Invasive species are a real problem in Mississippi and throughout the world because they:

- out-compete native species of plants
- change the soil
- contribute to erosion
- eliminate habitat for animals and other organisms

More than 350 species of invasive plants are known to occur in Mississippi. Some of the worst invasive plants of Mississippi are:

- Kudzu
- Water hyacinth
- Alligator weed
- Japanese honeysuckle
- Tallow tree
- Cogongrass
- Chinese privet
- Mimosa
- Japanese climbing fern
- Chinese wisteria

Find more information on invasive species in the Plant Atlas of the MidSouth
www.gri.msstate.edu/ipams

Kudzu, the South’s most notorious invasive plant, strangles native species

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Key to Symbols

**HABIT**

- Herb
- Small Tree/Shrub
- Large Tree

**LEAVES**

- Simple
  - <5 cm long
- Compound
  - <5 cm long
- Simple
  - >5 cm long
- Compound
  - >5 cm long

**FLOWERS**

- <1 cm
- 1-5 cm
- >5 cm

Distribution maps for species are based on the PLANTS Database, USDA, NRCS. 2014. (http://plants.usda.gov) National Plant Data Team, Greensboro, NC.

Photo Credits: M. Alford, M. Huneycutt, H. Sullivan, L. Wallace
Kudzu
Pueraria montana var. lobata

Identifying Features

- Terrestrial vine with compound leaves
- Clusters of purple-pink flowers
- Native to Eastern Asia
- Spread by wind, animals, vegetative growth

A: leaves; B: flowers
Questions

Grades K-2:
1. What does this plant use its leaves for?
2. What non-living things does this plant need to live?

Grades 3-5:
1. What are some of the characteristics that make this an invasive species?
2. Can animals be invasive species too? Why or why not?

Grades 6-8:
1. How would competition and predation affect the growth rates of invasive species compared to native species?
2. In what ways could invasive species reduce diversity of other plants? Animals?

Grades 9-12:
1. In what ways are invasive plant species harmful to people?
2. How do pollinators interact with invasive plants?
3. Why do some non-native species become invasive and others do not?
Water Hyacinth
Eichhornia crassipes

**Identifying Features**

- Aquatic, floating herb found in lakes, ponds, waterways
- Oval-shaped leaves with an inflated base
- Clusters of purple flowers
- Native to Brazil
- Spread by boats

A: habit; B: flowers and leaves
Questions

Grades K-2:
1. What does this plant use its stems for?
2. What happens when seeds of this plant start to grow?

Grades 3-5:
1. Do invasive species live the same way in their native habitats as they do in non-native habitats? Give some examples.
2. What would cause an invasive species to go extinct?

Grades 6-8:
1. In what ways do people help plants disperse?
2. In what ways could invasive species modify native food webs?

Grades 9-12:
1. What different pressures would invasive species face in non-native habitats compared to native habitats? How would these contribute to evolutionary changes?
2. How do herbivores interact with invasive plants?
3. How could population growth of invasive species be stopped?
Alligatorweed
Alternanthera philoxeroides

Identifying Features

- Aquatic herb found in lakes, ponds, waterways
- Linear-shaped leaves opposite on the stem
- Round clusters of white flowers
- Native to tropical America
- Spread by animals, boats

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Questions

**Grades K-2:**
1. What does this plant use its flowers for?
2. What are some characteristics of an invasive plant?

**Grades 3-5:**
1. Do invasive species live the same way in their native habitats as they do in non-native habitats? Give some examples.
2. Can animals be invasive species too? Why or why not?

**Grades 6-8:**
1. What other kinds of organisms can be invasive species? What traits would they have in common with invasive plants?
2. In what ways could invasive species reduce diversity of other plants? Animals?

**Grades 9-12:**
1. Some invasive species occur throughout the U.S. How would you expect evolution to be different in populations in Mississippi compared to California? Give examples?
2. In what ways do people help plants disperse?
Japanese Honeysuckle
Lonicera japonica

Identifying Features

- Terrestrial vine
- Leaves variable in shape; opposite on the stem
- White to yellow, sweet-smelling flowers in pairs
- Native to Japan
- Spread by animals; vegetative growth

A: habit; B: leaves
Questions

Grades K-2:
1. What does this plant use its roots for?
2. What non-living things does this plant need to live?

Grades 3-5:
1. What are some characteristics of invasive species?
2. What part of the life cycle is most important to control if we want to stop invasive species from spreading?

Grades 6-8:
1. What different things do invasive species encounter where they are not native compared to their native habitats?
2. In what ways could invasive species reduce diversity of Animals? Fungi?

Grades 9-12:
1. How do pollinators interact with invasive plants?
2. Consider the list of the worst invasive plants in Mississippi. What characteristics are shared among these species?
3. In what ways do people help plants disperse?
Tallowtree
Triadica sebifera

Identifying Features

- Triangular shaped leaves; alternate on the stem
- Clusters of yellow flowers
- Native to Asia
- Spread by birds, people

A: habit; B: close-up of leaf

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Questions

Grades K-2:
1. What does this plant use its stems for?
2. Are invasive species of plants consumers or producers? How do you know?

Grades 3-5:
1. Can animals be invasive species too? Why or why not?
2. What are some of the characteristics of an invasive species?

Grades 6-8:
1. How would competition and predation affect the growth rates of invasive species compared to native species?
2. In what ways could invasive plant species modify food webs?

Grades 9-12:
1. How do pollinators interact with invasive plants?
2. Why do some non-native species become invasive and others do not?
3. What different pressures would invasive species face in non-native habitats compared to native habitats? How would these cause evolution to occur?
Cogongrass
*Imperata cylindrica*

**Identifying Features**

- Long, thin leaves with a yellow mid-vein are very tough
- Clusters of whitish flowers at the tops of stems
- Native to Southeast Asia
- Spread by wind, people, vegetative spread

A: habit; B: close-up of inflorescences

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Questions

Grades K-2:
1. What does this plant use its flowers for?
2. What happens when seeds of this plant start to grow?

Grades 3-5:
1. Can invasive species go extinct like other species?
2. What part of the life cycle is most important to control if we want to stop invasive species from spreading?

Grades 6-8:
1. In what ways do people help plants disperse?
2. In what ways could invasive species reduce diversity of Fungi? Bacteria?

Grades 9-12:
1. What different pressures would invasive species face in non-native habitats compared to native habitats? How would these cause evolution to occur?
2. In what ways are invasive plant species harmful to people?
3. How do herbivores interact with invasive plants?
Chinese Privet
Ligustrum sinense

Identifying Features

• Oval leaves; opposite on the stem
• Clusters of white fragrant flowers
• Native to China
• Spread by birds, people

A: habit; B: flowers
Questions

Grades K-2:
1. What does this plant use its roots for?
2. Are invasive species of plants consumers or producers? How do you know?

Grades 3-5:
1. What characteristics of invasive plants would make them good competitors?
2. In what kinds of habitats do invasive species of plants grow?

Grades 6-8:
1. What other kinds of organisms can be invasive species? What traits would they have in common with invasive plants?
2. In what ways could invasive plant species modify food webs?

Grades 9-12:
1. Consider the list of the worst invasive plants in Mississippi. What characteristics are shared among these species?
2. In what ways are invasive plant species harmful to people?
3. How do herbivores interact with invasive plants?
Mimosa/Silktree
Albizia julibrissin

Identifying Features

- Compound leaves with many small leaflets
- Pom-pom-like pink flowers
- Native to Iran to Central China
- Spread by animals, people

A: habit; B: compound leaf; C: flower

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Questions

**Grades K-2:**
1. What does this plant use its leaves for?
2. What are some of the characteristics of an invasive species?

**Grades 3-5:**
1. Can invasive species go extinct like other species?
2. In what kinds of habitats do invasive species of plants grow?

**Grades 6-8:**
1. In what ways do people help plants disperse?
2. How would competition and predation affect growth rates of invasive species compared to native species?

**Grades 9-12:**
1. Some invasive species occur throughout the U.S. How would you expect evolution to be different in populations in Mississippi compared to California? Give examples?
2. How could population growth of invasive species be stopped?
3. Why do some non-native species become invasive and others do not?
Japanese Climbing Fern
Lygodium japonicum

Identifying Features

- Vine
- Twining, finger-like leaves
- Spores on the undersides of leaves
- Native to East Asia
- Spread by wind, people

A: habit; B: leaves

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Questions

Grades K-2:
1. What does this plant use its leaves for?
2. What non-living things does this plant need to live?

Grades 3-5:
1. In what kinds of habitats do invasive plant species grow?
2. Do invasive species live the same way in their native habitats as they do in non-native habitats? Give some examples.

Grades 6-8:
1. What different things do invasive species encounter where they are not native compared to their native habitats?
2. In what ways could invasive species reduce diversity of animals? Bacteria?

Grades 9-12:
1. How do pollinators interact with invasive plants?
2. In what ways are invasive species harmful to people?
3. Why do some non-native species become invasive and others do not?
Identifying Features

- Woody vine
- Compound leaves with many leaflets
- Clusters of purple flowers
- Native to China
- Spread by people, vegetative growth

A: flowers; B: leaves
Questions

Grades K-2:
1. What does this plant use its flowers for?
2. What happens when a seed of this plant starts to grow?

Grades 3-5:
1. Can invasive species go extinct like other species?
2. What characteristics of invasive plants would make them good competitors?

Grades 6-8:
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