

Andy's Effort

Andy Cox is the technical support manager for the Southland Conservancy, Department of Conservation, and he has spent 35 years in conservation management including kakapo work on Codfish Island and many years in Fiordland. During that time he has seen many changes in the condition of New Zealand's native bush and its inhabitants. Some of the changes are disturbing.

People have said to me, "there are fewer birds in the bush than there used to be". The reason given by some people is that 1080 must be responsible. The bird observation is correct but the cause is not 1080. Pest introductions are the key cause of species decline. Where it is used for pest control, 1080 has reversed declines and in some cases, prevented extinctions.

However, it is not the answer to all our concerns and we need a suite of options to combat the ongoing effects of pest introductions.

Many species that were relatively common 30 years ago are now threatened – whio (blue duck), kaka, mohua. They can be saved from the unwanted attention of pests but as time marches on, progress in some species recovery on the mainland is difficult. We can't put every threatened species on a pest-free offshore island – the habitats don't suit some species such as whio that need fast-flowing alpine streams.

All declines in species are a result of increased "take" governed by how much higher the level of take is than the level of sustainability. In other words, excessive pressure on populations will cause inevitable decline.

In a natural system like a forest, birds can sustain some losses through predation, changing habitat, poor weather and competition for resources. Bird breeding patterns evolved over millions of years to manage some of these contingencies for replacement and possible opportunities for expansion.

As habitats disappeared and forests were cleared for farming, new predators such as possums, rats or stoats were introduced to dynamic forest systems. The rate of "take" of susceptible birds increased beyond the ability of the bird to reproduce or defend itself. This process is still ongoing. The breeding birds disappear and the remaining population struggles to adapt to the new regime of pest invasions. Over time the insidious decline impacts on the survival of the

remaining pockets of scattered populations. Fragmentation and loss of habitat for native species and increased pest pressure have been the hallmarks of human occupation in pristine natural environments.

Decline, extinction and evolution are natural processes over thousands and millions of years but the vastly increased rate of decline and extinction has been ongoing since humans arrived in New Zealand with pest species that alter the natural dynamics of the forest. Without close management, more native species could disappear.

The mix of tree species in native forests has been irretrievably changed as a result of intensive browsing by introduced mammals like deer and goats. Unpalatable plant species dominate some sites where introduced animals have stripped the understorey of any edible regenerating seedlings, and rodents have demolished the seeds that might provide the next generation to replace them. Vegetation changes are more subtle but affect the ability of the forest to carry native wildlife in the presence of pest species.

To reduce that rate of decline, conservationists need every tool they can muster to defend native species. 1080 is one of the key tools. On its own it will not prevent ongoing losses of species but it is a valuable tool in providing an effective way to stem losses in some areas. This allows more time to stave off the ravages of decline until long-term permanent solutions are devised.

At least in New Zealand we have the opportunity to save many of our indigenous species and their habitats. Many countries in the Northern hemisphere have such heavily modified environments that there are only small remnants of wildlife left. Let's count ourselves lucky that we have the opportunity to restore the dawn chorus. Measure our generation's success and the legacy for our descendants, not by what we lose but what we can save that would otherwise be lost.

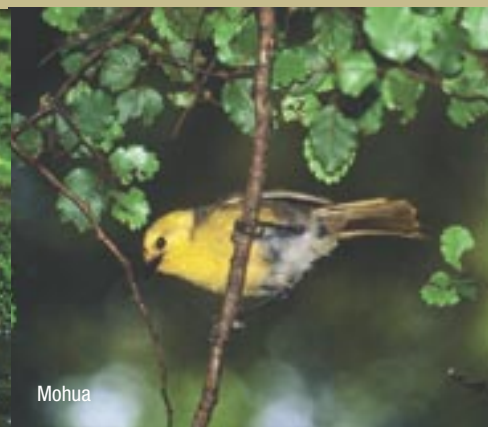
Photos: DOC



Kaka



Whio



Mohua