



## 6. Threats to Biodiversity

### URBANISATION = HABITAT LOSS

The Auckland region is experiencing a population growth rate of 3.1% with Waitakere's at 2.7% per annum. Increased population means pressure for further development which usually results in further loss of habitat, whether it is loss of bush, loss of rural land or encroachment of coastal and riparian areas. Along with increased population, development and noise; urbanisation brings more weeds and pests to compete with indigenous biodiversity.

On the positive side, there are some bird species that enjoy an advantage provided by the variety of garden plants that provide winter forage in particular. The more we can use native plants in our gardens and parks, supplemented with nectar producing and fruiting exotics, the more urban areas can support species such as tui, kereru or even bellbird once more.

Despite insectivores and frugivores enjoying some benefit from plantings in urban areas, the insectivorous bird species definitely suffer unless bush remnants with full undergrowth to support invertebrate communities are left intact.

### PLANT PESTS

Plant pests are a major threat to biodiversity by changing environmental conditions through shading, smothering, or preventing other species from establishing. Within natural communities they affect vegetation structure and composition, regeneration, plant and animal biodiversity, hydrology and nutrient regimes.

Problem plant pests in Waitakere City are numerous, and include agapanthus on the west coast, *Elaeagnus*, woolly

nightshade, wild ginger, mignonette vine, moth plant, blue morning glory, climbing asparagus, ladder fern, bamboo, honeysuckle and jasmine in the Waitakere Ranges. In the urban area pest plants also include privet, *Arundo*, climbing asparagus, pampas and monkey apple.

### ANIMAL PESTS

Animal pests browse on palatable plant species, reducing the success rate of new plantings, degrading existing habitats and compete with native species also using these food sources. Some also prey on native birds, invertebrates and fish. Firmly established animal pests include Norway and ship rat, mice, possums, wasps, pest freshwater fish species and mustelids, goats, pigs in the Waitakere Ranges.

In addition, there is an ongoing threat to coastal bird species, particularly New Zealand dotterel, variable oystercatcher and little blue penguin from dog predation and disturbance. Dogs and domestic cats also have easy access to valuable lowland fauna habitat, such as wetlands and tidal mudflats, because of the close proximity of residential development to these areas.

### CLIMATE CHANGE

Little is known at this stage about how climate change will affect biodiversity in the Waitakere Ranges. Increasing temperatures and more intense rainfall events may result in the climate becoming marginal for certain species while making conditions more favourable for some pests. This is an area not well understood at present and Council is planning to assess the likely effects of climate change in more detail during the next year.