

Category N: M-44 Predatory Pest Control

M-44 Predatory Pest Control Learning Objectives

THIS CATEGORY IS LIMITED TO USDA ANIMAL AND PLANT HEALTH INSPECTION SERVICE (APHIS) WILDLIFE SERVICE EMPLOYEES ONLY. IT IS FOR THE CONTROL OF COYOTES, RED AND GRAY FOXES, AND WILD OR FERAL DOGS ONLY.

After studying this category, you should be able to:

- ✓ Describe M-44 predator control device use.
- ✓ Describe M-44 use restrictions.
- ✓ Describe M-44 recordkeeping requirements.

Category N: M-44 Predatory Pest Control

Category N, M-44 Predatory Pest Control, involves the control of coyotes, red and gray foxes and wild or feral dogs that are vectors of communicable diseases or suspected of preying on livestock, poultry or federally designated threatened and endangered (T/E) species. Certification in this category is limited to USDA Animal and Plant Health Inspection Service (APHIS) Wildlife Service employees.

The M-44 device is a spring-activated device that delivers a dose of cyanide powder to targeted animals. It uses a sodium cyanide capsule that has been registered as a pesticide with the U.S. EPA. This product is classified as a restricted-use pesticide. The device can only be used by trained, certified applicators who are employed by the USDA APHIS Wildlife Services Agency.

The M-44 device consists of four components: a capsule holder wrapped with cloth, wool or other soft material; a cyanide capsule (a small plastic

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In addition to the main product label instructions and directions, EPA mandates 27 use-restrictions, which provide guidance for the application, storage, disposal and training requirements, safety, and necessary recordkeeping.

Each Applicator of the M-44 device must be trained in:

- **Safe handling of the capsule and device.**
- **Proper placement of the device.**
- **Necessary record keeping.**

container holding sodium cyanide); a spring-activated ejector; and a 5- to 7-inch stake. In the field, the stake is inserted into the soil with the top flush with the ground's surface. With the ejector cocked and set, the capsule is inserted into the holder and screwed onto the ejector. The ejector is secured to the stake. A specially formulated fetid (foul-smelling) bait or other scent material is smeared on the wrapped capsule holder. The bait elicits a "bite and pull" response by the target animal. The M-44 device is triggered when a canid (i.e. coyote, fox or wild dog) tugs on the baited capsule holder, releasing the plunger and ejecting sodium cyanide powder into the animal's mouth. The sodium cyanide quickly reacts with moisture in the animal's mouth, releasing hydrogen cyanide gas. Unconsciousness is quickly followed by death, normally within one to five minutes after the device is triggered.

M-44 Predatory Pest Control Device Use and Restrictions

- I. PURPOSE To establish guidelines for the use of the M-44 device by Wildlife Service personnel.
- II. POLICY The M-44 device may be used to reduce damage caused by wild canids in accordance with EPA use restrictions. M-44 devices and capsules produced by the Pocatello Supply Depot are for official USDA APHIS Wildlife Service use only.
- III. REFERENCE The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) as amended.
- M-44 Cyanide Capsules, EPA Registration No. 56228-15

M-44 Use Restrictions, as of May 14, 2020

In addition to the main product label instructions and directions, EPA mandates 27 use restrictions, which provide guidance for the application, storage, disposal and training requirements, safety, and necessary recordkeeping. Individual State pesticide regulatory agencies also can require additional restrictions on the use of M-44s in their jurisdiction.

1. Use of the M-44 device must conform to all applicable federal, state and local laws and regulations.
2. Applicators must be subject to such other regulations and restrictions as may be prescribed from time to time by the U.S. Environmental Protection Agency (EPA).
3. Each applicator of the M-44 device shall be trained in: (1) safe handling of the capsules and device, (2) proper placement of the device, and (3) necessary recordkeeping.

4. M-44 devices and sodium cyanide capsules must not be sold or transferred to, or entrusted to the care of any person not supervised or monitored by Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS), or any agency not working under a WS cooperative agreement.
5. The M-44 device must only be used to take wild canids: (1) suspected of preying on livestock or poultry; (2) suspected of preying on federally designated threatened or endangered species; or (3) that are vectors of a communicable disease.
6. The M-44 device must not be used solely to take animals for the value of their fur.
7. The M-44 device must only be used on or within 7 miles of a ranch unit or allotment where losses due to predation by wild canids are occurring or where losses can be reasonably expected to occur based upon recurrent prior experience of predation on the ranch unit or allotment. Full documentation of livestock depredation, including evidence that such losses were caused by wild canids, will be required before applications of the M- 44 are undertaken. This use restriction is not applicable when wild canids are controlled to protect federally designated threatened or endangered species or are vectors of a communicable disease.
8. The M-44 device must not be used: (1) on Federal lands set aside for recreational use, (2) in areas where exposure to the public and family and pets is probable, (3) in prairie dog towns, or (4) in national or state parks, national or state monuments, federally designated wilderness areas and wildlife refuge areas, except that the M-44 device may be used in the areas listed above in (4) only for the protection of federal designated threatened or endangered species.

To determine whether the applicable land management agency has set aside any area on federal Lands for recreational use, either on a permanent or temporary basis, the APHIS State Director or his/her designated representative, who are considering authorizing or are responsible for ongoing use of M-44 capsules on public lands, must contact each applicable land management agency quarterly to determine whether any portions of the projected or current M-44 use areas are, or are to be, set aside for recreational use. Within 30-days of that contact, the APHIS State Director, or his/her designated representative, must provide the applicable land management agency with written documentation specifying the applicable land management agency's determinations of what projected or current M-44 use areas

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Full documentation of livestock depredation, including evidence that such losses were caused by wild canids, will be required before applications of the M- 44 are undertaken.

The M-44 device must not be used in areas where federally listed threatened or endangered animal species might be adversely affected.

One person in APHIS other than the individual applicator must have knowledge of the exact placement location of all M-44 devices in the field.

are to be set aside for recreational use. For purposes of this Use Restriction, areas set aside for recreational use include areas where and when there are scheduled recreational events, areas identified on maps with “recreation” in the title, areas where developed or known camping occurs, areas near designated or known recreational trail heads and designated or known vehicle access sites.

9. The M-44 device must not be used in areas where federally listed threatened or endangered animal species might be adversely affected. Each applicator must be issued a map, prepared by or in consultation with the U.S. Fish and Wildlife Service, which clearly indicates such areas.

(1) Except as provided in paragraph (2) below, the M-44 device must not be used in areas occupied by any federally listed threatened or endangered species or any federally listed experimental populations as set forth in the most current versions of maps that have been prepared or approved by the U.S. Fish and Wildlife Service (FWS). At the time of application, the applicator must be in possession of the most current map, if such map exists, that covers the application site. If maps covering the application site do not exist, then the M-44 applicator must, prior to application, consult with FWS to determine whether the application site is in an area occupied by listed animal species. Any use of the M-44 thereafter shall be consistent with any conditions or limitations provided by FWS through such consultation.

(2) Notwithstanding paragraph (1), the M-44 device may be used in areas occupied by endangered, threatened or experimental populations if use in such areas a) has been addressed by FWS in special regulations pursuant to section 4(d) of the ESA, in requirements imposed through incidental take statements or incidental take permits, or in other applicable agreements with the FWS, and b) the applicator’s use of the M-44 is consistent with any conditions or limitations provided by FWS for such use.

10. At least one person within APHIS, in addition to the individual applicator, must have knowledge of the exact placement of all M-44 devices in the field. This includes initial placement and any subsequent changes of M-44 GPS locations as soon as possible, but no later than 14 days. In the case of applications to privately owned land, the applicator must also have written permission from the landowner or lessee who has requested the M-44 device use prior to their placement. When devices are placed on private land, all residences on the property must be notified of the M-44 device use.

11. In areas where more than one governmental agency is authorized to place M-44 devices, the agencies shall exchange placement information and other relevant facts to ensure that the maximum number of M-44s allowed is not exceeded.
12. The M-44 device must not be placed within 200 feet of any non-frozen lake, stream or other body of water, provided that natural depression areas which catch and hold rainfall for short periods of time shall not be considered "bodies of water" for purposes of this restriction. M-44 devices may be set within 200 feet of frozen bodies of water only if (i) they are removed before the water body is no longer completely frozen, and (ii) are set at such elevation to prevent inundation in the event of an untimely thaw.
13. The M-44 device must not be placed in areas where food crops are planted.
14. The M-44 device must not be placed within 300 feet of any designated public road or public pathway.
15. The maximum density of M-44s placed in any 100-acre pasture land areas must not exceed 10; and the density in any one square mile of open range shall not exceed 12.
16. No M-44 device shall be placed within 30 feet of a livestock carcass used as a draw station. No more than four M-44 devices shall be placed per draw station and no more than five draw stations shall be operated per square mile.
17. Supervisors of applicators must check the records, warning signs and M-44 devices of each applicator at least once a year to verify that all applicable laws, regulations and restrictions are being strictly followed.
18. Each M-44 device must be visually inspected by an applicator or cooperator at least once every week, weather permitting access, to check for interference or unusual conditions, and must be serviced as required by the applicator.
19. Damaged or nonfunctional M-44 devices must be removed from the field.
20. An M-44 device must be removed from an area if, after 30 days, there is no sign that a target predator has visited the site.
21. All persons authorized to possess and use sodium cyanide capsules and M-44 devices shall store such capsules and devices under lock and key, including when in transit.

The M-44 shall NOT be placed:

- **Within 200 feet of any lake, stream or water body.**
- **Where food crops are planted.**
- **Within 300 feet of a designated public road or public pathway.**

Supervisors of applicators must check the records, warning signs and M-44 devices of each applicator at least once a year.

Each M-44 device installed in the field must be inspected at least once a week.

After 30 days, a M-44 device must be removed if there is no sign a target predator has visited the site.

Bilingual warning signs in English and Spanish must be used in all areas containing M-44 devices.

In all areas where the use of the M-44 device is anticipated, local medical people must be notified of the intended use.

Each M-44 authorized applicator must keep records of the placement of each device and the results of each placement.

22. Used sodium cyanide capsules must be disposed of by deep burial or at a proper landfill site. Incineration may be used instead of burial for disposal. Place the capsules in an incinerator or refuse hole and burn until the capsules are completely consumed. Capsules may be incinerated using either wood or diesel fuel.
23. Bilingual warning signs in English and Spanish must be used in all areas containing M-44 devices. All such signs must be removed when M-44 devices are removed.
 - a. Main entrances or commonly used access points to areas in which M-44 devices are set shall be posted with warning signs to alert the public to the toxic nature of the cyanide and to the danger to pets. Install freestanding warning signs at access points or on property boundaries where no fence lines exist, as appropriate. Signs must be inspected weekly to ensure their continued presence and ensure that they are conspicuous and legible.
 - b. Two elevated signs, placed in the most likely directions of approach, must be placed within 15 feet of each individual M-44 device warning persons not to handle the device.
24. In all areas where the use of the M-44 device is anticipated, local medical people must be notified of the intended use. This notification may be through a poison control center, local medical society, the Public Health Service or directly to a doctor or hospital. It must be the responsibility of the supervisor to perform this function. Notifications must be made at least annually.
25. Each authorized M-44 applicator must keep records dealing with the placement of the device and the results of each placement. Such records must include, but need not be limited to:
 - a. The number of devices placed.
 - b. The location of each device placed.
 - c. The date of each placement, as well as the date of each inspection and removal.
 - d. The number and location of devices which have been discharged and the apparent reason for each discharge.
 - e. Species of animals taken.
 - f. All accidents or injuries to humans or domestic animals.
26. The M-44 device must not be used within 600 feet of occupied residences, except those of any cooperating entity who have given APHIS written permission for M-44 placement on their property.

27. Prior to device placement, APHIS must notify any occupied residence within 0.5 miles of an M-44 device of the presence of M-44s by one or more of the following methods: face-to-face communication, person-to-person telephone conversations (voice message is NOT acceptable), door hanger notice, certified mail.

Conclusion

Category N, M-44 Predatory Pest Control, involves the control of coyotes, red and gray foxes, and wild or feral dogs that are vectors of communicable diseases or suspected of preying on livestock, poultry or federally designated threatened and endangered (T/E) species. Certification in this category is limited to USDA APHIS Wildlife Service employees only.

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Originally published in 1987 as Category 13 , M-44 Predatory Pest Control, Nevada Pesticide Applicator's Certification Workbook, SP-87-07, by W. Johnson, J. Knight, C. Moses, J. Carpenter, and R. Wilson.

Updated in 2018 by M. Hefner, University of Nevada Cooperative Extension, and B. Allen and C. Moses, Nevada Department of Agriculture.

Updated in 2023 by M. Hefner, University of Nevada, Reno Extension and Bret Allen and R. Saliga, Nevada Department of Agriculture.

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