



Mustelids

HEN WE hear the word "carnivore" we automatically think of cats and dogs. Urged to add to the list of representatives, we may recall the ill fate of the bad boys who poked fun at a prophet, and remember that bears are meat-eaters, too. But it would probably take at least a little mental prodding to make us think of the members of the weasel tribe, the short-legged, long-bodied animals known collectively as the Mustelidae.

Yet these restless hunters are highly important, both in the economy of nature and in man's commercial reckoning. For they include the most valued furbearers sought by trappers in all the colder lands of the world. A mere list of their genera is a veritable catalog of the nobility among peltries: ermine, sable, otter, marten, mink, badger, fisher, skunk. Without the Mustelidae, fashion designers and the fur trade would be in a sad state.

Another group of persons interested in a different phase of wildlife look upon these short-legged carnivores with feelings exactly the opposite of those that trappers entertain for them. To the older-fashioned game warden, interested only in increasing the number of quail, pheasant and other birds to shoot at, all the Mustelidae are simply and unqualifiedly "vermin," because they do rob nests and kill birds. They would exterminate them to the last beast, if they could.

However, this extreme antipathy is fortunately passing, as a more modern type of wildlife management, based on a better understanding of ecology, tends to replace the older, more naively direct-minded variety of game raising. It is coming to be realized that the wildlife population of a given terrain is the healthier the more nearly it approaches

a state of undisturbed nature—and nature includes a good deal of killing of supernumerary game birds and animals by hungry flesh-eaters. If man manages his own conduct as intelligently as weasel and skunk do theirs, there will still be plenty left for shooting.

Of course, the role of this long-bodied tribe in nature is not limited to killing the same things man wants to kill. Game birds and animals form only a minor part of the diet of the Mustelids. To a far greater extent, they prey upon the swarming rodent populations which might otherwise get completely out of hand. Some of them, like the skunk, for example, also have tremendous appetites for white grubs and other destructive forms of insect life. The Mustelidae pay for their place in the world with services worth even more than their costly furs.

Science News Letter, December 7, 1940

ENGINEERING

Hard Surface on Steel Provided by New Process

SHELL of hard steel, containing more than 1% of carbon, can be produced on the surface of articles of softer steel by exposing them when heated to highly heated carbon-containing gases. This was reported before the American Chemical Society by W. A. Darrah, of the Continental Industrial Engineers, Inc., Chicago.

Methods somewhat similar have been used before, Mr. Darrah stated, but they left a coating of carbon scale, requiring expensive and annoying cleaning methods. In the new process, he announced, this is prevented by performing the carburizing operation in a muffle cf refractory material, and preheating the gases to 1600 or 1700 degrees Fahrenheit.

The process is already being used commercially in one automobile plant, he said.

Science News Letter, December 7, 1940

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rado and southwestern Kansas—where the Dust Bowl used to be—and rain to the east as far as Alabama.

Reports that the Panhandle had suffered from sleet were corrected to read "glaze" by the Weather Bureau. Sleet, as defined by meteorologists, means little, hard, round pellets of ice—frozen raindrops. Glaze is the solid coating of ice that forms when rain from a warmer overhead stratum strikes cold objects on or near the ground and freezes fast to them.

Science News Letter, December 7, 1940

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