

## Twenty Years of the *Records of the Hawaii Biological Survey*<sup>1</sup>

NEAL L. EVENHUIS

*Hawaii Biological Survey, Bishop Museum, 1525 Bernice Street, Honolulu, Hawai'i 96817-2704;*  
*email: NealE@bishopmuseum.org*

SCOTT E. MILLER<sup>2</sup>

*National Museum of Natural History, Smithsonian Institution, P.O. Box 37012, Washington, D.C.,*  
*20013-7012, USA; email: scottm@si.edu*

In 1992, the State of Hawaii designated the Hawaii Biological Survey (HBS) as a program of the Bishop Museum. The Survey is an ongoing natural history inventory of the Hawaiian Archipelago and was created to locate, identify, and evaluate all native and non-native species of flora and fauna within the state and maintain the reference collections of that flora and fauna for a wide range of uses. As the primary state repository for all specimens and objects, the Bishop Museum also maintains up-to-date databases of all groups of plants and animals that occur within the state boundaries. Additionally, as part of our effort in disseminating the latest information on updates to those databases, the Bishop Museum annually publishes the *Records of the Hawaii Biological Survey*.

In 1995, we published the first of these *Records* (for the year 1994) in two volumes (Articles and Notes). Those first *Records* contained a total of 29 papers by 32 authors. Some 105 species of plants and animals were newly recorded for the State, including 3 new species-group taxa. The success of those first *Records* bade well for the ensuing years, in which numerous observations have been published by our many colleagues in Hawai'i, the nation, and worldwide. Table 1 gives a snapshot summary of the state of the *Records* for the last 20 years.

During those 20 years, some significant observations have been made. Sixty-three new species-group taxa have been discovered and described, including some surprising finds from well-travelled trails on O'ahu (Evenhuis, 2012: 9)<sup>3</sup> and from the Bishop Museum campus itself (Ismay 2003). There have been uplifting records of species thought to have been extinct or not seen for many years (e.g., Foote 2000; Haines & Foote 2004: 45), but sadly also records of species thought to be not extant any longer (e.g., Wood 2012: 91). Although most records deal with new additions to the Hawaiian biota, here have also been corrections to our inventory and deletions of species thought to be here but were misidentified (e.g., Hoffman 1997; Shelley 1998).

In addition to the typical short reports of new introductions, there have been comprehensive checklists of some groups (e.g., freshwater rotifers: Jerzabek 2003; starfish: Mah 1998; shallow-water stony corals: Maragos 1995; oribatid mites: Swift & Norton 1998; non-marine algae: Sherwood 2004).

Not only extant taxa have been studied. There have been papers published on fossil cotton (Woodcock *et al.* 1998), fossil leaf galls (Woodcock & Webb 2006), and the first fossil record of the Hawaiian Hawk from Kaua'i (Olsen & James 1997).

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2. Research Associate, Hawaii Biological Survey, Bishop Museum, 1525 Bernice Street, Honolulu, Hawaii 96817-2704, USA

3. Citations mentioned in the text can be found in the author index in this volume.

year	animals			plants				grand total
	new state	new spp.	total	new state	naturalized	new spp.	total	
1994	48	3	51	11	43		54	105
1995	15	2	17	12	4		16	33
1996	39	5	44	25	1		26	70
1997	81	2	83	46	5		51	134
1998	24		24	8	20		28	52
1999	44	1	45	4	8	1	13	58
2000	43		43	7	24		31	74
2001-2002	152	21	173	24	24		48	221
2003	14	1	15	53	23		76	91
2004-2005	22	4	26	6	40		46	72
2006	5	8	13	2	12		14	27
2007	1		1	8	21		29	30
2008	2		2	19	24		43	45
2009-2010	4	6	10	11	9		20	30
2011	5	5	10	18	92		110	120
2012	5	5	10	6	8		14	24
2013	15		15	2	12		14	29
20-year totals	519	63	582	262	370	1	633	1215
-new spp.			-62				-1	-63
total non-native			520				632	1150

Table 1. Twenty-year summary of the *Records of the Hawaii Biological Survey*.

During the last 20 years we have worked closely with state and federal agencies in reporting new introductions or new naturalized plants. We have also been proactive and recorded plant taxa that had potential to become naturalized, so that they could be monitored if any ever became naturalized and potentially threatened native species or ecosystems (Staples *et al.* 2000).

In its creation by the Hawaii State legislature, the Hawaii Biological Survey was tasked with undertaking a complete inventory of Hawaii's biota. As a result, a number of papers have been published giving summary accountings by taxonomic group including an initial count (Eldredge & Miller 1995 [21,383 total species; 8,759 endemic]), subsequent periodic updates and, in 2003, a detailed assessment of the numbers of species for every taxon in the State of Hawai'i (Eldredge & Evenhuis 2003 [25,615 total species; 9,975 endemic]). At latest count we have a total of 26,608 species occurring in the State of Hawaii. Although some other state surveys in the nation are much older, we are still the only state in the country with an accurate accounting of every plant and animal (native and alien) within its borders.

As we celebrate 20 years of the *Records of the Hawaii Biological Survey*, we take this opportunity to thank the many who have helped us in this endeavor. There is still much to be done and we welcome the assistance of our colleagues in our ongoing process of taking stock of what living things we have surrounding us every day in these Hawaiian Islands.