Other: Black-headed Munia (<1983), Chestnut Mannikin (1983-1997), *L.a. jagori?* Black-headed, Mannikin, Black-headed Nun.

naturalized (non-native) resident, long established

Chestnut Munias, introduced and established in the Southeastern Hawaiian Islands since 1959, have been referred to in the Hawaiian literature as various of the above names (HAS 1967-2005; Berger 1972, 1981; Pyle 1977-2002, AOU 1983, 1998; Pratt et al. 1987) but primarily "Chestnut Mannikin (L. malacca)". They have also received the name L. m. atricapilla (Udvardy 1960b; Berger 1972, 1981), referring subspecifically to populations of n. India, Nepal, Myanmar, and nw. Yunan, and as a subspecies group to populations extending E into s. China, SE Asia, Taiwan, and the Philippine Is (Ali and Ripley 1999, Goodwin 1982, Restall 1996). The *malacca* group, "Tricolored Munia" occurs in s. India. Following Restall (1995), the AOU (2000) split the two groups into species, mistakenly indicating that Tricolored Munia (*L. malacca*) was also established in the Hawaiian Islands based on a few reports in the 1960-1970s (see Non-Established List). The AOU also followed Restall in changing the common name from "manikin" to "munia". A popular cage bird, the Chestnut Munia has been successfully introduced to many places besides Hawaii, including the Caribbean, Japan, Australia, Palau, and Guam (Long 1981, Lever 1987, Pratt et al. 1987, AOU 2000). In Hawaii they have become well-established on O'ahu and Kaua'i, and were becoming established on Maui and perhaps Lana'i in the 1990-2000s.

Chestnut Munias were first found in the wild on *O'ahu* by Udvardy (1960b), who observed 18-25 adults and juveniles near what is now the Honouliuli Unit of PHNWR 24 Apr-16 May 1959. It had been identified in the Honolulu cage bird trade since 1936 (E. Bryan in Udvardy 1960b). Through the mid 1970s observations of Chestnut Munia were confined to grassy and weedy fields in the Pearl Harbor and Ewa Beach areas (e.g., E 22:55, 23:42, 23:45, 28:18, 28:93), with populations expanding rapidly, to 400-500 individuals observed on the Waipi'o Peninsula by 1963 (E 23:42), and 500-1000 there by 1967 (E 27:106). Christmas Bird Count data during the 1970-2000s show a large peak in 1987 in this area (when 5052 individuals were recorded) followed by smaller and more fluctuating numbers (Graph), probably in response to grass-seeding phenology and the slow conversion of grass fields in the area (E 37:42; see also Red Avadavat). Beginning in the mid 1970s, perhaps as grass fields were being converted around Pearl Harbor, Chestnut Munias started showing up elsewhere on O'ahu: Moanalua in Jun 1976, Laie in Apr 1977 (specimen, BYUH), the slopes above Aiea in Jun 1977 (see also Shallenberger and Vaughn 1978), Diamond Head in Sep 1978 (when 40 were observed), Mililani in Jan 1981, Wahiawa in May 1981, near Waikane N of Kaneohe in Jul 1985, and Haleiwa in Jul 1986. Through the 1990-2000s they were being reported throughout most of O'ahu, from Kaena Point (Jun 1991) to Hawai'i Kai (Apr 1995). On the Honolulu Christmas Count, numbers fluctuated widely during the 1990s and have settled down in the 2000s (Graph), whereas numbers were increasing rapidly during the 2000s in Kaneohe.

On *Kaua'i*, first reports of Chestnut Munias were of a flock from Poipu Beach in early Aug 1976 followed by numerous small flocks totaling 50 or more individuals around Koloa 16-22 May 1977 (E 38:18). The location of these observations and coincidence with range expansion on O'ahu indicates that they most likely reached Kaua'i on their own accord, although see below concerning Maui. They spread rather quickly (Graph; E 47:69) W and N from Koloa, being observed in Lawai Oct 1978 (E 40:31), Lihue in Dec 1979, Hanapepe in Apr 1983, Kapa'a in Mar 1985, Waimea in Dec 1986, Barking Sands Beach in Mar 1987, Hanalei in May 1988, Princeville in Mar 1992, and Kokee SP in May 1992. During the 1990-2000s they were found commonly throughout Kaua'i primarily in lowland agricultural areas and in smaller numbers at higher elevations (Denny 1999). On *Maui*, 8 Chestnut Munias were first observed in Pu'unene 4 Feb 1997, during a period (1995-1998) in which several species of cage birds showed up for the first time in c. Maui (see Red-vented Bulbul, Saffron Finch, Lavender Waxbill, Orangecheeked Waxbill, and Common Waxbill) indicating, along with the lack of records from Moloka'i (a report of 45 on the Kualapu'u Christmas Count is an error), that they were released (but see record from Lana'i below). Numbers "exploded" after this first observation, with as many as 1500 observed between Pu'unene and the Airport in Jun-Jul 1999. Through the 2000s they continued to be seen abundantly in the central plain of Maui, with observations from Kealia Pond, Pukalani, and throughout Kahalui. Although the population had not been established for 15 years, we have no doubt that it will become established there. An observation of 7 adult Chestnut Munias at the Lana'i Airport 17 Apr 1997 may have represented migrants or escapes, as none were observed there in the 2000s.

Up to nine subspecies of Chestnut Munia are recognized (Clements 2007). Udvardy (1960b) was told by a pet shop owner that two birds he observed there came from Calcutta, and this seems to be the basis for his and Berger's (1972, 1981) assignment of the Hawaii population to *L.a. atricapilla*, but specimen examination (PP) indicates that Hawaii birds are a better match for *jagori* of the Philippine Is.

Acronyms and Abbreviations

Literature cited

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