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## Wings

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be proven by the discovery of his bones and hair in the owl's pellets, and one not uncommonly finds the body of this great bird smelling strongly of the skunk. Seton says that vultures eat him also, but these birds probably never kill him. His flesh is said to be tender and palatable even to man, but if so, it constitutes a notable exception in the family, for the weasels are notorious for their rank, stringy flesh.

Since he has so few enemies in the wild state, one might expect to find him and his kind fairly over-running the land, but such is not the case in actual fact. It is his misfortune to wear a good-looking coat and hence a price has been put upon his head. He will seemingly go out of his way to step into a trap, and this, coupled with his habit of hibernating with a half-dozen or so of his fellows in the same den where the whole crowd may be dug out and destroyed at one time, makes the mortality list among skunks a long one every year.

Once while diggin<sup>g</sup> into a skunk's den which had two entrances, I turned suddenly and found myself within four feet of a large skunk who was calmly watching me with no expression of vexation in his mild black eyes. He might easily have deluged me thoroughly before I had even discovered him, but he took no such unfair advantage. I whirled and hit him with the spade but I am haunted even now by the memory of his calm, inoffensive expression. For, in spite of his odor, and the ill-repute of his tribe, the skunk is really a sweet-tempered fellow with a reputation far worse than his manners.

Roy L. Abbott.

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### WINGS

When 'wings' are mentioned, most people at once think of birds. But wings, and the consequent power of flight, are by no means limited to birds. Among the mammals, for example, bats have wings and are excellent flyers. In both birds and bats, the wings are merely modified front legs. Birds get their wing surface largely from feathers; bats get theirs chiefly from thin skin stretch-

ed mainly along the forearm and between the greatly elongated fingers.

Among the back-boned animals, bats and birds are the only animals that fly by means of wings. Several other kinds of vertebrates fly, however, the most notable being the flying squirrels, the flying lemurs, and the flying fishes. The fishes use their fins for support while gliding through the air. The squirrels and lemurs glide by spreading out thin extensions of skin stretched between front and hind legs. One lizard, the flying "Dragon" of India, has ribs to support its wing-like extensions of the body wall.

Among the invertebrates, the insects are notorious for their great powers of flight. Not all insects are winged. Where wings are present there is always one or two pairs. There are indications that some of the ancient insects had three pairs of wings. Where two pairs are present, they are often hooked together on each side of the body, thus acting largely as one wing.

Some insects are but feeble flyers, such as most of our roaches and common grasshoppers. Others, such as dragon-flies, are unbelievably swift and powerful on the wing. Many insects are able to fly many miles without stopping.

Insect wings are simply expansions of skin of the dorsal body wall. That is to say, they are not modified appendages, and are therefore in no way comparable to the wings of bats and birds, which as said above, are merely modified front legs. Or, to put it in another way, Mother Nature has used two entirely different means to arrive at exactly the same end, the power of flight. And she has done it beautifully in both cases.

When I look at a swooping hawk, when I shade my eyes and stare up at an eagle cutting the blue dome of the heavens, when I gaze spellbound at the whirring wings of a humming bird, I am likely to think that no creature can equal the birds in their flight. But a great horsefly suddenly spirals with bullet-speed before me, a squadron of dragon-flies flash past on wings of light, then my judgment is shattered and I am ready to cast my vote for the insects.

Roy L. Abbott.