## Large-billed Tern in New Jersey: North America's first confirmed occurrence

Richard Kane, P. A. Buckley and Jerry Golub

Figure 1. Adult Large-billed Tern (Phaetusa simplex), Kearny Marsh, Hudson Co., New Jersey, 30 May 1988. Images enlarged from ultra-highspeed Ektachrome (ISO 1600) color slides taken through 1000 mm Nikkor mirror lens. Photos by P. A. Buckley.

T 0915 HRS EDT ON MEMORIAL Day, May 30, 1988, in the Kearny Marsh portion of the Hackensack Meadowlands, immediately alongside the New Jersey Turnpike, Kane glimpsed at a considerable distance a large tern with a yellowish bill and a striking black-and-white wing pattern, that on occasion dipped its bill into the water like a skimmer. Within a few minutes and before he approached closely, the bird dropped out of sight behind some Phragmites, and into an area with numerous stumps and snags. While Kane waited for the bird to appear. Golub and his son arrived in the same area.

About an hour after its discovery, the tern reappeared and began patrolling open water in the 363-acre, impounded freshwater marsh in what seemed to be a regular pattern, remaining about 10 meters above the water but occasionally dropping to the surface, and apparently once catching a fish. It came close to the railroad embankment on which the observers were standing, permitting good views of a quite large, blunt-headed tern whose body seemed disproportionately shorter than its wings, with an outsized yellow bill and a glossy black cap separated from the bill by a white forehead like that of a Crested Tern (Sterna bergii). Most striking of all were the wing and back pattern: black primaries and primary coverts, white secondaries and secondary coverts, and a very dark gray tail, back and lesser coverts, each section of the mantle sharply separated from the others (Figs. 1 and 2). After consulting Seabirds: An identification guide (Harrison 1983), Kane and Golub confirmed their suspicions that the bird was probably an adult Largebilled Tern (Phaetusa simplex), a South American riverine species that had been reported only twice before in North America, but never collected or photographed. Kane quickly left to spread the word by telephone.

Meanwhile, Golub managed to take what proved to be recognizable color photos with a 300-mm (6X) tele lens as the bird continued to make its 10minute feeding circuits of the open water in the marsh, alternating with 45- to 50-minute rests out of sight in the Phragmites. By noon, the first newly arrived observers had fought their way through the area's trash to reach the site, including Buckley, who had a 1000-mm (20X) tele lens, along with Francine Buckley and Allan Keith, both of whom had had previous experience with Phaetusa in South America, and David Roche and Theodore Proctor. The tern did not reappear, however, until 1310 hrs EDT and regrettably did not come as close as previously. All observers concurred in the identification, and Buckley took pictures from which the illustrations here were made. The second wave of seekers began arriving about 1500 hrs, and perhaps 50 people eventually saw the bird, sometimes close, often not, until its departure at about 1900 hrs.

At 1930 hrs, Proctor, who had left

in early afternoon to work other parts of the vast Meadowlands, was scanning Kingsland Impoundment, a brackish pool in front of the Hackensack Meadowlands Commission Offices, about three miles directly north of Kearny Marsh, when the Largebilled Tern appeared from the south, made a brief circuit of this 100-acre body of water, then flew out of sight to the northeast. Despite the presence of at least 100 observers starting at dawn the next day (creating a minor crisis on this commuter rail line this first morning after the long Memorial Day weekend) and for several days

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thereafter, the tern was never seen again. Later it was learned that on the previous Friday, May 27, several birders canoeing in Kearny Marsh had seen an unidentified large tern with a yellow bill at rest on a stump in the very area where this bird disappeared after foraging bouts. Thus, it was likely present in Kearny Marsh from May 27–30, but not on the preceding weekend, since this area is well covered in late May.

While this is the first known occurrence of Phaetusa in New Jersey and on the Atlantic coast, as well as the first fully documented record for North America, there are two previous continental reports. The first was one of uncertain age at Lake Calumet, Chicago, Cook County, Illinois, July 15-25, 1949, a record not always accepted despite the bird's having been sketched (Zimmermann 1949). The second followed five years later, a likely adult on May 29, 1954 at Evans Lake, Mahoning County, near Youngstown, Ohio, not published for many years owing to the observer's reluctance (McLaughlin 1979). Perhaps not surprisingly, all three records were on fresh water, with two of them on almost the same day in late May. It is probably only coincidental that all three were discovered at roughly the same latitude (between  $40^{\circ}$  and  $42^{\circ}$  N).

Large-billed Terns appear to wander frequently from their normal range over a good deal of South America, having reached the Pacific coast of South America several times (Blake 1977), Cuba once (interestingly, on May 28, 1910; Ridgway 1919) and Bermuda once, in mid-June (Wingate 1973). As the species breeds as far. north as Trinidad, some 2200 miles from New Jersey, it is a possible hurricane-transported vagrant, although to our knowledge no extralimital records have to date been ascribed to tropical storms. Normally, one expects juveniles, immatures or other non-adults to comprise the vast bulk of vagrant birds, yet several of the records of Phaetusa outside South America seem to have been of adults, so it is possible that northward postbreeding dispersal of adults in May, June, and July is a feature of Phaetusa's biology.

Within its breeding range, the Large-billed Tern nests on riverine sandbars across much of tropical South America east of the Andes, often near or in association with the South American race of the Black Skimmer (Rynchops niger cinerascens) and the Yellow-billed Tern (S. superciliaris). In the non-breeding season it regularly migrates to the Atlantic coast, feeding along estuaries and in tidal and marine situations (Murphy 1936), so that its presence in a freshwater marsh in an estuary near the coast in New Jersey conforms to the species' normal non-breeding behavior in South America.

The origin of this particular individual is open to speculation, as some observers felt its saddle was paler than expected, a characteristic of the more southerly breeding form, P. s. chloropoda. If this is true, it might parallel the occurrence in North America in their non-breeding seasons of the more southerly (i.e., south-temperate zone) races of such South American birds as the Fork-tailed Flycatcher (Tyrannus savana; Monroe and Barron 1980). However, it does not seem possible at this time to say with any certainty if this bird showed the characteristics of chloropoda, and the smallish bill, remarked on by all observers familiar with the species, could have indicated no more than

Large-billed Tern, showing characteristic dorsal wing pattern of the species.

that the bird was a female. All extralimital *Phaetusa* specimens have so far apparently been identified as the nominate race.

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