

Award Title

UMass Amherst Permaculture Initiative

Awards Categories

Careers, Academic Support, Service-Learning, Community Service and related

Executive Summary

The University of Massachusetts Amherst is redefining the idea of "local food" while simultaneously engaging over 5000 new students each year in service-learning opportunities. The UMass Amherst Permaculture Initiative transforms unproductive grass lawns on the campus into sustainable permaculture gardens using all student and local community volunteers.

In less than one year, the UMass Amherst Permaculture Initiative transformed a 12,000 square foot grass lawn into a low-maintenance, educational and model permaculture garden that is being recognized worldwide. Nearly 1000 volunteers from various backgrounds helped implement the Franklin Permaculture Garden since the project began last fall. This involved moving over 500,000 pounds of compost and wood chips by hand, using no fossil fuels on-site. In addition, over 10,000 UMass students participated in a permaculture workshop or presentation. Together, the campus has planted over 1500 fruit trees, berry bushes, herbs, flowers and vegetables on the quarter-acre site.

Permaculture is defined as, "ecological design for sustainable communities that involves people working together to care for the planet." It is considered to be the most sustainable form of gardening and farming and UMass Amherst is currently the only public university in the country implementing permaculture gardens directly on campus and using the food in the dining commons.

There are seven main learning outcomes for this initiative:

- 1) Generate service-learning opportunities for UMass students interested in sustainability.
- 2) Provide information to all 5000 incoming freshman students each year about permaculture and sustainable food production.
- 3) Engage the community outside of UMass Amherst and involve local K-12 students in the garden planting.
- 4) Offer classes, design workshops and hands-on training to students and community members who are interested in permaculture design.
- 5) Create new green jobs for students on the campus.
- 6) Grow local, fresh, sustainable food for the university's dining services.

7) Ability to replicate across campus and at other university's nationwide.

Through this initiative, thousands of students have found a place to go on campus for sustainable service-learning opportunities, community service, and training for new green careers.

In addition to the students, the UMass Amherst Permaculture Initiative is a collaborative effort amongst many different departments on campus. This includes Student Affairs and Campus Life, Auxiliary Services, Physical Plant, Facilities Planning, the College of Natural Sciences, and the Office of Waste Management.

The University of Massachusetts Amherst, which is deeply rooted as an agriculture school in origin, supports the UMass Permaculture Committee which consists of twelve passionate students and three staff members who are dedicated to ignite leadership and influence change on their university campus.

It is our hope that NASPA will choose to recognize and award the UMass Amherst Permaculture Initiative as a cutting-edge program that provides service-learning and community service opportunities plus "green jobs" training for university students and members of the local community.

More information about the UMass Amherst Permaculture Initiative can be found on our website – <http://www.umasspermaculture.com>

Award Description

Now entering its second year, the UMass Amherst Permaculture Initiative is conducting its second historic landscape transformation on the campus. This time it is a degraded hillside site that had previously been used for construction storage and a parking lot.

This harsh landscape, located outside of the Berkshire Dining Commons will be converted from a bare soil site into a thriving permaculture garden that provides thousands of students with service-learning opportunities and supplies thousands of pounds of produce for the UMass Amherst campus community. It will be completed in one year similar to the Franklin Permaculture Garden that you will soon read about.

The process of converting an underused or marginalized landscape is quite simple and easy to replicate. However, it is a fairly new concept and not widely practiced. There are three phases to the process and they often take place during fall, winter, and spring respectively. A detailed outline of our Year 1 project is provided below.

Year 1, Phase I: Planning, Outreach, and Sheet Mulching

The initial idea for the permaculture garden started as a student-led initiative in a sustainable agriculture class led by UMass Professor John Gerber. A group of students approached Ken Toong, executive director of auxiliary enterprises at UMass Amherst, expressing a need they had to create a garden that would add to the already existing sustainability efforts on campus.

Permaculture gardens are collaboratively designed, require minimal long-term maintenance and provide an abundance of food and resources for the local community.

In September 2010, UMass Auxiliary Services hired Ryan Harb, a certified permaculture designer and UMass alum, as the project director to begin laying the foundation steps for the garden. Soon after, Harb created the UMass Amherst Permaculture Committee, which composed of twelve undergraduate students from a variety of disciplines.

Eager to gain momentum and campus wide support for the project, the committee began developing a Facebook page and Wordpress blog to encourage student and local community involvement. When planning the phases of the garden, the permaculture committee searched for a way to create a closed-loop system to source their material needs. They found the solution directly on the university grounds. The compost came from the office of waste management, the recycled cardboard from dining services, the recycled newspapers from the campus news office, and the wood chips from fallen trees and branches.

In October 2010, the UMass Amherst Permaculture Committee, with help from student and local volunteers, embarked on the arduous mission to transform the otherwise unproductive grass lot in front of Franklin Dining Commons into a highly productive, aesthetically pleasing, educational, sustainable garden.

The UMass Permaculture Committee's goal was ambitious; they had to move more than 250,000 pounds of organic matter – by hand, using no fossil fuels on-site – and complete the sheet mulching in less than one month's time before the ground froze. Sheet mulching is an ecological gardening method that involves layering compost, cardboard and mulch onto an existing base such as a grass lawn.

First, a three inch layer of finished compost was spread over the entire 12,000 square foot site. This involved hundreds of students volunteering their time and working excitedly for nearly two weeks straight. Next, corrugated cardboard was placed on top of the compost to act as a weed barrier layer. Three inches of fresh wood chips were then placed on top of the cardboard. The garden remained like this until spring.

With help from more than 250 volunteers from the campus and local area, including Amherst Regional High School and Big Brothers Big Sisters Organization, the initial phase of the garden was completed in mid-November, 2010.

Pictures from Phase I: <http://www.umasspermaculture.com/photos/?album=GeneralPhotos>

Year 1, Phase II: Design

The sheet mulching process described above works best when plants are installed at least six months after. Therefore, we prepared the soil with students in the fall, designed the garden together during the winter, and planted in the spring.

In February, 2011 the UMass Amherst Permaculture Initiative held a campus-wide garden design workshop which involved over 100 participants. UMass Amherst students, faculty, staff, professional ecological designers, local gardeners and students from other schools all came together for four hours on a Saturday afternoon to design the Franklin Permaculture Garden.

The goal of the design workshop was to encourage collaboration among students, faculty, administration, outside community members and to bring their diversity of perspectives into one room. Everyone left the event feeling inspired, motivated, and empowered that their voices and concerns were all heard. Everyone on campus had a sense of ownership toward the first campus permaculture project which would soon be planted by students.

Video footage from the design workshop can be found on our youtube documentary video:
<http://www.youtube.com/watch?v=crrOm7jiSPQ>

Year 1, Phase III: Implementation

The actual planting of the Franklin Permaculture Garden commenced on May 26, 2011. Over the next three months the students and local volunteers planted fruit trees, berry bushes, perennial and annual vegetables, culinary and medicinal herbs, and a wide range of insect attracting flowers.

More than 300 volunteers were involved in planting over 1500 edible plants during that span. The UMass Amherst Permaculture Committee hosted student groups from K-12 schools and local non-profit programs including:

- Shelburne-Buckland Elementary (5.12.11),
- Shutesbury Elementary (5.17.11),
- JFK Middle School (6.3.11),
- Amherst Regional High School (6.9.11),
- Marks Meadow Summer Action Camp (7.7.11),
- Amherst Community Child Care (7.12.11),
- Pioneer Valley Chinese Immersion Charter School (7.13.11),
- and Big Brothers Big Sisters Organization.

Local school group pictures here:

<http://www.umasspermaculture.com/photos/?album=51211LocalElementarySchoolsVisitUMassPermaculture>

When UMass students arrived to campus in September, 2011 they saw a new permaculture garden that had previously been a grass lawn the year before. It had been installed over the past year by more than 1000 of their peers. Located directly outside of the Franklin Dining Commons, this garden not only provides food and serves to educate the campus community but it is also living proof that “local food” is closer than you think.

Year 2:

The garden is meeting all of its short and long-term goals, which range from providing service-learning and community service opportunities to offering students new "green" jobs working on the campus permaculture gardens. Six students are now being paid to help manage the garden and introduce new students to the UMass Amherst Permaculture Initiative. It serves as a model demonstration site for other universities across the nation.

In addition, UMass Amherst welcomed its largest incoming freshman class this year – nearly 5000 students – and they all were introduced to the UMass Amherst Permaculture Initiative by receiving a 30-minute presentation on their first day. In the last year alone, more than 10,000 UMass students have been introduced to the concept of permaculture by their fellow students and Ryan Harb, UMass Amherst Sustainability Coordinator.

UMass Amherst Chancellor, Robert C. Holub, is extremely supportive of the initiative and recently spoke about it to an audience of 20,000 individuals at the spring 2011 undergraduate commencement.

More recently, Chancellor Holub spoke at the Franklin Permaculture Garden dedication event on which drew hundreds of community members and featured internationally acclaimed author, anti hunger activist and food policy reformer, Frances Moore Lappe. She is best known for her award winning book, "Diet for a Small Planet" and is the official ambassador of the permaculture initiative.

You can watch her speech on our Youtube channel:
<http://www.youtube.com/watch?v=2OvL69bI5Vs>

Previously there were very few service-learning opportunities for students interested in sustainability. Now, over 10,000 students have been directly involved with the project through presentations and/or the hands-on field component.

Assessment Data

The UMass Amherst Permaculture Initiative is guided by our specific learning outcomes as mentioned in the executive summary. They align with the university's mission and the UMass Division of Student Affairs and Campus Life (SACL) five strategic goals.

The following strategic goals provide us with a roadmap to effectively carry out our responsibilities that lead to each student having a positive and productive collegiate experience ending in degree attainment and personal growth.

1. Transformational Learning - Student Affairs provides transformative learning experiences matching students' potential to their highest aspirations.
2. Student Engagement - Students are engaged in a comprehensive experiential learning model which incorporates innovative programming and responsive services that contribute to their personal development and academic success.
3. Resource Expansion - We have the necessary financial and physical resources to provide excellent programs and services to students.
4. Excellent Staff - We have a highly competent, engaged staff knowledgeable of best practices in the delivery of student development programs and services.
5. Partnership Recognition - We are recognized by the University's key stakeholders as integral to achieving excellence in student learning and development.

Assessment is linked to our learning outcomes as well as the Student Affairs strategic goals. Students submit evaluations of the program every two weeks allowing us to assess the effectiveness of the UMass Amherst Permaculture Initiative continuously over the course of the year. This feedback allows for "self correction" to the initiative and helps us understand that it is an always evolving process that is never stagnant so as to meet the shifting student needs.

Anonymous, closed-ended questions along with short-answer (open-ended) inquiries have given us the feedback we are looking for to make the initiative an on-going success. For example, recent feedback we received included:

85% of respondents said Much more than most courses and 15% of respondents said More than most courses to "Overall, how much do you feel you have learned in this course?"

87.5% of respondents said One of the best and 12.5% of respondents said Better than average to "What is your overall rating of this course?"

90% of respondents Strongly Agreed and 10% of respondents Agreed to "The UMass Amherst Permaculture Initiative offers hands-on experiential learning opportunities that is accessible to nearly every student at the university."

Open-ended feedback included statements such as:

"Being a part of this project has literally changed my life... it is the most gratifying, uplifting experience I've had since coming to UMass." ML

"This project has filled my past year with hope, happiness, and a sense of both purpose and community. I am truly grateful to have been able to be a part of it and I look forward to continue working on it next year." ML

"With UMass Permaculture I finally found a way to get involved in something on campus, and really make a difference." AK

"My involvement on the committee and volunteering in the implementation of the garden this year has been an experience, which honestly has forever altered my life." PG

"This class challenged me to work with others in a different way than what I'm used to... I feel that I know more about permaculture from actually doing it than if I just read." Anonymous

"It is rare that you get to learn, have fun, and drastically change the world around you for the best. What a great class! I wish there were more classes like this!" Anonymous

The UMass Amherst Permaculture Initiative facilitators take these responses and discuss how to both maintain student enthusiasm and add to the foundation that was built in year one. Students serving on the first UMass Amherst Permaculture Committee are now mentoring the new students and always think about the long-term sustainability of the project. These senior students are highly involved in the project design and have been trained to facilitate various campus events, workshops and are currently planning a national Permaculture Your Campus conference for other universities to attend next summer.

The UMass Permaculture Committee challenged them self to grow food directly outside of the dining commons and in less than one year they did exactly that. Students successfully transformed a previously under-utilized, 12,000 square foot grass lawn into the first campus permaculture garden and now they are going to do it again on an even more challenging site on campus.

For The University of Massachusetts Amherst, the campus permaculture initiative serves as a reminder of what a group of dedicated students, a lot of recycled cardboard and food waste, and a supportive community can accomplish in an ongoing effort to make the campus and planet a more sustainable and healthier place to live.

Again, it is our hope that NASPA will choose to recognize and award the UMass Amherst Permaculture Initiative as a cutting-edge program that provides service-learning and community service opportunities plus job creation for university students and members of the local community. Thank you for your consideration.

We ask that you please strongly consider watching this short video clip that shows the enormous impact of the UMass Amherst Permaculture Initiative and how many individuals it has involved: <http://www.youtube.com/watch?v=crrOm7jiSPQ>

Lastly, please follow this final link that includes pictures to go along with the entire submission: <https://udrive.oit.umass.edu/rharb/NASPA%20Excellence%20Award%20-%20UMass%20Amherst%20Permaculture%20Initiative.doc>