

Six New Oregon Beetle Banks Created this Year-October 2006

Six new beetle banks went in this year, three on farms and three at OSU research stations. The first, created May 9th, directly associated with the Banking on Beetles SARE project, is a 4'X 560', mechanically (and manually) transplanted bank on Gathering Together Farm in Philomath, Oregon.



It was planted to Blue Wild Rye (*Elymus glaucus*), Slender Wild Rye (*Elymus trachycaulus*), and Water Foxtail (*Alopecurus geniculatus*). Plugs of these grasses were transplanted by three workers lying on their stomachs on a transplanter pulled by the tractor. It took about 2 hours to plant and many hours to hand weed and flame (approximately 17-20 hours). For more details on weed management of this bank and other banks please refer to the article, "***Flaming as a Weed Management Tool on Beetle Banks***". The transplants have established well and the bank is going into winter with a thick stand of grasses with a tolerable amount of annual weeds.

In April, a bank at Hyslop Research Station that had been raised in the fall of 2005 was hand-transplanted with Blue Wild Rye plugs. This

bank is an experimental methods trial, one of three experimental banks at Hyslop. The other two banks are variety trials. All are approximately 6'X 270' with 18 different plots. There are 6 treatments with three replications of each treatment. For this bank the treatments are Blue Wild Rye fall direct seeded with wheat straw mulch, Blue Wild Rye fall direct seeded with no mulch, Blue Wild Rye spring transplanted with mulch, Blue Wild Rye spring transplanted with no mulch, mulch with no grass and the control, no mulch and no grass.





The fall direct seeded plots were unfortunately planted with the low germinating Blue

Wild Rye we purchased last year so they turned into spring direct seeded plots with different Blue Wild Rye seed. They were whimsically seeded before a good rain in late May. The April transplanted plots got one nice rain before August-type weather set in. It soon became apparent that if no irrigation was set up, which was the original plan, we would lose this newly planted bank. At the end of June, 900 feet of irrigation pipe that delivered over 9 inches of water throughout the summer, was set up and saved the bank. These plots were flamed several times as a successful pre-plant weed management technique. The bank is now going into winter with varying degrees of healthy to non-existent stands of grass and thinning mulches.

This fall we direct seeded the third bank that was raised at Hyslop last fall. This bank was originally going to be one we played around with as we came up with ideas and not take statistical data on. We have altered that plan and seeded it as a replicated variety trial instead. Several weed management techniques were applied on this bank last fall. Ninety feet of the bank was planted to crimson clover, which was allowed to seed and mowed twice this summer. Twenty feet was put into wheat straw mulch, and 100 feet of weed barrier cloth was applied. The last section was just mowed twice. The entire bank was tilled and direct-seeded this fall with three native grass mixes and three new native grasses to see how they fare with

the pre-seeding weed management practices. The new natives are Meadow Barley (*Hordeum brachyantherum*), California Fescue (*Festuca californica*), and Junegrass (*Koeleria macrantha*). The mixes will be Blue Wild Rye with Water Foxtail, Blue Wild Rye with Meadow Barley and Blue Wild Rye with California Fescue. Ground beetle populations, native grass establishment and longevity and weed competition will be assessed on these banks for the next few years.

In early May, enthusiastic students created a spring bank at OSU's Horticulture Farm in the Organic Garden Plot. The 4 X 90 foot bank



was direct seeded with Blue Wild Rye and Water Foxtail. The seed was mixed and mulched with slightly moist leaf compost. The bank germinated in two weeks under sprinkler irrigation and so did lots and lots of weeds. The bank was switched to drip irrigation once the seeds germinated. Sixteen to 20 hours were put into weeding this bank. In the fall, we thought we had lost the seed to Crabgrass (*Digitaria sanguinalis*) but the Blue Wild Rye and some of the Water Foxtail made enough of a recovery to partially reseed the bank this fall and reassess next spring.

The 47th Ave. Farm raised their first beetle bank in September. Farmer, Laura Masterson cut and tilled a 4' by 100' swathe through her summer cover of Sudangrass. This is the first beetle bank that was raised by many helping hands instead of a plow. It was raised about 8-12 inches and broadcast seeded to one section of Blue Wild Rye, one of Water Foxtail and one section of a mix of the two. It is also the first beetle bank on which, unintentionally, we may have

over-done the pre-plant weed management. Sudan grass has the ability to emit weed-suppressive compounds, particularly as it decays.



This ability apparently varies from cultivar to cultivar. After doing some research at OSU and WSU, from what is known so far, there is a possibility the Sudangrass could suppress the native bunchgrass seed germination. Latest news is that grass is germinating on the bank.

Persephone Farm put in another bank this fall. That makes three for their farm, though one succumbed to weeds this year. The bank is about 4' X 500' and was broadcast seeded with Blue Wild Rye and Water Foxtail. Farmer Jeff Falen planned to cover the seeds after sowing by pulling a chain across the bed to provide a light covering of soil.