ON HIBERNATION IN THE RACCOON.

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Some years ago, on the third of January, a young raccoon (Procyon lotor Storr) was taken during his winter sleep while a hollow sugar tree was being cut down in Butler County in Southwestern Ohio.

It is certain that the animal was really hibernating as the weather for more than two weeks before had been very cold, reaching twenty degrees below zero Fahrenheit. An opossum was found in the same woods that day frozen stiff. In the latitude of Ohio the Raccoon is said to hibernate for at least three months, even four when the winter is severe.

The animal had a few worn sticks in its stomach, together with a slight amount of liquid very like mucus. There was nothing at all in the small intestine, the walls of which were thin and thrown in longitudinal folds so that the lumen of the intestine was almost obliterated. The inside of the intestine was clean and slightly pinkish in color. There was a small amount of dry fecal matter in the posterior end of the large intestine.

The major part of the fat on the body was definitely localized. The naked body without the skin weighed 3700 grams (see figure photographed from the front and right side). A sheet of fat was taken from the rump and upper hind quarters, which weighed 416 grams, or one-ninth of the total weight. This was more than half an inch in thickness just in front of the base of the tail and shows plainly on the hind quarters in the photograph. The mesentery, which is shown spread out, had on it 84 grams of
fat. 127 grams were removed from other portions of the body in pieces of varying size. The whole amounted to 627 grams or more than one-sixth of the weight of the body. In view of the presence of fat in thin sheets between the muscles and over them, a conservative estimate would be that the amount of fat stored for use during the winter's cessation from activities was more than one-fourth of the total weight of the animal.

In our common hog, which does not hibernate, the thickest layer of fat is likely to be over the shoulders—the most exposed portion.

It would be interesting to learn the conditions in other animals, such as the bear, which hibernate. In this case it is plain that as the raccoon curls up in the hollow tree with his nose between his hind legs and his tail over his head and shoulders, the rump and back make the less protected part of the circle. Hence the location of the heavy fat blanket in that region.

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Correction.—In the March, 1909, Naturalist the poison ivy was inadvertently omitted from the list of woody plants of general distribution. Add Rhus radicans L. to the list of climbing vines on p. 471.

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