New Records of Alien Lizards from Maui County¹

Fred Kraus (Hawaii Biological Survey, Bishop Museum, 1525 Bernice Street, Honolulu, Hawaiii, 96817, USA; email: fkraus@hawaii.edu).

Hawai'i has seen an increase in recent years of new records of alien reptiles and amphibians brought into the state, largely via illegal trafficking but also via the nursery trade (Kraus *et al.* 1999; Kraus 2002; Kraus & Duvall 2004). As well, species long established on O'ahu continue to have their ranges expanded to other islands with human assistance. I herein report new reptile records for Maui County.

Chamaeleonidae

Chamaeleo jacksonii Boulenger

New island record

Established since the early 1970s on O'ahu via illegally released pet-trade animals (Mc-Keown 1996), this species has been spread throughout the state by pet owners and aficionados. Previously reported from every main island except Moloka'i, this record now fills in that range gap. Apparently deliberately released in upper-elevation native forest.

Material examined: MOLOKA'I: upper rim of Kalāupapa National Historical Park, 21.13058°N, 156.92122°W, 1062 m, 18 Aug 2005, F. Kraus (BPBM 21875).

Gekkonidae

Phelsuma laticauda (Boettger)

New island record

Previously recorded on O'ahu, Maui, and Hawai'i Island (McKeown 1996), this species is deliberately spread by gaudy-lizard aficionados as well as moved unintentionally in nursery plants. The restriction of the present record to a stand of ornamental trees argues for their transportation to Moloka'i via the latter pathway.

Material examined: MOLOKA'I: Moloka'i Airport, 18 Aug 2005, F. Kraus, G. Hughes & J. Bazzano (BPBM 21739).

Iguanidae

Iguana iguana (Linnaeus)

New island record

Previously reported as established only on O'ahu (McKeown 1996), and present since the late 1950s or early 1960s, this species was imported for use in the pet trade. Specimens have been reported on Maui for several years and recent sightings and a voucher specimen on the remote southern flank of Haleakalā confirm their establishment on that island.

Material examined: MAUI: on Kanaio Rd, 90 m mauka of junction with Pi'ilani Hwy, 27 Dec 2005, M. Vacek (BPBM 23604).

Polychrotidae

Anolis sagrei Duméril & Bibron

New island record

Previously reported from O'ahu and Kaua'i (McKeown 1996; Kraus 2003), this species has become widespread on the former island due to its common presence in traded nursery plants. Its presence on Maui is certainly due to the same pathway; in addition to the vouchered record below, I have seen the animals in the nursery at Home Depot in Kahului.

Material examined: MAUI: Whaler's Village, Ka'anapali, 18 Mar 2005, L. Heron (BPBM 21130).

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Numbers of Hawaiian Species for 2003 – 20051

LUCIUS G. ELDREDGE (Hawaii Biological Survey, Bishop Museum, 1525 Bernice Street, Honolulu, Hawai'i 96817-2704. USA: lge@bishopmuseum.org)

Background

This supplement is the first following a detailed assessment of the numbers of species in the Hawaiian Islands (Eldredge & Evenhuis 2003). The rich biodiversity of the Hawaiian Islands comprises 26,608 species (Table 1). Hawai'i accounts for only about 0.2% of the land area of the United States yet it has 31% of the national federally endangered species and 42% of its endangered birds. Almost 75% of the historically documented extinctions of plants and animals in the United States have occurred in the Hawaiian Islands (Allison & Miller 2000).

Hawaii Biological Survey is continually posting species checklists (terrestrial arthropods, native and alien land and freshwater snails, marine invertebrates, flowering plants, fungi, amphibians, reptiles, birds, and mammals) in searchable interfaces for the Hawaiian biota on our website server [http://hbs.bishopmuseum.org]. These are being revised and updated on a regular basis.

Included in this report are the first records of halophilic bacteria from the saline lake at Laysan; addition of algae species following the recently published monographs on the red, green, and brown algae; a review of the revisionary genera of the black coral *Antipatharia*; updating of the scaphopod genera; and numerous new species of insects and crustaceans. Of note are the books: Natural History of Nihoa and Necker (Evenhuis & Eldredge 2004) and Checklist of the Fishes of the Hawaiian Archipelago (Mundy 2005).

Notes on the Taxa

Bacteria

New species *Idiomarina loihiensis*, a halophilic *γ-Proteobacterium* from Loihi Seamount (Donache *et al.* 2003). New species *Psychroflexus tropicus* from the hypersaline lake at Laysan Island in the Northwestern Hawaiian Islands (Donache *et al.* 2004a). The microbial diversity of five lakes, an anchialine pool, and the Loʻihi submarine volcano were studied and found that each had a distinct prokaryotic community dominated by Bacteria (Donache *et al.* 2004b). New species *Arcobacter halophilus* Donache *et al.* (2005), from Laysan Island, the first obligately halophilic member of the genus.

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