



Module 3 ~ Why Manage Invasive Plants (UE)
**Answer Key – Reading Activity –
 Water Hyacinth in Florida – Then and Now**

Name: _____ Class Period: _____ Date: _____

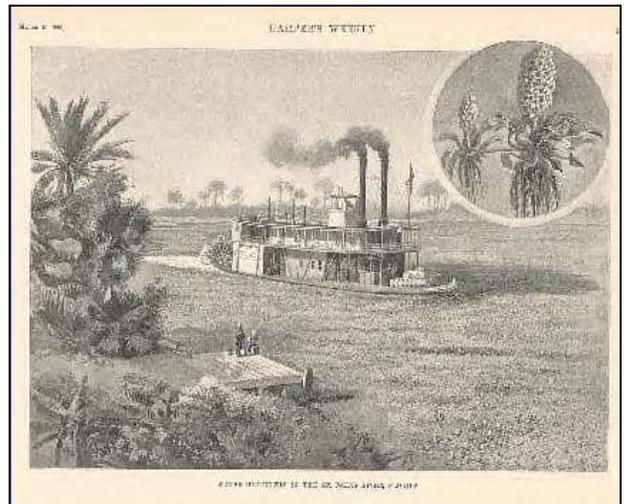
Directions: Read this passage and answer the questions below.

"WATER HYACINTHS AREN'T SOMETHING WE HAVE TO WORRY ABOUT THESE DAYS," said the fisherman while boating the St. Johns River. "Used to be I couldn't get my boat into the water, there were so many plants, but today there's not a problem."

The fisherman is only partly correct; he is able to get his boat into the river, because there are fewer water hyacinth plants now. But he's also incorrect, because we *do* have to worry about water hyacinths today.

Florida plant managers have been controlling water hyacinths for more than 100 years and succeeded in greatly reducing the number of these plants. So, for many people, the water hyacinths don't seem to be a problem at all.

They don't know that city, county, and state agencies in Florida spend over \$70 million dollars in plant management every year. Without this maintenance effort, our lakes, rivers, canals and wetlands would quickly be covered by invasive aquatic plants.



Water hyacinth plants infesting the St. Johns River in north Florida. This illustration was published in an 1898 issue of *Harper's Weekly* magazine. The author of the magazine article said, "I have seen vessels going at full speed brought to a complete standstill."

Today there are more than 100 non-native invasive aquatic and terrestrial plants on the loose in Florida waters and wetlands. Hydrilla, water hyacinth, melaleuca, and torpedo grass are very costly to control. Managing plants helps to protect Florida's natural environment and our tourism industry.

Directions: Answer the following questions using information from the passage above.

1. Are water hyacinths a problem in Florida today?

Yes, if water hyacinths weren't controlled they would cover natural aquatic habitats.

2. How much money does the state of Florida spend on removing problem plants each year?

70 million dollars are spent each year to control and managing invasive plants.

3. How do you think water hyacinth plants affected Florida 100 years ago?

Water hyacinth clogged the St. Johns River, as well as many lakes. Water transportation on lakes and rivers was difficult, if not impossible. This was important because barges and steamboats were a major mode of transportation back then. People depended on them for food, supplies, and travel. People would not have been able to swim or fish in the plant-infested water bodies.

Higher thinking answers:

Lack of control would also impact human health as these plants harbor disease carrying mosquitoes. Allowed snakes and alligators to hide



Module 3 ~ Why Manage Invasive Plants (UE)
**Answer Key – Reading Activity –
 Water Hyacinth in Florida – Then and Now**



The following is a list of suggested standards that pertain to this activity. This list is provided as a reference to incorporate and expand upon as needed.

Next Generation Sunshine State Standards

4th Grade

- SC.4.N.1.4: Recognize ways plants and animals, including humans, can impact the environment.
- SS.4.C.2.1: Discuss public issues in Florida that impact the daily lives of its citizens.

Common Core State Standards

4th Grade

Common Core Code	FL Common Core Code	Common Core Standard
RI.4.1	LAFS.4.RI.1.1	Refer to details and examples in a text when explaining what text says explicitly and when drawing inferences from text.
RI.4.2	LAFS.4.RI.1.2	Determine main idea of a text and explain how it is supported by key details; summarize the text.
RI.4.4	LAFS.4.RI.2.4	Determine meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
RI.4.10	LAFS.4.RI.4.10	By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as necessary at the high end of the range.
RF.4.3	LAFS.4.RF.3.3	Know and apply grade-level phonics and word analysis skills in decoding words.
RF.4.4	LAFS.4.RF.4.4	Read with sufficient accuracy and fluency to support comprehension.
RF.4.4a	LAFS.4.RF.4.4a	Read grade-level text with purpose and understanding.
SL.4.1	LAFS.4.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.
L.4.4	LAFS.4.L.3.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.
L.4.6	LAFS.4.L.3.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).

5th Grade

RI.5.1	LAFS.5.RI.1.1	Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
RI.5.4	LAFS.5.RI.2.4	Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.
RI.5.10	LAFS.5.RI.4.10	By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.
RF.5.3	LAFS.5.RF.3.3	Know and apply grade-level phonics and word analysis skills in decoding words.
RF.5.4	LAFS.5.RF.4.4	Read with sufficient accuracy and fluency to support comprehension.
RF.5.4a	LAFS.5.RF.4.4a	Read grade-level text with purpose and understanding.
SL.5.1	LAFS.5.SL.1.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
L.5.4	LAFS.5.L.3.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies.
L.5.6	LAFS.5.L.3.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., however, although, nevertheless, similarly, moreover, in addition).



Florida Invasive Plant Education Initiative • <http://plants.ifas.ufl.edu/education>
 A Collaboration of the UF/IFAS Center for Aquatic and Invasive Plants
 and the Florida Fish and Wildlife Conservation Commission / Invasive Plant Management Section
 University of Florida © 2012