University of California Davis Sustainable Agriculture & Food Systems Capstone 3.12.2016

EDIBLE LANDSCAPING AT UC DAVISFINAL REPORT



Prepared by

Emily Lovell, Gab Rosado, Isaac O'Leary, Julia Modell, Natalie Dean, Neal Pope, Ruthie Schnitt, and Sasha Strohkendl

Table of Contents

Executive Summary	3
Introduction	5
Problem Statement	
Client and Stakeholders	
Goals and Objectives	
Methodology	6
Interviews	
Human Centered Design	
Posters	
Focus group and follow-up survey	
Consultations with client and stakeholders	
Results	10
Student feedback	
Garden manager feedback	
Client and stakeholder feedback	
Website meeting	
Next Steps	12
Recommendations	13
Arboretum and Public Garden	
Edible landscape leaders	
Future Capstone group	
Conclusion	15
Successes	
Challenges	
Conclusion	
Acknowledgements	16
Appendices	
Appendix 1: Edible landscape index	18
Appendix 2: Edible landscapes map	19
Appendix 3: Word maps constructed from poster feedback	20
Appendix 4: Interview questions for garden leaders	21
Appendix 5: Results from interviews with garden managers	22
Appendix 6: Interactive Human Centered Design poster	25
Appendix 7: Follow-up poster	25
Appendix 8: Garden leader survey questions	26
Appendix 9: Sample garden sign	28
Appendix 10: Proposed website layout	29

Edible Landscaping at UC Davis: **Executive Summary**

Overview

Edible gardens are a valuable part of the UC Davis campus community, with goals and impacts that distinguish them from most campus landscapes. These spaces seek to enhance community, showcase the work of academic departments, promote health and wellness, and empower participants to grow food. We sought to further the impact of these edible landscapes and ensure their long-term viability. For overall success, edible landscapes on campus must be more connected to each other and to outside resources, subsequently engaging the wider UC Davis community.

We completed this project with the crucial guidance of our client at the UC Davis Arboretum and Public Garden: GATEways Horticulturist and Edible Landscaping Internship advisor Stacey Parker. With Parker's support, we conducted a needs assessment with students, garden managers, and campus leaders, which confirmed the need for visibility and collaboration and determined solutions that benefit all groups.

Vision and Goals

We envision UC Davis as an edible campus. At the start of our project, UC Davis had a collection of distinct food gardens and edible landscapes with various goals, histories, and support systems. We envision UC Davis in the near future as home to a *network* of edible landscapes, still with various goals, but with a unifying vision and enhanced collaboration, improving mutual access to resources and by extension, long-term viability.

Our goal for edible landscapes at UC Davis aligns with the Arboretum and Public Garden GATEways initiative, which sees campus landscapes as places for public engagement with academics, showcasing the work and values of the campus community. Students and the UC Davis community are key to creating these experiences and landscapes.

Needs Assessment

We conducted a thorough needs assessment to determine mutual needs and goals for each edible landscape on campus. Each step of the assessment informed the next. First, we conducted interviews with garden managers to determine their main challenges, one of which was visibility to the general student body. To investigate this issue, we designed and distributed interactive posters on campus and found that students were interested in growing food, but did not know that the gardens existed, where they were, or how to get involved.

To address this problem and others, we conducted a focus group and follow-up survey for garden leaders and allies on campus, exploring: creating a central website, unifying informative signage at all sites, pooling resources, and enhancing community solidarity across the campus edible landscapes. All parts of the needs assessment inform our recommendations.

Recommendations

Next Steps

Two of our team members will continue during spring quarter 2016 to complete ongoing projects. This will include building a central website, distributing follow-up outreach posters, developing a edible campus map, and investigating funding opportunities for signage. As a coordinator for the Edible Landscaping Internship, one team member will ensure that current and future interns contribute to the online calendar and blog regularly.

II. Recommendations for Client, Stakeholders, and Other Leaders

Arboretum and Public Garden

We suggest that Stacey Parker, Katie Hetrick, and other Arboretum and Public Garden staff aid in promoting the website. Parker and others at the Arboretum and Public Garden can continue to build their relationships with campus groundskeepers. We hope Parker continues her work in food safety and general advocacy for edible landscapes.

To aid the Arboretum, future Capstone groups, or garden leaders in securing funding for signage and garden development, our final report may be used for proposals. Possible sources of support include the ASUCD Green Initiative Fund and the Global Food Initiative.

Garden and Campus Leaders

We recommend that edible garden leaders across campus host more collaborative events and workdays. Events can include edible tours of campus, inter-garden potlucks, collaborative work-days, and more. We urge all to post to the website calendar and blog.

Future Capstone Group

A future Capstone group may organize a cross-garden volunteer corps, investigate funding opportunities, design unifying signage, or begin developing a physical edible garden hub.

UC Davis

UC Davis campus administrators and decision-makers have the unique opportunity to support our campus' edible gardens. As a world-class agricultural institution, UC Davis should promote its edible gardens through campus tours and orientation outreach, and we ask that campus administrators advocate for increased funding and institutional support.

Acknowledgements

We are immensely grateful to our client, Stacey Parker, for her constant support and enthusiasm. We thank garden leaders, poster contributors, and Castone participants for their feedback. Calvin Doval has been essential with website development, and Robyn Waxman's guidance inspired our Human Centered Design methods. Thank you to all departments and organizations that support our campus' many edible landscapes.

Introduction

The UC Davis campus is home to over ten edible landscapes. These edible landscapes, or food gardens, are an essential part of the campus community, providing experiential learning opportunities, showcasing the work of academic departments, empowering participants to grow their own food, and promoting health and wellness. (To read more about each garden, see Appendix 1). All emphasize education and environmental sustainability, aligning with the goals of UC Davis as an institution, and particularly the Sustainable 2nd Century Initiative.¹

The edible gardens and landscapes of UC Davis were developed over time as separate projects, with different specific goals and support systems. Despite their autonomy and differences, these sites share similar needs for intensive maintenance, aesthetics that fit in with the campus landscape, educational and engaging elements, and food and garden safety. More broadly, they lack exposure, stability, and connectivity. For these reasons, all struggle to achieve long-term viability.

Problem Statement

The edible landscapes on the UC Davis campus lack exposure, stability, and connectivity. Successful edible landscapes on campus can provide opportunities for experiential learning, demonstrate sustainability, promote health and food security, and enhance a personal connection to food. As a global leader in integrative agriculture and sustainability, UC Davis should showcase collaborative, highly visible edible landscapes on its own campus as a model for other universities and communities.

Client and Stakeholders

We have worked with the crucial guidance of our client, Stacey Parker, throughout this project. Parker is a GATEways Horticulturist at the Arboretum and Public Garden and advises the Edible Landscaping Internship, which trains interns in managing several of the edible gardens on campus.

In addition to direction from Parker and the Arboretum and Public Garden, we collaborated with numerous other stakeholders. Primary stakeholders include leaders and

¹ "Sustainable 2nd Century." *Sustainable 2nd Century*. UC Davis, n.d. Web.

representatives of the campus edible landscapes, as well as the general student body and UC Davis community. Other stakeholders less directly involved in our project include UC Davis Dining Services, Grounds and Landscape Services, the ASUCD Food Pantry, Student Health and Counseling Services, the Agricultural Sustainability Institute, and Plant Sciences.

Vision

Edible landscapes have the potential to enhance experiential learning, promote health and wellness, and demonstrate environmental sustainability². As outlined by the Arboretum and Public Garden GATEways initiative, campus landscapes such as these are places for public engagement with academics, where students and staff are essential in creating the landscape and its experience.³ We envision UC Davis in the near future as home to a network of successful edible landscapes, each achieving their various goals, but with a unifying vision and enhanced collaboration between each other and other groups and institutions. Collaboration and unity, which contribute to increased visibility, improves mutual access to resources and ultimately enhances sustainability, ensuring these gardens thrive well into the future.

Goal and Objectives

We believe UC Davis' edible landscapes can begin to reach their full potential through increased visibility and enhanced collaboration.

Our project sought to confirm our assumptions that the gardens actually needed to increase visibility and collaboration to achieve their goals and thrive in the long term. Only after confirming these assumptions could we begin to build and refine methods for increasing visibility and collaboration.

Methodology

Human Centered Design

The main methodology guiding our progression was Human Centered Design. Human Centered Design is an approach to understand how people use systems, products, spaces,

² Hale, James, et al. "Connecting food environments and health through the relational nature of aesthetics: Gaining insight through the community gardening experience." *Social science & medicine* 72.11 (2011): 1853-1863

³ Parker, Stacey. "Re: Capstone update." Message to Natalie Dean. 24 Sept. 2015. Web.

and/or services, to accomplish their tasks and achieve their goals⁴. Human-centered design has three steps: discover, ideate, and prototype⁵. The discovery phase starts with gaining a deep understanding of the needs and motivations of stakeholders. The ideate phase involves interpreting and distilling the information gathered from the discovery phase. The final phase is the prototype phase where specific solutions are created and refined.

Discovery Phase

To start the discovery phase we needed to assess the needs of our stakeholders. We lacked the time and resources to connect with all the potential stakeholders for this project, so we focused on garden leaders, as well as university community members not involved with gardens.

Interviews

In order to test our assumption that campus edible landscapes lacked connection, we conducted interviews with garden leaders. Prior to the interviews, our team formulated questions we wanted to ask about each garden. Our meeting sought to answer specific questions about the gardens. First, we wanted to make sure that the garden leaders thought connectivity would strengthen their project. Second, we wanted to understand the existing connections and shared resources to see if they could be built upon.

Once we received confirmation that connectivity was necessary we asked the garden leaders about different ways to increase connectivity amongst the gardens. Our team formulated a list of possible modes of connection: uniform signage, inter-garden workshops, regular garden manager meetings, shared tools or volunteers. We also talked about methods of increasing garden visibility. Creating a communal garden website and map were a few of the ideas we posed to garden leaders.

Posters

⁴ "Design For Purpose: Human Centered Design." *Gateway to Emerson*. Ed. Steve Little. N.p., n.d. Web. 9 Mar. 2016. http://www.gatewaytoemerson.com/innovation/designing-for-purpose.html>.

⁵ "WHAT IS HUMAN-CENTERED DESIGN?." *Utah State Office of Education* . Utah State Office of Education , n.d. Web. 6 Dec. 2015.

http://www.schools.utah.gov/CURR/langartsec/Core/Design-Thinking/HumanCentered.aspx.

For the second component of the discovery phase, we designed an interactive 9"x11" poster to engage the general student body with our project. The posters were designed mainly to test our assumption that the edible gardens on campus lack visibility. The posters themselves, eye-catching and interactive, also served as outreach: an initial step in increasing the visibility of edible landscapes on campus.

The interactive posters sought to answer three main questions: what students thought of campus gardens, how their experience was if they knew about campus gardens, and if they were unfamiliar with the gardens, why they have not visited.

We placed the posters in strategic locations, mostly restroom stalls with pens attached on a piece of string, across campus over a period of three weeks. All posters had the same design, as we sought to create a clear "brand" that students would recognize and expect. Thanks to our poster design and distribution efforts, which invited participation and encouraged frequent exposure to the posters, we received ample feedback. Though we targeted students with the posters, we also appreciated any input received from staff, faculty, and visitors.

Ideate Phase

After gaining important information about the needs and values of our stakeholders through the garden leader interview and interactive posters, we transitioned into the ideate phase of our process. The ideate phase is the interpretation and distillation of the information gained from the discovery phase. The ideate phase consisted of a focus group and follow up survey with garden and campus leaders.

Focus group

We organized a focus group with garden leaders and interns from the Biological Orchard and Gardens, Student Farm, Student Health and Wellness Center, Segundo Resident Garden, and Ecological Garden, as well as Stacey Parker and Agricultural Sustainability director Tom Tomich. Participants had the opportunity to voice ideas, concerns, and inquiries about possible collective solutions that addressed feedback collected from our needs assessment. The focus group was a preliminary step towards increasing collaboration between the edible campus spaces, and may be the first meeting of many between garden leaders.

Follow-up survey

After the focus group, we sent out a follow-up survey to obtain more detailed feedback from garden leaders, including those not present at the meeting. The survey consisted of three sections determined by the main discussion topics during the focus group: website, signage, and community. We received twelve responses, representing nearly all of the edible landscape sites we had targeted.

Prototype Phase

The prototype phase is is the last step of Human Centered Design where solutions are created and refined with our client and other stakeholders. The Recommendations section details our recommended solutions for specific stakeholders: the Arboretum and Public Gardens, Stacey Parker, garden leaders, and future Sustainable Agriculture Capstone Groups.

Consultations with client and stakeholders

Throughout this project, members of our team met with our client, Stacey Parker, for feedback. Parker was a team member in addition to being our client, as she worked tirelessly to further the impact of our project, meeting with key decision-makers, offering ideas and critiques, and always giving our team a sense of purpose and direction.

One team member, in addition to Parker and Katie Hetrick, the Marketing and Communications Director at the Arboretum and Public Garden, met with a UC Davis web developer to explore the possibility of building a central website for edible landscapes on campus. The web developer, Calvin Doval, works in the Plant Sciences IT Department and was in the process of revitalizing the website for the Salad Bowl Garden, and contacted Parker for input. We took advantage of the opportunity to ask Doval if he could turn the website into a virtual hub for edible landscapes on campus.

Results

Student feedback

Our student feedback was acquired through our interactive posters. When students were asked to describe what campus gardens are, it was clear that many did not know edible gardens existed at UC Davis. This proves our assumption that campus gardens lack visibility.

Though most students were unaware of gardens and a few were uninterested, many gave very positive feedback. Words such as "cool", "beautiful", and "awesome" were used in abundance, as shown in the word maps in Appendix 3.

When asked "How was your experience?" students provided mostly positive responses. When asked "Why have you not visited a campus garden?," many students expressed interest in getting involved, but did not know how, and did not know where the gardens are located. These responses further prove our assumption that campus edible gardens are largely invisible and probably should focus more efforts on outreach to the wider student body, as there is great interest and potential that is currently being ignored.

Garden manager feedback

Our interviews with garden managers confirmed an interest among most leaders in uniform signage for the gardens, inter-garden workshops, regular garden manager meetings, shared tools or volunteers, and a central garden website and map. (See Appendix 4 for our interview questions and Appendix 5 for a summary of the answers.)

From the focus group and survey, we found that leaders and representatives of the campus gardens at UC Davis were enthusiastic about our vision and eager to contribute and collaborate.

There was strong support for enhancing connection between the gardens and finding ways to improve the visibility of the gardens on the UC Davis campus. One vital method of outreach is signage at the various sites. Interpretive, informational, or welcoming signs can be extremely effective in engaging visitors and passerby with gardens, which is clearly essential, as many UC Davis gardens are in central locations yet are passed by without a second glance. Interpretive signs in particular can educate passerby, strengthen awareness and pride in edible gardens, and draw attention to the space's identity and mission. They are a consistent message that can be viewed by a wide audience at visitors' convenience, with minimal effort from garden managers. To see a sample of a garden sign for one campus landscape that includes important elements discussed in the focus group, see Appendix 9.

10

⁶ "Recommendations for Developing Interpretive Signs." South Dakota State Historical Society. State of South Dakota, n.d. Web.

Conversations with several garden managers confirmed the need to pool or share volunteers, as some have to turn volunteers away while others need more help. With many other edible gardens on campus struggling from a lack of participation, this presents an opportunity for volunteers to be directed to where they are needed most. Discussions such as these confirmed our assumption that campus gardens will benefit from increased communication and connectivity.

We explored the possibility of building a central website for all the edible landscapes on campus. Garden managers were generally in favor of this idea, though some were concerned about it conflicting with their existing communications. We decided that a website would need to serve as more of a reference point for people to get started learning about the gardens on campus, including a map of all sites, information on how to get involved, and links to any existing websites. Most garden and campus leaders claimed they or a representative of their space would contribute to a collaborative garden blog and event calendar. A website could serve as a virtual hub for UC Davis' edible landscapes, in lieu of a physical central site. If built well and used frequently, it could become the main way people learn about and stay updated on edible landscapes at UC Davis.

Client and Capstone feedback

Throughout fall and winter quarters, we met regularly with our client Stacey Parker, and we frequently presented our progress to our fellow Capstone participants. Stacey gave us valuable suggestions for interview questions, survey topics, and focus group activities. She provided us with connections, opportunities, and new ideas. Our Capstone class offered opportunities and connections of their own, such as the opportunity to conduct outreach at the Dining Commons and the chance to learn about designing engaging posters.

Website meeting

Our meeting with the Plant Sciences web developer, Calvin Doval, was informative and very promising. Doval expressed interest in our project, and he and his student assistant were willing to take on the project we proposed: to turn the underutilized, out-of-date Salad Bowl Garden website into a central website for all edible landscapes on campus. Based on our feedback from garden managers and our assessment of student needs, we proposed a page for each edible landscape site, with a blurb containing a mission statement,

information on how to get involved, links to existing websites or social media pages, photos, and a "what's growing" section for some gardens.

In addition, we proposed a collaborative blog and calendar, as well as a map with all sites clearly marked. Ideally, the website will also contain a resources page with food safety information, campus garden allies (such as the ASUCD Food Pantry and the Agricultural Sustainability Institute), resources for learning to garden, and eventually a "tour UC Davis' edible gardens" page.

The website URL will likely be "growfood.ucdavis.edu," a reflection of garden leader concerns over "edible" language as well as the need for a specific, yet inspiring name.

Next Steps

Two of our team members, Natalie Dean and Isaac O'Leary, will continue during spring of 2016 to see unfinished projects through to completion. This will include working with web developer Calvin Doval to ensure the new website is completed and features a blog, calendar, and pages for each site in a visually engaging and simple layout. The site is estimated to be completed by late May 2016. Next steps will also include developing the map that will be featured on the website and in future outreach materials, investigating funding opportunities for signage development, and distributing follow-up outreach fliers. As a coordinator for the Edible Landscaping Internship, Natalie will ensure that current and future interns contribute to the website's online calendar and blog regularly.

Next quarter, Natalie and Isaac will work on a campus "Edible Landscapes" map, designed to address the lack of knowledge about campus gardens and where they are located, a need we confirmed through the interactive posters. Natalie and Isaac may also work with garden leaders to design more engaging, educational on-site signage that visually unifies all of the garden spaces. They will also seek funding and support for the construction of engaging and interpretive signage.

The follow-up interactive outreach fliers (see Appendix 7) include the website URL, a map, and a section for students to write their email addresses, which we will enter into a list server. This list server may be used in the future as an essential tool for direct student outreach by garden leaders.

Recommendations

Arboretum and Public Garden

We suggest that Stacey Parker, Katie Hetrick, and other Arboretum and Public Garden staff aid in promoting the website, primarily its blog and calendar sections. We recommend that Stacey and others at the Arboretum and Public Garden continue to build their relationships with campus groundskeepers, so both Grounds employees and garden leaders feel supported and connected. As she has already achieved breakthroughs in these areas, we hope that Stacey continues her work in food safety, and continues to advocate for edible landscaping on campus as a whole, as an advisor of the Edible Landscaping Internship. We also recommend that the Arboretum helps garden leaders investigate funding opportunities for signage and garden development. Our final report may be used for funding proposals for future signage and map development. Possible sources of support include the ASUCD Green Initiative Fund (TGIF), the Global Food Initiative, the World Food Center, and the Plant Sciences Department.

Edible landscape leaders

We recommend that edible garden leaders across campus host more collaborative events and workdays. In particular, larger organizations and growing spaces have the space and resources to spearhead collaborative outreach events or socials for multiple gardens. Events may include edible tours of campus, inter-garden potlucks, collaborative work-days, and more.

To promote longevity of these gardens, we recommend that campus garden leaders conduct more outreach within UC Davis Student Housing and Dining Services to encourage involvement from lowerclassmen. Another way to get students involved is through coursework. Courses such as PLS 49 (Organic Crop Production) bring students to the Student Farm, but could expand students' experience by also connecting with other edible landscapes on campus. Garden leaders could also advertise through carefully designed interactive posters or fliers, which for us were very effective in engaging students.

We suggest that garden leaders and interns investigate opportunities for institutional support and funding, such as the ASUCD Green Initiative Fund and the Global Food Initiative. Consistent institutional support aids immensely with garden stability.

Lastly, we urge garden leaders to post to the website calendar and blog, or require their interns and volunteers to contribute as part of their learning and outreach efforts.

Future Capstone group

With the hope that a future Sustainable Agriculture Capstone group will champion edible landscapes at UC Davis, we recommend students organize a cross-garden volunteer corps, investigate funding opportunities, design unifying signage, and/or look into developing a physical edible garden hub.

UC Davis

We suggest that UC Davis incorporates more discussion of edible landscapes into its campus tours. We understand the difficulty of adding to the campus tour protocol, but we strongly believe that thriving edible gardens are a major draw for potential students, fit into UC Davis' identity and mission, and would be a perfect topic to mention during tours. To reach more new students, we also recommend that information about UC Davis' edible gardens is distributed or discussed during freshmen and transfer student orientations, as well as emphasized by sustainability interns at campus Dining Commons.

As reflected in our problem statement, we believe UC Davis has the unique opportunity to showcase edible landscapes on its campus. They connect Aggies to UC Davis' heritage and mission in a very tangible, inspirational way. Edible gardens at UC Davis are a valuable part of the campus community, and they have the potential to add even more to its identity as a world-class agricultural institution in a city and campus known for their "green"-ness. We urge UC Davis administrators and decision-makers to further support these spaces by incorporating them into campus planning considerations, advocating for institutional support and funding, and increasing their visibility and impact in ways that are beyond our reach as a student team.

Conclusion

Successes

Postering to gather student feedback proved to be highly successful. With help from two design experts, we designed a poster that was creative and eye-catching. We received a high number of responses, most of which were helpful and answered the main questions we were investigating.

Our interviews with garden managers confirmed that we were heading in the right direction with our inquiries and ideas. The focus group and survey of garden leaders further

confirmed this, and reassured us that garden leaders actually wanted to collaborate and create a community together.

We were extremely lucky for the opportunity to develop a website. As one of our main goals is to increase the visibility of campus gardens, having a website to promote them all is ideal, and beyond what we expected to be able to accomplish.

Challenges

Our team encountered some challenges over the course of the project. First, we had to narrow the scope of the project and decide which goals were actually feasible. We had seemingly infinite ideas, but limited time and resources.

As part of our "discovery" phase of Human Centered Design research, we attempted to gain feedback from the UC Davis student body by tabling at a central campus location. This was mostly unsuccessful because we did not receive a significant number or quality of responses. In addition, though the great majority were enthusiastic and helpful, a few garden leaders were difficult to contact and engage in our project.

With regards to the website, we considered the URL "ediblecampus.ucdavis.edu," but faced some concern about the "edible" language, as it could potentially encourage food safety or theft problems. We also received a lot of positive feedback on this website title and believe it is more visionary than alternative names. Deciding on the final website name must balance concerns of food safety and theft with the advantages of welcoming and inspirational language.

Hoping to engage high-level UC Davis administrators with our project, we considered two additional projects: submitting a "Big Idea" and participating in the "Meals with Mrak" program. The Big Idea program matches visionary ideas on campus with funding opportunities, and we believe our little project, particularly projects such as unifying garden signage, has the potential to "go big"—a project with meager financial requirements, but major implications for UC Davis' identity and future. However, the Big Idea program is designed to fund very large and costly projects. Although our project has big implications for our campus community, it did not fit the requirements for a Big Idea submission. We turned towards another institutional opportunity, Meals with Mrak, to try to make our goals known to important decisionmakers. One of our group members attended a meal with an

administrator, but the discussion was focused elsewhere. We hope our message and vision will still be heard by the larger UC Davis community, including campus administrators.

Acknowledgements

We are extremely grateful for all the support and inspiration from all those involved in our project. The Arboretum and Public Garden, and especially our friend and client Stacey Parker, were a constant support. Stacey has truly been a member of our team, offering ideas and connections and inspiring us to think big and push through obstacles. We thank the Arboretum Edible Landscaping interns for their enthusiasm and participation in our survey, Katie Hetrick for her contribution to the website process, and to the Grounds Division for being open to our project.

Our project could not have gone far without campus edible landscape leaders, who engaged with us through interviews, the focus group, and the survey. We would like to thank Calvin Doval for his enthusiasm in taking on the website project. We are grateful to Robyn Waxman for inspiring us to conduct Human Centered Design research and guiding much of our human inquiry methodology. We acknowledge campus institutions and departments that support UC Davis' edible gardens, including Plant Sciences, UC Davis Dining Services, the Agricultural Sustainability Institute, the ASUCD Food Pantry, the Student Health and Counseling Services, and Project Compost. Finally, we would like to thank Tom Tomich, Zachary Dashner, and our fellow Capstone participants, including Kenna Fallan for her design help, for all of their support and guidance throughout the entire process.

Appendices

Appendix 1: Edible landscape index Appendix 2: Edible landscapes map

Appendix 3: Word maps constructed from poster feedback

Appendix 4: Interview questions for garden leaders

Appendix 5: Results from interviews with garden managers Appendix 6: Interactive Human Centered Design poster

Appendix 7: Follow-up poster

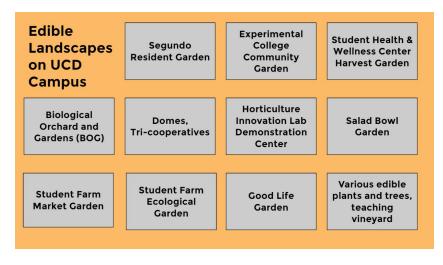
Appendix 8: Garden leader survey questions

Appendix 9: Sample garden sign

Appendix 10: Proposed website layout

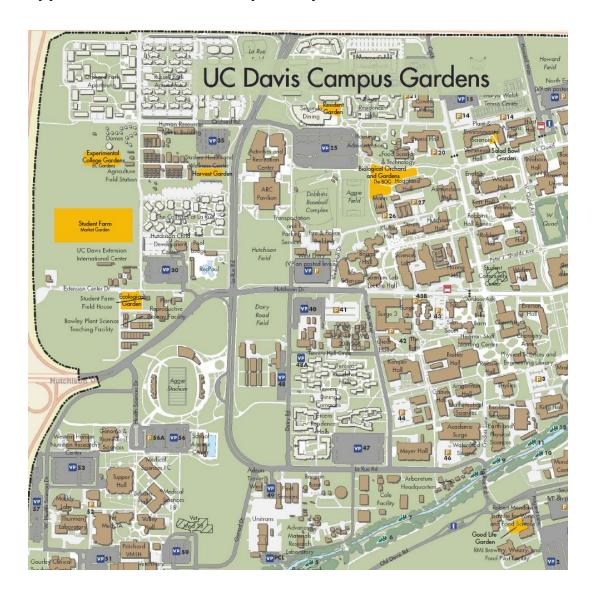
Appendix 1: Edible landscape index

There are numerous edible landscapes on campus, most with their own organized community and intentions. The **Segundo Resident Garden** seeks to help freshmen at the Segundo Residence Halls to connect with their food by giving them the option to



grow it. The Experimental College Community Garden (EC Garden) engages both on- and off-campus communities in a garden space. The Student Health and Wellness Center supports both an edible **Harvest Garden** and the medicinal **Healing Patch**, intended to enhance health and wellness on campus. The **Biological Orchard and Gardens** (BOG) is an educational demonstration for backyard orchard management with edible trees. The Salad **Bowl Garden** is a model of small-scale raw food growing in central campus. The **Student Farm** Market Garden and Ecological Garden are larger productives spaces committing to creating and exploring sustainable food systems. The **Good Life Garden** is a more formal aesthetic garden, showcasing edibles as a form of public art. The **Horticulture Innovation Lab Demonstration Center** is an Arboretum GATEways garden intended to share innovative horticultural practices with visitors from around the world. The **RMI teaching vineyard** features international varieties and provides hands-on learning for Viticulture and Enology students. The **Domes** and the **Tri Co-operatives** are alternative housing communities home to a variety of permaculture and ecological gardens. Beyond these more defined edible landscapes, UC Davis is also home to a number of edible plants and trees scattered throughout campus.

Appendix 2: Edible landscapes map



Appendix 3: Word maps constructed from poster feedback

Commonly written phrases and words appear larger.

CAMPUS GARDENS ARE....



How was your Experience?



WHY HAVE YOU NOT VISITED A CAMPUS GARDEN?



Appendix 4: Interview questions for garden leaders

- 1. What is your biggest challenge as a garden manager? (i.e. funding, support from experts/alums, resources/tools, outreach/engagement, etc.) What do you think could be done to help?
- 2. What's your involvement from students and the community like now, and how would you like to see it change?
- 3. What are you doing now to get student and community involvement? What are some challenges in getting people involved?
- 4. What are your existing connections to other entities or gardens on campus and how do you feel they help (or don't help) you and your garden?
- 5. What kind of campus connections would you like to make? (i.e. with departments, institutions, professors, or clubs)
- 6. The Arboretum Edible Landscaping Internship manages three campus gardens during the academic year and is connected to institutional resources and support.

 Do you think your garden could benefit from being one of the internship sites in the future?
- 7. Would you be interested in partnering with the Food Pantry, an ASUCD program providing free food to any student with a UCD ID?
- 8. Would you benefit from a network of shared resources between the various edible landscapes on campus? If so, what kind of resources would you like to share? (i.e. tools and other inputs, community connections/contacts, volunteers/farmers, etc.)
- 9. Are you potentially interested in hosting community workshops? If so, tell us what types of workshops you would like to have held at your garden (i.e. cooking, gardening skills, etc.).

Appendix 5: Results from interviews with garden managers

These are the topics that were discussed in individual interviews with garden representatives. Based on their concerns these criterion were found to overlap as most helpful and desirable.

Legend:

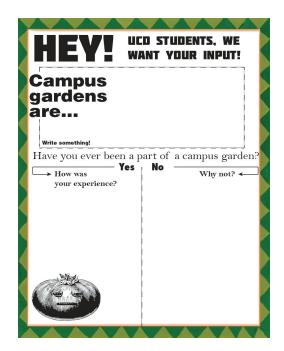
- \checkmark : Salad Bowl Garden, Good Life Garden, Healing Patch at Student Health & Wellness Center
- ✓: Resident Garden (Segundo)
- ✓: Biological Orchard Garden (BOG)
- ✓: Experimental College Garden
- ✓: Student Farm and Ecological Garden

	1	1	•	
	Willing to do	Not willing to do	Uncertain	Have done so already
Establishing connections and sharing resources between edible gardens on campus	√ √ √ √ √			✓ ✓ ✓
Creating more interpretive and "how to get involved" signs for individual garden spaces	/ / / / /			1
Creating a map with all edible sites on campus	✓ ✓ ✓ ✓		✓	
Reaching out and recruiting volunteers from a wide variety of majors on campus	////			1
Pooling and guiding excess interns/volunteers to other edible sites	/ / / /		✓ 	
Establishing a central website for all edible gardens	/ / / / /			

	Additional information taken away from Interviews
Salad Bowl Garden	The Salad Bowl Garden is managed by student interns and volunteers on a rotating basis. Jacob Siegler is the current garden manager. Both current and former garden managers expressed interest in improving engaging signage, although there is some at the garden already. Unlike some other campus gardens, the Salad Bowl Garden is financially supported by a campus department (Plant Sciences). This institutional support is unusual, but crucial to the garden's success and may be very helpful in other gardens. It is especially helpful for ensuring that the garden is continuously supported and maintained; it must be aesthetically pleasing as it is in a very central, visible location.
Resident Garden (Segundo)	Nancy Zheng coordinates the small, raised beds that are the Resident Garden. After orienting herself this quarter on the garden, seeing as this is her first year in the position, she plans to give plots to future interns. As of now she has no interns. When she does accept some interns, she really wants to encourage them to explore the other gardens on campus. She envisions collaboration among the other gardens with field trips, and sharing plots, seeds, and transplants. As previously interning on the Student Farm, Nancy still seeks advice and mentorship from the Student Farm.
Biological Orchard Garden (BOG)	Kelly Torres and Emily Dorrance are both concerned about the young stage of the BOG. It is just starting to becoming established and they want to cultivate a space that won't be threatened from erosion and ensure its longevity. They also mentioned recruiting younger classman volunteers would help with turnover and provide more stability.
Experimental College Garden	Ahsan Hossain, the EC Garden Director, would love more applicants through a structured support network like the Arboretum Edible Landscaping Internship to fulfill volunteer and internship positions. It would greatly benefit involvement at the EC Garden as most volunteers and interns are through word of mouth.

	The EC Garden is currently in a transitional state, so not much is being done at the gardens in terms of outreach, workshops, etc. Rather the garden managers are planning how to use the land and are addressing their own long term maintenance needs to get ready for the next quarter. Ahsan emphasized that he and the EC Garden itself will be up to speed next quarter and would love to meet and discuss more.
Student Farm and Ecological Garden	The Market Garden and Eco Garden are unique in that they both have an abundance of interns and volunteers, so much so that they have to turn some away. However, these interns and volunteers mostly come from similar majors (SAFS, ESM, EPAP, IAD) and both Carol and Raoul seek diversity. Furthermore, they would love to host more volunteers and interns but they simply cannot afford it- if there was enough money to pay for a new lead position it could allow for more participation.
Healing Patch at Student Health & Wellness Center	The Healing Patch could benefit from more outreach and volunteer involvement. It has great potential for further connection with health-related events and programs, such as cooking classes or the Fruit and Veggie Up program.
Good Life Garden	Designed by campus landscape architect Christina Reyes, the Good Life Garden is a large edible public art installation complete with formal interpretive signs and a variety of attractive plants. A section of the Good Life Garden is designed and maintained by interns from the Arboretum Edible Landscaping Internship, but as a whole it relies on a paid employee, Pat, to ensure it looks good all year. Of all the campus edible landscapes, the Good Life Garden is most focused on aesthetics.

Appendix 6: Interactive human centered design poster



Appendix 7: Follow-up poster



Appendix 8: Garden leader survey questions

Survey: Edible Landscaping at UC Davis

At the focus group meeting, we received lots of valuable feedback and discussed new ideas and opportunities. The Edible Landscaping Capstone group presented information from our needs assessment with the general student body and with garden managers. We found that despite widespread interest, students don't know where the gardens are or how to get involved. We believe more collaboration (between the edible landscapes themselves, and with other campus resources) will enhance visibility, engagement, and overall success. This survey delves a little deeper into some of the things we discussed.

Your name:

The garden/department/organization you represent:

Website

During the focus group, we brought up the possibility of having a central (UC davis domain) website for all the edible landscapes on campus. We have the support to make this a reality very soon—but we need your input on the content. The website would have to be fairly static to minimize maintenance needs. It would primarily serve as a central information hub, and could contain links to existing garden websites, helpful resources, a calendar of events, or a blog.

What information would you like to display about your garden - for example, a blurb, information about how to get involved, link to existing webpage, and/or photos? If you're not a garden manager, what information would you find most useful? The website could contain a blog which could be updated more frequently, by representatives (i.e. students, interns, volunteers, etc.) of any campus garden. Would you read this blog and/or contribute to it?

If the website contained a collaborative event page or calendar for campus gardens that could be updated frequently by representatives of any garden, would you or someone at your site add events?

What other content would you like to see on the website?

What would you want the website to be called?

Signage

We discussed having more permanent signs at each of the edible gardens on campus that would provide information and create a unified look for all the sites.

What information would you find useful to have on signs at the gardens? *Community and Collaboration*

If there was a way to communicate via email or private blog with other garden leaders, would you utilize it? Would you prefer a different mode of communication, such as simply being provided with everyone's emails?

The focus group meeting was an example of collaborative brainstorming and community-building that we'd love to see continue. Are you interested in meeting with other edible campus leaders and community members more often?

How can the edible landscapes on campus enhance collaboration with academic departments and institutional resources? (Food Pantry, graduate students, Health & Wellness, greenhouses, Aggie Food Connect, Agricultural Sustainability Institute, etc.)

Do you have any other input, ideas, or questions you'd like to share?

Appendix 9: Sample garden sign

Welcome to the

Biological Orchard and Gardens

Mission statement

The BOG is a collaboration between students, staff, and faculty to create a living museum showcasing permaculture and biodiversity. The BOG features an orchard of threatened heirloom California fruit trees and drought-tolerant plants native to South Africa, the Mediterranean, and California.

Want to get involved?

Check out our Facebook page and send us a message. Or, visit **growfood.ucdavis.edu** to learn more!

Yes, you can pick the fruit! Just wash it before eating.





```
Appendix 10: Proposed website layout
URL: growfood.ucdavis.edu
Outline:
Home
      About
      Photos/slideshow
      Map
Gardens
      Salad Bowl Garden
             Blurb + photos + location
             What's growing
             Link to FB page
             Get involved
      Biological Orchard and Gardens (BOG)
             Blurb + photos + location
             Link to <u>FB page</u> and <u>website</u>
             What's growing
             Get involved
      Student Farm
             Blurbs + photos + location: Market Garden and Ecological Garden
             Link to website & blog
             Get involved
      Experimental Community Garden
             Blurb + photos + location
             Link to website
             Get involved
      Dome 7 Garden
             Blurb + photos + location
             What's growing
             Get involved
      Good Life Garden
             Blurb + photos + location
             What's growing
             Link to website and FB page
             Get involved
      ENH Greenhouses
             Blurb + photos + location
             What's growing
             Get involved
      Student Health and Wellness Center Gardens
             Blurb + photos + location
             What's growing
             Get involved
```

Tri-Cooperatives

Blurb + photos + location

Photos

Get involved: Link to FB page and DavisWiki page

More edible landscapes

Horticulture Innovation Lab Demonstration Center

Blurb + photos + location

Learn more: Link to website and Hort. Lab FB page

Viticulture and Enology Teaching Vineyard

Blurb + photos + location Learn more: Link to <u>website</u>

Edible trees and plants on campus

Blurb + photos Locations (on map)

Calendar Blog Resources

> Tour UC Davis' edible gardens Learn to garden Food and garden safety Campus garden allies

Draft of webpage layout:

