CERTIFIED PESTICIDE APPLICATOR TRAINING FOR ANTICOAGULANT RODENTICIDES TO CONTROL BLACK-TAILED PRAIRIE DOGS

2015

Training Outline

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

Goals for the Training

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

Training Topics

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

Laws Protecting Wildlife

- 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!

Penalties for Violating the Endangered Species Act

- 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

- 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

Bald and Golden Eagle Protection Act

- 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.

Training Topics

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

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

Product Use Highlights

- 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

Training Topics

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

Key Use Changes

- Consult EPA's Bulletins Live! Two website for the area 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 Colorado and Wyoming: 11/1
- Restricted application dates in Montana: start date, 12/1; early end date, 3/1

Key Use Changes, continued

- 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

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

Training Topics

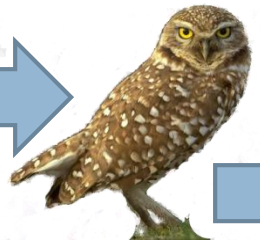
- Laws Protecting Wildlife and Penalties
- Product Use Highlights
- Key Use Changes
- Anticoagulant Rodenticide Concerns
- Exposure

Exposure Routes

Rodenticide Bait is Applied to Burrows

Primary Exposure: Bait is Eaten Directly

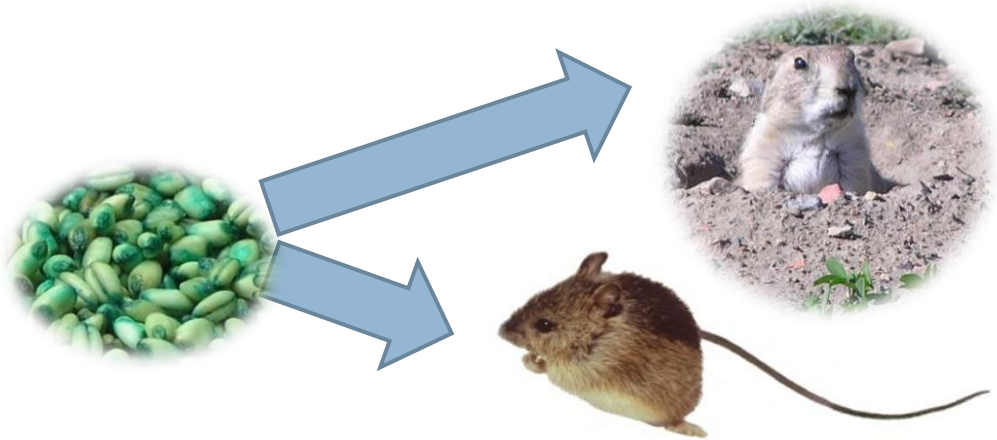
Secondary Exposure: Predator Eats Poisoned Wildlife



Tertiary Exposure: Poisoned Predator is Eaten By Another Species

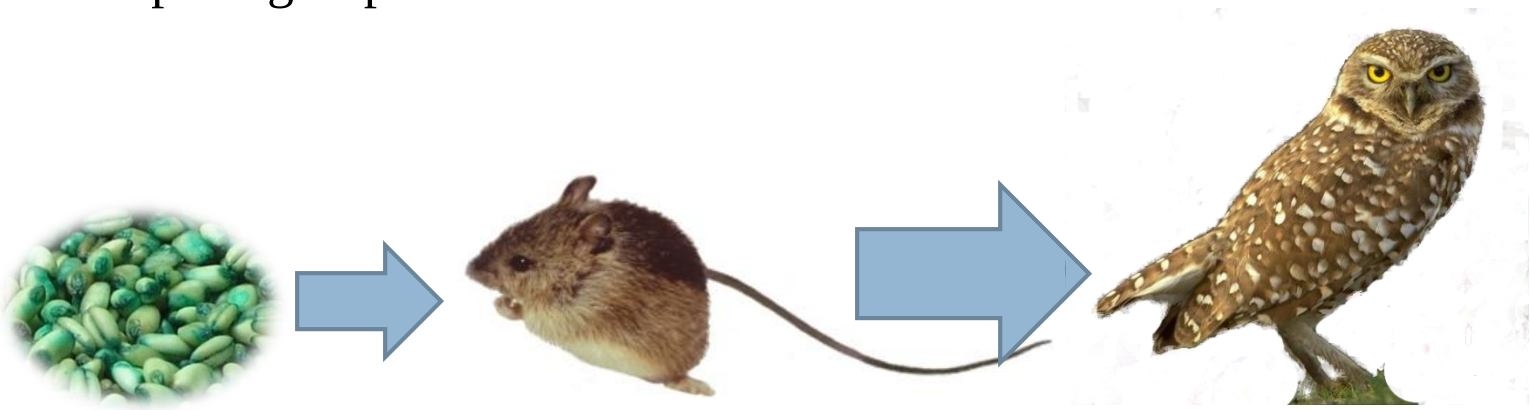
Primary Exposure

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



Secondary Exposure Mitigation

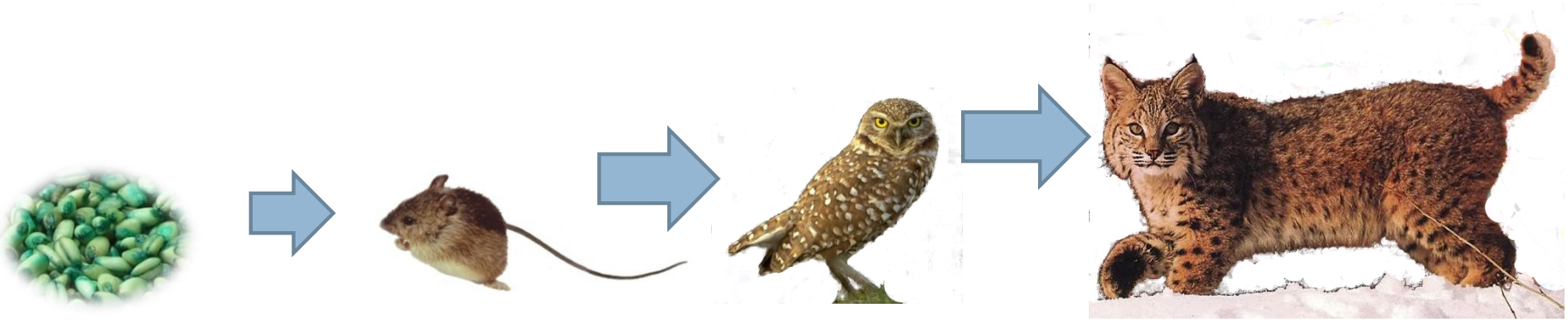
- Secondary Exposure: consumption of a poisoned black-tailed prairie dog or other poisoned wildlife by a non-target species
  - Example: A scavenger/predator eats a mouse
  - Mitigation Action:
    - Conducting line transects and carcass searches
    - Disposing of poisoned carcasses



Tertiary Exposure Mitigation

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



Before Application

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

EPA's Bulletins Live!

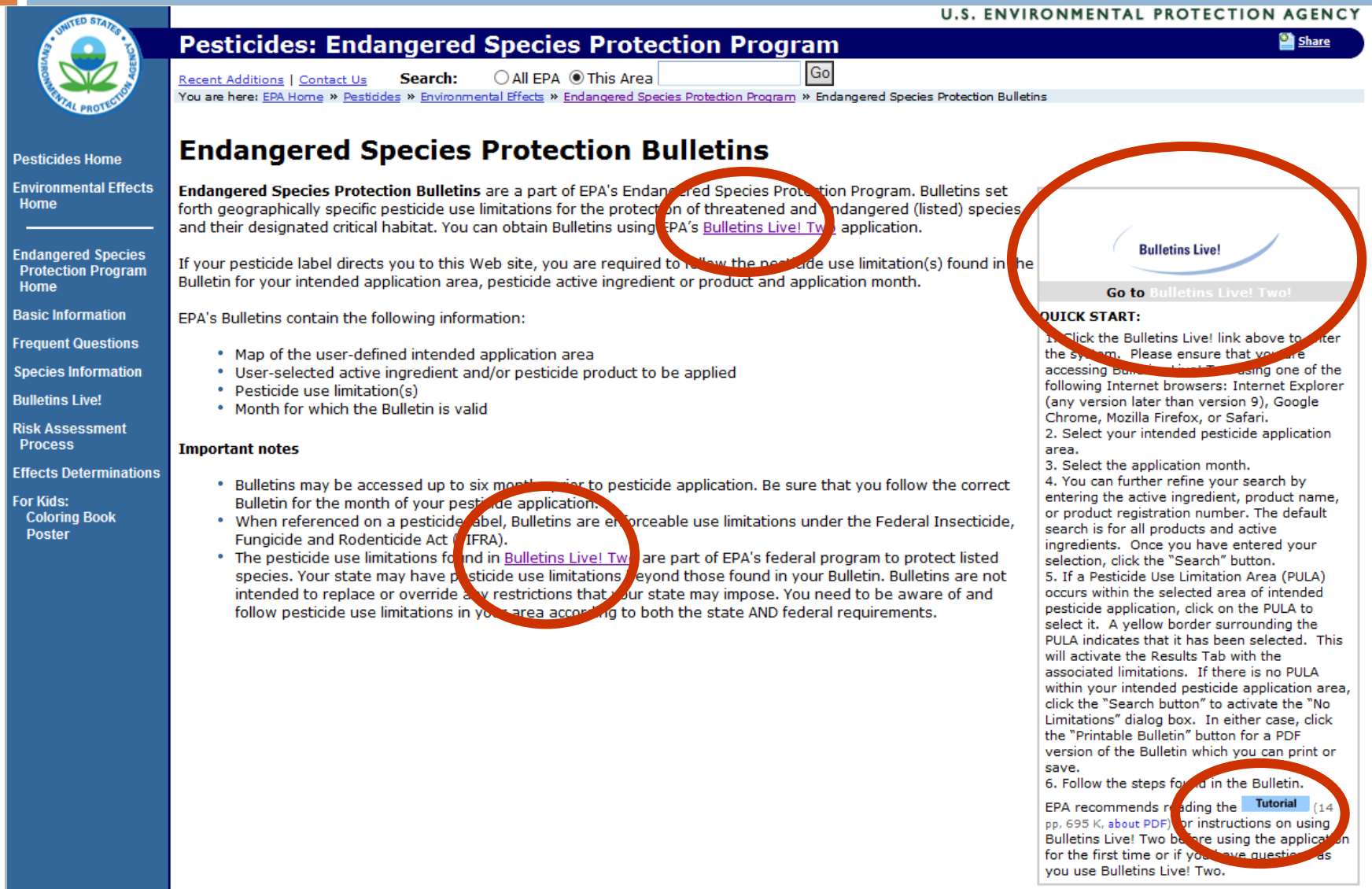
- Consult EPA's Bulletins Live! Two website for geographic restrictions or limitations currently in place for CO, KS, MT, NM, SD, WY and TX
  - www.epa.gov/espp/bulletins.htm
- Bulletins can be accessed up to six months prior to pesticide application.
- Be sure that you follow the correct Bulletin for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

EPA's Bulletins Live! Two

Steps to Access Bulletins:

1. Go to www.epa.gov/espp/bulletins.htm
2. Click on Bulletins Live! Two link
3. Zoom to the area in which you intend to apply the pesticide
4. Select your application date
5. Optional: Refine your search by entering a specific active ingredient, product name or product registration number.
6. Click on the Pesticide Use Limitation Area (PULA) to obtain a Printable Bulletin OR if no PULAs are within your intended application area a No Limitations dialog box will pop up and you can obtain a Printable Bulletin
7. Print or save the PDF version of the Printable Bulletin

Bulletins Live! Two Access Page



U.S. ENVIRONMENTAL PROTECTION AGENCY

Pesticides: Endangered Species Protection Program

Share

Recent Additions | Contact Us **Search:** ○ All EPA ◉ This Area Go

You are here: EPA Home » Pesticides » Environmental Effects » Endangered Species Protection Program » Endangered Species Protection Bulletins

- Pesticides Home
- Environmental Effects Home
- Endangered Species Protection Program Home
- Basic Information
- Frequent Questions
- Species Information
- Bulletins Live!
- Risk Assessment Process
- Effects Determinations
- For Kids: Coloring Book Poster

Endangered Species Protection Bulletins

Endangered Species Protection Bulletins are a part of EPA's Endangered Species Protection Program. Bulletins set forth geographically specific pesticide use limitations for the protection of threatened and endangered (listed) species and their designated critical habitat. You can obtain Bulletins using EPA's Bulletins Live! Two application.

If your pesticide label directs you to this Web site, you are required to follow the pesticide use limitation(s) found in the Bulletin for your intended application area, pesticide active ingredient or product and application month.

EPA's Bulletins contain the following information:

- Map of the user-defined intended application area
- User-selected active ingredient and/or pesticide product to be applied
- Pesticide use limitation(s)
- Month for which the Bulletin is valid

Important notes

- Bulletins may be accessed up to six months prior to pesticide application. Be sure that you follow the correct Bulletin for the month of your pesticide application.
- When referenced on a pesticide label, Bulletins are enforceable use limitations under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).
- The pesticide use limitations found in Bulletins Live! Two are part of EPA's federal program to protect listed species. Your state may have pesticide use limitations beyond those found in your Bulletin. Bulletins are not intended to replace or override any restrictions that your state may impose. You need to be aware of and follow pesticide use limitations in your area according to both the state AND federal requirements.

Bulletins Live!

Go to Bulletins Live! Two!

QUICK START:

1. Click the Bulletins Live! link above to enter the system. Please ensure that you are accessing Bulletins Live! Two using one of the following Internet browsers: Internet Explorer (any version later than version 9), Google Chrome, Mozilla Firefox, or Safari.
2. Select your intended pesticide application area.
3. Select the application month.
4. You can further refine your search by entering the active ingredient, product name, or product registration number. The default search is for all products and active ingredients. Once you have entered your selection, click the "Search" button.
5. If a Pesticide Use Limitation Area (PULA) occurs within the selected area of intended pesticide application, click on the PULA to select it. A yellow border surrounding the PULA indicates that it has been selected. This will activate the Results Tab with the associated limitations. If there is no PULA within your intended pesticide application area, click the "Search button" to activate the "No Limitations" dialog box. In either case, click the "Printable Bulletin" button for a PDF version of the Bulletin which you can print or save.
6. Follow the steps found in the Bulletin.

EPA recommends reading the Tutorial (14 pp, 695 K, about PDF) for instructions on using Bulletins Live! Two before using the application for the first time or if you have questions as you use Bulletins Live! Two.

Bulletins Live! Two Map Tools

Bulletins Live! Two Identifying the Application Area

Bulletins Live! Two Selecting the Application Month

INSTRUCTIONS | RESULTS

Protecting Endangered Species

Directions: This search tool provides Pesticide Use Limitation Areas (PULAs) for pesticide active ingredients and products with active Bulletins. To access Endangered Species Protection Bulletins from this search tool:

1. Zoom to your intended pesticide application area:
   a. Manually zoom to a location by dragging the map to your location and using the "+" and "-" buttons to zoom in and out, or
   b. Enter your intended pesticide application area into the Location Search Tool to automatically zoom to that location.
2. Select your Application Month.
3. Optional: Refine your search by entering a specific active ingredient or product and click the "Search" button. (Default is all active ingredients and products).
4. Click on the PULA within your intended pesticide application area to activate the Results Tab with the associated limitations and print your Bulletin. If no PULA is present, click the "Search" button to activate the "No Limitations" dialog box and print your Bulletin.
5. To complete an additional search, use the "Clear All" button to clear your current results.

Application Month:

April 2015

Active Ingredient:

All

Product Name:

Start typing Product name

-- OR --

Product Registration Number:

Type Product Registration #

SEARCH | CLEAR ALL

INSTRUCTIONS | RESULTS

Protecting Endangered Species

Directions: This search tool provides Pesticide Use Limitation Areas (PULAs) for pesticide active ingredients and products with active Bulletins. To access Endangered Species Protection Bulletins from this search tool:

1. Zoom to your intended pesticide application area:
   a. Manually zoom to a location by dragging the map to your location and using the "+" and "-" buttons to zoom in and out, or
   b. Enter your intended pesticide application area into the Location Search Tool to automatically zoom to that location.
2. Select your Application Month.
3. Optional: Refine your search by entering a specific active ingredient or product and click the "Search" button. (Default is all active ingredients and products).
4. Click on the PULA within your intended pesticide application area to activate the Results Tab with the associated limitations and print your Bulletin. If no PULA is present, click the "Search" button to activate the "No Limitations" dialog box and print your Bulletin.
5. To complete an additional search, use the "Clear All" button to clear your current results.

Application Month:

April 2015

April 2015
May 2015
June 2015
July 2015
August 2015
September 2015
October 2015

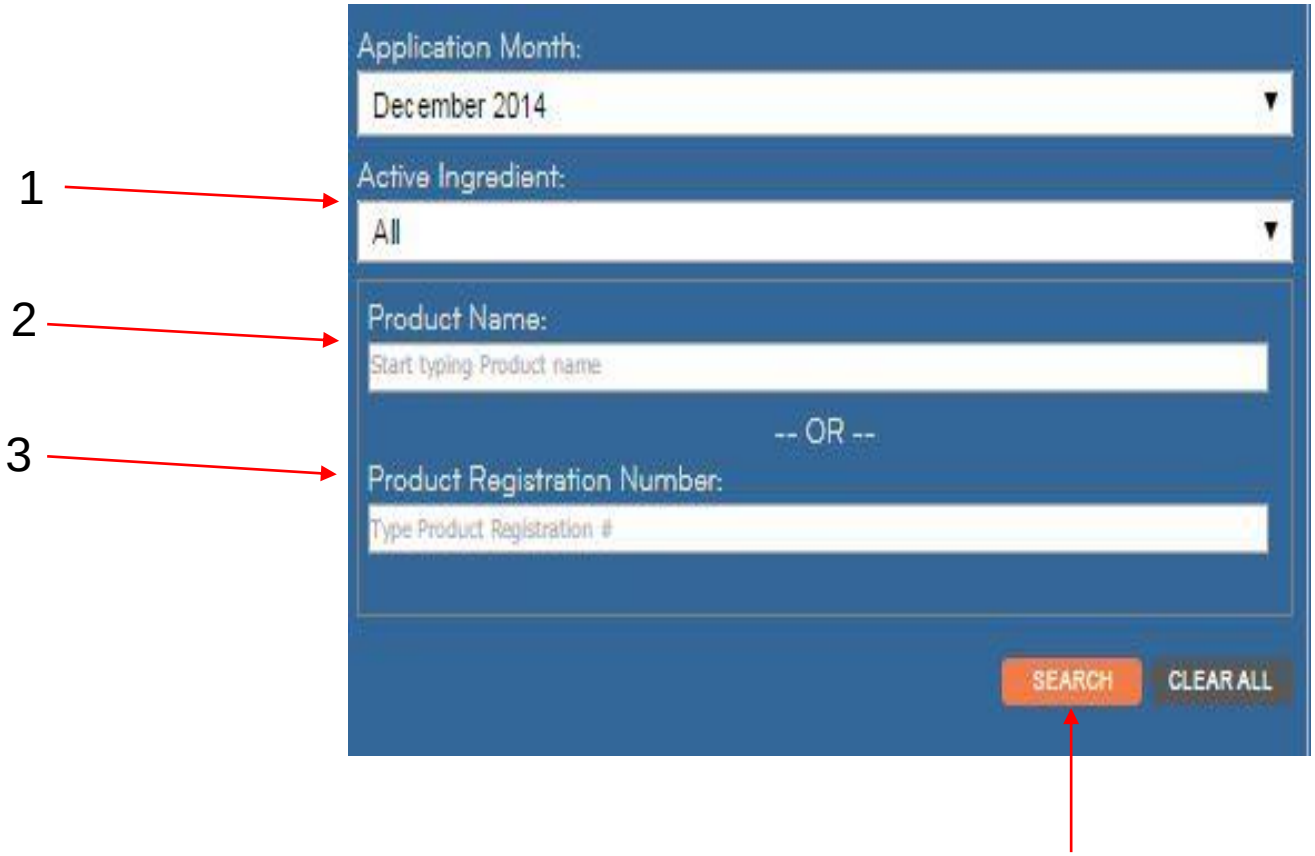
-- OR --

Product Registration Number:

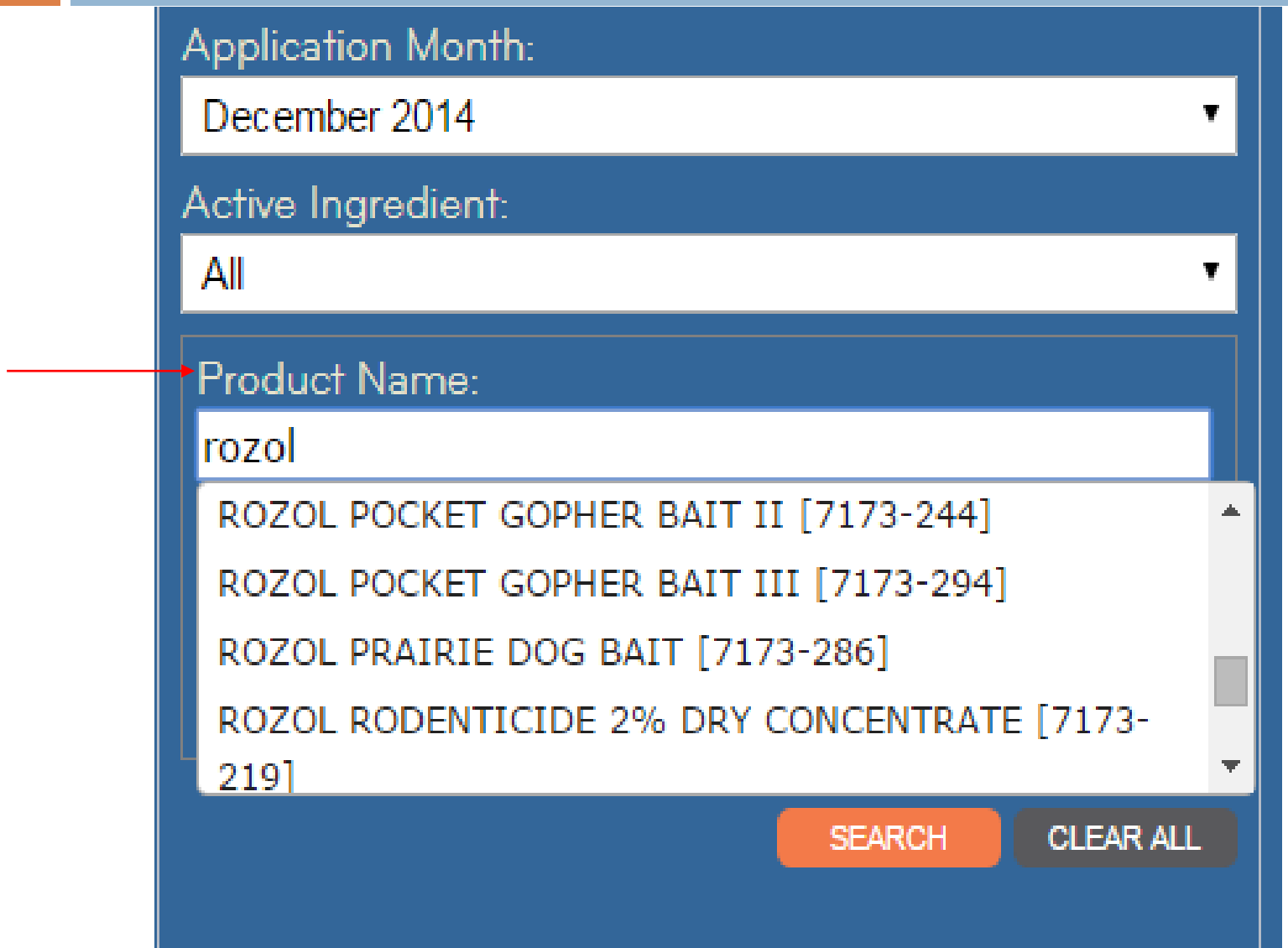
Type Product Registration #

SEARCH | CLEAR ALL

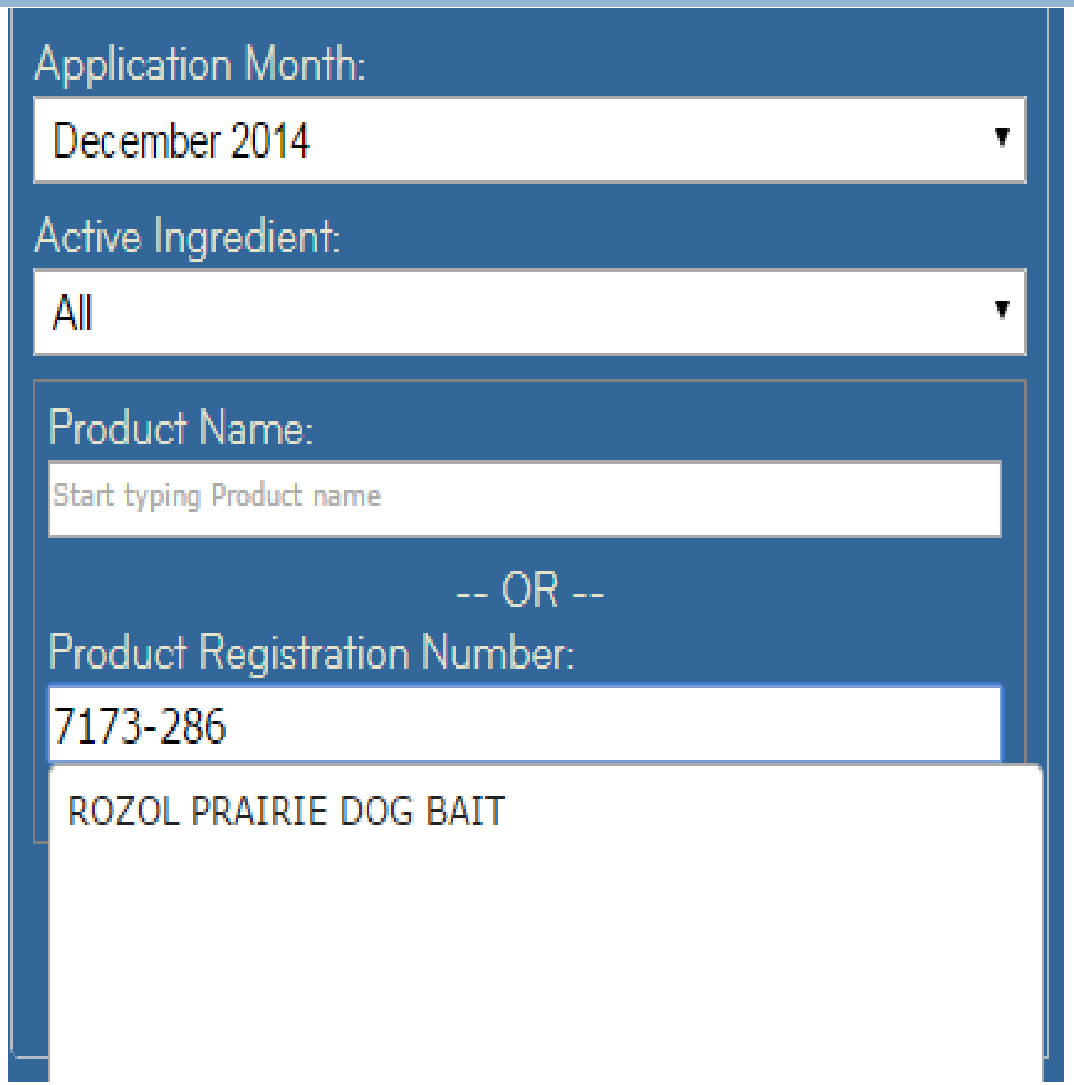
Bulletins Live! Two Refining Your Search (Optional)



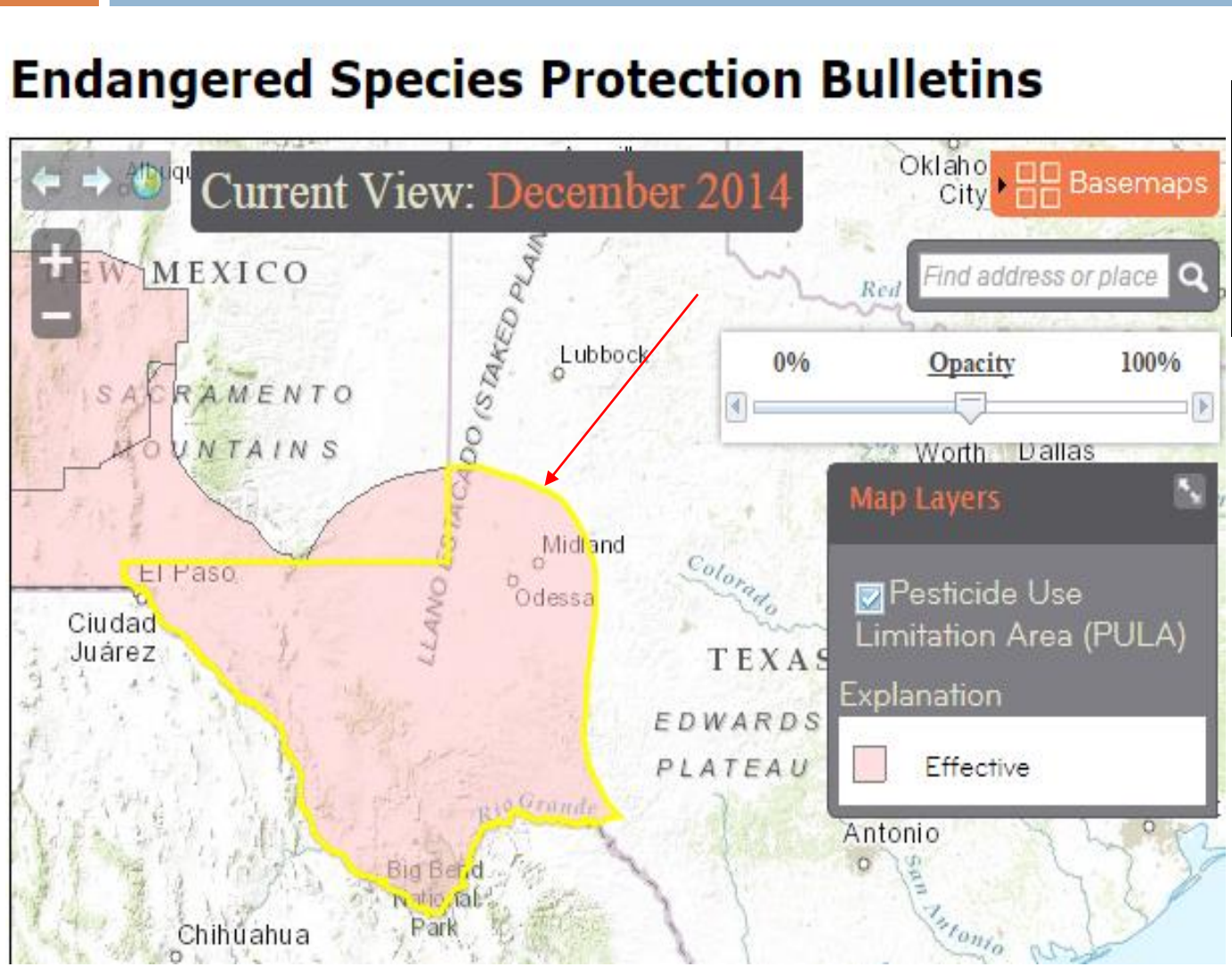
Bulletins Live! Two Refining Your Search: Product Name Search



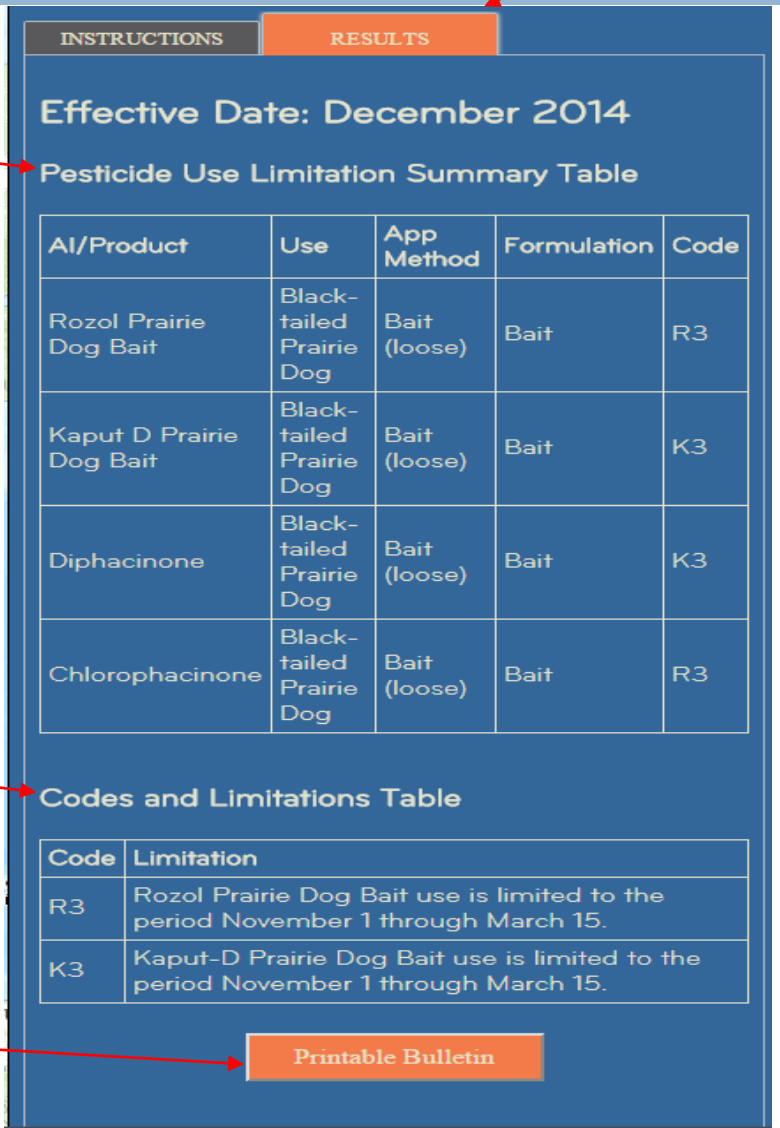
Bulletins Live! Two Refining Your Search: Product Registration Number Search



Bulletins Live! Two Selecting a PULA



Bulletins Live! Two Results Tab



INSTRUCTIONS | RESULTS

Effective Date: December 2014

Pesticide Use Limitation Summary Table

AI/Product	Use	App Method	Formulation	Code
Rozol Prairie Dog Bait	Black-tailed Prairie Dog	Bait (loose)	Bait	R3
Kaput D Prairie Dog Bait	Black-tailed Prairie Dog	Bait (loose)	Bait	K3
Diphacinone	Black-tailed Prairie Dog	Bait (loose)	Bait	K3
Chlorophacinone	Black-tailed Prairie Dog	Bait (loose)	Bait	R3

Codes and Limitations Table

Code	Limitation
R3	Rozol Prairie Dog Bait use is limited to the period November 1 through March 15.
K3	Kaput-D Prairie Dog Bait use is limited to the period November 1 through March 15.

Printable Bulletin

Bulletins Live! Two No PULA Within the Intended Application Area

Application Month:

December 2014

Active Ingredient:

All

Product Name:

Start typing Product name

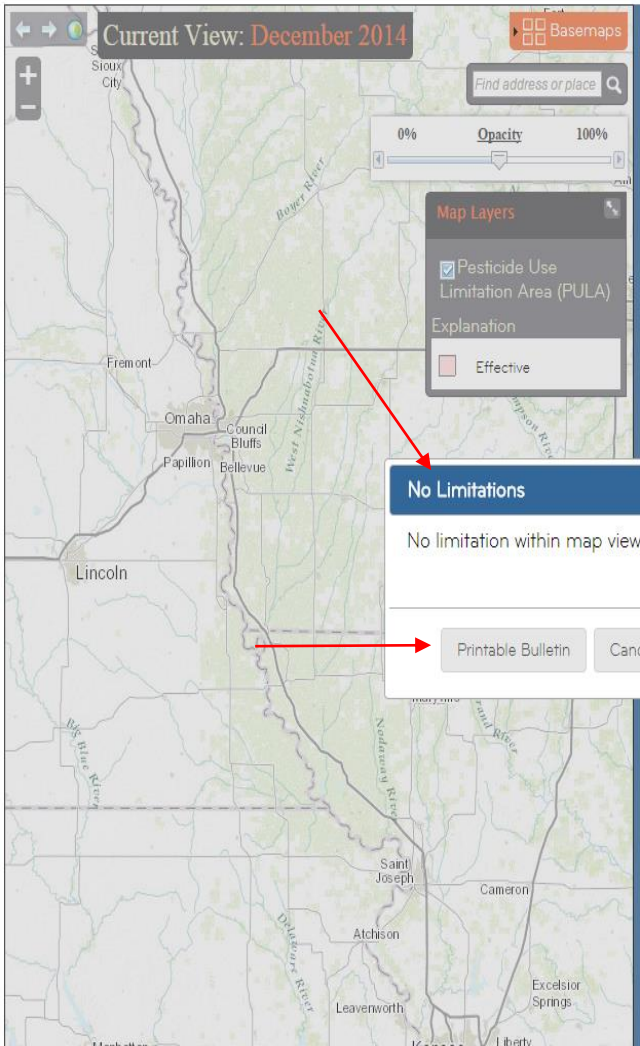
-- OR --

Product Registration Number:

Type Product Registration #

SEARCH CLEAR ALL

Endangered Species Protection Bulletins



INSTRUCTIONS RESULTS

Directions: This search tool provides Pesticide Use Limitation Areas (PULAs) for pesticide active ingredients and products with active Bulletins. To access Endangered Species Protection Bulletins from this search tool:

1. Zoom to your intended pesticide application area:
   a. Manually zoom to a location by dragging the map to your location and using the "+" and "-" buttons to zoom in and out, or
   b. Enter your intended pesticide application area into the Location Search Tool to automatically zoom to that location.
2. Select your Application Month.
3. Optional: Refine your search by entering a specific active ingredient or product and click the "Search" button. (Default is all active ingredients and products).
4. Click on the PULA within your intended pesticide application area to activate the Results tab with the associated limitations and print your Bulletin. If no PULA is present, click the "Search" button to activate the "No Limitations" dialog box and print your Bulletin.
5. To complete an additional search, use the "Clear All" button to clear your current results.

Application Month:

December 2014

Active Ingredient:

All

Product Name:

Start typing Product name

-- OR --

Product Registration Number:

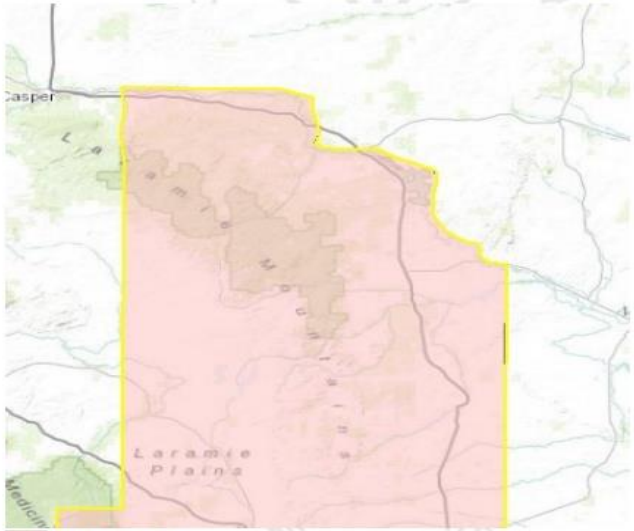
Type Product Registration #

Bulletins Live! Two Understanding the PDF Bulletin (with a PULA)

Endangered Species Protection Bulletin

Valid For: December 2014

1 Areas where pesticide use must be limited are identified on the map. A legend is located below the map to help pinpoint these locations.



Limitation Area

2 Look below at the Pesticide Use Limitation Summary Table. This table lists the user selected Active Ingredient(s) (ALs) or Product(s) with pesticide use limitations on the printed map. Locate the Active Ingredient (AI) or Product you intend to apply in this table and identify the code in the last column. This code indicates the specific limitation associated with that AI or Product. A limitation description for each code can be found below in the Codes and Limitations Table. If multiple Pesticide Use Limitation Areas (PULAs) are visible on the map, these tables provide information for the highlighted PULA.
If you are applying a pesticide that contains more than one Active Ingredient, or multiple Products, then multiple codes may apply. Follow the limitations for all codes when using this pesticide.

This document contains legal requirements for the use of certain pesticides.
Do not modify any text, graphics or coloration or otherwise alter this document.
ESPP Contact: ESPP@epa.gov Phone: 1-800-447-3813

Pesticide Use Limitation Summary Table

AI/Product	Use	App Method	Formulation	Code
Rozol Prairie Dog Bait	Black-tailed Prairie Dog	Bait (loose)	Bait	R3
Kaput D Prairie Dog Bait	Black-tailed Prairie Dog	Bait (loose)	Bait	K3
Diphacinone	Black-tailed Prairie Dog	Bait (loose)	Bait	K3
Chlorophacinone	Black-tailed Prairie Dog	Bait (loose)	Bait	R3

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

Habitat and Range

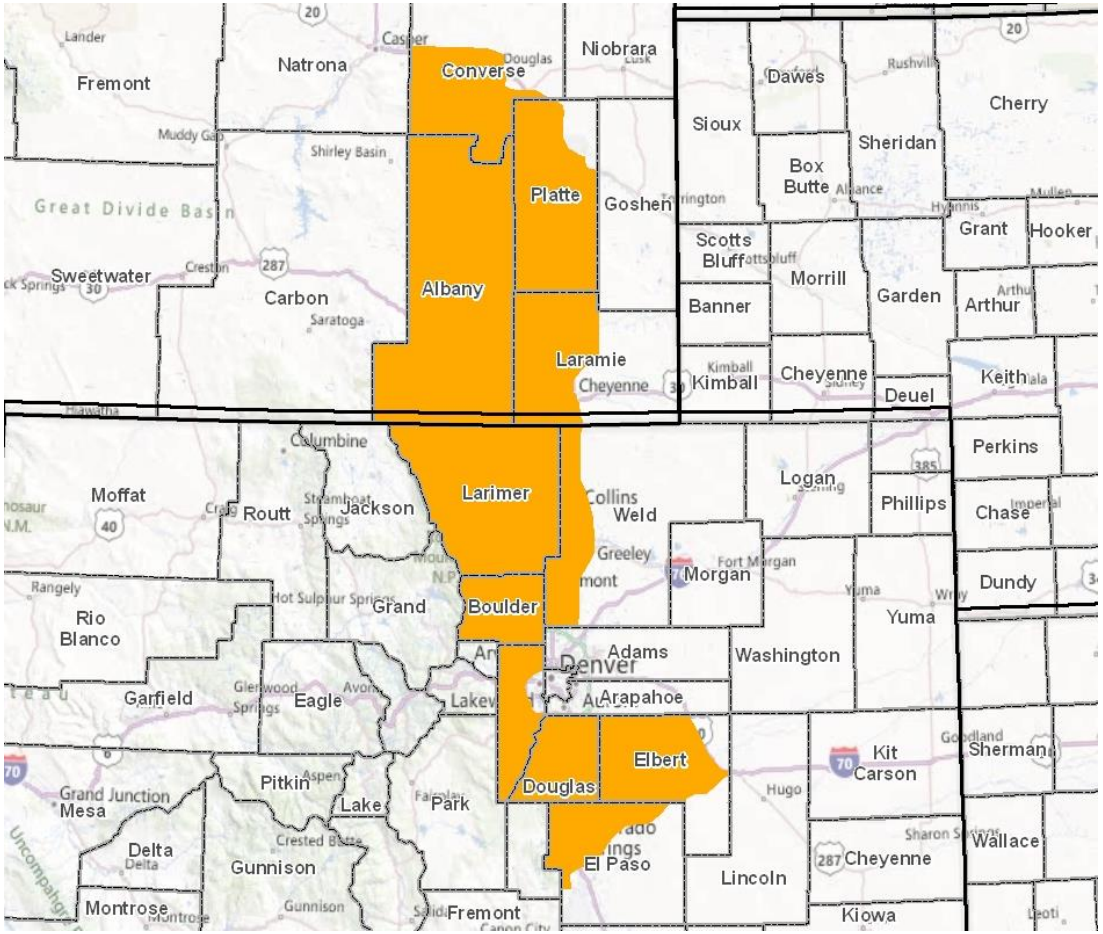
- Lives primarily in heavily vegetated, shrub dominated streamside habitats
- Also along adjacent upland habitats along the foothills of southeastern WY south to CO Springs along the eastern edge of the Front Range of CO
- Eastern boundary is likely defined by the dry shortgrass prairie

Restrictions

- Timing Restrictions: Delayed start of application (Nov. 1st) to ensure they are hibernating

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

Restricted Areas



Grizzly Bear (in MT)

Habitat and Range

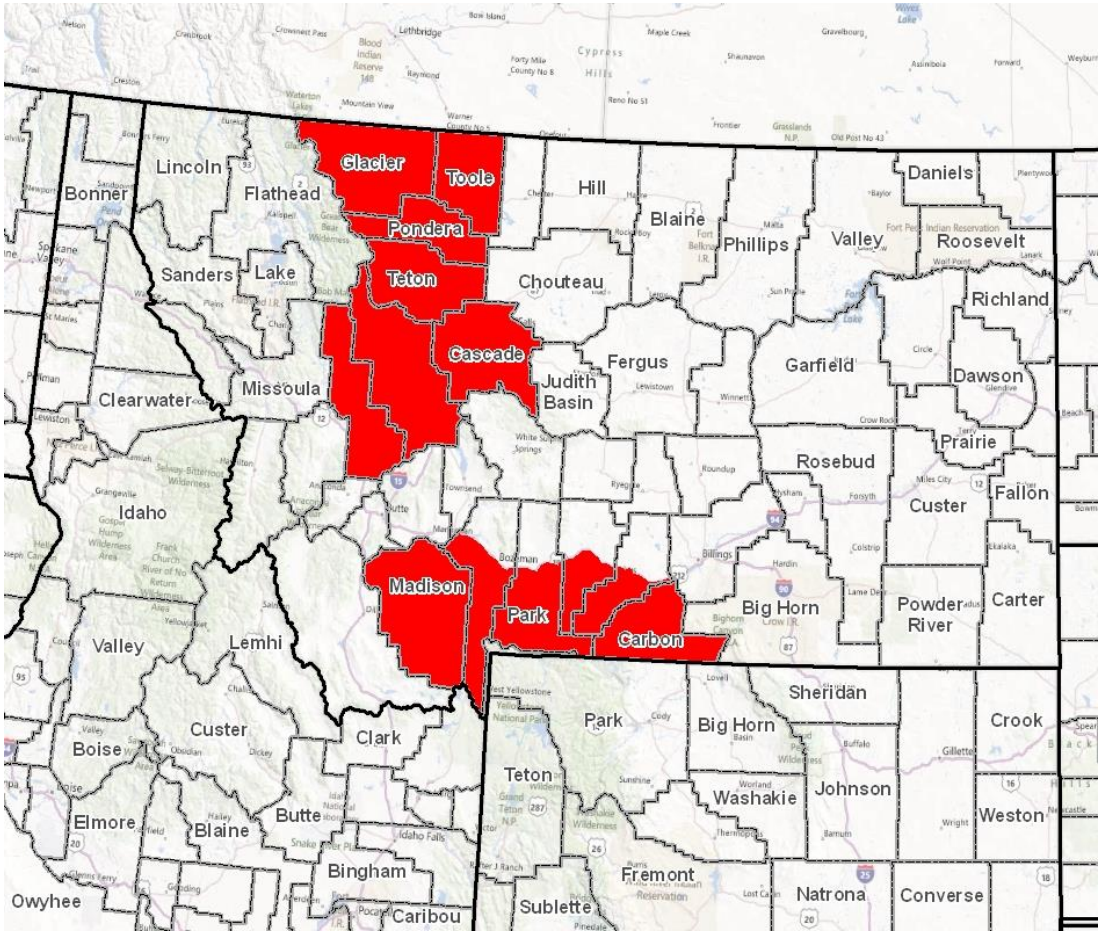
- Spring: Lower elevations such as
  - next to waterways
  - wet meadows
  - alluvial plains
- Summer and fall: Higher elevation forests, meadows, and open grassy timber sites
- Now occupy only 5 ecosystems in ID, MT, WA and WY in the lower 48 states

Use Restrictions

- Delayed start: Dec. 1st (after hibernation); Early end date: March 1st

Grizzly Bear (in MT)

Restricted Areas



Northern Aplomado Falcon (in NM and TX)

Habitat

Habitat includes:

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

Essential habitat elements are:

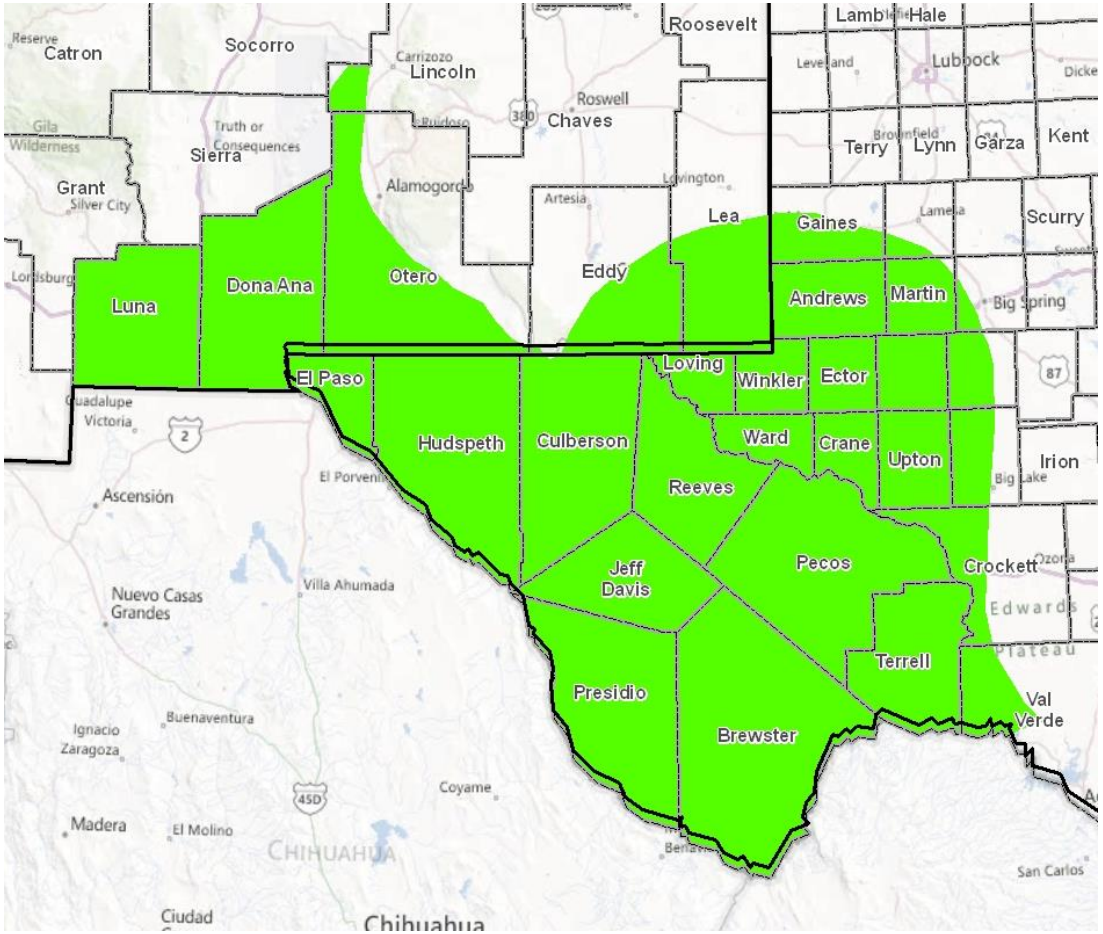
- open terrain with scattered trees
- relatively low ground cover
- an abundance of insects
- small to medium-sized birds
- a supply of nest sites

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.

Northern Aplomado Falcon (in NM and TX)

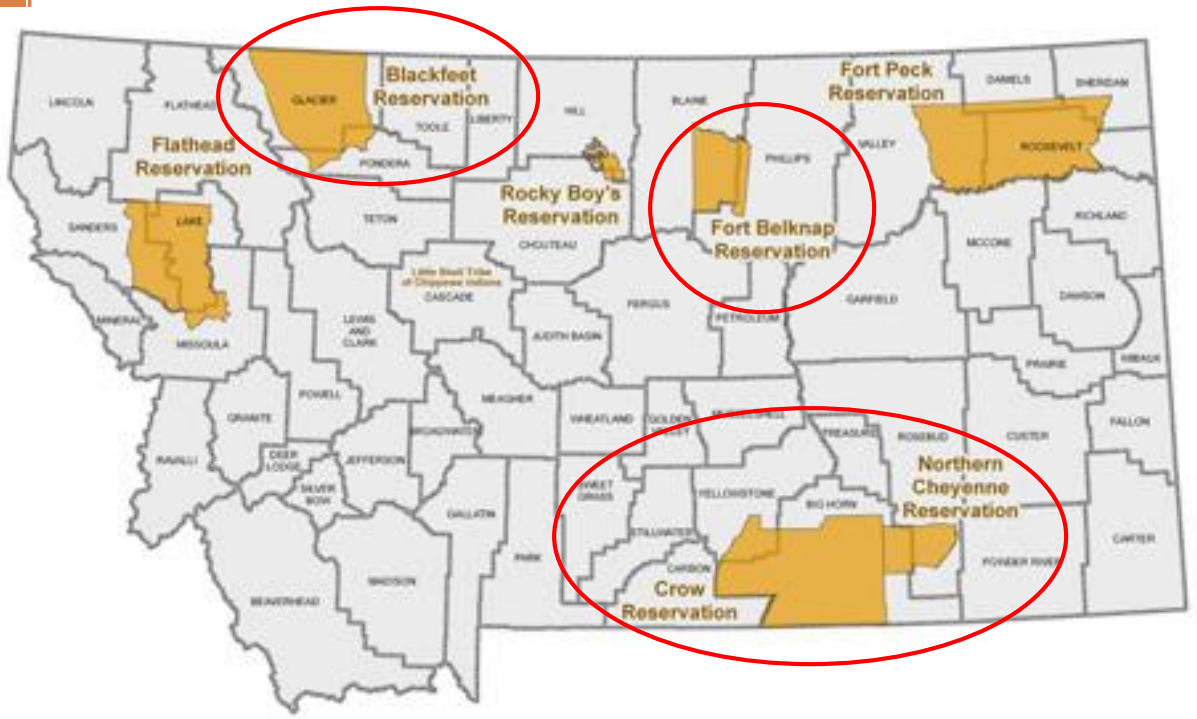
Restricted Areas



Geographic Restrictions in Indian Country: MONTANA

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

- Ft. Belknap
- Northern Cheyenne
- Blackfeet
- Crow



Before Application

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

Site Assessment

- 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

Before Application

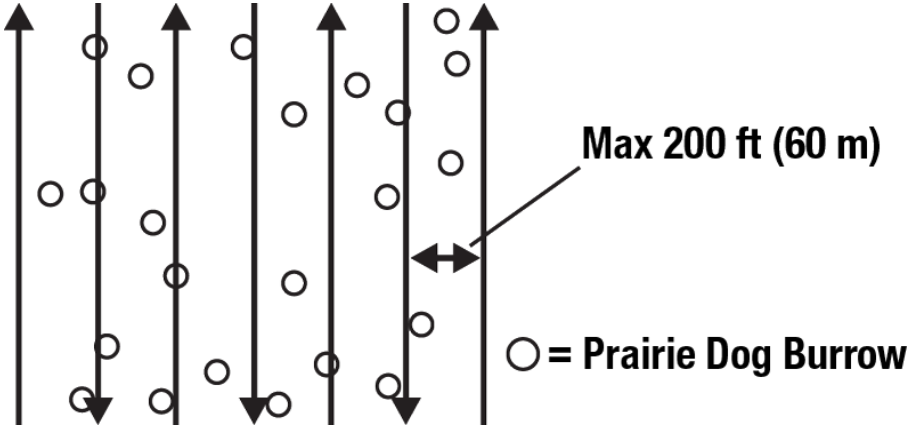
- Consult Bulletins Live!
- Follow Geographically Specific Use Restrictions for Specific Listed Species
- Perform Site Assessment
- Conduct Line Transects

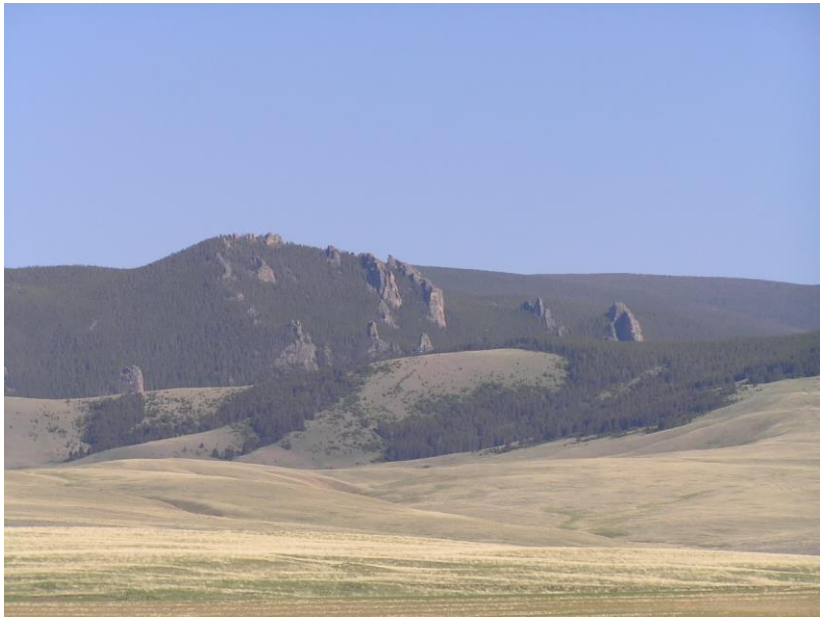
Line Transect Method

- [Insert Line Transect Method Video Here]

Line Transect Method

- 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



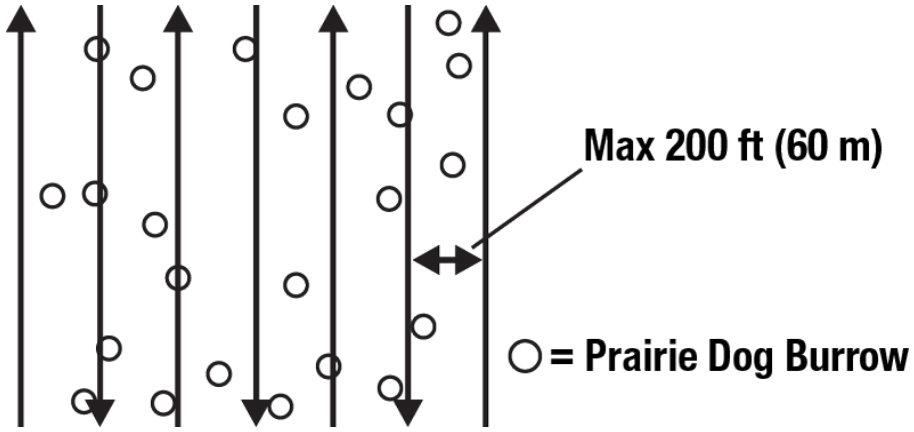


Line Transect Method

- 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

Line Transects

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



Applying the Product

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

Application Timing and Rate

Application Timing

- October 1st – March 15th *unless otherwise specified in Bulletins Live! Two*
- Pick one anticoagulant active ingredient (chlorophacinone or diphacinone) to apply for each use season

Application Rate

- Application rate: ¼ cup of bait (about 2 ounces or 53-56 grams) per active burrow

Applying the Product

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

Non-applicator Restriction

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

Applying the Product

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

Application Methods

Hand Application

- Treat ACTIVE burrows ONLY
- Apply at least 6 inches down the active burrow
- Recover spilled bait

Mechanical Application

- 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

After Application

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

Grazing Restriction

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

After Application

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

Carcass Search

- 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

Carcass Search

- 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

After Application

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

Notification Requirements

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

After Application

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

Proper Carcass Disposal

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

After Application

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

Re-Application

- 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.

Recap!

Product Use Highlights

- 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! Two)
- Grazing Restriction: No grazing for 14 days post-application
- Follow-up: Search for carcasses for at least 14 days post-application

Key Use Changes

- Consult EPA's Bulletins Live! Two website for your intended application area 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

Any Questions?