

# Biosecurity

## ..bioWHAT?

STOP

**Biosecurity** is all about PROTECTING New Zealand from UNWANTED SPECIES:

- preventing undesirables entering the country (border security)
- managing or eliminating those that have already established in the wild
- reducing the significant adverse economic, conservation and health impacts

### Exotic aliens

Unwanted species are often called alien or exotic species. These include pest insects and other invertebrates, weeds, and fungal, bacterial, and viral pathogens of plants and animals. They cost New Zealand billions of dollars each year.

### More aliens than natives

Among some groups of organisms, exotic species in New Zealand outnumber native species, and even some of the most common and widespread species (e.g., ants, possums, broom) have yet to reach their full potential distribution here. Although we are actively building our knowledge of New Zealand's biodiversity, we are still far from knowing all of our native species.

### Alien arrival zones

Most new insect pests are usually found for the first time near airports or sea ports so obviously they have hitch-hiked with people or goods. They can be very hard to detect and stringent surveillance is very important.

Most new weeds are garden escapees that have gone wild after several decades of being well-behaved ornamentals. On average, a new weed establishes in the wild every 40 days. For example, ornamental palms are now invading native bush in warmer areas.

### When good ideas turn bad

All of the larger animal pests were introduced as pets or by well intentioned people hoping to start new industries e.g., fur, food and recreational hunting. Many birds were intentionally introduced by early settlers. However more recent populations of exotic parakeets started as escaped pets or were blown across from Australia.

### Sick plants

All crop plants (including our pasture grasses) have associated disease-causing fungi, bacteria, and viruses. Some diseases can be controlled by chemical sprays, but this is costly and adds chemicals to the environment. It is much better to prevent disease-causing organisms getting into New Zealand in the first place. Care at the border with importation of wood products and plant material is essential to keep New Zealand green, healthy, and productive.