

## Sustainable Approaches to Food Production

University at Buffalo

Permaculture is a system of ecological design that aims to create more sustainable communities. Through understanding patterns in nature, people who practice permaculture learn how to grow food, manage water catchment and storage, utilize renewable energy, and build communities [1]. A permaculture system is the exemplary sustainable approach to food production systems that the Campus Garden aims to bring to the University at Buffalo. Permaculture values the interconnectedness of ecology, architecture and natural building. At its core are three ethics: earth care, people care, and fair share [1]. The belief is that through the building of this garden, we have created a community at UB that has a heightened understanding of where its food comes from (fair share), how that food affects individuals' bodies (people care), and how food production affects the environment (earth care).

With the framework of "Grow better, not bigger" in mind, the ultimate goal of this research is to double the amount of food production in the same 20'x20' plot. After the inaugural growing season, the Garden produced 20-pounds of food, returning it to the campus through various outlets. To advance the Garden's vision and further emphasize the importance of sustainability, it is our goal to explore different gardening techniques for implementation during the growing season. This research allows us to utilize the Garden's space as best possible and also be a representation to the campus community of how food production can occur despite space constraints. As a whole, we are aiming to educate individuals on alternative gardening techniques, prove that implementation of these techniques is plausible at other sites, and expand the campus community's understanding of food production processes. The four components to this alternative growing research include: 1) Community engagement and education; 2) Permaculture and companion planning; 3) Container gardening; and, 4) Vertical gardening.

[1] Cobb, Tanya Denckla. *Reclaiming Our Food: How the Grassroots Food Movement Is Changing the Way We Eat*. N.p.: n.p., n.d. Print.

