Invasive or nuisance pests are species that cause harm to humans or the environment. Invasive species are non-native; nuisance species may be native or non-native. This fact sheet focuses on invasive and nuisance animal (wildlife) species. Invasive and nuisance wildlife can alter ecosystems and kill, suppress with, compete with, or displace native species, adversely impacting biodiversity. Invasive and nuisance wildlife management aims to prevent or control these species to avoid ecological and economic damage.

**TECHNICAL APPROACH**

Specific management techniques vary by the invasive wildlife species being targeted, but the overall approach is as follows:

- Preventing introduction of invasive wildlife to new areas is the most cost-effective management strategy. Techniques include import regulation, border control, and equipment inspection.
- Monitoring so early invasions can be detected and responded to rapidly; for example, by surveying at-risk lands and using citizen scientists to expand detection capabilities. Rapid response when an invasive species is detected is key to minimize long-term costs.
- Eradicating invasive wildlife once present may not be possible; long-term management is often required. Removal techniques include traps, hunting, toxins, dogs, introduced predators, and habitat manipulation (including barriers to movement).

**BENEFITS**

**Social and Economic**
- Public health and safety
- Food security
- Jobs
- Reduced or avoided costs
- Recreational opportunities

**Ecological**
- Enhanced biodiversity

Inspecting a recreational boat encrusted with quagga mussels. Photo credit: Oregon State University. CC BY-SA 2.0 DEED.
SITE SUITABILITY FACTORS

✓ High-risk invasive species detected
✓ Area at high risk of invasion
✓ Areas with high biodiversity
✓ Management options available for invasive species present on the site
× Limited access for management

EXAMPLE PROJECT

The Chesapeake Bay Nutria Eradication Project, a partnership between US Fish & Wildlife Service, US Department of Agriculture, and Maryland Department of Natural Resources, successfully eradicated nutria – a large semiaquatic, invasive rodent – from Maryland after 20 years of work.6 Nutria in the Chesapeake Bay damaged coastal marshes already vulnerable to sea level rise, in the process degrading habitat for commercially harvested and at-risk species and reducing resilience for coastal communities. Key techniques used to eradicate nutria included detection dogs, traps, hunting, and chemical controls. The successful eradication of nutria has created opportunities for additional coastal marsh restoration that would not be possible with nutria present.

A US Department of Agriculture nutria detection dog with its handler. Photo credit: U.S. Department of Agriculture.

REFERENCES


CITATION