

# Agronomy "Crib" Notes

April 2014 – Vole Control – Issue 11

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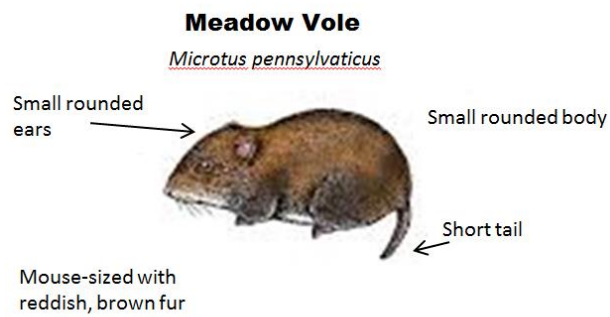
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The meadow vole (*Mycrotis pennsylvanicus*) and prairie vole (*Mycrotis orchraster*) resemble a common mouse with a short tail. Voles are an integral part of an overall healthy working-lands ecosystem, but in certain situations their population growth can be damaging to crops. Other rodents may also contribute to stand losses to a lesser degree.

Voles are active feeders of vegetation and seeds year round, day and night. Their preferred habitats are highly vegetated areas on dry ridges in the rolling terrain of a field. Networking trails, or runways, are easily seen going from vole colonies to surrounding feeding areas. A colony's size can be up to ¼ acre. Voles will significantly reduce corn or soybean stands during the first 21 to 28 days after planting as they dig up newly planted seeds and eat succulent plant tips emerging from the ground.



Sheri Ansel drawing

Growers who have experienced damage last season or who will be planting into existing sod or cover crop acres should assess the potential for rodent damage by "scouting" the field before planting.

## A recommended control program is one that combines multiple practices and strategies:

- Mow and terminate (herbicide) sod by early September the fall before returning to crop production. Check with the Farm Service Agency (FSA) prior to manipulating CRP vegetation.
- Grass cover crops and mixes of grasses and clovers appear most attractive to voles. Alternating mixes and selecting a cover crop mix that contains 40-50% species that will winter kill can provide a less favorable vole habitat and still retain the conservation benefits.
- Plan to terminate cover crops at least 21 to 30 days before planting to reduce rodent cover and food sources.
- Voles are a favored diet of predators such as owls, hawks, foxes, coyotes and cats. Voles are most active at night, so nocturnal predators like owls and coyotes are the most effective. Providing habitat (perch and den trees), and protection (reduced depredation) for predators should be part of the overall rodent control program.
- Sounds too simple, but plant deeper and close the seed slot. Voles are less likely to smell the seed at a depth of two inches or more.



- Check fields in late winter for active vole colonies to determine the populations' potential. Their runs will be very evident in areas with heavy residue, particularly after a period of snow cover. These runs can be targeted for application of rodenticides (baits).

For additional information on control options:

Purdue University: - <http://www.extension.org/pages/8677/vole-damage-management>

Call Hacco, Inc.: (800)435-9632 <http://www.hacco.com/Rodenticides.htm> or [http://www.hacco.com/Other\\_PDF/RodenticideTechnicalCatalog.pdf](http://www.hacco.com/Other_PDF/RodenticideTechnicalCatalog.pdf) (Note: the 2% zinc phosphide pellet bait is a restricted-use pesticide.)

Elston Manufacturing: <http://www.elstonmfg.com/gopher-getters/ga-400-gopher-getter.html>

### **Acknowledgements:**

These recommendations are comprised of recommendations found in various publications and research by University Extension Specialists and Researchers as well as practical experience from numerous farmers, crop consultants and agriculture retailers.

Research and publications by Dr. Ron Hines, University of Illinois - Dixon Springs Kenneth J. Eck, Purdue University – Extension Educator, Agriculture and Natural Resources, Purdue Corn and Soybean Field Guide

## *Mark your Calendar!*

**Soil Health Workshops** – The Conservation Cropping Systems Initiative and the Indiana Conservation Partnership are sponsoring a series of soil health workshops across Indiana. Go to <http://iaswcd.org/CCSI/ccsi-calendar.html> for dates and more information.

The **Purdue Pest and Crop Newsletter** is a great way to keep up with the latest information. You can sign up for it at <http://extension.entm.purdue.edu/pestcrop/subscribeSecure.php>.

Past issues of Crib Notes and additional Guide Sheets are located at <http://www.in.nrcs.usda.gov/technical/agronomy/agronomy.html>