

## STATUS AND DISTRIBUTION OF THE HOUSE SPARROW (*PASSER DOMESTICUS*) IN VENEZUELA

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Estatus y distribución del Gorrión (*Passer domesticus*) en Venezuela.

Key words: Distribution, breeding, House Sparrow, *Passer domesticus*, Venezuela.

The House Sparrow (*Passer domesticus*) is a member of the Ploceidae, a family of birds that is Ethiopian in origin (Summers-Smith 1963, 1988). Unlike some of its congeners, it has not only adapted, but apparently evolved to thrive in environments created by man (Summers-Smith 1963, 1988). The House Sparrow's ability to benefit from human activities has resulted in the species flourishing in many areas of the world (Clement *et al.* 1993). It was introduced in South America (Argentina and Chile) and the Caribbean (Cuba) in the late XIX century (Voous 1983, Fjeldsá & Krabbe 1990). It is locally common in urban areas of a large part of South America (NW Colombia, W Ecuador, W Peru, and more widely spread from Bolivia and Chile east across most of Argentina, Uruguay, and Paraguay to E Brazil), and continues to spread to new areas (Ridgely and Tudor 1989). In the Caribbean the species is established in Cuba,

Dominican Republic, Puerto Rico, the Bahamas and the Netherlands Antilles and has recently colonized the Virgin Islands (Voous 1983, Raffaele *et al.* 1998).

The species was first recorded in Venezuela in 1996 when a flock of about 30 individuals associated with Saffron Finches (*Sicalis flaveola*) was observed by DA at the port of La Guaira, Vargas (Sharpe *et al.* 1997). The fate of this population is not clear. It might have been extirpated during the extraordinary flooding events that took place in northern Vargas in December 1999, since birds were not observed in subsequent visits to the area during 2001 and 2002 (DA). Alternatively, recent sights in nearby areas suggest that the population may have moved to new grounds at the time of the flooding. Here we present new records of this species from northern Venezuela, including the first confirmed breeding reports for the country.

House Sparrows have so far been found in four areas: Los Roques Archipelago, northern Vargas, Chichiriviche and the Paraguaná Peninsula, the latter two in Falcón. In Los Roques Archipelago, RR observed an adult male in breeding plumage on Gran Roque island (11°57'00"N, 66°40'00"W), on 15 July 2004. The sightings in Vargas involve flocks varying from 7 to 21 individuals seen repeatedly by DA in the surroundings of Hotel Puerto Viejo, Catia La Mar (10°36'00"N, 67°02'00"W) from March 2004 to February 2006. Birds were seen foraging on the ground and singing frequently. Several other observations were made at and around Maiquetía International Airport (10°36'00"N, 66°59'00"W) through 2003, 2004 and 2005 (DA), including an adult male in almost full breeding plumage on 15 March 2005 (RR). AS and CB visited the central coastal strip of Vargas on four occasions, between 24 February and 26 May 2005. The area searched covered from Caraballeda (10°37'00"N, 66°51'00"W), east of the port of La Guaira (10°36'00"N, 66°56'00"W) to the Arrecifes power plant (10°35'00"N, 67°05'00"W), to the west of the port, a distance of about 27.7 km in a straight line. House Sparrows were found to be common from La Guaira port to Arrecifes indicating that they had dispersed a distance of at least 17.5 km to the east of the original site of sighting in 1996 (Sharpe *et al.* 1997). Birds were particularly abundant at Catia La Mar, including Maiquetía Airport, where the population is certainly over 100 individuals. At "Molinos Hidalgos", a large cereal silo, tens of birds could be seen foraging on spilled grain. In the Paraguaná Peninsula, AA and ARF found House Sparrows in several towns and hamlets. On 21 May 2003 a female was seen in a dry scrub in the surroundings of Jadacaquiva along the road to Pueblo Nuevo and on the same day a male was seen near the Plaza Bolívar in Pueblo Nuevo (11°56'53"N, 69°55'15"W). On 6–8

June 2004, the species was found in the following villages and towns: 1) Los Taques (11°49'22"N, 70°15'13"W), several individuals at two different sites close to the coast; 2) Punto Fijo, near the Santa Elena Cemetery (11°41'48"N, 70°10'36"W), several individuals; 3) Moruy, at the Plaza Bolívar (11°49'19"N, 69°58'57"W), five males and four females searching for food in the surroundings of the church; 4) Santa Ana, near the road Moruy-Punto Fijo (11°46'54"N, 69°56'52"W), several individuals calling from a tree; 5) Buena Vista, at the Plaza Bolívar (11°52'30"N, 69°56'37"W), a group of 12 individuals; 6) Pueblo Nuevo, one pair at the Plaza Bolívar and several others along the road to Buena Vista. House Sparrows were not observed at Adicora during 2003 or 2004 (despite several visits by ARF), but on 25 January 2005, ARF observed a pair feeding on the ground about 200 m from Adicora's main plaza (11°56'30"N, 69°48'16"W). On the same day, two pairs were seen at the plaza. On 12 May 2005 two males were observed again two blocks away from the Adicora's main plaza (ARF). Finally, AS visited Chichiriviche, northeastern Falcón (10°55'58"N, 68°16'07"W) on 16 June 2005 and saw one individual there.

Breeding activity was recorded in both the Paraguaná Peninsula (June 2004) and in northern Vargas (February–May 2005). In the former, AA and ARF gathered extensive evidence. A pair was seen mating in Pueblo Nuevo's Plaza Bolívar and afterwards the female entered a hole in a street lamp. Additionally, a breeding colony was located in a palm (*Phoenix* sp.) at Punto Fijo. In this case, nests were placed in natural hollows of the palm, at about 8 m height. Females were feeding chicks in at least two nests. Finally, a fledgling was found at the Plaza Bolívar in Buena Vista. In northern Vargas additional evidence was obtained by AS and CB. At least five nests, three of them with nestlings were

observed at Maiquetía International Airport and surroundings (Quebrada Curucutí). At the airport, three nests were placed in holes in a wall 6 m from the ground, while in the Quebrada Curucutí two additional nests were built in holes under a bridge at a height of 8 m. Fledglings begging to adults were seen on several occasions as were other fledglings with yellow gapes. One nestling that fell from a nest was collected and deposited at Phelps Ornithological Collection in Caracas.

These new data extend the distributional range of the House Sparrow in northern Venezuela. Our sightings also confirm the species' breeding status within two separate areas. The relatively large distance between Paraguaná Peninsula and northern coastal Vargas (c. 400 km) and especially the fact that, with the exception of the single bird at Chichiriviche, no House Sparrows have been recorded from areas between these two regions, suggest that these two populations have originated from independent colonization events.

The new populations are near or within coastal areas, thus, colonization probably occurred by overseas dispersal, by transportation on ships, or by a combination of both of these means. In the Paraguaná Peninsula, dispersal from Aruba (30 km from Paraguaná's northern coast) or Curaçao (c. 100 km from Paraguaná's eastern coast) seems possible. House Sparrows are common and widespread there (J. Wells pers. com.). Another alternative is that of transportation on oil ships; oil-related activity is important at Punto Fijo, where a breeding population is present. In the case of northern Vargas populations, transportation on ships and boats is also feasible. Cargo ships from all over the world reach La Guaira port on a regular basis. Additionally, fruit dealing is also a very important activity and it is possible that boats used by Venezuelan dealers to export their products to the Caribbean islands might have been involved in the sparrow's colonization.

House Sparrows have not yet been recorded at large cities such as Coro and Caracas, despite their closeness to established breeding populations. Interestingly, in regions of high bird species richness as the Amazon river delta, this species is restricted to human populated areas, especially squares and markets, where almost no other species occur (DA pers. observ.). Given the bird's ability to thrive in human environments it is likely that it will continue to expand within northern Venezuela, especially as human settlements expand along the coast. Additionally, if ships have been involved in colonization events, other coastal cities with substantial harbor activity such as Maracaibo, Puerto Cabello, and Cumaná may be colonized in the future. There are yet no reports of negative interactions between House Sparrows and Venezuelan native bird species. One species that might be affected is the Saffron Finch, which also relies on crevices in man-made structures for reproduction in urban settings. Unlike the finch, however, House Sparrows use and defend nest sites year round (Summer-Smith 1963, RR pers. observ.), and thus, may have an advantage in areas in which nesting sites are limited. Interestingly, although House Sparrows were first sighted in Vargas in 1996 along with Saffron Finches (Sharpe *et al.* 1997), repeated visits to this region during the last five years by DA has provided no recent sightings of the latter. As House Sparrow populations continue to expand monitoring is advisable in order to identify future problems which may require the application of management policies aiming to protect native species.

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*Accepted 22 March 2006.*