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<sup>1</sup>BUCKNER, C. H. and W. J. TURNOCK. 1965 Avian predation on the larch sawfly, Pristophora erichsonii (Htg.), (Hymenoptera: Tenthredinidae). Ecology 46: 223-236.

- <sup>2</sup>GRAIGHEAD, F. C. 1950. Insect enemies of eastern forests. U.S. Dept. Agr., Misc. Publ. 657.
- <sup>3</sup>MORRIS, R. F., W. F. CHESHIRE, C. A. MILLER, and D. G. MOTT. 1958. The numerical response of avian and mammalian predators during a gradation of the spruce budworm. Ecology 39: 487-494.
- <sup>4</sup>NASH, R. W. 1939. *The yellow-headed spruce sawfly in Maine*. J. Econ. Entomol. 32: 330-334.
- <sup>5</sup>WHITE-STEVENS, R. (Ed.). 1971. *Pesticides in the environment*, Vol. 1, Part I. Marcel Dekker Inc., New York.

## FISH-CATCHING MUSKRAT

## DICK DEKKER, 3819-112A Street, Edmonton, Alberta.

On May 30, 1976, I was quietly sitting on the Ducks Unlimited dam at Beaverhill Lake, Alberta when a muskrat appeared. It swam up from the southeast slough and headed for a small island, wedged in between the washed-out cement foundations of the eastern wing of the dam. Just before reaching the sandy shore, the rat dived and emerged with what looked like a small fish. When it dived again and came up with a similar food item, I kept the 10-power glasses focussed on the animal. It climbed on land about 20 meters away from me. To my surprise, its meal was indeed a fish, likely a stickleback that abounds in the lake. During the next 30 minutes, the muskrat caught and ate 11 more. After a spell of grooming, it dived and captured an additional nine.

The method of transporting and eating these fish was the same throughout. Upon emerging from each dive, the fish was held sideways in the rat's mouth. On land, the animal transferred the fish to its front feet. At this point the fish often flopped vigorously. The tail was invariably held upward, and the rat consumed the fish like a monkey would eat a banana, biting off chunks from the tail on down. When finished, the rat licked its front paws for a few moments before re-entering the water. Its dives lasted from 3 to 15 seconds. It took 15 to 25 seconds to eat a fish.

Finally, before swimming away to the slough, the rat climbed onto the bank of the islet and cut two mouthfuls of green grass. They were carried down and deposited in the water, before being eaten for dessert.

In the literature available to me, I found the following information on the food of the muskrat. Soper mentions only juicy plants.<sup>3</sup> Murie writes that the muskrat is not entirely vegetarian and may feed on clams and mollusks.<sup>2</sup> Other than plants, Banfield lists freshwater mussels, small turtles, frogs, salamanders and slow-moving catfish.<sup>1</sup>

<sup>1</sup>BANFIELD, A. W. F., 1974. *The mammals of Canada*. Univ. Toronto Press, Toronto. 438 p.

- <sup>2</sup>MURIE, O. J., 1954. A field guide to animal tracks. Houghton Miffin, Boston.
- <sup>3</sup>SOPER, J. D., 1964. *The mammals of Alberta*. Queen's Printer, Edmonton. 402 p.

