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Gray Kingbird predation on small fish (*Poecilia* sp.) crossing a sandbar. – The Gray Kingbird (Tyrannus dominicensis), a common West Indian flycatcher, normally forages on insects and fruit and has occasionally been reported to prey on lizards (Pinchon, Faune des Antilles Françaises: les Oiseaux, Muséum d'Histoire Naturelle, Fort-de-France, Martinique, 1963; Wunderle, Herpetologica 37:104-108, 1981). Its hunting techniques usually involve catching insects on the wing or picking prey off a substrate while flying. To our knowledge, it has not been reported catching fish. On 3 June 1986, at 07:12 (EST), we witnessed repeated predation by at least two kingbirds on Poecilia sp. (Poeciliidae) at a partially dried freshwater stream near Holetown, Barbados (West Indies). Several hundred of the fish, a close relative of the aquarium black molly, were attempting to swim upstream from a small pool. Water was <2 cm in most parts of the stream, and sandbars almost totally blocked the stream in several places. At the sandbars, fish moved out of water by a series of short flips for distances of up to 50 cm (a similar mode of locomotion has been documented in the related family Cyprinidontidae; Seghers, Verh. Inter. Verein. Limnol. 20:2055-2059, 1979). While on land, at least 11 Poecilia were caught and eaten by kingbirds. The birds perched on a branch 10 m from the stream and swooped down over the sandbar, occasionally hovering there for a few seconds. The birds were successful on approximately one third of their attacks. Captured fish were consumed when the birds had returned to their perch. On most occasions, the fish were hammered against the branch before being eaten, a technique Gray Kingbirds are

known to use with insects (Wetmore, Birds of Puerto Rico, United States Department of Agriculture, Washington, 1916). We returned to the site on the next morning but saw neither terrestrial locomotion by *Poecilia* nor fish predation by *T. dominicensis*. On 5 June, heavy rains during the preceding night raised water levels in the stream, and previously discrete pools merged. These observations support Wunderle's (1981) suggestion that island fly-catchers may broaden their diet opportunistically by applying their normal hunting techniques to novel prey.

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Aerial plunge foraging by a Great Blue Heron. – Wading birds are noted for the plasticity and diversity of their foraging behavior (Kushlan 1978a). Kushlan (1978b) suggests that novel or rare techniques are most likely to be added to the foraging repertoire of wading birds after nesting, when time and energy demands diminish. Individual specialization (Kushlan 1973b) possibly involving learning (Recher and Recher 1972) may increase the efficacy of an uncommon strategy to the point where it becomes an important part of the foraging repertoire of an individual bird. In North America, large wading birds such as the Great Blue Heron (*Ardea herodias*) tend to exhibit less diversity in feeding style than do smaller herons (Kushlan 1976, Willard 1977), and the less common components of their foraging repertoire are not well documented. This report describes the environmental context and behavior of a single Great Blue Heron that repeatedly used plunging (Kushlan 1973a) as a foraging technique.

On 13 October 1977 we observed a Great Blue Heron as it foraged at Tulloch Lake, a large artificial impoundment in the foothills of the central Sierra Nevada, California. The bird made three foraging flights from a large rock outcrop near the water's edge and plunged each time from slow forward flight into water over 10 m in depth. Two of the plunges were successful, and the heron rose from the water with a 10-18 cm bluegill (Lepomis macrochirus: Centrarchidae) in its mandibles. On 23 October the same heron (recognized by fishing line tangled around one foot) was observed continuously for 5 h. The fishing line did not appear to preclude normal flying or landing, but its effect on wading ability could not be determined because the bird did not wade. The heron made repeated foraging flights from the same rock outcrop it had used 10 days earlier. The bird obviously oriented toward water disturbances made by surfacing fish. When we threw rocks into the water from our observation point (150 m distant and on the opposite shore from the heron's perch), the heron initiated aerial foraging over the area of the disturbance; it oriented its flight and turned its head toward individual ripples caused by the rocks. Ten of the flights ended in deep water plunges, five of which were successful. After a successful plunge, the heron rose from the water immediately and returned to the rock outcrop where it swallowed its prey (L. macrochirus). After unsuccessful plunges, the heron circled over the feeding area, either immediately or after floating on the surface for up to 15 sec. During the two days of observation (5.5 h), the heron made about 20 foraging flights over deep water and plunged 13 times. Seven of the plunges (54%) were successful. During our observations, the heron did not use other foraging techniques and no interactions with other birds were observed.