



State of Hawai'i Endangered Species Protection

Carol J. Terry, Division of Forestry and Wildlife, Hawai'i Department of Land and Natural Resources

Hawai'i is known as the endangered species capital of the world. With just 0.2 percent of the land area of the U.S., Hawai'i has over 31 percent of the country's listed endangered species. Hawai'i currently has 302 federally listed species, with several hundred more that are species of concern.

Dealing with Hawai'i's endangered species is an enormous problem. Of our 33 native forest bird species, 21 are endangered. They include such unique species as the crested honeycreeper (once found throughout Maui and Moloka'i, it is now restricted to wet forests on East Maui); the 'akiapola'au (which has a fragmented distribution limited to a few koa/'ohi'a forests on the Big Island); and the nene (whose numbers are recovering well on Kaua'i but not on the other islands).

We currently have 263 plant taxa that are listed as threatened or endangered. Over 100 of these endangered plant species are represented in the wild by only 20 individuals, or less, or a single isolated population.

There are also several hundred species of invertebrates that are in danger of becoming extinct. Some are officially listed as endangered, such as the 41 species of O'ahu tree snail; others are not, such as the 74 other species of snails and over 300 species of insects and arthropods that are threatened by extinction but are not officially listed as endangered, such as the happyface spider.

The threats to Hawai'i's native species are numerous, but largely they are due to non-native invaders, such as invasive weeds like banana poka and miconia, both attractive plants that can take over a watershed and destroy the native forest and habitat for wildlife. Predation by introduced insects, rats and mongooses, and feral dogs and cats also take their toll on native plants, snails, and birds. In addition, diseases that were brought by these invaders infect both endangered plants and animals.

There are plenty of other threats to our native species. One of the very worst—that we know of—is the brown tree snake. This long, thin, nocturnal predator has devastated the fauna of Guam, wiping out almost all of

its native bird species.

But one of the most serious threats to Hawai'i's endangered species is the public's expectation that state personnel are solely responsible for recovering endangered species—coupled with our restrictive endangered species laws that focus on individual plants and animals and effectively preclude large-scale, long-term habitat planning by the private sector.

Hawai'i's endangered species are protected by Chapter 195D of the Hawai'i Revised Statutes and Chapter 124 of the Hawai'i Administrative Rules. These laws and rules say that with regard to endangered and threatened species, it is prohibited to possess, injure, kill, destroy, transport, or export, sell or offer for sale any endangered or threatened species of wildlife or plant, or attempt to do so. *Except*, the DLNR may issue temporary licenses to allow any of these prohibited activities, as long as the activity is for scientific purposes or enhances the propagation or survival of the affected species. [§195D-4 (e), (f), §124-3 (b), -4(a), (b)]

It is apparent that the intent of these regulations is to protect threatened and endangered species by protecting individuals. But although they currently protect individual plants and animals, they are hampering the recovery of the entire species. This is because no species lives in a vacuum. Each one is part of a community, and in many instances the species cannot survive when that community is no longer intact. That's why endangered insects are as important as endangered birds. The current Hawai'i endangered species laws address individuals, not the communities in which those individuals live.

Consider endangered species recovery as being composed of three phases. The first is recognition and protection of the endangered species. The second is their recovery, and the third is proper management so they don't become endangered again.

It seems as though Hawai'i's original endangered species laws were written to address that first phase, the recognition and protection of species that were likely to become extinct without human intervention. And those



initial laws have served their purpose, saving individuals with the future goal of recovering the species. However, at least in Hawai'i, we seem to be stuck in that first step—we are concentrating on saving individuals. However, it is time to move on to that second step: recovering the species. And now that we have the knowledge to actually begin recovery, we are discovering that the laws that were so useful in protecting endangered species are now hindering that recovery.

The current laws focus on individuals, they don't address habitat planning and they don't address the need for assistance and cooperation from the private sector. Implicit in these laws is the notion that protecting and recovering endangered species is solely in the hands of—and only the responsibility of—state personnel.

Anyone who knows anything about our state government knows that we will never have sufficient personnel and resources to do all that is necessary to save Hawaii's endangered species. And besides, endangered species don't belong just to DLNR employees, they belong to all of us, and we should all share the responsibility of not allowing them to become extinct.

Something is wrong with the system if our endangered species laws are preventing landowners from planting native trees and re-creating native forests for fear of creating such good habitat that endangered species will be encouraged to live there.

We need to expand our endangered species laws to allow for the private sector to help with the challenge of saving Hawaii's unique native species, including endangered ones.

Hawai'i's Coastal Nonpoint Pollution Control Program

Randy Rush, Hawai'i Department of Health

Background

In recent years, it has become increasingly clear that the nation's coastal waters have serious water quality problems. Virtually everywhere, the problems result from what is commonly called *polluted runoff* or *nonpoint source pollution*. These terms both refer to pollutants that enter a body of water as a result of water, such as rainfall and irrigation, flowing over the surface of the land and picking up pollutants such as sediments, chemicals, and nutrients.

In 1990, the U.S. Congress adopted new requirements for coastal states that are designed to protect coastal waters from polluted runoff and restore coastal water quality that has deteriorated because of nonpoint source pollution. All land use activities that contribute or have the potential to contribute to polluted runoff, including forestry, must be addressed by this new program.

The new requirements—called Section 6217 of the Coastal Zone Act Reauthorization Amendments—specify that states with Coastal Zone Management

(CZM) programs must develop and implement *coastal nonpoint pollution control programs*. Federal guidance, containing management measures, provides the foundation for state programs. *Management measures* are akin to goals which states must address through the implementation of regulatory and nonregulatory nonpoint source pollution control mechanisms. Land and water users must implement these management measures through the use of *best management practices* (BMPs) on the ground.

The intent of the coastal nonpoint pollution control program is to build upon, rather than duplicate, existing programs. In Hawai'i, the array of existing programs at the federal, state, and county levels will be loosely bound together in a "network" under the rubric of the coastal nonpoint pollution control program. Ultimately, there will be one statewide program for the management and control of polluted runoff, elements of which will be implemented by the existing programs at the federal, state, and county levels.

This program differs from the traditional pollution