

# Lakeville

## A Natural Resource Management Activity



*What would you do if you were in charge of the environment?*

SCORE RANGE	MANAGEMENT PLAN	CRITTER POPULATION
6 - 16	SEEK and DESTROY	1
17 - 27	KEEP IT UNDER CONTROL	2
28 - 38	WATCH IT	3
39 - 49	CONSERVATION: LET IT GROW	4
50 - 60	RESTORATION	5

From  
**UF-IFAS**  
**Center for Aquatic  
and Invasive Plants**

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**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

# Lakeville

## A Natural Resource Management Activity

- Goal
- 10 Steps to Playing Lakeville
- Lakeville's Impacts and Future
- Play the Game!

# Lakeville

## A Natural Resource Management Activity

### Goal

Provide students with the opportunity to learn about the challenges associated with making natural resource management decisions by giving them the opportunity to **participate** in the process.

# Lakeville

- 10 steps

1. Silent Invaders
2. Discuss/Define Ecosystem and Land Management
3. Large format poster of an ecosystem (Game Board)
4. Citizen Advisory Panel (players)
5. Critter Roles
6. Wheel of Focus
7. Critter advocates
8. Citizen Advisory Panel ask Questions
9. Scores =Management Plan
10. Critter populates the Ecosystem

# Step #1



## SILENT INVADERS

A true story about  
**native**, **non-native**  
and **invasive**  
plants in Florida.

*Click here to start the show!*

## Step #2

- Discuss
  - Ecosystem
  - Land Management

# Lakeville

**Define Ecosystem:** “An integrated unit of a biological community, its physical environment, and interactions.”

*(Florida Next Generation Sunshine State Standards)*



***Can your backyard be an ecosystem?***



# Lakeville

- Have you ever pulled a weed?
- Cut down a tree?
- Bought a plant to grow in your yard?

***You are a land (ecosystem) manager!***

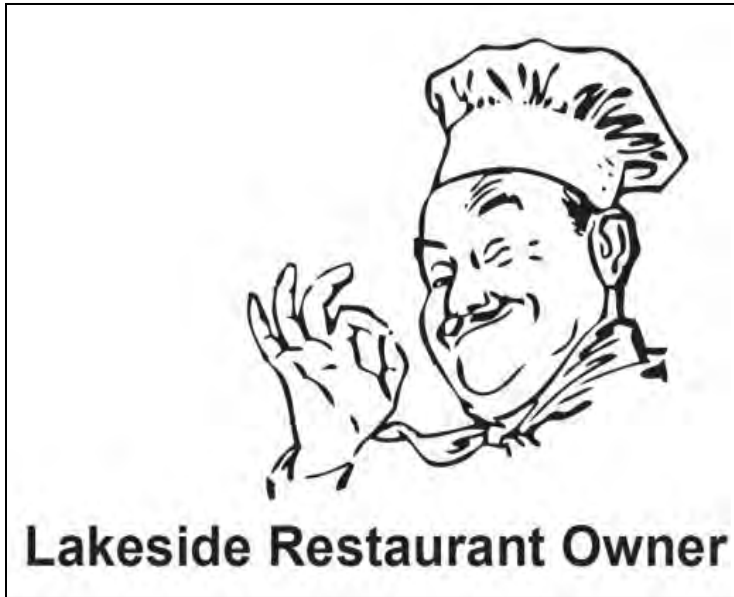
# Step#3 Large format habitat poster



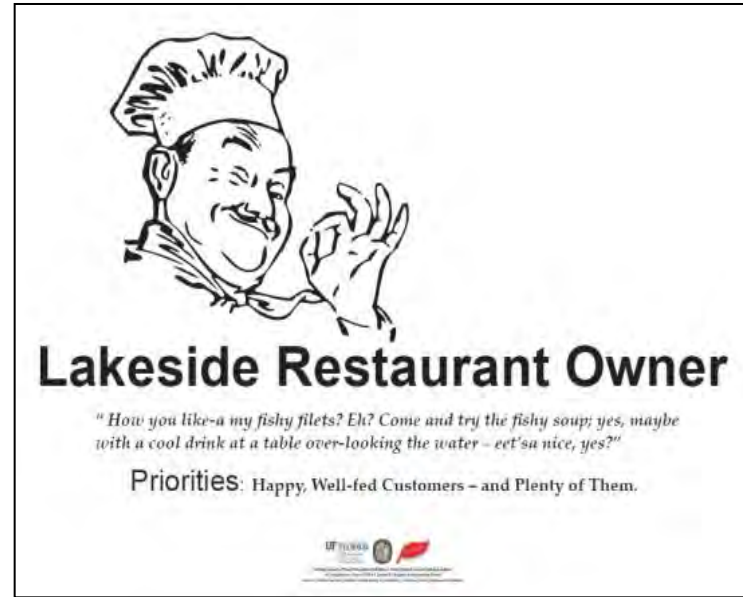
Lakeville – your local freshwater ecosystem

# Step#4 Choose Citizen Advisory Panel

## Citizen Role Cards



*front of card*



*back of card*

Cards provide “clues” for role playing or students can develop their own character traits for a selected citizen role.

*Priorities: Happy, well-fed customers – and plenty of them!*

# Citizen Role Cards (12 to choose from)



6 students are selected and given randomly chosen (or assigned) roles

# Step #5 Assign Critter Role Cards

## water hyacinth



front of card

## water hyacinth *Eichhornia crassipes* NON-NATIVE INVASIVE



PROS

CONS

- Water hyacinth has the ability to absorb heavy metals and toxins from water.
- It is a floating plant that can double its population every two weeks until it covers 100% of the water surface.
- This plant provides ideal habitat for several species of mosquitoes, which carry disease.
- As water hyacinth plants die and decay they can lower oxygen levels in the water and cause large amounts of muck to collect on the bottom of lakes.
- Water hyacinth grows so thick that it shades out other aquatic plants.
- This plant can create large "rafts" of plants that can prevent a boat from being able to move through the water.
- Water hyacinth is a popular water garden plant because of its pretty lavender flowers.



This information card is part of the game show strategy 7th/8th developed by the Florida Invasive Plant Education Initiative.

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back of card

Students are given critter role cards with information about their selected critter (*Is it aquatic or terrestrial? native, non-native or invasive? What does it eat? Economic value, etc.*)

# Critter Role Cards (30 to choose from)



**air potato**



**cat-tails**



**fragrant water lily**



**hydrilla**



**American alligator**



**coconut palm**



**Gambian pouch rat**



**iguana**



**Burmese python**



**duck potato**



**gopher tortoise**



**island apple snail**



**Canadian waterweed**



**eel grass**



**hibiscus species**



**largemouth bass**

# Critter Role Cards (30 to choose from)



**manatee**



**orange tree**



**red imported fire ant**



**tuberosus sword fern**



**monk parakeet**



**peanut plant**



**sailfin catfish**



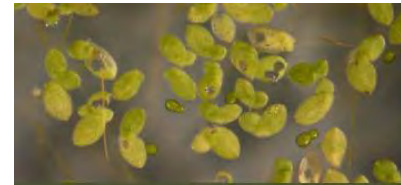
**water hyacinth**



**Old World climbing fern**



**pickerelweed**



**small duckweed**



**wild taro**



**poison ivy**



**snail kite**

Recommended: choose 12 to work with for one class session. Select critters based on relevancy to your community.

# Critter Magnets

(or JPEG images to be used on smart board)



30 critters; 5 of each (3" x 5") to be used for populating the habitat, based on decisions made by the Citizen Panel  
*(More on this later.)*



# Step #6 Wheel of Focus



Purchase for your classroom  
DIY instructions for making table-top version

# Step #7 and Step #8

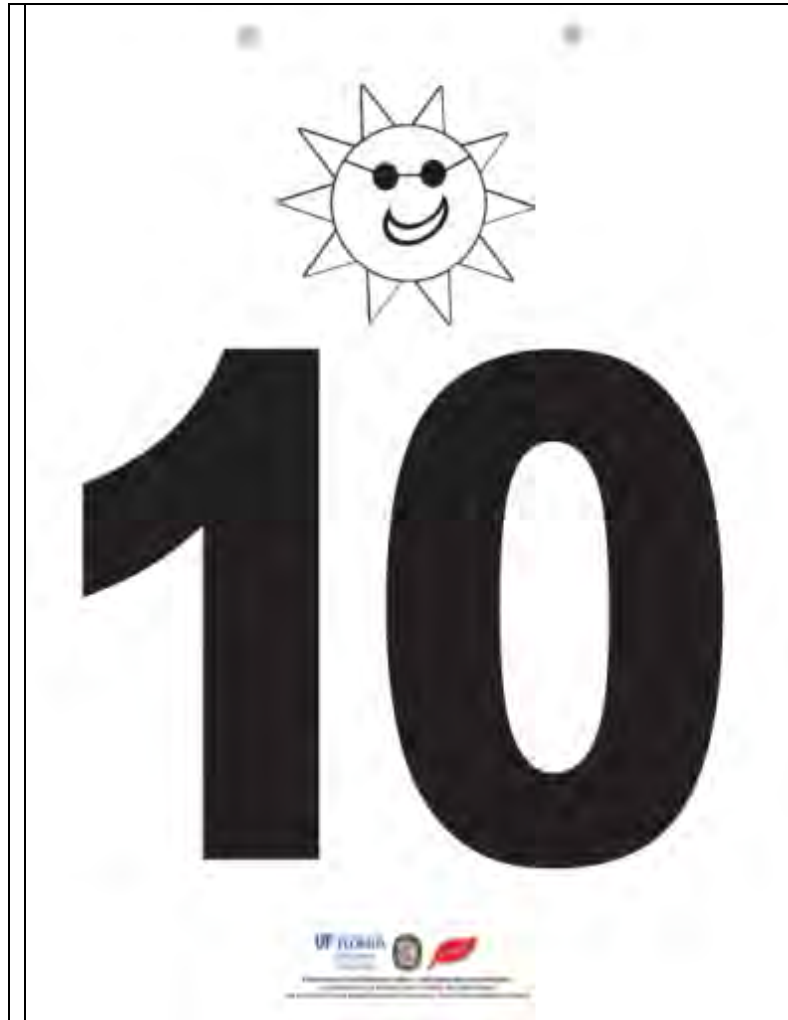


Step #7 Selected critter advocate(s) present in front of the class



Step#8 Citizen advisory panel asks questions; brief discussion with critter

# Step #9 Scorecards (10 to restore it; 1 to mow it)



Used by Citizen Panel to “vote” for management plan

# VOTE!

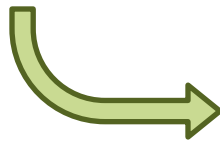


Advisory panel votes and the class adds individual scores to achieve a total score (ranging from 6 to 60)

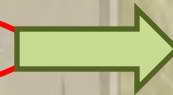
# Total Score



$$6+9+8+8+7+1 = 39$$



LAKEVILLE		
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9) Total score is used to determine a Management Plan (five levels)

\* See *Lakeville Large Habitat Poster* for scoring system

# Step #10

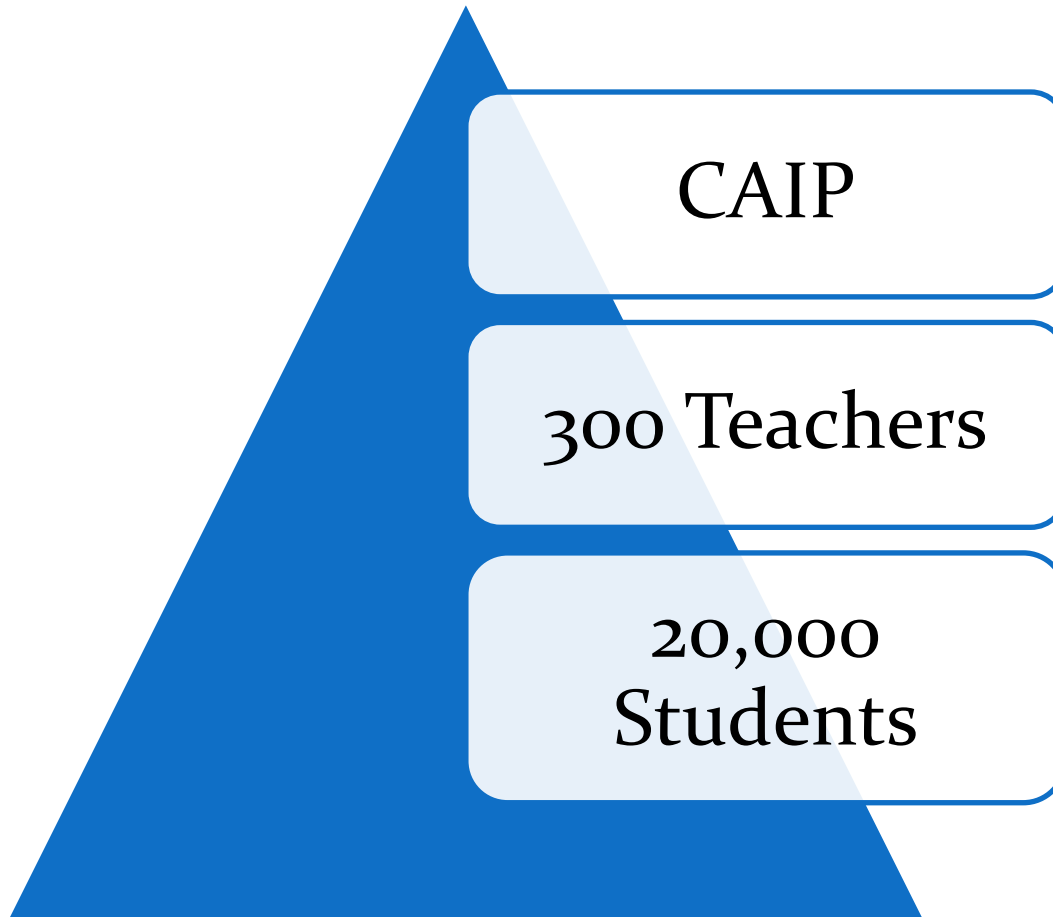
# Management Plan



Critter populates the board with management plan number.  
**IMPORTANT:** Students make decisions, even if they are not good ones and have consequences...



# Lakeville's Impacts





# Lakeville's Future

- Plant Camp 2013 (25 educators)
- Georgia Camp June 2013 (12 educators)
  - UGA/APMS/AERF
- Florida Schools 2013/2014 (5 schools)
  - FAPMS



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# Impact

**2012**

**2013**

**2014?**



# Lakeville

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**See *Lakeville Unit Guide***

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