

Plant Wise

IOWA STATE UNIVERSITY
University Extension

Mills County Extension
415 Main St., Suite 2, P.O. Box 430
Malvern, IA 51551
712-624-8616
<http://www.extension.iastate.edu/mills>

Prepared by Nancy Crews, Mills County Horticulture Assistant

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Growing Day Lilies

By Mary H. Meyer,
Assistant Professor,
Horticulture Science
University of
Minnesota Extension



Daylilies are rugged, adaptable, vigorous perennials that endure in a garden for many years with little or no care. Daylilies adapt to a wide range of soil and light conditions. They establish quickly, grow vigorously, and survive winters with little or no injury.

Daylilies belong to the genus *Hemerocallis* and are not true lilies. This Greek word is made up of two parts: *hemera* meaning day and *kallos* meaning beauty. The name is appropriate, since each flower lasts only one day. Some of the newer varieties have flowers that open in the evening and remain open until the evening of the following day. Many of these night blooming plants are delightfully fragrant.

Each daylily plant produces an abundance of flower buds that open over a long period of time. There are many varieties, a wide range of flower colors, and the flowers continue during the heat of the summer.

Daylilies are useful in the perennial flower border, planted in large masses, or as a ground cover on slopes, where they form a dense mat in just a few years.

Site and soil

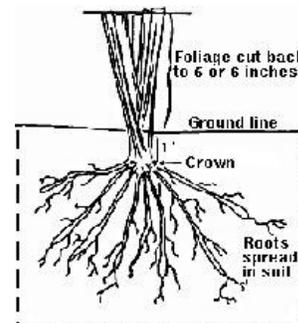
Daylilies grow best in full sun. They will tolerate light shade, but flower best with a minimum of six hours of direct sun. Light shade during the hottest part of the day keeps the flowers fresh. Daylilies should not be planted near trees and shrubs that are likely to compete for moisture and nutrients.

Although daylilies are adaptable to most soils, they do

best in a slightly acidic, moist soil that is high in organic matter and well drained.

Planting

Daylilies can be planted almost any time the soil can be worked. Till the soil deeply before planting. Work in well-rooted manure or compost to increase organic matter. Apply fertilizer based on a soil test. Contact your local Extension office for soil test information. Dig a hole large enough for the roots without bending or crowding them. The best time to transplant or divide plants is early spring or immediately after flowering. Plants divided in the spring may not bloom the same summer. Divisions should have two to three stems or fans of leaves with all roots attached. Make divisions by digging the entire plant and gently pulling the fans apart. Cut the foliage back, leaving only five or six inches. Place the plant in the soil so the crown (the portion where the stem and root meets) is one inch below the ground line. Water thoroughly after planting. A winter mulch of straw or shredded leaves helps ensure against winter injury for unestablished plants. Daylilies are vigorous growers and can be divided every three to four years.



Culture

In early spring, before growth starts, remove the dead foliage from the previous year's growth and any weeds. A summer mulch helps eliminate or ease the unpleasant task of weeding. Perennial grasses can be difficult to eradicate if they become established within the clumps. Although daylilies tolerate drought, they perform best in moist, but well-drained soils. One inch of water weekly is ideal, more frequent watering may be necessary on sandy soils. Remove seed pods after bloom to prevent seed production. Plants producing seed are likely to have fewer flowers the following year.

Insect control measures usually are not necessary.

Aphids and thrips sometimes feed on the flower buds. These pests can be controlled with insecticidal soaps or a repeated strong spray of water. Annual fertilization may be helpful in producing more flowers. A spring application of manure or compost is beneficial each year.
Cultivars

More than 35,000 daylilies have been named, officially registered, and marketed. Many newly developed plants are introduced annually. Because of their scarcity, some of these new varieties sell for \$100 or more, but there are many beautiful, modern cultivars available at reasonable prices. Specialty nurseries often carry thousands of different cultivars. The great majority of new cultivars are developed in southern regions of the United States.



Established daylily clumps often produce 200–400 flowers in a season. Bloom time extends from early to late summer. Each plant blooms for 30–40 days. With the large number of cultivars available, it is possible to have continuous bloom throughout the summer. Daylily flowers come in many colors, shades, and color combinations. Some are very full and round, others have wide petals with ruffled edges and borders. Others, called spiders, are spidery in shape; doubles have double the number of petals and sepals. Many are nocturnal and very fragrant and other cultivars have branched flower scapes.

Daylilies are regional performers which means they grow well only in certain parts of the country, usually over three hardiness zones. For this reason, you should purchase daylilies from a local nursery, a nursery within the state, or a nursery in a neighboring state.

Redwing Blackbirds

By The Cornell Lab of Ornithology

One of the most abundant birds across North America, and one of the most boldly colored, the Red-winged Blackbird is a familiar sight atop cattails, along soggy roadsides, and on telephone wires. Glossy-black males have scarlet-and-yellow shoulder patches they can puff up or hide depending on how confident they feel. Females are a subdued, streaky brown, almost like a large, dark sparrow. In the North, their early arrival and tumbling song are happy indications of the return of spring.



Migration

Red-winged Blackbirds in northern North America winter in the southern United States, as far as about 800 miles from their breeding ranges. Southern and some western populations don't migrate at all.

Food

Red-winged Blackbirds eat mainly insects in the summer and seeds, including corn and wheat, in the winter. Sometimes they feed by probing at the bases of aquatic plants with their slender bills, prying them open to get at insects hidden inside. In fall and winter they eat weedy seeds such as ragweed and cocklebur as well as native sunflowers and waste grains.

Nesting

Females build the nests by winding stringy plant material around several close, upright stems and weaving in a platform of coarse, wet vegetation. Around and over this she adds more wet leaves and decayed wood, plastering the inside with mud to make a cup. Finally, she lines the cup with fine, dry grasses. One nest picked apart by a naturalist in the 1930s had been made by weaving together 34 strips of willow bark and 142 cattail leaves, some 2 feet long. When finished the nest is 4 to 7 inches across and 3 to 7 inches deep.

Cool Facts

Different populations and subspecies of Red-winged Blackbirds vary markedly in size and proportions. An experiment was conducted that moved nestlings between populations and found that the chicks grew up to resemble their foster parents. This study indicated that much of the difference seen between populations is the result of different environments rather than different genetic makeups.

The Red-winged Blackbird is a highly polygynous species, meaning males have many female mates – up to 15 in some cases. In some populations 90 percent of territorial males have more than one female nesting on their territories. But all is not as it seems: one-quarter to one-half of nestlings turn out to have been sired by someone other than the territorial male.

Male Red-winged Blackbirds fiercely defend their territories during the breeding season, spending more than a quarter of daylight hours in territory defense. He chases other males out of the territory and attacks nest predators, sometimes going after much larger animals, including horses and people.

Red-winged Blackbirds roost in flocks in all months of the year. In summer small numbers roost in the wetlands where the birds breed. Winter flocks can be congregations of several million birds, including other blackbird species and starlings. Each morning the roosts spread out, traveling as far as 50 miles to feed, then reforming at night.

The oldest recorded Red-winged Blackbird was 15 years 9 months old.

Upcoming Horticulture Events of Interest:

NE Statewide Arboretum Plant Sale

Dates: Friday, May 23, 30, and June 6 and 13

Time: 12:00 – 5:00 PM

Place: NE Statewide Arboretum Greenhouse, Lincoln

Every Friday from May 16 through June 13, NSA greenhouse is open for plant sales from noon till 5pm at NSA Shade House on UNL East Campus. More details and directions at the following link:

<http://arboretum.unl.edu/plant-sales>

Why Was Winter 2013-14 So Hard On Our Landscape Plants?

Jeff Iles
Department of
Horticulture
Iowa State University



I think we'd all agree, the past winter season was a long and difficult one. Even now, in the third week of May, temperatures are struggling to reach 70°. And the three overriding questions remain...will summer ever arrive? How do I explain to my boss, club members, clients, etc. why so many plants look dead after the winter of 2013-14? And perhaps most importantly, why was this past winter so tough on landscape plants?

Consider these important events:

- As we entered late fall and early winter, soil conditions were very dry.
- As a result, many landscape plants entered winter under stress or in a weakened condition.
- Severe low temperatures (before measureable snowfall) caused the soil to freeze to impressive depths. This could have resulted in root death to sensitive or stressed plants.
- When snowfall eventually arrived, it blanketed the ground without interruption, persisting until early spring in some locations and ensuring frozen soil until late March/early April.
- Strong winds seemed to be an everyday occurrence. When coupled with high light intensity and frozen soil conditions, the damage to evergreens became a foregone conclusion.

- Finally, low temperatures, the likes we haven't seen for many years, helped create the perfect storm.

Mitigating Winter Injury

Winter injury may not be immediately apparent when plants resume growth in the spring. Some plants may actually leaf out and appear quite normal for a time, only to decline and die later during stressful summer conditions. To minimize unsightliness and promote plant health, dead wood should be pruned out as it becomes apparent.

Providing appropriate amounts of water to compromised plants may be the most important task for landscape managers. Plants already suffering from winter injury may die quickly if forced to cope with drought stress. Mulching the area around trees and shrubs with organic materials like wood chips or shredded bark will help conserve soil moisture and keep lawn maintenance equipment away from sensitive bark and stem tissue.

Finally, it is important to remember that fertilizer is not a cure-all for winter-injured plants. If a soil test determines that mineral elements are deficient, then applying an appropriate fertilizer makes perfect sense. But high rates of fertilizer will not miraculously close sunscald wounds, restore life to killed roots or buds, or reverse any of the other negative effects resulting from the memorable winter of 2013-14.

Perennial Plant of the Year for 2014

By The Perennial Plant Association



Panicum virgatum 'Northwind' is the Perennial Plant Association's 2014 Perennial Plant of the Year™. *Panicum virgatum*, pronounced PAN-ic-um ver-GATE-um, carries the common name of switch grass or switchgrass.

Hardiness: USDA Zones 4 to 10

Light: Switch grass performs best in full sun and will tolerate light shade.

Soil: Panicum is famously adaptable to almost any soil.

Uses: Switchgrass is a stalwart selection in the full-sun, especially native, meadow or prairie gardens. Flower arrangers find the foliage and plumes useful for arrangements. Finally, this warm-season perennial grass offers golden fall color.

Unique Qualities: 'Northwind' is very easy to grow. It will enhance any sunny border, not just a native, meadow- or prairie-style garden. 'Northwind' has a refined, garden-worthy appearance and habit.

Maintenance: There are no serious insect or disease problems with Switchgrass. Plants are best divided in spring. 'Northwind' is not patented. It can be reproduced from divisions. Liners are available from numerous propagators, including members of the Perennial Plant Association.

This warm-season perennial grass has blue-green foliage and stands more erect than is typical of the species. 'Northwind' is only the third ornamental grass to be named Plant of the Year™ following *Calamagrostis* 'Karl Foerster', 2001, and *Hakonechloa macra* 'Aureola', 2009.

The genus *Panicum*, native to North America, is a member of the Poaceae family (formerly family Gramineae). Regardless of nomenclature, members of *Panicum* are excellent perennial grasses for the landscape. The genus botanical name (*Panicum*) is thought to derive from the Latin pan, bread. One species (*P. miliaceum*, common millet) has been used for centuries to make flour.

The origin of the common name switchgrass or switch grass is obscure. "Switch" is believed to be a variation of Middle English "quitch," among whose meanings is "quick," or alive, suggesting the grass is difficult to kill. Others say the name derives from the swishing sound the grass makes when tossed by the wind.

Roy Diblik selected 'Northwind' from a population of *Panicum virgatum* he raised using wild-collected seed from plants growing along railroad tracks in South Elgin, Illinois. In July 1983, he noticed that one plant had wider leaves and a very upright growth habit, unlike the typical arching form of the others. He gradually built up stock of the upright one. In 1992, when Northwind Perennial Farm opened, he introduced it and named it 'Northwind'.

Panicum virgatum 'Northwind' spreads slowly to form erect clumps of slender, steel-blue leaves about five feet tall. In late summer, the foliage is topped by a haze of showy, finely-textured flower panicles that rise to six or even seven feet, and that open golden yellow and mature to beige.

Deep roots make 'Northwind' remarkably drought-tolerant, once established. And like most ornamental

grasses, *Panicum virgatum* 'Northwind' is seldom eaten by deer.

Japanese Beetle Control on Trees

By Donald Lewis and
Mark Shour
Department of Entomology
Iowa State University



Many homeowners, tree care companies and landscapers are looking ahead and worrying about defoliation of trees by the Japanese beetle adults again this summer. The Japanese beetle is "the worst landscape insect pest" in much of the eastern USA where it is established. The adults feed on the foliage flowers and fruits of over 350 types of plants. Favored hosts include linden trees, grapes and roses. Foliage is consumed by eating the tissue between the veins, a type of feeding called skeletonizing. Flowers and fruits are devoured completely, often by a horde of a dozen or more beetles at a time.

Eliminating Japanese beetles is not possible though over time the infestation does moderate. Populations (and damage to plants) will not always be as high as it is at the peak of an infestation 5 to 8 years after the first discovery in an area. Japanese beetles are at different levels around the state and within a community. Some properties do not yet have Japanese beetles, others are experiencing the frustration of the peak explosion, and others have seen the worst of the damage diminish as populations moderated. In other words, time will help to some extent, though experience in the eastern USA, where Japanese beetles have been present for nearly 100 years indicates they never completely go away and there will continue to be spotty outbreaks of severe defoliation.

Management options are as follows:

1. If possible tolerate the defoliation of trees. Defoliation of linden, crabapple and other trees is a temporary leaf loss. Defoliation makes trees unsightly but it does not mean the tree is dead. Healthy, well-established trees tolerate defoliation.
2. Screening, handpicking and spraying infested foliage with contact insecticides works for small plants (roses, shrubs, etc.). Young, newly-planted trees may benefit from protective actions but larger trees will survive without treatment. Using insecticides to keep the green leaves on trees requires repeated, thorough applications (due to the short residual of registered products; 1 to 3 weeks protection of foliage) for the duration of the beetle emergence period (late June to September). Insecticide labels prohibit spraying plants that are in bloom.

Contact insecticides for adult Japanese beetle control include carbaryl and pyrethroids (bifenthrin, cyfluthrin, deltamethrin, esfenvalerate, permethrin and lambda cyhalothrin). Note that carbaryl and some pyrethroids are toxic to bees and extra caution is required. Botanical alternatives such as Neem and pyrethrin products may provide 3-4 days of feeding deterrence. Never spray an insecticide on blooming plants or when bees are foraging or under windy conditions.

3. Soil-applied systemic insecticides such as imidacloprid were used in the past to protect tree foliage when by application prior to the arrival of the beetles (it takes time for the insecticide to make its way up to the foliage). However, we do not recommend soil-applied systemic insecticides for this purpose since the insecticides that protect the foliage may also move into the nectar and pollen where they are toxic to honey bees and other pollinators.

For trees that bloom early in the season (crabapples, etc.), it would seem that the risk to pollinators would be low. However, this assumption is being challenged as we learn more about the persistence of these insecticides in the trees, and whether the systemic insecticide is present in flowers the following spring.

Trees that bloom in summer (e.g., lindens) are the most problematic. Applying systemic insecticide before Japanese beetles arrive (and before the blooms appear) puts honey bees and other pollinators at risk. Applying after bloom may be too late for effective defoliation control and the systemic insecticide may be present in flowers the following summer.

More on the impact of neonicotinoid insecticides on pollinators in the Xerces Society report, "[Are Neonicotinoids Killing Bees?](#)"

Ask the ISU Extension Gardening Expert

My daffodils produce foliage in spring, but no longer bloom. Why?

If the daffodils aren't blooming, the plants weren't able to store enough food in their bulbs in the previous year. Daffodil foliage typically persists for four to six weeks after blooming. During this period, the daffodil foliage is manufacturing food. Much of the food is transported down to the bulbs. In order to bloom, daffodils must store adequate levels of food in their bulbs. Cutting off the foliage before it has died back naturally may prevent the plants from storing adequate food in the bulbs. Allow the daffodil foliage to die completely before removing it. Plants in partial shade in May and June may not be able to store enough food in their bulbs because of insufficient sunlight. Dig up daffodils growing in partial shade when the foliage has died back and plant the bulbs in a location that receives at least six hours of

direct sun per day. If given good care and favorable growing conditions, weak (non-blooming) daffodils can be encouraged to flower again.

What are some good low maintenance perennials?

All perennials require some maintenance. Watering, fertilizing, pinching, staking, deadheading, dividing and providing winter protection are common maintenance chores. Some perennials require frequent attention through the growing season. Others require minimal care.

Low maintenance perennials for sunny locations include butterfly weed (*Asclepias tuberosa*), false blue indigo (*Baptisia australis*), hardy geranium (*Geranium spp.*), hardy



Butterfly Weed

zinnia (*Heliopsis helianthoides*), daylily (*Hemerocallis spp.*), Siberian iris (*Iris sibirica*), blazing star (*Liatris spp.*), daffodil (*Narcissus spp.*), peony (*Paeonia hybrids*), Russian sage (*Perovskia atriplicifolia*), moss phlox (*Phlox subulata*), balloon flower (*Platycodon grandiflorus*), coneflower (*Rudbeckia spp.*), perennial salvia (*Salvia x superba*), sedum (*Sedum spp.*), speedwell



False Blue Indigo

(*Veronica spp.*) and ornamental grasses (various species). Low maintenance perennials for partial to heavy shade include lady's mantle (*Alchemilla mollis*), Canadian wild ginger (*Asarum canadense*), heartleaf brunnera (*Brunnera macrophylla*), turtlehead (*Chelone spp.*),



Lady's Mantle

bleeding heart (*Dicentra spp.*), barrenwort (*Epimedium spp.*), hosta (*Hosta spp.*), creeping phlox (*Phlox stolonifera*), lungwort (*Pulmonaria spp.*), bloodroot (*Sanguinaria canadensis*), foam flower (*Tiarella spp.*) and ferns (various species).



Lungwort

What are some good native perennials for a shady site?

Native woodland wildflowers that make good additions to the home landscape include wild columbine (*Aquilegia canadensis*), Jack-in-the-pulpit (*Arisaema triphyllum*), goat's beard (*Aruncus dioicus*), Canadian wild ginger (*Asarum canadense*), Dutchman's breeches (*Dicentra cucullaria*), shooting star (*Dodecatheon meadia*), Virginia

bluebells (*Mertensia virginica*), woodland phlox (*Phlox divaricata*), May apple (*Podophyllum peltatum*), Solomon's seal (*Polygonatum biflorum*), bloodroot (*Sanguinaria canadensis*), false Solomon's seal (*Maianthemum racemosum*), merrybells (*Uvularia grandiflora*) and others.

How do I identify suckers on my Knock Out Roses?

Knock Out Roses are grafted onto a rootstock. Any growth coming from below the graft or swelling on the main stem can be considered a sucker. All rose leaves are red when they first emerge so that's not a good indication of whether or not the stem is a sucker or growth from the grafted cultivar. Trace the stem down to its point of origin. If it is coming from above the graft, leave it alone; if it is coming from below the graft, cut it off. If the growth in question is upright growth from a stem you know is the cultivar, you can simply prune it back. It's not technically a sucker, just part of the Knock Out roses' genetic makeup and rambling nature. Knock Out roses are vigorous growers once established.

Resources for Horticulture information

ISU's Hortline at (515) 294-3108

(Monday-Friday, 10 a.m.-noon, 1-4:30 p.m)

Iowa State University Publications

RG 0303 Daylillies
 PM 683 Composting Yard Waste
 PM 820 Garden Soil Management
 RG 319 When to Divide Perennials
 PM 819 Planting a Home Vegetable Garden

MAY GARDENING TO DO LIST



- After danger of frost, plant your tender perennials such as caladiums, cannas, crocosima, gladiolas, dahlias, and tuberous begonias.
- Plant tomatoes, peppers, cucumbers, eggplant, pumpkins, squash, and melons after danger of frost. Be ready to protect seedlings if frost threatens.
- Stagger plantings of beans and corn for extended harvest.
- Rotate vegetable placement in the garden to reduce disease and insect problems.
- Pinch chrysanthemums back once they have grown to about 6" in height. This will promote

compact growth and more blooms to enjoy this fall.

- Harden off young plants to help them adjust to sun, wind, and variable temperatures. Several days before planting, cut back on water, move transplants outdoors to a protected location, and leave them out for a couple of hours.
- Don't remove foliage from tulips and other spring flowering bulbs until the leaves turn completely brown. The leaves are creating food resources and translocating them to the bulbs for next year's flowers.
- Harvest asparagus until the stalks become pencil-thin. Then stop harvesting until next year.
- Harvest rhubarb by cutting or by grasping and pulling up and slightly to one side.
- Thin lettuce, carrot, and radish seedlings.
- Prune spring-flowering shrubs, such as lilac and forsythia, immediately after blooming.
- Remove blossoms from newly planted June-bearing strawberry plants to allow for better runner formation.
- Scout for eastern tent caterpillar on apple, crabapple, and wild plum to find tents and remove them in the evening when the caterpillars are present.
- Start a compost pile. It is best to have a mixture of organic materials. Dry leaves mixed with fresh grass clippings, straw and hay, sawdust, and finely chopped or shredded tree and shrub prunings will produce wonderful compost!
- Dig and Divide herbaceous perennials to control size, retain vigor, and/or to propagate more plants. Early spring-blooming perennials should not be divided at this time.
- Heavily bearing apple trees should be hand thinned 6 weeks after bloom.
- Move houseplants outdoors into a shady, protected location for the season, if desired.

Horticulture Publications on-line

<https://www.extension.iastate.edu/store/ListCategories>

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