

Russian olive removal study focus of ARS BrownBagger

Russian olive, a popular shelterbelt tree in this region due to its hardiness, also has a darker side. At the USDA-ARS Fort Keogh Livestock and Range Research Laboratory near Miles City, MT Russian olive has escaped the confines of the shelterbelt and has now invaded thousands of acres of rangeland and riverbank, crowding out native plants and limiting river access with its painful barbs. As a result, its removal has become the focus of a new multi-agency study looking at not only what methods are most effective in getting rid of the tree where it's not wanted, but also at long-term restoration possibilities for impacted areas.

Collaborating in that effort is Sidney, MT ARS Plant Ecologist Erin Espeland who will discuss the new study and its latest findings this coming Friday, March 2nd, as part of the USDA-ARS Northern Plains Agricultural Research Laboratory's 2012 BrownBagger series.

Dr. Espeland's presentation begins at noon and is entitled "Getting information from weed eradication: a case study of Russian olive removal at Ft. Keogh." The one-hour session is open to the public.

In describing the study, Espeland says, "It was designed to identify the best Russian olive removal strategy and to determine whether revegetation was necessary and if so, what revegetation practices would work best." According to Espeland, researchers began by distributing a questionnaire to people already battling Russian olive asking what they used and what worked best. The group identified about two dozen different practices from the responses, which they used to develop their own "best practices" strategy, Espeland said. The new strategy was then employed at the Fort Keogh site with impressive results.

"We were very successful in removing Russian olive with our approach," she noted. "We had very, very low resprout rates." According to Espeland, of the thousands of trees removed so far under the study, less than three dozen resprouts have been recorded.

Espeland will share the project's successful removal strategy at Friday's session, as well as discussing other elements of the long-term study, which includes tracking the recovery of rangeland ecosystems where Russian olive was removed as compared to those where no removal was done. Researchers will be observing any changes in the soil, as well as insect, plant and bird life impacts over the 15-year life of the project.

Other collaborators in the study include Sidney ARS Entomologist Kevin Delaney, Miles City ARS Research Leader Dr. Mark Peterson, Miles City NRCS Rangeland Specialist Robert Kilian and representatives of the NRCS Bridger Plant Material Center. .

So bring your lunch and join us for this informative presentation in the fourth 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 in 2012:

- Mar. 16: Upendra Sainju, Soil Scientist, ARS-Sidney, MT
Irrigation system and crop rotation effect on soil carbon and nitrogen fractions
- Mar. 30: Tatyana Rand, Entomologist, ARS-Sidney, MT
Factors influencing wheat stem sawfly infestation levels and parasitism by native biocontrol agents
- Apr. 6: Kevin Delaney, Entomologist, ARS-Sidney, MT
Wheat stem sawfly – wheat interactions with spring wheat, and classical biocontrol of weeds