

**OSPREY (*Pandion haliaetus*) DROWNS EASTERN
GRAY SQUIRREL (*Sciurus carolinensis*)**

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The Osprey (*Pandion haliaetus*) occurs on all continents except Antarctica and is known by several common names including the Sea Hawk, River Hawk, and Fish Hawk. All of these names allude to its fish-focused foraging habits. Fish make up about 99% of the Osprey's diet throughout its range (Hakkinen 1978, Cartron and Molles 2002, Silva e Silva and Olmos 2002, Beech 2003). The remainder of the diet is made up of various prey including mammals, birds, reptiles, amphibians, and invertebrates (Wiley and Lohrer 1973, Martins et al. 2011). After observing a pair of Ospreys catch rodents multiple times, Wiley and Lohrer (1973) suggested that inland populations of Ospreys may exploit alternative foods when they are abundant.

Ospreys are common on the campus of South Florida State College, Highlands County, Florida, which is situated between Lake Lelia to the north and Lake Glenada to the south. During the first week of May 2017, RB observed an Osprey on the campus grab an adult eastern gray squirrel (*Sciurus carolinensis*) from the trunk of a cabbage palm (*Sabal palmetto*) approximately 8 m tall. The squirrel struggled as the Osprey carried it about 100 m to Lake Glenada. The Osprey landed at the water's edge and held the squirrel under the water until it stopped moving. Then the Osprey carried the squirrel away, flying to the northeast until out of view. Because Ospreys nest in the area and have nestlings this time of year, and because the squirrel was not consumed directly, we suspect that it was delivered to a nest.

Ospreys, like other raptors, may consume their prey alive (Kenward 1990, Clancy 2005). Cupper and Cupper (1981) describe Ospreys delivering still thrashing fish to the nest on multiple occasions. To our knowledge, Gessner (2007) provides the only other reference to Ospreys drowning potential prey, a brief and second-hand reference to an "Osprey adult trying to drown a young bird."

Although Ospreys can eat their prey alive, there are several reasons they may kill it first. Still-living prey may struggle, making themselves difficult to grasp or cumbersome to carry in flight. Ospreys do occasionally drop struggling prey (Clancy 2005). Killing prey also would make it easier for naïve nestlings to consume. Cupper and Cupper (1981) recount an adult Osprey releasing a still-flopping fish at the nest, causing chaos as multiple startled young rushed to grab it. A live squirrel delivered to the nest could injure nestlings or escape.

The drowning RB observed may be a behavior to facilitate consuming these alternative, escape-prone foods. If drowning reduces the escape of air-breathing prey, we expect mammalian prey delivered to the nest, where the chance of escape is higher, to be drowned more frequently than mammals that are consumed directly. If inland Osprey populations are more likely to consume alternative foods when abundant, and thus are more experienced with non-fish prey than coastal Ospreys, we expect to see prey drowning more frequently in inland populations. This behavior also may be more common in human-modified landscapes, such as college campuses, where squirrels and other rodents are more abundant. Although Ospreys are fish specialists well adapted to their piscivorous lifestyle, they also may have adaptations or the behavioral flexibility to exploit other food sources.

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