

*This elusive bird is known only from within a 20 km radius of Santo Tomás in the Zapata Swamp, Cuba, where it appears to have suffered particularly from dry-season burning of its savanna-like habitat and perhaps from introduced predators.*

**DISTRIBUTION** The Zapata Wren is endemic to Cuba, and was not discovered until 1926 (Barbour and Peters 1927). For almost 50 years it was only known to occur in the Zapata Swamp, Matanzas province, in a very restricted area about 13 km<sup>2</sup> and c.5 km north of Santo Tomás (22°24'N 81°25'W in OG 1963a) (King 1978-1979, Bond 1979). In February 1975, two birds were seen and others heard near the mouth of the río Hatiguanico (22°32'N 81°39'W in OG 1963a) (Bond 1984), extending the known range c.15 km to the north-west. In 1988 the species's known range was again extended when on several occasions birds were observed at Hato de Jicarita (22°37'N 81°27'W in OG 1963a) and at La Cola, these two localities being c.20 km north and c.20 km south-east of Santo Tomás respectively (Martínez García and Martínez García 1991). Most skins in AMNH, ANSP, BM, CM, MCZ, MNHN and USNM are simply labelled as "Santo Tomás, Ciénaga de Zapata" or "Santo Tomás, Península de Zapata", but a specimen in ROM is labelled "Represuela (*sic*) de Santo Tomás", which is in the same area north of Santo Tomás (O. H. Garrido *in litt.* 1991).

**POPULATION** The Zapata Wren was reported to be common within its restricted range soon after its discovery (Bond 1956b, Garrido 1985). Most skins (at least 17) in the museums mentioned above were collected between 1926 and 1934, although one was collected in 1948 (in USNM) and one in 1972 (in ROM). Garrido (1985) reported it to be common in 1962, when several birds could be heard and one was then collected (García undated). However, only after a long trek into the swamp was a bird taken in 1974, and surprisingly no bird was heard singing (Garrido 1980). Subsequent expeditions in 1978, 1979 and 1980 failed to find the species, and it was then believed extinct (Garrido 1985). However in November 1981 a single bird was again reported, in March and April 1982 two birds were seen and in 1985 the species was recorded once more (González 1982, Garrido 1985, C. Wotzkow *in litt.* 1986). Garrido (1985) has suggested that between 1974 and 1981 the Zapata Wren's "disappearance" was related to the fires in the swamp caused by local people (see also Regalado Ruíz 1981, and Threats), although O. H. Garrido (*in litt.* 1991) comment that the Zapata Wren seems to be "just holding up with no signs of increasing" and added that "it has been seen in the same areas for the past six years". Sulley and Sulley (1992) observed two birds in February 1991 near Santo Tomás. The population in the area of Santo Tomás appears to have substantially increased after the protection of the area (H. González Alonso *in litt.* 1991), but its current population is still very low and it is estimated perhaps at less than 30 pairs (L. Fazio *in litt.* 1992).

**ECOLOGY** The terrain north of Santo Tomás where the Zapata Wren is found, although not firm, is not as soft as the rest of the area (Garrido and García Montaña 1975). The vegetation is savanna-like, mainly formed of sawgrass *Cladium jamaicense*, "macíos" *Typha domingensis* and rushes with scattered bushes, mostly "arraigán" *Myrica cerifera*, "yana" *Conocarpus erecta*, "yanilla blanca" *Ilex cassine*, "ácana" *Mimulus* sp. and low trees (Barbour 1928, Bruner 1934, Garrido and García Montaña 1975, Garrido 1980, Regalado Ruíz 1981, González 1982). Its habitat within the Santo Tomás area is in part crossed by a ditch or "zanja" known as "La Cocodrila", and the vegetation growing on both sides is rich, owing to the peat that was deposited during its digging (Garrido 1980); this habitat can be either completely covered with water or dried out, depending on the annually variable rainy season, winters tending to be drier (Garrido 1980). The species is hardly ever detected unless its song is heard, and it is rarely seen flying, more usually moving through branches (Garrido 1980, García undated).

It feeds mainly on insects although three stomachs analysed contained lizard bones (Bruner 1934).

The Zapata Wren's nest was first discovered c.2 km north-east of Santo Tomás in 1986, where in due course altogether four nests were found in June 1986, February and March 1988 (Martínez García and Martínez García 1991; see Remarks). Nests were placed in sawgrass tussocks 50 to 70 cm above the ground, and the material used in construction was exclusively sawgrass threads; three of the nests

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contained two eggs (Martínez García and Martínez García 1991). The dates when nests were discovered plus the following information suggest a wide breeding season which would extend from January to July: a flightless juvenile was collected on 19 May 1933 (specimen in FMNH; see also Garrido 1980), a date that would suggest egg-laying in early May or late April (Balát and González 1982); two birds collected at the beginning of January 1931 had testes swelling (specimens in ANSP); and birds have been reported in full song in January and June, while very few were vocal in April (Balát and González 1982, González 1982).

**THREATS** Burning of habitat by local people was apparently the cause of the steep decline that evidently took place in the 1970s, and although this practice was believed to have been eradicated (González 1982, Regalado Ruíz 1981) fires still occur year after year (O. H. Garrido *in litt.* 1991). Barbour (1928) and Garrido (1985) both noted the presence of introduced mongoose *Herpestes* and rats *Rattus*, which could constitute a substantial additional threat. Small portions of the swamp have been drained but there is no immediate threat to the integrity of the habitat as a whole (King 1978-1979).

**MEASURES TAKEN** The 10,000 ha Corral de Santo Tomás Faunal Refuge has been set up in the Zapata Wren's range according to the maps shown in Wright (1988) and also ICGC (1978).

**MEASURES PROPOSED** A survey of the species is urgently needed, with a special effort to delimit accurately its range, numbers and potential threats (see Remarks under Zapata Rail *Cyanolimnas cerverai*). The protection of other areas where it has recently been found (see Distribution) is obviously necessary. Dry-season burning of the swamp must be investigated and controlled.

**REMARKS** Local residents described the species's nest as spherical and as containing as many as six eggs (Bond 1979, García undated); this agrees with Martínez García and Martínez García (1991) concerning shape but not clutch-size.