

## Texas Field Office Technical Guide Section II

### E. Special Environmental Concerns

#### 10. Invasive Species

**Authority: EO 13112**

**An "invasive species" is defined as a species that is non-native (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. (Executive Order 13112).**

Invasive species may be referred to as exotic, alien, or non-indigenous species. The problem with these names is that they only refer to the non-native part of the definition above. Many exotic or alien species do not cause harm to our economy, our environment, or our health. In fact, the vast majority of "introduced" species do not survive and only about 15% of those that do go on to become "invasive" or harmful.

An invasive species grows/reproduces and spreads rapidly, establishes over large areas, and persists. Species that become invasive succeed due to favorable environmental conditions and lack of natural predators, competitors and diseases that normally regulate their populations.

Invasive species are a form of biological pollution. Invasive species decrease biodiversity by threatening the survival of native plants and animals. They interfere with ecosystem function by changing important processes like fire, nutrient flow, and flooding. Invasive species hybridize with native species resulting in negative genetic impacts.

Invasive species spread easily in today's modern global network of commerce and are difficult and costly to control. Invasives impede industries and threaten agriculture and can endanger human health. Invasive species are a significant threat to almost half of the native US species currently listed as federally endangered.

The costs to prevent, monitor and control invasive species are enormous not to mention the costs to crop damage, fisheries, forests, and other resources. Invasives cost the US \$137 billion annually. Some of the most invasive and harmful species cost in excess of \$100 million each annually.

In Texas, the NRCS will use the Texas Department of Agriculture's NOXIOUS WEED LIST which may be found at <http://texreg.sos.state.tx.us/fids/200701978-1.html>