



# Pesticide and Noxious Weed Newsletter

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Nebraska Department of Agriculture

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## Conflicting Atrazine Label Statements

The Nebraska Department of Agriculture (NDA) has become aware of an issue that, although not new, warrants the attention of private and commercial applicators involved in agriculture. NDA is advising applicators of this in order to protect our water resources and ensure compliance with label directions and the Nebraska Pesticide Act.

Since approximately 1993, products containing atrazine have prohibited use within 50 feet of any well, whether it is used or abandoned.

More recently, products containing acetochlor also have restricted use around wells, but only in cases where the depth to ground water is less than 30 feet, where the soil

types are sandy (sands, sandy loams, and loamy sands), and also where the soils are low in organic matter.

Within the last several years, products containing both atrazine and acetochlor have published labels with the well restrictions for both active ingredients in the environmental restrictions section. Often, the less restrictive statement for acetochlor is given first, along with an eye-catching diagram showing a well and conditions where those acetochlor restrictions should be followed. This is then followed by the atrazine restrictions which are more restrictive than those for acetochlor

**Bottom Line:** Because of the atrazine restrictions, any product containing both acetochlor and atrazine are prohibited from being applied within 50 feet of any well, regardless of the soil types, percent organic matter, and depth to ground water found at the well.

Atrazine products also have use restrictions for protecting surface water, namely, setbacks near streams, rivers, lakes, and reservoirs, as well as considerations for tile outletted fields. These restrictions are also required, as indicated by the label, for all product mixtures containing atrazine.

Questions concerning label directions and product registration, applicator certification and licensing, or the NDA pesticide enforcement program can be directed to (402) 471-2351 or (877) 800-4080.

## Walk-in Testing Changes

Every year, the Pesticide Program conducts numerous walk-in testing sessions across the state for pesticide applicators. The goal is to provide a high degree of service to citizens, while managing a professional licensing program that assures the public that pesticide applicators are competent to apply toxic pesticides. For the last four years, we have offered same-day test scoring at one location. All other test sites have sent in the test answer sheets to the Lincoln office for scoring. In the last two years, the opportunity to have exams scored and to then retake a failed exam at the same session, has become quite attractive to many people, some traveling over 200 miles to do so. Because of the sheer size of the crowd, the risk of losing exams and test answers has become a serious security concern, even when additional staff is present to monitor the session.

Therefore, effective October 1st, NDA will no longer offer test scoring services on-site at any test session. All exam answer sheets will be sent to Lincoln for scoring in the NDA main office, with exam results being mailed out within 10 business days of receiving the answers in the Lincoln office (depending on mail delivery). As we move forward, NDA continues to seek ways that would streamline and standardized the examination procedure, including the possibility of electronic or online test services. These options are quite expensive and resource intensive, but there may be a time when the agency moves in that direction.

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The following walk-in test sessions are scheduled for the remainder of the year:

Date	City	Location
July 3	Omaha	Douglas/Sarpy Extension Office
July 10	Kearney	Buffalo County Extension Office
July 14	Lincoln	Lancaster Extension Office
July 28	Lincoln	Lancaster Extension Office
July 31	Holdrege	Phelps County Extension Office
August 7	Kearney	Buffalo County Extension Office
August 7	Omaha	Douglas/Sarpy Extension Office
August 11	Lincoln	Lancaster Extension Office
August 25	Lincoln	Lancaster Extension Office
September 4	Omaha	Douglas/Sarpy Extension Office
September 15	Lincoln	Lancaster Extension Office
October 2	Omaha	Douglas/Sarpy Extension Office
October 14	Lincoln	Lancaster Extension Office
November 3	Lincoln	Lancaster Extension Office
November 6	Omaha	Douglas/Sarpy Extension Office
December 4	Omaha	Douglas/Sarpy Extension Office
December 8	Lincoln	Lancaster Extension Office

This list is also maintained at [bit.ly/NDAPPdates](http://bit.ly/NDAPPdates); study material can be purchased at [pested.unl.edu](http://pested.unl.edu).

## Federal Applicator Certification for Indian Country

EPA has developed a federal applicator certification plan that will allow the use of restricted-use pesticides (RUPs) in Indian Country, where previously, no legal mechanisms were in place for such certification and use. EPA published the final policy in January 2014, and posted most of the information about the policy at [1.usa.gov/SjJCG](http://1.usa.gov/SjJCG).

### Who is responsible for getting a federal certificate issued by EPA?

Any applicator (private, commercial or non-commercial) who applies RUPs within the boundaries of a recognized Indian reservation will need a federal certificate from EPA. The ownership of the property does not change the requirement for federal certification. There are three exceptions to the policy: (1) if the applicator is a federal employee certified under a Federal Agency Certification Plan (FACP) and the area where the application will occur

is covered in their FACP; (2) if the applicator is certified under the tribe's own EPA-approved certification plan; or (3) if there is an EPA-approved written agreement between the state and the tribe to allow the applicator to apply RUPs using a state certification. In Nebraska, only the Santee Sioux Tribe of Nebraska has a written agreement with the State of Nebraska to accept state certification, the other three recognized tribes do not.

### How does an applicator get a federal certificate?

The individual pesticide applicator has the responsibility to get a federal certificate. Applicators must fill out an application form and provide proof of a valid, current state or other underlying certificate to EPA Region 7. The underlying certificate must be from a state or tribe that shares a contiguous boundary with the area of Indian Country where the application will occur. Private applicators will also have an additional training option available to them that does not require an underlying certificate. The application form is available online at the website address above, and there is currently no cost to obtain this federal certification.

For six months after the plan becomes final (beginning January 28, 2014), applicators may apply RUPs under the plan in Indian Country only for the categories for which they already have a valid state, tribal, or federal certificate, and only if they have submitted a complete application to EPA Region 7 showing proof of a valid state, tribal or federal certification. Beginning six months after publication of the final plan, applicators covered under this plan that have not received a written federal certification from EPA Region 7 are prohibited from applying RUPs in Indian Country in the Region.

### Are there additional training requirements for applicators beyond those required to obtain a state certificate?

The plan has no additional training requirements beyond those required to obtain a valid, current state license, a copy of which would be submitted to EPA Region 7, along with the application form in order to obtain a federal certificate. Private applicators that choose the training option would have to complete the training requirements that will be described on the application form. Applicators are responsible for determining if a tribe has additional requirements for RUP application.

### What if I have more questions related to the Federal Certification Plan in EPA Region 7?

Please contact Doug Jones ([jones.doug@epa.gov](mailto:jones.doug@epa.gov), (913) 551-7592) or Dick Wiechman, ([wiechman.dick@epa.gov](mailto:wiechman.dick@epa.gov), (402) 437-5080) if you have further questions or would like to be added to the EPA Region 7 Federal Certification Plan e-mail notification list.

Note: In order to receive our newsletter, and to get recertification information from the Pesticide Safety Education office at UNL prior to your license expiration, please let NDA know when you have a change of address.

# Prairie Dog Bait Changes

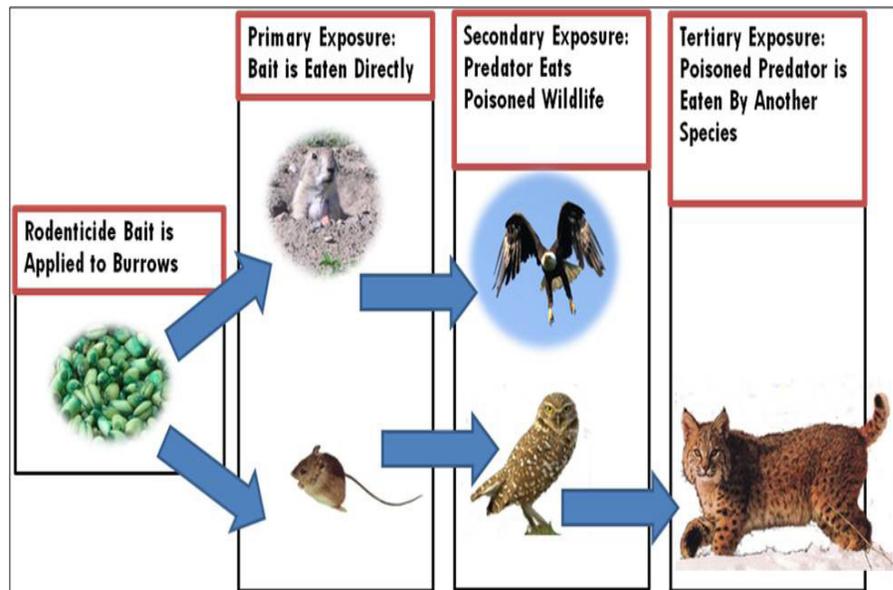
In 2013, the U.S. Fish and Wildlife Service concluded a formal biological opinion under the Endangered Species Act, on the use of prairie dog control products containing the active ingredients chlorophacinone and diphacinone. As a result, EPA has required the registrants to revise product labels with language to mitigate the risk to wildlife (see the diagram for examples of how non-target species are exposed). These changes are now on products for sale in Nebraska and elsewhere. While the main intent of this language is to protect endangered species found in states outside of Nebraska, applicators using these products in Nebraska must still follow the label, because the risk to other non-target species is still real. In addition, one of the prohibited use areas for protecting the black-footed ferret is just across the border in South Dakota, making the pre- and post-application surveys mentioned below that much more important for protecting this species and being in compliance.

## Before an Application:

- ▶ Must consult Bulletins Live! ([www.epa.gov/espp/bulletins.htm](http://www.epa.gov/espp/bulletins.htm))
  - Follow geographically specific use restrictions for specific listed species
- ▶ Perform Site Assessment to identify active prairie dog burrows to be treated
  - Recommended to set up and conduct line transect surveys, looking for the presence of endangered species and to become familiar with terrain
  - If black-footed ferrets are found during site assessment, the Black-footed Ferret Coordinator must be immediately contacted at (970) 897-2730 ext.224

## 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: Must search for carcasses in 1-2 day intervals for at least 14 days (for prairie dogs and all other animals)
- ▶ Must properly dispose of prairie dog carcasses (as described on label)

## Key Use Changes:

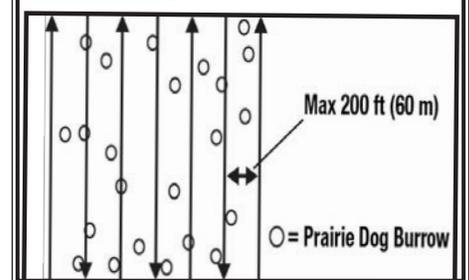
- ▶ Use is prohibited within all black-footed ferret reintroduction areas
- ▶ Must use line-transect method to perform carcass searches
- ▶ New Notification Requirements:
  - For dead or dying non-target animals, call the National Pesticide Information Center (NPIC; (800) 858-7378) as soon as possible.
  - For dead or dying listed species in Colorado, Kansas, Montana, North Dakota, South Dakota, Nebraska, or Wyoming, immediately call the U.S. Fish and Wildlife Service at (303) 236-7540
  - For live or dead black-footed ferrets, immediately call the Black-footed Ferret Coordinator at (970) 897-2730 ext. 224

More information on Nebraska's endangered species and pesticides can be found at [bit.ly/NDAPPesp](http://bit.ly/NDAPPesp).

## UNL Videos on Conducting Label-Required Surveys for Rodenticides

The University of Nebraska Pesticide Safety Education Program recently posted two excellent videos, dealing with the proper use and label requirements for pre- and post-application surveys, of certain products used for black-tailed prairie dog control.

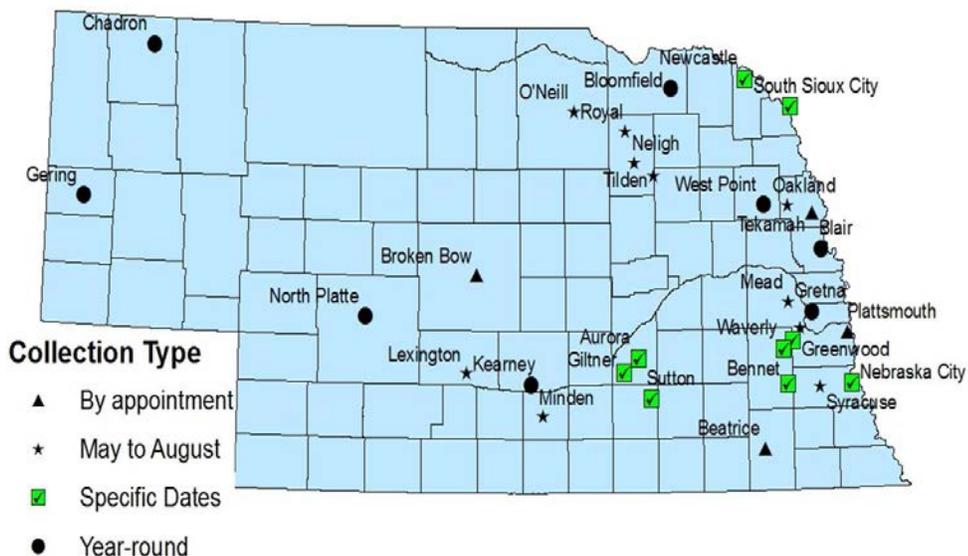
Both the Prairie Dog Management and the How to Survey Using the Line Transect Method videos, as well as a video on using the EPA Bulletins Live! web site for endangered species, can be seen here: [bit.ly/PSEppdmg](http://bit.ly/PSEppdmg).



# 2014 Pesticide Container Recycling Season

The University of Nebraska Pesticide Safety Education Program has kicked off the 2014 pesticide container recycling season, the latest in a 23-year extension program aimed at turning these potential threats to Nebraska's environment and landscape into useful products. Triple-rinsed or pressure-rinsed plastic containers are accepted at select locations around the state. In addition, 18 of the 32 sites also accept rinsed and drained plastic drums. See the corresponding map for collections in your area, then visit the list of collections at [pested.unl.edu/recycling](http://pested.unl.edu/recycling) to learn more specific information.

## 2014 Pesticide Container Collections



## DriftWatch Update

DriftWatch continues to grow in Nebraska, as well as nationally. There are currently 11 states and one Canadian province participating in DriftWatch: Colorado, Delaware, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, Wisconsin, and Saskatchewan.

A breakdown of the Nebraska fields by type of crop:

Crop Type	Count of Fields
Beehives	80
Fish Farm	3
Fruits	39
Grapes	158
Greenhouse - high tunnel	17
Nursery crops	22
Orchard	35
Other *	300
Vegetables	86
<b>Grand total</b>	<b>740</b>

\*Includes organic crops not meeting specific crop type descriptions.

An informational handout on Nebraska DriftWatch can be found at [bit.ly/NDADWinfo](http://bit.ly/NDADWinfo).

Registered Growers	369 (4)*
Registered Applicators receiving notices of new crop sites	147 (7)*

\*Registered users who have also become voluntary members of FieldWatch, the parent company of DriftWatch. See more information at [www.fieldwatch.com](http://www.fieldwatch.com).

In addition to the states in DriftWatch, other states maintain their own sensitive crop registry. Applicators who apply in these states are encouraged to use these links, as well as ask any state department of agriculture not listed (this list is likely not complete):

- Iowa ([bit.ly/CropIA](http://bit.ly/CropIA))
- Maryland ([1.usa.gov/1hcjNCH](http://1.usa.gov/1hcjNCH))
- North Dakota ([1.usa.gov/1qXUJZE](http://1.usa.gov/1qXUJZE))
- Ohio ([1.usa.gov/1jXVvfB](http://1.usa.gov/1jXVvfB))
- Oklahoma ([bit.ly/CropOK](http://bit.ly/CropOK))
- South Dakota ([1.usa.gov/TUCI84](http://1.usa.gov/TUCI84))
- Texas ([bit.ly/1pgpkNJ](http://bit.ly/1pgpkNJ))



## Pesticide Program Announces a Milestone!!!

In an ironic twist of the calendar, April 1, 2014, was the date when the NDA Pesticide Program “rolled the odometer” and issued applicator license number NEB100000. Since 1994, all pesticide applicator licenses issued by NDA have had a six-digit number starting with a zero. This seems like a great opportunity to remind everyone that the only correct way to record a pesticide applicator license is by using the “NEB” prefix, followed by ALL 6 digits of the number. This will be even more important now that license numbers beginning with a 1 for the first digit are being issued.

Help spread the word about local Household Hazardous Waste (HHW) collection sites in Nebraska. An updated version of the HHW Directory for 2014 has been posted at [bit.ly/NDAhhw](http://bit.ly/NDAhhw). If you know of sites in your area that aren't listed, please let us know so we'll have the most current information.

# Air Temperature Inversions and Their Impact on Spray Drift

North Dakota State University has completed a detailed, technical summary of inversions and drift in a new publication called, *Air Temperature Inversions: Causes, Characteristics and Potential Effects on Pesticide Spray Drift* (found online at [bit.ly/NDSUpub1705](http://bit.ly/NDSUpub1705))

## Quick Take-home points:

- ▶ Calm air and temperatures colder at 1' above ground than 10' above ground indicate an inversion is present or could form.
- ▶ Clear skies all night and into morning, coupled with low dew points, increase potential for temperature inversions.
- ▶ Dew or frost on the ground serves as a warning a temperature inversion may exist.
- ▶ The presence of ground fog always indicates temperature inversions are present and may intensify if the fog forms at night.
- ▶ Surface temperatures warm and cool more rapidly on recently tilled soil, resulting in temperature inversions forming more quickly over those sites.
- ▶ Similarly, temperature inversions form more rapidly over close-canopy crops than bare ground, due to less stored energy in the crop canopy.
- ▶ Temperature inversions always form in low-lying areas first, because cold air is heavier than warm air, and it sinks to the lowest elevation.
- ▶ Evening temperature inversions are actually worse than morning inversions, because they persist longer and can carry evening pesticide spray drift further.
- ▶ Measuring the air temperature at two heights at the application site, using calibrated and shaded sensors, will help determine if an inversion is present.

## Additional information:

North Dakota State University has also provided access to materials from a webinar called *Temperature Inversions: Their impact on pesticide applications*. This information can be viewed as a PowerPoint slideshow or handout in PDF format, or as a video (as Windows Media Video or MP4 format). The video can be seen as one complete file, or as four individual parts.

This information is available free of charge, but people must register at this link ([bit.ly/S8aabQ](http://bit.ly/S8aabQ)). Contact information is provided, if there are questions about the registration form or the material.

NDA encourages all outdoor applicators to utilize all resources at your disposal to reduce the potential for drift, including online weather forecasts, near real-time weather data, and observations at each application site.

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## Product Formulations - Why the Label Matters

*(Editor and Program Manager Note: Product names and registration numbers are used as examples only of a real situation that can and does occur. Use does not constitute an endorsement by NDA.)*

A lot can happen between the time a new pesticide product comes onto the market and where it might end up just a few years later. The manufacturer can change the formula to make it new and improved, and it can even change hands - being bought up by a second manufacturer. These frequent changes can present challenges for using the pesticide correctly, as well as for record keeping.

An example of this is a corn rootworm insecticide called Aztec. This product was originally formulated by Bayer CropScience, and sold in at least two formulations; a 4.67% a.i. formulation with an EPA registration number of 264-811, and a 2.1% a.i. formulation with EPA number 264-813.

Manufacturers are often anxious to get a new product to the marketplace, so the original labels may have limited uses. As additional research becomes available, new use sites are added to labels, and when issues such as phytotoxicity or other environmental issues come to light, the chemists for the manufacturer may tweak the formula to address these issues, and reintroduce the product with a new formula and new EPA registration number. Some product labels undergo several revisions over a period of just a few years. In these instances, one needs to be careful not to use an older container of product on a site allowed only by the newer, and now revised, label. One must be mindful of the EPA registration number, as that also might be different, even though the product name and manufacturer haven't changed.

Back to the Aztec story... When the two formulations of Aztec were being taken over by Amvac Chemical Corp, the EPA registration numbers were first changed to 264-811-5481 and 264-813-5481. When Amvac became the sole manufacturer, the EPA registration numbers changed to 5481-9028 and 5481-9030. Amvac also sold a third formulation of Aztec with EPA registration number 5481-9029, which is no longer being sold. Yes, it is confusing, which is the point of this article.

When NDA checks your application records, we first assume the records are correct and we'll check a copy of the label for that EPA number. If you recorded a product with a different EPA number than what you used, and that label doesn't show the site you applied the product to, you might be held in violation of the Nebraska Pesticide Act.

We encourage folks to check each new shipment of product to look for label changes and update your computer, if need be, for record keeping purposes. It takes a bit of time initially, but could save you from having to prove why your records say something different than what you actually did.

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Web site: [bit.ly/v3pptg](http://bit.ly/v3pptg)

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TDD users can contact the Department by first calling the Nebraska Relay System. Telephone (800) 833-7352 and asking the operator to call (402) 471-2351.

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