CACKLING GOOSE

Other: Canada Goose (<2004)

non-breeding visitor, regular winterer

The smaller Cackling Goose (including subspecies *leucopareia*, *minima*, *taverneri*, and *hutchinsii*) was split from the larger <u>Canada Goose</u> by the AOU (2004). The Cackling Goose breeds in the Aleutian Is and, primarily to the N of <u>Canada Goose</u>, in Arctic Alaska, Yukon, the NW Territories, and Nunavut. It winters primarily from British Columbia and California to Louisiana (Mlodinow et al. 2008). A small population (named *asiatica*) formerly bred in Siberia and wintered in Japan (Dement'ev and Gladkov 1952), but this population has been extirpated.

Cackling Goose is a near-annual visitor in small numbers to the Southeastern Hawaiian Islands. Historically, the majority of individuals critically identified to species have been of Cackling rather than <u>Canada</u> geese (Pratt et al. 1987, Engilis et al. 2004) but many older reports were not corroborated to species. Analyses of descriptions, photographs, and specimens of roughly 267 individuals recorded in the Hawaiian Islands indicate that over 140 individuals were of Cackling Geese but that only four individuals can confidently be identified as Canada Geese (see <u>Canada Goose</u>). Two Aleutian Island Cackling Geese (*B.h. leucopareia*) banded as chicks at the Aleutian Is NWR migrated to Kwajalein Atoll, Marshall Is, in late Nov 1979 (Schipper 1985, Springer 1986; *E* 46:153-154) and another pair of *leucopareia* were recorded on Wake Atoll during winter 2007-2008 (Rauzon et al. 2008).

Twelve well-documented Cackling Geese have been recorded in the Northwestern Hawaiian Islands. At Kure, one was present 29 Sep into Oct 2009 (HRBP 5674), two were present 12 Dec 2013 into Feb 2014 (HRBP 5981-5982), and one was observed in Nov 2014. On Midway, one was seen daily among nesting Laysan Albatross on Sand I., 12 Nov 1996-4 Jan 1997 (15 photographs in the HRBP file) and wintering birds were present in 2004-2005, 2005-2006, and 2 during Nov 2014-6 May 2015 (HRBP 5983-5984), the last representing the latest spring record of non-summering birds in the Hawaiian Islands. Other documented records include a 1st-cycle bird on *Laysan* during winter 2006-2007 (HRBP 5546), a presumably over-summing individual photographed on Necker 20 Jun 2010 (HRBP 5985), and one observed flying S about 220 km N of Necker 12 Oct 2002 (Rowlett 2002). Other reports of Cackling or Canada geese include single "small" Cackling/Canada geese on Sand I., Midway, in Dec 1959 and Nov-Dec 1961 (Fisher 1965), two birds there in March 1965, one of which was later reportedly sighted on Lisianski, and another on Lisianski 11 Nov 1969. There is also a report of two Cackling/Canada geese on Laysan in 1915 (Wetmore in Olson 1996b:118), the heads of which were reportedly sent to BPBM, but these specimens could not be located. These records are all most likely Cackling Geese but we prefer to consider them unsubstantiated to species.

Cackling Geese have been known as fall and winter visitors to the *Southeastern Hawaiian Islands* since a first-winter male was collected by Munro and Palmer at Konolewa near Mana, *Kaua'i*, 16 Mar 1891 (AMNH 730931; <u>HRBP</u> 5297-5301 of specimen; cf. *E* 68:24). Thinking it was an undescribed species of goose, Rothschild (1892) named it "*B. munroii*", but corrected himself later (Rothschild 1900).

Branta hutchinsii

B.h. minima B.h. leucopareia B.h. taverneri

Subsequently, a minimum of 128 Cackling Geese have been recorded regularly on Kaua'i (32 individuals, 1979-2015; e.g., HRBP 1251, 1314, 5205, 5303, published NAB 59:346 and 60:592), O'ahu (54, 1958-2016; e.g., 23 images in the HRBP file; Engilis et al. 2004; E 19:58, 67, 21:79, 30:117), Moloka'i (4, 2003-2015), Maui (15, 1959-2015; e.g., HRBP 5987; BPBM 178532; E 19:76, 21:60), and Hawai'i (23, 1979-2015; e.g., HRBP 0430, 0431, 0776, 0842-0847, published Engilis et al. 2004). One collected at the Mokapu Game Farm, O'ahu 3 Nov 1934 (BPBM 6368) may have been a migrant as no Branta geese were recorded as imported at that time (Swedberg 1967a). Individual Cackling or Canada geese recorded on Ni'ihau (1993; Engilis et al. 2004), and Lana'i (winter of 1997) were not confirmed to species. Cackling Geese have been found in a variety of wetland habitats including ponds on refuges, ranches, and golf courses, and in marshes and parks. The earliest fall arrival occurred on 11 Oct (1990, Kihei, Maui; BPBM 178352) and the latest spring bird for the Southeastern Hawaiian Islands was recorded on 7 May (1979, Ki'i Unit of JCNWR, O'ahu). Over-summering and long-staying birds that apparently arrived naturally include individuals at Hanalei NWR and the nearby coast each summer from 2009-2014; at Nu'upia Ponds, O'ahu over the summers of 1969 (E 30:117) and 1998; at various locations on O'ahu during 1983-1993 (e.g., HRBP 0238, 0395-0396); at the Ki'i Unit of JCNWR and nearby locations during 2004-2016 (HRBP 5258); at Keaau, Hawai'i, in summer 1984 (e.g., HRBP 0431); and at the Kona WTP during 2009-2016 (HRBP 5986). Other Cackling or Canada geese of unknown species spent the summer of 1997 at Kealia Pond NWR, Maui, and the summer of 1970 in Hilo, Hawai'i (E 38:58).

Groups of over 5 Cackling Geese have occurred on several occasions. A flock of 7-10 birds (including one banded bird see below) were observed at Hanalei NWR., Kaua'i, Oct 1991-Jan 1992, then at Waipi'o Peninsula, O'ahu, 8-22 Mar 1992, and then back at Hanalei NWR 15–27 Apr 1992. Groups of 6 were also at an aquafarm near Kahuku, O'ahu, 29 Jan-20 Apr 1986 and in Hilo, Hawai'i 22-23 Feb 2011. Flocks of 15 Cackling/Canada geese at Hilo, Hawai'i, in winter 1900-1901 (Henshaw 1901b, 1902a) and of 9 flying over Ki'i, O'ahu 22 Feb 1982, were not identified to species but were likely of Cackling Geese. Some birds may have been of captive origin (Scheffer 1967); e.g, two Cackling Geese at Mohouli cove off Waiakea Pond in Hilo, Hawai'i 5 Dec 1977-12 Feb 1978 (*E* 38:116) reported as escapees from a local aviculturist (Paton and Scott 1985), and long-staying birds that were very tame and observed with domestic waterfowl at Kaelepulu Pond, O'ahu 30 Nov 1996-27 Nov 2002, and Waiakea Pond, Hilo, Hawai'i 31 Oct 1976 through 2008 (HRBP 0776, 0842-0847, 5018) possibly representing more than one individual; Engilis et al. 2004). See the Canada Goose account for other examples of known or suspected escapes.

Engilis et al. (2004) provide a detailed diagnosis of the subspecific forms of Cackling and <u>Canada</u> geese found in the Hawaiian Islands. These subspecies have overlapping characters and can be difficult to separate; e.g., the identities of the long-staying and well-photographed individuals at Kaelepulu and Waiakea Pond, noted above, have been debated, perhaps suggesting mixed ancestry related to captive status for these birds. Older records (Rothschild 1900, Henshaw 1902a) were listed as "Cackling Geese" and this led to the general opinion that *B.h. minima* was the only taxon reaching Hawaii (Bryan 1941, 1958; Munro 1944), but critical identifications to subspecies, not to mention species in most cases, were rarely attempted.

Subspecies *minima* breeds in coastal w. Alaska and migrates to California and thus is likely to reach Hawaii. The group of 7 birds (noted above) that traveled between Kaua'i and O'ahu, all similar in size and appearance, included an individual *minima* with a yellow neck band that had been banded in Alaska in 1989 and had spent the intervening winters in California and Oregon (Engilis et al. 2004). Five to six *minima* photographed at Kahuku, O'ahu, Oct 1985-Feb 1986 (HRBP 0517-0519) were in direct comparison with 1-2 of Aleutian *leucopareia* (see below). A Cackling Goose removed alive from the runway at Hickam AFB, O'ahu 3 Mar 1982 that died 10 Mar 1982 (BPBM 158930) is of *minima* (PP examination), as is an individual that died at the Honolulu Zoo 12 Oct 1967 (BPBM 145464; HRBP 5645-5646; J. Aldrich *in litt.*, PP examination) but the origin of this last bird is uncertain. Including these individuals and based on examination of other photographs (see HRBP page) and descriptions, we assign at least 35 individuals from Kaua'i, O'ahu, Maui, and Hawai'i to *minima* (see also Engilis et al. 2004).

Wintering individuals on O'ahu, in 1985-1986 (HRBP 0517-0519) and in 2013-2014; on Hawai'i I in 2005-2006 (see HRBP Page and Engilis et al. 2004); on Midway in 1996-1997 (see HRBP Page) and 2014-2015 (HRBP 5983-5984); on Kure in 2009 (HRBP 5674) and in 2013-2014 (one of two birds; HRBP 5981-5982); and the individual photographed on Necker in Jun 2010 (HRBP 5985) have been identified by experienced goose biologists and/or us as *B.h. leucopareia* (the Aleutian Cackling Goose), which breeds in the Aleutians and migrates across the nw. Pacific to winter in California (Mlodinow et al. 2008). A specimen from O'ahu 1 Dec 1987 (BPBM 177067) and the over-wintering bird on Laysan in 2006-2007 also appear to be of *leucopareia* (PP examination; see also Engilis et al. 2004). The population size of this subspecies increased dramatically from 1975 through the 2000s, and its migratory habits, along with records elsewhere in the Pacific (see above) and in Japan, suggest that it is the most likely subspecies from the Northwestern Islands, and that records may continue to increase.

The subspecies *taverneri* also breeds in Alaska (to the E of *minima*) and winters in the Pacific Northwest and would thus be expected in Hawaii. Confusion between *taverneri* and the similar <u>Canada Goose</u> subspecies *B.c. parvipes*, however, precludes identification of many un-photographed birds to species (Engilis et al. 2004, Mlodinow et al. 2008); see also <u>Canada Goose</u> regarding this problem. Birds we believe are *taverneri* include two specimens (BPBM 6368 from O'ahu in 1934 [see above] and BPBM 178352 collected at Makena, Maui 11 Oct 1990; PP examination), and birds photographed at the Honouliuli unit of JCNWR Nov 1981-Feb 1982 (<u>HRBP</u> 0394, 0690-0691, 0695; two *taverneri* and one *minima*), in Keaau, Hawai'i, 29 Jul 1984 (<u>HRBP</u> 0431; Engilis et al. 2004), in Kailua, O'ahu, 30 Nov 1996-20 Mar 1997 (<u>HRBP</u> 1112-1113, 1433-1435), at Honouliuli NWR in Nov 2006 (with a *minima*; <u>HRBP</u> 5257), at Hawaii Kai, O'ahu, in Jan 2005 (<u>HRBP</u> 5190; two individuals), at Ki'i 17 Nov-Dec 2009 (<u>HRBP</u> 5708-5709, 5723), the long-staying bird at Kona WTP 2009-2016 (<u>HRBP</u> 5986), and on Kure in 2013-2014 (one of two birds; <u>HRBP</u> 5981-5982).

Acronyms and Abbreviations

Literature cited

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