

Course- WL- 707 Terrestrial Wildlife
Management
Course Instructor; Dr. Sangam Khalil
Dept. Forestry Range & Wildlife
Management

6th Lecture

Exotic Wildlife

Exotic wildlife

An introduced species, alien species, exotic species, foreign species, non-indigenous species, or non-native species is a species living outside its native distributional range, but which has arrived there by human activity, either deliberate or accidental. Non-native species can have various effects on the local ecosystem.

Exotic species are organisms that are introduced to a region or ecosystem, often unintentionally, through human migration or trade. Some exotic species are useful to man, such as horses, goats, pigs, and edible plants including wheat and oats.

Locations

Zoo is a facility where animals are held in more or less artificial enclosures. The level of animal ethics vary a lot between zoos.

Safari park is a large enclosure where animals roam freely, and visitors enter by car or other vehicles.

Game reserve or **nature reserve** is an open-land area for protection of wild animals, with a leave-no-trace mandate. Animals live naturally, and the park crew usually only interfere with them for research, conservation, or population control.

Examples:

Giant pandas

Due to the extremely small number of pandas alive, it is very unlikely to see one in the wild. There are only a few tours that even attempt to find them.

Zoos throughout China have pandas on display. Outside China, only a limited number of zoos have pandas, and frequently only for a limited time (they are "rented" from China and often must be returned after a certain number of years).

Gorillas

Gorillas are divided into two species: eastern (*Gorilla beringei*) and western (*Gorilla gorilla*). Both are endangered, and both are only found (in the wild) in poor African countries.

Polar bears

Polar bears, *Ursus maritimus*, live in and around the Arctic Ocean, near the North Pole. During winter, they can be found on and under the rim of the Arctic ice cap, hunting ringed seals in the water. During summer, part of the ice melts, and they retreat to land for a lean season.

1. Asian Carp

Native To: Eastern Russia and China

Introduced To: North America and Europe

Objective: Asian carp were brought over as food, part of the pet trade and for sport fishing.

2. Cane Toad (*Rhinella marina*)

Native To: Northern South America, Central America and Mexico

Introduced To: Many countries with warm climates, like Australia

Objective: Cane toads were brought over as a way to control crop pests.

3. Small Indian mongoose (*Herpestes auropunctatus*)

Native To: Southeast Asia

Introduced To: Asia, Central America, South America

Objective: Small Indian mongooses were brought over for pest control for rats and snakes.

Disadvantage

Exotic species have brought ecological disasters to every continent, but some of the most extreme cases have occurred on isolated islands where resident species have lost their defensive strategies. For example, rats, cats, dogs, and mongooses introduced by eighteenth century sailors have devastated populations of ground-breeding birds on Pacific islands.

GUIDELINES

Not all introduced species are invasive, and action should be prioritized to deal first with those currently causing, or with potential to cause, the most harm. In order to maximize effectiveness and value for money, invasive species risk assessment. Prevention is more effective and cheaper than management of established invasive.

Eradication is more effective and cheaper in the long run than permanent control of a pest population, so eradication should be considered where feasible.

- Species that cannot feasibly be eradicated should be considered candidates for biological control.
- Species that cannot feasibly be eradicated or controlled biologically, especially species whose value to people prevents the use of biocontrol, should be contained within delimited areas where feasible.

These Guidelines aim to:

Address all problem areas and facilitate prioritization.

- Increase action and improve implementation.
- Increase efficiency, increase cooperation and reduce duplication.
- Guide the work of international and regional agencies, including donors
- Guide the development of country programmes Guide strategic and local fundraising