



APES- Exotic Species Project

Purpose: *Species that have been transplanted from one ecosystem to another, are called "exotic species" and generally follow one of three paths. They either die off, create or partition a niche and adapt to their new environment, or become invasive. Invasive exotic species tend to take over the niche of several native species because they out-compete the native species and few predators control them.*

Managing invasive exotic species is difficult and sometimes controversial. Sometimes the control may cause as many problems as the invasive exotic species, as in the 2 sprays used to control the European gypsy moth in eastern oak forests. Often the control measures are labor intensive. Sometimes the invasive species has been in its new habitat for longer than people can remember and it is considered part of the landscape, as in the European starling and garlic mustard. Many times the "invasion" is not noticed until the "invader" is widespread and native species are being seriously impacted.

*Your assignment is to create a poster about one invasive species. Each poster will profile a different species that is considered invasive in the **United States**. (We are using the U.S. because it is easier to find information in English about species that are considered a problem here.)*

Background Information: <http://www.enviroliteracy.org/article.php/40.html>

Product: *A "Wanted Poster" for your species*

You must include the following:

- **Name:** *AKA: scientific name/common name/ "criminal name"*
- **Picture:** *A drawing or photograph (color preferred)*
- **Identifying Characteristics:** *Key features to look for when identifying the criminal*
- **Last Seen:** *Where did the species originally come from? **Include a map.***
- **Suspected Hideouts:** *Include a map of the U.S. with its current distribution shaded; description of preferred habitat*
- **Crimes Committed:** *By your species (crimes must be specific to your species and not general to all invasive species)*

- **Reward:** For elimination of your species (think ecologically, economically, socially, politically- be specific for your species)
- **Bibliography:** List of Internet sites/web addresses OR appropriate bibliographic information in the correct MLA format. Attach this to the back of your poster.
- **Presentation:** You will share the information on your species with the class in a brief (2-3 minutes) oral presentation

Turn in separate from your poster the following information, typed up on a single page:

- An introduction history (where it came from and how it got here)
- How it moves or how it increases its range- how quickly?
- Current Range in U.S.
- Why is it considered to be a problem?
- Methods of Control/Effects of control methods on indigenous species
- Cost for control of the species
- Cost of the impact of the invasive on our economy and/or the ecosystem
- An explanation of all of the information on your poster in more detail than poster allows, keep in mind all of the concepts we have studied in this unit that relate to the topic and try to tie them in (biodiversity, biotic potential, environmental resistance, predator/prey relationships, range of tolerance, habitat/niche, competitive exclusion principle, evolution, and/or natural selection)
- Bibliography- list of sites- **appropriately formatted**

Choose a Species: The following are a few of the species that have been identified as being invasive to the U.S. (you may choose another species if you clear it with me first!)

Asian clam (*Corbicula fluminea*)

Water hyacinth (*Eichhornia crassip*)

Nutria (*Myocastor coypus*)

Raspberry Crazy Ants (*Nylanderia* sp. near *pubens*)

Kudzu (*Pueraria montana* var. *lobata*)

Zebra mussel (*Dreissena polymorpha*)

Saltcedar (*Tamarix* spp.)

European gypsy moth (*Lymantria dispar*)

Africanized honeybee (*Apis mellifera scutellata*)

Butterfly peacock bass (*Cichla ocellari*)

Asian swamp eel (*Monopterus albus*)

Yellow iris (*Iris pseudacorus*)

Giant salvinia (*Salvinia molesta*)

Purple Star Thistle (*Centaurea calcitrapa*)

Redbelly tilapia (*Tilapia zillii*)

European starling (*Sturnus vulgaris*)

Wild Boar (*Sus scrofa*)

Mexican fruit fly (*Anastrepha ludens*)

Bighead carp (*Hypophthalmichthys nobilis*)

Hydrilla (*Hydrilla verticillata*)

Johnsongrass (*Sorghum halepense*)

Cheat grass (*Bromus tectorum*)

Fire ant (*Solenopsis invicta*)

Chinese mystery snail (*Cipangopaludina*

Brown tree snake (*Boiga irregularis*) *chinensis malleata*)