

than "meadow," including unmown grass, some corn fields, much brushy field, fence rows and wetlands. Not only are Rough-legs seen here regularly in winters of good mouse-hawking, but also Harriers (*Circus cyaneus*), fewer Red-tails (*Buteo jamaicensis*) and occasionally or frequently a Sharp-shin (*Accipiter striatus*) a Cooper's Hawk (*Accipiter cooperi*) or an American Kestrel (*Falco sparverius*). In addition, Short-eared Owls (*Asio flammeus*) may winter on the meadow, and to be complete, both Horned Owl (*Bubo virginianus*) and Screech Owl (*Otus asio*) may be heard on the borders.

During the late fall and early winter of 1957-58, Rough-leg Meadow has presented a fine raptor showing especially in early evening. As the day draws to a close a regular raptor succession takes place, and the following observation is a good example of this.

Arriving on the meadow at 4 p. m. on Dec. 22, 1957 (Christmas Census) with Ian C. T. Nisbet recently of Cambridge University, we counted 10 Rough-legs in a single scanning. Probably more were actually present. Some were perched, others flying low, or hovering, both light and dark phases being observed (and both adult and juvenile plumages of both phases). By 4:30 p. m. most of these had retired to night perches off the meadow proper and at this time we first scanned 3 Harriers appearing on the scene. At 4:45 p. m. we counted 7 Harriers and then 10, two of which were light gray adult males. A Sharp-shinned Hawk was seen in a tree at this time, but soon flew toward the woods. The Harriers hunted very actively until about 5 p. m., but several were still to be seen when the first Short-eared Owls got up to begin hunting. By 5:15 p. m. the last Harrier had settled into the meadow for the night, while the "snerk" calls of the Short-eareds could be heard now on all sides, and counts in the waning light established at least 12 owls. By 5:45 p. m. it was getting quite dark, the owls no longer could be seen, and the "snerk" chorus had about ceased.

Many trips have established that the owls perch upon the ground in the area all day and come up in the evening to hunt. Since the calls are heard only for a short time after they get up, either they soon cease to call or more likely many move out of the area to hunt further.

The Harriers perch there during the night, and leave early in the morning for various hunting fields, although a few may be seen at any time of day. Later in the afternoon they return and hunt intensively just as the Rough-legs leave the meadow, and settle down for the night just as the owls get up.

The Rough-legs hunt over Rough-leg Meadow all day, arriving from the bordering woods in the first morning light, when they sometimes call. The call is a somewhat plaintive cry, not the airy whistle of the Red-tail or the musical call of the Red-shoulder, but a long full-bodied whistled cry, somewhat descending in pitch. Maximum count for the Rough-leg on Rough-leg Meadow is 12 birds but with 4 more seen nearby. The maximum for the owls is 14 and for the Harrier, 11. It is interesting that this particular area consistently shows very high raptor counts, more so than neighboring similar areas. The mouse population appears to be high here during good-hawk winters, as I have myself caught them by hand! — Walter P. Spofford, 766 Irving Ave., Syracuse.

Behavior notes on the Olive-sided Flycatcher. — Whether in its northern tamarack-studded bog, in Canadian spruce, birch and hemlock, or in migration to and from these haunts, the Olive-sided Flycatcher generally seeks a dominant perch for its feeding, usually on the "tip-most branch of the top-most tree". Here, this "rather large bull-headed flycatcher," as Roger T. Peterson calls it, affords little in insect life to pass without a challenge, and shows a perseverance and unalterable intent in the chase which will be described.

My first "fall" migrating Olive-sided Flycatcher in 1957 was seen at Massapequa, August 13. On August 17 I left, with my family, for northern New Hampshire and on August 19 at Dixville Notch, I saw an Olive-sided still feeding young, in this case a full-grown juvenile. I was surprised during the 15 or 20 minutes I watched to hear one subdued but articulated song, although from hearsay and personal experience I have learned that singing tapers off by late June or very early July in the Adirondacks — a point to remember by those wishing to get maximum pleasure in hearing this species in its summer home.

Watchful for the light migration of these birds that usually comes through Long

Island in early September, I was pleased to see again at Massapequa on Sep 8 an Olive-sided Flycatcher sitting on a lone, dead, upright branch about seven feet long, topping an otherwise vigorous pitch-pine. This big pine, the largest in the vicinity, was a splendid specimen with wide-spread branches, a girth at the ground of about 45 inches and a height of some 50 feet. It overlooked second-growth oaks and underbrush that contained Catbirds, Towhees and a small band of migrating warblers. A few individuals moved freely from the big tree to the top, which brought them just beneath the bare rampike lookout perch, and thereby offered good opportunities to study relationships and behavior where normally the Olive-sided Flycatcher is isolated on some dead tree far above vegetation, and likewise, feeding birds.

The weather was slightly cloudy about 70° F and observation took place from about 5:15 p. m. to 7:09 p. m. E. D. T.

From my observations, the Olive-sided appeared never to miss an insect and took them regardless of size. One of the first noted caught was a medium-sized dragon-fly. Large insects got a vigorous blow or two of the bill on the bleached hard pine branch before swallowing. To my surprise among the larger insects, I saw practically no wings or horny parts discarded, but these were apparently swallowed whole with vigorous ingestive movements.

Insects were taken from a range of a short hop upward off the perch to long sallies outward of about 40 feet. Winged insects were abundant and sallies averaged about one a minute. High ranging insects were in evidence that evening with Tree Swallows and a Nighthawk feeding at an estimated elevation of 300 to 400 feet.

At 6:20 feeding got better with many flying insects maintaining about a 20 foot level. Most of the flycatcher's downward swoops were rather spectacular dives, followed by an upward flight (not glide) to its perch. A prolonged sortie, taking it out of the immediate vicinity, apparently caused it to desert the pine for another tree, but it was back to its perch by 6:32 after an absence of about three minutes. Feeding continued with three small insects taken and several large ones. One small insect was acquired by an upstretching and short leap.

At this time a Catbird flew to the tree, worked upward into the top branches and quietly observed the flycatcher, which in a moment again deserted its perch on an extended sortie. When it had left, the Catbird hopped up to its exact perch — a slight horizontal "kink", a foot or two from the top of the dead tip. Here was a chance to observe a terrestrial bird in the role of flycatcher! As the first insect flew by about four feet outward and down from the perch, the Catbird immediately took after it, apparently acquired it, but clumsily alighted among the pine needles below instead of gracefully returning to the perch. A moment later it flew down into its normal habitat — the undergrowth. No doubt the Catbird was at a disadvantage in selecting a nearby insect below perch-level and close to the dense tree-top. During my observations I saw the Olive-sided eye, but disregard, insects at this range and level.

At 6:45 the stub was still deserted. By the amount of food taken, I thought the Olive-sided was satisfied and had completed its evening meal; this probably was partially true, because, upon returning at 6:50 it preened and arranged its feathers instead of immediately taking up the insect chase. Although its back was almost constantly in view while hunting, extremely little had been seen of its unique white flank-patches, but now while preening, a large, white, downy tuft appeared and a moment later I had the rather unusual experience of seeing both flank patches prominently displayed.

The big pine's next visitor was a warbler — identified as a Cape May — which flitted through the needled branches and up onto the dead top. Here it perched, just below the Olive-sided Flycatcher, out in the open. It showed every intention of following the fairly common warbler practice — that of chasing another bird out of the vicinity. It is no surprise in late summer to see some Red-eyed Vireo, Oriole, even Kingbird or Robin being chased out of the neighborhood by one of our tree-top warblers. And this intent fairly registered in the alert pose of the Cape May as it impatiently awaited the flycatcher's next move. As the Olive-sided shot out from the perch with a distant insect in view, the Cape May flew threateningly up and behind its back. To my amazement, with magnificent composure the flycatcher didn't deviate an inch, but captured its winged prey and both birds about a foot apart spectacularly swung around, flew up and alighted on their former perches.

The warbler, apparently placed in a ridiculous situation, lost interest and immediately departed.

Some further hunting occurred as the Olive-sided acquired a few more insects, but at 7:09, after some 114 minutes under observation, and with daylight lessening, the Olive-sided left, apparently to bed down elsewhere for the night. I saw it no more, nor did I see any others that season. John J. Elliott, 3994 Park Avenue, Seaford, L. I.

THE WINTER SEASON: DECEMBER 1 TO MARCH 31

There is little to say about the season just past except that it was a fine demonstration up-state of the effects of the "real old-fashioned winters." Each regional report has its story about the February blizzards and their toll of bird life. This year especially after the mild weather extending through Christmas which held many of the half-hardy species over, we had an opportunity to witness how destructive the inclement weather can be. It will be interesting to note continuing levels in the populations of such birds as the Tufted Titmouse and the Carolina Wren. It will be interesting too to speculate on the differing effects on birds which utilize feeders and those which do not.

Noteworthy was the winter finch flight with Redpolls in the vanguard. 14 Snowy Owl reports, six from Finger Lakes. There was very little evidence of an echo flight of Three-toed Woodpeckers. The Cardinal continues to spread to the northeast, this winter bringing a report from the central Adirondacks. It is unfortunate that this bird did not make it through the winter. GRR

REGION 1—NIAGARA FRONTIER

ROBERT F. ANDRLE

The cold and stormy weather of November continued to mid-December but the marked higher temperatures during the latter half of the month made it the warmest December in 26 years. A sleety, snowy and comparatively cold first three weeks of January followed but a "thaw" in the last week saw temperatures fluctuating little from the freezing point. There was no ice in Lake Erie nor much in Buffalo harbor until February which ushered in severe weather with more snow (54.2 inches) than in any month on record. It was also a cold month with a record low of -5° F on the 18th after a weekend storm left more than two feet of snow over much of the region. Alternate thawing and freezing late in the month and through March removed much of the snow cover without causing flooding. During the last month of the period near normal temperatures prevailed (average 34.5° F) and precipitation was very light. Unusually low wind velocities occurred and prevailing easterly winds during the latter part of March caused open water by moving much Lake Erie ice to the westward. Great numbers of gulls continued to be present through December but soon after the advent of harsher weather and the formation of the ice bridge below Niagara Falls in January they decreased greatly. Slightly more than the normal number of half-hardy birds were observed through December and the flights of Evening Grosbeaks, Common Redpolls and Snow Buntings continued quite heavily during the period. The feeders south of Buffalo were well patronized by the Grosbeaks. Tufted Titmice and Carolina Wrens also appeared