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TYPES AND NUMBERS OF FISH CONSUMED BY A YOUNG OSPREY, (*Pandion haliaetus*)

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ABSTRACT

The fish presented to a fledgling Osprey (*Pandion haliaetus*) were collected, identified and counted. In a four day period the young Osprey was given and consumed four Bar Jacks (*Caranx ruber*), four Blue tang (*Acanthurus coeruleus*) and one parrotfish (*Sparisoma* sp.). Of fish collected from three feeding sites Bar Jacks and Blue Tang were equally preyed upon and were taken four times more often than the parrotfish.

INTRODUCTION

In January and February of 1996 a pair of Osprey (*Pandion haliaetus*) raised two young in a nest on top of the water tower on the Bahamian Field Station Base on San Salvador Island, Bahamas. On February 18 both young attempted their first flight. One soared off over Graham's Harbor and returned to the top of the tower. The other left the tower and ended up on the ground 20 feet from the base of the tower. The adults tried all afternoon to convince the young one to fly, but in vain. Near dusk personnel on the base placed the young bird on the roof of a one story addition to the Terminal Building about 40 feet from the tower. They were concerned that over night feral cats would kill the young bird. The young bird stayed on the roof until February 22, four days later, when it finally took off, flew over the bay and then returned to the top of the tower. During the 4 days that it was on the roof, the adult Osprey brought the young Osprey food in the form of fish. It is hypothesized the the fish remains provide an indication of the food supplied to the young osprey.

METHODS

After the young bird left the roof the investigators collected the remains of the fish. On the same day that the roof collections were made fish remains were collected from under the catchment

where the adults were known to perch. The last two collection sites have nothing to do with the feeding of the young, but they do show something about the favored prey. The young Osprey consumed the whole fish except some pieces of skin and 5 to 7 of the tail vertebrae which were left connected and attached to the tail.

RESULTS

The results of the collections are shown in Table #1. The parts of four species of fish were found. These included nine Bar Jacks (*Caranx ruber*), eight Blue Tang (*Acanthurus coeruleus*), three parrotfish (*Sparisoma* sp.) and one small needle fish (*Strongylura* sp.). The young bird was given 4 Bar Jacks, 4 Blue Tang and one parrotfish. Under the tower were found 4 Bar Jacks, 2 Blue Tang, 1 parrotfish and 1 needle fish. Under the antenna there were 1 Bar Jack, 1 Blue Tang and 1 parrotfish.

Toland (1985) reports that the major prey of the Osprey on the New Jersey shore is 98% fish, but since no other prey remains were found at any of the three collection sites, it would appear that fish is 100% of the prey on San Salvador.

DISCUSSION

Since adults had not been seen to alight on the low roof of the "T" building, except during these 4 days, it has been assumed that the fish remains represent what the young bird ate during the four days it resided on the roof.

The fish on the roof indicate that the young Osprey averaged 2.25 fish per day. The total catches by species indicate that the favored status among prey was almost equally divided between Barjacks and Blue Tang (9:8).

The fish collected under the water tower or the antenna pole can not be correlated with any specific time

Table 1. Collection from three places around the Bahamian Field Station of fish remains that were prey of the Osprey February 18, 1996 to February 22, 1996. The collection sites were the roof of the Terminal Building, ground around the water tower and the ground of the catchment under the antenna poles where the adults have been seen to perch.

<u>FISH</u>	<u>LOCATION</u>	<u>PART OF FISH</u>
1. Bar Jack (<i>Caranx ruber</i>)	"T" building Water tower Catchment	4 tails 4 tails 1 tail
2. Blue Tang (<i>Acanthus coeruleus</i>)	"T" building Water tower Catchment	4 tails, 2 bodies 2 tails, 2 bodies with tails 1 piece of skin
3. Parrot fish (<i>Sparisoma sp.</i>)	"T" building Water tower Catchment	1 tail 1 tail 1 piece of skin
4. Needle fish (<i>Strongylura sp.</i>)	Water tower	1 head

period and only show what the parents were catching. Stone (1965) indicates that in New Jersey when there are young birds in the nest, before fledging, the adults seem to feed in the nest. But when the "young birds are on the wing the old birds also feed away from the nest."

Stone (1965) reports on New Jersey Osprey that nest building occurs in April and May, an average of three eggs are laid, and young are in the nests from July 3 to August 26 with fledglings being in the nest from August 2 - 26. With fledging occurring on San Salvador on February 18 the reproductive cycle of these Osprey is almost 6 months out of synchronization with the northern birds. This is not an isolated time for fledging on San Salvador, because young have been observed on and around the tower at this same time of year for several years in the past.

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