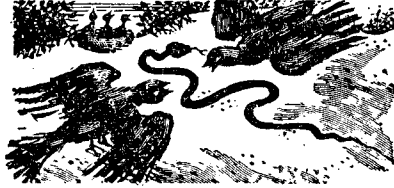


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# DOWN TO EARTH

by ALAN DEVOE

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## THE SEXTONS

THOSE of us who go field-prowling and woods-inspecting are never about our business for many years before we begin to be nagged by a question. (A question? Questions occur to us by the scores and hundreds, of course. Before we are ten years old we have entertained uncountable wonderings about what is going on inside a common stump or among the roots of a dusty blade of grass, and the wonderings about our earth go right on until the day we are resorbed into it. But I mean that this one special question keeps confronting us and puzzling us pre-eminently, and it may be a very considerable while before we are able to learn the answer.) Why do we find so few dead animals and birds?

Every now and then the corpse of some creature turns up on the highway. The animal has been struck and killed by a car. But these occasional dead squirrels, skunks, woodchucks,

robins, are only a handful. Our earth teems with animals. There are a hundred rabbits frequenting the nearest small woods, probably a thousand meadow mice scampering and scuttling among the long grass in the fields of the nearest farm. All animals must die, some time. We go peering and scrutinizing on innumerable nature-excursions and we scarcely ever find any. Why is it?

Partly the answer lies in the fact that few creatures of this earth except ourselves die "natural" deaths. Rabbits don't often get to be gray-muzzled grandfathers, drowsing away at last into a gentle final sleep. They have their spines cracked by a fox when they are six months old; or hawk-talons seize them and they are carried off; or they are killed by dogs or guns or weasels or God-knows-what. Birds lose their way in bad weather and smash into obstacles. They miscalculate their strength on migration and plummet exhausted

into the sea. An old squirrel is a rarity, and so is an old animal of almost any other kind except the largest and best-defended.

True. Still, violence doesn't kill *all* creatures. A very few, at least, must reach old age and die of that. Then there is disease. Wild creatures contract a great many diseases — fevers, virus infections, infestation by fatal parasites, intestinal inflammations closely similar to human appendicitis, malaria, typhoid — a book of animal diseases makes as big a volume as a treatise on our own disorders. Animals can die “in their tracks” as human beings sometimes do. Where *are* all the furred and feathered bodies that we might expect to keep finding when we go exploring outdoors?

A major answer lies in the secretive, chiefly nocturnal activities of an extraordinary creature called *Necrophorus*. It is a black and yellow-orange beetle, smaller than a finger joint. Its rôle is plain enough from its name. It is the Bearer of the Dead.

A good many popular and colloquial names are used by naturalists to describe this scuttling little animal that performs such tremendous offices in the darkness of the night. Most shortly and aptly, it is called the sexton.

Suppose, now, that a rabbit has gone blundering and crashing into

the wire netting around our garden and has broken its neck. The small body twitches briefly and lies still. We notice it, perhaps, when we are out mulching the roses in the afternoon. We think: Tomorrow I must bury that poor beast. The tomorrow comes, and we go out, and there is no rabbit. Perhaps a fox or coon has found it and lugged it away? Perhaps, perhaps; but not likely. The chances are that the rabbit is still near at hand, around our garden. But between sundown and sunup, it has been interred. In the black hours, the sextons have been at work.

## II

In the darkness, there is a whirry little clatter of beetle-wings, like a smaller version of the buzz of a June bug. There alights beside the rabbit's corpse a small black and yellow beetle with powerful black legs. It comes to earth a few inches from the dead body, and waggles its antennae inquiringly to catch more precisely the smell of death that has brought it to this place from perhaps a long way away. The odor of death, to a sexton beetle, carries great distances on the heavy night air. The sexton scurries closer to the body. It closes its heavy, beetlish wing-covers over its flying-wings. It is ready to undertake its business.

For some minutes the sexton ex-

amines the corpse, touching it lightly here, there, with its feelers, pitter-patter, pitter-patter, as in a quick gesture of "running its fingers" over the body. What it is determining, we don't know. To get inside the consciousness of any animal is hard. To project ourselves inside the insect-being of the sexton and know, so to speak, what is going through its mind, is all but impossible. Clearly, however, it is making tests of one sort and another; it is obtaining a picture, sensory or more than that, that is meaningful to it. Pitter-patter, pitter-patter, go the feelers. Then presently the sexton backs off a little. It knows what it must know. It approaches the corpse again, wedges its dome-backed body under one side of it, scrabbles away at the earth to roughen it and clear away a little patch, and then in an adroit gesture the sexton flips over on its back.

Farther, farther, lying on its back, the sexton insinuates itself under the dead body. Everyone who has practiced at all with weights, or who has watched "strong-men" going through their prodigious feats, must know what tremendous weights can be supported by leg muscles when a man is lying on his back. We have two legs. The sexton beetle has six. As the sexton lies on its back, pushing upward with all its might with these six stout black legs, it is able to show

a power almost unbelievable. The body of the rabbit begins to jiggle and rock. Farther, farther, the little sexton beetle works its way under the rabbit, sliding on its curved, polished back, holding the rabbit aloft by leg-power. Finally the sexton is directly underneath the body. It is supporting the whole weight of it. It is at dead-center. In a mighty pedalling motion, with all six legs, the sexton sends the rabbit's body lurching perhaps half an inch toward the edge of the garden bed. As the body drops to settle again, the sexton scoots out from under it, slips over right-side-up again, and now rests briefly, contemplating what it has wrought.

What the sexton is doing is moving the corpse toward a softer spot of sandy soil which it has selected as a better burial-spot. It may need to move the body a foot. It may need to move it ten feet. It is quite capable of doing so. For the strength and energy of the sexton are prodigious. It will work, hardly halting, all night long. And it is pretty certain to obtain, any moment now, a helper. Another little whirry clatter of beetle-wings sounds in the darkness. A small form drops to earth beside the rabbit. A female sexton has arrived.

There is no courtship between the insects, unless their immediate joining together in the work of burial can

be called such. They work together, in perfect team-operation, as if the thing had been rehearsed. When the male pushes, now, the female runs to the other side of the rabbit and pulls. When the male is *under* the body, supporting the cadaver on his legs and pedalling it forward, the female is at the rabbit's head, scrabbling frantically to clear away impeding twigs and pebbles. Are insects intelligent? Not fully humanly intelligent, no, of course not. But — well — *insectly* intelligent? It is difficult to doubt it. When a rootlet or grass-blade gets in the way, one of the sextons hurries to chew it through and cut it. Beetle works with beetle in a team-play like the nice joint-expertness of acrobats. Inch by inch, inch by inch, the body of the dead rabbit is juggled forward. In an hour, two hours, five hours — the sextons are tireless — it is brought to the selected site for burial.

The sextons whisk underneath. They dig. Down, down, the rabbit sinks, in a slow, jiggly descent into its grave.

Now only an inch or two of it is still visible above the sandy ground; now even that has disappeared; now there is no rabbit at all, but only a heaving and rippling of the earth to let a watcher know that the sextons are still at their dark work, down underneath the interred body.

## III

When the corpse lies several inches deep, the sextons pluck away its fur and groom it and work it into a ball. They dig a *side-tunnel* out into the earth from the burial chamber, and there the female lays eggs. The fantastic preparations for the next generation of sexton beetles are now completed.

Most insects do very little looking after their young. The majority, of course, do not tend the young insects at all. But sexton beetles do. While they wait for the hatching of the eggs, they feed on the rabbit's body. Then, when their yellow grubs hatch out, they take care of *their* feeding. What the parents do is to take mouthfuls of the decayed rabbit-flesh and then vomit it up, partly pre-digested, for the babies. They keep up this feeding until the grubs have finished their moltings and have become ready to pupate and transform into adult sexton beetles. As soon as pupation has started, in a chamber under the soil, the young are in no further need of tending. The adult sextons come tunneling up from their fetid tomb, take to the air again, and go their ways.

The lives of sexton beetles are macabre enough. They may dismay the squeamish. There is no reason, really, why they should. Is it a bad

thing that carcasses are removed and buried? Is it worse that a beetle should feed on long-dead bodies than that we should feed ourselves on recently-dead ones? Meat is meat, flesh is flesh, and everything in the world lives on some other thing. If we do not like those terms, we are on the wrong planet. Vomiting may signify unhealthiness when it happens among *us*; but among a great many creatures it is as sound and sunny a part of natural living as the singing of songs. Hummingbirds, after their fashion, vomit food into their nestlings. Are they any the less lovely in their delicacy and grace? The "pigeon's-milk" of the poets is discharged cellu-

lar matter from the birds' crops. Are doves any the less dove-like and delightful, for all that? Still, still — it is not always easy to be sensible philosophers. We don't like the smell of death; we don't like any sort of funereal suggestions; and doubtless it is not odd that sexton beetles, among those who have ever heard of them at all, should inspire a kind of horror.

It is probably futile for a naturalist to hope to dispel that queasiness about the sextons. But it does lie open to him, anyway, to indicate why the answer to the perennial query, "Why do we find so few dead birds and animals?," has at the very least a singular interest.

## TANK TOWN

BY LESLIE NELSON JENNINGS

Tank Town, they called it. Once a day the train  
Roared through, and there was nothing much to see  
But a few shabby store fronts where the main  
Street struggled against dust and apathy.  
Windows were mostly dark at nine o'clock;  
The signal tower beside the tracks showed green;  
The Diesels' throaty hooting seemed to mock  
Those huddled houses racing by unseen.

Still east and west the streamlined sleepers rolled  
Across brown prairie; in the club car's bright  
Complacency the drinks came tall and cold,  
Cornland and windmill fading out of sight  
As wheels ticked off the super-extra fare.  
And Tank Town might as well have not been there.