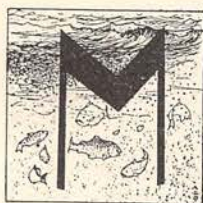


## FIELD-NOTES.

### I. A WEASEL AND HIS DEN.



Y most interesting note of last season relates to a weasel. One day in early November my boy and I were sitting on a rock at the edge of a tamarack swamp in the woods hoping to get a glimpse of some grouse which we knew were in the habit of feeding in the swamp. We had not sat there very long before we heard a slight rustling in the leaves below us which we at once fancied was made by the cautious tread of a grouse. (We had no gun.) Presently through the thick brushy growth we caught sight of a small animal running along that we at first took for a red squirrel. A moment more, and it came into full view only a few yards from us, and we saw that it was a weasel. A second glance showed that it carried something in its mouth, which, as it drew near, we saw was a mouse, or a mole of some sort. The weasel ran nimbly along, now the length of a decayed log, then over stones and branches, pausing a moment every three or four yards, and passed within twenty feet of us, and disappeared behind some rocks on the bank at the edge of the swamp. "He is carrying food into his den," I said; "let us watch him." In four or five minutes he reappeared, coming back over the course along which he had just passed, running over and under the same stones and down the same decayed log, and was soon out of sight in the swamp. We had not moved, and evidently he had not noticed us. After about six minutes we heard the same rustle as at first, and in a moment saw the weasel coming back with another mouse in his mouth. He kept to his former route as if chained to it, making the same pauses and gestures, and repeating exactly his former movements. He disappeared on our left as before, and, after a few moments' delay, reemerged, and took his course down into the swamp again. We waited about the same length of time as before, when back he came with another mouse. He evidently had a big crop of mice down there amid the bogs and bushes, and he was gathering his harvest very industriously. We became curious to see exactly where his den was, and so walked around where he had seemed to disappear each time, and waited. He was as punctual as usual, and was back with his game exactly on time. It happened that we

had stopped within two paces of his hole, so that, as he approached it, he evidently discovered us. He paused, looked steadily at us, and then without any sign of fear entered his den. The entrance was not under the bank, as we had expected, but was in the bank a few feet beyond them. We remained motionless for some time, but he did not reappear. Our presence had made him suspicious, and he was going to wait awhile. Then I removed some dry leaves, and exposed his doorway, a small, round hole hardly as large as the chipmunk makes, going straight down into the ground. We had a lively curiosity to get a peep into his larder. If he had been carrying in mice at this rate very long, his cellars must be packed with them. With a sharp stick I began digging into the red clayey soil, but soon encountered so many roots from near trees that I gave it up, deciding to return next day with a mattock. So I repaired the damages I had done as well as I could, replaced the leaves, and we moved off.

The next day, which was mild and still as usual, I came back armed as I thought to unearth the weasel and his treasures. I sat down where we had sat the day before, and awaited developments. I was curious to know if the weasel was still carrying in his harvest. I had sat but a few minutes when I heard again the rustle in the dry leaves, and saw the weasel coming home with another mouse. I observed him till he had made three trips; about every six or seven minutes I calculated he brought in a mouse. Then I went and stood near his hole. This time he had a fat meadow-mouse. He laid it down near the entrance, went in and turned around, and reached out and drew the mouse in after him. "That store of mice I am bound to see," I thought, and then fell to with the heavy mattock. I followed the hole down about two feet, when it turned to the north. I kept the clue by thrusting into the passage slender twigs; these it was easy to follow. Two or three feet more and the hole branched, one part going west, the other northeast. I followed the west one a few feet till it branched. Then I turned to the easterly tunnel, and pursued it till it branched. I followed one of these ways till it divided. I began to be embarrassed and hindered by the accumulations of loose soil. Evidently this weasel had foreseen just such an assault upon his castle as I was making, and had planned it accordingly. He was not to be caught napping. I found several enlargements

in the various tunnels,—breathing-spaces, or spaces to turn around in, or to meet and chat with a companion,—but nothing that looked like a terminus, a permanent living-room. I tried removing the soil a couple of paces away with the mattock, but found it slow work. I was getting warm and tired, and my task was apparently only just begun. The farther I dug the more numerous and intricate became the passages. I concluded to stop, and come again the next day, armed with a shovel in addition to the mattock.

Accordingly, I came back on the morrow, and fell to work vigorously. I soon had quite a large excavation; I found the bank a labyrinth of passages, with here and there a large chamber. One of the latter I struck only six inches under the surface, by making a fresh breach a few feet away.

While I was leaning upon my shovel-handle and recovering my breath, I heard some light-footed creature tripping over the leaves above me just out of view, which I fancied might be a squirrel. Presently I heard the bay of a hound and the yelp of a cur, and then knew that a rabbit had passed near me. The dogs came slowly after, with a great rumpus, and then presently the hunters followed. The dogs remained barking not many rods south of me on the edge of the swamp, and I knew the rabbit had run to hole. For half an hour or more I heard the hunters at work there, digging their game out; then they came along and discovered me at my work. (An old trapper and woodsman and his son.) I told them what I was in quest of.

"A mountain weasel," said the old man. "Seven or eight years ago I used to set dead-falls for rabbits just over there, and the game was always partly eaten up. It must have been this weasel that visited my traps." So my game was evidently an old resident of the place. This swamp, maybe, had been his hunting-ground for many years, and he had added another hall to his dwelling each year. After further digging, I struck at least one of his banqueting-halls, a cavity about the size of one's hat, arched over by a network of fine tree-roots. The occupant evidently lodged or rested here also. There was a warm, dry nest made of leaves and the fur of mice and moles. I took out two or three handfuls. In finding this chamber, I had followed one of the tunnels around till it brought me within a foot of the original entrance. A few inches to one side of this cavity there was what I took to be a back alley where the weasel threw his waste; there were large masses of wet decaying fur here, and fur pellets such as are regurgitated by hawks and owls. In the nest there was the tail of a flying-squirrel, showing that the weasel sometimes had a flying-squirrel for supper or dinner.

I continued my digging with renewed energy; I should yet find the grand depot where all these passages centered: but the farther I excavated, the more complex and baffling the problem became; the ground was honey-combed with passages. "What enemy has this weasel," I said to myself, "that he should provide so many ways of escape, that he should have a back door at every turn?" To corner him would be impossible; to be lost in his fortress were like being lost in Mammoth Cave. How he could bewilder his pursuer by appearing now at this door, now at that; now mocking him from the attic, now defying him from the cellar! So far, I had discovered only one entrance; but some of the chambers were so near the surface that it looked as if the planner had calculated upon an emergency when he might want to reach daylight quickly in a new place.

Finally I paused, rested upon my shovel awhile, eased my aching back upon the ground, and then gave it up, feeling as I never had before the force of the old saying, that you cannot catch a weasel asleep. I had made an ugly hole in the bank, had handled over two or three times a ton or more of earth, and was apparently no nearer the weasel and his store of mice than when I began.

Then I regretted that I had broken into his castle at all; that I had not contented myself with coming day after day, and counted his mice as he carried them in, and continued my observation upon him each succeeding year. Now the rent in his fortress could not be repaired, and he would doubtless move away, as he most certainly did, for his doors, which I had closed with soil, remained unopened after winter had set in.

But little seems known about the intimate private lives of any of our lesser wild creatures. It was news to me that any of the weasels lived in dens in this way, and that they stored up provision against a day of need. This species was probably the little ermine, eight or nine inches long, with tail about five inches. It was still in its summer dress of dark chestnut-brown above and whitish below.

It was a mystery where the creature had put the earth, which it must have removed in digging its den; not a grain was to be seen anywhere, and yet a bushel or more must have been taken out. Externally, there was not the slightest sign of that curious habitation under the ground. The entrance was hidden beneath dry leaves, and was surrounded by little passages and flourishes between the leaves and the ground. If any of my readers find a weasel's den, I hope they will be wiser than I was, and observe his goings and comings without disturbing his habitation.

## II. KEEN PERCEPTIONS.

SUCCESS in observing nature, as in so many other things, depends upon alertness of mind and quickness to take a hint. One's perceptive faculties must be like a trap lightly and delicately set; a touch must suffice to spring it. But how many people have I walked with whose perceptions were rusty and unpractised — nothing less than a bear would spring their trap. All the finer play of nature, all the small deer, they miss. The little dramas and tragedies that are being enacted by the wild creatures in the fields and woods are more or less veiled and withdrawn; and the actors all stop when a spectator appears upon the scene. One must be able to interpret the signs, to penetrate the scenes, to put this and that together.

Then, nature speaks a different language from our own; the successful observer translates this language into human speech. He knows the meaning of every sound, movement, gesture, and gives the human equivalent. Careless or hasty observers, on the other hand, make the mistake of reading their own thoughts or mental and emotional processes into nature; plans and purposes are attributed to the wild creatures which are quite beyond them. Some people in town saw an English sparrow tangled up in a horsehair, and suspended from a tree, with other sparrows fluttering and chattering about it. They concluded at once that the sparrows had executed one of their number, doubtless for some crime. I have several times seen sparrows suspended in this way about their nesting and roosting places. Accidents happen to birds as well as to other folks; but they do not yet imitate us in the matter of capital punishment.

One day I saw a little bush sparrow fluttering along in the grass, disabled in some way, and a large number of its mates flitting and calling about it. I captured the bird, and in doing so, its struggles in my hand broke the bond that held it — some kind of web or silken insect thread that tied together the quills of one wing. When I let it fly away all its mates followed it as if wondering at the miracle that had been wrought. They no doubt experienced some sort of emotion. Birds sympathize with one another in their distress, and will make common cause against an enemy. Crows will pursue and fight a tame crow. They seem to look upon him as an alien and an enemy. He is never so shapely and bright and polished as his wild brother. He is more or less demoralized, and has lost caste. Probably a pack of wolves would in the same way destroy a tame wolf should such a one appear among them.

The wild creatures are human — with a difference, a wide difference. They have the keenest powers of perception; what observers they are!

how quickly they take a hint! But they have little or no powers of reflection. The crows do not meet in parliaments and caucuses as has been fancied, and try offenders, and discuss the tariff, or consider ways and means. They are gregarious and social, and probably in the fall have something like a reunion of the tribe. At least their vast assemblages upon the hills at this season have a decidedly festive appearance.

The crow has fine manners. He always has the walk and air of a lord of the soil. One morning I put out some fresh meat upon the snow near my study window. Presently a crow came and carried it off, and alighted with it upon the ground in the vineyard. While he was eating of it, another crow came, and, alighting a few yards away, slowly walked up to within a few feet of his fellow, and stopped. I expected to see a struggle over the food, as would have been the case with domestic fowls or animals. Nothing of the kind. The feeding crow stopped eating, regarded the other for a moment, made a gesture or two, and flew away. Then the second crow went up to the food, and proceeded to take his share. Presently the first crow came back, when each seized a portion of the food, and flew away with it. Their mutual respect and good-will seemed perfect. Whether it really was so in our human sense, or whether it was simply an illustration of the instinct of mutual support which seems to prevail among gregarious birds, I know not. Birds that are solitary in their habits, like hawks or woodpeckers, behave quite differently toward one another in the presence of their food.

The lives of wild creatures revolve about two facts or emotions, appetite and fear. Their keenness in discovering food and in discovering danger are alike remarkable. But man can nearly always outwit them, because while his perceptions are not so sharp, his power of reflection is much greater. His cunning carries a great deal further. The crow will quickly discover anything that looks like a trap or snare set to catch him, but it takes him a long time to see through the simplest contrivance. As I have above stated, I sometimes place meat on the snow in front of my study window to attract him. On one occasion, after a couple of crows had come to expect something there daily, I suspended a piece of meat by a string from a branch of the tree just over the spot where I usually placed the food. A crow soon discovered it, and came into the tree to see what it meant. His suspicions were aroused. There was some design in that suspended meat, evidently. It was a trap to catch him. He surveyed it from every near branch. He pecked and pried, and was bent on penetrating the mystery. He flew to the ground, and walked about and surveyed it from all sides. Then he took a long walk

down about the vineyard as if in hope of hitting upon some clue. Then he came to the tree again, and tried first one eye, then the other, upon it; then to the ground beneath; then he went away and came back; then his fellow came, and they both squinted and investigated and then disappeared. Chickadees and woodpeckers would alight upon the meat and peck it swinging in the wind, but the crows were fearful. Does this show reflection? Perhaps it does, but I look upon it rather as that instinct of fear and cunning so characteristic of the crow. Two days passed thus; every morning the crows came and surveyed the suspended meat from all points in the tree, and then went away. The third day I placed a large bone on the snow beneath the suspended morsel. Presently one of the crows appeared in the tree, and bent his eye upon the tempting bone. "The mystery deepens," he seemed to say to himself. But after half an hour's investigation, and after approaching several times within a few feet of the food upon the ground, he seemed to conclude there was no connection between it and the piece hanging by the string. So he finally walked up to it and fell to pecking it, flipping his wings all the time, as a sign of his watchfulness. He also turned up his eye, momentarily, to the piece in the air above, as if it might be a sword of Damocles, ready to fall upon him. Soon his mate came and alighted on a low branch of the tree. The feeding crow regarded him a moment, and then flew up to his side, as if to give him a turn at the meat. But he refused to run the risk. He evidently looked upon the whole thing as a delusion and a snare, and presently went away, and his mate followed him. Then I placed the bone in one of the main forks of the tree, but the crows kept at a safe distance from it. Then I put it back to the ground, but they grew more and more suspicious; some evil intent in it all, they thought. Finally, a dog carried off the bone, and the crows ceased to visit the tree.

### III. A SPARROW'S MISTAKE.

If one has always built one's nest upon the ground, and if one comes of a race of ground-builders, it is a risky experiment to build in a tree. The conditions are vastly different. One of my near neighbors, a little song-sparrow, learned this lesson the past season. She grew ambitious; she departed from the traditions of her race, and placed her nest in a tree. Such a pretty spot she chose, too — the pendent cradle formed by the interlaced sprays of two parallel branches of a Norway spruce. These branches shoot out almost horizontally; indeed, the lower ones become quite so in spring, and the side shoots with which they are clothed droop down, forming the slopes of miniature

ridges; where the slopes of two branches join, a little valley is formed, which often looks more stable than it really is. My sparrow selected one of these little valleys about six feet from the ground and quite near the walls of the house. "Here," she thought, "I will build my nest, and pass the heat of June in a miniature Norway. This tree is the fir-clad mountain, and this little vale on its side I select for my own." She carried up a great quantity of coarse grass and straws for the foundation, just as she would have done upon the ground. On the top of this mass there gradually came into shape the delicate structure of her nest, compacting and refining till its delicate carpet of hairs and threads was reached. So sly as the little bird was about it, too — every moment on her guard lest you discover her secret! Five eggs were laid, and incubation was far advanced, when the storms and winds came. The cradle indeed did rock. The boughs did not break, but they swayed and separated as you would part your two interlocked hands. The ground of the little valley fairly gave way, the nest tilted over till its contents fell into the chasm. It was like an earthquake that destroys a hamlet.

No born builder in trees would have placed its nest in such a situation. Birds that build at the end of the branch, like the oriole, tie the nest fast; others, like the robin, build against the main trunk; still others build securely in the fork. The sparrow, in her ignorance, rested her house upon the spray of two branches, and when the tempest came the branches parted company, and the nest was engulfed.

Another sparrow friend of mine met with a curious mishap the past season. It was the little social sparrow, or chippy. She built her nest on the arm of a grape-vine in the vineyard, a favorite place with chippy. It had a fine canopy of leaves, and was firmly and securely placed. Just above it hung a bunch of young grapes, which in the warm July days grew very rapidly. The little bird had not foreseen the calamity that threatened her. The grapes grew down into her nest, and completely filled it, so that when I put my hand in, there were the eggs sat upon by the grapes. The bird was crowded out, and had perforce abandoned her nest, ejected by a bunch of grapes. How long she held her ground I do not know; probably till the fruit began to press heavily upon her.

### IV. A POOR FOUNDATION.

It is a curious habit the wood-thrush has of starting its nest with a fragment of newspaper or other paper. Except in remote woods I think it nearly always puts a piece of paper in the foundation of its nest. Last spring I chanced to be sitting near a tree in which a

wood-thrush had concluded to build. She came with a piece of paper nearly as large as my hand, placed it upon the branch, stood upon it a moment, and then flew down to the ground. A little puff of wind caused the paper to leave the branch a moment afterward. The thrush watched it eddy slowly down to the ground, when she seized it, and carried it back. She placed it in position as before, stood upon it again for a moment, and then flew away. Again the paper left the branch, and sailed away slowly to the ground. The bird seized it again, jerking it about rather spitefully, I thought; she turned it around two or three times, then labored back to the branch with it, upon which she shifted it about as if to hit upon some position in which it would lie more securely. This time she sat down upon it for a moment, and then went away, doubtless with the thought in her head that she would bring something to hold it down. The perverse paper followed her in a few seconds. She seized it again, and hustled it about more than before. As she rose with it toward the nest, it in some way impeded her flight, and she was compelled to return to the ground with it. But she kept her temper remarkably well. She turned the paper over, and took it up in her beak several times before she was satisfied with her hold, and then carried it back to the branch, where, however, it would not stay. I saw her make six trials of it when I was called away. I think she finally abandoned the restless fragment,—probably a scrap that held some “breezy” piece of writing,—for later in the season I examined the nest, and found no paper in it.

#### V. A FRIGHTENED MINK.

IN walking through the woods one day in early winter, we read upon the newly fallen snow the record of a mink's fright the night before. The mink had been traveling through the woods post-haste, not by the watercourses, where one sees them by day, but over ridges and across valleys. We followed his track some distance to see with what adventures he had met. We tracked him through a bushy swamp, saw where he had left it to explore a pile of rocks, then where he had taken to the swamp again, then to the more open woods. Presently the track turned sharply about, and doubled upon itself in long hurried strides. What had caused the mink to change its mind so suddenly? We explored a few paces ahead, and came upon a fox-track. The mink had seen the fox stalking stealthily through the woods, and the sight had probably brought his heart into his mouth. I think he climbed a tree, and waited till the fox passed. His track disappeared amid a clump of hemlocks, and then reappeared again a little beyond

them. It described a big loop around, and then crossed the fox-track only a few yards from the point where its course was interrupted. Then it followed a little watercourse, went under a rude bridge in a wood-road, then mingled with squirrel-tracks in a denser part of the thicket. If the mink met a muskrat or a rabbit in his travels, or came upon a grouse, or quail, or a farmer's hen-roost, he had the supper he was in quest of.

#### VI. A LEGLESS CLIMBER.

THE eye always sees what it wants to see, and the ear hears what it wants to hear. If I am intent upon birds' nests in my walk, I find birds' nests everywhere. Some people see four-leaved clovers wherever they look in the grass. A friend of mine picks up Indian relics all about the fields; he has Indian relics in his eye. I have seen him turn out of the path at right angles, as a dog will when he scents something, and walk straight away several rods, and pick up an Indian pounding-stone. He saw it out of the corner of his eye. I find that without conscious effort I see and hear birds with like ease. Eye and ear are always on the alert.

One day in early June I was walking with some friends along a secluded wood-road. Above the hum of the conversation I caught the distressed cry of a pair of blue-jays. My companions heard it also, but did not heed it.

But to my ear the cry was peculiar. It was uttered in a tone of anguish and alarm. I said, “Let us see what is the trouble with these jays.” I presently saw a nest twenty-five or thirty feet from the ground in a small hemlock, which I at once concluded belonged to the jays. The birds were only a few yards away, hopping about amid the neighboring branches, uttering now and then their despairing note. Looking more intently at the nest, I became aware in the dim light of the tree of something looped about it, or else there was a dark, very crooked limb that partly held it. Suspecting the true nature of the case, I threw a stone up through the branches, and then another and another, when the dark loops and folds upon one side of the nest began to disappear, and the head and neck of a black-snake to slide slowly out on a horizontal branch on the other; in a moment the snake had cleared the nest, and stretched himself along the branch.

Another rock-fragment jarred his perch, when he slid cautiously along toward the branch of a large pine-tree which came out and mingled its spray with that of the hemlock. It was soon apparent that the snake was going to take refuge in the pine. As he made the passage from one tree to the other we sought to dislodge him by a shower of sticks and stones, but without success; he was soon upon a large branch of

the pine, and, stretched out on top of the limb, thought himself quite hidden. And so he was; but we knew his hiding-place, and the stones and clubs we hurled soon made him uneasy. Presently a club struck the branch with such force that he was fairly dislodged, but saved himself by quickly wrapping his tail about the limb. In this position he hung for some moments, but the intervening branches shielded him pretty well from our missiles, and he soon recovered himself, and gained a still higher branch that reached out over the road, and nearly made a bridge to the trees on the other side.

Seeing the monster was likely to escape us unless we assailed him at closer quarters, I determined to climb the tree. A smaller tree growing near helped me up to the first branches, where the ascent was not very difficult. I finally reached the branch upon which the snake was carefully poised, and began shaking it. But he did not come down; he wrapped his tail about it, and defied me. My own position was precarious, and I was obliged to move with great circumspection.

After much manœuvering I succeeded in arming myself with a dry branch eight or ten feet long, where I had the serpent at a disadvantage. He kept his hold well. I clubbed him about from branch to branch while my friends, with cautions and directions looked on from beneath. Neither man nor snake will trust himself to very lively antics in a tree-top thirty or forty feet from the ground. But at last I dislodged him, and, swinging and looping like a piece of rubber hose, he went to the ground, where my friends pounced upon him savagely, and quickly made an end of him.

I worked my way carefully down the tree, and was about to drop upon the ground from the lower branches, when I saw another black-snake coiled up at the foot of the tree, as if lying in wait for me. Had he started to his mate's rescue, and, seeing the battle over, was he now waiting to avenge himself upon the victor? But the odds were against him; my friends soon had him stretched beside his comrade.

The first snake killed had swallowed two young jays just beginning to feather out.

How the serpent discovered the nest would be very interesting to know. What led him to

search in this particular tree amid all these hundreds of trees that surrounded it? It is probable that the snake watches like a cat, or, having seen the parent birds about this tree, explored it. Nests upon the ground and on low boughs are frequently rifled by black-snakes, but I have never before known one to climb to such a height in a forest-tree.

It would also be interesting to know if the other snake was in the secret of this nest, and was waiting near to share in its contents. One rarely has the patience to let these little dramas or tragedies be played to the end; one cannot look quietly on, and see a snake devour anything. Not even when it is snake eating snake. Only a few days later my little boy called me to the garden to see a black-snake in the act of swallowing a garter-snake. The little snake was holding back with all his might and main, hooking his tail about the blackberry-bushes, and pulling desperately; still his black enemy was slowly engulfing him, and had accomplished about eight or ten inches of him, when he suddenly grew alarmed at some motion of ours, and ejected the little snake from him with unexpected ease and quickness, and tried to escape. The little snake's head was bleeding, but he did not seem otherwise to have suffered from the adventure.

Still, a few days later, the man who was mowing the lawn called to me to come and witness a similar tragedy, but on a smaller scale—a garter-snake swallowing a little green snake. Half the length of the green snake had disappeared from sight, and it was quite dead. The process had been a slow one, as the garter-snake was only two or three inches longer than his victim. There seems to be a sort of poetic justice in snake swallowing snake, shark eating shark; and one can look on with more composure than when a bird or frog is the victim. It is said that in the deep sea there is a fish that will swallow another fish eight or ten times its own size. It seizes its victim by the tail, and slowly sucks it in, stretching and expanding itself at the same time, and probably digesting the big fish by inches, till after many days it is completely engulfed. Would it be hard to find something analagous to this in life, especially in American politics?

*John Burroughs.*

