

*This icterid is endemic to Martinique, West Indies, where, although present in most habitat types throughout the island, it suffers severe levels of brood-parasitism from the recently established Shiny Cowbird, and the population has declined dramatically.*

**DISTRIBUTION** The Martinique Oriole is endemic to the island of Martinique (to France), West Indies. It was originally distributed throughout the forested areas of the island, below 700 m (Babbs *et al.* 1987), as indicated from the localities mentioned by Lawrence (1878c), on specimen labels (in CM, LSUMZ, ROM, USNM) and in Babbs *et al.* (1987). Bond (1956b) suggested that the bird is most numerous in the southern portion of Martinique (see Remarks).

**POPULATION** The Martinique Oriole has suffered a severe decline in recent years, and this seems to have been greater in coastal mangrove and dry forest areas where in some cases the species has completely disappeared (Babbs *et al.* 1987). At the five census sites for which there was an estimate of the population size in the mid-1980s, Babbs *et al.* (1987) recorded a 75-100% decline (these sites were mainly on the boundary between mangrove and dry forest). Even local people (including hunters), many of whom knew the bird, commented on the recent decline of the bird (Babbs *et al.* 1987). The breeding density and total population have never been estimated, so the extent of the decline remains essentially unknown. The overall population is certainly now considered small (Benito-Espinal and Hautcastel 1988).

**ECOLOGY** The Martinique Oriole apparently inhabits all of the island's forest types except cloud-forest, thus: mangrove, dry forest, moist forest, plantations, gardens with trees, and rainforest, with all records coming from below 700 m; the species is primarily a canopy forager, where it takes some fruit and berries, as well as a large diversity of insects (Babbs *et al.* 1987). Breeding (which is not communal) has been recorded from December onwards, but generally starts in February, with most pairs having fledged young by mid-July; there is apparently no post-breeding movement of (adult) birds, and the species does not seemingly form flocks (Babbs *et al.* 1987). In 1986, breeding was recorded in all habitats except rainforest and cloud-forest (no records from above 360 m), the nest being built 2-4 m above the ground and suspended from a large leaf or a bunch of leaves at the end of a branch. The commonest nesting trees are apparently: baliser *Heliconia caribaea*, bread-fruit *Artocarpus altilis* and banana *Musa acuminata* (in agricultural and moist forest areas); trumpet wood *Cecropia peltata* (in moist and rainforest areas); and raisinier grand-feuilles *Coccoloba grandifolia* (in dry forest) (Babbs *et al.* 1987, Benito-Espinal and Hautcastel 1988). Clutch-size is generally three (Benito-Espinal and Hautcastel 1988). Birds were not recorded feeding more than 100 m from the nest, and indeed, the species seemingly defends only a small territory in the immediate vicinity of the nest-site (Babbs *et al.* 1987).

**THREATS** The main threat is brood-parasitism by the Shiny Cowbird *Molothrus bonariensis*, which colonized Martinique during the late 1940s and is increasing in number every year: it is apparently now responsible for the parasitism of c.75% of Martinique Oriole nests (B. Dewynter *in litt.* 1982, Babbs *et al.* 1987). An indication of the problem lies in the fact that c.60% of birds chased away from nests are Shiny Cowbirds, and that the latter were present at all sites where Martinique Orioles were recorded (in 1986) except the rainforest (Babbs *et al.* 1987). It is also possible that increases in the population of the Carib Grackle *Quiscalus lugubris* may have a secondary effect on oriole nesting success (through the taking of eggs and nestlings), this species probably being the only important natural predator of orioles on the island (Babbs *et al.* 1987). The oriole is apparently unaffected by habitat loss or illegal hunting (Babbs *et al.* 1987), but the expansion of the cowbird may well have been assisted by deforestation (Benito-Espinal and Hautcastel 1988).

**MEASURES TAKEN** None is known, other than the fact that the Martinique Oriole enjoys legal protection (Benito-Espinal and Hautcastel 1988).

**MEASURES PROPOSED** Babbs *et al.* (1987) made a number of recommendations, the main one being (1) the control of the Shiny Cowbird population by using decoy traps (and killing the trapped cowbirds), with the simultaneous monitoring of oriole reproductive success within the trapping area, to give an indication of the effectiveness of this approach; they also called for (2) a study of oriole breeding success

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and levels of cowbird parasitism in different habitats, with the aim of monitoring population trends, and identifying important areas for the species; (3) assessment of the effect of Carib Grackles on the oriole population; and (4) a public awareness campaign, focusing on the species's plight and its importance as Martinique's only endemic bird.

**REMARKS** Benito-Espinal and Hautcastel (1988) considered the oriole as now limited to a number of localities, naming Grand Rivière, the slopes of Piton La Croix, Anse à l'Ane, Morne Doré, Rivière Pilote and the Caravelle Peninsula. However, it appears that these localities just refer to the published (Babbs *et al.* 1987) sightings of the bird from two years earlier, and do not represent proof of a range contraction.