

## **“Bug detective” to discuss crop pest management at ARS BrownBagger**

A former pet shop manager, zoo keeper and now ARS scientist will share his insights into successful management of crop pests using ecological principles on Friday, February 17, as part of the USDA-ARS Northern Plains Agricultural Research Laboratory’s (NPARL) 2012 BrownBagger series.

Dr. Jon Lundgren, an entomologist with ARS’ North Central Agricultural Research Laboratory in Brookings, SD, will discuss “Using ecological principles to manage pests: A case study involving the corn rootworm.” The one-hour session begins at noon and is open to the public.

Dr. Lundgren says that some of the biggest threats to our nation’s crops aren’t found on the top of the plants, but rather are harbored in the soil. The corn rootworm is a classic example and Lundgren uses it to help focus attention on what’s going on in the “bug eat bug” world beneath the soil surface and how to harness that biodiversity to aid good insects and curb bad ones in farmers’ fields.

According to Lundgren, “Generalist predators are diverse and abundant in most cropping systems, and help farmers by reducing the need for insecticides. But often, these predators cannot keep key pests at low levels.” This result is due, in part, to our farming practices, he says. In his talk Lundgren will address “how conservation programs can be helpful in reducing a key pest while still taking in a successful crop.”

Lundgren’s research work has earned him several awards and the moniker the “bug detective” in ARS circles. His most recent honor includes the 2010 Presidential Early Career Award for Scientists and Engineers, which recognizes individuals in the pursuit of innovative research at the frontiers of science and technology.

So bring your lunch and join us for this informative discussion in the third of our 2012 Friday BrownBagger seminars. The lab is located at 1500 N. Central in Sidney. All presentations begin at noon. For more information, contact Beth Redlin at 406-433-9427.

And don’t miss these remaining presentations on topics as varied as Russian olive management, wheat stem sawfly biocontrol; and irrigation and crop rotation effects on soil carbon and nitrogen:

- Mar. 2: Erin Espeland, Plant Ecologist, ARS-Sidney, MT  
*Getting information from weed eradication: a case study of Russian olive removal at Ft. Keogh*
- Mar. 16: Kevin Delaney, Entomologist, ARS-Sidney, MT  
*Wheat stem sawfly – wheat interactions with spring wheat, and classical biocontrol of weeds*
- Mar. 30: Tatyana Rand, Entomologist, ARS-Sidney, MT

*Factors influencing wheat stem sawfly infestation levels and parasitism by native biocontrol agents*

Apr. 13:

Uendra Sainju, Soil Scientist, ARS-Sidney, MT

*Irrigation system and crop rotation effect on soil carbon and nitrogen fractions*