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# Osprey Captures Tethered Rock Dove

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The year-round diet of the Osprey (*Pandion haliaetus*) consists primarily of fish taken live from the water after a near vertical plunge, but some non-fish prey items have been reported (Poole 1989). Herein I report observing the capture of a tethered Rock Dove (*Columba livia*) by an Osprey at an autumn migrant raptor banding station at Cape May Point, Cape May County, New Jersey (385-0745). This is apparently the first record of a Rock Dove being captured by an Osprey and is one of few actual observations of Osprey capturing non-fish prey items in North America.

At 07:35 on 25 October 1986 I heard the vigorous movement of one of my lure birds, a 375 g Rock Dove, approximately 20 m away and slightly behind the banding blind. The Rock Dove was tethered between two 7 m poles and was well concealed except from directly overhead in thick 1 m Marsh Elder (*Iva frutescens*). Looking out from the blind, I saw an Osprey chasing the Rock Dove in flight within a 5 m radius circle and about 0.5 m above the vegetation. Within one turn of this circle, the Osprey successfully captured the Rock Dove in the air and landed on the ground facing away from the blind. After sitting quietly on the ground for approximately 5 seconds, the Osprey attempted to carry off the Rock Dove. When it reached the end of the Rock Dove's tether, it dropped the bird and flew up to the top of one of the poles from which the tether was suspended. A Verbaile Trap (Stewart et al. 1945), which had been placed on top of this pole, successfully captured the Osprey. The bird was aged as hatching year by plumage and iris color (Clark and Wheeler 1987; Henny in Palmer 1988), sex unknown, banded with a size 8 U.S. Fish and Wildlife Service band (608-79809), weighed, the lengths of culmen, hallux and tail measured, photographed, and released approximately 45 minutes after capture. The Rock Dove was uninjured by the encounter.

Wiley and Lohrer (1973) reviewed non-fish prey items known to have been taken by Osprey, including 11 species of birds, but did not include Rock Dove. I have been unable to find any other references to Rock Dove occurring in the diet of, or being captured by, Ospreys. Wiley and Lohrer's (1973) list of prey birds includes five species whose weight can exceed that of a Rock Dove. In addition, few observations of Osprey capturing non-fish prey items have been reported. In North America, there are a few recent reports of Osprey observed capturing small mammals (Proctor 1977; Castrale and McCall 1983; Taylor 1986; King 1988; Werren and Peterson 1988). However, the only record I found of Osprey observed capturing birds was of a two-week-old Canada Goose gosling (*Branta bernicla*) taken from a fish hatchery pond in Kansas (Layher 1984). Osprey hunting behaviors described in these reports include plunging attacks and pounces, shallow glides, and walking on the ground. In contrast, the tactic used to capture the Rock Dove was an aggressive aerial pursuit more vigorous than any of these descriptions. This observation thus appears to broaden the range of reported Osprey predatory behaviors and prey capture techniques.

Explanations for Ospreys feeding on unusual prey items have included a scarcity of regular prey or poor local weather conditions (Henny in Palmer 1988). Both of these explanations seem inadequate in this instance since the banding blind was located within 100 m of the Atlantic Ocean beach in an area actively and successfully fished by Osprey during migration. On this particular morning, skies were clear, winds were light, and the ocean surface not unusually disturbed. Another possible explanation is that it was an inexperienced juvenile having difficulty capturing fish (Wiley and Lohrer 1973). If this were the case, the individual

could be expected to be lower-than-average weight or show other evidence of below-average physical condition. This individual, however, appeared to be in good physical condition with no loss of pectoral muscle such as commonly found in migrating juvenile raptors. The bird's weight, 1830 g with an empty crop, was significantly heavier ( $P < 0.001$ ) than the mean weight (1483.1 g, SD = 219.4) of 15 Osprey captured by the Cape May Raptor Banding Project since 1986. This individual was also significantly heavier ( $P = 0.012$ ) than the mean weight (1605.1 g, SD = 187.8) of eight probable females (MacNamara 1977) within our banding sample. Another possible explanation, play or practice behavior such as described by Bildstein (1980) for the Northern Harrier (*Circus cyaneus*), seems unlikely considering how different the observed aerial pursuit was from more typical aquatic prey acquisition techniques or previously reported non-fish capture incidents. I suggest the most likely explanation of this event is that of a genuine predation capture attempt.

The observed capture of a Rock Dove in close proximity to apparently suitable hunting habitat indicates that despite the presence of locally abundant preferred food resources, apparently healthy Osprey will take advantage of new or unusual foraging opportunities. Individuals, especially those in familiar foraging areas such as a breeding territory, can develop unusual hunting techniques which prove successful (Taylor 1986; Werren and Peterson 1988), or utilize unusual prey supplies which are locally abundant (Wiley and Lohrer 1973; King 1988). This observation implies that outside of familiar foraging areas, behavioral plasticity and opportunism may play important roles in the foraging strategies and survival of Osprey, and may be especially important for juvenile birds engaged in energetically demanding activities such as intercontinental migration.

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