Sponsored by Wayne State University, Michigan Technological University and Belle Isle Conservancy

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**Let Me Tell You About Plants!**

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**Lesson Overview-** Students are going to educate the community about plants. Students will learn about the problems caused by introducing invasive plants into our ecosystem. Students will learn which invasive species are causing the most problems and find a beautiful native plant to promote in place of that plant. Students need to understand that it is important to keep our native plants here in Michigan instead of inviting invasive plants into our state. Their job is to start a campaign to promote native Michigan plants. Students will design a display and brochure to educate their community about why they should promote native plants and not introduce invasive plants.

**Target Grade/Subject:**  K **-** 5th Grade ELA, science and social studies

**Time:** 2 hours and 15 min. + presentations

**Sources Consulted-**

[**http://www.nativeplant.com/plants/search/input**](http://www.nativeplant.com/plants/search/input)

[**https://uswildflowers.com/wfquery.php?State=MI**](https://uswildflowers.com/wfquery.php?State=MI)

<http://www.yorkccd.org/wordpress/wp-content/uploads/2012/12/Why-Are-Native-Plants-Important.pdf>

<http://www.audubon.org/content/why-native-plants-matter>

**Learning Objectives**

Students will be able to:

* identify why invasive plants are harmful to Michigan’s plants and wildlife.
* identify the importance of native plants to our ecosystem.
* create a display about a native plant vs invasive species.
* present knowledgeably to their community.

**Michigan ELA,Science, and/or Social Studies Standard Addressed**

#### Kindergarten: SL.K.4 SL.K.5 SL.K.6 K-LS1-1 K-ESS2-2 K-P4.2.1 K-P4.2.2

**1st grade:** SL.1.4 SL.1.5 1-P4.2.1 1-P4.2.2 2-LS2-2 2-LS4-1 2-LS4-1

2-P4.2.1 2-P4.2.2

**3rd grade:** SL.3.4 SL.3.5 3-LS1-1 3-LS3-2 3-LS4-2 3-P4.2.1 3-P4.2.2

**4th grade:** SL.4.4 SL.4.5 SL.4.6 4-LS1-1 4-P4.2.1 4-P4.2.2

**5th grade:** SL.5.4 SL.5.5 SL.5.6 5-P4.2.1 5-P4.2.2

**List Materials & Quantities Needed** per class and per student group

Display board, paper, markers, crayons, and pencils for all.

Access to computers for research.

Color Printers to print labels

native plant seeds

small envelopes

**New Vocabulary**

**Damage**- harm or injury that makes something less useful or valuable.

**Habitat**- the natural environment of a plant or an animal.

**Impact**- effect or influence.

**Population**- the number of inhabitants, human or otherwise, of a particular category in a place.

**Rebound**- to recover from a loss.

**Native**- having origins in a particular country or area.

**Invasive Species-** 1) non-native (or alien) to the ecosystem under consideration and. 2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

## **Focus Question(s)**

What is a native plant?

Why are invasive plants harmful to Michigan?

What can you do to educate your community?

**Classroom Activities**

1. Share the focus questions with the students. The following sites have great information for educators- <http://www.yorkccd.org/wordpress/wp-content/uploads/2012/12/Why-Are-Native-Plants-Important.pdf> & <http://www.audubon.org/content/why-native-plants-matter> 15 minutes
2. Encourage students to be community advocates for Michigan plants. They will choose one of the following activities within their community. 2 hours
3. They will research which invasive species are being used by florists and which native plants could be used as a replacement. As a group, they need to prepare a presentation to take to local florists to educate them about why they shouldn’t use invasive materials in their designs.

1. They will research Michigan native plants to promote at nurseries. As a group, they need to prepare a presentation to take to a local nursery to educate them about why they should promote Michigan native plants and/or possibly have a display booth set up on a busy weekend.
2. They will research Michigan native plants to promote at a home and garden show. As a group, they need to prepare a presentation to take to a home and garden show to educate visitors about why they should promote Michigan native plants. Students can also give out packages of native plant seeds.
3. Presentation time varies
4. Extension- Invite your local government agency that protects against invasive species to present to your students and support their projects.

**Assessment of Student Learning** Students will be assessed using the rubric on this and the next page.

**Michigan Native Plants Unit** Student Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Students will be able to identify why invasive plants are harmful to Michigan’s plants and animals.** | Student participates at a proficient level and goes significantly beyond. The student is able to identify why invasive plants are harmful to Michigan’s plants and animals and make reference to other examples not described in the lesson. | Student correctly identifies and explains why invasive plants are harmful to Michigan’s plants and animals. | Student can identify some part of how invasive plants are harmful to Michigan’s plants and animals.Their answers are incomplete or partially accurate | Student cannot successfully identify why invasive plants are harmful to Michigan’s plants and animals. |
| **Students will be able to describe a Michigan Native plant. They will be able to name it by the common name, read the Latin name, and identify all of its characteristics.** | Student participates at a proficient level and goes significantly beyond. The student is able to describe a Michigan Native plant. They will be able to name it by the common name, read the Latin name, and identify all of its characteristics.In addition, the student can choose the best locations to plant their plant based on its needs. | Student correctly describe a Michigan Native plant. They will be able to name it by the common name, read the Latin name, and identify all of its characteristics. | Student can describe some parts of a Michigan Native plant by the common name, the Latin name, and its characteristics. | Student cannot successfully describe a Michigan Native plant. |
| **Students will be able to create a display board and brochure of a Michigan native plant vs. invasive species or non- native plants** | Student participates at a proficient level and goes beyond, for example by using thorough labeling and thoughtful descriptions ion their posters. | Student correctly portrays a native Michigan plant on their poster and completely lists the common name, Latin name, height, moisture, light, blooms, and typical price. | Student correctly portrays a native Michigan plant on their poster and partially lists the common name, Latin name, height, moisture, light, blooms, and typical price. | Student does not portray a native Michigan plant on their poster and/or accurately lists the common name, Latin name, height, moisture, light, blooms, and typical price. |

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| **Students will be able to present to the community about why people should promote native Michigan plants and avoid invasive species and/or non-native species.** | Student participates at a proficient level and goes beyond, for example they can answer questions posed to them by community members. | Student correctly portrays a native Michigan plant vs. an invasive species on their poster and brochure. Students can speak about the reasons to plant native plants proficiently. | Student correctly portrays a native Michigan plant vs. an invasive species on their poster and brochure. Students cannot speak about the reasons to plant native plants proficiently. | Student does not portray a native Michigan plant vs. an invasive species on their poster and brochure. Students cannot speak about the reasons to plant native plants proficiently. |

**We would greatly appreciate your feedback using this lesson plan! Please visit** [**https://www.biaquariumstem.org/survey.html**](https://www.biaquariumstem.org/survey.html) **to complete a short survey about your experience.**