

Slide 1



This training is designed to comply with the U.S. Fish and Wildlife Services' Biological Opinions for Rozol and Kaput-D Prairie Dog Bait for the control of black-tailed prairie dogs.

[Note to presenter: Text that appears in the brackets are directions for you and may contain optional information you may want to consider including in your presentation]

Training Outline

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- Training Topics
- Before Application
- Applying the Product
- After Application

This training will walk you through some background information on the products and then the process of applying the products in a manner compliant with the label.

Goals for the Training

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1. Ensure label compliance
2. Minimize exposure to non-target wildlife, particularly to listed species
3. Clarify label requirements and terminology

The conservation measures in the FWS' Biological Opinions state that EPA will work with the State Lead Agencies to incorporate training sessions on secondary poisoning at their annual pesticide applicator recertification programs. This will help ensure label compliance. The training will educate applicators on:

- the importance of minimizing risk to non-target species,
- the meaning of secondary toxicity,
- the hazards of anticoagulant rodenticide bait and
- the basis for the carcass search requirements and other associated label restrictions.



4 **Training Topics**

- Laws Protecting Wildlife and Penalties
- Product Use Highlights
- Key Use Changes
- Anticoagulant Rodenticide Concerns
- Non-Target Exposure

The slide features a white background with a thin black border. At the top, there is a horizontal bar with a blue gradient. On the left side of this bar is a small orange square containing the number '4'. To the right of the orange square, the text 'Training Topics' is written in a bold, white, sans-serif font. Below this bar, the slide content is presented as a bulleted list of five items, each preceded by a small orange dot. The text is in a dark grey, sans-serif font.

Laws Protecting Wildlife

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- Endangered Species Act (ESA)
 - With the purpose “to provide a means whereby the ecosystems upon which endangered species or threatened species depend may be conserved...” (ESA Section 2b)
- Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
 - No unreasonable adverse effect to humans or the environment
 - The product label, including all materials referenced on the it (e.g., Endangered Species bulletins), is the law

THE LABEL IS THE LAW!

ESA imposes obligations on all Federal agencies to protect listed species and critical habitat. So Federal agencies, including EPA, must insure that any action they authorize or carry out is not likely to jeopardize the continued existence of any listed species or result in destruction or adverse modification of designated critical habitat. For EPA, the Federal action is the registration of the pesticide according the label.

The EPA regulates pesticide use via administration of FIFRA, and registration of pesticides by the EPA is subject to compliance with Section 7 of the ESA.

FIFRA is enforced through the pesticide label. Anything on the label is part of a federal action.

Since Bulletins are referenced on the product label, they are, by extension, part of the label and enforceable. Always read the label before using the product.

Penalties for Violating the Endangered Species Act

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- If label directions are followed and there is “take” of a listed species (e.g., a protected animal is injured or killed):
 - no violation of FIFRA
 - no violation of ESA (FWS has permitted this take in its Biological Opinion)
- If label directions are NOT followed and there is take of a listed species
 - violation of FIFRA
 - violation of ESA (FWS has only permitted take for lawful application)
 - penalties may apply

Migratory Bird Treaty Act

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- It is unlawful to pursue, hunt, take, capture, kill, possess, or sell birds or bird parts
 - Over 1000 migratory birds listed in the act
 - Does not discriminate between live or dead birds
 - Includes all bird parts such as feathers, eggs and nests
 - List of protected birds:
www.fws.gov/migratorybirds/RegulationsPolicies/mbta/mbtintro.html
- Fines were established for violation of this law, including misdemeanor charges (16 U.S.C. 707)
- Contact the U.S. Fish and Wildlife Service and the applicable State wildlife agency to obtain all necessary kill or collecting permits under this Act

It is unlawful to pursue, hunt, take, capture, kill or sell over 1000 migratory birds listed in the act. The statute does not discriminate between live or dead birds and includes bird parts such as feathers, eggs and nests.

Almost every native bird species is protected; assume that if it's a native bird, it's likely on the list. The list of protected birds is available on the FWS website.

Fines were established for violation of this act, including misdemeanor charges. Contact the U.S. Fish and Wildlife Service and the applicable State wildlife agency to obtain all necessary kill or collecting permits under this Act.

Executive Order 13186, signed January 10, 2001, broadens the MBTA's applicability to the federal government.

The Secretary of Interior was directed to establish a Council made up of departments and agencies that have established, or are in the process of establishing, MOUs with the Service. EPA is in the process of developing the MOU with FWS and is part of this council.

[More information on the Act available at <http://www.fws.gov/laws/lawsdigest/migtrea.html>]

Bald and Golden Eagle Protection Act

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- Prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" eagles.
 - Taking is described to include their parts, nests, or eggs, as well as molesting or disturbing the birds.
- Includes criminal penalties for interfering with eagles' normal breeding, feeding or sheltering behavior.



This law provides for the protection of the bald eagle (since 1940) and the golden eagle (since 1962) by prohibiting, except under certain specified conditions, the taking, possession and commerce of these birds.

The 1972 amendments increased penalties for violating provisions of the Act.



9 Training Topics

- Laws Protecting Wildlife and Penalties
- Product Use Highlights
- Key Use Changes
- Anticoagulant Rodenticide Concerns
- Non-Target Exposure

The slide features a white background with a thin black border. At the top, there is a horizontal bar with a blue gradient. On the left side of this bar is a small orange square containing the number '9'. To the right of the orange square, the text 'Training Topics' is written in white. Below this bar, a list of five bullet points is displayed. The second bullet point, 'Product Use Highlights', is highlighted in red text, while the others are in black. The background of the slide has a very faint, light gray grid pattern.

Product Use Highlights: Rozol and Kaput-D

- Target Pest: Black-tailed prairie dog
- Product Classification: Restricted Use Pesticide (RUP)
- 10 States Where Used: CO, KS, MT, NE, ND, NM, OK, SD, TX and WY
- Use Site: Rangeland and adjacent non-crop areas



These product use highlights appear on the product label.

A target pest is the organism the pesticide is intended to kill, in this case the black-tailed prairie dog.

The "Restricted Use" classification restricts a product's sale or its use to certified pesticide applicators or someone under the direct supervision of a certified applicator.

These products are registered for use in a 10 state area (Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming).

For use only for sites (rangeland and adjacent non-crop areas) and pests (the black-tailed prairie dog) specified on the label.

[Further information you can choose to read]

Chlorophacinone is the active ingredient in Rozol Prairie Dog Bait (EPA registration number 7173-286). Diphacinone is the active ingredient in Kaput-D Prairie Dog Bait (EPA registration number 72500-22).

Product Specifications:

- Concentration of active ingredient is 0.005% or 50 mg a.i./kg chlorophacinone or diphacinone
- Loose bait: food-grade wheat
- Contains bluish-green marker dye for chlorophacinone products and red for diphacinone products

Product Use Highlights

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- Application Method: Apply at least 6 inches down active burrows by hand scoop or mechanical application machine
- Application Season: October 1 to March 15 (check Bulletins Live!)
- Grazing Restriction: No grazing for 14 days post-application
- Follow-up: Search for carcasses for at least 14 days



The products can be applied by hand scoop or mechanical application machine that is designed, constructed and operated in a manner that ensures that bait is properly placed at least 6 inches down active black-tailed prairie dog (BTPD) burrows in rangeland and adjacent noncropped areas.

The application season is from October 1 through March 15, unless otherwise specified in Bulletins Live!

Livestock can't graze on the treated land for 2 weeks.

The applicator must return to the site within 4 days post-application and at 1-2 day intervals for at least 2 weeks (longer if carcasses are still being found) to collect and dispose of any bait and any dead/dying prairie dogs found on the surface. This is also important because the black-tailed prairie dogs can kick the bait out of the burrow, exposing non-target species to the bait.



12 **Training Topics**

- Laws Protecting Wildlife and Penalties
- Product Use Highlights
- **Key Use Changes**
- Anticoagulant Rodenticide Concerns
- Exposure

The slide features a white background with a thin black border. At the top, there is a horizontal bar with a blue gradient. On the left side of this bar, the number '12' is displayed in white on an orange rectangular background. To the right of the orange background, the text 'Training Topics' is written in white. Below this header, a list of five bullet points is presented. The third bullet point, 'Key Use Changes', is highlighted in red text, while the other four are in black. The background of the slide content area has a very faint, light gray horizontal line pattern.

Key Use Changes

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- Consult EPA's Bulletins Live! website for your county and month in which you intend to apply:
www.epa.gov/espp/bulletins.htm
- Use is prohibited within all black-footed ferret reintroduction areas
- Delayed application date in Preble's meadow jumping mouse areas: 11/1
- Restricted application dates in grizzly bear habitat: start date, 12/1; early end date, 3/1

Use Bulletins Live! to find out if there are any pesticide use limitations or restrictions where you plan to apply the product.

Use is prohibited in all black-footed ferret reintroduction areas, which are clarified in Bulletins Live!. Use is also prohibited within the Blackfeet and Crow reservations in Montana, as listed on the product label.

Even though the application season is from October 1 to March 15, some counties have delayed or abbreviated application dates or periods. These can be found in more detail in Bulletins Live!.

For the Preble's meadow jumping mouse, the start of the application season is delayed from 10/1 to 11/1 in 7 counties in Colorado and in 4 counties in Wyoming.

For the grizzly bear, the start of the application season is delayed from 10/1 to 12/1 and the end of the season is shortened from 3/15 to 3/1 in 13 counties in Montana.

Key Use Changes, continued

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- Use line-transect method to perform carcass searches
- New Notification Requirements
 - ▣ National Pesticide Information Center (NPIC) - dead or dying non-targets
 - ▣ U.S. Fish and Wildlife Service (FWS) - dead or dying listed species
 - ▣ Black-Footed Ferret Coordinator – live or dead black-footed ferrets

The line transect method will be covered later in the training.

New Notification Requirements that appear on the product label:

All dead or dying non-target animals must be reported to the National Pesticide Information Center as soon as possible. Any apparently injured or sick Federally listed species must also be immediately reported to FWS. The Black-Footed Ferret Coordinator must also be contacted if ferrets are found during bait applications or carcass searches. If live or dead BFFs are found outside reintroduction areas before, during or after application, the BFF Coordinator must be contacted immediately and sufficient time must be allowed for the FWS to capture and relocate the black-footed ferret(s) before bait application.

The label lists all phone numbers.



15 **Training Topics**

- Laws Protecting Wildlife and Penalties
- Product Use Highlights
- Key Use Changes
- **Anticoagulant Rodenticide Concerns**
- Exposure

Anticoagulant Rodenticide Concerns

- Delay between ingestion of bait and death
- Increased chance of non-target species (scavengers/predators) exposed to poisoned animal



It can take 4 to 5 days and multiple feedings for the prairie dogs to begin to die after the bait is eaten. Because the bait does not kill the black-tailed prairie dog instantly, it's possible that some of the sick or dead animals will end up on the surface of a prairie dog colony.

This delay increases the likelihood that the poisoned animals become easier prey and increases their risk of being scavenged or preyed on by non-target species.

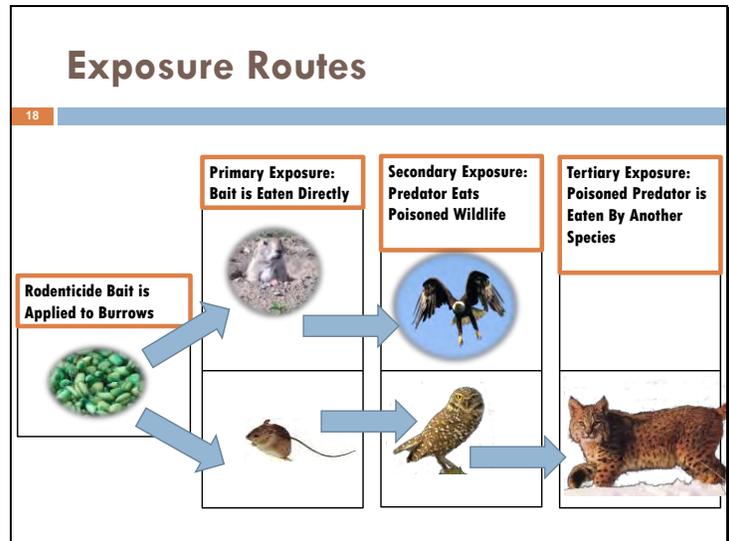
The measures described in this training were designed to minimize this risk to non-target species.



17 Training Topics

- Laws Protecting Wildlife and Penalties
- Product Use Highlights
- Key Use Changes
- Anticoagulant Rodenticide Concerns
- Exposure

The slide features a white background with a thin black border. At the top, there is a horizontal bar divided into two sections: an orange section on the left containing the number '17' and a blue section on the right containing the text 'Training Topics'. Below this bar, a list of five bullet points is presented. The first four items are in black text, and the fifth item, 'Exposure', is in red text.



Primary exposure occurs via direct consumption of the bait. Both the black-tailed prairie dogs and non-target species can consume the bait. Our examples here are a prairie dog (which is the target species) and a mouse (the non-target species), however primary exposure could occur for other non-targets such as songbirds or the grizzly bear.

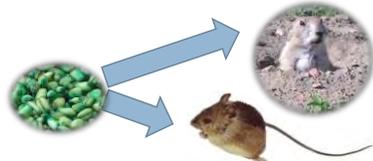
In this example, secondary exposure is shown as a raptor consuming a prairie dog which has ingested the bait. Secondary exposure is the main concern for black-footed ferrets eating poisoned prairie dogs.

Tertiary exposure is shown as a bobcat consuming a raptor that has consumed a mouse which has ingested the bait. This mirrors an actual incident report where a bobcat died from feeding on an owl that had consumed a poisoned mouse that fed on chlorophacinone

Primary Exposure

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- Primary Exposure: direct ingestion of the bait
 - Example: A prairie dog or mouse eats the bait
 - Mitigation Actions:
 - Use Bulletins Live!
 - Treat only active burrows
 - Place the bait 6 inches down the burrow
 - Clean up bait above ground



Primary exposure- Adverse effects from direct ingestion of the poisoned bait. Direct effects are only possible for species that directly eat the bait (like the Preble's meadow jumping mouse, songbirds or the grizzly bear).

Restrictions/ delay of application to help reduce exposure for Preble's meadow jumping mouse and grizzly bear. These geospatial timing restrictions, which were discussed earlier, are found in Bulletins Live!

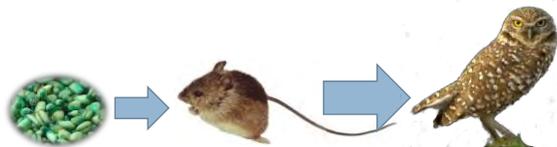
Placing the bait 6 inches down the active burrows helps increase the chance the black-tailed prairie dog will take the bait and make it inaccessible to non-targets.

The prairie dogs can kick bait out of the burrow so cleaning bait outside the burrow will reduce the risk of non-targets eating the bait.

Secondary Exposure Mitigation

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- Secondary Exposure: consumption of a poisoned black-tailed prairie dog or other poisoned wildlife by a non-target species
 - Example: A scavenger/predator eats a mouse
 - Mitigation Action:
 - Conducting line transects and carcass searches
 - Disposing of poisoned carcasses



The diagram shows a sequence of three items from left to right: a pile of green pills, a mouse, and an owl. A blue arrow points from the pills to the mouse, and another blue arrow points from the mouse to the owl, illustrating the path of secondary exposure.

Secondary exposure- Adverse effects to a scavenger or a predator from consuming parts or all of a prairie dog or other wildlife that has eaten the poison.

Example: The most likely scenario would be a scavenger/predator such as black-footed ferret eats a poisoned prairie dog (non-target eats a target species), however it is also possible that a poisoned non-target animal is eaten by a scavenger/predator.

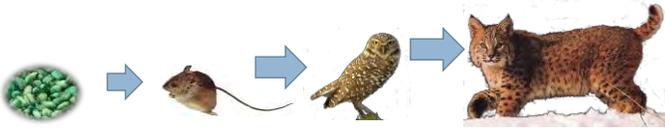
If poisoned wildlife found is a bird, eagle or raptor, do not touch the animal and instead notify FWS. Contact information for FWS is provided later in the training. There are new reporting and carcass disposal requirements that appear on the label and will be discussed later in the training.

Tertiary Exposure Mitigation

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Tertiary Exposure: a poisoned scavenger/predator is eaten by another species

- Example: A bobcat eats an owl that has consumed a poisoned mouse
- Mitigation Action:
 - Disposing of poisoned carcasses
 - Reporting dead/dying listed species and non-target animals



This mirrors an actual incident report where a bobcat died from feeding on an owl that had consumed a poisoned mouse that fed on chlorophacinone.

In order to mitigate this exposure, the label requires reporting of dead or dying listed species and non-target animals if found. In addition, the label also requires the proper disposal of the black-tailed prairie dogs carcasses when found. These actions are designed to reduce the potential for poisoned carcasses to be scavenged.

The notification and carcass disposal requirements mentioned in the previous slide are also applicable to this scenario.

22 **Before Application**

- Consult Bulletins Live!
- Follow Geographically Specific Use Restrictions for Specific Listed Species
- Perform Site Assessment
- Conduct Line Transects

The next section of the training provides information on steps to follow before applying the anticoagulant products.

EPA's Bulletins Live!

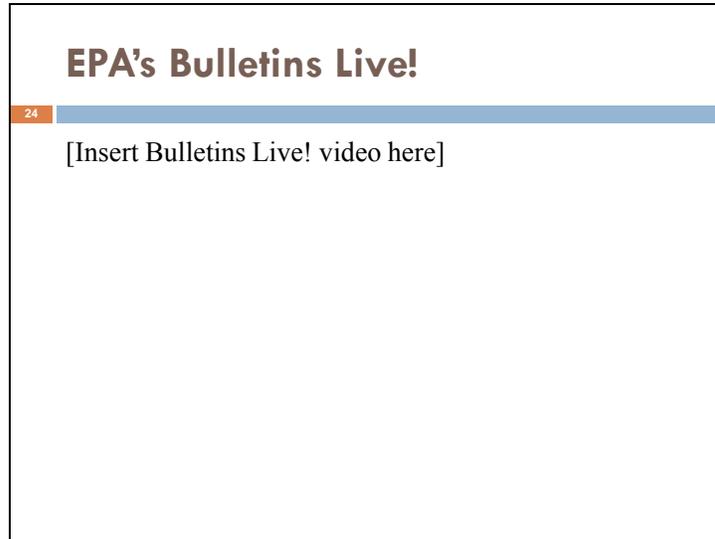
23

- Consult EPA's Bulletins Live! website for geographic restrictions or limitations currently in place for CO, KS, MT, NM, SD, WY and TX
 - www.epa.gov/espp/bulletins.htm
- Bulletins can be accessed up to six months prior to pesticide application.
- Be sure that you follow the correct Bulletin for the month and year of your pesticide application

Read the product label and consult Bulletins Live! Currently, there are restrictions for 7 states out of the 10 that have registered Rozol and Kaput-D.

Check for bulletins in your area no more than 6 months before you plan to use the products. Make sure you are following the Bulletin that is valid for the month and year you apply.

Slide 24



EPA's Bulletins Live!

24

[Insert Bulletins Live! video here]

The slide features a title 'EPA's Bulletins Live!' in bold black font at the top. Below the title is a blue horizontal bar. On the left side of this bar, the number '24' is displayed in white. Below the bar, the text '[Insert Bulletins Live! video here]' is centered in a black font. The entire slide content is enclosed in a black rectangular border.

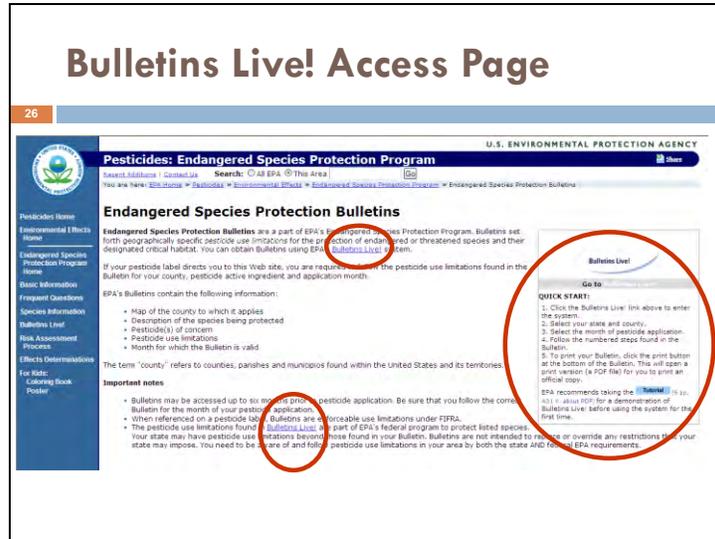
[If Bulletins Live! video is shown, skip the next 6 slides and go to slide 31: Before Application]

EPA's Bulletins Live!

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1. Steps to Access Bulletins
2. Go to www.epa.gov/espp/bulletins.htm
3. Click on Bulletins Live! link
4. Select your state and county
5. Select application date
6. Retrieve Bulletin
7. Scroll to bottom, click 'Printable Bulletin'
8. Print or save PDF

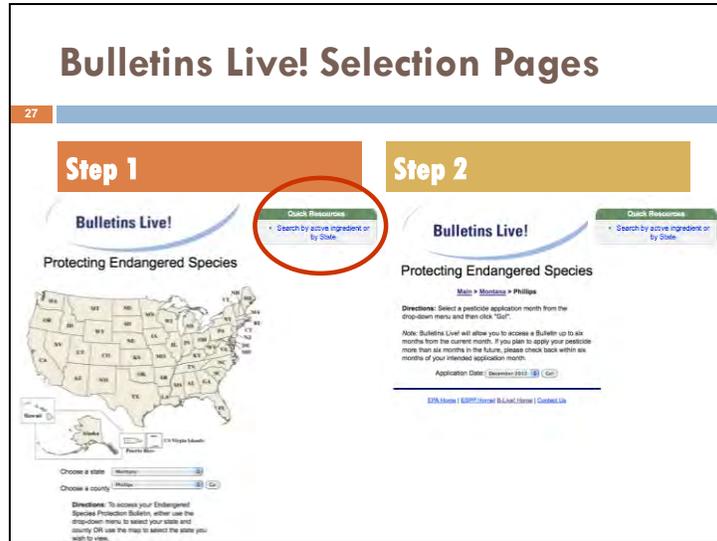
Here are the steps for accessing a Bulletin, which you can get to from the EPA's ESPP website. There's a tutorial available on the website.



The following slides are examples of the process you will follow to access bulletins, and what you will find as you access the different web pages.

Graphic shows what you see when going to the Bulletins Live website.

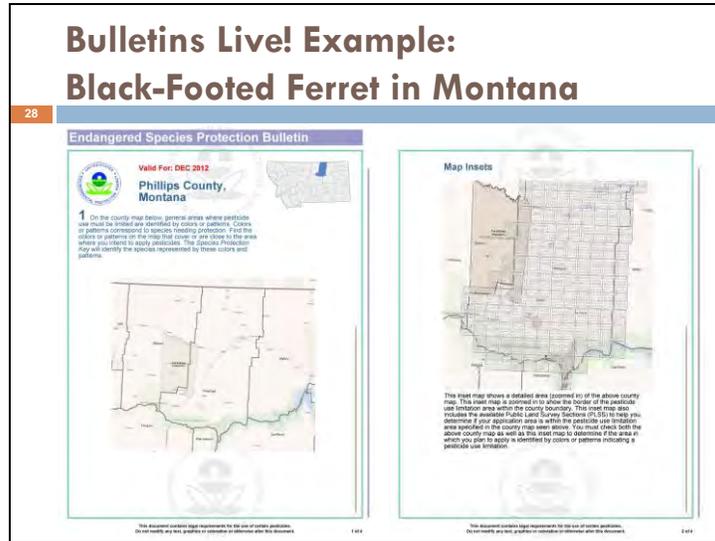
To access the Bulletins, click the words "Bulletins Live" in either of these 3 areas. If it doesn't load, you may have to click it twice.



You can click on a state in the national map, then specify a county, or use the dropdown menu to specify the state and county where you intend to apply.

Then you have to select an application date (Step 2).

You can also click on the link in the Quick Resources box in the upper right hand corner where it says "Search by active ingredient or by State" and then enter the state, application date and the active ingredient which you intend to apply.



The maps that appear will show the areas where the limitation applies. The current system provides a static map for the county.

[By December 2013, Bulletins Live! will transition to a more interactive mapping platform that will allow the user to zoom in and out.]

As in this example, you might see a zoomed-in map of the area with more information if available. This will help you determine if your planned application site will fall within a pesticide use limitation area.

Bulletins Live! Example: Black-Footed Ferret in Montana

2 Look at the table of Pesticide Active Ingredients. This column lists the pesticide active ingredients and uses of a pesticide for which there are use limitations to protect certain species. Locate the active ingredient in the pesticide you are to apply. Note that there may be more than one row for each active ingredient.

Pesticide Active Ingredients	Pesticide Limitation Codes	
	Ferret, Black-footed	Ferret, Black-footed
Chlorpyrifos (Diall)		
Black Blight Fleck Dog	R1	R2
Diazinone (Diall)		
Diazinone (Diall)	K1	K2

4 The limitations that apply to each code are identified in Codes and Limitations. Follow the limitations for all codes that apply.

If your product contains multiple active ingredients for which there are use limitations, you must follow all the limitations for each active ingredient for your pesticide use. If multiple codes address the same type of limitation (i.e., buffer distance), wind speed, etc., follow the most restrictive code.

Codes and Limitations

K1	Aggravated Prairie Dog Bat use is prohibited in this area.
K2	Aggravated Prairie Dog Bat use is prohibited within the Indian Reservation.
R1	Road Prairie Dog Bat use is prohibited in this area.
R2	Road Prairie Dog Bat use is prohibited within the Indian Reservation.

This document contains legal requirements to the state of Montana. The requirements are not applicable to other states. 1 of 1

On the left, you see the pesticide active ingredient and a pesticide limitation code. On the right you see the code definitions to determine your use limitation.

The Bulletins should be printed or saved as a PDF to provide a record of your compliance with the label. To print or save, scroll all the way to the bottom of the page and click the words “Printable Bulletin”. This will create a PDF which can be printed or saved for your files.

Bulletins Live!

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- If there is no enforceable bulletin in your county, you will see the following on Bulletins Live!

“There are no pesticide use limitations in place for the county and month you selected, beyond what is indicated on your pesticide label. Follow the use instructions on your label. Please check back if you plan to apply your pesticide in a month other than the one for which this Bulletin is valid.”

If there is no Bulletin for your county, you will see the following statement that instructs the user to follow the product label and check back if they are planning to apply the pesticide in a month other than the one for which the Bulletin is valid.

31 **Before Application**

- Consult Bulletins Live!
- Follow Geographically Specific Use Restrictions for Specific Listed Species
- Perform Site Assessment
- Conduct Line Transects

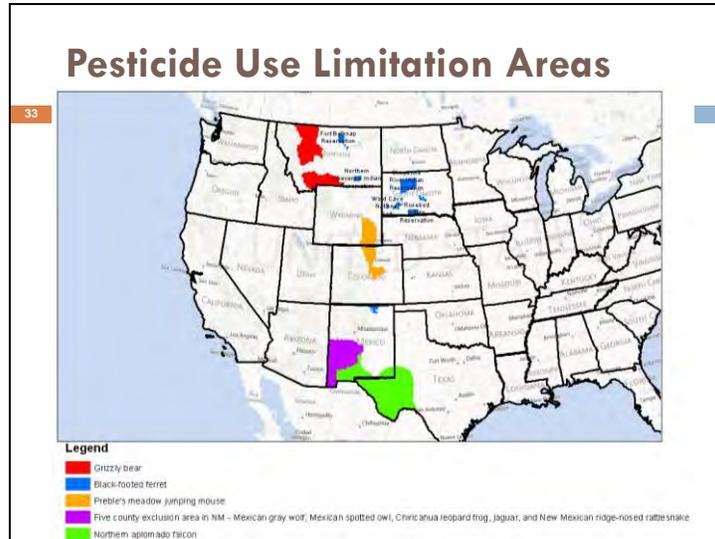
Existing Bulletins for Listed Species

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- **CO:** Black-footed Ferret, Preble's Meadow Jumping Mouse
- **KS:** Black-footed Ferret
- **MT:** Black-footed Ferret, Grizzly bear
- **NM:** Mexican Gray Wolf, Mexican Spotted Owl, Chiricahua leopard frog, jaguar, New Mexican ridge-nosed rattlesnake, Black-footed Ferret, Northern Aplomado Falcon
- **SD:** Black-footed Ferret
- **TX:** Northern Aplomado Falcon
- **WY:** Preble's Meadow Jumping Mouse

This slide shows the federally listed species in each state for which use limitations exist in Bulletins Live as of July 2013.

[Note to presenter: skip over the slides for species that do not exist in the state you are giving the presentation in]



This map shows use limitation areas for species that have bulletins as of July 2013. Please refer to Bulletins Live to get the use restrictions for your area.

Black-Footed Ferret
(in CO, KS, MT, NM, SD)

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Habitat and Range	Use Restrictions
<ul style="list-style-type: none">□ Habitat: same as prairie dog species<ul style="list-style-type: none">▣ Short, midgrass prairie 	<ul style="list-style-type: none">• Habitat Use Restrictions: No use allowed in re-introduction areas• The Black-footed Ferret Coordinator must be contacted at (970) 897-2730 ext. 224, if black-footed ferrets are found <u>anytime, before, during, or after</u> application, or during carcass searches

Black-footed ferrets are listed as endangered by the FWS.

The black-footed ferret depends on prairie dogs for food and their burrows for shelter. Because of this, the route of exposure for the black-footed ferret is through direct consumption of poisoned prairie dogs. To prevent this exposure, bulletins are in place to prohibit the use of these products in ferret reintroduction areas.

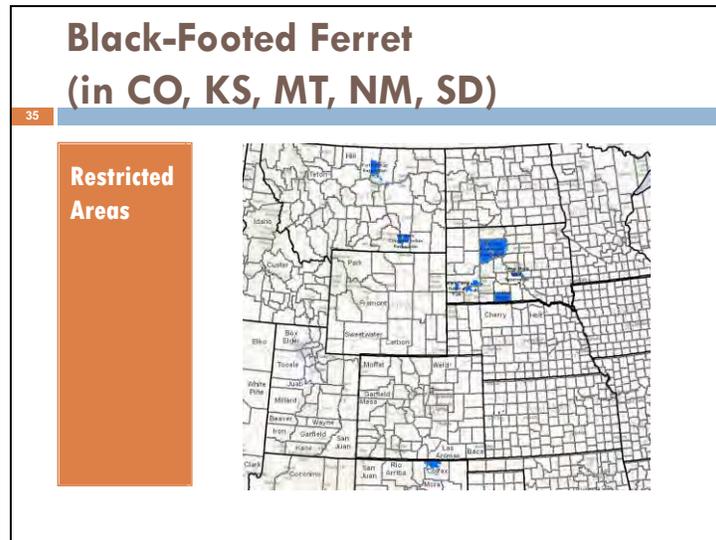
[Additional Information:

Despite significant recovery successes, the black-footed ferret remains one of the most endangered animals in the world. In the mid 1980s, less than 20 individuals were known to exist. These ferrets provided the foundation for a successful breeding and reintroduction program. However, additional reintroduction sites are needed for their recovery.

Their habitat primarily occurs in the short, midgrass prairie that is present in the North American grassland.

Midgrass, or mixed-grass, prairie, supports both bunchgrasses and sod-forming grasses, and is the most extensive prairie subtype and occupies the central part of the prairie region.

The historic range spanned western North America's intermountain and prairie grasslands extending from Canada to Mexico.]



No use allowed in 13 re-introduction areas in 17 counties within 5 states (Colorado, Kansas, Montana, New Mexico, and South Dakota).

The restrictions read:

Prairie Dog Bait use is prohibited in this area.

Prairie Dog Bait use is prohibited within the Indian Reservation.

Application of prairie dog bait is prohibited within 13 current black-footed ferret reintroduction areas within the 10 state use area:

- Ft. Belknap Indian Reservation (MT)
- BLM 40 complex (MT)
- UL Bend National Wildlife Refuge (MT)
- Northern Cheyenne Indian Reservation (MT)
- Cheyenne River Indian Reservation (SD)
- Lower Brule Indian Reservation (SD)
- Rosebud Indian Reservation (SD)
- Custer State Park (SD)
- Wind Cave National Park (SD)
- Badlands National Park (SD) which includes parts of the Pine Ridge Reservation
- Conata Basin (SD)
- Logan County (KS)
- Vermejo Park Ranch (NM)

Preble's Meadow Jumping Mouse (in CO, WY)

36

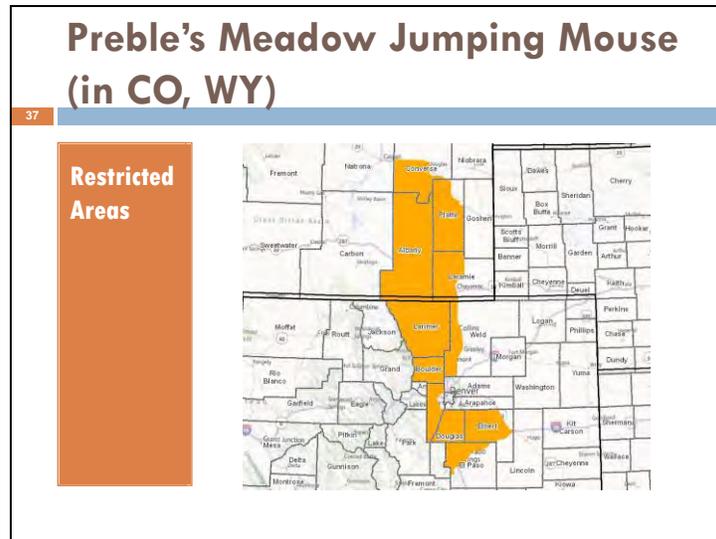
Habitat and Range	Restrictions
<ul style="list-style-type: none">□ Lives primarily in heavily vegetated, shrub dominated streamside habitats□ Also along adjacent upland habitats along the foothills of southeastern WY south to CO Springs along the eastern edge of the Front Range of CO□ Eastern boundary is likely defined by the dry shortgrass prairie	<ul style="list-style-type: none">□ Timing Restrictions: Delayed start of application (Nov. 1st) to ensure they are hibernating <div style="text-align: center;"></div>

The Preble's meadow jumping mouse is listed as threatened by the FWS.

The Preble's meadow jumping mouse could be exposed through direct consumption of the bait. To prevent this exposure, bulletins are in place to prohibit the use of these products when the species is active.

[Additional information:

Typical habitat for Preble's meadow jumping mouse is comprised of well-developed plains, riparian (or streamside) vegetation with adjacent, relatively undisturbed grassland communities and a nearby water source. These riparian areas include a relatively dense combination of grasses, forbs, and shrubs. Preble's meadow jumping mice are known to regularly range outward into adjacent uplands to feed and hibernate.]



Prairie Dog Bait use is limited to the period November 1 through March 15 in 7 counties in Colorado and in 4 counties in Wyoming.

For the Preble's meadow jumping mouse, the application of prairie dog bait is delayed in the fall by one month, until November 1. By delaying the start of the application, the product is only applied during the Preble's meadow jumping mouse's hibernation period. This minimizes the risk of the Preble's meadow jumping mouse eating the bait.

Grizzly Bear (in MT)

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Habitat and Range	Use Restrictions
<ul style="list-style-type: none">□ Spring: Lower elevations such as<ul style="list-style-type: none">□ next to waterways□ wet meadows□ alluvial plains□ Summer and fall: Higher elevation forests, meadows, and open grassy timber sites□ Now occupy only 5 ecosystems in ID, MT, WA and WY in the lower 48 states	<ul style="list-style-type: none">□ Delayed start: Dec. 1st (after hibernation); Early end date: March 1st



The grizzly bear is listed as threatened.

The grizzly bear could be exposed through direct consumption of the bait or by eating poisoned wildlife. To prevent this exposure, bulletins are in place to prohibit the use of these products when the species is active.

[Additional Information:

The grizzly bear uses low level riparian sites located next to rivers and waterways. Alluvial plains are characterized by areas with deposits of clay, silt, gravel and sand from water flowing downstream.

Meadows, shrubfields, and low- and high-elevation riparian communities are also important habitat for the grizzly bear.

Historically, grizzly bears roamed between the Pacific Ocean and the Great Plains. Today, with the western United States inhabited by millions of Americans, only a few small corners of grizzly country remain. While self-sustaining populations of grizzlies still inhabit Alaska and Canada, only about 1,200-1,400 wild grizzlies survive in the Lower 48 states. Grizzlies remain in only five ecosystems in the States of Montana, Idaho, Washington and Wyoming -- designated as the North Cascades, Selkirk, Cabinet-Yaak, Northern Continental Divide, and Yellowstone recovery zones.]

Northern Aplomado Falcon (in NM and TX)

40



Habitat

Habitat includes:

- palm and oak savannahs
- various desert grasslands
- open pine woodlands

Essential habitat elements are:

- open terrain with scattered trees
- relatively low ground cover
- an abundance of insects
- small to medium-sized birds
- a supply of nest sites

Special Actions

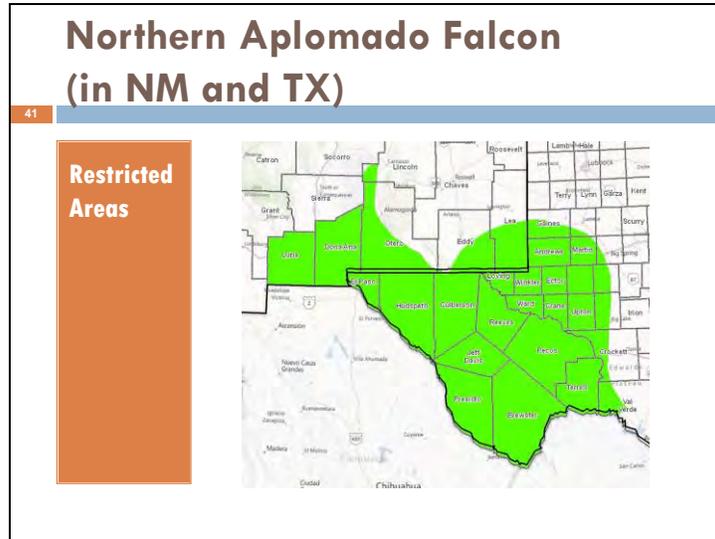
- In New Mexico and Texas, *if indicated for your specific county*, USFWS must be contacted prior to use to find out where the falcons occur:
 - New Mexico: (505) 346-2525
 - Texas: (817) 277-1100
- If necessary, leave a message including name and phone number.
- If USFWS does not respond within three business days, applicator can apply bait.

The northern aplomado falcon is listed as endangered.

The northern aplomado falcon could be exposed through direct consumption of poisoned wildlife. To prevent this exposure, bulletins are in place to provide additional information to the applicator about the falcon and where it's located.

[Additional information:

Habitat is variable throughout the species range and includes palm and oak savannahs, various desert grassland associations, and open pine woodlands. Within these variations, the essential habitat elements appear to be open terrain with scattered trees, relatively low ground cover, an abundance of insects and small to medium-sized birds, and a supply of nest sites.]



Bulletins exist for 6 counties in NM (Luna, Dona Ana, Otero, Lincoln, Eddy & Lea) and 25 counties in TX (Andrews, Brewster, Crane, Crockett, Culberson, Dawson, Ector, El Paso, Gaines, Glasscock, Howard, Hudspeth, Jeff Davis, Loving, Martin, Midland, Pecos, Presidio, Reagan, Reeves, Terrell, Upton, Val Verde, Ward, Winkler).

In these counties, USFWS must be contacted prior to use to find out where the falcons occur:

- New Mexico: (505) 346-2525
- Texas: (817) 277-1100

If necessary, leave a message including name and phone number.

If USFWS does not respond within three business days, applicator can apply bait.

New Mexico's Endangered Species of Concern

42

- Black-footed Ferret (previously discussed)
- Northern Aplomado Falcon (previously discussed)
- Chiricahua leopard frog
- Jaguar
- New Mexican ridge-nosed rattlesnake
- Mexican Gray Wolf
- Mexican Spotted Owl



Use is prohibited within 5 counties in southwestern New Mexico (Catron, Grant, Sierra, Hidalgo and Socorro) to protect five species in New Mexico:

- Chiricahua leopard frog
- Jaguar
- New Mexican ridge-nosed rattlesnake
- Mexican wolf
- Mexican spotted owl

Use is also prohibited in parts of Colfax and Taos counties to protect the black-footed ferrets as described previously.

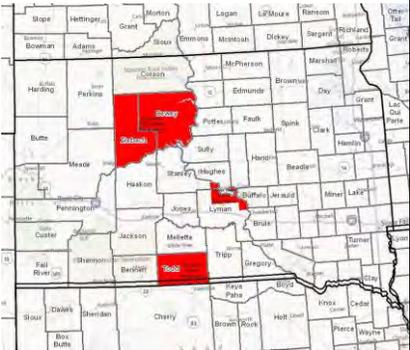
Northern Aplomado falcons are found in 6 counties in NM (Dona Ana, Eddy, Lea, Lincoln, Luna and Otero) so the same steps must be taken in those counties as described in the previous slide.

Geographic Restrictions in Indian Country: SOUTH DAKOTA

43

Black-tailed prairie dog bait may not be applied within the boundaries of the following Indian Reservations:

- Cheyenne River
- Lower Brule
- Rosebud



The map displays the county boundaries of South Dakota. Three specific areas are highlighted in red, corresponding to the Indian Reservations mentioned in the text: Cheyenne River, Lower Brule, and Rosebud. The map also shows major cities and towns across the state.

[Note to presenter: Skip slide if you are not giving the presentation in South Dakota]

Black-tailed prairie dog bait may not be applied within the boundaries of the following Indian reservations in SD:

- Cheyenne River
- Lower Brule
- Rosebud

Because these areas contain black-footed ferret re-introduction areas.

Additional tribes might have specific ordinances prohibiting the use of anticoagulant prairie dog bait on their lands. One example of this is the Pine Ridge Indian Reservation.

Geographic Restrictions in Indian Country: MONTANA

44

Black-tailed prairie dog bait may not be applied within the boundaries of the following Indian reservations:

- Ft. Belknap
- Northern Cheyenne
- Blackfeet
- Crow



[Note to presenter: Skip slide if you are not giving the presentation in Montana]

Black-tailed prairie dog bait may not be applied within the boundaries of the following Indian reservations in MT:

- Ft. Belknap
- Northern Cheyenne

Because these areas contain black-footed ferret re-introduction areas.

As directly specified on the product label, use is also prohibited within 2 additional Indian reservations:

- Blackfeet
- Crow

45 **Before Application**

- Consult Bulletins Live!
- Follow Geographically Specific Use Restrictions for Specific Listed Species
- **Perform Site Assessment**
- Conduct Line Transects

Site Assessment

46

- Identify active burrows. Look for:
 - Prairie dog feces
 - Openings with freshly turned earth without:
 - Leaves
 - Seeds
 - Spider webs
 - Other debris
- Only apply to active burrows
- If black-footed ferrets are found during site assessment, the Black-footed Ferret Coordinator must be contacted at (970) 897-2730 ext.224

Only apply bait to active burrows. If the burrow is not active, DO NOT APPLY. Some signs of active burrows include prairie dog feces and freshly turned earth without leaves, seeds, spider webs and other debris.

If black-footed ferrets are found during site assessment, do not apply the product and call the Black-footed Ferret Coordinator at (970) 897-2730 ext. 224.

47 **Before Application**

- Consult Bulletins Live!
- Follow Geographically Specific Use Restrictions for Specific Listed Species
- Perform Site Assessment
- **Conduct Line Transects**

Line Transect Method

48

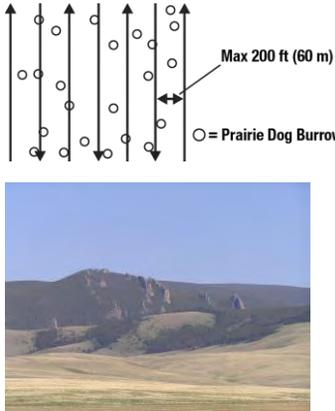
- [Insert Line Transect Method Video Here]

[If line transect method video is being used, skip the next 3 slides and go to the slide 52: Applying the product. Refer audience to the SOP on EPA's website and the SOP should be available as part of this training's materials]

Line Transect Method

49

- Divide the treated area into line-transects (i.e., straight, parallel lines)
- Use GPS, landmarks, stakes or flags to define the width & ends of the transects on opposite ends of the treated area
- Use these tools within and over the length of the treated area to ensure a thorough inspection



The diagram illustrates the line transect method with four vertical parallel lines. Arrows at the top and bottom of each line indicate the direction of travel. Small circles representing burrows are scattered along the lines. A double-headed arrow between two lines is labeled 'Max 200 ft (60 m)'. A legend below the diagram shows a circle with the text '= Prairie Dog Burrow'. Below the diagram is a photograph of a rolling prairie landscape under a clear blue sky.

[The SOPs for conducting line transects should be available as part of the training material and on EPA's website]

It's recommended that line transects be conducted before applying the pesticide to make sure that

- 1) Applicators are familiar with the area where they'll be applying the rodenticide
- 2) Mandatory carcass searches can be conducted efficiently and effectively post-application

Start by dividing the treated area into line-transects (i.e., straight, parallel lines), and use GPS, landmarks, stakes or flags to define the width and ends of the transects on opposite ends of the treated area. These tools should be used as needed *within and over* the length of the treated area to ensure a thorough inspection, and allow the observer to easily identify the line and return to it after moving off to collect carcasses or excess bait.

Line Transect Method

50

- Set transects at a distance which will allow for unobstructed view
- Use natural breaks and create new transects at:
 - fence lines,
 - hedgerows,
 - ditches,
 - washouts/arroyos,
 - hillcrests

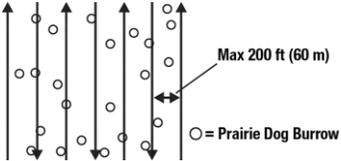


Transects should be set at a distance which will allow for unobstructed view, which may mean using natural breaks and creating a new transect at fencelines, hedgerows, ditches, washouts or arroyos, and/or hill crests, and as needed in more densely-vegetated areas.

Line Transects

51

- Transect lines must be no more than 200 feet (60 meters) apart
- Treated areas with heavier vegetation need to use closer transects.



The diagram illustrates the layout of line transects. It shows five vertical lines, each with an upward-pointing arrow at the top and a downward-pointing arrow at the bottom. Small circles representing prairie dog burrows are scattered along these lines. A horizontal double-headed arrow between two adjacent lines is labeled "Max 200 ft (60 m)". A legend below the diagram indicates that a circle represents a "Prairie Dog Burrow".

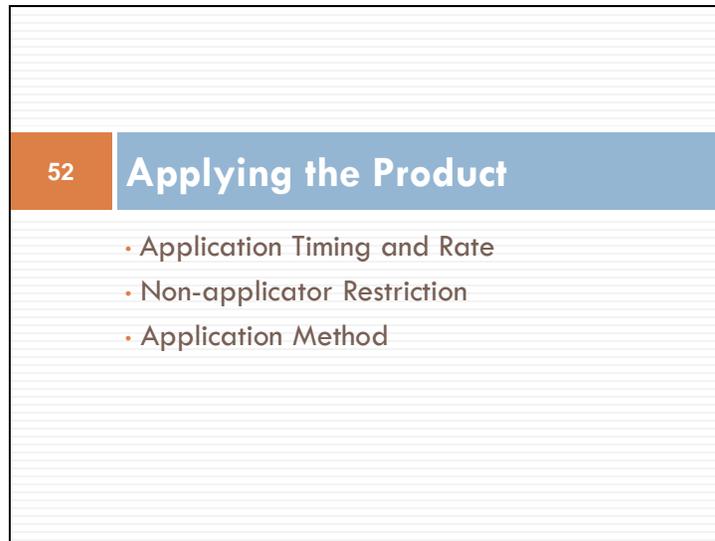
Evaluate the colony for carcass visibility by placing a glove or other small brown item in the vegetation and walking away from it to a distance at which the item is not easily seen.

Measure that distance. Repeat several times in representative habitat(s). Double the minimum visibility distance to determine appropriate spacing between transect lines.

Consider the time of day and the position of the sun when establishing a transect layout to maximize visibility (i.e. looking into the sun at sunrise/sunset decreases visibility).

In all cases, even on flat, unobstructed rangeland or non-crop areas, this will mean transect separation of not more than 200 feet (60 meters), to ensure clear visibility, and not missing any portion of the treated area. Treated areas with heavier vegetation need to use closer transects separations to ensure clear visibility, and not miss any portion of the treated area.

Detailed instructions on the line transect method can be found in the SOP.



52 **Applying the Product**

- Application Timing and Rate
- Non-applicator Restriction
- Application Method

This section will cover information you need while applying the product

Application Timing and Rate	
Application Timing	Application Rate
<ul style="list-style-type: none">□ October 1st – March 15th <i>unless otherwise specified in Bulletins Live!</i>□ Pick one anticoagulant active ingredient (chlorophacinone or diphacinone) to apply for each use season	<ul style="list-style-type: none">□ Application rate: ¼ cup of bait (about 2 ounces or 53-56 grams) per active burrow

As previously stated, EPA’s [Bulletins Live! website \(www.epa.gov/espp/bulletins.htm\)](http://www.epa.gov/espp/bulletins.htm) must be consulted for any timing or geographic pesticide use limitations.

Do not use any other rodenticides containing anticoagulants (chlorophacinone or diphacinone) in BTPD towns during the treatment period allowed on the label.

The purpose of applying only 1 active ingredient is to limit additional secondary exposure and cumulative effects.

The application rate is ¼ cup of bait (about 2 oz or 53-56 g) pre active burrow)

54

Applying the Product

- Application Timing and Rate
- **Non-applicator Restriction**
- Application Method

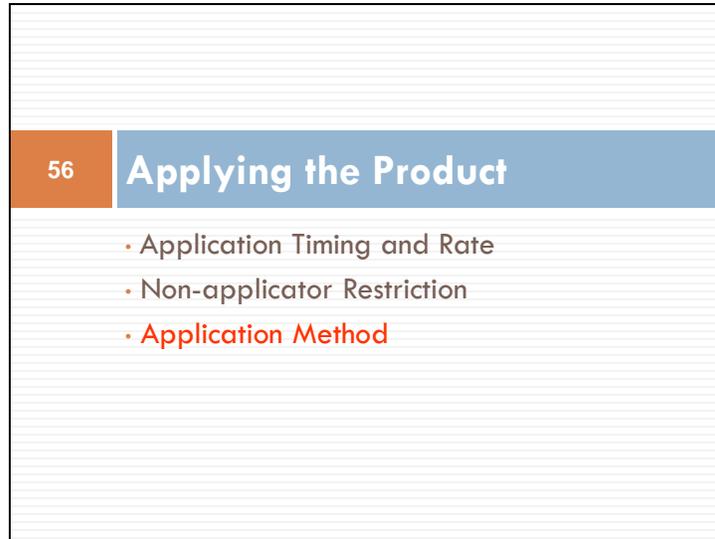
Non-applicator Restriction

55

Do not allow children, pets, domestic animals or people not involved in the application to be in the area where product is being applied.

A photograph showing a white horse in a fenced area. A person is riding the horse, and another person is standing nearby. The background includes trees and a building with a red roof.

This non-applicator restriction appears on the label.



56 **Applying the Product**

- Application Timing and Rate
- Non-applicator Restriction
- **Application Method**

Application Methods

57

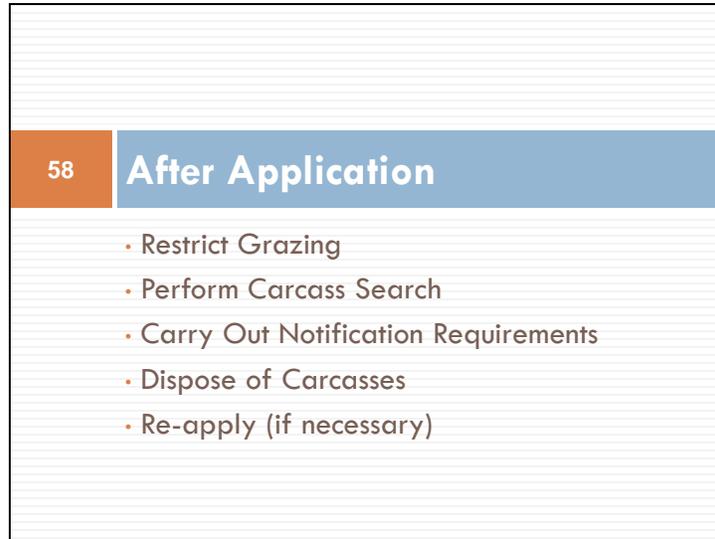
Hand Application	Mechanical Application
<ul style="list-style-type: none">▣ Treat ACTIVE burrows ONLY▣ Apply at least 6 inches down the active burrow▣ Recover spilled bait	<ul style="list-style-type: none">▣ Treat ACTIVE burrows ONLY▣ Apply bait with mechanical bait application machine that is properly calibrated to ensure the right amount of bait is applied▣ Apply at least 6 inches down the active burrow▣ Recover spilled bait



Apply bait by hand scoop or a mechanical bait application machine that is designed, constructed and operated in a manner that ensures that bait is properly placed at least 6 inches down the prairie dog burrows.

With both application methods, make sure no bait is left on the soil surface or less than 6 inches down the burrow. You must retrieve and dispose of any bait spilled above ground or placed less than 6 inches down the burrow entrance regardless of application method.

Also be sure to follow the personal protective equipment guidelines on the label.



58 **After Application**

- Restrict Grazing
- Perform Carcass Search
- Carry Out Notification Requirements
- Dispose of Carcasses
- Re-apply (if necessary)

This section of the training will cover actions you will need to perform after you apply the product.

Grazing Restriction

59

- Do not allow livestock to graze in treated areas for 14 days after treatment and when no bait is found above ground.



Prairie dogs may kick up bait after application, which is why there is a two week grazing restriction in the area where the product is applied.

After Application

- Restrict Grazing
- **Perform Carcass Search**
- Carry Out Notification Requirements
- Dispose of Carcasses
- Re-apply (if necessary)

Carcass Search

61

- Carcass searches must be performed using the line-transect method that completely covers the treated area
- Applicator is responsible for conducting the search, however the applicator or someone under their direct supervision can physically conduct the search
- Carcass collection should occur by late afternoon to reduce the chances of nocturnal animals finding carcasses

[Detailed guidance on how to conduct a line-transect search will be online in the quick resources box of EPA's Anticoagulant web page and in the training material entitled **Carcass Search & Recovery Guidelines for Black Tailed Prairie Dogs**]

Carcass search may be conducted by walking the line transects of the search area, or by driving a vehicle less than 4 mph.

Applicator is responsible for conducting the search, however the applicator or someone under their direct supervision can physically conduct the search.

Observe only the area to the left side of the line of travel. Then turn around, proceeding back over the same line again, inspect the left (opposite) side of the line of travel.

Carcass collection should occur by late afternoon to reduce the chances of nocturnal animals finding carcasses.

Although not specifically required on the label, more frequent carcass collections (for example, 2x a day) will reduce the exposure to daytime sight predators like hawks and eagles.

Carcass Search

62

- Frequency: 1-2 day intervals for at least 14 days but longer if carcasses are still being found.
- A greater frequency of searches will help to minimize risks of secondary poisoning to predators and scavengers.
- Black-tailed prairie dog carcasses must be properly disposed of, to make them unavailable to predators/scavengers

Check the site within 4 days post-application and return at 1-2 day intervals for a least 2 weeks (or longer if carcasses are still being found) to collect and dispose of bait less than 6 inches below the surface and dead/dying prairie dogs.

Although not specifically required by the label, a longer duration of searches (for example, at least 5 consecutive days of transect efforts with no observances of above ground animals or bait) would help to minimize risks of secondary poisoning to predators and scavengers, given the variability in scavenger removal.

When a dead/impaired animal or bait is detected, move off the line to address the object and return to the line at the point it was left, then continue to traverse the line and visually scan as before.

If poisoned wildlife is found, follow the notification requirements detailed in the next few slides.

63

After Application

- Restrict Grazing
- Perform Carcass Search
- **Carry Out Notification Requirements**
- Dispose of Carcasses
- Re-apply (if necessary)

Notification Requirements

64

Steps to follow if dead/dying non-target species are found:

- Call the National Pesticide Information Center: (800) 858-7378
- If a Federally Listed species is found, call:
 - (303) 236-7540 in CO, KS, MT, ND, SD, NE or WY
 - or
 - (505) 248-7889 in NM, OK or TX
 - Check www.fws.gov/endangered for listed species
- If black-footed ferrets are found before, during or after applications, or carcass searches, call the Black-footed Ferret Coordinator: (970) 897-2730 ext. 224



According to the product label, all dead or dying non-target animals must be reported to the National Pesticide Information Center 1-800-858-7378 as soon as possible.

Any apparently injured or sick Federally listed species or bird, raptor, or eagle must also be immediately reported by calling 303-236-7540 (if located in Kansas, Nebraska, the Dakotas, Montana, Colorado, or Wyoming) or 505-248-7889 (if located in Texas, New Mexico, or Oklahoma).

The Black-footed Ferret Coordinator must also be contacted if ferrets are found during bait applications or carcass searches at 970-897-2730 X224.

These phone numbers appear on the product label.

65 **After Application**

- Restrict Grazing
- Perform Carcass Search
- Carry Out Notification Requirements
- **Dispose of Carcasses**
- Re-apply (if necessary)

Proper Carcass Disposal

66

To help prevent secondary poisoning, bury carcasses:

- On-site in holes dug at least 18 inches deep or
- In inactive burrows
- Pack the hole with soil to avoid scavenging
- By other methods allowed by state and local authorities to insure inaccessibility by scavengers

- Removal of carcass from site is the preferred option to reduce secondary poisoning



According to the label language:

In order to limit the availability of dead and dying target and non-target wildlife to listed species of concern, the label requires removal or burial of any poisoned prairie dog carcass. This will decrease the likelihood that non-target animals will consume poisoned prairie dogs.

Dead prairie dogs must be buried on site in holes dug at least 18 inches deep or in inactive burrows (no longer being used by prairie dogs or other species). In addition, the hole or burrow must be packed with soil to avoid scavenging by non-target animals.

If burial is not practical (due to the ground being frozen, etc.) and other disposal methods are allowed by state and local authorities, collected carcasses may be disposed of by other methods to insure that the carcasses are inaccessible to scavengers.

Although not specifically stated on the label, the most effective method for disposing of carcasses and minimizing risks of secondary poisoning to predators and scavengers is to dispose of the collected carcasses by state-approved methods that ensure the carcasses are inaccessible.

67

After Application

- Restrict Grazing
- Perform Carcass Search
- Carry Out Notification Requirements
- Dispose of Carcasses
- **Re-apply (if necessary)**

Re-Application

68

- If black-tailed prairie dog activity persists several weeks or months after the bait was applied, a second application may be made by re-treating burrows in the same
 - manner,
 - time period,
 - procedure,
 - and active ingredient as the first application.



You MUST use the same active ingredient used during the first application if you need to reapply. Apply the same product in the same way as you applied it the first time. Be sure that you follow the correct Bulletin for the month of your pesticide application.

Only 2 applications can be made per season.

69 **Recap!**

Product Use Highlights

70

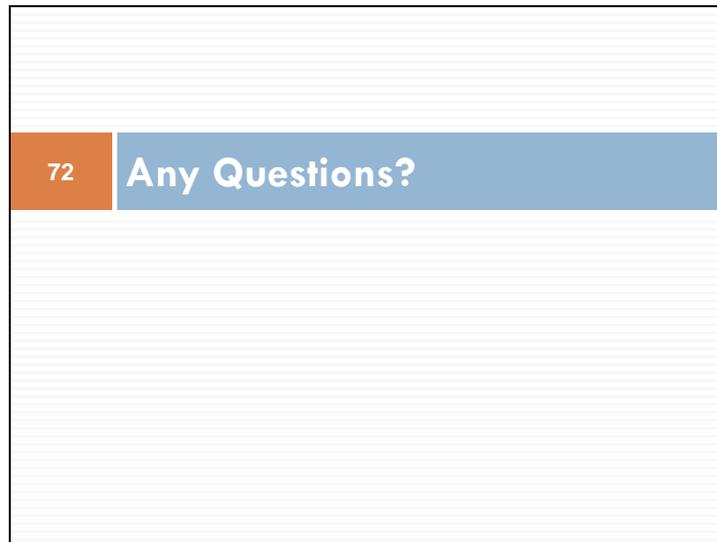
- Target Pest: Black-tailed prairie dog
- Product Classification: Restricted Use Pesticide (RUP)
- 10 States Where Used: CO, KS, MT, ND, NE, NM, OK, SD, TX and WY
- Use Site: Rangeland and adjacent non-crop areas
- Application Method: Apply at least 6 inches down active burrows
- Application Season: October 1 to March 15 (check Bulletins Live!)
- Grazing Restriction: No grazing for 14 days post-application
- Follow-up: Search for carcasses for at least 14 days post-application

Key Use Changes

71

- Consult EPA's Bulletins Live! website for your county and month in which you intend to apply
- Use is prohibited within all black-footed ferret reintroduction areas
- Delayed application date in Preble's meadow jumping mouse areas: 11/1
- Restricted application dates in grizzly bear habitat (Montana): start date, 12/1; early end date, 3/1
- Use line-transect method to perform carcass searches
- Notification Requirements

Slide 72



Slide 60