

Down to Earth by Alan Devoe

'CHUCK LORE . . .

NEARLY ALL of us who live in the country know at least one wild animal, however doubtful we may be about the others. We know Woodchuck. The chances are that we not only know him, but also shoot at him, sick the dog on him, shake our fists at him, and try setting off gas-bombs in his burrow in the pasture. Woodchuck can be just about our Number One Nuisance. He nips off the clover-tops, and hides some of his den-holes so completely that the horses and heifers break their legs in them. When he gets to the beans, he eats stems, leaves, pods, the whole plant down to the ground. There is practically

nothing in our vegetable garden that he doesn't like, and not much in our flowerbeds; and he will climb the best-made fence, or dig under it, to get to the delicacies. Oh, we know Woodchuck.

Or do we?

Do we know the facts about that long winter sleep of his, when he drowzes from frost-time to bluebird-time? Woodchuck is asleep, now in January, throughout almost all the northern part of his range; and the nature of that sleep is very odd. Have we heard that Woodchuck will eat meat? How does our furry corn-snatcher and apple-tree-girdler manage to keep

his burrow so clean? To know things like this may not help us keep Woodchuck out of the clover field — probably nothing will ever completely do that unless an Act of God — but it will at least enable us to reflect, as we sit on the porch and watch *Marmota Monax* happily chewing off the blossoms, that anyhow our crops are being harvested by an interesting animal.

Where does Woodchuck get his name? There are a great many ingenious theories about that, some of them plausible. Perhaps the most popular of them explains that "chuck" or "chucky" is old rural English for a pig; and of course the early settlers here found the animal living in the woods, so they called him Woodchuck for pig-of-the-woods. This theory is such a persuasive invention that it seems almost a pity to spoil it. The fact seems to be, though, that Woodchuck gets his name — like so many animals and plants of our American outdoors — from the Indians. In Cree, he was called Otchoek (or Wejack, or Weensuck; the spelling of Indian words has to go pretty much by ear). In Choctaw he was Shukha; in Natick, Ock-qutchau. In other Indian tongues there are other similar names, all sounding — if allowance is made for the guttural,

grunting quality of Indian speech — more or less like "wood-chuck." Woodchuck was one of the most familiar native animals to our Indians. They put him into stories and legends, wondered at his prodigious winter sleeping, and gave him his name.

What about that winter sleep of his? Does Woodchuck only drowse, or is he in a deep unconsciousness, or what? When the days shorten to a certain point and the heavy frosts set in, even though the golden autumn sun still shines warmly across the fields and there is still plenty to eat, Woodchuck is moved to retire into his four- or five-month hibernation. His sleeping-chamber is far inside the burrow, down under the frost line. For his first few days there he merely naps and nods, sometimes rousing and prowling a little. Then gradually he sleeps oftener and oftener, more and more deeply. Field naturalists have dug Woodchuck up at every stage of his winter rest, and tested him; and laboratory scientists have watched him dozing away the winter in special observation boxes, so we know now exactly what happens to him during his long, long night. It is a pretty astonishing thing.

Woodchuck's pulse slows

down, down, down, from his summer rate of eighty or ninety heartbeats a minute to a rate of only about five. Curled up tight in foetus position, Woodchuck breathes slower and slower, until when he is fully asleep he is drawing only about a dozen breaths an hour. His temperature goes down to 38° F., or even a little lower. Once he has entered into this final depth of unconsciousness, he stays wrapped in it until the Spring. Snows, winter winds mean nothing to Woodchuck, curled in his oblivion far down under the frozen ground. He sleeps as the trees sleep, or the grass: withdrawn into a deep life-suspension that is very close to death. It is strange to realize that for Woodchuck there are only three known seasons: spring, summer and fall. Woodchuck goes to sleep with the taste of green growing things in his mouth. When next he opens an eye, there are green things growing as usual.

HAVE we wondered why sometimes there is an earth pile beside Woodchuck's burrow and sometimes there is none? It is not a caprice. Starting a burrow, Woodchuck always throws the dirt behind him. He always makes a mound. But his burrow is no simple tunnel. It is an en-

gineering feat, and a masterpiece of safety. For four or five feet, Woodchuck tunnels slantingly downward, and then usually he takes a gradual turn and there he pats a hump of earth into place on the tunnel floor. That is for a barricade, or at least an obstacle, against intruders. An eye peering into the burrow mouth can see no farther along the tunnel than that point, and Woodchuck uses it as a kind of observation stand. After the curve and the hump, Woodchuck may tunnel another twenty-five feet or more before curving upward to make an exit, and he may make several lateral tunnels in various directions, each leading to yet another exit. When Woodchuck makes an exit, working carefully from below, he pulls every crumb of earth inward and he makes the exit hole as little as he can. It is around these exit holes that there is never found any telltale mound. These are the holes beside which Woodchuck likes triumphantly to sit, straight as a tent-peg, chirping and whistling, while our dogs bark their heads off at the earth-mounded burrow entrance way over yonder on the other side of the field. The stock may easily break a leg in one of these cunningly concealed exit holes; they can ruin a pasture, but they

are testimony at any rate to Woodchuck's animal ingenuity and canniness.

Speaking of the earth mounds: Have we ever noticed an especially big one, that seems to get piled higher and higher every year, although as far as we know, the inhabitant of the tunnel is doing no fresh burrowing? If we investigate one of those mounds with a spade, it may tell us part of the story of how Woodchuck makes his sanitary arrangements. When Woodchuck is making his tunnel — or rather, usually, his labyrinth of tunnels — he commonly hollows out a little sideroom somewhere in it for use as toilet. His droppings are scrupulously voided in that one place, so that the corridors of the burrow are kept fresh and clean. (Anyone who has dug up many woodchuck burrows must have been struck by how neat and odorless they are.) After this special room has been used for a time, Woodchuck cleans it out. He brings the gathered droppings to the burrow-entrance and piles them into the dirt-mound there. Mixed with earth and disinfected by the sun, the waste material becomes indistinguishable from the rest of the mound. Year by year there grows a higher hummock — a hummock that also serves Woodchuck, in-

cidentally, as his lookout place.

We have heard Woodchuck whistle, of course. It is his commonest utterance. Perhaps, too, we have heard him growl, down inside his burrow when we are passing near it. He sounds like a bear fight. But what about that queer grating, chattering noise that sometimes comes from the burrow? It is not quite a growl, not quite a squeal, not quite like anything else. Woodchuck makes that intimidating chatter by gritting and grinding his teeth together.

He has one more kind of noise, still more astonishing. He sings. On the hundred-odd acres that for years have served me, as a naturalist, as a sort of living laboratory, I suppose I have not heard Woodchuck singing more than three or four times. Unless *Marmota Monax* is a special interest of ours, so that we are everlastingly peering into burrows and listening at them and following old *Marmota* by day and by night (yes, he comes out in the moonlight) we are not likely to hear the chuck-song even once. Or if it *is* heard, it is likely to be mistaken for a bird. It is no bird. It is our Woodchuck, trilling and fluting away, very softly, like a warbler.

Common as Woodchuck is, he has enough curious ways and unexpected behaviors to keep a

home-acre naturalist busy for a lifetime. Do we know that he swims? There is a popular belief that he cannot swim at all. It is not true. Woodchuck will swim to get away from a dog, if there is no other possible way of escape; and he will even swim just to get across a wide brook to the vegetable patch on the other side.

Or again: How does it happen so often that a good terrier goes lolloping down a burrow in pursuit of Woodchuck and very shortly comes back empty-handed? Surely Woodchuck can't out-distance him, and a determined dog does not back down from a fight, powerful and dangerous though an angry Woodchuck can be as an adversary. No. The answer is that Woodchuck, hard pressed, can throw up an earthwork behind him faster than seems credible, and can pack and ram it to the consistency of concrete. He can build much faster than the best dog can tear down. Many and many the terrier that has gone rushing down a burrow and found, within ten feet, what seems to be unmistakably a blind ending. Woodchuck has just that minute made it. Or still again: Whoever could imagine Woodchuck eating flesh? The answer is that any naturalist can who has known *Mar-*

nota long and intimately enough. Every now and then he will eat May-beetles as enthusiastically as a skunk. A reliable naturalist has sworn to Woodchuck's even eating a small bird.

No discussion of 'chuck lore could be complete without a raising of the question: Can Woodchuck climb trees? It may sound like a silly question, perhaps, for Woodchuck is obviously a ground animal of ground animals, his heavy digging claws no more suited for tree-climbing than a sparrow's beak is suited for pounding fenceposts. But the truth about Woodchuck, nevertheless, is that he can and does go aloft whenever he feels like it. Some woodchucks climb often, some only rarely. Usually a big bush or a sapling is as high as they go, but not always. Sometimes Woodchuck, in the spring, gets a craving for fresh maple sap, just as red squirrels do. On such an occasion Woodchuck may go clambering up a maple to a height of fifty feet or more. As a final whopper — but a true one, though no one but veteran Woodchuck-watchers may perhaps be expected to believe it — when Woodchuck makes his descent from these dizzy heights he almost always (unmindful of the thing's being clearly impossible) comes down head first.



The Revolt of Mamie Stover

Part I
of a New Novel

William Bradford Huie

A SIX-FOOT-TALL, yellow-haired
whore from Mississippi was
the most successful revolution-
ary of the Second War. Her name