DEPARTMENT of the INTERIOR

news release

FISH AND WILDLIFE SERVICE

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CYANIDE AND COYOTE: BEHIND THE HEADLINES

Secretary of the Interior Rogers C. B. Morton said today that his recent decision authorizing emergency use of sodium cyanide for killing coyotes in selected areas of the country underscores the tough environmental decisions natural resource managers must make.

"We are trying to balance environmental goals with economic goals. The fact that reasonable men can agree on such efforts strengthens the entire environmental movement," Morton said.

The Secretary decided on May 30 to exercise the emergency provisions of the Presidential Executive Order of February 1972 which banned the use of all toxicants on Federal lands in predator control.

"Cyanide is not as frightening as it may seem, because it is one poison that does not linger in the environment," Morton said. "As a matter of fact, it breaks down into a harmless chemical. Moreover, the device it is used in--the M-44 cyanide ejector--is selective and is a humane weapon for use against the coyote, as death is instantaneous."

The coyote issue bristles with fact and fancy, truth and half-truth, and emotions run both hot and cold. Must coyotes be killed? To what extent do they prey on livestock? Does the coyote face extinction because of the organized campaign against it? What methods are used? Will they harm the environment? These and other related questions deserve answers.

(more)

The problem centers in the 17 Western States where livestock raising is a leading element of the economy with close to 60 million cattle, about 12 million sheep, and just under 2 million goats grazing in a given year. All of these animals are targets for coyotes, but the major impact of predation is felt in sheep and goat flocks, which are easier prey for the coyote.

The problem of controlling coyote losses assumes a more meaningful dimension when the wide open spaces involved are considered. Only one-third of the 1,000-plus counties in the 17 Western States have over five sheep grazing per square mile. Another third graze only from one to five sheep per square mile, and the remaining counties have less than one sheep grazing per square mile.

As to losses of sheep from coyotes, there are as many sets of figures as there are parties to the dispute. Moreover, there are an equal number of criteria for measuring losses. One source's survey in 1972 showed the average percentage of total ewe losses caused by coyotes to be 7.2 and the average percentage of total lamb losses caused by coyotes to be 11.5. Another survey showed an overall average percentage estimate of 5.3 predator loss to the total sheep inventory. Still another shows losses to predators at 48 percent of all losses. A fourth study reported predator losses ranging from 5 percent to 25 percent of total losses.

Obviously, more data are needed, and field studies are continuing to get a better handle on what is happening in predator-prey relationships. The level or degree of predation may vary from ranch to ranch depending, for example, on whether the ranchlands are open grassy plains, heavy brush areas, high meadows, or steep terrain. Weather also has a major influence in some situations. A general view held by the U.S. Fish and Wildlife Service, used simply to portray the dimension of the problem throughout the West, holds that predator losses appear to range from 1 percent to 4 percent of the total flock. This suggests that as many as 500 thousand sheep may be lost to coyotes each year in the 17 Western States.

The coyote, it's been said, will howl atop the grave of the last man. It faces no danger whatsoever of extinction in spite of man's efforts to control its numbers. Not only is it expanding numerically--an index from six Northwestern States showed a 32 percent higher coyote breeding population in 1972 over 1971--but it also is expanding its range from the Plains States through the highly populated Midwest and on to the Virginias, Pennsylvania, New York, and the New England States. It is tougher and smarter than its cousin the wolf, which couldn't adapt to man's presence. One brush with a trap and a coyote is "trap-wise." It can live in sight of man, yet evade him.

A strong factor in its hardiness is its ability to eat almost anything--livestock, rabbits, snakes, insects, fruits and vegetables, even cactus. Its populations rise and fall in the Southwest and elsewhere as its food supply fluctuates. If the rabbit population experiences a die-off, the coyote numbers the next year will be less, but never enough to endanger their survival, for the hunger-driven coyote will grub out an existence with any other available food source.

Coyotes prey on young sheep, cattle, and goats more than on the adults. In most Western States the majority of livestock give birth in the spring, which coincides with the coyote whelping period when the coyotes must provide food for their young and readily do so by preying on lambs. Coyotes and livestock share the same range for the same reasons--food, water, and shelter. Coyotes are most active at night and into the early morning, returning to their dens in daylight and not resuming the hunt until sundown.

As a rule coyotes do not mate for life, but some pairs may remain together for a number of years. There is evidence the female may breed when she is one year old. The breeding season is from February to March and the gestation period is 60 to 63 days. Females have been known to deliver as many as 17 to 19 young, although 5 to 7 is the usual litter.

Federal coyote control efforts have been underway since 1916. Prior to the early 1940's the major control techniques were trapping, hunting, denning--which is locating and digging out dens in the spring when pups are small--and the use of strychnine baits.

The "coyote-getter," a cartridge-powered cyanide gun, was introduced in the early 1940's and put to widespread use. Thallium sulfate and a chemical known as 1080 appeared in the late 1940's, but the use of thallium was soon abandoned because of its high toxicity. Cyanide and 1080 remained in use until 1972 when the use of all poisons was banned by Executive Order because of the potential for environmental harm by some of the chemicals in use.

The Executive Order (11643) banned the use of chemical toxicants for predator control in all Federal programs and on Federal lands except in emergency situations. Stepped up efforts with traps and other mechanical control methods have been underway since 1972, but field surveys indicate that this spring and summer may witness a sizable increase in coyotes in certain areas.

In areas where field surveys indicate increased levels of coyote depredations and where the use of nontoxic control methods has proven ineffective because of factors such as topography and vegetation, the M-44 cyanide ejector device will be selectively reintroduced this spring and summer under the emergency provision of the Executive Order.

The M-44 is a spring-loaded cyanide ejecting tube placed in the ground. Death occurs almost instantly when a coyote, tugging at a scented bait, triggers a puff of cyanide into his mouth. When used professionally, it is safe and selective. There is little hazard to human beings. The toxicant either decomposes or is metabolized rapidly. It does not persist in the environment or enter the food chain. Areas where these devices are used will be clearly marked with warning signs.

The Federal agencies involved have jointly developed new procedures to permit the use of the M-44 in the emergency period. Under the new procedure a rancher, land user, or land administrator, when faced with

losses that cannot be avoided by the usual methods, may request emergency consideration from Regional Directors of the Fish and Wildlife Service. The request for emergency action will be immediately appraised and documented in the field by Fish and Wildlife Service personnel. An authorization to provide relief will be issued by a Fish and Wildlife Service Regional Director if it is within the guidelines approved by the Federal agencies, and if it is determined that a true emergency situation exists and that other methods are not applicable. His decision will be relayed immediately to the Fish and Wildlife Service field force who will place and control the M-44 devices.

An emergency will be considered to exist for sheep and goat raising areas when it has been found that mechanical control methods have proven futile in controlling stock losses caused by coyotes and there is an unusually high rate of loss to coyotes equal to 2 percent or more of a flock in a seven day period, or when coyote losses project to 8 percent or more of the flock over the growing season despite traditional efforts at control.

The use of the M-44 will conform to all applicable Federal, State, and local laws and regulations. The device will be placed in spots where minimal encounter with humans, pets, and other animals is likely. Signs will be placed in the general vicinity of M-44 use, and each device will be clearly marked with an elevated sign warning people not to handle it.

The M-44 device will be used only by Fish and Wildlife Service supervised employees who have received careful training in its use. These men will carry cyanide antidote kits with them at all times, and spent cases will be collected and burned. Each device will be regularly inspected in the field.

The M-44 will not be used in National Parks and Monuments under any circumstances, nor will it be used in areas where endangered species such as the San Joaquin kit fox or the red wolf might be affected. Maps showing the locations of all endangered species in the West are in the hands of Fish and Wildlife Service field personnel.

Monthly notices of the actual use of the M-44 will be published in the Federal Register, and the Fish and Wildlife Service will cooperate with the Environmental Protection Agency to document its efficiency and use and to collect information on its possible effect on the environment.

Legislation has been introduced and is being considered by Congress which would transfer a portion of the predator control program to the States. In the meantime, the Service is working with State governments in approaches to their assuming a greater responsibility in predator management.

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