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## BATHING BEHAVIOR OF GRAY KINGBIRDS (Tyrannus dominicensis)

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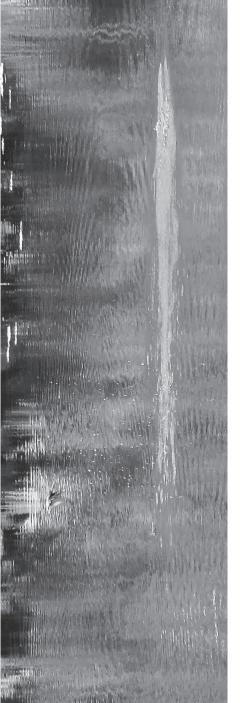
A previous article in Florida Field Naturalist described the breeding behavior of Gray Kingbird (*Tyrannus dominicensis*) in St. Johns County, Florida (Doyle 2013). In that account, I noted "On one occasion I arrived to find the male completely wet, on a sunny day, suggesting the possibility of recent bathing." However the question of bathing by Gray Kingbirds was left unresolved. The Birds of North America Online species account (Smith and Jackson 2002) lists "No Information" for bathing, so the purpose of this note is to present supplementary observations on this behavior for this species.

On three occasions (12 May 2015, 31 May 2015, and 27 June 2015) I observed Gray Kingbirds engaged in an aerial bathing behavior. This bathing technique is consistent with the previously unresolved partial observation reported in the original article. The observations described below occurred at Key West Tropical Forest & Botanical Garden, Key West, Monroe County, Florida, in a 30 m x 45 m freshwater pond. For all three dates the behavior was similar, so I recount below in detail the observation on 27 June 2015.

The kingbird began by perching in a mid-sized tree at the edge of the pond. It then sallied out over the pond, swooping down in a U-shaped flight path to impact the water surface about  $\frac{1}{3}$  of the distance across the pond. The impact with the water is not one of bill-dipping, which was observed at other times, nor leg-dipping, as I have observed with Least Terns (*Sternula antillarum*) during extremely hot weather. Each impact is a submersion "belly-flop" splash (see Fig. 1) that results in a water "haystack" at the impact location, a wake of 2.5 m (as measured from the photo relative to the kingbird's length), water droplets flying, and extensively wetting the bird. The water impact is part of a flight pattern where the kingbird swoops down, impact-submerges with wings open, immediately flies up, and then banks to return to its same perch. After two to three seconds on the perch, the kingbird repeated this swoop-and-splash maneuver, for a total of three repetitions of swoop, splash, bank, perch. Then the kingbird remained on the same perch, completely wet, and preened for several minutes, with special attention to the underwings.

Although there is a report of Gray Kingbird foraging by diving (Sprunt 1942), my observations are consistent with bathing rather than foraging. I did not observe insects emerging from the water, nor aquatic insects or small fish near the water surface. Viewed with binoculars multiple times, nothing was noted in the birds' bills as they returned to the perch. And there was no subsequent behavior that suggested foraging, such as bill wiping. Upon alighting, the birds commenced to preen.

There were at least four Gray Kingbirds in the area of the pond, presumably a family from that territory's breeding pair. About 10 minutes later, two kingbirds, presumably different individuals than the previously observed bird since they each had different preferred perches, engaged in a similar bathing behavior, with variations. One kingbird's pattern was to impact the water twice on each down-swoop, hitting the water then rising up only a few feet to impact the water again, reminiscent of a twice-skipped stone, before swooping up and banking to its preferred perch. This individual also repeated this wetting behavior three times, with two to three seconds at its perch between dips. It then remained perched to fluff and preen. A third kingbird, engaged in bathing at the





#### Notes

same time as the second, was more cautious. It flew with much less speed toward the pond's surface, dipped into the water much closer to the pond's edge, and with a less forceful impact but that still resulted in completely wetting its belly and underwings, before returning to its preferred perch to fluff and preen.

### ACKNOWLEDGMENTS

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