# **CACKLING GOOSE**

### Branta hutchinsii

Other: Canada Goose (<2004)

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

# non-breeding visitor, regular winterer

The "Cackling Goose" was long regarded as the smallest subspecies of <u>Canada Goose</u>, *B. canadensis minima* but the AOU (2004; see also Paxinos et al. 2002) split this and other small subspecies of <u>Canada Goose</u> (including *leucopareia*, *taverneri*, and *hutchinsii*) into a different species, the Cackling Goose (*B. hutchinsii*). 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, and 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.

Together, Cackling and Canada geese are annual visitors in small numbers to the Southeastern Hawaiian Islands (AOU 1998) and, based on the presence of migratory geese that resemble these species in fossil deposits on O'ahu, likely have been doing so for at least 120,000 years (James 1987, pers. comm.). Historically, the majority of individuals critically identified to species have been of Cackling rather than Canada geese (Pratt et al. 1987, Engilis et al. 2004). Analyses of descriptions, photographs, and specimens of roughly 200 individuals recorded in the Hawaiian Islands indicate that over 75 individuals were of Cackling Geese but that only six individuals can confidently be identified as Canada Geese (see Canada Goose). Two 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 two leucopareia were recorded on Wake Atoll during winter 2007-2008 (Rauzon et al. 2008).

Only five well-documented Cackling Geese have been recorded in the *Northwestern Hawaiian Islands*: one that arrived to *Kure* 29 Sep 2009 and remained at least until 1 Oct (HRBP 5674); a bird that was seen daily among nesting Laysan Albatross on Sand I., *Midway* 12 Nov 1996-4 Jan 1997 (15 photographs in the HRBP file), wintering birds on Midway in 2004-2005 and 2005-2006, and a 1<sup>st</sup>-cycle bird on *Laysan* during winter 2006-2007 (HRBP 5546). Other undocumented reports from Midway include single "small" Cackling/Canada geese on Sand I. in Dec 1959 and Nov-Dec 1961 (Fisher 1965), two birds 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. Also of note was a small Cackling/Canada goose observed flying S about 220 km N of Necker 12 Oct 2002 (Rowlett 2002). These are all most likely Cackling Geese.

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; HRBP 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). Subsequently, Cackling Geese have been recorded regularly on Kaua'i (at least 29

individuals, 1979-2009; e.g., <u>HRBP</u> 1251, 1314, 5205, 5303, published *NAB* 59:346 and 60:592), *O'ahu* (49, 1958-2009; e.g., 23 images in the HRBP file; Engilis et al. 2004; E 19:58, 67, 21:79, 30:117), Moloka'i (3, 3 Nov 2003), Maui (12, 1959-2006; e.g., BPBM 178532; E 19:76, 21:60), and **Hawai'i** (15, 1979-2009; 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 have been recorded as being 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 was recorded on 7 May (1979, Ki'i Unit of JCNWR, O'ahu). Oversummering birds that apparently arrived naturally include individuals at Nu'upia Ponds, O'ahu in 1969 (E 30:117) and in 1998; Ki'i, O'ahu each summer from 1983-1993 (e.g., HRBP 0238, 0395-0396); another on O'ahu 2004-2009 (HRBP 5258); and one at Keaau, Hawai'i, in 1984 (e.g., HRBP 0431). 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 observed at Hanalei NWR., Kaua'i, Oct 1991-Jan 1992, occurred at Waipi'o Peninsula, O'ahu, 8-22 Mar 1992, and then back at Hanalei NWR 15–27 Apr 1992 (see below). A group of 6 were also at the aquafarm near Kahuku, O'ahu, 29 Jan-20 Apr 1986. 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.

Some birds may be 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 several long-staying birds that have been 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 (possibly more than one individual; Engilis et al. 2004). See the <u>Canada Goose</u> account for other examples.

Engilis et al. (2004) provide a detailed diagnosis of the subspecific forms of Cackling and Canada geese found in the Hawaiian Islands. These subspecies have overlapping characters and can be difficult to separate; e.g., the identities of several long-staying and well-photographed individuals (in particular the Kaelepulu and Waiakea Pond individuals 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 Hawai'i (Bryan 1941, 1958; Munro 1944), but critical identifications to subspecies (e.g., to eliminate leucopareia), not to mention species, were rarely attempted. Minima breeds in coastal w. Alaska and migrates to California and thus would be 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 were in direct comparison with 1-2 *leucopareia* (HRBP 0517-0519). One 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 (e.g., HRBP 0430, 0690-0691, 0695, 1251, 1314, 5129, 5205, 5257-5258, 5297-5301) and descriptions indicating very small size, we assign at least 30 individuals from Kaua'i, O'ahu, and Hawai'i to *minima* (see also Engilis et al. 2004).

During the 1980s through 2000s, individuals wintering on O'ahu in 1983-1986 and 1996-1997, on Hawai'i I in 2005-2006 (see <a href="HRBP Page">HRBP Page</a> and Engilis et al. 2004), on Midway in 1996-1997 (see <a href="HRB Page">HRB Page</a>), and on Kure in 2009 (<a href="HRBP 5674">HRBP 5674</a>) have been identified by experienced goose biologists (P. Springer, D. Woolington, M. Naughton pers. comm.) 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). It is likely that most or all records from the Northwestern Islands pertain to this subspecies, for which populations and vagrant records to Japan and elsewhere increased substantially since populations were heavily managed in the 1980s. 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 suggest that it should be likely in Hawaii. However, Engilis *et al.* (2004) point out that *hutchinsii*, a subspecies of the central North American flyway less likely to reach Hawaii, would be difficult to separate from *leucopareia*.

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 in small numbers. Confusion between *taverneri* and the similar <u>Canada Goose</u> subspecies *B.c. parvipes*, however, precludes identification of many unphotographed birds to species (Engilis et al. 2004, Mlodinow et al. 2008). See also <u>Canada Goose</u> regarding this problem. Confirmed *taverneri* include two specimens (BPBM 6368 from O'ahu in 1934 [see above] and BPBM 178352 collected at Makena, Maui 11 Oct 1990), and birds photographed at Keaau, Hawai'i, 29 Jul 1984 (<u>HRBP</u> 0431; Engilis et al. 2004, PP examination), at Honouliuli NWR in Nov 2006 (with a *minima*; <u>HRBP</u> 5257), at Hawaii Kai, O'ahu, in Jan 2005 (with *parvipes* <u>Canada Goose</u>; <u>HRBP</u> 5921), and at Ki'i 17 Nov-Dec 2009 (<u>HRBP</u> 5708-5709, 5723) appear to be of *taverneri*. Photographs of three birds at the Honouliuli unit of JCNWR Nov 1981-Feb 1982 (<u>HRBP</u> 0690-0691, 0695) appear to show a *taverneri* Cackling Goose accompanying one each of *minima* Cackling and *parvipes* <u>Canada</u> geese.

### Acronyms and Abbreviations

#### Literature cited

Citation: Pyle, R.L., and P. Pyle. 2009. The Birds of the Hawaiian Islands: Occurrence, History, Distribution, and Status. B.P. Bishop Museum, Honolulu, HI, U.S.A. Version 1 (31 December 2009) http://hbs.bishopmuseum.org/birds/rlp-monograph/