A naturally low-density flycatcher, this bird has become much rarer still throughout its native Cuba (there are old records from the southern Bahamas and the Turks and Caicos Islands) for reasons unknown, although the most likely culprit is deforestation.

DISTRIBUTION The Giant Kingbird occurs throughout Cuba including the Isle of Pines (Isla de la Juventud) and was formerly found in the southern Bahamas and Turks and Caicos (AOU 1983, Buden 1987a; see Remarks). An accidental individual on Mujeres Island, Península de Yucatán, Mexico, was also reported in 1886 (Salvin 1889).

Cuba Localities (organized by and within provinces from west to east, with coordinates from OG 1963a) where the species has been recorded are:

Pinar del Río "Pinar del Río", February 1900 (four specimens in USNM); El Veral, Península de Guanahacabibes, where two specimens were collected sometime before 1968 (Garrido and Schwartz 1968); Sierra del Rosario, where it was reported common (Bond 1956b); Pica Pica (22°27'N 83°55'W), undated; Sumidero (22°27'N 83°55'W), undated (both from O. H. Garrido *in litt*. 1991); San Diego de los Baños (22°39'N 83°22'W), April 1900 (specimen in USNM); between La Palma (22°45'N 83°33'W) and San Diego (probably San Diego de los Baños) and between La Palma and La Mulata (22°52'N 83°23'W), where it was commonly found in 1933 (Rutten 1934); La Güira (small population south of Sierra de la Güira, this at 22°40'N 83°26'W), undated; Loma del Mulo (22°53'N 82°59'W), undated; Loma del Taburete (c.4 km south of Loma del Mulo), undated (all from O. H. Garrido *in litt*. 1991);

La Habana "near Havana", where a nest was found in May 1939 (Bond 1941a); Laguna de Ariguanabo (22°56'N 82°33'W), undated; Tapaste (23°02'N 82°08'W), undated (both from O. H. Garrido in litt. 1991);

Matanzas río San Juan, near Matanzas, where a bird was collected on an ungiven date (Barbour 1943); Santo Tomás (22°24'N 81°25'W), January 1933 (specimen in ASNP); "about the Ciénaga" (presumably referring to the Ciénaga de Zapata), where a few birds were collected at an ungiven date (Barbour 1943); Guamá (at the south-eastern corner of Laguna del Tesoro, this at 22°21'N 81°07'W), December 1901 (specimen in USNM), where only one sighting has been reported during the last 30 years (O. H. Garrido *in litt.* 1991);

Cienfuegos "Mina Carlota", Cumanayagua (22°09'N 80°12'W), April 1941 (three specimens in CM);

Villa Clara Loma de Jumagua (22°48'N 80°07'W) and Santa Clara, undated (O. H. Garrido in litt. 1991); Remedios (22°30'N 79°33'W), where the species was collected in 1864 (Barbour 1943);

Sancti Spíritus Trinidad, March 1892 (four specimens in AMNH); Sierra de Trinidad (21°56'N 80°00'W) and Sierra de Sancti Spíritus (21°58'N 79°38'W), undated (O. H. Garrido *in litt.* 1991); San Pablo (21°46'N 79°46'W), where four birds were collected in March 1892 (Chapman 1892);

Ciego de Avila Loma de Cunagua (22º06'N 78º27'W), undated (O. H. Garrido in litt. 1991);

Camagüey "Camaguey", March 1948 (specimen in USNM); "north Camagüey", December 1990 (L. Fazio *in litt.* 1992); Sierra de Cubitas (21°41'N 77°55'W), undated (O. H. Garrido *in litt.* 1991); Sierra de Najasa (21°02'N 77°45'W), where the species was recorded in April 1978 (Berovides Alvarez *et al.* 1982);

Holguín, March and April 1904 (six specimens in AMNH); Preston (20°46'N 75°39'W), where two birds were collected in 1915 (Barbour 1943); Nicaro (20°42'N 75°33'W), undated (O. H. Garrido *in litt*. 1991); near Mosca Verde (a few kilometres north-west of Culebro, this at 20°35'N 75°26'W), where a bird was observed in June 1986 (Abreu *et al.* 1989); Cupeyal (20°35'N 75°11'W), undated; Sierra de Moa (mountains south of Moa, this at 20°40'N 74°56'W), undated (both from O. H. Garrido *in litt*. 1991); río Fabrico (untraced but opposite Cayo Grande de Moa), where a bird was taken in March 1930 (Wetmore 1932c); Ojito de Agua (c.10 km north-east of La Munición, for which see ICGC 1978), undated; Farallones (c.20 km south-west of Moa), undated (both from O. H. Garrido *in litt*. 1991);

Granma Cabo Cruz, undated; Birama (20°48'N 77°12'W), undated (both from O. H. Garrido *in litt.* 1991); Bayamo, undated (Barbour 1943);

Santiago de Cuba Sierra Maestra (including the surroundings of Pico Turquino), undated (O. H. Garrido *in litt*. 1991);

Guantánamo "Guantánamo", April 1911 (specimen in AMNH), May 1912, February 1914 and April 1916 (three specimens in USNM); Sierra del Guaso (20°14'N 75°10'W), undated; "Cafetal, Virginia" (untraced), "Yateras" (municipality at 20°12'N 75°09'W), December 1917 (specimen in USNM); Yateras, undated (O. H. Garrido *in litt.* 1991); San Carlos (20°09'N 75°09'W), September 1909 and April 1912 (two specimens in LSUMZ); woods at río Seco (untraced), San Carlos, November 1911, March 1912, January 1913, February 1916 (five specimens in USNM); Santa Rita, Los Caños (20°03'N 75°09'W), February 1919 (five specimen in LSUMZ and USNM); Monte Verde (20°19'N 75°00'W), undated (O. H. Garrido *in litt.* 1991); Cuchillas del Toa Biosphere Reserve, 20°27'N 74°58'W), sometime between 1985 and 1989 (Alayón García *et al.* 1987); Sierra del Purial (20°12'N 74°42'W), undated; Duaba Arriba (20°17'N 74°35'W), undated; Cuchillas de Baracoa (mountains c.10 km south of Baracoa: see, e.g., ICGC 1978), undated; Meseta de Maisí (see, e.g., ICGC 1978), undated (all four from O. H. Garrido *in litt.* 1991);

Isle of Pines Santa Bárbara (21°49'N 83°01'W) (see Todd 1916); Los Indios (21°42'N 83°00'W), where a pair was collected in May 1913 (Todd 1916); "Nuevas River" (río de las Nuevas, at 21°56'N 82°56'W), where the species was reported common (Todd 1916); McKinley (21°53'N 82°55'W), sometime before 1911 (Todd 1916); Los Almácigos (21°46'N 82°49'W), "Santa Fé" (21°45'N 82°45'W), Mal País (untraced, but río Mal País is at 21°49'N 82°44'W) and La Vega, untraced, where six birds were observed and five collected in May 1904 (all four from Bangs and Zappey 1905).

POPULATION Although d'Orbigny (1839) referred to this species as "very common" (an unreliable comment as he reported it from all the Greater Antilles), and Gundlach (1871-1875) as "not rare" in appropriate habitat (see Ecology), the Giant Kingbird has generally been regarded as a rare, low-density species (Bangs and Zappey 1905, Todd 1916, Wetmore 1932c, Barbour 1943, Garrido and García Montaña 1975, García 1987, O. H. Garrido *in litt.* 1991, L. Fazio *in litt.* 1992) or "extremely rare" (Garrido and Schwartz 1968). On the Cuban mainland, however, the species was reported to be common in the pine-forest of the Sierra del Rosario, Pinar del Río (Bond 1956b), a judgement probably derived from Rutten (1934), who described it as common in the high pinewoods between San Diego and La Palma, and between the latter locality and La Mulata. O. H. Garrido (*in litt.* 1991) noted that only a single bird was recorded during 30 years at Guamá, Ciénaga de Zapata, and in his opinion the healthiest surviving populations are to be looked for in the eastern sierras (i.e. Toa, Moa, Baracoa and Maestra). On the Isle of Pines observers agreed that the species was comparatively scarce (Bangs and Zappey 1905, Todd 1916, Barbour 1943), although reportedly fairly common along the río de las Nuevas (Todd 1916); but there appear to have been no records for over 70 or even 80 years.

ECOLOGY The Giant Kingbird inhabits woodlands, in particular pine-forest, also semi-open woodlands with high trees, both in the mountains and lowlands, frequently near borders of swamps (Todd 1916, Rutten 1934, Barbour 1943, Bond 1979, O. H. Garrido *in litt.* 1991). According to Gundlach (1871-1875) and hence Barbour (1943) it feeds on flying insects, lizards, and even little birds; and has also been reported catching insects over the water and occasionally minnows near the surface (Bangs and Zappey 1905, Todd 1916). O. H. Garrido (*in litt.* 1991) added caterpillars and considered that a substantial amount of fruit (e.g. *Ficus*) is taken daily; fruit consumption was previously mentioned by Bangs and Zappey (1905), who found remains of insects and berries in a stomach (see also Todd 1916). Gundlach (1871-1875) noted that the species nests on horizontal branches of large trees (e.g. ceiba *Ceiba pentandra*), and a nest situated at the top of a large ceiba found on 28 May 1936 contained three eggs (Bond 1941a; also Balát and González 1982).

THREATS The causes of the species's rarity (and apparenty decline) are not clear, but deforestation appears to be the major problem (Rutten 1934, Barbour 1943, O. H. Garrido *in litt.* 1991, L. Fazio *in litt.* 1992).

MEASURES TAKEN None is known, except for the populations which may be benefiting from some of Cuba's protected areas (e.g. Sierra Maestra, La Güira and Cubitas National Parks, Los Indios and Sierra del Cristal Natural Reserves, Baconao, Cuchillas del Toa, Península de Guanahacabibes and Sierra del Rosario Biosphere Reserves).

MEASURES PROPOSED Intensive studies of the ecological requirements of the species are essential. Although its range appears to extend throughout Cuba and the Isle of Pines, the areas where reasonable populations still occur should be identified, and efforts made to afford protection to the most important. Such activities should if possible be undertaken in conjunction with work on other threatened species, notably Gundlach's Hawk *Accipiter gundlachi* (see relevant account), which is likely often to be sympatric in pinewoods and lowland forest.

REMARKS During the nineteenth century birds were reported from Great Inagua and and Turks and Caicos (North, Middle and East Caicos), where (although not proven) it was a possible breeder (Buden 1987a; five specimens in the FMNH were collected in 1891). The species has not been seen there since and seems likely no longer to occur.