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Entry details

Entry Name: The Iron Griz Garden: Hyperlocal Produce for Fewer Carbon Emissions

Institution Name: University of Montana Campus Dining

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Essay:

UM Campus Dining Gardens

Carbon Neutrality

University of Montana Campus Dining is proud to submit the Iron Griz Garden for consideration for the Carbon Neutrality Sustainability Award. The Iron Griz Garden is a half-acre of regeneratively grown annual vegetables, cut flowers, an orchard, native plants, laying ducks, and honeybees. In 2025, this space produced 4,572# of produce valued at \$52,119 that was added to the campus food system. The garden is staffed by one full time employee as well as student employees, interns, and volunteers. It is a learning space that welcomes the community for tours, workshops, parties, or just to explore.

UM Campus Dining also caretakes the Associated Students of the University of Montana Childcare Garden (ASUM Garden). This childcare center serves the children of UM students, staff, and faculty from 3months to kindergarten. Iron Griz Garden staff visit the school garden weekly during the growing season to involve preschoolers in all aspects of growing their own food and flowers.

Overall Impact: The Iron Griz Garden is less than a mile south from the University's main campus, providing hyper-local food to units across campus with a minimal carbon impact from transportation. Yield fluctuates year to year as the seasons or as chef's requests change, but the offerings from the garden are always impactful. Students encounter them at the Lodge Dining Center, at Catering events, and during the summer, in the Iron Griz Bistro, which is a stone's throw from the garden.

Restoration agriculture principles are used in the garden to store carbon. We use scientifically proven techniques such as cover cropping, minimal soil disturbance, crop rotation, and planting with native varieties. These practices conserve soil, reduce CO2 emissions, reduce water use, and support wildlife. We test our soil every three years and they have revealed increased organic matter and a more balanced pH, indicating a healthier soil microbiome. We also source manure from a local farm animal rescue, increasing our soil nutrients and supporting a nearby nonprofit.

We pay our student employees fairly and teach them to advocate for themselves. Many go on to work in agricultural domains, where exploitation of workers is common. We encourage our student workers to stand up for themselves and others to create positive social change.

Over the past three years, the Iron Griz Garden has begun intentionally growing cut flowers for bouquets and arrangements for our Catering department and Iron Griz Bistro. These locally, fairly, and sustainably grown flowers replaced those with a devastating environmental and social impact. Most cut flowers in the United States are grown in Ecuador and Colombia and are shipped here through refrigerated air travel, creating literal tons of carbon emissions. All imported flowers are dipped in fungicides, which can leave harmful residues. The flower industries in these countries are not well regulated, and harsh pesticides are often used, damaging the environment and potentially remaining on the flowers. Women and children are often the workers in this industry, and they are exposed to these terrible conditions. By growing our own flowers, we short circuit this awful cycle with a better product that we can also use to educate our guests. We dry our own flowers for winter bouquets as well, decreasing the quantity of fresh flowers imported in the off season.

Creativity and Innovation: Many creative methods are used to encourage campus community involvement in the garden. There is an "open gate" policy, where we encourage anyone interested to visit with us if they see us working. We also employ more structured options, such as tours and workshops. We reach out to diverse audiences, from undergraduate classes to senior groups to preschoolers. The Iron Griz Garden also hosts a party each year, inviting stakeholders from across campus to wander and eat delicious local appetizers.

Costs vs. Return: The start-up costs of the Iron Griz Garden in 2016 were high, as all infrastructure projects are. Those thousands of dollars in investment have more than paid off over the past ten growing seasons. The Iron Griz Garden is continually a productive space. The garden provides bespoke produce that campus chefs can't find elsewhere on timetables they request. It has also become a landmark of the University community, a place to take your freshman class, the spot to host your internship, or even just a route to admire on a dog walk.

Applicability of Initiative: The ASUM Preschool Garden is an example of replicating the successes of the Iron Griz Garden at a smaller scale in a different environment. This garden started as a volunteer project with a few small beds. UM Campus Dining staff took over management in 2023 and have used the minimal infrastructure to grow food hand-in-hand with the preschoolers. Now there are weekly education activities and students get to complete all tasks from seeding to washing their harvest. The preschoolers are being introduced to fruits and vegetables and healthy foods are being added to their school lunches and snacks. This also reduces carbon emissions by decreasing the amount of food the preschool needs to order from our wholesale food distributor Sysco.

The Iron Griz Garden manager applied for several grants for this space and in 2025 was able to install a berry patch with four kinds of fruit. In the winter of 2025, she won over \$7,000 in funding that will transform this space. In

spring 2026, garden staff along with campus volunteers and contractors will install raised beds, drip irrigation, more fruiting shrubs, and a native flower garden. This investment will increase educational opportunities and the amount of food that can be grown.

Effectiveness of Measurement: We use detailed and robust measuring tools to quantify success in the garden. Everything we harvest is weighed and logged to give us information on the particular season, as well as help us understand trends from year to year. We take a soil test every three years to measure soil health and identify any remediation that needs to happen. We also track visitor numbers so we can understand which events are the most popular and identify populations who could be better served by our programming.

Please find produce tracking charts attached. A note on the first graph. The pounds of produce production in 2016 was higher than average because it was the first year and we were still working out crop ratios. We planted twice as much zucchini as we needed, and any gardener knows they create a ton of output.

Education, Outreach, and Marketing/Communications: The educational impact on students and the community is just as important as the physical produce grown in the Iron Griz Garden. We host dozens to hundreds of children every year from nearby schools, summer camps, and volunteer organizations. We are dedicated to instilling a sense of stewardship and wonder in all children who visit with us, as well as building real food growing skills.

Undergraduate students are deeply involved in the garden and make up the majority of the workforce. We host interns for academic credit every semester and have had a wide variety of majors such as computer science, environmental studies, communications, and dance. The garden manager facilitates student capstone and research projects. We also have season long student employees who are in the garden at least 25 hours a week, building concrete agricultural, conservation, and planning skills to carry with them after graduation.

Log in to nacufs.awardsplatform.com to see complete entry attachments.



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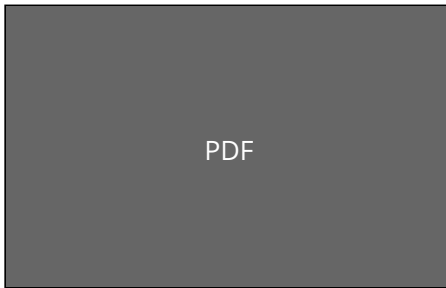
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