

fish, never stopping for a second. It did not dive into the water like an Osprey, but just skimmed above the surface, grasping the fish in the talons of one foot. Never did I see the eagles immerse more than one leg. Only one bird was seen doing this at one time, while the others would wait until one made a catch and flew away; then another would go through the same procedure. This is the first time I have ever seen an eagle take a live fish from the water.—EDWARD J. REIMANN, *Box 81, Everglades, Florida.*

**Pigeon Hawk at Cape Hatteras, North Carolina.**—On November 25, 1937, while I was passing the Pea Island Coast Guard Station, Chicamaconico Island, North Carolina, in company with Grover Pitts and J. D. Asher, my attention was called by Mr. Asher to a small hawk perched on a low post near some old buildings. The bird displayed a remarkable lack of fear, permitting us to approach within thirty feet before it flew a short distance and alighted upon a low stake. It was easily identified as a Pigeon Hawk (*Falco columbarius* ssp.).

Pearson, Brimley and Brimley ('Birds of North Carolina,' North Carolina Geol. and Economic Surv., 4: 173-174, 1919) state: "The Pigeon Hawk appears to be a rare transient in this state, our only records being October 1, 1886; April 21 and April 23, 1888; April 19, 1902; September 10, 1910; and October 4, 1914, all from Raleigh, a single specimen being taken each date. Cairns secured a female in Buncombe County on October 19, 1894."

A specimen of this species was taken by the writer near Raleigh, in April 1932, and presented to the Zoology Department, North Carolina State College of Agriculture and Engineering.

The identification of this hawk at Cape Hatteras is the only known record of its occurrence along the North Carolina coast.—OTIS BOYD TAYLOR, *National Park Service, Richmond, Virginia.*

**Additional notes on breeding of Black Pigeon Hawk.**—Since publication of my notes on the range and probable breeding of the Black Pigeon Hawk, *Falco columbarius suckleyi* (Auk, 52: 305-307, 1935) additional verifying evidence has come to hand. Since not only the breeding range but the validity of this race have been questioned (H. S. Swarth, Condor, 36: 40, 1934), these new notes may be worthy of record.

Because this bird was recorded as present during all months of the year on Vancouver Island as far north as Comox, British Columbia, there was a near certainty that it bred here. On June 19, 1935, a supposed nesting pair was discovered near the trail to the Forbidden Plateau well up in the heavy timber of the hills at about 2500 feet elevation. The shrill nesting cry of the birds called attention to them and the male was seen to bring food to the female on a high perch. That he did so, and that she accepted it as though it were her due, left little doubt of the relationship. A nest seemed quite certainly somewhere in the vicinity, but though I returned to the spot on the morning of June 22 and remained camped in the vicinity for two days, watching constantly, no clue to a nest could be secured. The birds were seen and heard on several occasions. Again on July 2, I returned to the scene, spending the day and part of the next on the spot, seeing a pigeon hawk once but getting no further clue to the supposed nest. The timber here was dense and tall—western cedars, western hemlocks, Amabilis firs and some huge Douglas firs—but to increase the difficulties of the situation, the Gray Jays at hand were mimicking the squeal of the pigeon hawk so perfectly as quite to confuse the problem.

Better luck attended later field operations that year (1935) when on the evening of

July 20 the shrill cry of pigeon hawks was heard in the timber near camp at the foot of Upper Campbell Lake, Vancouver Island. Next day again in the evening as I back-packed supplies down the trail to Snake Lake, the same cry was heard and a Band-tailed Pigeon winging over the woods was seen suddenly to sheer off its course as a little male falcon shot into view and took after it. The chase passed out of sight in a moment but a closer scrutiny of the tops of the trees at hand disclosed another small pigeon hawk sitting motionless and suggesting a young one just out of the nest. On returning to the main camp again on the 24th, a family of noisy young merlins was found in the woods where these birds were first seen. The young were now out of the nest, perching high in the tall firs and cedars and calling for food in their usual shrill-voiced manner. That the young were very close to their nest site was evident and this was proved next day, July 25, when one of my assistants, R. E. Luscher, shot one of the very immature young. This specimen, definitely establishing a breeding location for this subspecies, is now in the National Museum of Canada, Ottawa.

During field work in the summer of 1936, carried out on the mainland coast opposite Vancouver Island, no pigeon hawks were noted until the young were out of hiding and migration was under way. Several times during a stay at Grassy Bay, Loughboro Inlet, August 17 to September 9, pigeon hawks of the black type were noted, but two specimens taken later at Kingcome Inlet, September 19 and 20, both juveniles, were not of the black, but of the paler eastern type. In a consideration of the pigeon-hawk problem, however, too much must not be made of this occasional infusion of the eastern form as during migration and winter a great many eastern birds come to the coast, apparently striking the heads of the inlets or rivers flowing into them, and so following down with the coastal migration. Thus a Northern Water-Thrush was taken August 27, this same season (1936) at Grassy Bay, Loughboro Inlet.

The season of 1937, with operations in the Rivers Inlet region of the mainland coast, brought more interesting notes, when at the head of the inlet pigeon hawks were seen two or three times in June, and in mid-July a breeding pair was located at Owikeno Lake. On July 14, I heard the familiar cry in the heavy timber on the north side of the lake near the outlet and next day the source of the disturbance was located—a family of three or four young just out of the nest. In such huge timber, Sitka spruce, Amabilis fir, western hemlock and western cedar, there seemed no way now to locate the actual nest site, but as in several days' observation the young did not move over more territory than a scant acre, it is a certainty that they were very close to the nest. Both old and young remained at nearly all times so high as to be out of gunshot and it was only by means of "gang-shooting," with the help of assistant Charles J. Guiguet, that specimens could be obtained. One juvenal female and the adult female were taken, July 16 and 17, respectively. The male continued to feed the remainder of the family.

The amount of small-bird life taken to support a breeding pair of these little hunters must be considerable. The young female taken was very fat and the adult also was in prime condition. Despite the fact that the little male parent was working alone (the female having been lightly winged on the 15th and lost in the timber till retrieved on the 17th), the young one that was shot had its stomach crammed by 11 a.m. Mr. Guiguet previously had reported seeing a merlin strike down a Black Swift in a beautiful stoop above the outlet of the lake.

Regarding the coloration of this little-known subspecies, the above specimens—now in the National Museum of Canada—again bear out the fact that there is almost

no difference of plumage color between the adult female and the young of the year. The young female, here taken so early that the first two primaries were short, the tail also abbreviated, and evidences of down still on the head, differed only in the color of the soft parts; the toes and tarsus, cere and eye area were pale greenish in the young and more yellowish in the adult female. In neither is there the rich yellow of the soft parts of the adult male. The latter alone assumes the wondrous blue slate of the upper parts. These in adult female and young of both sexes are dark sooty blackish. In the matter of the markings of the primaries of these specimens, though the Campbell Lake juvenal male carries the spots or 'islands,' the Owikena Lake specimens, both adult and young, rather favor the cross-bar markings: the adult female was barred but faintly 'islanded,' while the young female—though the outer primaries are not fully grown—was even more distinctly barred. Just what may be considered typical of *Falco c. suckleyi* in this respect is a matter of opinion. In a series of eighteen Vancouver Island specimens of this black race in my collection, these primary spottings range from the well-defined bar as in the eastern race, to an almost complete absence of marking in both adult and young. But despite this variable marking of wing or varying width of outermost tail-band, these dark-plumaged birds resident and breeding in a wide area where the more eastern race of *Falco columbarius* is absent or rare, must be referred to *Falco c. suckleyi* and these notes are offered to establish more completely this race in its home in the coastal strip.—HAMILTON M. LAING, *Comox, British Columbia.*

**Two specimens of the Heath Hen from New Jersey.**—The Academy of Natural Sciences of Philadelphia has recently acquired two mounted specimens of the Heath Hen (*Tympanuchus cupido cupido*), both killed in Burlington County, New Jersey.

On October 1, 1937, Mr. R. J. Sim of Riverton, New Jersey, while photographing old houses, was shown by Mrs. Thomas Harrison near Wrightstown, a mounted Heath Hen which was given to her by her father. Mr. Sim told me of his find and together we drove down to see it. Mrs. Harrison said, later confirming by letter, "There were three Heath Hens together; my father shot one and had it mounted. He killed it at least forty-five years ago on the farm where he lived, known as 'Howard Hill.' This farm is located in the northeast corner of Burlington County, New Jersey, where Mercer and Monmouth Counties join Burlington County. It is in North Hanover Township, which was then called New Hanover Township. It being an unusual bird, he had it mounted." It is a male bird and in very good condition. As Mrs. Harrison is well past sixty years of age the "at least forty-five years ago" is a modest way of expressing lapsed time, for she told me it had "always been in the parlor." I brought the specimen to the Academy and compared it with our series from Martha's Vineyard. Later I took it to the American Museum of Natural History, New York, where Dr. Frank M. Chapman very kindly compared it with the series in that institution. It apparently answers all of the requirements of *cupido*.

About ten days after acquiring the above specimen, I received a letter from Mr. Thomas C. Shreve of Moorestown, New Jersey, saying that he had a Heath Hen. This second specimen is in better plumage and is apparently an older male bird than the one from Wrightstown. The Shreve family for the past three generations, were all enthusiastic sportsmen, owning bird dogs and hunting throughout New Jersey. Mr. Shreve wrote me as follows: "This Heath Hen was killed by Joshua E. Shreve prior to the year 1850 at Onga Hat, Pemberton Township, Burlington County, New