

TEAM NAME: ECOHAWKS

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SCHOOL: JERICO HIGH SCHOOL

GREENEST

PGC DAY 12

Biodiversity

An Investigation of
the Biodiversity at
our High School.

BENJAMIN WONG

ROHAN REDDY

BENJAMIN YAO

ROBERT YU



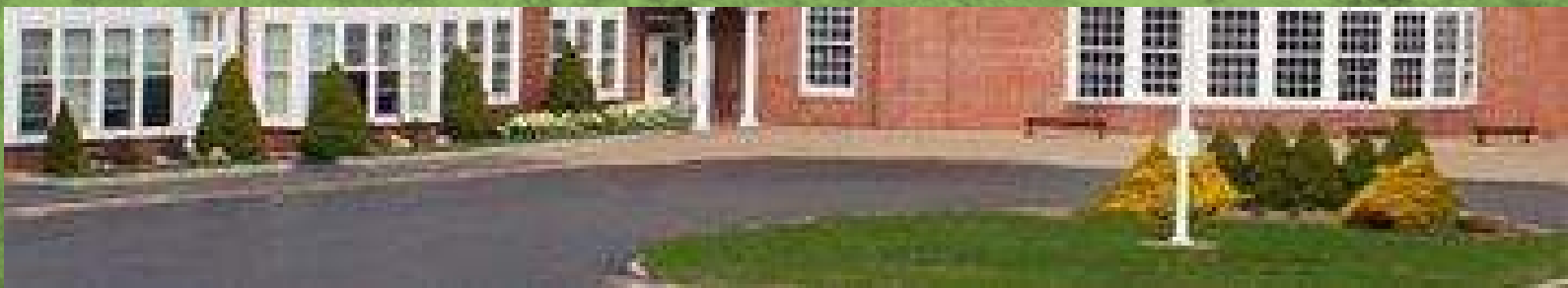
@ecohawks2017



Unfortunately, we observed that there is very little biodiversity in our school's campus. Most plant species on campus consist of trees, grasses, shrubs (pictured), simple pot flowers and typical New England garden plants.. There is a clear need for increased biodiversity and plant presence, indicated by the barren field below.

Flora Summary

AT JERICHO HIGH SCHOOL



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Reaching Out



Because there were so little plants to be seen as we walked around campus. we decided to obtain more information and details that we could get through our visual observations. We decided to contact a faculty member who is very familiar with plants on campus. Mr. Grossman is actually the keeper of Jericho High SChool's greenhouse that is attached to the High School's research laboratories!

On-Campus Plants

bgrossman@jerichoschools.org

On-Campus Plants

Dear Mr. Grossman,

I am contacting you on behalf of my team participating in the Project Green Challenge, the EcoHawks. We have a few questions regarding the plants we have on campus. If you find the time to do so, could you please answer the following questions?

Questions: Are there any pollinator friendly native plants on campus? Where does Jericho High School source our plants from?

Thank you so much for your time and consideration. Your response would be greatly appreciated.

Sincerely,
Benjamin Yao
Team EcoHawks | (Benjamin Wong, Rohan Reddy, Benjamin Yao, and Robert Yu)

Send

Saved

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Online Research

As we waited for a response from Mr. Grossman, the four of us met at the library to research about online to see if we could dig up any information about our school's pesticide and herbicide usage.

Green Clean Schools

Beginning eight years ago, Jericho Schools implemented green cleaning practices in the elementary schools with much success. In 2006, Governor Pataki issued Executive Order #134 directing all State agencies to clean with products that have properties that minimize potential impact on human health in public buildings. Jericho Schools, along with select other school districts on Long Island, has been at the forefront of this effort both inside and outside of all its buildings.

Geese Peace

We have implemented a program that is being used by the Nassau County Parks Dept. for the control of the Canadian Geese that frequent Jericho Schools property. During certain times of the year our properties will be patrolled at various times of the day by Border Collies with their handlers. **One of the most important aspects of successful geese control is to not feed the geese.** Your cooperation will be greatly appreciated.

Video Surveillance Cameras

The Jericho School District recognizes its responsibility to insure the safety, security and welfare of its students, staff and visitors in school buildings and on school grounds. Our school district employs video surveillance systems as part of our comprehensive safety plan.

Lawn and Turf Applications

Jericho Schools use only non toxic methods for weed control and lawn fertilization.

From time to time an application of herbicide may be needed to be applied to the baseball field clay areas. In this event a good faith effort will be made to notify anyone who wishes to be on a 48-hour pre notification e-mail list.

We learned that our school uses only "non toxic methods for weed control and lawn fertilization."

However, our school has herbicide usage with questionable impacts on human health and the environment

REPLY!

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Barry Grossman

to me

Hi Benjamin,

I do not have extensive knowledge of plant species distribution around the campus. There are however, a few pollinator specimens which I have noticed over the past few seasons, which include Trumpet vine (*Campsis radicans*) which attracts hummingbirds and moths, Yucca (unknown sp) which attracts several types of moth, and Butterfly Bush (*Buddleia davidii*), which attracts many species of butterfly. I do not know from where these plants are sourced.

Please let me know if you and your club would like to see these specimens.

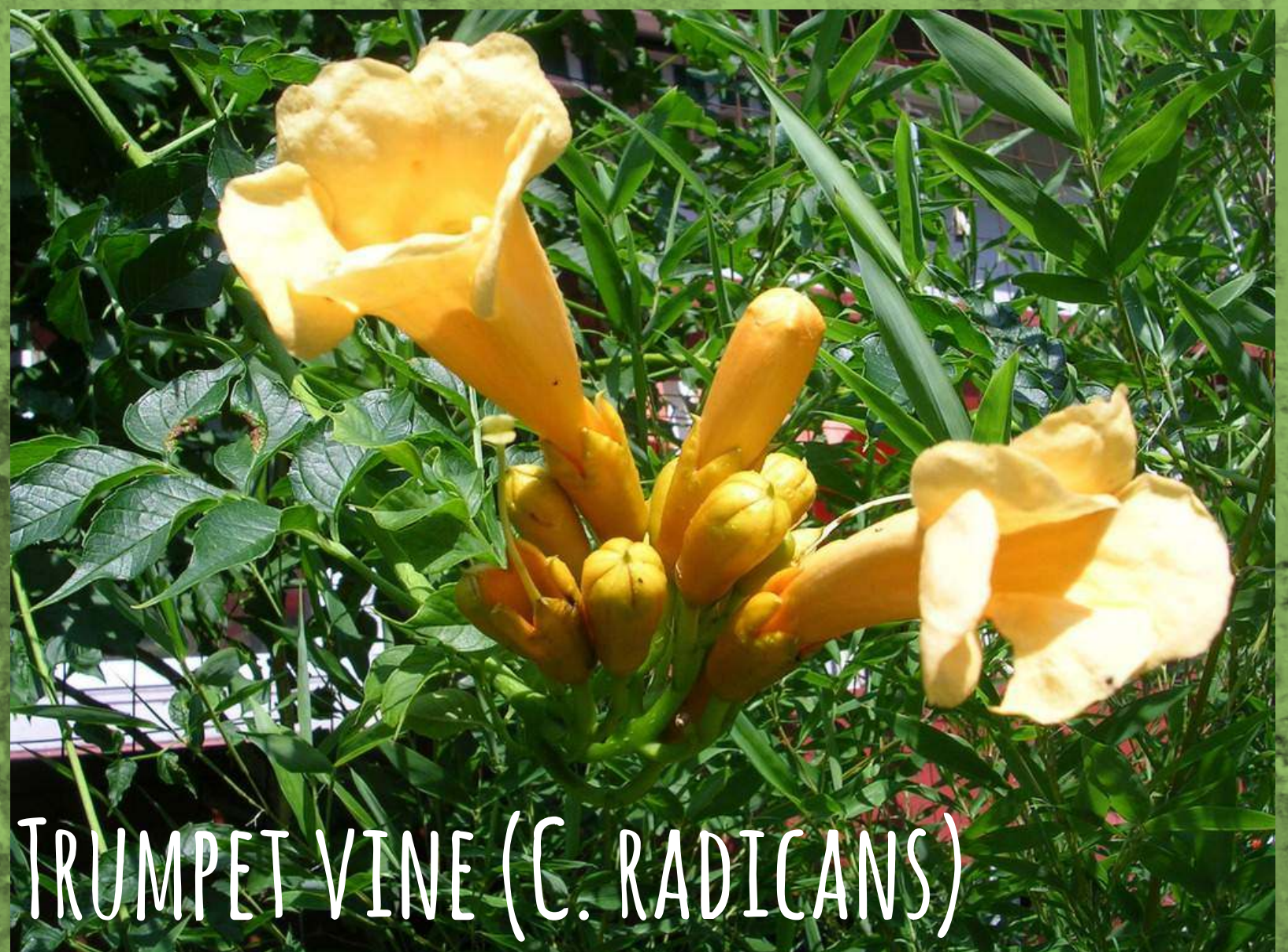
POLLINATOR SPECIMENS THAT MR. GROSSMAN HAS NOTICED ON CAMPUS:



YUCCA



BUTTERFLY BUSH (B. DAVIDII)



TRUMPET VINE (C. RADICANS)

Responses

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Are there any native, pollinator-friendly plants on campus?

Yucca (unknown sp) which attracts several types of moth, and Butterfly Bush (Buddleia davidii), which attracts many species of butterfly.

Where does your school source the plants?

There has been little change in the landscaping and plants in our school/campus. No one we reached out to was aware of the plant sourcing. For the past six years, students stated that they haven't seen any change and thus little no staff know where our plants were sourced..

Where on campus, could you grow more native, pollinator-friendly plants free of neonics?

There is a garden which much potential that is neglected and often forgotten. We personally interviewed dozens of our friends who all stated that they didn't even know this "secret garden" existed.



What on campus methods could be used instead of pesticides to ensure health of people, plants and species?

- Simple DIY alternatives
- Use other plants that repel insects/pests
- Use non-toxic pesticides
- Crop Rotation
- Routine Plant Inspection
- Sourcing "clean" and healthy plants, to prevent introduction of pests into garden.

Our Final Report

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What did you learn?

*Through investigating our school's flora, we realized how **little biodiversity** we have on campus. Mr. Grossman only reported to have seen three pollinator species, displaying the lacking variety of plants on campus. Still, after surveying our campus, we found plenty of areas to **start pollinator-friendly** gardens that weren't even being used. It was such an **eye-opening** experience, seeing the potential of our school to become more environmentally friendly. We also learned about a **variety of pollinator-plant species** that could benefit pollinators in our local area and increase the biodiversity at our school. We also learned how important biodiversity is to the ecosystem- it maintains a beautiful balance in the ecosystem. Without biodiversity of species, our world and ecosystem would be fragile and easily disrupted.*

Were you surprised by your findings?

At first we were surprised that our school had barely any flowers or plants on campus except for trees, shrubs, and a few flowers. We have been walking on campus for years, but never noticed the lack of diversity. It was extremely surprising.

Do you have any next steps in mind? If so what would they be?

Yes, we plan on finding out who has access and control of the "secret garden" and to inspire other students to help us create a garden. Our next steps include gathering a following to help us, conducting more research and planning our garden as the winter comes along, and then finally carrying out our goals to create the garden and implement pollinator-friendly plant species around campus.