Project Worm

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Abstract

With the effects of increasing carbon emissions and overflowing landfills becoming more and more apparent around the world, Project Worm hopes to spread sustainably mindful behavior throughout Embry-Riddle Aeronautical University. The overarching goal of Project Worm is to educate and inform the Embry-Riddle Daytona Beach campus’ student body on the importance of composting and its ability to positively aid in combating our current global climate crisis. Project Worm’s immediate aim is to provide ERAU students with the option to compost their own organic material from the comfort of their home. As a result of this project, it is expected for the participants to have fully functioning composting bins and an informed attitude towards the harmful effects of carbon emissions, overwhelming landfill sizes, and unhealthy soil, and how composting can dramatically reduce these effects.

Approach

- Begin with an initial online survey to gauge interest and ask initial questions.
- Hold a meeting to accomplish three main goals:
  ○ Teach the participants about composting and its positive effects on the environment.
  ○ Instruct the participants about their individual composting bins.
  ○ Distribute the necessary supplies to each of the participants.
- Periodic follow-up surveys will be sent out to the participants every two weeks over the six month composting period to assess progress and satisfaction.
- For participants using indoor composting bins, trips to an external composting location will be made every two weeks to dispose of their collected compost.

Expected Results

After 6 months:
- Participants will acknowledge they have made an impact on the Daytona Beach community.
- Reduced carbon footprint by 29 pounds.
- Prevented 110 pounds of food waste from going into landfills.
- Participants will be more conscious of their food waste habits.
- Participants will be more knowledgeable about how to mitigate detriments derived from food waste.
- Composting will be regularly practiced by participants after project completion.
- Participants will teach others about composting and influence them to compost.
- Participants will ideally be inspired to spearhead a composting movement on campus.

Conclusion

Since this generation has the chance to define the future, the researchers sought to educate as many people about composting as is within their reach. As the population increases, so do pollution and organic waste levels. Without clean air and rich soil, crops produced will fail to fulfill human needs. Composting is an effective way to repair the environmental damage humans have caused and provide the future world with a surplus of natural resources.

Background

- The goal of Project Worm is to educate college students about the importance of composting.
- Soil around the world is losing richness and nutrients due to climate change.
- Due to air pollution, soil is losing the ability to absorb carbon.
- For these reasons, soil health is an important avenue for diminishing the effects of climate change.
- Food crises are emerging in western United States, yet food waste remains a huge problem.
- Organic waste produced by schools and universities is often overlooked.
- Project Worm aims to bring awareness to these issues.

Image 1: Outdoor composting vessel intended for use.
Image 2: Indoor composting vessel intended for use.

Acknowledgements

Loyola University Chicago: School of Environmental Sustainability. (2021). Composting: About the composting initiative.
Natural Resources Defense Council (NRDC). (2017). Wasted: How America is losing up to 40% of its good food before it even hits the table.

Recruit participants through workshops and surveys
Give participants materials and educate on how to use
6-month composting period with regular evaluation and calculate results
Draw conclusions and

Draw conclusions and