Other: Black-headed Munia (<1983), Chestnut Mannikin (1983-1999), L.a. jagori? Black-headed, Mannikin, Black-headed Nun

## naturalized (non-native) resident, long established

Chestnut Munias are native to India, Nepal, S China, SE Asia, Taiwan, the Philippine I. Indonesia, and the Malaysian Penninsula (Goodwin 1982, Restall 1996, Ali and Ripley 1999). They were formerly considered the same species as Tricolored Munia (*L. malacca*) of s. India but, following Restall (1995), the AOU (2000) split the two species, mistakenly indicating that Tricolored Munia was also established in the Hawaiian Islands based on a few reports in the 1960-1970s (see Non-Established List). The AOU (2000) also followed Restall (1995) in changing the common name from "mannikin" to "munia." Chestnut Munias were introduced to O'ahu in the *Southeastern Hawaiian Islands* around 1959 and are known in the Hawaiian literature by various of the above names (HAS 1967-2005; Berger 1972, 1981; Pyle 1977-2002, AOU 1983, 1998; Pratt et al. 1987). They subsequently became well-established on O'ahu, Kaua'i, and Maui, with additional records of presumed natural dispersers from Moloka'i, Lana'i, and Hawai'i I. A popular cage bird, Chestnut Munias have also been successfully introduced to the Caribbean, Japan, Australia, Palau, and Guam (Long 1981, Lever 1987, Pratt et al. 1987, AOU 2000).

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 Munias 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). Beginning in the mid 1970s, perhaps as grass fields were being converted to other uses 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. Christmas Bird Count data during the 1980s-2014 show large peaks in se. O'ahu in 1987, 1999, and 2011 (Graph), probably in response to grass-seeding phenology (E 37:42; see also Red Avadavat). Through the 1990s-mid 2010s they were being reported throughout most of O'ahu, from Kaena Point (Jun 1991) to Hawai'i Kai (Apr 1995), with a high count during 2010-2016 of 250 at Aloun Farms on the Ewa Plain 28 Mar 2011.

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. They spread rather quickly (*E* 47:69) W and N from Koloa, being observed in Lawai in Oct 1978 (*E* 40:31), Lihue in Dec 1979, Hanapepe in Apr 1983,

Kapa'a in Mar 1985 (Graph), 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 1990s-mid 2010s they were found commonly throughout Kaua'i, primarily in lowland agricultural areas, and in smaller numbers at higher elevations (Denny 1999). Single-location counts of >100 were recorded at various locations in 2010-2016, with a high count of 200 at Salt Ponds Beach near Hanapepe 12 Mar 2015.

The only record for *Moloka'i* involves two birds at Kualapulu Reservoir 20 Jan 2010, presumably individuals that had dispersed from O'ahu or Maui (a report of 45 on the 2000 Kualapu'u Christmas Count is an error). 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, Orange-cheeked Waxbill, and Common Waxbill) indicating, along with the lack of records from Moloka'i to that point, 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 mid-2010s they continued to be seen abundantly in the central plain of Maui, with a high count of 900 at Hansen Ponds 16 Feb 2015, and additional observations from Pukalani, Lahaina, Olinda, and to the Hana area by Aug 2010. We now consider Chestnut Munia as established on Maui. 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-mid 2010s. On *Hawai'i I*, Chestnut Munias were first discovered near Pepe'ekeo, where two birds were observed and photographed 22 May 2015 (HRBP 6774), followed by a report of 25 in Hilo 8 Aug 2015 and 100 at the Pepe'keo location 2 Dec 2015 (HRBP) 6775). Through 2016 they continued to be observed in the Pepe'ekeo area but not elsewhere on the island.

Up to nine subspecies of Chestnut Munia are recognized (Clements et al. 2016, Gill and Donsker 2016). 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, BPBM) indicates that Hawaii birds are a better match for *jagori* of the Philippine Is.

## Acronyms and Abbreviations

## Literature cited

Citation: Pyle, R.L., and P. Pyle. 2017. The Birds of the Hawaiian Islands: Occurrence, History, Distribution, and Status. B.P. Bishop Museum, Honolulu, HI, U.S.A. Version 2 (1 January 2017) <a href="http://hbs.bishopmuseum.org/birds/rlp-monograph/">http://hbs.bishopmuseum.org/birds/rlp-monograph/</a>