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# Thoughts About Wildlife Damage Control

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## THOUGHTS ABOUT WILDLIFE DAMAGE CONTROL\*

by

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Gentlemen, it is my intention today to give you a brief history of EPA and its involvement in predator control, outline basic registration requirements for pesticides, show slides of the use of sodium cyanide capsules in the M-44 ejector mechanism in the experimental use permit programs and comment upon the restrictions set forth in Administrator Train's ORDER of September 16, 1975.

Congress passed the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) in 1947 to regulate the marketing of pesticides termed economic poisons. Federal registration of pesticides shipped across state lines was required. It became unlawful to sell unregistered pesticides of substances that had been misbranded or adulterated in interstate commerce.

In 1970, the EPA was established by Congress and was charged with specific environmental tasks, including the regulation of pesticides. FIFRA was amended in 1972 to extend Federal control to all pesticides used in the United States. This amendment provided for stronger enforcement measures, making it unlawful to misuse a pesticide. Provisions were set in motion to classify all pesticides to either "general" or "restricted" use. The amended FIFRA is scheduled to be fully implemented by October 21, 1977.

Other provisions of the amended FIFRA include classification of applicators, establishment registration and inspection, unlawful acts, indemnification, stop sale, use or removal orders and penalties.

In order for pesticides to be registered, there is basic data required:

- (1) Acute toxicity (effects on mammals, birds and aquatic organisms)
- (2) Environment Chemistry (persistence, mobility, degradation, accumulation studies, disposal data)
- (3) General Chemistry - technical chemical - (composition, basic manufacturing process, purity, physical and chemical composition, analytical methods)
- (4) General Chemistry - formulation - (composition, basic manufacturing process, storage stability studies, analytical methods)
- (5) Efficacy (lab and/or field studies, minimum effective dosage, dosage range, application techniques, evaluation activity against pests and non-targets)

The above general data is basic and required of all pesticides for registration consideration. Depending on use and toxicity other tests may be required.

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\*Presented December 9, 1975 at Wildlife Damage Control Workshop, Kansas State University, Manhattan, Kansas.

It is important to understand that it is unlawful to use any registered pesticide in a manner inconsistent with its labeling. Essentially, the labelling for pesticides is law which outlines the conditions of use.

Pesticides have historically been used in Federal, State and Local animal damage control programs. Prior to early 1972 the commonly used toxicants in predator control included 1080 (sodium fluoroacetate), strychnine in baits and sodium cyanide in the explosive coyote getter. These were banned for use in predator control by the EPA Administrator primarily for their adverse effects on the environment and public safety. This ban did not affect these pesticides for use as rodenticides. EPA's ban and Executive Order (11643) which halted the use of toxicants for predator control on Federal lands and in Federal programs, had a profound effect on the conduct of animal damage control programs.

Non-chemical methods employed in animal damage control programs (e.g., trapping, snaring, denning, aerial operations) were accelerated in 1972-73.

In early 1974, under Section 5 of FIFRA, EPA approved the issuance of experimental use permits to those states and Federal Agencies requesting such a permit and agreed to a carefully limited and controlled use of sodium cyanide in the M-44 (spring loaded ejector mechanism) in an experimental program to collect data. Certain data was lacking to support registration consideration and could be gained only from actual field use under a variety of climatic and geographical conditions. The Department of Interior (FWS), Texas A & M University and seven states (Texas, Montana, California, South Dakota, Idaho, Nebraska, and Kansas) conducted programs under EPA approved experimental use permits.

Program results were reported monthly to EPA, the programs were monitored in the field, and a workshop was conducted in mid-July of this year to review accomplishments, problems and to fully discuss the merits of sodium cyanide in the M-44 device as a tool to control predators (primarily coyotes) depredating livestock. In general, the states favored registration of the pesticide with controls. Unanimously they found it to be safe and easy to apply in most geographic areas. It was effective in taking many coyotes preying on sheep. Some complaints concerning caking of the capsule contents, ineffective scents, fading of area and stake signs were expressed.

A public hearing was conducted in mid-August in response to a registration application received by EPA from the Fish and Wildlife Service, Department of Interior. This was followed by other applications from Montana, Oregon, Wyoming, Texas, Nevada, Colorado and the M-44 Safety Predator Control Company in Midland, Texas. Following the decision submitted by an Administrative Law Judge, EPA Administrator Train issued his decision on September 16, 1975, rescinding part of the March, 1972 Order so as to allow registration of sodium cyanide in the M-44 ejector device. Registration applications were to be processed under Section 3 of FIFRA. Mr. Train also set forth 26 restrictions governing the use of the pesticide, its placement, antidotal measures, supervision, inspection and removal of devices, permissible and prohibited uses.

As of December 3, 1975 five registrations for sodium cyanide capsules to be used in the M-44 have been approved (Department of Interior, Wyoming; Montana, Oregon, California, South Dakota). Five other registration applications are pending (M-44 Safety Predator Control Company, Nevada, Colorado, Utah, and Texas).

The M-44, used by licensed or trained and supervised applicators has proven to be a relatively selective and environmentally safe tool for controlling coyotes. With other controls (trapping, snaring, shooting and sound management practices), the M-44 now constitutes a valuable tool in animal damage control programs for those agencies granted registration.

Presently the Department of Interior has an experimental use permit to conduct field tests in 13 states using toxic collars of sodium cyanide fastened to the necks of tethered lambs. As in the case of the M-44 the data from these tests must show that this use of a pesticide is selective and environmentally safe in taking predators.

Other pesticides may be developed and field tested for their potential use to control predators. They must conform to the specific guidelines as indicated in Section 3 of FIFRA, implemented in August of this year. There are requirements to be met in the areas of toxicology, basic chemistry, environmental chemistry, fish and wildlife safety as well as efficacy. These apply to all pesticides, not only those designated for use in animal damage control programs. It is certainly the intent of the Environmental Protection Agency to insure that those toxicants permitted for damage control do their job with minimum adverse effects on non-target species and minimum chance of hazard to the users.