Many other aspects such as the nursery, composting workshop, chicken cook, commercial growing area, community kitchen and biochar facility make the garden an educational, communal, and sustainable space for the surrounding community. The garden flourishes in its mission to practice sustainability, while also cultivating strong relationships and educational systems for the whole community.

## **1.5 Community Gardens in the Local Area**

The MCG is not the only communal garden in the northern New South Wales area. Other local organizations that are working on similar projects include: the Ballina Community Gardens, Rainbow Region Community Farms Inc., and the Lismore Community Garden (Sustain Food 2012). Although the Ballina Community Garden is only two years old, it strongly embraces sustainability by promoting the production of local food, educating members about sustainability, supporting school environmental education, providing a space for older members of the community, and establishing a place for all community members to enjoy gardening together (Ballina Community Gardens Inc.). Another organization that relates to the MCG is the Rainbow Region Community Farms Inc. (or the RRCF). This not-for-profit has been running for 6 years and promotes “community gardens and related initiatives in and around Lismore in the Northern Rivers area of New South Wales, Australia” (Rainbow Region Community Farms Inc.). The RRCF creates campaigns to plan initiatives such as the Edible Gardens Project and also recently founded the Lismore Community Garden (Rainbow Region Community Farms Inc.). The Lismore Community Garden focuses on sustainability through their workshops and demonstrations, which educate citizens about the importance of gardening, localization, and a healthy diet (Rainbow Region Community Farms Inc.). These local community gardens can be useful references when studying the MCG ethics and practices on a local level.

## **1.6 Importance of Children’s Gardens**

Presently, none of the other gardens in the local area have implemented or advertised a successful space for children, something that sets the Mullumbimby Community garden apart. According to D. C. Flanders, a key feature of a functioning community garden is the educational aspect, especially when dealing with younger children (Flanders 1999, p. 1). He stresses the importance of engraining the concepts of local food, gardening, and community into children’s brains at an early age. Because a huge amount of children only experience nature through their textbooks, the garden can become a living classroom. (Flanders 1999, p. 1). By giving children hands on experience in a garden at a young age, their interest in community gardening is ensured for the future (Flanders 1999, p. 1).

Sharon Lovejoy, a well-known children's gardening author and consultant, explains that this type of education is much more comprehensive than public school education (Flanders 1999, p. 1). Lovejoy rationalizes that education composed of subjects such as “science, as well as music, meteorology, bird watching, and literature” is important because most kids do not get to experience that kind of learning in their everyday schooling (Flanders 1999, p. 1). Tom Goodridge, a special education teacher and advocate for children’s gardens in Harlem, explains that through gardening children are able to have a direct connection with the earth (Goodridge 2009, p. 18). His main mission is to get kids back into nature. He argues that in the classroom teachers expect children to be too “normal” when they come class, which has a repressive affect on the children (Goodridge 2009, p. 18). Goodridge considers education to be “like gardening in that both cultivate that which is native or ‘wild’ into something more useful to society” (Goodridge 2009, p. 18). In this way, Goodridge understands the importance of structuring children’s gardens into positive learning places with workshops, classes, and programs (Goodridge 2009, pp. 17-19). The Garden of Love, the Garden Project, and composting workshops are merely a few of the structures he has created for the children in his classes, and his programs have been used as the basis for many other child gardening education structures around the world (Englander 2001, pp. 8-9). Through these studies, one can understand the importance of environmental education, especially for young children.

### **1.7 Primary Goals**

Before beginning my work at the Mullumbimby Community Garden, I established three main goals to help me learn and absorb everything I could from my internship experience. First, I wanted to improve my communication skills. This was important to me because it plays an integral part in planning community projects and organizing events. I also recognized that this was a skill that would help me in other areas of my life including my education and future career. My method for reaching this goal was to be an active listener, do the necessary research in order to be an accountable and insightful communicator, and to observe other communication strategies used by members of the community garden.

My second and third goals were to focus on gaining a deeper understanding of how community projects operate and to improve my project management and planning skills. I thought these two goals accompanied each other nicely because one allowed me to observe the organization, while the other helped me to take what I learned and apply it in the real world. In order to succeed with these goals I made sure to take part in as many meetings, gatherings, and conversations as I could; actively participate in these events; take part in planning events and programs; and take responsibility for projects and events. The ways in which I chose to evaluate my success with all of my goals was to get feedback from project managers and those with whom I worked closely. I also planned to self evaluate by assessing the research I completed and the efficiency with which I completed my tasks.

## **2. DESCRIPTION OF ACTIVITIES**

### **2.1 Hours and Duties**

I interned at the Mullumbimby Community Garden five days a week from October 29<sup>th</sup> through November 23<sup>rd</sup>. I worked a total of 152.5 hours, contributing mostly to the Children's Garden project. All of my hours and activities can be found in Appendix B: Log of Hours and Activities on page 33. I also helped in other parts of the garden including the Food For All project, chicken maintenance, and office work. Because my focus was on the Children's Garden I worked closely with Andrea Pederson, the Children's Garden Pod leader. During my stay I contributed to projects such as the mushroom house design and cost analysis, the construction of vertical garden beds, renovations to the sensory garden, conducting research for plants and materials to use for various projects, and taking minutes at Children's Garden meetings. I spent the majority of my time on site working in the Children's Garden and meeting with pod members.

### **2.2 Projects**

#### 2.2.1 Mushroom House

I spent part of my internship working with Georgie Bradley – a volunteer and member of the Children's Garden Pod – designing and working out logistics for the mushroom house mud kitchen. Pod members expect this facility to be implemented in the next two months. The mushroom house is designed as a space for children to make mud pies, play with colorful plants, get dirty, and thrive in nature. It is intended to add to the Children's Garden by creating a magical space for children to use their imaginations and learn about soil through hands-on experience.

Georgie created a preliminary design for the house and presented it at the Children's Garden Pod meeting in November. She and I worked together to complete the design and begin to work out costs, materials, and logistics. Initially, we intended to build the structure out of hemp, a sustainable and hardy material that had been used previously to construct two of the sensory garden beds. After researching this however, I found local hemp is not in season until May and that the expense was beyond our budget. Instead, I proposed that we use earth bags – hessian bags filled with dirt and concrete – for walls and paper mache and resin for the roof. In order to approximate costs, I calculated the



total surface area of the walls and roof, computed the amount of hessian bags needed, researched costs, and presented the data to the pod. Interestingly, my analysis helped us realize that the costs were much less than expected. As such, the budget could be covered by presenting it to the Inger Rice Foundation in a grant proposal recently submitted by Andrea Pederson. I worked on this project for fifteen hours on October 30<sup>th</sup> and November 2<sup>nd</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup>.

### 2.2.2 Sensory Garden

The sensory garden began as a brainchild of Andrea Pederson, Children's Garden Pod leader and garden volunteer. It will eventually be comprised of five main garden beds, each showcasing a different sense. Presently, a smell, taste, and sight bed exist. After the completion of all five beds, the vision is to have the surrounding areas (including the vertical garden beds and other planted zones) stimulate the children's senses as well. Although the sensory garden had already been established when I arrived at the garden, there was much for me to contribute in this area. An important aspect of this garden is the educational component. I helped to further this by creating signs that specify names for each plant in the garden. This will help the kids not only identify plants, but also associate them with certain senses. Another task I completed in this garden was transplanting and adding plants to certain garden beds. This included various trips to nurseries in Byron Shire to find interesting plants for the children to enjoy. Lastly, I reshaped, built, and renovated the touch bed, creating a more manageable space for children to spend time, learn, and play. I spent about 28 hours working on this project on November 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, 14<sup>th</sup>, 15<sup>th</sup>, and throughout the entire last week of my internship.

### 2.2.3 Vertical Pallet Garden Beds

As one of my main projects I built and completed a set of four vertical garden beds to be used as fencing around the sensory garden area. These beds are made of recycled pallets lined with reused potato sacks. I designed, built, painted, and prepared the beds to be planted during the working bee on Friday, November 16<sup>th</sup>. During this work session, four members of the Children's Garden Pod and I filled the pallets with potting soil and planted them, leaving them to rest for three weeks before installation. Andrea and I gathered the plants used for the pallet gardens during a trip to local nurseries. Plants were chosen for their vibrant colors, scents, and flavors, in order to add

to the sensory garden and encourage children to interact with the plants in their environments. Exotic herbs, bright native flowers, funny tasting pods, and eccentric fuzzy leaves were included in order to demonstrate the variety of senses that the natural world can offer.

This project required quite a bit of research. First, it was important to find plants that would survive the conditions of a small root space. Furthermore, two of the gardens will eventually be placed in direct sunlight, while the other two will be experiencing only shade. Determining which plants would work best in these conditions took a good amount of research. Another factor to consider was the possible toxicity of the plants being chosen. Because these plants are being used as a part of the Children's Garden, it was important to make sure nothing would make a child sick. Lastly, I researched possible irrigation systems to be used in the event that the watering system ends up failing. I discovered interesting tools such as plastic bottle irrigation that can be implemented later in the process if there happens to be a water drainage issue. I worked on this project for a total of 30 hours on November 1<sup>st</sup>, 2<sup>nd</sup>, 5<sup>th</sup>, 12<sup>th</sup>, 14<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, and 19<sup>th</sup>.

#### 2.2.4 Teepee Trellis

The teepee trellis was unique compared to other projects insofar as it was dreamt up and completed in the span of a couple weeks. The teepee was an idea sent to Andrea by a member of the community. After being a topic of discussion at the monthly meeting, it was approved and completed the following Friday during the working bee. The teepee was created as a space for children to sit or play, while also contributing a visually pleasing structure to the garden. The structure is made entirely of bamboo that was sustainably grown and built by a local bamboo artist. My contribution to the project was helping to build the structure and also shopping at local nurseries for the best kind of climbing vines to plant on the structure. Andrea and I chose to use two native flower plants to add color and beauty to the teepee and also to educate children about the native plants in the area (Andrea and I always used native plants when we were able to). Secondly, we bought a thornless native blackberry to plant up the back of the teepee creating a harmless food source for children playing inside, which will also contribute to

the taste portion of the sensory garden. I spent a total of five hours on this project on November 6<sup>th</sup>, 16<sup>th</sup>, and 21<sup>st</sup>.

#### 2.2.5 Mums and Bubs Permaculture Course

Every Tuesday from seven in the morning to eleven I participated in the Mums and Bubs permaculture course taught by Sharon Gibson, a certified permaculture teacher. During these sessions Sharon taught mothers of infants the basics of permaculture. The workshop consists of a hands-on portion and a lecture, each important in conveying the principles and practices of a permaculture lifestyle. My role in these classes was to help with presentations, maintain and water the garden beds and seedlings throughout the week, and watch babies while the mothers were taking part in hands-on demonstrations. I spent a total of fourteen hours on this project on October 30<sup>th</sup>, and November 6<sup>th</sup>, 13<sup>th</sup>, and 20<sup>th</sup>.

#### 2.2.6 Children's Garden Pod Meetings

As an intern for the Children's Garden Pod, I participated in many meetings, both official and casual. On the first Tuesday of every month the Children's Garden Pod meets to discuss project progress, future grants, and programs to work towards. I was able to attend one of these meetings during which I took minutes, presented the work I had done thus far, and participated in discussions and decisions being made. On more regular occasions I was involved in smaller, less official meetings during which we would discuss specific projects to be completed. I had at least one meeting every week with Andrea to discuss my progress and tasks to be done. More frequently I met one-on-one with Georgie to discuss the mushroom house design and future plans for the Children's Garden. I spent a total of fourteen hours in meetings on October 29<sup>th</sup> and 30<sup>th</sup>, and November 1<sup>st</sup>, 2<sup>nd</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 12<sup>th</sup>, 15<sup>th</sup>, 20<sup>th</sup>, and 21<sup>st</sup>.

### **3. METHODOLOGY**

#### **3.1 Participant Observation**

Every day of my internship I collected data by working closely with members of the community garden and participating in events and projects. I observed conversations, interactions, and behaviors of members, volunteers, and leaders within the community. The garden was a perfect place to conduct this research because it is a very open space with many social interactions and group projects. I found that the majority of my data was collected in the kitchen, a central hub where everybody congregates to eat, take tea, and break for water. Another good portion of my data was collected during meetings, interviews, and conversations. In order to collect as much data as I could, I made sure to attend every meeting possible and speak with many different people at the garden daily. I participated in groups other than the Children's Garden Pod and volunteered to help with different projects including biochar production, chook management, and the Food For All beds.

After collecting my data I recorded all of my findings in the data collection portion of my work journal. This section included participant observations, interviews, interesting conversations, and helpful documents. I also recorded my interpretation and evaluation of this data. My analysis looked at the Mullumbimby Community Garden as a whole, and also focused in on the Children's Garden as a separate entity. Specifically, I focused on the implications my data had for the organization; the ways in which the organization achieved it's goals and mission; and specific behaviors of the organization including communication, project management, and productivity.

#### **3.2 Interviews**

In order to collect qualitative data from knowledgeable sources I conducted three interviews, each lasting between a half and hour and an hour. In order to gain the most amount of information from each interview, each participant's interview consisted of different questions relating to their role in the Children's Garden (all interview questions asked can be found in Appendix A on page 32). I interviewed Jeannette, the Mullumbimby Community Garden Coordinator; Andrea Pederson, leader of the Children's Garden Pod; and Georgie Bradley, volunteer and active member of the Children's Garden Pod. I decided these members of the community were very integral

parts of the creation of the Children's Garden and also were very knowledgeable about the history, progress, and current issues associated.

During each interview I recorded notes on my computer so I was able to retain the maximum amount of data. I then printed these notes out and pasted them into my work journal so I was able to read and analyze each interview in my journal afterwards. I compared and contrasted the interviews to compile data about the Children's Garden. I also compared them to my participant observation data and used this information to draw conclusions about the organization as a whole and also about the Children's Garden.

### **3.3 Biases and Limitations**

Although I did my best to limit biases while collecting data, it is impossible to avoid all shortcomings in studies such as these. First, when conducting participatory observations it was important for me to take notes in private. When I was taking notes in public I found that it dramatically changed what people would say to me and how they acted, because they did not want my research to affect the organization in a negative way. Often, this caused volunteers and members to be untruthful or hold back information. To solve this problem I often took notes alone after collecting my data because it was important to have a very honest set of data from which to work.

It was also important for me to recognize biases associated with the interview process. Because the community garden is a huge commitment for members and volunteers and these people are very passionate about the garden, their perception of issues related to the garden may be very different than that of an outsider. Interestingly, I occasionally found the same interview question produced entirely different answers from two different people. Recognizing the personal connection and opinions people have with the garden is important in order to gain the most helpful and unbiased data. Another aspect to remember was that interviewees are prone to interviewer bias in which they answer questions in the way that the interviewer wants to hear it. Because of this, I phrased my questions in a very neutral manner in order to minimize this bias as much as possible.

## **4. OBSERVATIONS AND IMPRESSIONS**

### **4.1 Role of Environmental Education**

#### 4.1.1 Within the Garden as a Whole

The Mullumbimby Community Garden puts a huge emphasis on environmental education, creating an atmosphere where it is easy and fun to learn about sustainable food production. Workshops are offered to the public on a regular basis in order to encourage individuals to learn to garden or to live a more sustainable life. Through my participant observations, interviews, and experiences I was able to gain an informed understanding of the role of environmental education at the MCG.

During my time as an intern I was lucky enough to attend a free mushroom-growing course. There was a surprisingly large turn out and a huge amount of enthusiasm for the subject matter. Another example of accessible environmental education was at the food festival on the 27<sup>th</sup> of November. This event offered free workshops available to the public teaching subjects such as: biochar, biodynamics, no dig gardening, and bug identification. I was also very lucky to take part in the weekly Mums and Bubs Permaculture Course every Tuesday morning. This class focuses on the importance of food education for a group of women who are often too busy to take a class. Future workshops are being created as well. For example, Cecile Charrue plans to teach a class about making soaps, detergents, and cleaners that are not harmful to the environment.

Another way in which the Mullumbimby Community Garden focuses on environmental education is through the volunteer system that they have created. Because so many people without garden skills come to work at the garden daily, it creates an informal education system within the garden. Interestingly, a volunteer is not generally utilized in an area where they are previously skilled. Instead, they are taught to do what is needed at the moment and are expected to learn and succeed in this area. I have found this system to be not only productive in terms of education, but also for getting tasks accomplished. In other realms of life, people are confined to what they are good at, making them afraid to take risks. The community garden urges people to try new things, which is both empowering for the individual and helpful to the garden.

#### 4.1.2 Within the Children's Garden

A need for an education system within the Children's Garden was emphasized in all three of the interviews conducted for this project. Jeannette Martin, Georgie Bradley, and Andrea Pederson all explained that children are disconnected from nature in today's society and that early environmental education is important in solving this problem. All three of these women described examples of close friends and family members' children who were not allowed to play outside, are scared of bugs, or do not know that milk comes from a cow. Jeannette said that it is essential to develop connections to the natural world at an early age and that education is the key to this problem (Martin 2012). She went on to explain the importance of education in broadening children's perspectives. Jeannette explained "kids are always going to choose the bright red pop over orange juice, but they need to know there are options so they have something to fall back on" (Martin 2012).

The importance of creating a structured education system can be supported by studies conducted by groups such as Project GREEN (Garden Resources for Environmental Education Now), an organization that helps organize environmental education within school curriculums using gardening as a key tool (Skelly & Zajicek 1998, p. 2). A study conducted by Project GREEN in 1998 showed that kids who took part in gardening projects at school were more likely to have a connection with nature and develop positive attitudes towards the environment (Skelly & Zajicek 1998, p. 2). This connection to nature is exactly what the Children's Garden Pod wants to cultivate in their space.

At the moment there is not a structured education system implemented in the Children's Garden, but this is something that all the members of the Children's Garden Pod hope to start in the near future. During my interview with Andrea Pederson, the Children's Garden Pod leader, she explained that she recently put together free workshops in the Children's Garden that were highly successful (Pederson 2012). They were classes that could be enjoyed by not only children, but also parents (Pederson 2012). After having this experience she believes a structured education system would be extremely successful, but the pod is lacking the members to dive into such an endeavor (Pederson 2012). During her interview, Georgie Bradley explained that they hope to start a small workshop that teaches children about cooking fresh produce (Bradley 2012). She also explained that the Children's Garden Pod is extremely interested in implementing a

soil education program as well (Bradley 2012). These workshops could potentially work on a small scale and increase in size if there is a large interest group.

A plan was initiated last year to educate children about their food. This took the form of an elaborate program called Love Food Hate Waste, but the program did not get the grant for which it applied so the idea was dropped (Martin 2012). Jeannette insists that these types of programs must start on a very small scale so that they are manageable. In her time as a community garden coordinator she has witnessed many big projects be abandoned because they are too much of a commitment for a volunteer group (Martin 2012).

Jeannette Martin explained that education systems in community spaces have to happen very slowly and loosely (Martin 2012). A few schools have taken field trips to the garden, but Jeannette hopes to eventually see an education system that is linked to the school curriculum so teachers can take the lessons learned at the garden and apply them back in the classroom (Martin 2012). Unfortunately, because of lack of funding and an absence of qualified teachers at the garden, this project has not been able to be implemented. (Martin 2012).

## **4.2 Accepting Environment**

### **4.2.1 Within the Garden as a Whole**

Through participant observations I found that the Mullumbimby Community Garden is a very accepting and nonjudgmental organization. A range of ethnicities, ages, genders, and religions are present and copasetic within the garden community. An example of this is a respect for the Aboriginal people of Byron Shire. The major signage around the facility is translated into the local Bundjalung language, Aboriginal elders are highly respected in the garden, and an Aboriginal art piece is presently being created for display next to the office. There are also many people who are unemployed, homeless, and recently released from prison that volunteer at the garden. On a daily basis I observed the way in which these people were treated and found that it was similar to the way regular volunteers and members treated each other.

Another group of people that are highly respected are elders. There is a special garden created and maintained by the elders of the community and every Saturday there is a meeting for those who are 65 and older where they can spend time in their garden.



This space is respected and left alone by other members of the community because they see it as a sacred space for their elders.

I also noticed a huge range of religious, spiritual, and alternative belief systems present at the garden. Religious beliefs range from Catholicism to Buddhism to Sufism. A wide range of conspiracy theories and rare spiritual practices are present as well. None of these beliefs or religions play a role in the way people are treated. No matter what a person's belief system, they are embraced and accepted by the community.

The fact that a variety of beliefs, practices and people are incorporated into the community is a very important aspect of the garden. It has become a haven for those who are discriminated against or those who do not fit easily into society. It is a space where everyone gets along, people learn together, and community members form open minds and loving hearts.

#### 4.2.2 Within the Children's Garden

During Andrea's interview she emphasized her vision for the future of the Children's Garden as being a multi-generational and multi-cultural space (Pederson 2012). She explained that at the moment the Mullumbimby Community Garden is a space that caters to the alternative population of the area and she would love to see the Children's Garden bring different people into the community (Pederson 2012). Her vision is to eventually have a van to pick up elderly and disabled people to bring them to the garden if they do not have access to transportation (Pederson 2012). She also thinks that having classical concerts and other events will help to create more of a culture in the garden (Pederson 2012). Andrea emphasized the fact that the Children's Garden will not only be a space for children, but also a place to build community and meet new people.

Jeannette explained that she would like to see the Children's Garden be as influential for parents as it is for children (Martin 2012). She says that she envisions a space where mothers and fathers can socialize and share their parenting problems with each other (Martin 2012). From personal experience, Jeannette explained that parenting can be a lonely and isolating job (Martin 2012). She hopes this space will provide parents a venue to give advice and support, while also building community and bonding with their children (Martin 2012). Jeannette explained: "This is why it is not only important for kids, but also for the entire family" (Martin 2012).

Creating a multi-cultural and multi-generational atmosphere is at the core of the Children's Garden plan. Both my interviews with Jeannette and Andrea emphasized the idea that the Children's Garden is not a space exclusively for children. They both saw the importance of creating a facility that brings people of different ages, ethnicities, genders, and backgrounds. This is key to the Children's Garden plan because it focuses on a sense of community rather than isolating the children or separating them from other factions of the community.

### **4.3 Communication**

#### **4.3.1 Within the Garden as a Whole**

After taking part in a meeting between Sainttina de Moleay, the Food Festival Coordinator, and Jeannette Martin on Monday, October 29<sup>th</sup> I learned about the issues associated with the MCG's communication system. The meeting pertained to the food festival, which took place the Saturday before. The two discussed the issues with communication and how it has become a detriment to the organization in terms of the garden's finances. During the festival, it was impossible to get in contact with enough volunteers to help, so there were no people standing by the entrances to ask for donations. Jeannette imagined this would have raised a good amount of money. If the communication were better between volunteers and members, the garden would be able to fund more projects and also finish projects at a faster rate.

The foundation of this problem is the fact that people do not read their emails or the monthly newsletters that are sent via email to all members and volunteers. Jeannette explains that they have tried other communication methods including utilizing a bulletin board at the entrance, but nothing seems to work (Martin 2012). She also said that after conducting a recent survey, the administration at the garden discovered that only about 40% of email recipients actually read emails sent by the Mullumbimby Community Garden (Martin 2012). Another issue with this is the fact that even if one was able to get a hold of a member, the majority of people who work on the garden are not willing to commit to a project, leaving a constant sense of uncertainty for leaders.

#### **4.3.2 Within the Children's Garden**

These issues are especially reflected in the Children's Garden Pod, creating a huge impediment for projects and designs. Although Andrea sends out regular emails to

all 40 of the members of the pod, rarely does she get responses nor do people turn up for meetings or working bees. Because most of these people are not even reading the emails, the messages and schedules are not being recognized. This is especially a problem when it comes to the wellbeing of the core people of the group. Through my observations I have noticed that because the burden of an entire project falls on one person, it is very easy for burnout to take place. Each of the three core members of the Children's Garden Pod take on a separate project, meaning that a huge amount of responsibility is thrust upon them. Andrea explains that this set up is frustrating and has made her consider leaving the pod on numerous occasions (Pederson 2012).

Another way in which communication is an impediment is the way Children's Garden Pod meetings are run. Because the meetings are not structured in any particular way, every member of the committee speaks freely, creating a huge amount of wasted time. Many members leave or do not come to the meetings because of their length (Pederson 2012). I recommend creating a more efficient meeting system using a structure such as parliament procedure, which could improve the communication issue. Not only would this help to get things done, but it would also attract more members and free up time to discuss other matters and to work on projects. If people were inspired to come to shorter meetings they would be much more willing to participate, take on projects, and open up avenues of communication.

#### **4.4 Commitment**

##### **4.4.1 Within the Garden as a Whole**

Through my observations, I found that the garden struggles with finding people who are committed to a project for the long term. The major cause for this problem is the fact that certain people with strong personalities tend to take over projects without respecting the input of other members (Bradley 2012). This causes people to slowly drop out of projects because they feel like their work is not appreciated. Examples of this can be found in the Biochar, Food For All, and Children's Garden pods (Bradley 2012). Andrea and Georgie both explained that these issues greatly affect the pace at which projects are completed at the gardens (Pederson 2012). It is a phenomenon that Georgie called the "little people" syndrome, a state of mind where a person may feel powerless in their lives outside the garden so they acquire a bit of a power trip while at the gardens

(Bradley 2012). She goes on to say this type of personality makes it hard for other people who want to come to the garden to relax, learn, and leave their stressful lives behind (Bradley 2012).

#### 4.4.2 Within the Children's Garden

The Children's Garden Pod has experienced the same types of commitment issues as the garden has since it was established two years ago. Georgie explained that there were 40 committed volunteers at the beginning of the year helping with the Children's Garden (Bradley 2012). Because of a single personality, this group has been narrowed down three people that show up to the meetings, help with working bees, and are dedicated to fulfilling the vision for the garden (Bradley 2012). This poses an issue for projects such as the mushroom house, which could be finished in one day if there is a big enough group. Unfortunately, it has taken four meetings just to finalize the design (Bradley 2012).

Andrea's interview gave me some context in terms of these issues in the past. She explained she was part of the pod two years ago when it began, although at that point she was not in a leading role (Pederson 2012). The vision for Children's Garden, Andrea explained, has stayed relatively the same for the last two years, but sadly these ideas were rarely, if ever, acted upon (Pederson 2012). After two years and 4,000 hours of work put into the Children's Garden, there have been a mere three garden beds built and a fence put in place around the facility (Pederson 2012). Andrea admits to her frustration with the project, explaining that being from a German background she is used to discipline and commitment from people (Pederson 2012). She thinks that part of the problem could be a cultural divide between the European mindset and that of Australians (Pederson 2012). From my observations this seems like a very likely explanation because those from other countries such as France, the Czech Republic, and Germany seem especially distraught by the accountability of the organization, while many people who grew up in Australia do not. This includes Jeannette who mentioned in her interview that "the current [Children's Garden] group is holding it together and really getting things done" (Martin 2012).

Andrea also sees the inefficiency and lack of commitment as an issue of diversity. She explained that because the garden caters mainly to the "alternative" population of Mullumbimby, it is missing out on key members who would be able to donate time,

money, and their accountability (Pederson 2012). She does not have a problem with this sector of the population, but she does think that they can be unreliable and that the more mainstream population of Mullumbimby could make a huge contribution to the creation of the Children's Garden (Pederson 2012).

#### **4.5 Positive Reinforcement**

##### 4.5.1 Within the Garden as a Whole

I was able to attend the wrap up meeting after the food festival on Tuesday, October 30<sup>th</sup> where members and volunteers discussed the successes and inadequacies of the festival held Saturday the 27<sup>th</sup> of October. During this meeting a discussion began about the issue of commitment and the fact that not enough volunteers showed up to help with necessary set up and maintenance during the festival. Interestingly, it was agreed by the majority of the group that the reason for the shrinking volunteer pool was a lack of appreciation being shown to those committed to the garden. Because they were not being recognized for the work they had done, or were being treated poorly by certain members, many people had left the volunteer pool at the garden. This leaves pods or projects at the garden lacking in support. Georgie explained that she and Andrea experienced this lack of appreciation at the festival, but they were able to shake it off (Bradley 2012). Other more vulnerable or newer volunteers may not feel the same way and Georgie said it is important to recognize that people do not come to work at the garden expecting to be treated poorly (Bradley 2012).

Because of this discussion, the board planned to create activities and events to recognize volunteers. I recommend ideas such as having a volunteer lunch or creating perks for volunteers on a regular basis. Even if a small recognition system was set into place, I believe it would make a huge difference in the length of time a person is committed to the garden.

##### 4.5.2 Within the Children's Garden

Georgie mentioned these same kinds of issues in her interview when speaking about the Children's Garden (Bradley 2012). She went on to say that because a certain member of the Children's Garden Pod did not allow others to voice their opinions and took no interest in ideas produced from other people, many left the pod. This is an issue that Andrea is working on. She has spent much time having one-on-one meetings with

this person in order to discuss the problems at hand. This has helped to create an atmosphere where people feel appreciated and believe that it worth their time to work on Children's Garden projects (Pederson 2012).

## **5. CONCLUSION**

### **5.1 Overall Impressions of the Garden**

The Mullumbimby Community Garden is an organization highly dedicated to creating an accepting and educational space for all members of the Byron Shire community. With a focus on environmental education and sustainability, the garden has become a progressive and important aspect of the community. Through educational events, workshops, and even day-to-day interactions the members and volunteers of the garden have created a safe space where all are welcome to learn, laugh, and play. The space allows for people of all socioeconomic, cultural and ethnic backgrounds to learn where their food comes from, build relationships with those in the community, and participate in sustainable projects.

When I first arrived in the garden, I noticed how accepting all members and all volunteers were. I also noticed the emphasis the garden puts on community outreach. As an outsider coming into the organization, I felt extremely welcome and appreciated by everyone. They were kind enough to accept me into their community, offering me a position in the Children's Garden where I was even further embraced by the Children's Garden Pod and those associated with these projects. This sense of community reaches farther than those who come to the garden. An acknowledgement of the positive atmosphere at the garden is present throughout Mullumbimby. I noticed that everyone to whom I mentioned the garden acknowledged the kindness embedded in its foundation. Human attachment is what binds the organization together, not a strict set of rules. This is why people of all backgrounds can find their niche at the MCG.

Even though MCG is a highly successful organization, because it is a volunteer, community-run organization, it struggles with issues such as communication and commitment. Projects are not generally finished on time and working bees are usually short on volunteers. This being said, everything does get done because of a core group of individuals who are highly dedicated to the organization. Every one of these individuals shares a passion and love for the garden that keeps them coming every week, even when times are hard and working hands are limited. Without members of the Children's Garden Pod such as Andrea, Georgie, and Cecile, the strong vision for this project would have disappeared long ago. A core group of dedicated people has been essential to the garden

and has shaped it to be a successful, passionate, and loving environment. Although projects may take a while to materialize, these members understand that eventually their visions will become a reality just like their compost piles will eventually create bright red tomatoes.

My recommendations for the organization would be to foster a larger sense of appreciation for members and volunteers. The major downfall of the garden is a loss of community members because they do not feel like their work is being appreciated. Even creating a structured system of appreciation including monthly events would help with this issue. Another recommendation I have is to create a method of communication that works more efficiently than the current system. Although there will always be downfalls in terms of communication when working within community projects, there are always ways to improve on this. By making small changes like creating incentives for attending meetings, the garden could begin to establish better means of communicating with a larger faction of members and volunteers. This would also help to widen the volunteer base at the community garden, something that would only be beneficial to the space.

Working on issues such as these would be a perfect focus project for a future student. If an improved system of communication could be created, the garden would benefit hugely. Also, if a system of appreciation were set into place, a huge amount of the member base would return to the garden to help with projects and contribute their ideas and visions. Interestingly, the organization of an outsider might even be more beneficial for the organization because a person who is not as attached to current practices will be able to pick up on issues or flaws where members may not be able to recognize them.

## **5.2 What I learned and Application in the United States**

### 5.2.1 Project Management Skills

One of my primary goals was to improve my project management skills. My work with the Mullumbimby Community Garden proved to help me achieve this goal because I was forced to take on a huge amount responsibility for projects, tasks, and volunteers. Because I worked full days at the garden five days a week, I was able to see projects through until the end, discovering how best to handle different steps of the project completion process. I learned how to initiate, plan, design, execute, monitor and complete projects in a very efficient way. Because I was not working alone during all of these



projects I was also able to practice my delegation skills and learn how to relinquish responsibility of certain aspects in the name of efficiency. A good example of my use of these skills was the vertical pallet garden beds. I began the project by designing and planning the layout of these pallets. This took a lot of research and many conversations with knowledgeable members of the garden. I then began the construction of the gardens, while also delegating tasks to willing volunteers. During the working bee I was able to monitor the work being done on these beds and was completely responsible for making sure the beds were filled, planted, and mulched.

This skill will help me upon my return home to the United States because I intend to instigate many projects in my home community, at my school, and later within my career. Because I plan to organize an Edible Sidewalks campaign in Oregon during the summer of 2013, having the skills to execute a plan in the most efficient way is important and necessary. I plan to petition for the development of unused public land, especially sidewalk lawn areas, to grow food for community members in Monmouth, Oregon. This campaign will include a map of new and old edible plants in the town, create a edible mapping system around town to make these areas more accessible, and incorporate a local educational component focusing on localization and health. What I have learned as far as project management at the Mullumbimby Community Garden will help me immensely when planning this campaign. I also see these skills helping me with my senior thesis pertaining to sustainable food projection and later when I either work for an environmental organization or start my own business.

### 5.2.2 Progressive Farming Methods

Through my experiences as an intern at the Mullumbimby Community Garden I was able to learn a huge amount about sustainable farming methods and gardening techniques about which I had been previously unknowledgeable. The process of creating biochar, the techniques associated with permaculture, no-dig-gardening, seed saving, and several different types of composting are all skills that I feel I have somewhat mastered or learned quite a bit about during my stay at the gardens. Because there is such a huge emphasis on education at the Mullumbimby Community Garden, I was able to learn from experts in many different fields about progressive ways of farming and gardening in a sustainable manner.

This knowledge will be extremely important for my last year of studies at Scripps College. I am majoring in Environmental Analysis with a focus on sustainable food production and policy. The majority of the classes I have taken for my major pertain to sustainable agricultural methods and food production within healthy ecosystems. I have been working on the on-campus farm and have also been in charge of the Scripps College organic garden. My senior thesis will involve a farming project that will undoubtedly utilize the agricultural skills I have acquired. In terms of my home community, my family has just recently created an organic urban farm that distributes fresh produce to those in the community. My new knowledge will most definitely aid this project as well. To be able to take the methods I have learned and apply them at home, in school, and eventually, as a career is hugely important and extremely helpful for my lifelong goals.

### 5.2.3 Importance of Early Environmental Education

Before my work at the Mullumbimby Community Garden I was aware of the benefits that gardening and establishing a connection with nature had for children, however, I had never created a space that promoted this awareness. After doing much research, collecting participant observations, and conducting very informative interviews, I understand the issues much more clearly. Because a huge percentage of children are raised in places where they are not in contact with nature, they grow up with out an appreciation for the environment, which leads to unsustainable practices later in life. My work at the garden allowed me to help design a successful children's garden, apply it to a real life situation, and research educational programs that would suit the Children's Garden currently being built.

This experience will help me in the United States because I have become passionate about environmental education. I believe that when children are raised in an environmentally conscientious manner, we can create a more sustainable society. Specifically, the Edible Sidewalks campaign will encompass this because it is aimed at eliminating child hunger in my hometown. A huge portion of this project will be focused on instigating workshops about food justice, health, sustainability, and preparation of food. Through this education I hope to teach children a consciousness about environmental issues and specifically the food that they are consuming.

### **5.3 Reflection of Primary Goals**

One primary goal that I chose at the beginning of this project was to focus on gaining a deeper understanding of how community projects operate. This was important to me because I can utilize this knowledge in many different aspects of my life. First, as a community member of all communities I am involved in, I hope to be able to take advantage of the potential of community projects and the positive outcomes when communities work together. Second, I hope this knowledge will help me to become a better community leader and organizer who can create and maintain sustainable community projects in an experienced and knowledgeable fashion.

Another primary goal that I set for myself was to improve my communication skills. I think I have improved in this area quite a bit because I was forced to communicate in different ways to many different people. Because I was planning and designing projects for the Children's Garden Pod I was constantly in contact with Georgie and Andrea in order to present the work I had accomplished and the plans I had for the future. The research that I did for the pallet gardens and mushroom house also compelled me to contact other organizations to compare projects, price materials, and confirm logistics. It was also important to stay in contact with Jeannette so that I could take advantage of the volunteers she was distributing around the garden. This skill will help me as a student working on my senior thesis and later in life in my career. In the near future I will also use my communication skills to help me fundraise, raise support, and manage my Edible Sidewalks campaign upon my return home to the United States.

## 6. HARVARD REFERENCING

- Australian City Farms and Community Gardens Network 2012 (online), Available: <http://communitygarden.org.au/> (20 November 2012).
- Bradley G. 2012, Mullumbimby Community Garden Volunteer, Mullumbimby Community Garden, Personal communication via f-to-f interview, (5 November 2012).
- Ballina Community Gardens Inc. Undated (online), Available: <http://ballinacommunitygardens.com/index.htm> (20 October 2012).
- Corbett, A. 1981, *Corin, William*, Australian Dictionary of Biography (online), Available: <http://adb.anu.edu.au/biography/corin-william-5782> (28 November 2012).
- Crabtree, L. 1999, Sustainability as Seen from a Vegetable Garden, BA(Hons) thesis, Macquarie University, Sydney. Available: <http://urbansustainability.files.wordpress.com/2009/04/crabtree-honours-thesis.pdf>.
- Englander, D. 2001. *New York's Community Gardens—A Resource at Risk*, The Trust for Public Land (online) Available: [http://actrees.org/files/Research/NYC\\_CommunityGardens.pdf](http://actrees.org/files/Research/NYC_CommunityGardens.pdf), viewed 19 October 2012.
- Flachs, A. 2010, *Food for Thought: The Social Impact of Community Gardens in the Greater Cleveland Area*, Electronic Green Journal, vol. 1, no. 30, pp. 1-9, Academic Search Premier, EBSCOhost, viewed 19 October 2012.
- Flanders, D. C. 1999. *Gardens Plot their Future with Children*. The Atlanta Constitution. EBSCOhost, viewed 20 October 2012.
- Gelsi, E. 1999, Gardening in The Street: Sociality, Production and Consumption in Northey Street City Farm, Masters thesis, University of Queensland, Brisbane. Available: <http://www.cityfarmer.org/brisbane.html>.
- Geographical Names Board 1994, *Mullumbimby* (online), Available: [http://www.gnb.nsw.gov.au/name\\_search/extract?id=ujjLwptLMa](http://www.gnb.nsw.gov.au/name_search/extract?id=ujjLwptLMa) (28 November 2012).
- Goodridge, T. 2009. *Children and Urban Gardens*, Encounter, vol. 22, no. 2, pp. 17-19, Academic Search Premier, EBSCOhost, viewed 19 October 2012.

- Henderson, B. & Hartsfield, K. 2009. *Is Getting into the Community Garden Business a Good Way to Engage Citizens in Local Government?*, National Civic Review, vol. 98, no. 4, p. 12, Gale: Academic OneFile, viewed 20 October 2012.
- King, C. 2008, *Community Resilience and Contemporary Agri-ecological Systems: Reconnecting People and Food, and People with People*, Systems Research and Behavioral Science, vol. 25, no.1, p. 111, Gale: Academic OneFile (PowerSearch), EBSCOhost, viewed 19 November 2012.
- Loven, Z. 2005, *Community Gardening*, Organic Gardening, vol. 52, no. 3, pp. 26-33, Academic Search Premier, EBSCOhost, viewed 20 October 2012.
- Martin, J. 2011. Mullumbimby Community Garden, Wordpress (online) Available: <http://mullumcommunitygarden.wordpress.com/>, viewed 20 October 2012.
- Martin, J. 2012, Mullumbimby Community Garden Coordinator, Mullumbimby Community Garden, Personal communication via f-to-f interview, (9 November 2012).
- Pederson, A. 2012, Mullumbimby Community Garden Children's Garden Pod Leader, Mullumbimby Community Garden, Personal communication via f-to-f interview, (14 November 2012).
- Rainbow Region Community Farms Inc. Undated. *Rainbow Region Community Farms* (online), Available: <http://www.rrcf.org.au/> (20 October 2012).
- Skelly, S. M. & Zajicek, J.M. 1998. 'The Effect of an Interdisciplinary Garden Program on the Environmental Attitudes of Elementary School Students,' (online) *HortTechnology*, vol. 8, no. 4, pp. 579- 583, Available: <http://horttech.ashspublications.org/content/8/4/579.full.pdf> (27 November 2012).
- Sustain Food 2012. *Community Gardens* (online), Available: <http://sustainfood.com.au/index.php?page=community-gardens> (21 October 2012).
- The Australian Women's Weekly 1964, *Place Names* (online), Available: <http://nla.gov.au/nla.news-article55185386> (28 November 2012).
- The Sydney Morning Herald 2004, *Mullumbimby* (online), Available: <http://www.smh.com.au/news/New-South-Wales/Mullumbimby/2005/02/17/1108500197710.html> (28 November 2012).
- Van den Berg, A, van Winsum-Westra, M, De Vries, S, & Van Dillen, S. 2010. *Allotment Gardening and Health: a Comparative Survey among Allotment Gardeners and their Neighbors Without an Allotment*, Environmental Health: A Global Access

Science Source, vol. 9, pp. 74-85, Academic Search Premier, EBSCOhost, viewed 20 October 2012.

Wells, L. 2012. Adventures in Bloom: An Internship with the Mullumbimby Community Garden, Unpublished paper prepared for the Mullumbimby Community Garden, in possession of Student International Training, NSW Australia.

## 7. APPENDIX

### 7.1 Appendix A: Interview Questions

What role do you play in the MCG? Specifically in the Children's Garden?

- What specific projects are you working on?

How did the vision for a children's garden start?

- Are you aware of its evolution through time? If so, can you describe the way the vision for the garden has changed and morphed?

What is being used as an example or inspiration for the garden?

- Is there another garden that you are looking to?
- Are there studies that you have been looking into?

Why do you think the MCG Children's Garden is important?

- Is this the same for other communities in Australian and the rest of the world?

How does education play a role in the Children's Garden?

- Is this something that will be implemented initially or once the garden is completed?
- What is your vision for an education system in the garden?

Do you think education in this kind of environment is important? Please elaborate.

- Do you think there is a disconnect between children and nature and if so, how could this garden help to diminish that problem?
- Is education necessary to solve this issue?

Please explain the role of volunteers for this project

- Has working with volunteers proved easy or hard? Please explain

Can you please explain the pace at which projects are completed at the Children's Garden?

- How does this impact the projects at hand?
- Is this different than other projects that are going on at the garden?

Please explain your vision for the garden in the future (in 10 or 15 years).

- Do you think it will ever be completed or continually elaborated on?
- Do you see it as extending to the entire Mullumbimby and the surrounding community?

What is your personal connection to the Children's Garden?

- What makes you want to create this space?
- Why did you choose this project over others?

Do you have any further questions or comments about the Children's Garden?

## 7.2 Appendix B: Log of Hours and Activities

Date	Hours Worked	Activities
10/29/12	8	Meeting with Jeannette/Sainttina, Premier and Cabinet Government Grant Proposal, festival budget analysis
10/30/12	8	Helped with mums and bubs permaculture course, worked in FFA beds, meeting with Jeannette
10/31/12	8	Worked in FFA beds, worked in chicken coop, met new members, worked in nursery, meeting with Georgie
11/1/12	7.5	Meeting with Terry, planted in Children's Garden, meeting with Andrea, worked on pallet gardens
11/2/12	8	Meeting with Georgie and Sam, worked in nursery, worked on pallet gardens, research for Andrea
11/5/12	7.5	Worked in office, planned Children's Garden Pod meeting, painted vertical garden beds, interviewed Georgie
11/6/12	10	Helped with mums and bubs permaculture course, meeting with Ramishwa, Children's Garden Pod meeting
11/7/12	6	Meeting with Georgie, planted in Children's Garden, meeting with Andrea, watered FFA beds
11/8/12	8	Planted in Children's Garden, sent minutes from Children's Garden pod, calculated mushroom house dimensions
11/9/12	8	Finished sensory garden signage, interviewed Jeannette, researched pallet gardens, calculated mushroom house costs
11/12/12	8	Researched for pallet gardens, worked in FFA beds, meeting with Jeannette
11/13/12	10	Helped with mums and bubs permaculture course, took part in mushroom workshop, built chook nursery, gave a tour of Children's Garden
11/14/12	6	Painted pallet gardens, prepared for trip to nursery, watered Children's Garden, planned working bee
11/15/12	8	Went nursery shopping with Andrea, Interviewed Andrea, planned working bee
11/16/12	7	Ran working bee, watered nursery, updated Andrea on progress
11/19/12	6.5	Planted pallet gardens, planted natives, pulled out tomatoes, built new sensory bed, weeded Children's Garden
11/20/12	8	Helped with mums and bubs permaculture course, built chook nursery, planted in Children's Garden, went



		nursery shopping with Andrea, planned rest of week with Andrea
11/21/12	7	Planted and mulched in Children's Garden, meeting with Andrea
11/22/12	5	Completed sensory garden bed, worked on signage, planted sensory garden beds
11/23/12	8	Summed up all projects, updated Andrea with progress, said goodbye to volunteers and members
<b>Total Hours Worked: 152.5</b>		