Bearded Iris

The bearded iris is seen everywhere in Arizona, it seems. In some places it could almost qualify as wild, as it is very adaptable to our dry conditions and can survive with little or no care. Native to a wide range of the world, you can find iris species in Asia, Spain, France, Italy, Yugoslavia (the former Yugoslavia anyway, I’m not sure what it’s called now,) Sicily, Japan, Turkey, Portugal, the old Soviet Union, Iran, Saudi Arabia, etc., etc., etc. (Sorry folks—I can’t always keep up on the changes in boundaries and the new names in some areas of the world.) Ancient Arabians spread iris to many parts of the world. In fact, there are over 200 different species and thousands of varieties. Cross-breeding and careful selection have produced the variety of shapes and colors we find today.

Iris flowers have three drooping petal-like sepals called falls and three usually erect petals called standards. The falls have some variation, as they may be bearded—with or without a crest (a raised ridge down the center)—or beardless. Sizes of the plant vary also. They range from miniatures to tall. Some bloom once during the season but recently there has been the development of a large number of reblooming iris for the garden. Variations occur in the leaves also. Sword-like leaves are the most familiar but they can also be grass-like and/or variegated.

For the many good features of iris, there is one bad one. They need to be transplanted, dug and divided in July. Not exactly our favorite time of year for working outside but for the rewards of spring some sacrifices need to be made on occasion. If you haven’t stopped watering the iris yet, start now, a period of summer dormancy helps them along and withholding water encourages them to stop their growth. If your iris haven’t been blooming well, it may be time to
divide them. As they grow, they can become overcrowded and a little spreading out and fertilization of the rhizomes can improve their blooming.

A quick note about rhizomes—like what are they? Rhizomes are swollen stems that grow horizontally along or just below the surface. The main growing point is at the tip while roots develop from buds on the underside.

Iris are truly a nearly care-free plant but a little maintenance and fertilizer will keep them blooming for many years. If the plants are doing well, just fertilize lightly with a low nitrogen fertilizer and use a piece of rebar or something similar to poke holes in the ground and fill with a high phosphorus fertilizer and cover with soil. Phosphorus doesn’t travel—it stays where you put it—and so you will have to poke holes in a lot of areas to make sure you have covered the whole bed. The hole needs to be only 6 to 12 inches deep. In older beds you will see that the rhizomes even sit above the surface in some places.

Need to rehab an older bed? Well, get out the sunscreen and hat and get started now. Iris go dormant in the summer and now is the best time to dig them out. A digging fork works well but you will also need a very sharp knife or pruning shears, brown paper bags or paper boxes, a permanent marker and a source of water.

Loosen clumps of rhizomes with the fork. Shake off the excess soil. Pull the clump apart and cut the fan (leaves) back to a point or straight across so it is only eight to ten inches tall. If you cut it too tall, the wind may pull it out of the ground if new roots haven’t anchored it yet; if too short, you might not leave enough green for the plant to support itself while new roots form. The rhizomes should be solid—not mushy or soft. No squishy parts, please. If you find any rhizomes or parts of rhizomes that are mushy or soft, remove them. If you have lots of that variety, throw the thing away but if it is a variety you really want to save, cut off the soft spots and place in a box or paper bag until the rhizome has time to harden off. Keep them in a cool place with good air circulation.

If you have a variety of colors or species, this is where you need the bags, boxes and marker. Place the different colors in marked bags or boxes so that when you put them back in the ground you know where they are going or know what you are giving away. (Iris can almost be like zucchini—after time you always end up with more than you need.) You can keep iris out of the ground for quite awhile depending on their size, so don’t worry if you can’t get everything done in one day. You won’t hurt the iris if you keep them out of the ground for even several weeks. Just remember, the smaller the rhizome the less time it can tolerate being out of the ground.

Dig the bed down to about a foot, remove debris, sprinkle a balanced fertilizer, like 10-10-10 (a higher middle number is ok) over the area, spread compost or manure about three inches deep and mix together well. Let sit, if you can, a week if you use compost, a couple of weeks if you use manure. The sooner you replant, the better chance the iris will bloom in the spring. Replant the iris by digging a shallow hole, place a handful of superphosphate in, cover with an inch or two of soil, place the rhizome with the fan (leaves) slightly higher than the rest of the plant. Cover with a thin layer (one inch) of soil. Water twice a week unless it rains. A little spray application of a fertilizer like Miracle-gro or Superthrive will help them establish a good root system, so come spring it’s blooms galore!
Reblooming Iris

One of the holy grails of flowerdom is the reblooming iris. While they have been around forever, the quality of flowers have been poor and of little interest to gardeners. Today, thanks to hybridizer, the reblooming iris is finding its place in the show world and the garden.

Everyone is familiar with the iris that blooms in one great show in the spring. After that you plant things around the slowly disintegrating leaves to hide them until the winter. With reblooming iris, you will get a second wave of blooms in the summer and another wave in the fall. In warmer and dryer climates you might get four to five blooms per year.

In the common iris the rhizome generates an “increase,” the next blooming stalk which takes a year to grow and bloom. An accelerated growth cycle allows rebloomers to speed up this process prompting several blooms per year.

Like other iris, rebloomers come in a variety of types, up to 200 varieties of tall and intermediate sizes and even a few miniature.

The plants are treated the same as other iris, except for fertilizer. Their constant growth demands more water and fertilizer. Avoid high nitrogen fertilizers and use a complete fertilizer like 10-10-10—otherwise you will sacrifice bloom to vegetative growth. Feed in the spring and summer and up to four times per year in warmer areas. Water well, especially during the blooming season.

If the plants become crowded, revitalize the bed in the same way as with other iris.

Some varieties to look for:
Dwarf: Baby Blessed and Plum Wine.

Arizona is blessed with two great sources of iris. Each year they hold an open house to view the blooming irises. You can order what you like at the same time, to be delivered later in the summer.

In Prescott: Golden’s Iris Garden in Diamond Valley, 4564 Robin Ln, Prescott, AZ 86301, (928) 445-0503. Barry Golden teaches biology at Yavapai College in Prescott and sells iris rhizomes to the public.

In Phoenix: Shepard Iris Garden
334 W. Orangewood Ave
Glendale
(623)841-1231

Schreiners Iris Gardens
3671 Quinaby Rd NE
Salem, OR 97303
1-800-419-4747 Free catalog
www.oregonlink.com/iris/index.html

Cooley Gardens
P.O. Box 126NT
Silverton, OR 97831
(503)873-5463
www.cooleysgardens.com

catalog $5.00

for reblooming iris try
www.best.com/~renshaw/garden/irisbloom.html

Sutton’s Iris Gardens
16592 Road 208
Porterville, CA 93257
toll free 1-888-558-5107
http://www.suttoniris.com
suttons@lightspeed.net

A great resource is
The American Iris Society
P.O. Box 55 Dept E
Freedom, CA 95019
(818)767-5512
http://www.irisres.org
Water

How many times have I brought this up over the years? Well, it is July and I'm sure there are newcomers out there or just some folks that may need a refresher. We are in the midst of summer. Hot, sometimes humid. The kind of hot that sucks every bit of moisture available. We—human beings, suffer and plants do to. While humans have devised the air conditioner to avoid the weather, plants just have to rely on the rain or us for their water needs. (I'm sure there are people out there who have never spent more than an hour in the July/August sun.) You may have noticed wilting; well, that is a bad sign of water loss for most plants. If they are at the wilting stage, get the hose out and give them a drink.

Some plants, like squash and melons, will wilt in the afternoon even if the ground is damp. The problem is they can't pump enough water through their system to sustain the leaves when it gets really hot. They will recover as the sun goes down. If they don't, they definitely need water.

There are a number of ways to water, some more wasteful than others. In a time when communities are fighting over water resources, it would be a good idea to investigate alternatives to restrict the amount of water you waste. With drip systems and timers you can give the plants all the water they need without losing large quantities to evaporation.

Many of you probably go out to the garden in the evening or early morning and sprinkle with the hose. For most plants this is not enough. Any water that doesn't make it to the soil surface evaporates quickly and is never available to the plant. Even the water on the soil surface evaporates quickly and may not benefit the plant. Make sure you are watering the roots. If you are not sure how deep the water is going, use a probe—any long narrow object will work, a long screwdriver, even a wooden plant stake. Push the object as deep as you can without hammering it. Generally, you can only push it through the moist soil. If you can push it in 6 to 12 inches, you're doing ok for your plants. If it only goes in an inch or two, you are not watering correctly. Generally, add more water to the soil surface for a longer period of time. While I know that getting the hose out and sprinkling may be emotionally satisfying, it really doesn't do much for the plants.

You may have read that you shouldn't water in the morning. Droplets of water work like a magnifying glass on foliage and cause burns. It's one of those "old wives tales." In our climate it is probably better to water in the morning vs. the evening. This way the plant has a reservoir of water to draw on as the day gets warmer.

Use mulch—lots of it. Mulching reduces evaporation. By mulching you can reduce your water bills because you don't need to water as often. That's a good thing!

Use drip irrigation when possible. Drip irrigation delivers the water to where it's needed—the roots. You can place it underground or place mulch on top of it to reduce evaporation. By using a timer with the drip system, you can provide uniform watering on a consistent basis even if you are not home. Plants like that. There are some problems with drip. The system can clog and emitters will need to be replaced. The system may break or some inquisitive animal might chew through it and you will have to dig it up to replace it. This can be problematic as the plants get larger and the roots grow around the tubing. But I have found that a drip system on a timer is really an effective way to grow plants in the desert. Even for the most water-hungry plants, I have cut back my watering considerably.

Now on to one of my pet peeves—grass in
the desert. It doesn’t drink water, it gulps water. Think of the giant “Big Gulp” from Circle K vs. an 8 oz. glass. If you must have grass consider replanting your lawn with buffalo grass or another drought tolerant grass and forget that winter grass stuff. But, if you must have bright green grass, make sure your sprinkler system is working and one of the heads isn’t sending water down the street. Don’t overwater. Check to see how much water is going out on the grass. Place small cans out in various locations in the lawn and collect water for an hour and measure to see how much you are using and whether your system is spreading water evenly. You shouldn’t need to

water more than every three days.

Trees and shrubs should be watered deeply. Don’t just fill up a little basin once. Make sure your basin goes out to the drip line of the tree. Fill the basin up, let it drain and fill again. For very large plants I’d fill it a third time and even a fourth. You should do this about every two weeks. Drip systems work well with trees, also, but you must have enough emitters spaced out around the tree to make sure it gets water to the roots. By watering deeply you will encourage the roots to grow down and help reduce their water needs considerably versus having the roots grow closer to the surface. It also helps anchor your tree better. One of the problems with landscape trees is that the roots don’t grow deep enough to anchor them well enough, causing the first strong wind to blow them over. Ever seen a native tree blown down out in the wild? It happens rarely because the roots are forced to grow down vs. out.

Water wisely!

Sundial

In a climate like ours, where we have something like 300 days of sunshine each year, what would be a better addition to the garden than a sundial? It can make an eye-catching hardscape element. It was used as a timekeeping device in Ancient Egypt around 1500 B.C. Romans perfected the sundial and it is the one we are familiar with today. They even invented a portable version to travel with.

It became quite popular, so by the first century B.C. there were so many sundials in Rome that someone wrote, “Let the gods damn the first man . . . Who set up a sundial in this city . . . He has chopped the day into slices.” A feeling we are all familiar with our busy schedules today. The sundial evolved so that, by the time of the Renaissance, all sorts of sundials were produced that not only told the time but dates, seasons, signs of the Zodiac and tide tables. Clocks didn’t begin to replace sundials until the 16th century, although sundials were sometimes used to set clocks.

The tradition of placing a sundial in the garden comes from the Romans also. When the Romans conquered ancient Britain, they brought the sundial, lettuce, lilies, roses and violets with them. When the Romans left Britain in the 5th century, monasteries preserved the sundials and their garden practices.

There are eight categories of sundials. The best for the garden are the horizontal and equatorial type. The horizontal, mostly seen on a
pedestal, include a dial plate marked in hour lines and a “gnomon,” the raised projector that casts the shadow.

Equatorial sundials are large, open globes with the dial plate fixed in the plane of the equator.

in an area that is sunny and level. If set on a pedestal, it will draw the eye upward, so position it to highlight an interesting feature in the garden. It can also be used as a focal point along a path or at the point of a garden bed that radiates from it.

Whether you use it to tell time or just as a garden curiosity, it can be an interesting addition to the garden.

Pedestal Pot

Looking for another way to create a center of interest in the garden if a sundial sounds like too much work? Put a pot on a pedestal. Purchase peeled poles from a lumber yard and cut three 4 foot lengths of 5 inch diameter poles. Connect with 10 inch lag bolts that run through copper pipe couplings. The surface is large enough to hold a large bowl that can be filled with a variety of flowering plants.
Fertilize Bearded Iris and plant new rhizomes.

Check peaches, peach tree borers may be boring into your fruit. Look for a spot of clear resin, these indicate entrance and exit holes. Check the tips of the twigs, also, for borer damage.

Plant beets, broccoli, cabbage, carrots, cauliflower, green onions, leaf lettuce, peas, spinach and turnips for a fall harvest. Eggplant, okra, cantaloupe, peppers, pumpkins, tomatoes, watermelons and winter squash can also be planted. Potatoes can also go in but wait until the end of the month.

Keep picking ripe fruit and vegetables as this will encourage the plant to set more, in most cases.

Remove faded flowers from roses and other summer annuals to keep the blooms coming. Roses need a bit of fertilizer to keep the plant blooming.

Cut back old raspberry canes after fruit is harvested. Cut off blackberry canes that have borne fruit and tie new canes to the trellis. Wait to do this until August if you live in a really cold part of the county.

Keep after weeds. With the summer monsoons usually starting at the end of the month, a few weeds now will turn into large bushes and thousands more if they are still around when it starts to rain. This is a case of keeping up. They can overwhelm a space if you let them.

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**Things to Do**

Sharlot Hall Museum in Prescott is hosting an event in honor of the International Year of the Volunteer on Saturday August 4 between 10 AM and 3 PM. The event officially recognizes volunteers as a unique source of knowledge, energy, and dedication. As Master Gardener Volunteers, I hope you can attend this unique volunteer recognition event. Wear your Master Gardener Badge proudly and come prepared for complimentary food, drinks, door prizes, and fun. Jeff Schalau and his wife, Dorothy, will be playing old-time music at the gazebo at 11 PM.

Last Chancel Greenhouse Workshop, Payson, Friday, July 6th, 10:30 - 4:00. There are still spaces available. Call (520)425-7179

Coming up in October—Arizona Highlands Garden Conference. Don't Miss It! Check out the new website at: [http://ag.arizona.edu/yavapai/ahgc/conference2001.html](http://ag.arizona.edu/yavapai/ahgc/conference2001.html)

You can also access it from the Yavapai County Home Page: [http://ag.arizona.edu/yavapai/](http://ag.arizona.edu/yavapai/)
Aphids

By Jeff Schalau, County Director, Agent, Agriculture & Natural Resources

This is the time of year for aphids. Their piercing-sucking mouthparts allow them to make a good living on the flowers, leaves, stems, and sometimes roots of many host plants in our landscapes and gardens. Aphids are soft-bodied insects that come in many shapes, sizes, and colors. They are small (1/8" or less) and light green. Your first clue is usually curled, stunted leaves on new growth in spring. This is usually accompanied by a sticky liquid called honeydew. A cottony white mass may present in some species. Close inspection of the plant and telltale stickiness from the honeydew will usually lead to a correct diagnosis.

While observing, you may see ants walking among the aphids. They are probably collecting the honeydew for food. The honeydew is colorless and sticky because it contains sugars from the plant and is exuded from the anus of the aphid as waste. Some ants will protect aphids and carry them from one plant to another. In this way they cultivate honeydew. You may have noticed in the recent movie, "A Bug’s Life," the queen ant carried around an aphid like a pet Chihuahua. As memory serves me, at least once she drank the honeydew from the aphid. In time, excess honeydew may build up, fungal spores in the air land on it, and sooty mold can begin growing.

Aphids can reproduce rapidly and use a unique strategy. They produce young by parthenogenesis. Here female aphids lay unfertilized eggs that hatch into female young without fertilization by a male. After a few generations, they produce winged female aphids and they fly to a different food plant. These winged females can also reproduce parthenogenetically, giving birth to winged young. Late in the season, the winged aphids return to the original food plant and some females turn into males. The males and females mate and the females lay eggs that will overwinter. Sometimes, ants will carry the eggs to their nest for the winter and transport them to a food plant the following spring.

Human gardeners may not appreciate the value of aphids as ants do. Even so, we should not be in a great hurry to attempt eradication by chemical means. Though Acephate and Malathion will effectively kill aphids, these insecticides will also kill beneficial predators that provide natural aphid control. Most gardeners are aware that lady beetle, ant lion, and lacewing larvae are effective predators of aphids, but there are many others. Many insects, including earwigs, assassin bugs, minute pirate bugs, stink bugs, soldier beetles, syrphid fly larvae, aphid flies, and parasitic wasps are natural enemies of aphids. With this assortment of "good guys," chemical control methods can be used as a last resort to control aphids.

If a decision is made to take action against aphids, start by using a good blast of water from a high pressure hose nozzle. This may be enough to slow them down until natural enemies can overcome them. Soap sprays can also be effective at controlling aphids. To mix a soap solution, add one tablespoon of dishwashing soap (not detergent) to one gallon of water and apply to a small area of the plant to see if the solution will adversely affect the plant foliage. If the leaves look normal after one or two days, then apply soap solution to the entire affected area. Soap is quite effective against aphids.

If ants are tending the aphids, then it may become necessary to control the ants. The ants also have natural enemies and parasites. Ants can also be controlled by baiting, application of pesticides to the soil or base of plant. This will prevent ants
from protecting the aphids while conserving natural enemies.

Other strategies can also be employed. For instance, insect growth regulators (IGRs) are available for aphids. These pesticides target specific insects and prevent them from maturing into reproductive adults. In effect, this is a surgical strike but some aphids may have matured to reproductive age before the application. These pesticides are less harmful to natural enemies or humans than commonly available chemical pesticides. Just a reminder: ALWAYS READ THE LABEL AND FOLLOW THE INSTRUCTIONS WHEN USING ANY PESTICIDE.

By monitoring aphid populations, carefully choosing types and timing of control methods, and encouraging natural enemies, you are practicing integrated pest management (IPM).

Garden Clubs & Websites

Yavapai Rose Society - Will meet July 16, 2:00 PM at the First Christian Church, 1230 Willow Creek Road, Prescott. There will be a Consulting Rosarian Question and Answer period. Guests are welcome and there is no charge. For more information call Bob or Nancy at 771-9300, or Dave at 778-5501.

If you are interested in Organic Gardening, join the Cottonwood Organic Gardening Club. They meet at the Cottonwood Verde Valley Fairgrounds on the second Wednesday of each month at 1:30 p.m.

Yavapai County Cooperative Extension Website

http://ag.arizona.edu/yavapai/anr/hort/byg/

The "Arizona Master Gardener Manual" is now on-line. Check out
http://ag.arizona.edu/pubs/garden/mg/

NOTE FROM THE EDITOR:
Let me know about your garden, the types of seeds you planted, interesting articles you found—anything of gardening interest. Send to: Nora Graf
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