

ROCK PIGEON

Columba livia

Other: Rock Dove (<2003), Domestic Pigeon,
Common Pigeon, Feral Pigeon

subspecies?

naturalized (non-native) resident, long established

The Rock Pigeon, long known as Rock Dove, originally inhabited rocky cliffs on seacoasts and limited inland cliffs and desert oases in s. Europe and n. Africa east to India, although the ancestral distribution has been obscured by a long history of domestication (Dement'ev and Galdkov 1951a, Ali and Ripley 1981, Long 1981, Cramp and Simmons 1985, Johnston and Janiga 1995, AOU 1998). As early as 1606-1621 they were brought to e. North America, and many more introductions were subsequently made throughout the world (Long 1981, Lever 1987, Higgins and Davies 1996). Feral populations derived from domesticated stock are found in the Hawaiian Islands and throughout the Pacific basin, at least sparingly on Wake and Johnston atolls and in most Pacific island groups, occurring primarily around cities but also in rural areas (Amerson and Shelton 1976, Long 1981, Lever 1987, Pratt et al. 1987, Rauzon et al. 2008).

In the Hawaiian Islands Rock Pigeons may have arrived as early as 1788, a year before the species was formerly described by Gmelin (1789), aboard a vessel from China that carried a number of [Wild Turkeys](#) and “several pair of pigeons” (Meares 1791), most likely Rock Pigeons (Locey 1937). In 1796 domestic pigeons were brought to O'ahu from w. Europe (Walker 1967) and became feral almost immediately (Caum 1933). “Tame pigeons” were abundant in Honolulu by 1825 (Bloxam 1827b) and were reportedly being displaced there by the more-recently arrived [Common Mynas](#) in 1879 (Finsch 1880). By 1891 Rock Pigeons were reported to be very common on Hawai'i I (Caum 1933, Munro 1944). They became abundant and widely hunted on all Southeastern Islands, but in time populations declined, reportedly due to increased hunting at roosting sites and changing land-use conditions (Schwartz & Schwartz 1949), as well as diseases (*cf.* Berger 1972, 1981), but likely also due to other factors associated with introduced population dynamics.

Caum (1933) believed feral pigeons to be still very common on *Hawai'i I*, less common on *O'ahu*, rare on *Moloka'i* and *Lana'i*, and very rare on *Maui*; he did not mention their status on Kaua'i. Schwartz & Schwartz (1949) estimated populations of 2300 on Hawai'i and 100 or fewer each on O'ahu, Moloka'i, and Lana'i. On the last island they were valued for spreading Australian saltbush (*Atriplex semibaccata*) seeds for range crop (Munro 1944). On *Ni'ihau* a banded racing pigeon was noted in June 1981, the species was described as an occasional visitor in March 2002, and two were observed on nearby Lehua islet in May 2003. On *Kaho'olawe*, one was observed 23 Apr 1980 (*E* 59:22) they were noted as present during field surveys in Feb & Mar 1992 (Gon et al. 1992), and 12 were observed flying from the island toward Molokini Islet 14 Dec 2015. One Rock Pigeon was observed 28 km NW of Kaho'olawe, flying high and steadily northward toward Lana'i (Rowlett 2002), and a flock of 12 was recorded at sea 16 km off Waikaloa Beach, Hawai'i 12 May 2012.

Through the mid 2010s both free flying flocks of domesticated pigeons (often in varying plumages developed during controlled breeding) and flocks of wild feral pigeons were common on all six of the main Southeastern Islands (including *Kaua'i*; *cf.* Richardson and Bowles 1964), primarily around cities but also nesting on remote rocky cliffs (e.g., *E* 37:9), offshore islets, and in lava tubes. They have been recorded up to

3,000 m elevation on Mauna Kea (Schwartz and Schwartz 1949; Berger 1972, 1981) and Maui (2 at the summit of Mt. Haleakala 15 May 2011). They have become extremely common around Honolulu and considered a nuisance in Waikiki and at the Honolulu Zoo (Williams and Fleischer 1989; *E* 48:61-64). Public pressure against culling has resulted in attempts to neutralize breeding fertility by modifying the food grain provided to the birds, with limited to no success. Rock Pigeons were not counted on the Honolulu [Christmas Bird Count](#) until 1973, after which numbers there and on the Waipi'o count have been variable and have shown no trends. High counts reported on each island during 2010-2016 included 150 in cornfields W of Lihue, Kaua'i 4 Apr 2015; 300 at Kapiolani Park, O'ahu 7 Jun 2011; 20 at Kaunakakai WTP, Moloka'i 27 May 2012; 32 at Manele Bay, Lana'i 14 Jun 2010; 220 at Waihe'e Refuge, Maui 24 Dec 2012; and 76 at Spencer BP, Hawai'i I 22 Feb 2016.

In the *Northwest Hawaiian Islands*, cable company employees brought Rock Pigeons to Sand I, **Midway**, sometime after Wetmore's visit in Apr 1922 (Bailey 1956). In May 1945 about 50 birds were nesting in ironwood trees (Fisher & Baldwin 1946). Despite attempts to control the population by shooting (Fisher & Baldwin 1946, Bailey 1956), it increased to an estimated 175 by Dec 1946 (Fisher 1949). They continued to occur commonly around the cable station through at least Dec 1958 (Frings and Frings 1960, *E* 18:4), but sometime after 1960 the population declined, perhaps from natural attrition or possibly by deliberate control. Visitors reported 2-3 Rock Pigeons on several occasions between Mar 1978 and Feb 1983, but none thereafter. The only other reports of Rock Pigeon from the Northwestern Islands are of singles reported from **French Frigate** 29 Apr 1985, an individual observed daily on **Nihoa** 22 Jun-23 Aug 1981 (Conant 1983b), and one found desiccated there 13 Sep 2011. Both of the birds on Nihoa had bands of racing pigeons.

There are some 13 subspecies of wild Rock Pigeons recognized based on size and depth of coloration (Cramp and Simmons 1985) but it is impossible to trace the origins of domesticated birds introduced around the world, the characteristics of the original stocks being long ago lost and/or genetically mixed beyond diagnosis. Feral Rock Pigeons are often referred to as the subspecies "*Columba livia domestica*" but this name is nomenclaturally invalid (Johnston and Janiga 1995). Pigeons in Hawaii can show various color morphs, often including partially or wholly white feathering. Populations in Waikiki and that of Midway in the 1950s have been dominated by white-morph individuals, "White Kings" of the pigeon fancier trade (Williams and Fleischer 1989), and multicolor flocks of dyed white birds have occasionally been observed competing with rainbows on O'ahu. After several generations, wild feral populations in Hawaii often revert to the dark blue-gray ("dovecoat") plumage appearance of the original Rock Pigeons (Caum 1933, Schwartz & Schwartz 1949, Berger 1981).

[Acronyms and Abbreviations](#)

[Literature cited](#)

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