Irises for the Home Landscape

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There are more than 200 species of Iris. Most irises grow from thick, underground stems or rhizomes. A few species are bulbous. An iris flower typically consists of 6 segments. The 3 inner segments, which are generally upright, are referred to as standards. The drooping, outer 3 segments are known as falls. Bearded irises are one of the most popular and widely grown perennials in the home landscape. Though not as widely grown, several other types or species of iris are also attractive additions to the perennial garden. By selecting and planting several different iris species, gardeners can enjoy blooming irises from April through July.

Bearded Iris

The common name comes from the fuzzy growth or "beard" which runs down the center of each fall. Bearded irises are commonly classified into dwarf bearded (plants are 4 to 10 inches tall), standard dwarf bearded (10 to 15 inches tall, sometimes called Lilliputs), intermediate bearded (15 to 28 inches), and tall bearded (over 28 inches). Bearded irises are available in a wide range of colors, including white, yellow, orange, pink, wine-red, blue, and purple. The flowers of many varieties possess various combinations or blends of these colors. Bearded irises bloom in early to late spring. The dwarf bearded forms are the first to bloom, usually mid-April to early May. The last of the bearded irises to bloom are the tall bearded varieties. They usually bloom from mid-May to mid-June. Leaves are strap-like and grow in fan-shaped clumps. Gardeners can choose from several thousand named varieties.

Bearded irises perform best in well-drained soils in full sun. To avoid problems in poorly drained soils, plant bearded irises in raised beds. They are excellent plants for perennial beds and borders. Bearded irises are hardy in USDA Hardiness Zones 3 to 10.

While bearded irises are widely grown, they are not trouble-free. Bearded irises quickly become overcrowded, resulting in fewer flowers. Clumps should be divided every 3 to 4 years. Several pests are problems on bearded irises. The most destructive pest is the iris borer. The iris borer larvae tunnels into and devours much of the rhizome. Bacterial soft rot often attacks the borer-damaged rhizome turning it into foul-smelling mush. Various leaf spots can disfigure the foliage.

Siberian Iris

The beardless flowers of the Siberian iris (Iris sibirica) are smaller and more delicate than those of the bearded iris. They are available in shades of blue, purple, wine-red, pink, white, and yellow. Siberian irises bloom in late May or June.

The foliage of Siberian irises is narrow, upright, and grass-like in appearance. The green foliage often turns to an attractive yellow or orange-brown in the fall. Varieties range in height from 12 to 40 inches. Siberian irises perform best in moist, well-drained, fertile soils. They do well in partial shade to full sun. Siberian irises (USDA Hardiness Zones 3 to 9) are excellent
plants for the perennial border and bog gardens. Unlike bearded irises, Siberian irises don't have serious insect or disease problems. Siberian irises are seldom bothered by the iris borer, soft rot, and leaf spot. Also, plants don't require frequent division.

Japanese Iris
The Japanese iris (*Iris ensata*) produces large, flat flowers which may be up to 10 inches across. The flower consists of 3 very large, nearly horizontal falls and 3 short, spreading standards. Flower colors include white, blue, purple, reddish-purple, and lavender-pink. The flowers are often marbled or speckled with a contrasting color. Japanese irises bloom in early to mid-summer (late June or July). The flowers are borne atop 30- to 36-inch-tall flower stalks. The leaves of the Japanese iris are dark green, sword-shaped, and about 2 feet long. Japanese irises require moist, organic-rich, acid soils. However, many garden soils in Iowa are alkaline. Gardeners with alkaline soils should incorporate Canadian sphagnum peat into the soil before planting. Canadian sphagnum peat will lower the soil pH and also adds organic matter. Japanese irises do well in partial shade to full sun. They are excellent plants for moist soils near streams and ponds. Japanese irises, hardy in zones 4 to 9, don't have any serious pest problems. Plants can be left undisturbed for many years.

Crested Iris
A native of the eastern United States, crested iris (*Iris cristata*) produces 4- to 6-inch-long leaves from woody, spindle-shaped rhizomes. Flowers are pale blue to violet with white or yellow bands. Plants bloom in mid-spring. Crested iris performs best in well-drained soils in partial shade. It is hardy in zones 3 to 9. Because of its small size, crested iris can be grown in front of the perennial bed or border. It can also be naturalized in the woodland garden.

Yellow Flag
Yellow flag (*Iris pseudacorus*) has sword-shaped leaves and grows 3 to 4 feet tall. Plants bloom in late spring. The flowers are yellow with brown blotches on their falls. Yellow flag performs best in moist to wet soils in partial shade to full sun. It is an excellent plant for wet areas along streams and ponds. In spring, the newly emerged leaves of 'Variegata' have yellow stripes. However, this variegation disappears by mid-summer. Yellow flag is hardy in zones 4 to 9.

Sweet Iris
Sweet iris (*Iris pallida*) produces gray-green, sword-shaped leaves and fragrant, bearded, bluish-purple flowers. The flowers appear in late spring. Sweet iris grows 2 to 3 feet tall. 'Variegata' has cream or yellow and green-striped foliage and pale blue flowers. The attractive, variegated foliage provides visual interest throughout the growing season. Sweet iris grows best in well-drained soils in full sun. It is hardy in zones 4 to 8.

Louisiana Iris
The Louisiana iris is the collective name for 5 species of iris which are indigenous to Louisiana and boggy coastal areas from Florida to Texas. They are valued for their colorful white, blue, red, and yellow flowers. The Louisiana irises grown in gardens today are hybrids of the native Louisiana irises. There are over 500 varieties available. These hybrids vary in size, height, color, and flower form. Some varieties have upright standards and flaring falls like bearded irises, while the flowers of others resemble Japanese irises. A few varieties have ruffled or lacy edges. Several have "double" flowers. Flower size varies from 4 to 7 inches. The bloom period is June or July.

While the Louisiana irises are native to the Gulf Coast states, they are remarkably hardy. They will grow in USDA Hardiness Zones 4 to 9. Louisiana irises prefer moist, neutral to acid soils in partial shade to full sun. Protected sites are best. During dry weather, water the plants weekly. Apply a winter mulch of straw to insure winter survival. Apply approximately 6 inches of straw in November. Louisiana irises are excellent plants for water or bog gardens.

The colorful, orchid-like flowers of the bearded irises are indeed spectacular. However, don't forget some of the other attractive iris species when selecting perennials for the home landscape.
Properly Planting and Harvesting Rhubarb

By Richard Jauron and Greg Wallace
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Rhubarb is a widely-grown plant that can make an excellent addition to a number of dishes and meals. Late spring to early summer is prime time for rhubarb harvest and consumption.

When growing rhubarb at home, take care to ensure prime production. Iowa State University Extension and Outreach horticulturists can help handle these issues. To have additional questions answered, contact the ISU Hortline at 515-294-3108 or hortline@iastate.edu.

My rhubarb is blooming. What should I do?

Flower development is natural for rhubarb and most other plants. Drought, extreme heat and infertile soils may encourage flowering. Age is another factor. Older plants tend to flower more than younger ones.

Regardless of the reason, flower stalks should be promptly pulled and discarded. Plants will be less productive if allowed to flower and set seeds.

Flower formation can be discouraged with good cultural practices. Water rhubarb plants every seven to 10 days during dry weather. Sprinkle ½ cup of an all-purpose garden fertilizer, such as 10-10-10, around each plant in early spring. Control weeds by shallow hoeing, hand pulling or mulching.

When can I start harvesting newly planted rhubarb?

After planting rhubarb, it’s best to wait two years (growing seasons) before harvesting any stalks. The two-year establishment period allows the plants to become strong and productive.

Rhubarb can be harvested over a four-week period in the third year. In the fourth and succeeding years, stalks can be harvested for eight to 10 weeks.

What is the proper way to harvest rhubarb?

Harvest rhubarb by grabbing the base of the stalks and pulling up and slightly to one side. Rhubarb also can be harvested by cutting the stalks at the soil surface with a sharp knife. Do not remove more than one-half of the fully developed stalks from any plant at any one time. After harvest, trim off and discard the leaves. Fresh rhubarb stalks can be stored in a plastic bag in the refrigerator for two to four weeks.

When should I stop harvesting rhubarb?

Well-established rhubarb plants can be harvested for eight to 10 weeks. In Iowa, the last harvest is typically mid-June. If harvested over a longer period, the rhubarb plants will be weakened and less productive the following year.

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Glenwood’s Giving Garden is located behind McCormick Station, 24955 Ingrum Ave, Glenwood, IA

Call for more information 712-527-3316
Emerald Ash Borer on Acreages

By Dr. Mark Shour
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A very small (½ inch long x ⅛ inch wide), metallic green beetle is moving/being moved across Iowa and is destroying ash trees in its wake. More than twenty counties are now considered infested by the Iowa Department of Agriculture and Land Stewardship, and this count is expected to increase in the coming year.

The emerald ash borer (EAB), *Agrilus planipennis*, hitchhiked from Asia in wood packaging materials into the United States sometime in the 1990s. It established itself in ash trees in the greater Detroit, Michigan area, nearly undetected until 2002 when an adult specimen was submitted for identification. The news of this exotic, recent introduction into the USA set off queries about previous literature, only to find two papers about its physical description and known Asian hosts. The great majority of information about EAB has been observed in the past 13 years, and much more research is needed to answer the many questions arising from this devastating insect pest.

Although the adult stage feeds on its host’s leaves, it is the larval (immature) stage that inflicts the primary damage. Larvae (*pictured below*) feed beneath the bark in the cambium area, cutting serpentine tunnels (reminds the author of mountain switch-back roads) thus severing water and mineral transport to the top part of the tree, and also preventing sugar transport from the leaves to the roots. In essence, the tree dries out and is starved at the same time. Multiple larval feeding ‘galleries’ along the trunk and branches will kill the tree in 3 to 5 years.

Larvae hatch from the eggs and chew through the bark to the cambium area, feed, and overwinter. The insect transforms into the pupal stage in the early spring, then to the adult stage. Adults emerge by chewing a “D-shaped” exit hole through the bark to complete the cycle. It has been reported that EAB took 2 years to develop in healthy trees, with most of the life cycle spent in the larval stage.

Host trees
EAB has an insatiable appetite for ash trees – *Fraxinus species*. In Iowa, green ash (*F. pennsylvanica*) and white ash (*F. americana*) are fairly common in landscapes and forests, while pockets of black ash (*F. nigra*) and blue ash (*F. quadrangulata*) also occur naturally.

Approximately 6% of trees in Iowa’s forests are ash species. The ash component in urban landscapes is much higher (60%+), as this genus was used as a replacement for American elms once Dutch elm disease moved through Iowa’s towns and cities.

Unfortunately, EAB’s attention is not focused on declining or weakened ash trees, but healthy trees as well. There are some ash trees still standing in Michigan despite EAB’s feeding activities, and researchers are trying to determine if this is the result of just being missed or if there is tolerance or resistance involved.

A new host, white fringetree, *Chionanthus virginicus*, was found in Ohio in 2014. This olive family relative of ash appears to allow the complete development of EAB, so add another genus to its narrow host list. Fringetrees, traditionally a more southern species, are fairly recent introductions in Iowa’s urban areas by landscapers.

How do you know if you have an ash tree?
Below is a picture of an ash leaflet and the bark texture of green or white ash.

(Photo credit for the two photos above - Paul Wray, Iowa State University Extension, Bugwood.org.)
You could also take a leaf into the county Extension office or visit the following sites for the do-it-yourselfers:

https://store.extension.iastate.edu/Product/Common-Problems-of-Ash-Trees

http://www.extension.iastate.edu/forestry/iowa_trees/tree_id.html

**Symptoms of EAB activity**

Telltale symptoms of EAB activity in an ash tree include:

- Top of the tree dieback—EAB starts feeding at the top of ash trees.
- Epicormic sprouting (‘water sprouts’) along main branches or upper tree trunk—since larvae cut off sugars from the tree top, the tree pushes out new suckers to try to regain sugar.
- Woodpecker feeding (“flecking”) – large pieces of outer bark are flecked off by woodpeckers looking for EAB under the bark.
- D-shaped exit holes chewed by adults emerging from under the bark. Unfortunately, these are first seen at the top of the tree where EAB begins its feeding; by the time you see the exit holes low on a tree, it is usually heavily infested.
- Serpentine tunnels chewed by larvae under the bark. In many instances, the bark above this tunneling cracks and is easy to pop off.

Combined together with the positive identification of an EAB life stage (larva, pupa, and/or adult), these are used to declare a ‘find’ infested by state and federal regulators.

**Native borer activity**

Iowa has its set of native insects that feed on dying/declining ash trees. Their job is to assist in the natural wood recycling effort. Ash-lilac borer, redheaded ash borer, flateheaded appletree borer, banded ash borer, and eastern ash bark beetle are five native borers that make tunnels under the bark of ash trees, and can be confused with EAB at first glance. For more information on this topic, visit:

https://store.extension.iastate.edu/Product/EAB-or-Native-Borer


**How to manage EAB infestations**

After you confirm you have an ash tree, the next step is to determine if the ash tree is in vigorous health. Trees must be healthy and growing on a good site for treatments to be effective. Compromised trees that have mechanical injuries, loose bark or thin canopy or are struggling to grow in poor sites with limited rooting area, compacted soil or other stresses are not worth treating. If the tree is apparently healthy and is valuable in your landscape, then treatment options may be considered. Please visit:

https://store.extension.iastate.edu/Product/Emerald-Ash-Borer-Management-Options to read the ISU Extension & Outreach publication Emerald Ash Borer Management Options.

Specimen trees in the landscape can be protected from EAB. This process is done either every year or every other year (depending on the active ingredient used), and is a long-term commitment (at least 10-15 years into the future). If the tree is 20” diameter at breast height (measured 4.5’ high on tree’s trunk) (corresponds to 60” circumference), the landowner could use a homeowner treatment – see page 3 of EAB Management Options. If the tree is larger, a certified pesticide applicator can determine which of the four treatments (soil drench, soil injection, basal trunk spray, or trunk injection) is best for the site and tree. To make a list of prospective certified applicators in your county/area, go to: http://www.extension.iastate.edu/psep/Publications/EAB/FindingACertifiedPesticideApplicator-NavigatingIDALSDatabase.pdf.

Insecticide control measures against EAB should not be used unless you live within 15 miles of the confirmed EAB infestations. All ash trees within this zone are at risk of EAB attack. Trees outside the 15-mile risk zone should be monitored for signs of infestation. For a full list of EAB detection and education activities, please visit our website at:

Upcoming Horticulture Events of Interest

Summer Solstice Lecture at Lauritzen Gardens
“Jewels of the Prairie” featuring Jim Locklear

**When:** Thursday, June 16, 2016
**Time:** 7 PM
**Where:** Lauritzen Gardens, 100 Bancroft Street, Omaha, NE 68108

Cost of the lecture is $10 for members and $14 for non-members. Space is limited.

The café will be open from 4:30 – 6:30 for dinner. Please call 402-346-4002, ext. 201 or email m.sears@omahabotanicalgardens.org to register and make payment by June 14.

Botanical Design Workshop at Lauritzen Gardens

**When:** Thursday, June 25, 2016
**Time:** 10 – 11:30 AM
**Where:** Lauritzen Gardens, 100 Bancroft Street, Omaha, NE 68108

Gain the skills to create an elegant arrangement and help your inner designer bloom! Classes are taught by the experienced and creative instructor Kevin Smith and run for roughly an hour and a half. All supplies are included. Advanced registration is required. 10 to 11:30 a.m. Instructed by Sasha White.

$45 Lauritzen Gardens members
$55 Non-members

Register online at www.lauritzengardens.org or call Gabrielle at (402) 346-4002, ext. 263.

2016 Perennial Plant of the Year™
Anemone xhybrida 'Honorine Jobert'

By the Perennial Plant Association

**Common Names:**
Japanese anemone, windflower

**Hardiness – USDA Zones:**
4 to 8

**Light – Sun or partial shade is preferable.**

**Soil –** ‘Honorine Jobert’ grows best in well-drained soil, humus-rich soil. Will not tolerate poor drainage nor too-dry soil.

**Unique Qualities –** The dark green trifoliate foliage is uniquely attractive from spring to fall. The textural foliage is a beautiful backdrop for the pure white color of the late summer-to-autumn flowers.

**Uses –** The pure white color lends light accents to the fall planting where golds, reds, and oranges dominate. It is a beautiful, brightening element.

More about this stellar perennial...
Anemone xhybrida ‘Honorine Jobert’ is an experienced world traveler. Anemone was found in China and other Asiatic countries as well as the Mediterranean region. The origins gave rise to the common name Japanese anemone. Windflower is another name popularly applied to the plant. This anemone has existed in the English garden at the Royal Horticultural Society in Chadwick at least since 1848. Before then, many of the fall flowering anemone were a very light pink. Ten years later a fantastic new hybrid occurred in Verdun, France, in the Jobert Gardens and was named ‘Honorine Jobert’. Soon this exciting discovery went back to England and eventually to American gardens. It was a sought-after cultivar by the time of the American Civil War and since has become a classic perennial in gardens of the world. It is found in borders, cottage gardens, or in formal borders and continues to grow in popularity.

Plants are clump-forming and erect. The long wiry stems make the plant look airy and graceful. ‘Honorine Jobert’ attains heights of up to 4’, although most of the time it is a 3’ beauty.

Flowers are intense bright white with a green center surrounded by a corolla of yellow stamens. In late summer, 2” to 3” flowers of ‘Honorine Jobert’ explode from dainty pink, silvery buds into petaloid-shaped flowers. The striking flowers are enhanced by the uniquely attractive trifoliate dark green textural foliage that stays attractive from spring to fall.

The anemone is a very low maintenance plant. It can be grown in sun or in partial shade. In warmer climates it should definitely be in partial shade with protection from wind. Be aware to plant only in early spring or fall. In any location, the plant thrives in humus-rich soil that is well-drained but moisture retentive. It does not tolerate wet, poorly-draining soils in winter. In colder climates, mulch establishing plants. Soils should not be allowed to become dry. The foliage will burn in hot, dry locations. Eventually the spreading rhizomes will be happy to colonize your garden.

‘Honorine Jobert’ grows in USDA zones 4 to 8. It seems to flourish without insect or disease problems and deer do not seem to browse this plant. The best time to propagate is winter or spring. In winter they are usually propagated by root cuttings and in spring by division.
‘Honorine Jobert’ goes well with many other annuals and perennials. Since ‘Honorine Jobert’ flowers into autumn the bright white plant stands out in the landscape and provides accents to the deeper gold, orange, and red colors of the fall garden. They can be charming companion plants with hostas and ferns and countless annuals. Classic plants stand the test of time. This plant more than fills that requirement.

Ask the ISU Extension Gardening Expert

When should bare-root trees be planted?

Bare-root trees and shrubs must be planted in early spring before growth begins. If rainy weather or other circumstances prevent planting within a few days of purchase, store bare-root material in a cool location, such as a garage or root cellar, until planting is possible.

What is the proper way to plant a bare-root tree?

Prior to planting, soak the tree’s roots in a bucket of water for one to two hours. Also, prune off damaged or broken roots.

When ready to plant, dig a hole that is 2 to 2.5 times wider than the spread of the tree’s root system. The depth of the hole should be equal to the distance from the tree’s trunk flare to the bottom of its roots. The trunk flare is the point where the trunk begins to spread out as it meets the roots. Build a cone-shaped mound of soil in the center of the hole. Place the tree on top of the mound. The trunk flare should be even with the surrounding soil surface. Spread the roots evenly over the mound. Then begin backfilling with the original soil. As you backfill, firm the soil in the hole with your hands. Place soil to the trunk flare. Finally, water the tree thoroughly.

Many shade and fruit trees are propagated by grafting. The graft union is located near the base of the tree’s trunk and is denoted by a bulge or crook in the trunk. The graft union is typically 1 to 3 inches above the trunk flare. When planting bare-root trees, be careful not to confuse the graft union with the trunk flare.

What are some good plum varieties for Iowa?

Cold hardiness is an important factor when selecting plum varieties for home gardens. Japanese plums are not reliably cold hardy in Iowa. However, several European and hybrid plum varieties can be successfully grown in the state.

European plum varieties that perform well in Iowa include ‘Mount Royal,’ ‘Stanley’ and ‘Damson.’ ‘Mount Royal’ produces small fruit with bluish black skin and greenish yellow flesh. ‘Mount Royal’ can be grown throughout Iowa. ‘Stanley’ (dark blue skin, greenish yellow flesh) and ‘Damson’ (blue skin, yellow flesh) are not reliably cold hardy in northern Iowa, but can be successfully grown in the southern two-thirds of the state.

Several hybrid plum varieties (introduced by the University of Minnesota) possess excellent cold hardiness and can be successfully grown throughout the state. Hybrid plums include ‘Alderman’ (burgundy red skin, yellow flesh), ‘Pipestone’ (red skin, golden yellow flesh), ‘Superior’ (red skin, yellow flesh) and ‘Underwood’ (dull red skin, yellow flesh).

European plums are self-fruitful. A single tree will bear fruit. Hybrid plums are self-unfruitful. Two or more hybrid plum varieties must be planted to ensure cross-pollination and fruit set. ‘Toka’ is an excellent pollinator for ‘Alderman,’ ‘Superior,’ ‘Underwood’ and other hybrid plums.

Which apricot varieties can be successfully grown in Iowa?

Cold hardiness is an important factor when selecting apricot varieties for home gardens. Many apricot varieties are not reliably cold hardy in Iowa. However, a few varieties can be successfully grown in the state. ‘Moorpark’ is reliably cold hardy in the southern two-thirds of Iowa. ‘Moorpark’ is self-fruitful. A single tree will bear fruit. ‘Moongold’ and ‘Sungold’ (University of Minnesota introductions) possess excellent cold hardiness and can be successfully grown throughout the state. ‘Moongold’ and ‘Sungold’ are self-unfruitful. Plant at least one tree of each variety for cross-pollination and fruit set.

Are there any peach varieties that can be successfully grown in Iowa?

Peaches are not reliably cold hardy in most parts of Iowa. It is possible to grow ‘Reliance’ (yellow flesh, freestone) and ‘Polly’ (white flesh, clingstone) in the southern one-third of Iowa.

Growing peaches in Iowa is challenging. Cold winter temperatures may destroy the flower buds on peach trees. A late frost or freeze in spring can damage or destroy the flowers. As a result, peach trees often bear few, if any, fruit. Gardeners in southern Iowa can anticipate a good crop about once every three or four years. Peaches are also short-lived in Iowa, often dying within eight to 10 years.
I would like to plant some raspberries this spring. Is it best to purchase plants from a garden center or can I transplant some from a neighbor’s garden?

Purchase virus-free raspberry plants from a reliable garden center, nursery or mail-order company. Plants obtained from an old raspberry planting are often diseased. Virus-infected plants may appear healthy, but grow and yield poorly.

**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.

**Resources for Horticulture information**

ISU’s Hortline at (515) 294-3108
(Monday-Friday, 10 AM-noon, 1-4:30 PM)

**Iowa State University Publications**

- PM 874 Starting Garden Transplants at Home (free)
- PM 683 Composting Yard Waste
- PM 820 Garden Soil Management
- RG 319 When to Divide Perennials
- PM 0453 Fruit Cultivars for Iowa
- PM 819 Planting a Home Vegetable Garden

**HorticulturePublications on-line**

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

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