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FIRST RECORD OF LEAST GREBES (*Tachybaptus dominicus*) NESTING IN FLORIDA

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The Least Grebe (*Tachybaptus dominicus*), the smallest New World member of the grebe family (Podicipedidae), occurs from the southwestern United States and Mexico to Chile, Argentina and in the West Indies (Trinidad, Tobago, the Bahamas, and Greater Antilles; Ogilvie and Rose 2003). This is a plump grebe with yellowish eyes, a thin bill, and fluffy white tail coverts, ranging in length from 22-27 cm (8.25-10.5 inches). In basic plumage Least Grebes are brownish to blackish above with a white throat; in alternate plumage the throat is black. Their wetland habitats are varied and include fresh and brackish ponds, lakes, slow-flowing rivers, and mangrove swamps that have good vegetative cover along the edges. There are reports of nesting in temporary bodies of water (Storer 1992). Their compact floating nest is made of aquatic vegetation and anchored to rooted plants. The eggs are incubated by both adults and hatch in about 21 days (Palmer 1962). The Least Grebe is reported to nest year-round in the tropics. Although considered non-migratory, they have been found to move long distances (Storer 1992). Norton et al. (2009) report that the Least Grebe has been expanding its range in the Greater and Lesser Antilles in the last decade. The few Least Grebes found in Florida to date are considered most likely to have been of the subspecies *T. d. dominicus* from the West Indies, although *T. d. brachypterus* from Texas should not be discounted (Stevenson and Anderson 1994). Mean bill length is greater in *T. d. dominicus* than in *T. d. brachypterus*, a difference potentially observable in the field, though there is much overlap between the two (Storer and Getty 1985).

We found two Least Grebes on 21 September 2008 at the Yamato Scrub Natural Area, 701 Clint Moore Road, Boca Raton, Palm Beach County, Florida. This sighting and our subsequent observations pro-

vide the third verified record (i.e., with photographic evidence), the fifth report with written documentation, and the earliest known fall occurrence for Florida. The previously accepted reports and records are from Miami (November 1970 and April 1992), Big Pine Key (October 1988) and Marco Island (March to April 1990) (Pranty 1996, B. Anderson in litt. 2009). We submitted details of our observations to the Florida Ornithological Society Records Committee (FOSRC), which assigned to them FOSRC number 08-699. The committee accepted the record on 7 February 2009. Two members of the committee commented on the subspecific identity of the grebes; one considered the bill proportions to indicate that they were *T. d. dominicus*, and another was “not convinced they were *dominicus* although the bill does look exceptionally long on one.”

YAMATO SCRUB NATURAL AREA

Yamato Scrub is an 88-ha (217-acre) natural area in northern Boca Raton, which was opened to the public on 17 October 2007. It is the largest remaining scrub in southern Palm Beach County. It lies on an ancient dune ridge and includes oak hammocks, pine flatwoods, and dry prairie; the low area between the dunes is a basin marsh. Dominant plants include slash (*Pinus elliottii*) and sand (*P. clausa*) pines, saw palmetto (*Serenoa repens*), and dwarf oaks (*Quercus*); there are also many species of rare and endangered plants. The 10-acre wetland supports a variety of aquatic vegetation and animal species. Two ponds have been created by excavating approximately 2,100 m³ (75,000 ft³) of sand, which was used for beach re-nourishment following Hurricane Wilma in 2005. The north pond, where the grebes nested, covers approximately 0.58 ha (1.43 acres) and is 1.5-1.8 meters (5-6 feet) at its deepest point.

The property that became Yamato Scrub has a long history of ownership, and is now a joint venture of the state, county, and city. The Palm Beach County Department of Environmental Resources Management is responsible for the maintenance of the biological communities of Yamato Scrub. There is a 1,067 m (3,500 feet) paved nature trail through the scrub as well as hiking trails into the interior parts of the area.

We determined that the grebes' principal food was dragonfly nymphs, which were plentiful. Species found at Yamato Scrub are the pin-tailed pondhawk (*Erythemis plebeja*), plateau dragonlet (*Erythrodiplax connata*), band-winged dragonlet (*Erythrodiplax umbrata*), eastern pondhawk (*Erythemis simplicicollis*), and Halloween pennant (*Celithemis eponina*). In addition to dragonflies, the adult Least Grebes were seen eating small fish and frogs.

One possible explanation for the grebes' presence is the conditions generated by tropical storm *Fay*, which crossed Cuba and traversed the entire length of Florida in early August 2008.

CHRONOLOGY OF OBSERVATIONS

21 September 2008. Using binoculars, we initially observed the Least Grebes at the north pond. One bird was along the south edge of the pond and the other was on the north edge.

27 September 2008. We returned with a spotting scope and digital camera. We observed only one bird on this date and took photographs. We then reported our observations by e-mail to persons who post messages on the Tropical Audubon Birdboard website.

28 September 2008. Our observations were confirmed early in the day by many birders at the scrub. Initially, only one bird was observed, which appeared to be in breeding plumage. At 1030 EST Andy Bankert was the first to hear the characteristic "trill" that Least Grebes produce during breeding (Storer 1992), such as when they exchange places at the nest. This behavior was recorded on video by Steven Siegel and can be viewed at <http://www.vimeo.com/1834184>. The grebes built their first nest of the season, which contained two eggs on this date, in the softstem bulrushes (*Scirpus tabernaemontani*) along the south side of the north pond.

29 September 2008. Site manager Lee Lietzke cordoned off the area when the first egg hatched. Carl Edwards reported that a small alligator was in the vicinity of the nest and that one of the adult grebes chased it away. The second egg hatched the next day; both parents fed the chicks and exchanged places on the nest while giving the vocal trill. By the next day the chicks were observed out of the nest, swimming near the parents and climbing onto their backs.

2 October 2008. Following days of heavy rain and few or no observations, the Least Grebes were located on the north side of the pond. Attempts to find the nest were unsuccessful; apparently the rain had flooded it. During the next few days the chicks were seen on and off the parents' backs. The adults also brought bills-full of vegetation, collected from just under the water's surface, to a new nest site on the north side of the pond.

6 October 2008. Throughout the week, the chicks continued to thrive. The adults were seen alternating between foraging and feeding the chicks and carrying material to the new nest. The chicks continued riding on the parents' backs (Fig. 1) and swimming near them. The chicks had dark eyes, lateral stripes on their heads, and a rufous patch on their crowns, and orange lores (Palmer 1962). When they were nearly two weeks of age we saw the chicks diving.



Figure 1. Least Grebe pair at Yamato Scrub, Palm Beach County, Florida; two chicks ride on the back of the leading adult. Photograph by Ruth Pannunzio, 2 October 2008.

During the next week, the adults seemed to be distancing themselves from the chicks and even rebuffed a chick at times when it attempted to climb on their backs, but the adults continued to feed them. When the chicks were two to three weeks of age they could be heard emitting high-pitched peeps when waiting to be fed. Rarely were both adults seen together with the chicks, which led us to think there was a new clutch of eggs. The adults could be heard giving the trill call, leading us to suspect that they were exchanging places on a nest. The chicks now swam farther from the nest site and could be seen diving and following a parent around loudly peeping for food. At three weeks of age their orange lores and rufous crowns were no longer visible, the head striping was still present, their tail coverts were becoming white, and their eyes were still dark. By four weeks of age the neck and breast feathers were becoming mixed with white (Fig. 2).

23 October 2008. This was the last date we observed the two adults and two chicks (four weeks old) together.



Figure 2. Least Grebe chick at Yamato Scrub, Palm Beach County, Florida. Photograph by Ruth Pannunzio, 19 October 2008.

27 October 2008. Only one adult was seen with the chicks. At five weeks of age, the young were seen wing flapping, preening, and diving; one was seen eating a dragonfly nymph that it caught. The head striping of the chicks was visible but becoming fainter, and a white patch was appearing in the throat area. The chicks were seen fluttering over the pond's surface by their eighth week. At this time their eyes were starting to become pale and had attained a strong yellow color by 10 weeks of age.

26 November 2008. The adult and two chicks were noted on the pond.

28 November 2008. The adult could not be found.

2 December 2008. One chick remained at Yamato Scrub and was seen consistently in the company of Pied-billed Grebes (*Podilymbus podiceps*), several species of ducks, Common Moorhens (*Gallinula chloropus*), and American Coots (*Fulica americana*).

17 February 2009. The last known sighting of a Least Grebe at Yamato Scrub pond was on this date; several attempts to locate the bird during the last week of February were unsuccessful. A severe drought over the winter caused the water level in the Yamato Scrub north pond to decrease significantly, and along with a decrease in food, may have been a factor in the last grebe's departure. Predators upon

this species (turtles and raptors) are present in and around the pond and may be also be responsible for the disappearance of one or more of the birds.

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