Once common and widespread on its native Cuba, this ground-haunting pigeon has become extremely rare almost everywhere through the combined effects of hunting and the destruction of its (chiefly lowland) forest habitat.

DISTRIBUTION The Blue-headed Quail-dove (see Remarks 1) is endemic to Cuba including the Isle of Pines (Isla de la Juventud), although it was originally thought to occur in Jamaica and Florida as well (see Remarks 2). Unless otherwise stated, coordinates below are taken from OG (1963a), with records organized by and within provinces from west to east (see Remarks 3), as follows:

Pinar del Río about 20 km before reaching Cabo San Antonio, Península de Guanahacabibes, 1974 (García undated); El Veral, Península de Guanahacabibes, where a pair was observed sometime before 1968 (Garrido and Schwartz 1968); Sierra de los Organos (22°25'N 84°00'W) and Sierra de Güira (22°40'N 83°26'W), currently (Garrido 1986); Pan de Guajaibón (22°48'N 83°22'W) (see Rodríguez and Sánchez 1991); La Güira National Park, north-west to San Diego de los Baños (22°39'N 83°22'W), where a bird was observed in March 1989 (J. F. Clements *in litt.* 1991); Cabaña Los Pinos (inside La Güira National Park), where a bird was observed in November 1987 (A. Mitchell *in litt.* 1991); San Diego de los Baños itself (outside the current park), April 1900 (two specimens in USNM); Palacios (probably Los Palacios, 22°35'N 83°15'W), February 1886, and near Palacios at La Serrana (untraced), February 1933 (six specimens in FMNH); hillside north of Candelaria (22°44'N 82°58'W), October 1955 (specimen in YPM; also Ripley and Watson 1956); Nortey (22°49'N 82°56'W) in the Sierra del Rosario, undated (Garrido 1986), with untraced localities within the province being San Marcos and Sierra Chiquita (see Rodríguez and Sánchez 1991);

Isle of Pines (Isla de la Juventud) Carapachibey (21°27'N 82°56'W) to Guayacanal (21°30'N 82°46'W), around 1965 (Garrido 1986); Caballos Mountains (21°53'N 82°46'W), undated (Bangs and Zappey 1905);

Habana "Havana", February 1886 and March 1892 (four specimens in FMNH); "near Havana", January and March 1929 and April 1936 (three specimens in DMNH, FMNH and YPM); Minas (23°07'N 82°12'W), April 1934 (two specimens in FMNH); Arcos de Canasí (23°07'N 81°47'W), undated (O. H. Garrido *in litt.* 1991); Nueva Paz (22°46'N 81°45'W), undated (O. H. Garrido *in litt.* 1991);

Matanzas Caobí (22°51'N 81°49'W) and El Portugués (22°52'N 81°48'W) (see González and Sánchez 1991); near Bodega, Vieja (untraced, but near Santo Tomás 22°24'N 81°25'W), Península de Zapata, undated (Garrido 1980); near Bemba (now known as Jovellanos, 22°48'N 81°12'W: see, e.g., Mapa de la Isla de Cuba 1900), undated (specimen in AMNH); in the woodlands from Soplillar (22°17'N 81°09'W) south-east to Cayo Ramona (22°09'N 81°02'W), currently (González Alonso *et al.* 1990, Rodríguez and Sánchez 1991, R. García *per* A. Mitchell *in litt.* 1991, Sulley and Sulley 1992), with untraced localities within the province being El Cenote and Nueva Paz (see Rodríguez and Martínez 1991);

Cienfuegos-Sancti Spíritus Pico de San Juan (on the border of the two provinces) by local report (Chapman 1892);

Ciego de Avila Palo Alto (21°36'N 78°59'W), April 1915 and nearby, January 1934 (two specimens in MCZ); Loma de Cunagua (22°06'N 78°27'W), currently (Rodríguez and Sánchez 1991, O. H. Garrido in litt. 1991);

Camagüey near Vertientes (21°16'N 78°09'W), March 1926 (four specimens in FMNH, MCZ and USNM); Algarrobo (21°28'N 78°05'W), March and April 1925 (six skins in AMNH, BMNH and MCZ); Sierra de Cubitas (21°41'N 77°55'W), April 1933 (Rutten 1934) and undated (Allen 1962, O. H. Garrido *in litt.* 1991); La Mula (untraced, but near Nuevitas at 21°33'N 77°16'W), April 1925 (two specimens in AMNH and MCZ), with untraced localities including San Berenito (*sic*), April and March 1924, 1925 and 1934 (specimens in AMNH, BMNH and MCZ), Delisio (*sic*), March 1925 (specimens in MCZ; see Remarks 4), Los Angeles, March 1924 (specimen in MCZ; see Remarks 5);

Granma Cabo Cruz (19°51'N 77°44'W), undated (O. H. Garrido in litt. 1991); Las Coloradas (untraced), currently (Rodríguez and Sánchez 1991);

Holguín Holguín, June 1904 (specimen in MCZ), and Santiago (20°53'N 76°09'W), March 1905 (specimen in AMNH);

Santiago de Cuba Pico Turquino (15°59'N 76°50'W), undated (O. H. Garrido in litt. 1991); near Paso Estancia (20°24'N 75°58'W), June 1906 (specimen in WFVZ); Baconao (19°54'N 75°28'W),

currently (Rodríguez and Sánchez 1991, O. H. Garrido *in litt.* 1991); Pico Cuba (untraced), currently (Rodríguez and Sánchez 1991);

Guantánamo Bayate, 1906 (specimens in AMNH, BMNH, FMNH and MCZ; see Remarks 6); Boca de Jaibo (20°02'N 75°14'W), August 1919 (specimen in USNM); Guantánamo town, 1911, 1912, 1913 and 1926 (specimens in AMNH and USNM); Lajas (20°05'N 75°10'W), June 1916 (specimen in USNM); San Carlos (20°09'N 75°09'W), April 1912; Romilia woods (Romelia = Hector Infante, 20°10'N 75°06'W), January and June 1911, January 1912 and January 1913 (four specimens in AMNH and USNM); Río Seco and nearby (20°12'N 75°04'W), 1908, 1911, 1912 and 1916 (eight specimens in AMNH, CM and USNM).

POPULATION The number of birds collected in the past (at least 105 specimens in the museums listed above), together with comments in the literature (see, e.g., d'Orbigny 1839, Gundlach 1871-1875, Cory 1887, Barbour 1923, Bond 1956b, García undated), testifies to a former abundance and hence a steep decline that was already pointed out by Gundlach (1871-1875; see also Threats). Ripley and Watson (1956) reported finding the Blue-headed Quail-dove rather common on the hillsides north of Candelaria in 1955, and Barbour (1923) found it "very common" in 1915 in the lowlands near Palo Alto, where he shot "a good many", with the "guajiros" having "dozens caged to sell...", adding that in Oriente (see Remarks 7), "the bird is still common where it has not been trapped too hard". Garrido and Schwartz (1968) believed that it was still to be found in numbers in the Península de Guanahacabibes, although they could only observed a pair. It was presumably very rare on the Isle of Pines (Garrido and García Montaña 1975), where the species was first reported by local people to Bangs and Zappey (1905) in the Caballo Mountains (now extirpated: O. H. Garrido in litt. 1991) and somewhere on the south coast; a bird was collected in August 1909 (see Todd 1916). In 1965 Garrido (1986) found a few birds in the southern parts of the island, but the species seems now to be extinct there (Rodríguez and Sánchez 1991, O. H. Garrido in litt. 1991). At present the Blue-headed Quail-dove is so much rarer and less widespread than formerly that it has for some years been considered in danger of extinction (Allen 1962, Goodwin 1983, Garrido 1986). However, it still appears to occur in reasonable numbers in the forested area between Soplillar and Cayo Ramona (R. García per A. Mitchell in litt. 1991); in March and April 1987, 13 birds were ringed in the area of Soplillar and Los Sábalos (Rodríguez and Sánchez 1991), and a group of five birds was observed in this same area in January-February 1991 (Sulley and Sulley 1992).

ECOLOGY The Blue-headed Quail-dove mainly inhabits lowland forest undergrowth and occasionally highland forest where suitable open woods are also sometimes to be found; it appears to need thick overhead cover, but with an open and preferably stony forest floor (Gundlach 1871-1875, Barbour 1923, Goodwin 1983, Rodríguez and Sánchez 1991). Generally it is found in pairs (Garrido 1986). It mainly feeds from the ground on seeds, fallen berries and snails; it has also been reported in pea plantations at the time of year when the shells start opening (Goodwin 1983, Rodríguez and Sánchez 1991; also d'Orbigny 1839). It lays one or two eggs in a simple nest low in shrubbery or on bare ground under bushes or among the roots of trees (Bond 1979, García undated, Valdés Miró 1984, Garrido 1986, WFVZ label data), although it has also been said to build its nest with twigs in epiphytic *Tillandsia* (Cabanis 1856, Gundlach 1871-1875). Breeding occurs from April to July (Rodríguez and Sánchez 1991, USNM and WFVZ label data).

THREATS The present scarcity of the Blue-headed Quail-dove is mainly due to human persecution and the destruction of its habitat (Goodwin 1983, Rodríguez and Sánchez 1991). It has been persistently hunted as its flesh was highly appreciated, birds often being trapped alive and sent to markets in both Cuba and Jamaica (Albin 1738, Hayes 1794, d'Orbigny 1839, Gundlach 1871-1875, Cory 1887, Scott 1891-1893, Barbour 1923, Garrido 1986), this still occurring on the Península de Zapata (O. H. Garrido *in litt*. 1991). Such pressure made numbers decline annually, and the price paid for them rose accordingly (Gundlach 1871-1875). Despite Cuba being reported to have the "lowest annual deforestation rate in Latin America" (in Santana 1991), habitat loss, mainly for agricultural land, has forced the Blue-headed Quail-dove to retreat into pockets of habitat (Garrido 1986).

MEASURES TAKEN The species presumably benefits from the following protected areas (as listed in Wright 1988): Península de Guanahacabibes Biosphere Reserve, La Güira, Sierra Maestra and Península de Zapata National Parks, Santo Tomás and Loma de Cunagua Faunal Refuges, and Guaná, Playa Larga, Playa Girón Tourist Natural Areas. The species is protected against hunting although this law is not adequately enforced (see Threats).

MEASURES PROPOSED Intensive studies are needed to clarify the current status of the Blue-headed Quail-dove and to determine whether it occurs in any of the protected areas listed above, a task that should perhaps be combined with similar studies of the Plain Pigeon *Columba inornata* in those areas where the two overlap (see relevant account). Enforcement of existing hunting legislation should be increased, but this would best be done through a campaign of general public education concerning this and other threatened birds endemic to Cuba.

REMARKS (1) The Blue-headed Quail-dove is the sole representative of its genus. (2) The species is now considered to have been introduced unsuccessfully in the Florida Keys, Hawaiian Islands and Jamaica (Long 1981; also AOU 1983). (3) Some localities which were labelled under old province boundaries have now been included within the present political division of provinces (see ICGC 1978). (4) Probably the locality is Delirio, but there are several places with this name in Camagüey (see, e.g., OG 1963a). (5) Los Angeles is a too common a place-name in Camagüey to be traceable. (6) Two localities are called Bayate, one in Santiago de Cuba and the other in Guantánamo. The museum labels do not specify the province, but the larger Bayate (20°20'N 75°22'W) in Guantánamo is almost certainly intended. (7) Oriente was the name of the easternmost province, today split into Granma, Holguín, Santiago de Cuba and Guantánamo (e.g. ICGC 1978).