The Oregon state emblem is located on the left side of the slide. It features a central figure of a woman holding a sheaf of wheat, with a plow and a ship below her. The emblem is surrounded by a circular border with the text 'OREGON 1859'.

ODA outreach efforts to minimize off-target effects of Zinc Phosphide applications in Grass Grown for Seed

Oregon Department of Agriculture
Pesticides Division
January 19, 2011



Pesticides on Grass Grown for Seed

What is a Special Local Need (SLN)?

A state may issue a SLN for an existing or imminent pest problem in that state if an appropriate federally registered pesticide is not available.

Also known as a FIFRA Section 24(c) label

Why a SLN?

- No other pesticides were registered for grass grown for seed - as a site
- No other pesticides were registered specifically for vole control.
- Some pesticides were registered for “cropland” however the pest - VOLES - were not on the label.
- Zinc Phosphide has the best toxicity profile for the protections of non-target animals
 - Strychnine, chlorophacinone, diphacinone pose higher risks.





Vole Problem on Grass Grown for Seed

In March 1998, ODA received a request for the use of HACCO/ Zinc Phosphide Oat Bait to control voles.

The request was denied by ODA in April 1998, because of concerns associated with migratory water fowl.



Vole Problem on Grass Grown for Seed

After the 1998 SLN denial, the grass seed industry contacted ODA, and ODA representatives toured fields damaged by voles.

ODA then began to work more intensively with USFWS, OSFW and OSU to develop a label which would provide protections for migratory water fowl.



SLN Registrations-Grass Grown for Seed

Limited Above Ground Uses, 1999-2005

HACCO/Zinc Phosphide Oat Bait

EPA Reg. No. 61282-14, SLN No. OR-990009

Bell Laboratories/ZP® Rodent Bait AG

EPA Reg. No. 12455-17, SLN No. OR-990034

HACO/ Prozap® Zinc Phosphide Pellets

EPA Reg. No.2393-521, SLN No. OR-010018

HACCO/Prozap® Zinc Phosphide Pellets

EPA Reg. No. 61282-49, SLN No.OR-050009



Original SLN Registrations

Grass Grown for Seed

❖ Limited Broadcast Applications

- 20 acres or less within a field.
- Total acreage treated, not to exceed 30% of field.
- Do not make additional applications within 30 days.

❖ Spot bait

- Up to to 5% of the total acreage of the field.
- Area around burrows can be treated.
- Do not make additional applications within 30 days.

Problem- 2005

- ❖ Very high vole population level in grass grown for seed.
- ❖ Growers believed that they could not control voles with the SLNs which only allowed up to 20 acres to be treated.
- ❖ ODA Response → Grant SLNs with expanded uses and increased protections for geese.





3 Expanded Use Temporary SLNs Grass Grown for Seed- expired 12/31/05

Limited broadcast use (allowed up to 8/31/05)

- ❖ Apply between windrows at or after swathing
 - Limitations - do not remove straw from field
 - Must incinerate/compost seed screenings

- ❖ Post Harvest (alternating strips (5-10 ft wide))
 - Limitations - apply after seed harvest. If baling straw, remove straw before application.

Below Ground Handbaiting (allowed until December 31, 2005 expiration date).



OREGON DEPARTMENT OF AGRICULTURE ZINC PHOSPHIDE ADVISORY

LIMITED BROADCAST USES MUST END AUGUST 31, 2005

The Oregon Department of Agriculture (ODA) has issued Special Local Need registrations for three zinc phosphide products. The use is specifically for LIMITED BROADCAST APPLICATIONS on GRASSES GROWN FOR SEED. The Department has been alerted that there may be misinterpretation of these labels in a way that would result in applications that are NOT allowed. The products involved are:

- Hacco-Prozap Zinc Phosphide Pellets EPA Reg #61282-49 SLN# OR-050021
- Bell-ZP Rodent Bait AG EPA Reg #12455-17 SLN# OR-050022
- R & M Exterminators-Zinc Phosphide on Oats EPA Reg# 4271-16 SLN# OR-050023

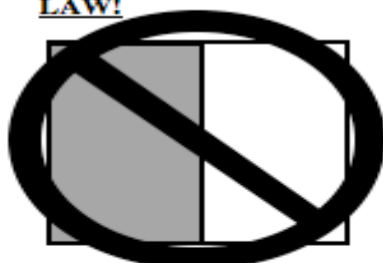
The use directions clearly state that:

- ◆ Broadcast applications may ONLY be made in alternating strips of treated and untreated areas throughout the field as indicated on the label (5-10' wide).
- ◆ **DO NOT BROADCAST OVER ANY PORTION OF THE FIELD WITHOUT LEAVING UNTREATED STRIPS.**
- ◆ Broadcast applications may ONLY be made after all seed/plant parts/straw are completely removed OR after seed is removed and the straw load is left in the field with NO straw removal for any purpose.

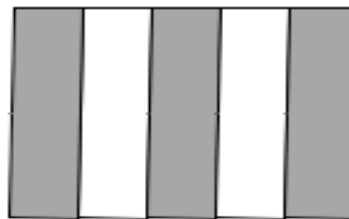
The uses allowed by these SLN labels are based on the habitat and foraging habits of voles. Voles do not usually travel farther than 15-20' from their burrow. Also, voles are very susceptible to "bait aversion". This is when a vole eats a sub-lethal dose of zinc phosphide and gets sick. The vole will not eat ZP bait again. The directions for use on these labels are designed to place enough bait in the correct pattern to maximize the efficacy of the application and yet minimize the amount of bait that is needed and minimize risk to off-target species.

This limited use was approved by ODA to assist growers in controlling an unusually serious vole problem. Grass grown for seed is considered a minor use crop. Growers rely on ODA's authority to issue SLN registrations to address specific pest problems in Oregon crops since product registrants rarely address grass grown for seed uses on primary labels (Section 3 labels). **ANY MISUSE of pesticide products could jeopardize ODA's ability to respond to grower's needs in the future.** If you have questions regarding pesticide label interpretation, licensing, or other related issues, please contact ODA at (503) 986-4635 or jfults@oda.state.or.us

DISTRIBUTING, USING, OR RECOMMENDING ANY PESTICIDE PRODUCT INCONSISTENT WITH LABEL DIRECTIONS IS A VIOLATION OF STATE AND FEDERAL LAW!



ILLEGAL APPLICATION PATTERN

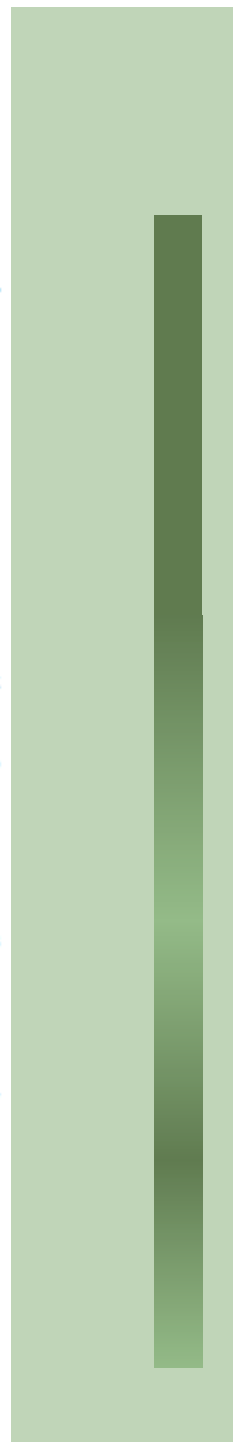


LEGAL APPLICATION PATTERN



LEGAL APPLICATION PATTERN

Shaded areas = treated strips Unshaded areas = untreated strips



2005 Goose Deaths

Goose Deaths in Willamette Valley Under Investigation

The U.S. Fish and Wildlife Service is investigating the deaths of more than three dozen resident Canada geese in the past couple weeks in two different locations around the Willamette Valley. Zinc phosphide, a rodenticide, has been confirmed as the cause of death. A total of 36 dead geese were found August 18 and August 19 near Dayton and another 11 dead geese were found August 22 near Hillsboro.

The geese appear to have suffered the same death as several hundred geese, mostly migratory, that were found dead between November 2004 and March 2005 in six locations around the Willamette Valley when a total of about 300 Canada geese were found dead near McMinnville, Keizer, Staats Lake in north Salem and Ankeny, Finley and Baskett Slough national wildlife refuges. USFWS Agents believe it is likely that more geese died but were not discovered or reported.



September 6, 2005

OREGON DEPARTMENT OF AGRICULTURE ZINC PHOSPHIDE ADVISORY



NOTICE- All above ground applications (limited broadcast) of zinc phosphide on Grasses Grown for Seed allowed by Oregon Special Local Need registrations ENDED AUGUST 31, 2005.

Please be advised there is NO extension of the AUGUST 31 deadline. Misuse of these products is a violation of state and federal law and may result in criminal and/or civil enforcement action. Misuse will most likely result in permanent cancellation of above-ground applications on grass grown for seed.

In July 2005, the Oregon Department of Agriculture (ODA) issued three additional Special Local Need (SLN) registrations for the use of zinc phosphide products on grasses grown for seed. These registrations allowed specific above ground uses until AUGUST 31. These above ground uses were: (1) limited broadcast applications in alternating strips, and (2) limited broadcast applications between windrows. Three previously existing SLNs allowed limited broadcast applications not to exceed 20 acres as a solid treated block and not to exceed 30% of the field.

ALL LIMITED BROADCAST APPLICATIONS EXPIRED AUGUST 31ST.



All Revised ZP SLN Registrations Grass Grown for Seed

Restrictions

- Above ground (broadcast) applications **only allowed May 1-August 31.**
- Do not apply if geese have been observed in the field within the last seven (7) days.
- Do not apply this product by air.
- Do not place pellets in piles or allow piles to be formed by equipment.
- Do not apply if rain is forecast within the next 24 hours.
- **Below ground baiting only between Sept 1- April 30.**

All ZP SLN Registrations

Grass Grown for Seed

Label Statement

- Users are advised that the **Migratory Bird Treaty Act** makes it **unlawful to kill** any migratory bird except as permitted by regulation.
- In North America, all birds are considered migratory except for upland game birds (e.g. grouse, ptarmigans, prairie-chickens, quail, ring-necked pheasant and wild turkey) and introduced bird species (e.g. European starling, house sparrow, and rock dove). Refer to label booklet for Endangered Species Considerations.



Vole Populations Crashed 2006

Oregon's Vole Population Crashed

2006 is officially the year that vole populations have crashed. As predicted and hoped, voles are very scarce this year. Jennifer Gervais, OSU Wildlife Ecologist states that "There were a few reports of dense populations as late as February and early March, but all of those populations crashed on their own by mid-April." This is good news as the fate of the rodenticide zinc phosphide, for broadcast use in grass grown for seed fields, is being reconsidered by EPA. OSU North Willamette Research and Extension Center has found funding for the required tolerance data research trials from the Zinc Phosphide



Industry Outreach

- **March 2006 - OSU and Oregon Seed Council developed and distributed a brochure on ZP and Vole control.**
- **ODA conducted numerous presentations on ZP/vole/geese issues.**
- **ODA newsletter articles in Pesticides Quarterly**



2008 Increased efforts

- ODA Advisories sent out to licensed applicators, etc
 - 02/04/2008
 - 04/30/2008
 - 07/07/2008
 - 08/12/2008
- Below Ground applications - year-round
- Above ground applications (3 labels) from May 1 - August 31 - with restrictions.
 - <20 acre block
 - Total area treated not >30% of field
- Removed limited broadcast applications in strips or between windrows.



2008 Increased Efforts

- Feb 26, 2008 - Meeting with growers, registrants, OSU, USFW, ODFW, EPA to review incidents, research (residue and voles), non-chemical control options, restrictions, etc.
- April 22, 2008 - Conference call with USFWS and ODFW regarding geese slow to move out of valley - resulting in
- April 30, 2008 Advisory - Geese slow to move out of Valley - Oregon Seed Council, Oregon Ryegrass Commission & OFS sent out letters to members
- July 7, 2008 ODA letter to growers as a reminder of restrictions & deadlines.
- August 12, 2008 - Use Expiration Advisory



2009

- April 22, 2009 - Conference call with USFWS, ODFW regarding restrictions
- May 6, 2009 - ODA advisory - Delayed above ground uses until May 8th to allow geese to move out of the valley.
- ODA automated phone called 2700 private applicators to advise them of the date change.
- Oregon Seed Council and Ryegrass Commission sent advisory to growers/ members
- Capital Press was contacted to place update in the newspaper.
- OSU distributed information through extension and other channels.



ODA News Release

Threat to geese in Willamette Valley leads to pesticide civil penalties

September 16, 2009... The Oregon Department of Agriculture has issued civil penalties to five Willamette Valley growers totaling \$8,405 in connection with the misuse of a zinc phosphide product during the 2008 and 2009 growing seasons. Instances of geese deaths from zinc phosphide have been documented in the valley beginning in 2005. The penalties stem from investigations performed by ODA's Pesticides Division, and in one case, includes a higher civil penalty amount for gross negligence and willful misconduct.

In all five cases, Restricted Use Pesticide products containing zinc phosphide, a rodenticide, were used to control voles that were damaging crops. The product labels clearly indicate that non-target species, such as migratory geese, are vulnerable to zinc phosphide. The labels state that the products can only be applied under certain conditions.

The following have received civil penalties for applying a pesticide product in a faulty, careless, or negligent manner:

On-Going Outreach

- Continued updates to growers, dealers, consultants, commissions, councils and industry organizations.
- Continued communication with ODFW, USFWS, OSU regarding geese numbers and habits
- 2010 - No incidents - moderate vole pressure
- Current labels allow below ground all year May 1 - August 31 limited above ground



Current Labels

Section 24c registrations for the use of zinc phosphide on various crops.

GRASS GROWN FOR SEED

Above Ground (Only May – August) - Grass Grown for seed

Bell/ ZP Rodent Bait AG	990034	12455-17
HACCO/ Prozap® Zinc Phosphide Oat Bait	990009	61282-14
HACCO/ Prozap® Zinc Phosphide Pellets	050009	61282-49

BELOW Ground (year-round) - Grass Grown for seed

Bell/ ZP Rodent Bait AG	050031	12455-17
HACCO/ Prozap® Zinc Phosphide Pellets	050032	61282-49

BELOW Ground (year-round): clover grown for seed, forage or hay; clover/grass mixtures grown for forage or hay; and pasture,

Bell/ ZP Rodent Bait AG	990034	12455-17
HACCO/ Prozap® Zinc Phosphide Pellets	090020	61282-49

January 19, 2011|