THE country is, of course, more of a wilderness, more of a wild solitude, in the winter than in the summer. The wild comes out. The urban, the cultivated, is hidden or negatived. You shall hardly know a good field from a poor, a meadow from a pasture, a park from a forest. Lines and boundaries are disregarded; gates and bar-ways are unclosed; man lets go his hold upon the earth; titledeeds are deep buried beneath the snow: the best-kept grounds relapse to a state of nature; under the pressure of the cold all the wild creatures become outlaws, and roam abroad beyond their usual haunts. The partridge comes to the orchard to get buds; the rabbit comes to the garden and lawn; the crows and jays come to the ash-heap and corn-crib, the snow-buntings to the stack and to the barn-yard; the sparrows pilfer from the domestic fowls; the pine-grosbeak comes down from the north and shears your maples of their buds; the fox prowls about your premises at night, and the red squirrels find your grain in the barn or steal the butternuts from your attic. In fact, winter, like some great calamity, changes the status of most creatures, and sets them adrift. Winter, like poverty, makes us acquainted with strange bedfellows.

For my part, my nearest approach to a strange bedfellow is the little gray rabbit that has taken up her abode under my study floor. As she spends the day here and is out larking at night, she is not much of a bedfellow, after all. It is probable that I disturb her slumbers more than she does mine. I think she is some support to me under there - a silent, wideeyed witness and backer; a type of the gentle and harmless in savage nature. She has no sagacity to give me or lend me, but that soft, nimble foot of hers, and that touch as of cotton wherever she goes, are worthy of emulation. I think I can feel her good-will through the floor, and I hope she can mine. When I have a happy thought I imagine her ears twitch, especially when I think of the sweet apple I will place by her doorway at night. I wonder if that fox chanced to catch a glimpse of her the other night when he stealthily leaped over the fence near by and walked along between the study and the house? How clearly one could read that it was not a little dog that had passed there. There was something furtive in the track; it shied off away from the like a detected pickpocket, he was suddenly

and then it had the caution and deliberation of the fox - bold, bold, but not too bold; wariness was in every footprint. If it had been a little dog that had chanced to wander that way, when he crossed my path he would have followed it up to the barn and have gone smelling around for a bone; but this sharp. cautious track held straight across all others, keeping five or six rods from the house, up the hill, across the highway toward a neighboring farmstead, with its nose in the air and its eye and ear alert, so to speak.

A winter neighbor of mine in whom I am interested, and who perhaps lends me his support after his kind, is a little red owl, whose retreat is in the heart of an old apple-tree just over the fence. Where he keeps himself in spring and summer I do not know, but late every fall, and at intervals all winter, his hiding-place is discovered by the jays and nuthatches, and proclaimed from the tree-tops for the space of half an hour or so, with all the powers of voice they can command. Four times the present winter they have called me out to behold this little ogre feigning sleep in his den, sometimes in one apple-tree, sometimes in another. Whenever I hear their cries, I know my neighbor is being berated. The birds take turns at looking in upon him and uttering their alarm-notes. Every jay within hearing comes to the spot and at once approaches the hole in the trunk or limb, and with a kind of breathless eagerness and excitement takes a peep at the owl, and then joins the outcry. When I approach they hastily take a final look and then withdraw and regard my movements intently. After accustoming my eye to the faint light of the cavity for a few moments, I can usually make out the owl at the bottom feigning sleep. Feigning, I say, because this is what he really does, as I first discovered one day when I cut into his retreat with the axe. The loud blows and the falling chips did not disturb him at all. When I reached in a stick and pulled him over on his side, leaving one of his wings spread out, he made no attempt to recover himself, but lay among the chips and fragments of decayed wood, like a part of themselves. Indeed, it took a sharp eye to distinguish him. Not till I had pulled him forth by one wing, rather rudely, did he abandon his trick of simulated sleep or death. Then, house and around it, as if eying it suspiciously; transformed into another creature. His eyes

flew wide open, his talons clutched my finger, thing had been carefully studied, it could not look said "Hands off, at your peril." Finding this game did not work, he soon began to "play 'possum" again. I put a cover over my study wood-box and kept him captive for a week. Look in upon him at any time, night or day, and he was apparently wrapped in the profoundest slumber; but the live mice which I put into his box from time to time found his sleep was easily broken; there would be a sudden rustle in the box, a faint squeak, and then silence. After a week of captivity I gave him his freedom in the full sunshine: no trouble for him to see which way and where to go.

Just at dusk in the winter nights, I often hear his soft bur-r-r, very pleasing and belllike. What a furtive, woody sound it is in the winter stillness, so unlike the harsh scream of the hawk. But all the ways of the owl are ways of softness and duskiness. His wings are shod with silence, his plumage is edged

with down.

Another owl neighbor of mine, with whom I pass the time of day more frequently than with the last, lives farther away. I pass his castle every night on my way to the post-office, and in winter, if the hour is late enough, am pretty sure to see him standing in his doorway, surveying the passers-by and the landscape through narrow slits in his eyes. For four successive winters now have I observed him. As the twilight begins to deepen he rises up out of his cavity in the apple-tree, scarcely faster than the moon rises from behind the hill, and sits in the opening, completely framed by its outlines of gray bark and dead invisible to every eye that does not know he is there. Probably my own is the only eye that has ever penetrated his secret, and mine paling a shrew-mouse upon a thorn in a neighboring tree, and which I was watching. Failing his cavity, and ever since, while going that way, day, but he regards them not, nor they him. When I come along and pause to salute him, he opens his eyes a little wider, and, appearquires the best powers of the eye to decide most an exact image of him. If the whole shall have to wage serious war upon these

his ears were depressed, and every motion and have answered its purpose better. The owl stands quite perpendicular, presenting a front of light mottled gray; the eyes are closed to a mere slit, the ear-feathers depressed, the beak buried in the plumage, and the whole attitude is one of silent, motionless waiting and observation. If a mouse should be seen crossing the highway, or scudding over any exposed part of the snowy surface in the twilight, the owl would doubtless swoop down upon it. I think the owl has learned to distinguish me from the rest of the passers-by; at least, when I stop before him, and he sees himself observed, he backs down into his den, as I have said, in a very amusing manner. Whether blue-birds, nuthatches, and chickadees - birds that pass the night in cavities of trees—ever run into the clutches of the dozing owl, I should be glad to know. My impression is, however, that they seek out smaller cavities. An old willow by the roadside blew down one summer, and a decayed branch broke open, revealing a brood of half-fledged owls, and many feathers and quills of bluebirds, orioles, and other songsters, showing plainly enough why all birds fear and berate the owl.

> The English house-sparrows, that are so rapidly increasing among us, and that must add greatly to the food supply of the owls and other birds of prey, seek to baffle their enemies by roosting in the densest evergreens they can find, in the arbor-vitæ, and in hemlock hedges. Soft-winged as the owl is, he cannot steal in upon such a retreat without

giving them warning.

These sparrows are becoming about the wood, and by his protective coloring virtually most noticeable of my winter neighbors, and a troop of them every morning watch me put out the hens' feed, and soon claim their share. I rather encouraged them in their never would have done so had I not chanced neighborliness, till one day I discovered the on one occasion to see him leave his retreat snow under a favorite plum-tree where they and make a raid upon a shrike that was im- most frequently perched covered with the scales of the fruit-buds. On investigating I found that the tree had been nearly stripped to get the mouse, the owl returned swiftly to of its buds — a very unneighborly act on the part of the sparrows, considering, too, all the I have been on the lookout for him. Dozens of cracked corn I had scattered for them. So I teams and foot-passengers pass him late in the at once served notice on them that our good understanding was at an end. And a hint is as good as a kick with this bird. The stone I hurled among them, and the one with which ing to recognize me, quickly shrinks and I followed them up, may have been taken as fades into the background of his door in a a kick; but they were only a hint of the shotvery weird and curious manner. When he gun that stood ready in the corner. The sparis not at his outlook, or when he is, it re- rows left in high dudgeon, and were not back again in some days, and were then very shy. the point, as the empty cavity itself is al- No doubt the time is near at hand when we World hardiness and prolificness; they are wise and tenacious of life, and we shall find it by and by no small matter to keep them in check. Our native birds are much different, less prolific, less shrewd, less aggressive and persistent, less quick-witted and able to read the note of danger or hostility - in short, less sophisticated. Most of our birds are yet essentially wild, that is, little changed by civilization. In winter, especially, they sweep by me and around me in flocks,—the Canada sparrow, the snow-bunting, the shore-lark, the pine-grosbeak, the red-poll, the cedarbird, - feeding upon frozen apples in the orchard, upon cedar-berries, upon maple-buds and the berries of the mountain-ash, and upon the seeds of the weeds that rise above the snow in the field, or upon the hay-seed dropped where the cattle have been foddered in the barn-yard or about the distant stack; but yet taking no heed of man, in no way changing their habits so as to take advantage of his presence in nature. The pine-grosbeak will come in numbers upon your porch to get the black drupes of the honeysuckle or the woodbine, or within reach of your windows to get the berries of the mountain-ash, but they know you not; they look at you as innocently and unconcernedly as at a bear or moose in their native north, and your house is no more to them than a ledge of rocks.

The only ones of my winter neighbors that actually rap at my door are the nuthatches and woodpeckers, and these do not know that it is my door. My retreat is covered with the bark of young chestnut-trees, and the birds, I suspect, mistake it for a huge stump that ought to hold fat grubs (there is not even a book-worm inside of it), and their loud rapping often makes me think I have a caller indeed. I place fragments of hickory-nuts in the interstices of the bark, and thus attract the nuthatches; a bone upon my window-sill attracts both nuthatches and the downy woodpecker. They peep in curiously through the window upon me, pecking away at my bone, too often a very poor one. A bone nailed to a tree a few feet in front of the window attracts crows as well as lesser birds. Even the slate-colored snow-bird, a seedeater, comes and nibbles it occasionally.

The bird that seems to consider he has the of this chapter. His retreat is but a few an apple-tree which he excavated last fall. would then take up her position in his

sparrows, as they long have had to do on the I say "he" because the red plume on the continent of Europe. They have the Old top of his head proclaims the sex. This is the second winter he has lodged in the old appletree. It seems not to be generally known to our writers upon ornithology that certain of our woodpeckers - probably all the winter residents - each fall excavate a limb or the trunk of a tree in which to pass the winter, and that the cavity is abandoned in the spring, probably for a new one in which nidification takes place. So far as I have observed, these cavities are drilled out only by the males. Where the females take up their quarters I am not so well informed, though I suspect that they use the abandoned holes of the

males of the previous year.

The particular woodpecker to which I refer drilled his first hole in my apple-tree one year ago last fall. This he occupied till last spring, when he abandoned it. In the fall he began a hole in an adjoining limb, later than before, and when it was about half completed a female took possession of his old quarters. I am sorry to say that this seemed to enrage the male very much, and he persecuted the poor bird whenever she appeared upon the scene. He would fly at her spitefully and drive her off. One chilly November morning, as I passed under the tree, I heard the hammer of the little architect in his cavity, and at the same time saw the persecuted female sitting at the entrance of the other hole as if she would fain come out. She was actually shivering, probably from both fear and cold. I understood the situation at a glance; the bird was afraid to come forth and brave the anger of the male. Not till I had rapped smartly upon the limb with my stick did she come out and attempt to escape; but she had not got ten feet from the tree before the male was in hot pursuit, and in a few moments had driven her back to the same tree, where she tried to avoid him among the branches. A few days after, he rid himself of his unwelcome neighbor in the following ingenious manner: he fairly scuttled the other cavity; he drilled a hole into the bottom of it that let in the light and the cold, and I saw the female there no more. I did not see him in the act of rendering this tenement uninhabitable; but one morning, behold, it was punctured at the bottom, and the circumstances all seemed to point to him as the author of it. There is probably no gallantry best right to the bone both upon the tree among the birds except at the mating seaand upon the sill is the downy woodpecker, son. I have frequently seen the male woodmy favorite neighbor among the winter birds, pecker drive the female away from the bone to whom I will mainly devote the remainder upon the tree. When she hopped around to the other end and timidly nibbled it, he paces from my own, in the decayed limb of would presently dart spitefully at her. She rear and wait till he had finished his meal. The position of the female among the birds is very much the same as that of woman among savage tribes. Most of the drudgery of life falls upon her, and the leavings of the males are often her lot.

My bird is a genuine little savage, doubtless, but I value him as a neighbor. It is a satisfaction during the cold or stormy winter nights to know he is warm and cozy there in his retreat. When the day is bad and unfit to be abroad in, he is there too. When I wish to know if he is at home, I go and rap upon his tree, and, if he is not too lazy or indifferent, after some delay he shows his head in his round doorway about ten feet above, and looks down inquiringly upon me—sometimes latterly I think half resentfully, as much as to say, "I would thank you not to disturb me so often." After sundown, he will not put his head out any more when I call, but as I step away I can get a glimpse of him inside looking cold and reserved. He is a late riser, especially if it is a cold or disagreeable morning, in this respect being like the barn fowls; it is sometimes near nine o'clock before I see him leave his tree. On the other hand, he comes home early, being in if the day is unpleasant by 4 P. M. He lives all alone; in this respect I do not commend his example. Where his mate is I should like to know.

I have discovered several other woodpeckers in adjoining orchards, each of which has a like home and leads a like solitary life. One of them has excavated a dry limb within easy reach of my hand, doing the work also in September. But the choice of tree was not a good one; the limb was too much decayed, and the workman had made the cavity too large; a chip had come out, making a hole in the outer wall. Then he went a few inches down the limb and began again, and excavated a large, commodious chamber, but had again come too near the surface; scarcely more than the bark protected him in one place, and the limb was very much weakened. Then he made another attempt still farther down the limb, and drilled in an inch or two, but seemed to change his mind; the work stopped, and I concluded the bird had wisely abandoned the tree. Passing there one cold, rainy November day, I thrust in my two fingers and was surprised to feel something soft and warm; as I drew away my hand the bird came out, apparently no more surprised than I was. It had decided, then, to make its home in the old limb; a decision it had occasion to regret, for not long after, on a stormy night, the branch gave way and fell to the ground.

"When the bough breaks the cradle will fall, And down will come baby, cradle and all."

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on to daight, wind.

Such a cavity makes a snug, warm home, and when the entrance is on the under side of the limb, as is usual, the wind and snow cannot reach the occupant. Late in December, while crossing a high, wooded mountain, lured by the music of fox-hounds, I discovered fresh yellow chips strewing the new-fallen snow, and at once thought of my woodpeckers. On looking around I saw where one had been at work excavating a lodge in a small yellow birch. The orifice was about fifteen feet from the ground, and appeared as round as if struck with a compass. It was on the east side of the tree, so as to avoid the prevailing west and north-west winds. As it was nearly two inches in diameter, it could not have been the work of the downy, but must have been that of the hairy, or else the yellow-bellied woodpecker. His home had probably been wrecked by some violent wind, and he was thus providing himself another. In digging out these retreats the woodpeckers prefer a dry, brittle trunk, not too soft. They go in horizontally to the center and then turn downward, enlarging the tunnel as they go, till when finished it is the shape of a long, deep pear.

Another trait our woodpeckers have that endears them to me, and that has never been pointedly noticed by our ornithologists, is their habit of drumming in the spring. They are songless birds, and yet all are musicians; they make the dry limbs eloquent of the coming change. Did you think that loud, sonorous hammering which proceeded from the orchard or from the near woods on that still March or April morning was only some bird getting its breakfast? It is downy, but he is not rapping at the door of a grub; he is rapping at the door of spring, and the dry limb thrills beneath the ardor of his blows. Or, later in the season, in the dense forest or by some remote mountain lake, does that measured rhythmic beat that breaks upon the silence, first three strokes following each other rapidly, succeeded by two louder ones with longer intervals between them, and that has an effect upon the alert ear as if the solitude itself had at last found a voice — does that suggest anything less than a deliberate musical performance? In fact, our woodpeckers are just as characteristically drummers as is the ruffed grouse, and they have their particular limbs and stubs to which they resort for that purpose. Their need of expression is apparently just as great as that of the song-birds, and it is not surprising that they should have found out that there is music in a dry, seasoned limb which can be evoked beneath their beaks.

The past spring a downy woodpecker, probably the individual one who is now my winter neighbor, began to drum early in March the edge of a narrow strip of woodland near me. When the morning was still and mild I would often hear him through my window before I was up, or by half-past six o'clock, and he would keep it up pretty briskly till nine or ten o'clock, in this respect resembling the grouse, which do most of their drumming in the forenoon. His drum was the stub of a dry limb about the size of one's wrist. The heart was decayed and gone, but the outer shell was hard and resonant. The bird would keep his position there for an hour at a time. Between his drummings he would preen his plumage and listen as if for the response of the female, or for the drum of some rival. How swift his head would go when he was delivering his blows upon the limb! His beak wore the surface perceptibly. When he wished to change the key, which was quite often, he would shift his position an inch or two to a knot which gave out a higher, shriller note. When I climbed up to examine his drum he was much disturbed. I did not know he was in the vicinity, but it seems he saw me from a near tree, and came in haste to the neighboring branches, and with spread plumage and a sharp note demanded plainly enough what my business was with his drum. I was invading his privacy, desecrating his shrine, and the bird was much put out. After some weeks the female appeared; he had literally drummed up a mate; his urgent and oft-repeated advertisement was answered. Still the drumming did not cease, but was quite as fervent as before. If a mate could be won by drumming, she could be kept and entertained by more drumming; courtship should not end with marriage. If the bird felt musical before, of course he felt much more so now. Besides that, the gentle deities needed propitiating in behalf of the nest and young as well as in behalf of the mate. After a time a second female came, when there was war between the two. I did not see them come to blows, but I saw one female pursuing the other about the place, and giving her no rest for several days. She was evidently trying to run her out of the neighborhood. Now and then, she, too, would drum briefly, as if sending a triumphant message to her mate.

The woodpeckers do not each have a particular dry limb to which they resort at all times to drum, like the one I have described. The woods are full of suitable branches, and they drum more or less here and there as they are in quest of food; yet I am convinced each one has its favorite spot, like the grouse, to which it resorts especially in the woods may notice that this sound proceeds cannot say.

in a partly decayed apple-tree that stands in from the same tree or trees about his camp with great regularity. A woodpecker in my vicinity has drummed for two seasons on a telegraph-pole, and he makes the wires and glass insulators ring. Another drums on a thin board on the end of a long grape-arbor, and on still mornings can be heard a long distance.

> A friend of mine in a Southern city tells me of a red-headed woodpecker that drums upon a lightning-rod on his neighbor's house. Nearly every clear, still morning at certain seasons, he says, this musical rapping may be heard. "He alternates his tapping with his stridulous call, and the effect on a cool, autumn-like morning is very pleasing."

> The high-hole appears to drum more promiscuously than does downy. He utters his long, loud spring call, which - which - which -whick, and then begins to rap with his beak upon his perch before the last note has reached your ear. I have seen him drum sitting upon the ridge of the barn. The log-cock, or pileated woodpecker, the largest and wildest of our Northern species, I have never heard drum. His blows should wake the echoes.

> When the woodpecker is searching for food, or laying siege to some hidden grub, the sound of his hammer is dead or muffled, and is heard but a few yards. It is only upon dry, seasoned timber, freed of its bark, that he beats his reveille to spring and woos his mate.

> Wilson was evidently familiar with this vernal drumming of the woodpeckers, but quite misinterprets it. Speaking of the redbellied species, he says: "It rattles like the rest of the tribe on the dead limbs, and with such violence as to be heard in still weather more than half a mile off; and listens to hear the insect it has alarmed." He listens rather to hear the drum of his rival or the brief and cov response of the female; for there are no insects in these dry limbs.

On one occasion I saw downy at his drum when a female flew quickly through the tree and alighted a few yards beyond him. He paused instantly, and kept his place apparently without moving a muscle. The female, I took it, had answered his advertisement. She flitted about from limb to limb (the female may be known by the absence of the crimson spot on the back of the head), apparently full of business of her own, and now and then would drum in a shy, tentative manner. The male watched her a few moments, and, convinced perhaps that she meant business, struck up his liveliest tune, then listened for her response. As it came back timidly but promptly, he left his perch and sought a nearer acquaintance with the prudent female. Whether or morning. The sugar-maker in the maple- not a match grew out of this little flirtation I accused of injuring the apple and other fruit trees, but the depredator is probably the larger and rarer yellow-bellied species. In the fall I caught one of these fellows in the act of sinking long rows of his little wells in the limb of an apple-tree. There were series of rings of them, one above another, quite around the stem, some of them the third of an inch across. They are evidently made to get at the tender, juicy bark, or cambium layer, next to the hard wood of the tree. The health and vitality of the branch are so seriously impaired by them that it often dies.

In the following winter the same bird (probably) tapped a maple-tree in front of my window in fifty-six places; and when the day was sunny, and the sap oozed out, he spent most of his time there. He knew the good sap-days, and was on hand promptly for his tipple; cold and cloudy days he did not appear. He knew which side of the tree to tap, too, and avoided the sunless northern exposure. When one series of well-holes failed to supply him, he would sink another, drilling through the bark with great ease and quickness. Then, when the day was warm, and the sap ran freely, he would have a regular sugar-maple debauch, sitting there by his wells hour after hour, and as fast as they became filled sipping out the sap. This he did in a gentle, caressing manner that was very suggestive. He made a row of wells near the foot of the tree, and other rows higher up, and he would hop up and down the trunk as these became filled. He would hop down the tree backward with the utmost ease, throwing his tail outward and his head inward at each hop. When the wells would freeze up or his thirst become slaked, he would ruffle his feathers, draw himself together, and sit and doze in the sun on the side of the tree. He passed the night in a hole in an appletree not far off. He was evidently a young bird, not yet having the plumage of the mature male or female, and yet he knew which

Our smaller woodpeckers are sometimes tree to tap and where to tap it. I saw where he had bored several maples in the vicinity, but no oaks or chestnuts. I nailed up a fat bone near his sap-works; the downy woodpecker came there several times a day to dine; the nuthatch came, and even the snow-bird took a taste occasionally; but this sap-sucker never touched it; the sweet of the tree sufficed for him. This woodpecker does not breed or abound in my vicinity; only stray specimens are now and then to be met with in the colder months. As spring approached, the one I refer to took his departure.

I must bring my account of my neighbor in the tree down to the latest date; so, after the opening of spring, I add this note. The last day of February was bright and springlike. I heard the first sparrow sing that morning and the first screaming of the circling hawks, and about seven o'clock the first drumming of my little friend. His first notes were uncertain and at long intervals, but by and by he warmed up and beat a lively tattoo. As the season advanced he ceased to lodge in his old quarters. I would rap and find nobody at home. Was he out on a lark, I said, the spring fever working in his blood? After a time his drumming grew less frequent, and finally, in the middle of April, ceased entirely. Had some accident befallen him, or had he wandered away to fresh fields, following some siren of his species? Probably the latter. Another bird that I had under observation also left his winter-quarters in the spring. This, then, appears to be the usual custom. The wrens and the nuthatches and chickadees succeed to these abandoned cavities, and often have amusing disputes over them. The nuthatches often pass the night in them, and the wrens and chickadees nest in them. I have further observed that in excavating a cavity for a nest the downy woodpecker makes the entrance smaller than when he is excavating his winter-quarters. This is doubtless for the greater safety of the young birds.

John Burroughs.

