

and Nutrition Northern Campus Design

Nikyra Wheaton, Eriel Johnson

Background



Goal: Provide design recommendations and implement educational materials within the Northern Campus for K-8 students at JJKFAN

Emphasis on sustainable agriculture and local ecology

Foster curiosity of the outdoors and an interest in agriculture

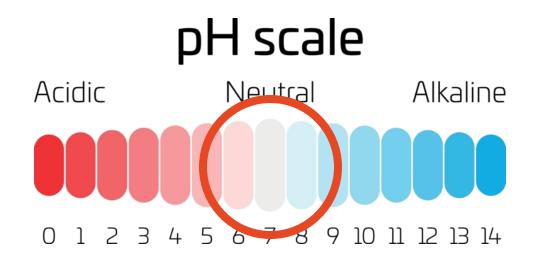
Design Plan

Soil Research

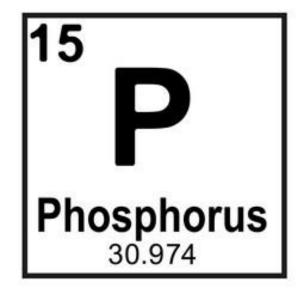
Phytoremediation refers to the use of plants and associated soil microbes to reduce the concentrations or toxic effects of contaminants in the environment



Soil Research



26 Fe Iron





Animal Research

- For my animal research project, I studied several species found in southern Illinois, learning about their habitats, diets, whether they are native or invasive, and their benefits and drawbacks.
- The species I looked at include salamanders, dragonflies, opossums, white-tailed deer, wild turkeys, black bears, ground squirrels, raccoons, groundhogs, coyotes, cardinals, hummingbirds, tree frogs, blue jays, red-tailed hawks, and striped skunks.
- After comparing research with my team, I focused on three threatened amphibians: the Eastern Narrow-Mouth Toad, the Bird-Voiced Treefrog, and the Illinois Chorus Frog. The purpose of this research was to find out what animals would fit.

threatened

Eastern Narrow-Mouth-Toad

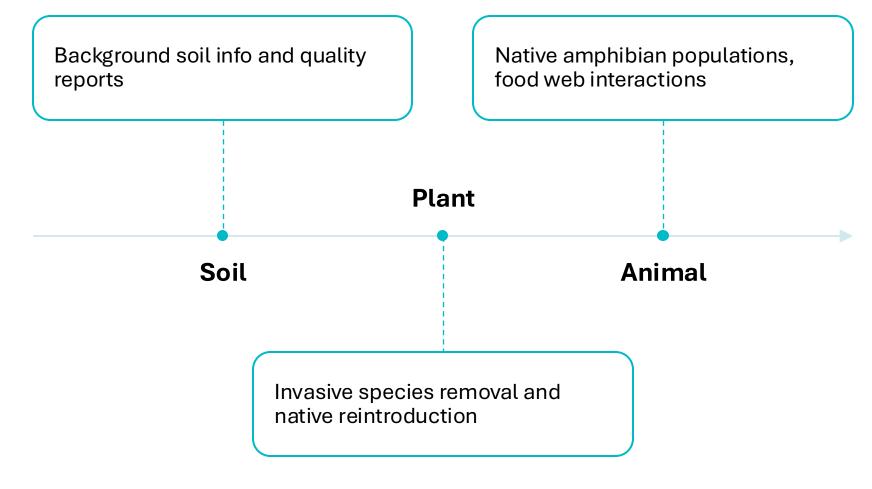
Bird-voiced treefrog

Illinois Chorus





Report



Educational Materials

What makes people interested in conservation?

- Research shows that several key factors increase someone's interest in conservation. People are usually drawn to conservation when they:
 - Connect conservation to their personal values
 - Feel an emotional connection to conservation
 - Have good knowledge about conservation
 - Gain social influence through participating in conservation
- If we really want people to care about the environment, we have to make conservation something they can see, touch and feel in their own lives. Hands-on activities like joining a neighborhood cleanup, planting a tree, or helping restore a local park let people experience the difference they're making, not just hear about it.







Planting

Clean Up

Community Work



Biomes



The 3 R's



Design Aspects of Educational Materials

Questions

- How can we hold each other responsible against harming the environment?
- How is the environment here (at jjkfan) unique?
- What types of animals/insects help the environment grow?
- How does the environment help us?
- How can people help the environment?
- What type of environment is in the area?

All of these questions came from Ava and Nikyra. I used Canva for the designs and the colors from the JJK-FAN website



Templates



How does the environment help us?

- Our environment provides us with many of the essential things that we need to live!
 - Clean air from trees as they take in the carbon dioxide that we breathe out and release the oxygen that we breathe in
 - Water from the rivers, lakes, and oceans around the world
 - Food from the plants and animals that help us to grow up and stay healthy
- So it's very important that we take care of our environment because it's also taking care of us!

Moving forward...

 More research and feedback given for the northern campus



 Providing assistance with maintaining the general health of the soil, flora, and fauna

References

https://www.nature.com/scitable/knowledge/library/phytoremediation-17359669/

https://partner.projectboard.world/oas/project/impact-of-native-indian-grass-blend-sorghastrum-nutans-on-metal-contaminants-in-soil-xlnxwx

https://americanairtesting.com/lead-soil-abatement-with-sunflowers/#:~:text=Phytoremediation%20is%20an%20innovative%20technique.of%20reach%20for%20other%20plants

https://alluvialsoillab.com/blogs/news/using-common-plants-to-remove-heavy-metals-from-garden-soils?srsltid=AfmBOoqBEVQ2ijt7l1dZEBCiWH5UaMSE078XEWsuWLozLm17dqzkfO9

https://jjkfan.org/

https://dnr.illinois.gov/education/wildaboutpages/wildaboutfrogs/waftamericantoad.html

https://dnr.illinois.gov/espb/etlistandlistreviewandrevision/e-t-list-

2025.html#:~:text=Table_title:%20Filters%20Table_content:%20header:%20%7C%20Taxon%20%7C,Frog%20%7C%20Illinois%20Listing%20Status:%20Threatened%20%7C