

RED-TAILED HAWK NEST ON A BUILDING IN TROY, NEW YORK

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ABSTRACT — A pair of Red-tailed Hawk (*Buteo jamaicensis*) nested on the third story of a building in Troy NY from April 12 through June 11, 1984. The development of their single chick is described from hatching through departure. Photographs are provided.

INTRODUCTION

Recently, interest has been expressed in the nesting of Red-tailed Hawk on buildings in an urban environment (Winn 1993, 1996). Excellent pictures of a pair of red-tails nesting on a Manhattan building were shown recently on television (CBS). Because of this interest, I should like to report on a pair of hawks who nested in 1984 on a building on the campus of Rensselaer Polytechnic Institute that is located in the middle of Troy, New York, a city with a population of about 53,000. One hundred photographs of the birds were obtained over the period of two months from April 12, 1984 through June 11, 1984, the final day before the single young that they raised left the nest.

METHODS

The nest was about 50 feet from a window at the top of an elevator well in Walker Laboratory. This permitted a completely uninterrupted view of the hawk's nest from a window at the northwest corner of the building that was left open during their period of residence. Part of the nest was obscured as it was around the corner from our vantage point. The pictures were taken with a Nikon F camera using Ektachrome film with an f 2.0 lens. Mounted in front of the lens, on a tripod, was a 10-power telescope. This gave sharply detailed pictures with no vignetting. Occasionally a 2-power teleconverter was coupled to this, but the combination gave a field of view that was more than completely filled by an adult bird with no view of its surroundings.

HATCHING

My colleagues and I first became aware of the hawks when we heard their "peep-peep" as they flew over the campus early in April. We discovered that they were nesting on a cornice of Walker Laboratory, a chemistry laboratory building located on the side of a hill overlooking Troy and the Hudson River valley. Pictures of their nest showing its location at the level of the third floor of Walker Laboratory about 75 feet above the ground were obtained from the adjacent Russell Sage Laboratory building at a higher level on the hillside (Fig. 1). Nesting began before I was able to obtain my first picture on April 12 and hatching occurred on or before April 30. There was no evidence that more than one young was ever hatched although red-tails are reported to lay and incubate "from one to three (usually two and occasionally four) eggs" (Bonney *et al.* 1981).

DEVELOPMENT OF CHICK

My first photograph of the downy, white chick in the nest was obtained on May 8 (Fig. 2). My best estimate is that it was 8-9 days old at this time. It grew rapidly and on May 14 was observed contributing to a tidy home by shooting excrement over the side of the nest. On May 17, while still in its downy coat with a few feathers evident on the tips of its wings, it was photographed being fed a rodent, a mouse, vole, or mole, by one of the adult birds, presumably the female (Fig. 3). Because of their apparently identical coloration it was possible to distinguish the adult female from the male only by size, most easily when they were together; as with many reptiles, some dinosaurs, and with other birds of prey, the female was notably larger than the male (Fig. 4) (Fischman 1993).

The male kept the nest in good repair, bringing large twigs and, on occasion, greens from a nearby tamarack tree. By May 23 the chick was able to stand quite well, but it still had a tendency to totter; white feathers had begun to appear on its tail. A torrential rain that led to concern for the health of the chick began on May 27 and continued through May 30 depositing a total of 4 inches of rain on Troy. The nest had been built in a copper rain trough contained in the cornice, adding to our anxiety. But, by the time the rain had ceased, the young bird's wings were almost completely feathered out and neither it nor the adults seemed to have suffered from the soaking. The male was not a notable attendant at the nest. At no time was an adult identifiable as the male seen feeding the chick, although he may be presumed to have provided much of the food

for his family. On May 31 a good picture was obtained that illustrated the female's technique for feeding her chick (Fig. 5.). The feathers of her prey, an unidentified bird but probably a pigeon, were plucked one-by-one from the corpse and dropped over the edge of the building. Then morsels held in her beak were fed to the young hawk with her head inverted, held upside down, so that her chick did not have to twist its head to either side. This method always was used when food was presented to her young whether it was from a rodent or a bird.

There still was much downy white on the young bird, but by June 4 brown feathers were on the crown of the young hawk's head. By then not only had it learned to keep its nest clean, but on the June 6 it was observed defecating over the edge of the cornice. Gradually more feathers covered its torso and tail; the feathers were brown, tinged with white, but there was no hint of any rusty red on its tail. On the seventh of June it was observed hopping and flapping its wings.

DEPARTURE

On June 11 a cold front passed through bringing strong northwest winds that the young hawk used to advantage as it faced into the wind, spread its wings and hopped, soaring many inches above the cornice. On this, the last day it remained with the nest, it had some down on its head and it looked very scraggly, still not completely feathered out. The next morning the young hawk was gone - it had flown the nest. Subsequently it was observed on the campus. The nearby tamarack tree, that had been topped a few years earlier by a line storm that passed through the campus, provided a perfect perch for plucking campus pigeons. A pair of Red-tailed Hawk continue to nest on campus buildings, but no longer on the cornice of Walker Laboratory. They have chosen less exposed nesting sites.

ACKNOWLEDGMENT

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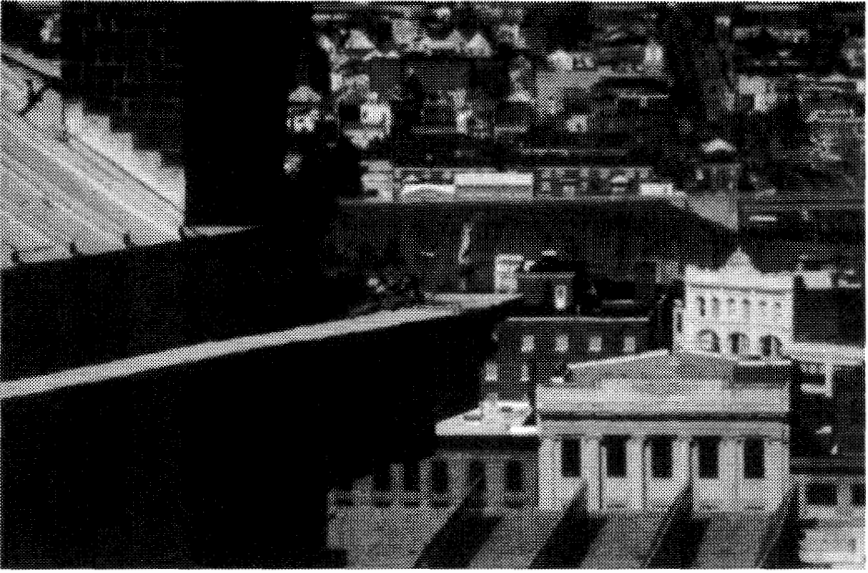


Figure 1. View of a nesting Red-tailed Hawk 75 feet above the ground on a building overlooking the city of Troy NY.

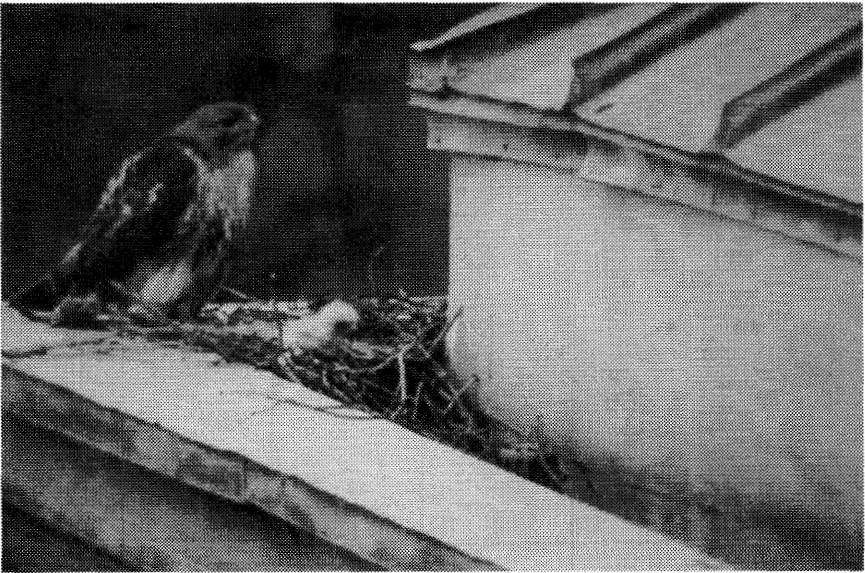


Figure 2. Red-tailed Hawk with 8-day old chick.

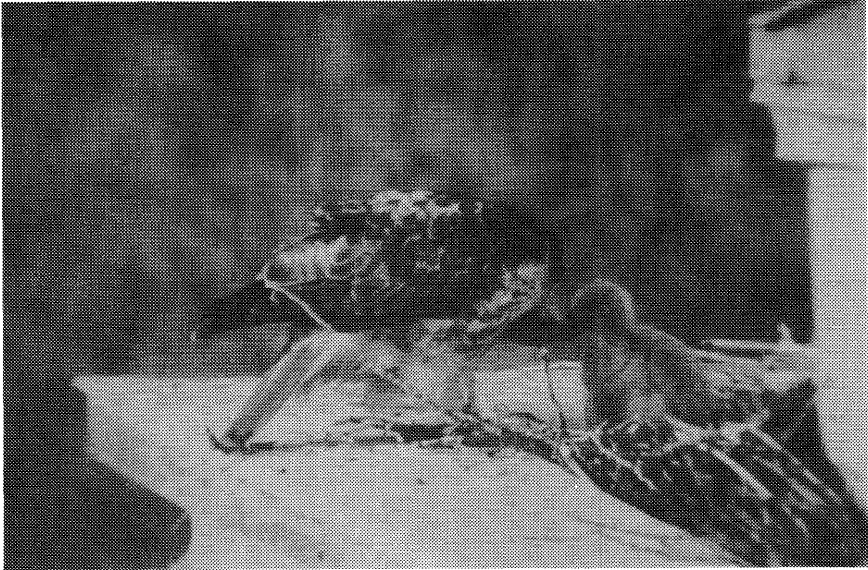


Figure 3. Feeding the 2 1/2 week old chick. The mother always inverted her head to feed morsels of flesh to the chick.

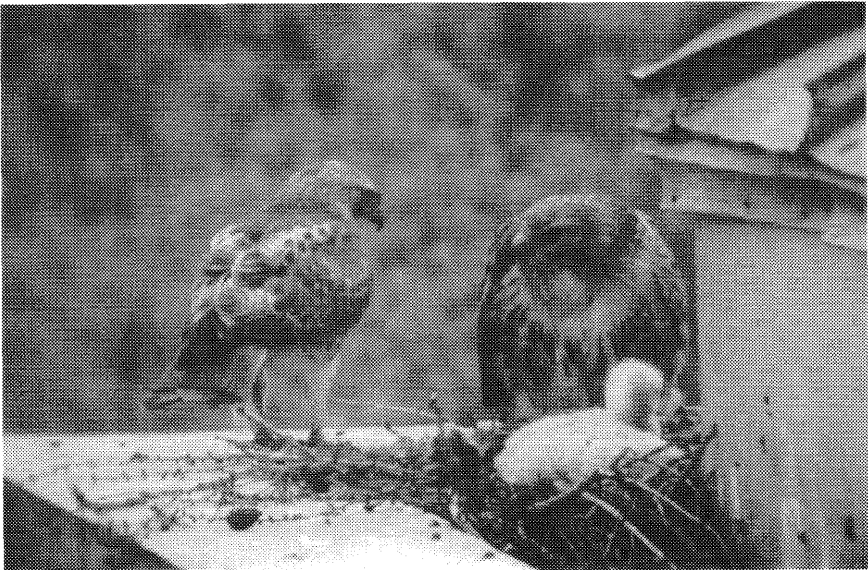


Figure 4. Compare the relative sizes of the male and female Red-tailed Hawk. The chick was about 3 weeks old.



Figure 5. Feeding the 4 1/2 week old chick. Note again the mother's inversion of her head.

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