

Prairie Strips: A New Way to Manage Soybean and Corn Farms in Iowa

Most of Iowa was once covered in tallgrass prairie. The prairie is an ecosystem with over 200 different kinds of native plants, many of them grasses. Many prairie plants are perennial, which means they don't die every year, like corn and soybeans. Instead, they continue to grow year after year and provide habitat. Tallgrass prairie plants grow up to 12 feet tall. Prairie ecosystems support many different kinds of animals.

Many of the farms in Iowa are monoculture farms that grow only soybeans or corn. Farmers and scientists are studying a new method of farming. Instead of growing only soybeans or corn on all of the land, farmers are growing prairie plants on 10-20% of the land. They call these areas "prairie strips."



Tallgrass prairie



Monoculture soybean farm



Prairie strips

Prairie strips are a way for farmers to manage the land. In the image to the right, you can see corn growing. The breaks in between are newly planted areas of prairie. These prairie areas will grow into tall perennial plants that act like sponges and keep the water, soil, and nutrients on the farm. Farmers will cut down the corn and soybeans every year, but the prairie areas will continue to grow.



This image (right) shows the prairie after several years once the plants are established. On a farm with prairie strips, scientists found 13 different types of plants in the crop area, and 51 different kinds of plants in the prairie area.



On farms with prairie strips, having many different kinds of plants leads to more animals. For example, scientists found two different kinds of birds on the farm with prairie strips, but only one kind of bird on a farm growing only one crop. In addition, they found three times as many birds total on the farm with prairie strips than on the monoculture farm without.

In addition to creating a habitat for birds, the prairie plants also provide habitat for many helpful insects, including over 70 different kinds of bees and other pollinators, like monarch butterflies.

Using 10-20% of the land to grow prairie is one way that farmers in Iowa are making their monoculture soybean and corn farms more like the prairie habitat that once grew there. Scientists have found that the land still produces the same amount of soybean and corn crops as a monoculture farm, even though farmers use slightly less land to grow the crops.

