

COUPLE TURNS EASTERN WYOMING PROPERTY INTO POLLINATOR PLAYGROUND



Jennifer Thompson

A Carpenter couple has converted part of their property to pollinator habitat to help the bees.

Catherine Wissner and her husband, Martin, own Wild Winds Sheep Company near Carpenter. Among other endeavors, their beautiful 200-acre property supports a sub-irrigated meadow and hard-grass prairie used for grazing and 70 acres of alfalfa grown for hay under a center pivot.

Catherine first became interested in planting pollinator habitat because alfalfa weevils were causing issues in their hay fields. Pollinator habitat often helps not only pollinators but also the beneficial predatory insects that prey on pests. These often-tiny insects go after weevils, aphids, and a few other insect pests of alfalfa. Equally important to the Wissners was providing floral resources (food) for native bees and supporting honey bees if Catherine decides to become a beekeeper.

Pollinator plantings are often placed on marginal ground or other areas on farms that aren't as productive for growing crops. The Wissners had just such a location – the corners of their pivot. With a plan in mind,



A small-scale pollinator area near the Wissner's home garden.

Catherine looked for sources to help fund the project. She was familiar with some of the projects supported by the USDA-NRCS (Natural Resources Conservation Service). So she visited with Jim Pike, the local NRCS district conservationist, about the project and decided to apply for funding.

When Catherine applied for an Environmental Quality Incentives

Program (EQIP) cost-share to help support the project, she went through a process to register their farm with Farm Service Agency (FSA) and then waited for her project to be reviewed and ranked by the NRCS field office. She submitted her application twice before it was funded. She believes having a well-thought out management plan for her farm helped.

Choosing Plants

One of the requirements in getting a pollinator habitat EQIP cost-share funded is that there be at least three different species of plants that will be blooming in each of the three seasons (spring, summer, and late summer/early fall) – nine species total. One of her main considerations was what would be able to survive in a dryland situation. Catherine used an NRCS publication to choose plants she wanted in her seed mix list (bit.ly/plantpollinators). Her seed list was then reviewed and approved by the Wyoming NRCS state agronomist.

Catherine planted native and non-native plants to provide the diversity of blooms she was looking for, knowing that different types of flowers support different types of bees. She chose yellow and white sweetclover,



Bee visiting native Rocky Mountain bee plant.

sunflowers, yarrow, Mexican hat, Lewis flax, Rocky Mountain bee plant, red clover, white clover, dryland alfalfa, and dryland sanfoin. She also included native grasses such as western wheatgrass, thick

spike wheatgrass, and some bunchgrasses. Amongst other attributes, native bunch grasses provide nesting habitat for some native bees, such as bumblebees, and help reduce weed competition. Since the planting, she has also planted milkweed seed and rabbitbrush seed with the hopes they will germinate in time.

No-till Drill Planting

Catherine paid for the seed and to have someone with a no-till drill do the planting. The no-till drill is designed to go through the sod, leaf litter, and ground cover as one of her goals was not to disturb the soil more than needed. She planted in the spring (before Mother's Day) to try to capture soil moisture from winter and spring precipitation. Since it was a dryland planting, they were dependent on this moisture to help



Helping make pollinators plentiful

The startling decline in honey bee numbers in the U.S. in 2006 from colony collapse disorder threw pollinator health into the national spotlight.

This spotlight shines not only on the honey bee but also on native bees (around 4,000 native species in the U.S., 700-800 of which reside in Wyoming). Since then, an immense amount of effort has been invested into getting to know more about these insects – what's out there, their lifecycles and habits, and how humans can help them thrive.

Much remains unknown, but one thing clear is that bees require a plentiful supply of flowers to survive and thrive.

This knowledge has led to pollinator plantings – strips, fields, or just small plantings of flowering plants that provide pollen and/or nectar to native and introduced bees and other beneficial insects.

We headed out across Wyoming this fall to visit a planting – the Wissners near Carpenter.

the seed germinate. The planting was complete in a couple of hours.

The NRCS then reimbursed her for the cost of the seed for the 17 acres planted. The seed mix was \$143 per acre (about 12 pounds of seed per acre) – with a total cost around \$4,500 for seed and for the custom no-till planting. The cultivated species in the mix tend to be less costly than the native species, many of which are harder to grow for seed, or are hand-collected. Seed of these native species can be in short supply (and thus costly) during years of drought and after years with many wildfires (seed is in high demand for reclamation purposes).

Weeds Among Challenges

There have been challenges, as with most pollinator plantings. Weeds have been the biggest. Weeds are very hard to control in pollinator plantings (hard to kill them without killing off desirable plants). Cheatgrass,



Keep your eyes out this spring for our Wyoming pollinator guide! Information on pollinators, plants to attract them and basics on beekeeping!



Wildflowers on a riparian area on Wissner property.

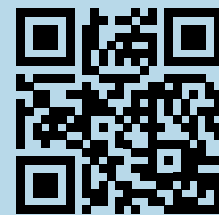
Kochia, prickly lettuce, and horse-weed have cropped up as issues. The NRCS suggested they swath and bale the plots then remove it from the field to reduce the weed seed. The planting will require ongoing management. Catherine plans to reseed some areas that didn't come up well.

Catherine advises those trying pollinator plantings to be persistent as there are many benefits. She has not only seen lots of pollinators visiting the plantings, she has already seen benefits in control of the alfalfa weevil. Randa Jabbour, assistant professor of agroecology at the University of Wyoming, visited the site with one of her students and swept the field for insects.

Catherine's fields have some of the lowest levels of alfalfa pests in the area. "It's a very cool process of a natural balance," she says. The Wissners plan to put another 10 acres into pollinator habitat at some point.

The USDA-NRCS has financial assistance available to help establish pollinator plantings on agricultural land on which agricultural products or livestock are produced. Funding is available through EQIP and Conservation Stewardship Program (CSP). To receive funding, an application must rank high among local priorities for funding. Visit with your local USDA-NRCS district conservationist (<http://bit.ly/nrcswyo>) to see if your project would be a good fit for this program and to determine the eligibility requirements and deadlines for project submission.

Visit <http://bit.ly/wissner1> to watch an interview of Catherine about their pollinator plantings.



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