

World Travelers

Background

Examples of Six non-native animal species

Red Imported Fire Ant (*Solenopsis invicta*)

Native to: South America

Distribution in Texas: 2/3 of eastern Texas counties

Damage: agricultural crops, displace native ants, eliminate food sources for some wildlife, and kill newborn livestock and ground-dwelling wildlife

Human impact: Small children have occasionally died from multiple invasive ant stings

Economic impact: in the Dallas-Fort Worth metropolitan area alone totaled \$525.88 million in 1998

Control: biological – parasitic flies.

Wild Pigs (*Sus scrofa*)

Native to: Eurasia

Distribution in Texas: 73% of Texas counties

Damage: agricultural damage, habitat destruction, competition for food, vector and host to mammalian diseases

Human impact: great hunting, agriculturally destructive

Economic impact: 1,243 head of sheep and goats killed (total value about \$63,000) occurred in 1990

Control: hunting

Nutria (*Myocaster coypus*)

Native to: South America

Distribution in Texas: eastern 2/3 of the state

Damage: disturb wetlands and aquatic habitats, agricultural damage

Human impact: carry diseases that can affect humans

Control: hunting

Channeled Applesnail (*Pomacea canaliculata*)

Native to: Central & South America

Distribution in Texas: 7 counties in southeast Texas (2004)

Damage: consume large quantities of tender aquatic vegetation, habitat destruction

Human impact: agricultural impact – especially rice farming, possible vector of human parasite

Control: pesticide

Grass Carp (*Ctenopharyngodon idella*)

Native to: Eurasia

Distribution in Texas: Lake Conroe, Trinity River-Galveston Bay area.

Damage: competes with native species, consume large quantities of vegetation, habitat destruction

Human impact: used to control aquatic vegetation

Control: use of sterile “triploid” carp for vegetation control

European Starling (*Sturnus vulgaris*)

Native to: Europe

Distribution in Texas: all

Damage: compete with native cavity nesting birds, agricultural damage, consume cattle feed

Human impact: introduced deliberately to Central Park New York in 1890

Control: trapping (in California)

Examples of Six non-native plant species

Hydrilla (*Hydrilla verticillata*)

Native to: Africa

Distribution in Texas: 100 reservoirs in Texas

Damage: covering 75,000-100,000 surface acres of water, block sunlight for native plants, damages aquatic habitat

Human impact: interferes with water recreation, drinking water treatment, hydroelectric generation, promotes mosquito habitat

Control: biological - Grass Carp, Hydrilla tuber weevil, Hydrilla leafmining fly; mechanical – drain reservoir

Water Hyacinth (*Eichhornia crassipes*)

Native to: South America

Distribution in Texas: 20 counties in Texas confirmed

Damage: dense mats cover surface of the water blocking sunlight for native plants, damage aquatic habitat, rotting plants deplete oxygen in water

Human impact: Clogs waterways, access, and intakes; may be useful in wastewater treatment

Control: biological – waterhyacinth weevils, waterhyacinth moth; mechanical collecting

Giant Salvinia (*Salvinia molesta*)

Native to: South Africa

Distribution in Texas: 10 public water bodies (2002)

Damage: dense mats cover surface, as much as 2 feet thick, blocking sunlight and gas exchange, damages aquatic habitat

Human impact: interferes with water recreation, promotes mosquito habitat

Economic impact:

Control: salvinia weevil

Saltcedar (*Tamarix spp.*)

Native to: Eurasia

Distribution in Texas: 12,500 acres of likely saltcedar stands in western Texas

Damage: Absorbs large quantities of water and releases salt; damage riparian habitat, competes with native plants

Human impact: reduction in stream flow

Control: herbicide, digging

Japanese honeysuckle (*Lonicera japonica*)

Native to: Asia

Distribution in Texas: about 37 counties mostly southeast Texas

Damage: wraps around small plants, forms dense canopy blocking sunlight, habitat damage, competes with native plants

Human impact: used for erosion control

Control: herbicide, mowing

Giant Reed (*Arundo donax*)

Native to: Asia

Distribution in Texas: about 32 counties from east Texas to west Texas, south to the coast and north to the panhandle

Damage: grows aggressively in dense stands choking out the native plants, riparian habitat damage, disrupts waterways

Human impact: interferes with flood control, fire danger because it burns hot

Control: herbicide, mowing

Resources

100 worst Invasive; <http://www.issg.org/database/species/search.asp?st=100ss&fr=1&sts>

Central Texas Invasive Plants <http://www.ci.austin.tx.us/growgreen/downloads/invasives.pdf>

The Danger of Invasive Species http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_br_w7000_0942.pdf

Freshwater Fishes of Texas <http://www.tpwd.state.tx.us/landwater/water/aquaticspecies/inland.phtml>

Invasive Species Texas <http://fireant.tamu.edu/antfacts/pdf/texas1.pdf>

Invasive Species that Should be Avoided

<http://www.tpwd.state.tx.us/huntwild/wild/wildscapes/guidance/plants/invasives/>

The Mammals of Texas - Online Edition <http://www.nsrl.ttu.edu/tmot1/myoccoyp.htm>

National Invasive Species Information Center <http://www.invasivespeciesinfo.gov/index.shtml>

Statewide Attitude Survey on Feral Hogs in Texas <http://texnat.tamu.edu/symposia/feral/feral-4.htm>

Texas Invasives http://www.texasinvasives.org/Invasives_Database/Results/Detail.asp?Symbol=LJJA