

Courthouse News Service

Hawaii Species Protected Under Ecosystem Plan

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Wednesday, November 06, 2013

WASHINGTON (CN) - Fifteen species on the Big Island of Hawaii now have Endangered Species Act protection under an ecosystem-based listing determination. The 13 plants, a pool shrimp and a picture-wing fly have been listed as endangered in a recent action. The plants include relatives of asters, sunflowers, peas, mints, citrus and palms, and many have no common name.

The listing is part of a court-approved five-year workplan that resulted from a settlement agreement between the U.S. Fish and Wildlife Service and the Center for Biological Diversity (CBD) to speed listing decisions for 757 species across the country.

The USFWS has previously used an ecosystem listing approach for Oahu, Kauai, Molokai, Lanai and Maui, noting that "native species that occur in the same habitat types (ecosystems) depend on many of the same biological features and the successful functioning of that ecosystem to survive," according to the action.

"The Service is implementing a landscape-based approach in Hawai'i to better prioritize and focus conservation and recovery actions," Loyal Mehrhoff, the USFWS's field supervisor for the Pacific Islands Fish and Wildlife Office, was quoted as saying in the agency's press release.

Because the Hawaiian Islands are over 2,000 miles from the nearest continent, the isolation has allowed the island chain's plants and animals to evolve into species that occur nowhere else in the world.

Two insect-eating bat species are the only native terrestrial mammals, so Hawaii's native plants have evolved in the absence of mammalian grazers and have lost defenses such as toxins, oils, resins, stinging hairs and coarse texture that protect against "threats such as mammalian predation and competition with aggressive, weedy plant species that are typical of continental environments," the action noted.

Introduced mammals and alien plant species pose special threats for native species as a result of this lack of defense. Since the 2012 listing proposal the agency added three nonnative invasive plant species to the final listing action in addition to the previously noted nonnative plants and animals, including insects.

Prior to the arrival of humans in the islands, the native flora contained about 1,000 species. Over 800 species have been introduced, and 100 of them are considered to be pests. "Of these 100 nonnative pest plant species, over 35 species have altered the habitat of 14 of the 15 species in this final rule (only the anchialine pool shrimp is not directly impacted by nonnative plants)," the action said (parenthesis in original).

The picture-wing fly is affected because nonnative plants crowd out the fly's native host plant. The fly is also threatened by predatory nonnative wasps.

The threat of nonnative plants is compounded by browsing from nonnative goats, pigs and cattle and environmental threats of fire, drought, hurricanes and climate change, which threaten most of the 15 species listed.

Six of the plant species have less than 50 individuals remaining, and the extremely small populations of the fly and shrimp also add to those species' vulnerability, the action said.

"Part of Hawaii's beauty is the amazing diversity of life unique to the Aloha state. Endangered Species Act protection will keep these magnificent plants and animals safe for generations to come," Tierra Curry, a conservation biologist with the CBD was quoted as saying in the group's response to the listing.

The listing determination was effective Nov. 29.