

What are prairie strips?

Prairie strips are a farming conservation practice designed to reduce soil and nutrient export from agricultural fields while simultaneously increasing native habitat on the landscape. These goals are achieved by seeding prairie within or at the edge-of-field in strategic designs compatible with farm equipment. The stiff stems, deep roots, and perennial nature of prairie vegetation render it ideal for water interception, soil retention, and continuous living cover. Prairie strips are a relatively new farming conservation practice. They began being planted across Iowa in 2013.

Why are you surveying the plants in prairie strips?

We are interested in inventorying the vegetation community in already established prairie strips to assess their fate and success. We are curious in seeing what plants are dominant in the strips, and whether the diversity or cover of prairie species are related to factors such as site age or management.



Figure 2. Example of sampling methodology: Species inside a quadrat (a rectangular sampling plot, shown above) were identified. Visual cover (%) was also estimated for each species in order to get an idea of both presence and abundance.

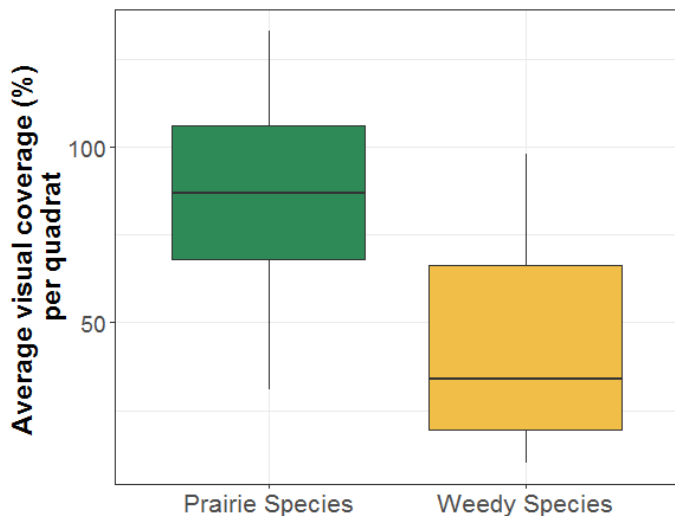


Figure 3. The average % cover (abundance) of prairie and weedy species per sampling unit, across all sites, in 2018.

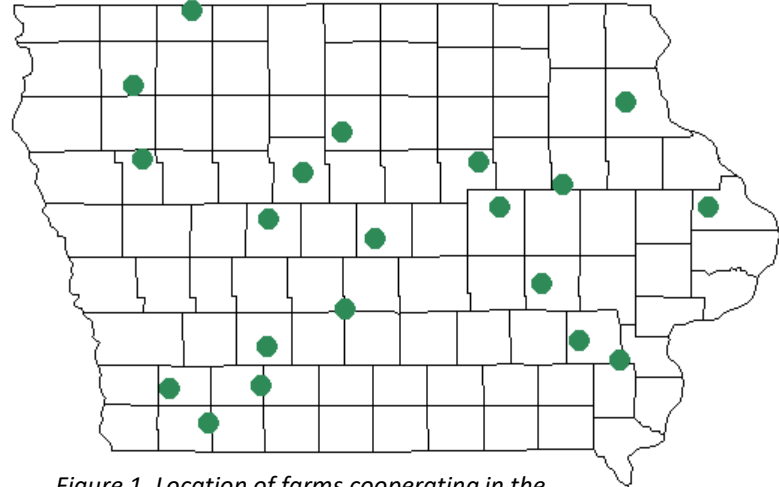


Figure 1. Location of farms cooperating in the vegetation study. 21 sites were surveyed in the summer of 2018.

Rank	Common name	Scientific name
1	Grey-headed coneflower	<i>Ratibida pinnata</i>
2	Indian grass	<i>Sorghastrum nutans</i>
3	Canada wild rye	<i>Elymus canadensis</i>
4	Big bluestem	<i>Andropogon gerardii</i>
5	Wild bergamont	<i>Monarda fistulosa</i>
6	Oxeye sunflower	<i>Heliopsis helianthoides</i>
7	Virginia wild rye	<i>Elymus virginicus</i>
8	Switch grass	<i>Panicum virgatum</i>
9	Canada goldenrod	<i>Solidago canadensis</i>
10	Black-eyed Susan	<i>Rudbeckia hirta</i>

Table 1. Top 10 most common prairie species found in prairie strips in 2018. Grass species are highlighted in green.

Rank	Common name	Scientific name
1	Dandelion	<i>Taraxacum officinale</i>
2	Canada thistle	<i>Cirsium arvense</i>
3	Kentucky bluegrass	<i>Poa pratensis</i>
4	Giant foxtail	<i>Setaria faberi</i>
5	Smooth brome grass	<i>Bromus inermis</i>
6	Marestail	<i>Conyza canadensis</i>
7	Yellow foxtail	<i>Setaria pumila</i>
8	Quackgrass	<i>Agropyron repens</i>
9	Red clover	<i>Trifolium pratense</i>
10	Prickly lettuce	<i>Lactuca serriola</i>

Table 2. Top 10 most common weedy species found in prairie strips in 2018. Grass species are highlighted in green.