Living More Sustainably on an Urban College Campus: Fighting Food Insecurity and Aiding Pollination with Green Space at UW Tacoma.

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This project proposes the installation of vegetable and pollinator-friendly gardens in the empty plots located at the UWT student housing building on campus.

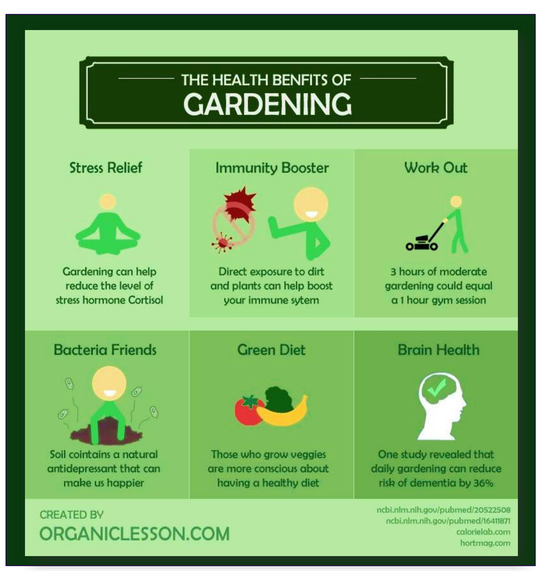
Why Do It?

- Pollination is an essential ecological service. Without pollinators, humans and all of earth's terrestrial ecosystems would not survive (USDA)
- Recent studies have shown that bee populations tend to be strong in urban areas as a result of higher levels of flower/perennial gardens as opposed to turf grass (Anderson at al, 2022)
- At UWT, 33% of students are food insecure to some degree (Stevens, 2020)
- The food harvest from these gardens will be available for student residents, with any excess food being donated to the Pantry.

Photo of Court 17 student housing by Alexa Christie

How Do We Get There?

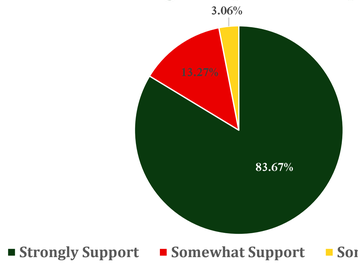
- Maintenance - would be conducted by willing student residents each week on a different floor schedule as well as by volunteers.



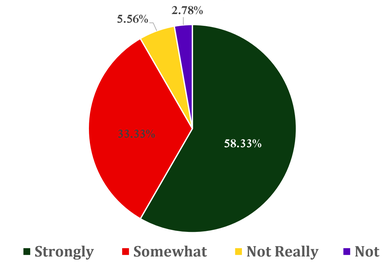
- Advertisement - would be free through social media, UWT campus website, newsletters, and other forms of paperless advertising
- Monthly data of harvested vegetation would be assessed by weight.
- Activity of insect activity will also be collected through a collaborative observational study, with data collected on a quarterly basis
- Post-market survey to collect qualitative data on student and volunteer experiences and how project could be improved in the future

SURVEY RESULTS

How much do you support the addition of more green space on campus?



How interested are you in solving campus sustainability issues?

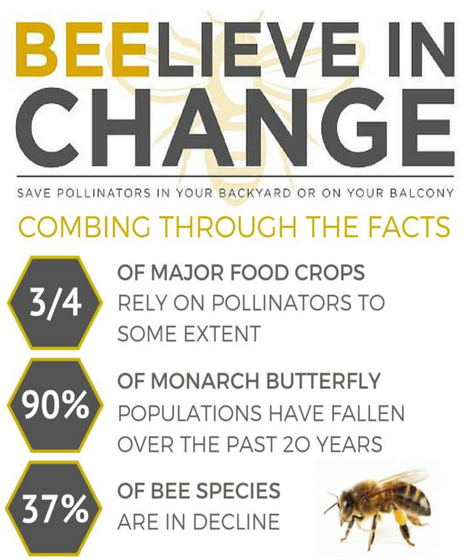


- Survey from UWT Pantry booth which focuses on general knowledge on food insecurity and the UWT Pantry itself
- Campus-wide survey results (210 respondents):
- 97% of respondents stated they support the addition of more green space (including vegetation) on campus
- 98% of respondents stated that university funding towards reducing food insecurity is very important

The Benefits!

This Project Will:

- Reduce carbon footprint by shopping local
- Financially support the UWT Pantry by providing food on a regular basis, directly helps support UWT residents
- Provide fresh, local produce in the downtown Tacoma food desert (Joassart-Marcelli, 2017)
- Generate oxygen through photosynthesis—that helpful service performed by plants and algae, making life possible for humans
- Give student a chance to socialize through a common goal and make new friends



Provided by the Sierra Club

- The benefits of green spaces on human health are well documented, with recent studies showing a correlation between access to green space and urban citizens' cortisol levels as well as general physical health (Maas et al, 2006)

Obstacles

- The irrigation system in the plots is not working properly and needs to fixed
- Student attendance goes down in summer – the busiest season for vegetation and pollination
- Student interest in maintenance will most likely vary throughout different quarters of the year
- Still need a plan for the transitions of winter and summer gardens and the different vegetation they require

Photo of empty plots on the side of Court 17

REFERENCES

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