

## Native Landscaping IOWA'S PRAIRIE HERITAGE



1. A mowed native turf path welcomes people into this native flower garden. It features flowers found in the prairie planting at Riverside Bible Camp.
2. A parking lot landscaped with native plants. Regular weeding and mulching is needed to keep this garden-like native planting looking good.
3. This greenspace by Ames City Hall is landscaped with native plants.
4. A reconstructed prairie buffers Twin Lakes in North Central Iowa. A mowed path welcomes people through the prairie and provides access to the lake.
5. Native landscaping graces Iowa roadsides and provides seasonal color and beauty to passing motorists. The Living Roadway Trust Fund has helped convert roadsides in Iowa to native plantings.
6. This high-diversity planting features shorter-growing native species on the hillside behind the Altoona fire station.



### Low-interest loans available for rainscaping.

The State Revolving Fund provides low-interest loans for implementing sustainable storm water management strategies. Eligible practices include soil quality restoration, native landscaping, bioretention cells, rain gardens, pervious paving systems and more. Loans with an interest rate of three percent can be made to developers, municipalities, businesses and homeowners.



rainscapingiowa.org



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# NATIVE LANDSCAPING

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### THE MODERN LANDSCAPE AND INCREASED RUNOFF

For thousands of years, the Iowa landscape was dominated by tallgrass prairie vegetation with extensive root systems that helped form deep, rich soils. Prairie soils had high organic matter content and ample pore space between soil particles. These soil characteristics helped the prairie absorb and infiltrate most rainfall, while shedding little runoff.

As the prairie was converted to agriculture and cities were established, the ability of Iowa's land to absorb and infiltrate water decreased. Tillage-based agricultural practices reduced the organic matter content that had developed under the prairie, which gave the landscape the ability to act like a sponge. As organic matter declined, runoff increased. Modern soils also have less pore space for water storage, and less storage capacity means more runoff.

Urban landscapes have impervious surfaces, including streets, parking lots and rooftops. Urban soils are compacted by grading activities. Impervious and compacted urban surfaces prevent infiltration and increase the amount of runoff. Urban runoff occurs with almost every rainfall, causing water quality problems, stream corridor erosion and increased flood potential.





Butterfly milkweed



Spiderwort



Goldenrod

## The Benefits of **NATIVE LANDSCAPING**

The use of native plants in modern landscapes provides a connection to our prairie heritage. Once established, native plants are aesthetically pleasing and require little watering, fertilizing and mowing. The reduced maintenance can lead to significant cost savings when compared to labor-intensive turf grass.

Native landscaping attracts songbirds, dragonflies, butterflies and other desirable species and also helps reduce the problems associated with geese around urban ponds. Most important, it helps restore soil quality over time and helps landscapes absorb more rainfall, reducing the amount of runoff from urban spaces.

## **Native Gardens**

Native plants can be used in any garden or landscape.

### **Plugs, Plants, Seeds**

Use plugs or potted plants for faster establishment. Plugs are small, economical plants that require a fair amount of nurturing until established. They will need to be watered regularly until the deep roots are established—at least through the first growing season.

Plants are available in pots that range from three inches to one gallon in size. They provide showy blooms in the first year.

Seeding is used when establishing native plants in large areas such as parks and corporate campuses. It isn't recommended in a garden setting, as it takes roughly three years for the plants to become established and showy. Seeded gardens appear more random and less groomed than traditional landscaping.



### **Selecting Species**

Select species adapted to the soils, moisture regime and sunlight characteristics of a specific area. Open and sunny areas support a large variety of plants, while shady sites are limited to woodland species.

Consider placing native plants in wet areas or along steep slopes that are difficult to mow.

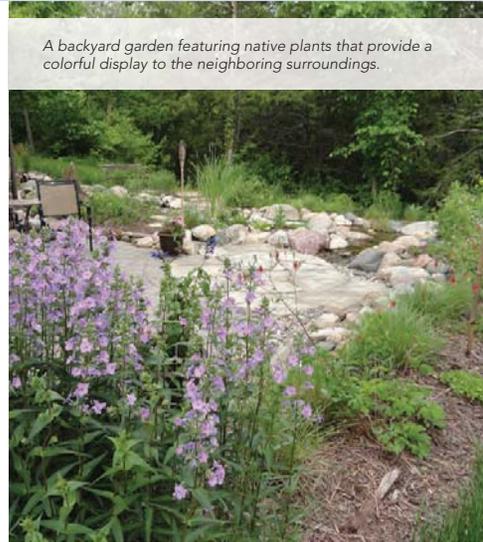
Generally, it's best to select shorter species (three feet or less). Some native species grow to six or eight feet tall. In a smaller garden setting, some of the taller species flop over and become unsightly.

### **Installation**

Plants should typically be spaced about one foot apart. Place two inches of mulch around the base of the plant to help suppress weeds. Be prepared to weed until plants are fully established. If using plugs, spread the mulch first and plant through it.

### **Maintenance**

After establishment, maintenance will be minimal. Periodic weeding will be necessary. No fertilization is needed. Pesticides may be needed for spot treatment of weeds. Remove dead vegetation each year by mowing, raking or burning dead residue.



*A backyard garden featuring native plants that provide a colorful display to the neighboring surroundings.*

## **Native Prairie Reconstruction**

To reduce the costs of mowing large expanses of turf, such as a corporate campus, establish a diverse native planting using a mixture of native seeds. It will take roughly three years for the native planting to become fully established.

### **Site Preparation**

Kill existing vegetation prior to seeding prairie. When eliminating prior plantings, leave a border of turf. Maintaining a mowed border will provide a managed look to the landscape and will serve as a fire break for prescribed burn management. Broadcast or drill in the seed.

### **Management**

Native plants spend the first two years developing roots. Annual weeds often dominate a new planting. Keep competing vegetation mowed to a height of six to eight inches, allowing sunlight to reach the smaller natives. By the third year, the natives should start to flourish and outcompete other weedy plants.

Native landscaping reduces maintenance but is not maintenance-free. Certain activities need to be performed on an annual basis, including prescribed burning, spot treating or mowing for weed control, and cutting and stump-treating woody species that will encroach if you don't utilize fire management. The result of these efforts will be an attractive native prairie planting.



*A well-established, diverse native planting on the campus of Iowa State University. Mowed borders are maintained around native plantings to provide a managed look.*