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THE

# CHAMPLAIN SPORTSMEN



AND

## NATURALIST

A  
MONTHLY  
JOURNAL



VOL. III.  
No. 5.  
1883.

A. DONLUP DEL.

MONTREAL

WISSEMAN EC.

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# THE CANADIAN SPORTSMAN AND NATURALIST.

No. 5.

MONTREAL, MAY, 1883.

Vol. III.

WILLIAM COUPER, Editor.

## TO CORRESPONDENTS.

We want a continuance of original communications relative to Canadian Natural History, and results from the use of the Rod and Gun, which are always welcome; but it is necessary that manuscripts should be in our possession before the beginning of each month.

## COOPER'S HAWK.

(*Accipiter Cooperi*)

An adult female of the above was sent to us by Mr. Woodward, U.S. Vice-Consul at Conaticook, P.Q. On dissection, a full developed soft-egg was found in the ovarium. It appears that the bird was caught by a man who brought it to him in a small wire cage. From these facts we may safely record this hawk as nesting in April in the Province of Quebec.

## BROAD-WINGED HAWK.

*Buteo Pennsylvanicus*

Mr. Woodward, of Conaticook, sent us a female of this species lately; it, also, indicated that it laid its eggs in April, and doubtless nests in the Province of Quebec. The egg of this Hawk is sold to collectors, from \$1.00 to \$1.25.

## A YOUNG WEASEL.

On the 18th instant, a small Weasel was brought to me, which was caught while being carried in the mouth of the parent, as a cat is seen to carry its kitten. This fact is new to me, but it may, however, have been noticed by others. The body of this young one is only four inches in length; tail, two inches, and the fur is much finer than in the adult. The dress is in accordance with the adult in summer.—C.

## HOW TO LOOK FOR COCOONS OF OUR LARGE MOTHS.

There are some beautiful large silk spinning moths found in Canada, the caterpillars of which feed on various forest and cultivated trees. By obtaining cocoons of these moths, the perfect insects will be procured if the chrysalides are living. About the end of April I collected ten fresh cocoons of probably three species within a space of four acres on Mount Royal. The most common cocoon is oblong, generally spun within a leaf, and they are found attached to twigs about a foot or two above the ground. They are covered with snow in winter, but by careful search they may be easily seen in April or the early part of May. I have found several cocoons of this species destroyed by mice this winter. It is called the Polyphemus moth (*Petea polyphemus*). The most productive localities to find these cocoons are in scattered underbrush partially shaded by large trees. Another oblong cocoon, that of the most beautiful of our large moths (*Actias luna*), is generally found in the spring on the ground under butternut trees. The caterpillar of this moth fails to make a firm attachment to the tree, therefore the cocoons drop to the ground with the fall of the leaf. Although butternut trees are abundant on the Island of Montreal, the *luna* moth is uncommon. The next cocoon is a large one, generally found on trees at various distances from the ground. It produces the largest of our nocturnal moths (*Platysamia cecropia*). There is also another almost similar cocoon rarely found in the vicinity of Montreal, which produces an allied form called (*Platysamia Columbia*). These species are all worth looking after, as they are magnificent insects and the blending of their colours would charm the eye of any artist or lover of nature. The last rare one occurring near Montreal is the Prometheus moth (*Callosamia promethea*), whose caterpillar seems to be a good architect, as the cocoon is firmly attached by a strong silken band to the twigs of trees, from which they are pendant. When they are discovered it will be necessary to climb the tree to procure them.—C.

## ENTOMOLOGICAL.

SIR.—In justice to yourself, I desire to make in your columns a brief statement regarding the beetle which I mentioned under the name of *Hylobius stupidus*, in a paper on some "Coleoptera injurious to pine," which was published in Transactions No. 2 of the Ottawa Field Naturalists' Club. On page 83 of *The Canadian Sportsman and Naturalist*, you stated that:—"We have no knowledge of this insect, and never met it under the name of *stupidus* in Canadian collections." My defence (page 101) was to the effect that the name was given in the lists of the Entomological Society of Ontario, and that there was a specimen so labelled in the collections of the late Mr. Billings. I have recently been able to have many of my beetles determined and in regard to the species in question am informed by Mr. J. B. Smith that it is only a variety of *H. pubes*, being, "the form going in Canada under the name of *H. stupidus*." He adds that he has been able to make up a full series from one form to the other, and I shall endeavor this season to make up a similar series, if the intermediate forms are to be obtained here.

A couple of words have apparently been dropped from my paper on "Causes of rarity in some species of insects" in your last number. On page 225, in line 21 of second column "man" should be inserted before "now" and in the last line of the same column "been" should be inserted after "already."

W. H. HARRINGTON.

Ottawa, 25th April, 1883.

NOTE.—The insertion of *H. stupidus* in the Canadian list of Coleoptera, may have arisen from correspondence between the Entomological Society of Ontario and the late Mr. Billings, who probably supplied the name. *H. pubes* varies in size; I remarked it in Toronto years ago, but as I noticed similar deviations among other genera of Coleoptera, it did not occur to me to prepare a series of the variable species. *H. pinivola*, Comper, is our most northern form of *Hylobius* and may not be found south of the latitude of Quebec. The word "man" appears in your copy, but "been" does not. We will be more careful in future. —C.

## THE SAMSON FOX.

Montreal, April 16th, 1883.

SIR.—I would feel greatly obliged if you could give any information respecting the

"Samson" Fox. Why so called? What causes its peculiar difference from other Foxes? How long has the name been known?

Yours truly,

HONORÉ T. MARTIN.

NOTE.—Messrs. Martin & Co., furriers of this city, have lately purchased a number of skins of adult foxes, known in the townships as the "Samson Fox." This peculiar variety is minus the long glossy hair of the common fox, but it is abundantly covered with soft hair, having a peculiar singy appearance, which is generally seen in young foxes. It is said to occur in one locality, where it is called by the above name; but we are not prepared to say that it is a descendant of one of the three hundred foxes mentioned in the xv. chapter of Judges, which Samson caught and "took firebrands and turned tail to tail, and put a firebrand in the midst between the tails. And when he had set the brands on fire, he let them go into the standing corn of the Philistines, and burnt up both the sheeks and the standing corn, &c." Perhaps some of our correspondents may throw some light on the "Samson Fox." We are aware that the common Red Fox has permanent varieties in North America: the silver-grey and dark-grey animals are merely fur changes of the common species. The result is said to occur through segregation, for instance, the Island of Anticosti, where the silver variety is more abundant than in any other locality in the North where the common fox is found. All our wild American quadrupeds are, however, subject to variation in fur; we have grey and black varieties in the Ground Hog or Woodchuck, and, in the neighbourhood of Quebec, muskrats are sometimes found perfectly white; but they are not albinos, the eyes are hazel like the ordinary rat. Occasional white specimens of the common Virginian deer are shot in Canada, and, during some seasons piebald varieties of the Black Squirrel have been caught in Ontario. Regarding the Black and Grey Squirrels, Can-

adians are frequently in ignorance, claiming that they constitute two distinct species, while they are actually the same animal; the fur merely forms the variety, as is seen in the Ground Hog, Muskrat and other native quadrupeds.—C.

#### THE CANADA LYNX.

SIR.—I notice in your number for June, 1882, that a subscriber corrects the assertion of Dr. Garnier, that the Canada Lynx, (*Lynx Canadensis*), "has never been seen south of the Ottawa River" in Ontario. Why Sir, the Canada Lynx, notwithstanding the cutting away of much of our native forests, is still quite common even within five and ten miles of the city of Ottawa. Not more than four years ago, two of these animals were killed within two miles of the western limits of the city. Wherever there are large forests in Ontario, the Canada Lynx may still be found, and will, doubtless continue to abound in its old haunts until the forests shall have disappeared.

Yours truly,

WM. P. LETT.

Ottawa, April 27th, 1883.

#### NEW BRUNSWICK NOTES.

##### LOON. (*Colymbus torquatus*.)

In my catalogue of the birds of New Brunswick it is stated, "Two races of Loon spend the summer in New Brunswick and breed here. They have plumage of similar colors and markings, but one is smaller than the other, being some six inches less in length. The larger bird is common on the lakes and rivers in all sections of the Province, seldom seeking the salt water until the rivers freeze over, while the smaller is rarely found away from the sea-shore, and, though only seen occasionally in the Bay of Fundy, is quite abundant on the Gulf of St. Lawrence."

A correspondent has asked me to send a further account of these birds to the *Canadian Sportsman and Naturalist*, but I have as yet discovered nothing additional concerning them though observations made since the above was first written have confirmed the opinion then advanced.

It has long been well known that Loons vary very considerably in size. In Baird's report of 1859 the length is given as thirty to thirty-six inches, and Allen in "Mammals

and Winter Birds of Florida," (1871) gives a long list of varying measurements, but, I believe it had not been previously noted that the smaller birds display a preference for the salt water while the larger race is usually found during the breeding season on the lakes and streams. I have not seen a nest of the salt water or Sea Loon but the fishermen on the Bay of Chaleur, who are familiar with the appearance of the two races, and readily distinguish them, told me that the Sea Loons build in the marshy spots along the coast.

These fishermen have good reason for remembering the smaller birds as they destroy numbers of fish after they have been caught in nets or weirs, though the Loons are themselves sometimes caught in the nets while thus poaching; I remember on one occasion seeing six brought on shore in one boat. A correspondent inquires if the smaller of these two races may not be the black-throated or Arctic Diver, but such is not the case. In immature plumage the two species bear considerable resemblance but the mature birds are easily distinguished by the difference in coloration and in size.

The Black-throated Arctic Diver was well named *Ardethus* for they have been seldom seen south of Hudson's Bay, though a few examples, in immature plumage only, have been taken along the Atlantic Coast adjacent to the mouth of the Bay of Fundy.

MONTAGUE CHAMBERLAIN.

St. John, N. B.

#### THE WILD OR PASSENGER PIGEON.

##### *Ectopistes migratorius*.

DEAR SIR.—Would you allow me, through the medium of your columns, to ask whether it is a fact that this bird which until 1850, in the spring, was seen in swarms all round Quebec, lighting occasionally on the glaciers—was also abundant in the woods of Chateauguay, not far from Montreal. I was told by a credible person that as late as 1851, there was a pigeon roost, at a place called the *Four Corners*, in the mountains back of Chateauguay, where their numbers and flight quite realised the description Audubon has left us of the wild pigeon roosts of Kentucky. We scarcely see one in a year round Quebec at present.

J. M. LEMOINE.

Quebec, April, 1883.

## THE ACADIAN SCIENTIST.

We have received No. 4 of this magazine, which is issued in a new and handsome dress. The matter is both interesting and instructive, and we have no doubt the improved appearance of the serial will conduce to its success.

## THE LOGGER-HEAD SHRIKE.

*Lanius lubericianus*, Linn.

On the rising ground, in the fields behind the village of Lachine, many large thorn trees have been growing for years past, and the Loggerhead Shrikes have, doubtless, for a long time made the place a resort for the prosecution of their peculiar habits, as also, to rear their young. They generally arrive in the above locality early in April, as the foundation of the nest is laid about the 18th, and the first egg is probably deposited on or about the 24th of the latter month. A nest of this species, containing three eggs, was found in a thorn tree at Lachine, on the 30th of April. The parents of this nest were shot in its vicinity, before the nest was discovered, but proof of this was the finding of a fully formed egg on dissecting the female. The nest is bulky and warmly constructed, with little pretension to architectural beauty, as it is mainly formed exteriorly of withered twigs of thorn, stalks of weeds intermixed with horse hair, cotton rags, cord, thread and wool. The interior, or nest proper, is extremely neat and comfortable, being evidently formed for warmth. It has a diameter of three inches, with a depth of two and a half inches, while the wall is a little over one inch thick, thus forming a much larger nest than that of the Redbreasted Thrush or Robin. The interior is lined with wool, horse hair, and a quantity of feathers from domestic fowl. There is but slight difference in the nuptial plumage of the sexes. I notice that the female has but one central feather in the tail, while the male has two; the tail feathers on each side of the latter are pointed, with white at the apex. The white band on the wing of the male is

wider than that of the female, and his wing coverts are generally whiter. The throat and under parts are dirty white in both sexes, showing no indication of the dark, wavy lines so conspicuous in their young. I am astonished that this bird should be taken for the Great Northern Shrike, which is larger and has a more prominently toothed beak. The Loggerhead is weaker in form, besides, the marking of the two species are so distinct, that the merest tyro who studies our birds should not mistake them. In connection with the above, I have selected Dr. Elliot Coues' charming and accurate description

"Of Shrikes in a State of Nature,"

"We will here take up the Loggerhead and the Northern Butcher-bird together—for they are as one in all essential particulars—reserving for after consideration the few points that mark their respective histories. Looking at the bold, defiant aspect of the Shrike, however inadequately portrayed in the accompanying sketch, we cannot fail to recognize a bird of extraordinary spirit,—the stout, hooked beak, combining claw and tooth in one murderous instrument, is surely the weapon of a Hawk, or other rapacious bird! In one sense we certainly have here a bird of prey; yet, if the portrait were finished at full length, we should find the feet as weak and harmless as those of a Thrush or Sparrow, instead of being furnished with the talons which confer such a raptorial prowess upon the Falcon, the Eagle, and the Owl. If, furthermore, we should examine the anatomy of the Shrikes, it would be merely to discover that the entire structure of the internal organs is modeled after a strictly Passerine type. Though the bone and muscle indicate unusual strength and vigor, the beak itself is the seal of the Shrike order—a mark as plain and unmistakable as that which stamps the tribes of Israel, wherever dispersed over the earth—the symbol of a spirit as bold and reckless as ever dwelt in the breast of any one of the Hawks called "noble" in the olden time, when falconry beguiled the leisure hours of kings and royal mistresses. Matching the bravest of the brave among birds of prey in deeds of daring, and no less relentless than reckless, the Shrike compels that sort of deference, not unmixed

\* Birds of the Colorado Valley, part 1st, 1878.

with indignation, we are accustomed to accord to creatures of seeming insignificance, whose exploits demand much strength, great spirit, and insatiate love of carnage. We cannot be indifferent to the marauder who takes his own wherever he finds it—a feudal baron who holds his own with undisputed sway—an ogre whose victims are so many more than he can eat, that he actually keeps a private graveyard for the balance. Lest such a picture may seem exaggerated, let me make good my statements. The Shrike's food consists of such birds, quadrupeds, and reptiles as he can capture and overpower, together with insects, chiefly of the larger kinds, and especially grasshoppers. These he pursues, attacks, and destroys quite as a Hawk does; and he has the very curious habit of impaling their bodies upon thorns. Numberless illustrations of the spirit the Shrike displays might be given. Though smaller in stature than the least of our Hawks, he habitually destroys birds and other animals as large as those upon which some Hawks subsist, and quite as capable of resisting attack. Appropriating to himself sufficient territory, where no other bird may safely intrude, he becomes the terror of the neighborhood; and woe to the unlucky Finch or Warbler that ventures to trespass on these hunting-grounds! Like a veritable sentinel on guard, the Shrike stands in wait upon his chosen post, ready to pounce with unerring aim upon the first little bird that may dare to rustle in the nearest bush. His impetuosity and tenacity are well displayed in the onslaught he sometimes makes upon cage-birds hanging at our windows; and he has even been known to enter an apartment, bolting through the open sash with perfect recklessness. Dr. Brewer narrates the case of a Shrike who dashed at a Canary without perceiving that the window was closed. He struck the glass with all the momentum of his impetuous flight, and fell to the ground, stunned by the force of the blow.\* He revived, however, and was kept in confinement for some time, during which he continued sullen and fearless, and greedily devoured small birds which were offered him for food, though refusing to eat

raw meat of other kinds. Notwithstanding the protection that a cage affords, Canaries are not seldom killed by the Shrike unless speedily relieved from his attack. Sometimes they are so terror-stricken that they fall fainting to the bottom of the cage; but they oftener flutter and dash themselves against the wires, till seized by the bird of prey, who scalps them, breaks in their skull, or takes their heads off. The small birds that the Shrike destroys in a state of nature are either captured at a single dash, or caught in open chase, and killed with a blow of the beak. They are then devoured upon the spot, or carried to the "cemetery" and stuck upon a thorn, as I shall presently describe with more particularity. As if conscious of his prowess, the Shrike shows little fear in the presence of man. Under some circumstances, indeed, I have found a Shrike so wild that my endeavors to obtain a shot were unavailing, but the very opposite is oftener the case. You may enter the thicket the Shrike has chosen as his hunting-ground, and the bird will regard you with contempt, returning your regard with a gaze as steady and unflinching as if he were the better man of the two and knew it. At such a time, you will have a good opportunity to observe the easy nonchalant air with which he asserts himself. For all that the Shrike is such a gallant marauder, it must not be inferred that he is always on the war-path, intent on prodigies of valor. The doughtiest knights lay aside their armor at times, and the Shrike is fond of his ease in the intervals of his piratical enterprises. At such times, you may observe him lounging about with his hands in his pockets, so to speak, and nothing on his mind, when, as you approach, he will turn his head toward you with languid curiosity, just for a moment, and then dismiss you from further consideration. Sometimes you will see him ready for business, scanning the neighborhood closely from his watch-tower on the topmost twig of some bush or sapling, where he stands stilly, bolt upright, like a soldier on dress parade, ready to move at a moment's warning. He makes a rather imposing picture just then in his uniform of French gray with black and white facings, which fits him "like a dream"; the next instant—whish! he is gone, and the piteous cry of the Sparrow in yonder bush tells the rest of the story. A good deal of the Shrike's business, however, is neither brilliant nor romantic. The green sward below his

\*A similar instance of birds' inability to see glass is within my own experience. Having on one occasion netted a large lot of Sparrows and other small birds alive, I turned them loose in a vacant room. In their terror and eagerness to escape, almost every one of them dashed against the window in the course of a few moments, and successively fell stunned and shivering to the floor—some to recover, others, more seriously hurt, to die shortly.



perch harbors a great many field-mice of different kinds, according to the lay of the land, and he has nothing to do but drop quietly down upon these little innocents. At certain seasons of the year, moreover, the fields swarm with grasshoppers, of which the Shrike is very fond, as he is also of spiders, beetles, caterpillars, and, in fact, almost any insect. In July and August, I have frequently seen Shrikes skipping about in old weedy fields, apparently amusing themselves; but I generally found, on watching them closely, that they were hunting for the "hoppers, some of which they devoured then and there, after beating off their long hind legs, while others were carried to some tree near by and duly impaled. The tradition that the Shrike destroys exactly *uno* victims a day, and which is preserved in the name "Nine-killer," still sometimes heard, is very ancient, and I do not know to what source it may be traced back. It is a staple myth, which has been current for centuries in folk-lore, and may be found related with gravity in some of the older treatises. I should very much like to learn its source and the circumstances under which it was first stamped with authority. The Shrike's most notable trait,—the habit of keeping a butchershop, where the bodies of the slain are exposed,—has also been remarked for many hundred years, and various ingenious theories have been proposed to explain what has been considered a wholly exceptional and anomalous habit. When fully considered, however, I think it will be found less singular than it at first appears to be. The Shrike is a veritable "butcher bird," in as far as that title may be given to a bird who kills what he does not eat, and his operations in this line have been made the subject of repeated observations, so that we are in possession of all the facts in the case. The birds, mice and insects are sometimes impaled alive, and left to perish miserably; sometimes their dead bodies are similarly stuck upon the sharp twigs. The shambles of the pitiless butcher may be found in some thorny tree or bush, which in the course of time presents a curious spectacle, with the numerous creatures sticking here and there. Quite a museum of anatomy is sometimes thus brought together in one place, but as the Shrike is not particular about making a collection of curiosities, we may recognize his work in single specimens scattered anywhere about fields and shrubbery. Some have surmised that the

bodies are stuck up in this conspicuous way as decoys, to allure other victims within reach. This "bait theory" in its fulness is set forth in the article noted below,\* which may be taken as a typical illustration of this way of thinking. Mr. Heckewelder represents that whereas the Shrike lives entirely upon mice and small birds (which is not the case), and whereas the grasshoppers are not stuck up in natural attitudes as if they were alive (though they are not so fixed, in fact), therefore this is done to decoy birds that feed upon grasshoppers; for if this be not so, and if the insects be stored up for future use, how long would one or even two grasshoppers last a Shrike? But if the intention be to seduce little birds, then that number or half as many, or fewer still, would be good bait all winter. And so forth. Wilson, with his usual good sense, has disposed of this theory, "pretty fanciful," as he calls it, in a rather satirical as well as practical way. He notes that grasshoppers themselves are the favorite food of the Shrike, and that they would make the very poorest bait for our small winter birds, which are mostly granivorous; that there is no necessity for a stratagem of such refinement and cruelty, as the Shrike is abundantly able to capture all the birds he wants in open chase; and, finally, that the Crows and Jays may be supposed with equal probability to be laying baits for mice and flying squirrels, when they hoard up their corn. The bait theory may be safely discarded. Another idea is, that the Shrike avails himself of a thorn to secure his prey whilst he is devouring it, just as a Hawk or Owl would use his claws for the same purpose; and that this has become such a habit that the Shrike may spit, and then leave untouched, the carcasses he does not wish to devour. Undoubtedly, the bird's feet and claws are weak in comparison with his stout beak, large head, and powerful muscles of the neck and breast; but no one can doubt the bird's ability to hold his prey securely while he tears it to pieces. Any one who has had a Shrike scratch him should be satisfied of this. There is another notion, that the Shrike impales his victims in the excess of his cruelty, from sheer love of inflicting pain. But this argues a moral obliquity which we can ascribe

\*1799. HECKEWELDER, J. A letter from Mr. John Heckewelder, to Dr. Barton, giving some account of the remarkable instinct of a bird called the Nine-Killer [*Lanius borealis*]. (*Trans. Amer. Philos. Soc.* iv, 1799, pp. 124, 127.)

to no bird,—if indeed any moral quality whatever can be discovered in their actions. It is true that a cat tortures a mouse, and seems to delight in inflicting pain. I cannot but believe, however, that the cat is unconscious of the mouse's misery; that what she enjoys is not the suffering of her victim, but the exercise of her natural powers. Excessive destructiveness, as when cats or weasels kill more animals than they can devour, is very frequent; but it implies neither cruelty (in a moral sense) nor mere wantonness; it is a legitimate result of their rapacious nature, and for the rest, the animals may have a natural preference for some part of their prey, as the blood or brains, to secure enough of which they take more lives than they would if they fed upon the whole of the flesh. In the case of the Shrike, moreover, it is certainly the rule that the bodies are impaled after death, not while still struggling in the clutches of the captor. Analogy goes for something in natural history; and the analogy of the Shrikes' shambles to the storehouses of various birds is too obvious to have escaped attention. I think the right clue to the curious habit is thus found. Many birds lay up stores of provisions, like mice and squirrels. Among those of this country, birds of the Corvine tribe, as Crows and Jays, are conspicuous in this respect. The 'thievishness' of the Raven and Magpie in confinement is notorious; but it is simply the excessive development or perversion of their habit of hoarding food that makes them steal and hide away articles of no possible use to them, such as jewellery and silverware. The Californian Woodpecker offers another notable instance of stowing up food, as it does with infinite pains. I have seen branches of trees studded thickly with acorns, each stuck tightly by itself in a little hole bored by the bird for its reception. In other instances, the same bird has been known to insert acorns in the natural crevices of wood. These facts relate indeed only to the hoarding of fruits or inanimate objects; but we see a still closer resemblance to the habit of the Shrikes in the curious practice of the Red-headed Woodpecker, a versatile bird, one of whose singular traits has just been told by Mr. H. B. Bailey, of New York. This writer narrates\* that a correspondent of his observed a Woodpecker's frequent visits to an old oak post, which on examination was found to present a large

crack, in which the bird had inserted about a hundred live grasshoppers, and wedged them in so firmly that they could not escape. Some farmers showed him other posts which had been put to the same purpose. This was certainly a laying-up of stores for future use, for the writer states that the Woodpecker later began to eat his hoard, and that at length only a few shrivelled dead 'hoppers were left. Wilson has observed, furthermore, that Jays and Shrike's retain similar habits in confinement; the Jay filling every seam and chink in his cage with grain and bread-crumbs, and the Shrike 'nailing' neat, insects and the bodies of such birds as may be thrown to him. I have had my doubts in this matter; and still, after observing Shrikes carefully in various parts of the country, must admit that the matter is not finally narrowed down to a simple question of hoarding. Too many bodies are stuck up, too promiscuously, and too few are made use of afterward, for us to consider it simply as a piece of the bird's thrift. I suppose the habit of impaling, considered simply as such, and without reference to ulterior purposes subserved, may have been gradually acquired as the result of the Shrike's physical organization—the relatively little force of grasping with his feet he possesses, in comparison with the power of his beak. The talons of a Hawk, for example, are very effective instruments, not only for striking and killing prey, but also for holding it while it is torn by the beak. The Shrike has much less prehensile power; it strikes with the beak, and devours as best it may. A Nuthatch, for example, will take an acorn to a crack in the bark, and wedge it there while it hammers away at it with the bill. Such a habit of fastening its prey having been acquired, as something entirely unconnected with the storing up of provisions, may then have been turned to account as a means of securing its prey for future use, and thus become the usual way of making a hoard. It is certain, however, that the Shrike makes no great use of his hoard; and that he sometimes impales and sometimes not, apparently at his caprice. He is just as likely to eat a grasshopper as to stick one. He spits his victims as often when food is plenty as when it is scarce; and the majority of the bodies gibbeted are left to wither and be blown away, or be eaten up by the bugs. On one occasion, when I watched a Shrike closely for some time, I saw him impale a number of grasshoppers in

\* Bull. Natl. Ornith. Club, iii. no. 2, April, 1878, p. 97.

succession, and continue foraging for more, which he ate upon the spot as soon as caught. I never witnessed the act of impaling a bird or mouse, but I suppose it would be the same as for a grasshopper; and in the instance to which I refer the bird worked the unfortunate insect on the thorn with his beak, pushing and pressing it down with various strokes, until it was fixed to his satisfaction. But we have not yet finished our study of Shrikes—having still to consider their flight, their voice, and especially their domestic habits. There are two very different birds of this country which the Shrike resembles in the relative proportions of the wings and tail, as well as in the general conformation of the body. These are the Mockingbird, *Mimus polyglottus*, and the Sharp-shinned Hawk, *Accipiter fuscus*. Now if we picture to ourselves a bird whose attitudes, movements, and especially whose mode of flight, may partake on occasion of those of either of the birds just named, we shall have no wrong idea of the varied actions of which the Shrike is capable. The close general resemblance of the Shrike to a Mockingbird is really remarkable. The two are about of the same size, shape and color—in fact, it is not the easiest thing to tell them apart at a little distance, especially when they are flying. The similarity has long since been duly noted and commented upon; in fact, Swainson went so far as to make it the basis of a strong argument in favor of his fanciful quaternary theory of affinity. The mode of flight, then, of the Shrike, under ordinary circumstances, is necessarily much the same as that of a Mockingbird, being light, wayward and even undulatory, when the bird is simply moving about at his ease, or foraging for the humbler kinds of prey that contribute to his support. Yet even under these conditions there is a certain dash about it; giving hint of the spirit he can infuse into his actions when he calls his powers to their full display. Then, in the manner of the Hawk, his flight is strengthened, firmly sustained for long distances, and on occasion quickened at a prodigious rate; the climax of this exploiting being reached when he plunges headlong after his prey, hurtling like a very Hawk. He is said at times to hover in the air, just over his intended victim, as if taking aim before he stoops to his quarry; but this can hardly be a characteristic habit, or it would not have escaped my attention. I do not remember to have ever witnessed it,

though it need not be doubted that the action is sometimes performed. When not on the wing, we may observe in the Shrike's habitual attitudes the same blending of Mockingbird and Hawk; or rather, the transition from one to the other, when his air of indifference and rather 'slouchy' appearance give way to the martial bearing which indicates that his attention is riveted upon intended conquest. So versatile and animated a spirit as that which the Shrike possesses necessarily seeks expression. There is no reticence about this bird, whose harsh outcries we may in turn interpret to mean anger and exultation—the challenge and the conquest—while the course of his passionate life runs on in almost incessant warfare. These notes mean much the same as the stridulation of the Kingbird, in whose temper there is much of kinship with the Shrike, both being impatient and aggressive birds. But notwithstanding the magnitude of his exploits, the Shrike is not a very lofty character after all; he picks many a needless quarrel with his fretful fellows, and all the petulance of a wilful, badly-governed disposition may be traced in some of the harshest of the cries that greet our ear. It is easy to say, and quite safe to make the assertion, that nothing more unmusical than the Shrike's notes is often heard; and it is usual to compare the voice of this bird to the creaking of a sign-board, or the grating of any other rusty hinge. But I suspect, though I am not a competent witness in this case, that those are right who ascribe to the Shrike some powers of song, limited though they be. Technically speaking, the Shrike is as truly Oscine as the Mockingbird itself; and no *a priori* reason appears why his notes should not at times be modulated with a tuneful quality. Several authors have in fact asserted such to be the case, protesting fairly against any sweeping denunciation in this particular. Thus, in speaking of the Great Northern Shrike, Audubon says:—'This valiant little warrior possesses the faculty of imitating the notes of other birds, especially such as are indicative of pain. Thus it will often mimic the cries of Sparrows and other small birds, so as to make you believe you hear them screaming in the claws of a Hawk; and I strongly suspect this is done for the purpose of inducing others to come out from their coverts to the rescue of their suffering brethren.'

(TO BE CONTINUED.)

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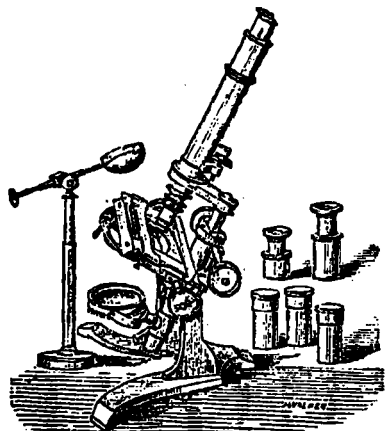
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