NESTING OF OSPREY AT WEBB ROYCE SWAMP, ESSEX COUNTY, NEW YORK

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ABSTRACT–Description of nesting chronology and behavior of Ospreys at Webb Royce Swamp, an Important Bird Area (IBA) in New York State.

WEBB ROYCE SWAMP

The Webb Royce Swamp is a premier birding site in Essex County. It was created in 1978 when beavers dammed a small feeder stream of the Boquet River. This rather dramatic ecologic change has precipitated many other equally dramatic wildlife changes in the intervening years, including the establishment of a breeding colony of Great Blue Herons and the establishment in the Champlain Valley of the first reported Osprey nesting in recent times on other than an artificial (man-made) platform. In 1998 the National Audubon Society recognized the Webb Royce Swamp as one of 127 sites in New York State that met the state level Important Bird Area (IBA) criteria (Wells 1998).

The Webb Royce Swamp lies in a broad depression with Split Rock Mountain to the east and the Boquet River and the foothills of the Adirondack Mountains to the west. Recently the area was purchased from private owners and turned over to the state of New York (Wells 1998). The swamp is surrounded by private land devoted mostly to hay production. It is about one mile long and about a third of a mile wide. The swamp straddles two towns, Westport and Essex. Lake Champlain is about two (2) miles to the east of the swamp as the Osprey flies.

CHRONOLOGY OF NESTING

Osprey have nested at this site since 1995 when a pair built their nest in a tree at the northern fringe of the swamp. Early in 1996 the nest tree was blown down in a windstorm. Poole (1989) reports "that in New York State 30% to 40% of nests were lost yearly due mainly to windstorms". In that same year (1996), a pair returned and usurped the largest nest in the middle of the Great Blue Heron colony. This evidently caused the herons to move en masse some twelve (12) miles to the north to nest on the 4-Brothers Islands in Lake Champlain. Things changed again in 1997. This time a Great Horned Owl took over the nest site from the Osprey. By April 7 a Great Horned Owl was sitting on the nest, and it wasn't until April 15 that the Ospreys returned to the Webb Royce Swamp. On May 2, Mark Gretch discovered a completed Osprey nest within four tenths of a mile of the Great Horned Owl nest. This nest site was surrounded by a sea of cattails and was safe from ground predators like raccoon because it was over water. Poole(1989) says "that over water sites have almost magical attraction for this species". He also says that "Osprey nest nearly always near food (near water)". He reports that "three (3) to five (5) kilometers from water is often near enough". The Ospreys at Webb Royce had the shallow waters of the swamp to fish over or they could fly to the shores of Lake Champlain, a distance of about three (3) kilometers (about 2 miles).

Most of the dead snags in the swamp are solitary trunks with few branches that could support an osprey nest. The tree they chose to build in was a mammoth red maple about three and one-half feet in diameter at breast height. The nest rests securely on the blunt end of the trunk 22 feet above the ground. The birds made a good choice when they selected this tree. It is sturdy enough to last many years. In 1998 they again returned to this site and nested successfully.

OSPREY NESTING BEHAVIOR

As the 1997 breeding season progressed it became quite obvious to us that there was a chance to eclipse the late date (July 25) for unfledged juveniles listed in *The Atlas of Breeding Birds of New York State* (Andrle and Carroll 1988), so we monitored the nest closely. Bill Kozel (1995) in fact describes nesting Ospreys at Polliwog Pond in the Adirondacks with one of the young not fledging until August 8. There were a number of other reasons to suspect that the Ospreys we were observing might have a late

start to nesting. First the Great Horned Owl displaced the pair at the old heron colony forcing them to search for another suitable site in the swamp. That took some time. The second factor was the weather. It was a cool, wet spring (Peterson 1997). It wasn't until after Memorial Day that the weather became seasonable. That year even the Mayflies did not hatch until early June.

Watching the nesting site almost daily from mid-July we noted many fascinating items of behavior. Poole (1989) says that males are the "main providers" of food at the nest. Our observation indicated that both adults were bringing back food to the nest at about the same rate. Perhaps the near presence of the Great Horned Owls had something to do with this. Great Horned Owls are a real threat to nesting birds, so they had to be more vigilant. Could it be the male spent more time than usual standing guard, and less time fishing?

Poole (1989) says that "Osprey chicks that are persistently hungry often fight with siblings for access to their mother distributing food. Well-fed young almost never fight". We didnít observe any fighting among the siblings, so we assume that food was relatively abundant.

We observed only one close encounter with another species of bird. A Great Blue Heron landed in the vegetated branches near and over the nest. Both young immediately detected the perched heron. The heron had come too close to the nest and had to nosedive out of the tree toward the cattails as the male Osprey swooped down to knock it out of the tree.

Ospreys are sexually dimorphic,differing in both plumage, size and weight. The two young we observed (with a 40 power scope) were easily told from each other even at a considerable distance (over one-third mile). Adult females weigh more than males. Poole (1989) also says that "females usually have fuller, darker breast bands than males do".Using these two characteristics (plumage pattern on the breast and size) we believe we were observing a male and a female young. Poole (1989) reports that "male Ospreys having less weight to gain, may actually mature faster than females". This is consistent with what we observed at the nest. The young male fledged 5 days earlier than its female sibling. The male fledged on August 6 and the female fledged on August 11.

Poole (1989) says that "during the last 10-15 days before fledging, young Ospreys regularly exercise their wings developing the muscles that will power their first tentative flights". At first, wing-lift practice included flapping their wings rapidly while raising one foot then the other off the nest. At this early stage of testing they never developed sufficient lift for flight. At the next stage they frantically flapped their wings and jumped up and down on the rim of the nest. Again not enough lift. We witnessed one of the young flap its wings and leap over its sibling. The final stage before lift off was hovering momentarily over the nest. Once they reached that stage it was usually only another day before their maiden flight.

It appeared that the second bird to fledge needed more encouragement from its parents to fly. From a perch some distance from the nest the adult birds repeatedly called to it. The adult female even modeled flight for its last unfledged young. She stood on the rim of the nest, looked back at her young, communicated with body language and then jumped into the air and flew to a nearby perch. Many times this young appeared as if it was ready to fly but hesitated at the last minute. The bird appeared restless, maybe even nervous. It frantically flapped its wings, jumped up and down,walked around the edge of the nest and nearly tripped and fell out of the nest a number of times. It even developed what appeared to be a nervous pick-up stick routine. It pulled sticks out of the nest and quickly placed them back into the nest. Reading nervousness into this behavior is anthropomorphic of course. The real meaning of this behavior is known only to the Osprey. Through all these preflight maneuvers the adults remained patient.

NESTING STATISTICS

Loucks (1998) reports incubation for the Adirondacks population from 34 to 39 days with a nestling period of 61 days, or a range of 95 to 100 days. This coincides almost exactly with the 101 days we recorded at Webb Royce Swamp for the same activities. Other comparisons between our nesting data and those reported by Loucks (1998) are in close agreement such as birds arriving on beeeding ground 13-17 April, ours on 15 April; egg laying beginning 28 April to 6 May whereas the Webb Royce female was incubating on 2 May. Further, our young fledged 6 August to 11 August, again consistent with the Loucks data of 28 July to 21 August.

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NOTES AND OBSERVERSATIONS

Readers are invited to submit short pieces of interesting sightings, observations or incidents, etc., that do not require full-blown article treatment. No bibliography is necessary unless the author wishes to submit one. If a photograph is included, we require either a black-and-white glossy print or a color negative which we will convert to a b&w print. If the editor believes the note should be expanded to a full article, you will be invited to do so.