

FFL Principle 5- Attracting Wildlife: Landscape Architects High School

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Program Type: In Class Activity w/ optional community outreach		Duration: ~2-3hrs
Standards: SC.912.L.17.6: Compare and contrast the relationships among organisms, including predation, parasitism, competition, commensalism, and mutualism SC.912.L.17.8: Recognize the consequences of the losses of biodiversity due to catastrophic events, climate changes, human activity, and the introduction of invasive, non-native species SC.912.L.17.20: Predict the impact of individuals on environmental systems and examine how human lifestyles affect sustainability SC.912.N.1.1: Define a problem based on a specific scientific body of knowledge; pose investigable questions; conduct systematic observations; consult reference materials; plan investigations; use tools to gather, analyze, interpret, and communicate data; generate and justify explanations; and evaluate explanations of others		
Learning Objectives: Learn how to design a natural area in a way that attracts and provides a habitat for native Florida flora and fauna and why it is important to mindfully design landscaping to support native species and being able to succinctly and effectively inform community members of the importance of developing Florida-friendly landscaping.		
Guiding Questions: What is necessary for plants to survive and thrive in a certain location? How do plants interact and impact each other, and how do the plants present impact the other organisms that may be found there? How can students influence their community through outreach and education?		
Intended Outcomes		
As a result of the program, what I want my audience to LEARN... The factors that impact plant growth in ecological systems How different plants and animals can be adapted to certain environments Complex interactions between biotic and abiotic factors in natural and man-made ecosystems The roles humans play in altering natural systems as development occurs How public awareness can influence conservation in a community	As a result of the program, I want my audience to ACT by... Consider the impacts of non-native plants and ornamental species Considering how thoughtfully designed natural areas can support native plant and animal populations Explain to those in power the importance of thoughtfully designed landscaping	Assessment: (How will you know your audience has reached your intended outcomes) Create and share an outreach material (poster/flyer/social media post) to inform their community of the importance of considering native wildlife when making landscaping decisions
Schedule Layout:		Items Needed:
Introductory lesson based on material in FFL Principle 5, "attracting wildlife". Review the role of plants in an ecosystem, trophic levels and biotic and abiotic factors. Give a brief overview of the concept of urban ecology and the importance of meaningful design even in man-made landscaping ecosystems. ~20min		FFL Handbook. Available for free online through UF IFAS

Have students work together to identify (from a series of pictures) which common landscaping plants are native or non-native. This could be done as either a “card game” type activity where each group receives a deck of cards with each of the plants or as a gamified PowerPoint or online quiz game where teams can earn points or a prize for correct answers. ~20min	List of native/non-native landscaping plants- specific to the certain area and in any of the listed formats depending on classroom needs.
Have students consider what types of plants that may attract local species. Depending on grade level, provide a list of native animal species that may rely on local plant growth. Remind students of “right plant right place”.. Depending on technology availability, introduce the FFL plants mobile app and show students how many native plants are available to them and how the app will assist them with their project. ~20min	Same format as above, with the option to allow them to name their own additional plants. FFL Plants Mobile App (if technology is available)
Show students examples of a gardening/landscaping plan and challenge them to design a landscaping area of their own from scratch. Students will need to prepare full renderings of their plan (either sketched and colored or a digital mock-up with image) and include at least four specific, native species with descriptions of the wildlife that they attract and what makes those species an appropriate choice for that location. ~1hour	Poster board with coloring and art supplies OR laptops/iPads capable of preparing digital images
Students will design a persuasive poster, infographic, brochure or short video that uses scientific explanations to explain the importance of mindful landscaping to attract native wildlife. This item should be designed for the community to see and should propose specific suggestions for that particular community. ~30min	Art/digital media tools
Gallery walk or presentations- students will display and present their landscaping plans and outreach items and provide feedback. If possible, consider inviting a local environment group or staff for real-world feedback.	

Details:

Activity Set-Up:

Prepare lecture material that is grade/class-level appropriate and focuses on the specific location for FFL “attracting wildlife” principle.

Choose and prepare cards/slideshow of landscaping plants common to the area, with a good mix of native and non-native plants represented.

Choose and prepare cards/slideshow of native wildlife that may rely on landscaping plants for survival.

Download FFL Plant Guide app to any necessary devices (if applicable)

Collect and prepare supplies for any poster making or presentations.

Optional Extension: Partner with a local group (e.g., extension office, garden club, municipal sustainability team) to display the best student posters in a public space.