

activities for the conservation of these species. They have developed two programs that demonstrate their conservation commitments, Aina Ulu and Malama Aina. The Aina Ulu program implements land based education programs, whereas Malama Aina delivers focused stewardship of natural resources.

Malama Aina has been focused in two distinct areas, Keauhou in Kau District and North-South Kona, with a budget commitment in 2002 of \$1,000,000, not including staff expenses. Kamehameha Schools has more than 25 years of stewardship experience at Keauhou in Kau District, which includes the Olaa-Kilauea Management partnership project entered into on July 6, 1994. This area is within proposed critical habitat unit Hawaii G. The vision for Keauhou is to restore the native ecosystems in order to utilize the entire area for education and cultural enrichment by using sustainable economic ventures to support these programs. Activities within this program include timber certification, large and small mammal control, weed control, koa thinning, propagation and outplanting of both rare and common native plants, inventory, monitoring and data analysis of stewardship efforts, access road improvement, refuse clean up, and the purchase of Keauhou Ranch. Participating partners include: Cultural practitioners (the Edith Kanakaole Foundation and the Polynesian Voyaging Society), ranching and timber interests (Hawaii Forest Industry Association), researchers and scientists (University of Hawaii at Manoa and Hilo, the Zoological Society of San Diego, U.S. Forest Service, Hawaiian Silversword Foundation, and USGS-BRD), educators (Nawahi Charter School), natural resource managers (Olaa-Kilauea Management Group, DOFAW, the Service, HVNP, and The Nature Conservancy of Hawaii (TNCH)). Malama Aina has allocated \$681,000, and Aina Ulu has allocated \$33,000. Preservation of this area conserves critically endangered species of plants and animals in a mix of ecosystems with microenvironments required by some of Hawaii's rarest plants and animals, including endangered forest birds and lobeliads (plants in the family Campanulaceae). This management strategy is consistent with recovery of these species.

Kamehameha's Schools North-South Kona natural resource conservation efforts focus on three distinct areas: Honaunau Forest and Honaunau Uka, Kaupulehu Kauila Lama Forest and Kaupulehu Uka, and Pulehua. Kamehameha Schools started a weed

control program in 2002 in Honaunau Forest and Honaunau Uka. In both the Forest and Uka areas, they will continue the weed control program, along with a timber certification program to write certifiable plans and complete inventories. In the Honaunau Uka area, they will construct an ungulate exclosure fence and issue a contract for a botanical survey, and in the Honaunau Forest the road will be maintained. Funds allocated for the implementation of these projects total \$52,500 to Honaunau Forest and \$29,500 to Honaunau Uka. Kaupulehu Kauila Lama Forest and Kaupulehu Uka lie within the proposed critical habitat unit Hawaii Z. Conservation activities in the Aina Ulu program at Kaupulehu Kauila Lama Forest include an intern program, an outreach coordinator, multimedia curriculum development, small mammal and weed control, road maintenance, installation of self-composting toilets, and precious wood-gathering. Funds allocated for these projects total \$70,700. Malama Aina projects at Kaupulehu Uka include timber certification, large mammal and weed control, ungulate exclosure fencing, inventory, monitoring and data analysis of conservation actions and road maintenance. Funds allocated for those projects total \$101,000. Partners include: Hawaii Forest Industry Association, the Service, DOFAW, local residents, PIA Sports Properties (lessee), U.S. Forest Service, National Tropical Botanical Garden (lessee), and Honokaa High School. Pulehua lies within proposed critical habitat unit Hawaii W. Conservation efforts at Pulehua are in the beginning stages. Conservation projects in 2003 will focus on weed control, with \$7,500 allocated. In 2002, an ungulate control program was initiated, which included \$7,000 to study ungulate issues in Kona. This year's budget includes \$35,000 for ungulate control, with an additional \$40,000 to construct enclosures to measure the success of the control efforts.

Because Kamehameha Schools' goal is to improve habitat for threatened and endangered species, the district is developing a Safe Harbor Agreement with the Service and the State through the Safe Harbor program. The Safe Harbor program encourages proactive management to benefit endangered and threatened species on non-Federal lands by providing regulatory assurances to landowners that no additional Endangered Species Act restrictions will be imposed on future land, water, or resource use for enrolled lands. The Safe Harbor Agreement would include

lands within proposed critical habitat units W and Z. The purpose of Kamehameha Schools' Safe Harbor Agreement is to encourage voluntary restoration and enhancement of habitat for threatened and endangered species, and to enable certain species to be reintroduced onto Kamehameha Schools' lands where such species formerly occurred, including the bird species palila (*Loxoides bailleui*), as well as *Argyroxiphium kauense* and *Delissea undulata*. Some of the conservation activities planned under this Agreement include fencing areas containing mamane (*Sophora chrysophylla*), removal of ungulates, control of ungulates in areas that are not fenced, removal of predators (e.g., rats), and the release of palila into the area. Currently, the Agreement being developed includes only the palila. However, other listed and candidate animal and plant species and other conservation activities will be added in the future (Peter Simmons, Kamehameha Schools, *in litt.* 2003).

As described earlier, Kamehameha Schools has a history of entering into conservation agreements with various Federal and State agencies and private organizations on biologically important portions of their lands. These arrangements have taken a variety of forms. They include partnership commitments such as the Olaa-Kilauea Partnership and the Dryland Forest Working Group. The listed plant species originally included within the Kamehameha Schools portion of proposed units Hawaii G, W, and Z will benefit substantially from their voluntary management actions because of a reduction in ungulate browsing and habitat conversion, a reduction in competition with nonnative weeds, a reduction in risk of fire, and the reintroduction of species currently extirpated from various areas and for which the technical ability to propagate these species currently exists or will be developed in the near future.

The conservation benefits of critical habitat are primarily regulatory or prohibitive in nature. But on the island of Hawaii, simply preventing "harmful activities" will not slow the extinction of listed plant species. Where consistent with the discretion provided by the Act, we believe it is necessary to implement policies that provide positive incentives to private landowners to voluntarily conserve natural resources, and that remove or reduce disincentives to conservation (Michael 2001; Michael, *in press*). Thus, we believe it is essential for the recovery of these nine species to build on continued conservation activities, such as these with a proven