

FIRST COLONIZATION OF THE LESSER ANTILLES BY THE HOUSE SPARROW (*PASSER DOMESTICUS*)

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Abstract.—We observed the House Sparrow (*Passer domesticus*) in late 1999 at Cul-de-Sac, Saint Martin, and at Grande Terre, Guadeloupe, the first records for the French West Indies. We have confirmed the colonization of this species on the two islands during February–March 2002.

Key words: French West Indies, Guadeloupe, House Sparrow, *Passer domesticus*

Resumen.—PRIMERA COLONIZACIÓN DEL GORRIÓN DOMÉSTICO (*PASSER DOMESTICUS*) EN LAS ANTILLAS MENORES. Observamos el Gorrión Doméstico (*Passer domesticus*) a finales de 1999 en Cul-de-Sac, San Martín, y en Grande Terre, Guadalupe, los primeros registros para las Antillas Francesas. Durante febrero-marzo de 2002 confirmamos la colonización de esta especie en las dos islas.

Palabras clave: Antillas Francesas, Gorrión Doméstico, Guadalupe, *Passer domesticus*

THE HOUSE SPARROW *Passer domesticus* is a Palearctic passerine which was first introduced into the USA in 1850. It rapidly invaded a large part of North America including southern Canada and most of Mexico (Sibley 2000). It is also now present in South America from western Colombia to Chile and from eastern Brazil to Paraguay and Argentina (American Ornithologists' Union 1998). Recently it has also been expanding its range rapidly in Central America (Fleischer 1982).

In the West Indies, the House Sparrow first appeared in Cuba in 1865 and next in Jamaica in 1903 and on Grand Bahama and New Providence Islands in the Bahamas shortly thereafter. More recently it appeared for the first time on Hispaniola (1976), Puerto Rico (1978) and on St. Thomas in the Virgin Islands in the early 1950's (Raffaële *et al.* 1998; see also the bibliographical summary in Wiley 2000). In the Lesser Antilles, the House Sparrow was seen several times: one observation on Barbuda in 1989 (John Mussington, pers. comm.), another on Barbados in 1997 (Martin Frost, pers. comm.), one seen at St. Lucia in 1999 (Allan Keith, pers. comm.) and one on Saba in 2001 (Martha Walsh-Mc Gehee, pers. comm.).

In 1999, travels through the French West Indies by several ornithologists permitted observations and censuses of many bird species, during which the House Sparrow was detected on two islands. It was

first observed at Cul-de-Sac in northeastern Saint Martin by Gilles Leblond (pers. comm.), who found one male in May, and then by Anthony Levesque (1999), who located a family of four birds in September 1999. Second, it was observed twice in eastern Guadeloupe: one female at Pointe des Châteaux in September 1999 and about 10 individuals at Campêche in the Anse-Bertrand region in August 2000 (Levesque 2001). These observations of a species new to the French Antilles immediately interested several ornithologists and also the Direction of French Environment, who wanted to know the extent of colonization of this alien bird in Guadeloupe.

Thus, in 2001, we confirmed the reproduction of the House Sparrow on Saint Martin and Guadeloupe, and in February–March 2002, we conducted a study to census colonies of the sparrows and to estimate the total population on each island.

We divided each island into squares, 5 km on each side: 55 squares for Guadeloupe and 6 squares for Saint Martin, including the Dutch part. In each square, we selected three points of favorable habitat (e. g., village, town suburb, chicken farm) and at each point we performed 10-minute point counts for House Sparrows. In nine squares in northern Guadeloupe we increased the number of observation points to one point per kilometer. A total of 249 point counts were made. When we found sparrows in a square, we looked for the species in neighbor-

ing villages within the square, searching for birds and nests for at least four hours. In April, we also used daily newspapers to send a message to the entire human population of Guadeloupe, asking for locations of the sparrows.

In Guadeloupe, we found the House Sparrow only in one square in the Anse-Bertrand region. More complete research in the square revealed only one colony in Campêche village. There we found 14 nests and estimated the total population from 40 to 60 individuals. Response to our newspaper notice helped us find another colony of about 30 birds at Sainte Anne.

In Saint Martin, we found the House Sparrow in three squares, all in the French part of the island: at Cul-de-Sac, Grand-Case, and Marigot. At Grand-Case and Marigot, we did not find any nests, but we estimate the population at about 10 individuals in each village. In Cul-de-Sac, we discovered a large colony of about 50 nests with numerous young being fed. We estimated this population to be from 200 to 250 individuals. One response from our newspaper notice also revealed some House Sparrows on the Dutch side at Mullet Bay.

As of today, we do not believe breeding populations of House Sparrows are present on other islands of the Lesser Antilles. Recent contacts with other ornithologists from the Lesser Antilles corroborate this belief.

The source of the birds that have colonized Saint Martin and Guadeloupe is unknown but we suppose they arrived as stowaways on large cruise ships or traveled in cereal ships. In the case of Saint Martin, we also suggest that the birds may have arrived from neighboring islands on strong winds.

It is clear that the House Sparrow is now well established in Saint Martin with several colonies and numerous individuals. In Guadeloupe, this species seems to be just at the start of its colonization and

the population is still small. These two islands where breeding of the House Sparrow is confirmed are likely to become sources for the spread to other nearby islands of the Caribbean archipelago. Our observations show that this alien bird will probably continue to colonize the West Indies, island by island.

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