

## Black Skimmers on the Mexican Plateau

*"Black Skimmers should now be considered as occasional visitors to . . . Durango, Jalisco, and at least formerly, Guanajuato and the Valley of Mexico."*

Sartor O. Williams III

**I**N NORTH AMERICA, the Black Skimmer (*Rynchops nigra*) is typically associated with coastal situations. Inland occurrences are generally considered unusual and, while invariably newsworthy, often appear as isolated cases without clear causal bases. Multiple sightings of birds from outside their normal ranges or away from their expected habitats, however, can be important clues to the transpiration of significant biological events. In this paper I will (a) report three instances of Black Skimmers in the interior highlands of Mexico since 1975; (b) review the validity of past skimmer reports from the Mexican Plateau; and (c) discuss these events as regards weather phenomena, recent skimmer dispersal into the southwestern United States, and annual ecological events in the Mexican highlands.

On August 13, 1975, M. R. Baker and I were surprised to find two Black Skimmers at Presa San Bartolo, Durango (24°32'N, 104°40'W; elevation 1940 m). We sighted the two skimmers repeatedly, often at very close range, during a two-hour (10:00-12:00 a.m.) boating circuit of the reservoir. Both birds were in adult "spring" plumage (black above, with no white collar on the hind-neck) and appeared to be in good physical condition. The skimmers were continually in the air, sometimes flying to within a meter or two of the water's choppy surface, but we never saw them attempt to feed. The two were always together over the reservoir; they called occasionally but generally were silent. With a 200 mm lens I obtained 10 color slides of the skimmers at various times during the morning. Presa San Bartolo, a shallow reservoir of about 1700 ha, is located in central Durango near the town of Canatlán, approximately 55 km north of the city of Durango. On the day

of the sighting it was apparent that the region had recently experienced heavy rains, and throughout the morning the wind was quite strong from the south.

On July 28, 1976, I found two Black Skimmers at Laguna de Santiaguillo, Durango (24°50'N, 104°55'W; elevation 2000 m), a locality some 40 km northwest of Presa San Bartolo. I watched the two almost continuously from 10:45 a.m. until noon, usually through 8 x 40 power binoculars, as I stood near the spillway on the southeastern shore of the lake. I first saw the skimmers as they flew toward me from the open lake. They immediately began to feed in a shallow bay some distance from me, crisscrossing the placid surface in typical skimmer fashion. The two, both in adult spring plumage, stayed together at all times, although when skimming one would occasionally trail the other by

several meters. They then rested together on the far shore of the bay. They remained on shore for about 15 minutes, then took wing and began to skim the bay again. At noon, as I was attempting to approach closer, the skimmers left the bay and flew toward the open lake. During the period of observation, I obtained four pictures with a 200 mm lens and seven more with a 400 mm lens. Laguna de Santiaguillo is a large (13 km × 5 km), shallow, natural lake near the village of Guatimape, about 95 km north of the city of Durango. The lake has no natural outlet. A dam separates the permanent, northwestern portion of the lake from a vast, seasonally flooded playa to the southeast. The "bay" where the skimmers fed was actually a flooded pasture. Livestock were grazing the higher ground, while six fishermen were hauling seines through the shallows



Figure 1. Map of Mexico showing location of places mentioned in the text. Map by S.R.D

The region had received heavy rains, typical of the season, during the preceding several days. By 3:30 p.m., on the day of the sighting, torrential rains were falling, causing flash-flooding in nearby villages.

ON THE MORNING OF MAY 24, 1978, during an aerial survey of waterbirds on the Mexican Plateau, C. E. Knoder, P. D. Plaza, and I observed a flock of eight Black Skimmers at Laguna de Atotonilco, Jalisco (20°25'N, 103°40'W; elevation 1500 m). These birds, obviously disturbed by our aircraft, were seen flying toward the open lake from the vicinity of the eastern shore. Although we observed the birds only briefly, we had no doubt concerning their identity as skimmers. Although it went unrecorded at the time, I believe all the birds were spring-plumaged adults. Laguna de Atotonilco is a large (12 km × 4 km), shallow lake lying in a closed basin in central Jalisco. It is situated near the town of Acatlán de Juárez and is about 40 km southwest of Guadalajara. The weather on the day of the sighting was clear but quite hazy, as is typical for the region prior to the onset of the rainy season.



Figure 2. *Black Skimmer over Presa San Bartomo, Durango. Photo/S.O. Williams III.*

Although these recent occurrences of Black Skimmers on the high interior tableland of Mexico are somewhat surprising, they are not without precedent. Over a century ago, Dugès (1869: 142) recorded the species from the state of Guanajuato. Later, Herrera (1887a: 188) recorded it from the Valley of Mexico (the closed basin in the immediate vicinity of Mexico City, which includes portions of the Distrito Federal and the state of Mexico and which lies at an elevation of about 2200 m). Dugès recorded the species without comment, applying the accepted binomial plus the vernacular name “pico de tijera” in a distributional list of vertebrates that he had encountered in the region. Herrera

provided more specific information, including pointing out that the pair that he encountered constituted the only record during his several years study of the avifauna of the valley. A third nineteenth-century highland record is provided by a specimen reportedly taken near Mexico City by the collector G. H. White (Sclater 1864: 179). This specimen is probably the basis for Sanchez (1878: 108) having included the Valley of Mexico within the area of geographic distribution of the skimmer in Mexico.

These three early highland records, representing two localities, were accepted without question by Salvin and Godman (1903: 416). They may have overlooked the fact that, several years earlier, Herrera (1887b: 319) had pointed out the unreliability of the locality data of many of White's specimens. The latter were often purchased in native markets in Mexico City and some of these could well have come from lowland areas. Ridgway (1919: 453) followed Salvin and Godman by including the three interior records; however, he placed question marks after the records that originated with Dugès and Herrera. Why Ridgway did this is not clear—it may have been due to lack of supportive specimens and/or his uncertainty as to which subspecies might have been involved. He ascribed White's specimen to the nominate race, under which he also placed the records of Dugès and Herrera.

After Ridgway, however, these old records apparently fell into disfavor, as all subsequent works on the birds of Mexico have either dismissed them as unfounded or ignored them altogether. Hellmayr and Conover (1948: 339-345), perhaps aware of the uncertainty surrounding White's specimens and observing that Ridgway had seemingly questioned the records of Dugès and Herrera, listed no inland localities for skimmers in Mexico. The most recent compendium of the distributional status of Mexican birds states flatly: “very old reports from the interior deserve no credence and remain unconfirmed” (Friedmann *et al.* 1950: 112).

In retrospect I believe the records of Dugès for Guanajuato and Herrera for the Valley of Mexico are probably valid, whereas that of White may be questionable and perhaps should be discounted. Both Dugès and Herrera appear to have been competent and respected naturalists, with some training in ornithology, including taxonomy (the natural

history museum at the university in Guanajuato is today named in honor of Dr. Dugès). Both were in professional contact with noted nineteenth century ornithologists in other countries. It would seem remarkable that these men could have mistaken so singular a bird as a skimmer. In addition, the Bajío (the valley and lake region immediately south of the city of Guanajuato) and the Valley of Mexico were, and to an extent still are, likely places for such waterbirds as skimmers, stray or otherwise, to occur.

## DISCUSSION

IN THE UNITED STATES, inland occurrences of skimmers usually produce speculation as to why these birds should appear away from the sea. More often than not, weather disturbances have been implicated in these records and, indeed, most inland records in the United States have occurred during the summer-fall period of warm weather disturbances. Although some question has arisen concerning weather as a cause of such vagrancy (*e.g.*, Kaufman 1977: 151-152), Anderson *et al.* (1977: 234) have concluded that dispersal of certain marine birds into the southwestern United States is weather-induced. I analyzed available weather data for the three-week period preceding each of my three sightings but found no particularly unusual weather phenomena on either Mexican coast that might have driven seabirds inland. It is conceivable that, as nocturnal feeders, Black Skimmers could be subject to displacement by the severe, nighttime storms that frequently occur in coastal areas of Mexico during the summer rainy season, and be carried over the sierra and into the interior. However, while I cannot discount weather entirely, I doubt that all of these three recent occurrences represent storm-driven strays.

It is notable that recent influxes of skimmers have occurred into California and Arizona—almost certainly from the west coast of Mexico (McCaskie *et al.* 1974: 338, Grant and Hogg 1976: 79, Witzeman *et al.* 1977: 1172). Skimmers occur regularly in the latter region, from the Gulf of California southward. Although separated by imposing mountain ranges, my highland localities in Durango are only 250 km from coastal Sinaloa, and the Jalisco site is but 150 km from the coast of Colima. In the coastal lagoons near Manzanillo,

Knoder, Plaza, and I recorded several hundred Black Skimmers in a large nesting colony of Laughing Gulls (*Larus atricilla*) on May 24, 1978. Taken together, the California, Arizona, and my Mexican records may signal a recent expansion in the range of the skimmer, owing to such factors as increases in numbers, displacement due to environmental factors, or other, unknown causes. The recent (winter 1975-76) appearance of hundreds of Black Skimmers along the Pacific coast of Guatemala (Behrstock 1977: 382), after having gone unreported from that country since 1863 (Salvin 1865: 193, Land 1970: 114), may indicate that there are more skimmers along the Pacific coast now than were there previously. However, recent expansion would not explain the older Mexican Plateau records.

IT MAY BE THAT THESE highland records are not weather- or expansion-related at all, but instead they may reflect a small, perhaps regular movement by nonbreeders up to plateau wetlands. During my fieldwork in Mexico, I observed that several other species that typically nest in coastal or lowland areas, notably Roseate Spoonbills (*Ajaia ajaja*) and Wood Storks (*Mycateria americana*), occur in flocks of up to 400 and 50 individuals, respectively, in the highlands during the summer season. Similarly, I have found during this season that Caspian Terns (*Sterna* [= *Hydroprogne*] *caspia*), heretofore unreported from anywhere on the Mexican Plateau, occur in flocks of up to 30-40 "spring-plumaged" adults at wetlands in the highlands of Jalisco. Furthermore, I have observed Laughing Gulls in the highlands of central Durango in July, and Amadon and Phillips (1947: 577) collected one there in August; there are additional Laughing Gull records for highland lakes in Jalisco, Michoacán, Guanajuato, and the Valley of Mexico (Friedmann *et al.* 1950: 105).

The attraction of these highlands to such species during this season could possibly be related to the abundance of small, freshwater fishes in the shallow lakes and seasonal reservoirs of the plateau. At least, it appears that several typically coastal species of birds regularly invade the plateau and exploit this resource, although this movement could perhaps be due to their being displaced from the lowlands to some de-

gree. It is of interest that in El Salvador, Dickey and van Rossem (1938: 184) recorded Black Skimmers inland at Lake Olomega on several dates during August; however, they could not determine if the birds came from the ocean each night or were migrants that simply stopped to feed.

Regardless of how or why they arrive there, Black Skimmers should now be considered as occasional visitors to the Mexican Plateau, occurring in Durango, Jalisco, and, at least formerly, Guanajuato and the Valley of Mexico. However, potential nesting in the highlands by skimmers seems most unlikely, at least during the summer, in view of the continually rising water levels during the June-October rainy season, which would likely prove detrimental to sandbar-nesting species such as skimmers. Finally, it should be noted that while these Mexican occurrences undoubtedly represent altitude records for the species in North America, they do not approach those for South America reported by Murphy (1936: 1173) and others from Lake Titicaca in Peru (elevation 3800 m), which must remain the altitudinal "high" for the species and probably for the genus as well.

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