Non-Lethal Poison Deters Sheep-Killing Coyotes

Conditioned aversion to poisoned meat appears promising as a method of controlling sheep-killing coyotes, according to a team of University of California psychologists. Conventional methods of eliminating these predators have been bounty hunting, lethal poisons, and traps; but these methods do not distinguish between sheep-killing coyotes and other carnivores.

Psychologists John Garcia, Walter G. Hankins, and Kenneth W. Rusiniah were able to develop conditioned aversion to lamb and rabbit meat in seven coyotes after lacing it with lithium chloride. The amount of the chemical placed in the meat was sufficient to produce illness in coyotes that ate it, but not enough to kill them. A single trial was enough to discourage the coyotes from feeding again on lamb or rabbit flesh. However, it did not necessarily discourage them from attacking the prey in question.

The researchers propose a two-phase conditioning process: "In phase one, the flavor of food becomes aversive after one illness, [but the coyotes] may still . . . attack . . . . Phase two occurs when the auditory, visual, and olfactory cues from the prey become associated with the aversive flavor, thus subsequent attacks are inhibited . . . . The feeding habits of the mother coyote averted to sheep might be transmitted to her pups, via flavor which her diet imparts to her milk, and by their early experience with prey she brings to the den."

Eagle "Egg Plant" Successful

Two bald eaglets have hatched in the Maine nests to which they were transplanted as eggs in early May; they were obtained from nests in Minnesota. This was the first such transplant experiment with the bald eagle. The original plan called for six eggs to be transplanted from Minnesota, where the eagle population is healthy, to six nests in Maine, where pesticide pollution has affected eagle hatching in recent years. Only three eggs were taken from Minnesota because of the onset of weather that was not conducive to tree-climbing. The three were delivered to Maine and planted in nests the next day. One egg broke as it was being placed in the nest.

The two eaglets hatched out on May 16. At last report the foster parents seemed convinced that the young birds are their own offspring, and are caring for them normally with daily feeding and close guard of the nest area against possible enemies.

At the time of the transplant the two nests in Maine each contained one egg that had addled, or spoiled. These were removed and analyzed by U.S. Fish and Wildlife Service biologists. Examination revealed that neither egg would have hatched in the wild. The shell of one was 31 percent thinner than healthy eagle eggs—the consequence of pesticide ingestion by the female parent. The contents of both eggs showed no embryonic development. The biologists attributed this condition to the presence of residues of dieldrin, one of the most potent of the chlorinated hydrocarbon insecticides. Pesticide residues in bald eagles of Maine and certain other areas have seriously altered the birds' reproductive capability.

Biologists were fearful that the disturbance of the egg-switch might prompt the foster parents to desert the nests, but this fear fortunately was not borne out by the experiment. The parent eagles in Minnesota were left with plaster-filled goose eggs to maintain their interest in the nests. If they continue to incubate these dummy eggs, they will be provided a young bird from a Minnesota nest that hatches more than one eaglet, for many times there is a four-to-six day interval between hatching of multiple egg clutches; and the youngest, or runt, may die because it can't compete for the available food.

Tussock Moths and Weevils to be Fought with DDT

Limited use of DDT has been approved by the EPA for pest control in Washington, Idaho, and Oregon. In all three states the chemical is to be used against the tussock moth. The insecticide will also be used against anticipated pea leaf weevil infestations in Washington and Idaho. Actual use of the chemical will be allowed only where field surveys indicate that infestations of the insect could significantly damage dry pea crops.

Fate of Wild Horses: Freedom or Pet Food?

In January and February, 1973, a herd of about 60 wild horses was driven to the edge of a cliff near Howe, Idaho. Seven animals stampeded over the cliff to their deaths. Others, according to an official government report, had their throats slit by the ranchers who were rounding them up; some had their legs amputated with a chain saw. About 30 horses were shipped to a packinghouse in Nebraska; while there, several died of their injuries. Before the survivors could be processed into pet food they had a stay of execution. Today 18 adults of the original herd and one foal are being held near Idaho Falls, Idaho, until official disposition can be made of them. State and federal officials will decide whether the captured horses are, indeed, entitled to federal protection. A June 26 hearing was scheduled in Washington to determine if the 1971 Wild and Free-Roaming Horses Act of 1971 was being enforced.

According to government sources, the ranchers used a helicopter and snowmobiles to round up the horses—both methods in violation of federal law. Nevertheless, the animals eluded several earlier attempts to capture them. The alleged purpose of the roundup was to remove the horses from public lands (thus leaving more grass for grazing cattle), then slaughter and process them into canned pet food. According to the 1971 act, unbranded horses and burros that run free on western public lands are protected from such roundups.

Hands off Emission Control Devices

An Orlando, Fla., auto dealer was recently fined $500 by a U.S. District Court for "rendering inoperative" a 1972 auto's emission control device. Tampering with such a device by a manufacturer or dealer is in violation of the Clean Air Act. The fine was the first such action taken under the new regulation.

EPA Bans Vinyl Chloride Pesticides

Aerosol pesticides that contain vinyl chloride, have been suspended from further distribution by the EPA. The action taken in late April affects at least 28 products used in food handling establishments, hospitals, homes, and other enclosed areas.

The basis for withdrawal of the chemical is the occurrence of cancer in industrial workers exposed to the substance. Twelve men involved in the conversion of vinyl chloride to polyvinyl chloride, a plastic, have been found to have angiosarcoma, a rare type of liver cancer. Laboratory animals exposed to vinyl chloride have also developed angiosarcoma.

Russell E. Train, EPA head, stated that "while the public health implications to vinyl chloride from short pesticide bursts are undetermined, the link between the gas and the cancer is suspected strongly enough to make it prudent policy to ban further use . . . ."

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