Invasive Alien Species

Invasive alien species can have devastating impacts on native biota, causing extinctions and affecting natural and cultivated ecosystems. Invasive alien species are animals, plants, fungi and microorganisms introduced outside of their natural habitat; they reproduce rapidly, out-compete native species for food and habitat, and are one of the main causes of biodiversity loss worldwide. Species are often introduced deliberately (ex. fish farming) or unintentionally, through transport, travel, scientific research, biocontrol, pet trade, etc.

Increasing travel, trade and tourism help facilitate the movement of species over long distances and beyond natural boundaries. While only a small percentage of transported organisms become invasive, they have a tremendous impact on food security, plant health, animals and even humans. Their impact on the economy is huge—they cause billions of dollars worth of damage annually. Once established, eradication is the most desirable solution, but it can be very expensive to do, so prevention is still the best answer.

The negative effects of invasive alien species on biodiversity can be intensified by climate change, habitat destruction and pollution. Isolated ecosystems such as islands are particularly affected. Loss of biodiversity will have major consequences on people’s wellbeing. This includes the decline of food diversity, leading to malnutrition, famine and disease. It will also have an important impact on our economy and culture.

Invasive alien species are a worldwide problem, but international cooperation can solve it. Prevention is the first step, but where the damage has been done, it can still be reversed if we all work together.
Fast Facts

- Since the 17th century invasive alien species have contributed to nearly 40% of all animal extinctions for which the cause is known.
- Annual environmental losses caused by introduced pests in the United States, United Kingdom, Australia, South Africa, India and Brazil have been calculated at over US$ 100 billion.
- 80% of the threatened species in the Fynbos biome of South Africa are endangered because of invading alien species.
- Invasive alien species can transform the structure and species composition of ecosystems by repressing or excluding native species.
- Because invasive species are often one of a whole suite of factors affecting particular sites or ecosystems, it is not always easy to determine the proportion of the impact that can be attributed to them.
- A major source of marine introductions of alien species is hull fouling and the release of ballast water from ships, although other vectors, such as aquaculture and aquarium releases, are also important and less well regulated than ballast water.

Learn More

International Plant Protection Convention  www.ippc.int
Global Invasive Species Programme  www.gisp.org
IUCN’s Invasive Species Specialist Group  www.issg.org
The Nature Conservancy  www.nature.org/initiatives/invasivespecies
CAB International  www.cabi.org
Global Invasive Species Database (GISD) of ISSG  www.issg.org/database/welcome
World Organisation for Animal Health  www.oie.org
Globallast Partnership  http://globallast.imo.org
CITES  www.cites.org