

SEEDS OF DIVERSITY



Iowa DNR Prairie Resource Center

June/July 2012

Partners of the Iowa DNR Prairie Resource Center

Many people are familiar with the symbiotic relationships between species in the outdoor world. Monarch butterfly and milkweeds have a symbiotic relationship where both species benefit from the other being around. The Prairie Resource Center has had many partners in our quest to raise prairie seed. The dictionary defines a partnership as an arrangement where parties agree to cooperate to advance their mutual interests. Like the Monarch and milkweeds, a good partnership both parties benefit from the partnership and have a symbiotic relationship. Despite some initial hurdles to overcome, partnerships have been one of the keys to success of our prairie

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Greenhouse facilities at Dept. of Correction Facilities have been a valuable asset that has been utilized by the Prairie Resource Unit. This photo is the greenhouse at North Central Correctional Facility at Rockwell City.

seed operation. We have gained knowledge, ideas, labor, and most importantly prairie seed through collaboration with partners.

In the fall of 2000 Eliot, Laurence and I were given the task of producing native wildflower seed. This seemed to be an insurmountable task, but yet a new and exciting adventure.

Looking back, this large task was made easier by partnerships. Partners allowed the large task of prairie seed production

to be broken into several small less intimidating parts. Partners have included other agencies, NGO's, and Universities, but the Department of Corrections (DOC) has been the largest partner of our program since the inception of the Prairie Resource Center (PRC). We have partnered with several DOC facilities including North Central Correctional Facility (NCCF) at Rockwell City, Fort Dodge Correctional Facility (FDCF), Iowa Correctional Institution for Women at Mitchellville (ICIW), Iowa Medical and Classification Center at Oakdale (IMCC), Anamosa State Penitentiary (ASP), and Iowa State Penitentiary at Fort Madison (ISP). One of our needs in the beginning was help in designing our greenhouse operations. Recently retired Certified Trades leader at IMCC, Larry Gilds, helped us through the greenhouse jungle. Through his guidance on pests, diseases, pesticides, and care of plants in a greenhouse; we are now able to produce over 100,000 plants annually with the help of our greenhouse partners. This helped us clear the first hurdle, greenhouse propagation of plants.

The Department of Corrections (DOC) has expanded the workforce of our program with the addition of inmate offenders to help with the tasks of seed production at the PRC. We rely on inmate offenders to transplant and care for greenhouse seedlings, plant-weed-harvest-clean seed from our seed production plots and clean-dry-bag seed from our combine harvest. We not only have offenders come to our office to complete some of the tasks, but we also have a portion of

our operation at DOC facilities. Presently, NCCF, FDCF, and ICIW have wildflower production plots at their facilities. 2nd and 3rd hurdle cleared a large labor force to plant, maintain, harvest and clean our prairie seed.

Other significant partners have been government operations; such as Polk and Dallas County. They are crucial partners with wildflower seed production. These partnerships have provided additional species to our plots, new ideas on seed production, added exposure to the public and extra guidance of inmate crews during our busy summer season.

The Department of Human Services Woodward Resource Center has also partnered with the PRC and has been able to generate greenhouse plants for our seed production plots since 2006.



Public tour of the Adel seed production plot with Dallas County Roadside Department, Dallas County Conservation Board, and Iowa DNR Prairie Resource Staff on hand to tell the story about native plants.

Grant opportunities have generated additional partners for the Iowa DNR Prairie Resource Center. Seed generated from the PRC has been utilized as match for grants from the Monarch Joint Venture, US Department of Interior Fish and Wildlife Service State Wildlife Grant Program and North American Wetland Conservation Act.

These grant opportu-

nities have allowed the Iowa DNR labor force and dollars to be stretched a little farther, especially important during tough economic times.

Like Monarchs and milkweeds the symbiotic relationship between the Iowa DNR Prairie Resource Center and partners have been key to the many successes of the Iowa DNR Prairie Resource Center. High quality prairie reconstruction and wildlife habitat on public lands of Iowa are the beneficiaries of the many partnerships of the Iowa DNR Prairie Resource Center.

Species Spotlight: Lousewort—It Takes Partners in the Prairie to Make Seed

By Therese Parys



Wood betony blooming at the Prairie Resource Center April 26th.

Lousewort is an unusually beautiful native plant that comes in two species: Wood Betony (*Pedicularis canadensis*) and Swamp Lousewort (*Pedicularis lanceolata*). Their flowers are in a thick spike, long and tubular in shape, with the upper lip curving over the lower lip like a hood. The leafy bracts are lobed and toothed with long hairs around the edges, and twist in such a way to turn the flowers sideways, giving it a pinwheel appearance when looking down at the top of the plant.

Formally in the Scrophulariaceae (Figwort) family, the lousewort has been recently reassigned to Orobanchaceae (Broomrape) along with other parasitic plants. This is due to the fact that both are partially parasitic to the plants around them. Their favorite host plants are asters and native grasses.

This, however, is where the similarities end, making it quite easy to tell them apart. Wood Betony grows in mesic to dry conditions and somewhat acidic soil in prairies and open woods; reaches a height of 4-16 inches tall; and blooms May-June. In contrast Swamp Lousewort prefers wet limey soil in field, prairies and swamps along shores; is much taller growing 12-36 inches; and blooms later in August-September. Even the growing habits of the two are a good identification indicator. The leaves of

Wood Betony are mostly basal and, what few leaves are along the densely hairy main stem, are alternately attached. The Swamp Lousewort has smaller leaves that are mostly the same size and lobes that are shallower. The main stem is smooth with the leaves paired in opposite attachment with each pair at right angles to the pair below.

Louseworts, Wood betony and Swamp lousewort, have many similarities, but parasitism make these species unique in a prairie. The parasitism function of lousewort in a prairie may be vital in the checks and balances of a prairie system. It needs a partner to produce seed.



Upper left: Swamp lousewort
Upper right: Swamp lousewort in Brushy Creek planting August 13, 2011
Lower left: Wood betony at Prairie Resource Center office spring 2012.

Activities at the Prairie Resource Center

Saturday August 25th, 2012-Butterfly Identification and Monarch tagging 1 PM-3 PM. Prairie flower seed production plots at the Prairie Resource Center are magnets for local and migrating butterflies. Come join Stephanie Shepherd with the Iowa DNR Wildlife Diversity Program as she leads the group in butterfly identification and tagging of monarchs from 1-3 pm Saturday August 25, 2012. We will meet at the Prairie Resource Center office and continue to the wildflower plots and catch and identify butterflies.



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