Strawberries

Growing strawberries is a labor-intensive and often frustrating exercise. But if you love the taste of ripe sweet strawberries it is worth it. Native strawberries grow in a wide variety of climates from the tropics to the arctic. Their history goes back a long way. It is thought that the Romans may have cultivated the plants. They probably knew two types: the small wood strawberry (Fragaria vesca —also known as fraises des bois) and the alpine strawberry (F. Montana frago.) Europeans cultivated strawberries in the 14th century and were the primary producers into the 19th century. In the 16th century both red and white varieties were popular. The modern strawberry was actually developed in the 18th century. It was developed from two American species—the Virginia, or scarlet, strawberry (F. virginiana) and the Chilean, or beach, strawberry (F. chilensis) from the American West. It was sometimes referred to as the pineapple strawberry because of its fragrance.

Many of you may not realize it but the strawberry is related to the rose. They are grown as herbaceous perennials and annuals. Generally, plants rarely last past three years and even if the plant survives often the quantity of fruit diminishes. The strawberry is an unusual fruit because it bears its seeds on the outside, so to speak. The portion we eat is actually the ripened receptacle; those tiny things on the outside are achenes and inside them are the seeds, the true fruit of the plant.

There are basically four types of berries: everbearing, day neutral, alpine types and June bearing.

Everbearing produce two crops of berries each year, one in early summer and one in the fall. Flower buds are formed in the summer. This type produces few runners. You may need to replace
the plants every year to keep up production. These may do better in our area than day neutrals.

June-bearers is the typical strawberry, bearing fruit just in June, although earlier in warmer climates. Flower buds form in autumn for the early summer bloom. They produce fruit over an extended period of approximately six weeks. Plant in the spring and remove any flowers or fruits that form the first year. They need to establish themselves first. The plants should produce fruit for two to three years and then be replaced. A late frost can damage the flowers and young fruit—a common occurrence in the Verde Valley.

Day neutrals could be the ultimate of plants, strawberries all summer long—it’s hard to get better than that. This type of strawberry flowers through the entire summer. Day-length is not a factor in their growth. The bad news is they are not always the best choice for the lower elevations. Heat can impact fruit production. They like a temperature range between 35° and 85° during the growing season for best growth and production.

Alpine Strawberries are small berries, closely related to the wild berry. I will discuss them next month.

Good strawberry beds need to have all weeds removed and large quantities of compost or other organic matter worked into the top four-six inches of soil. Heavy soils need to be loosened to allow for good drainage. Raised beds are good alternatives for improving drainage and dealing with Arizona’s clay soils. They also prefer a slightly acid soil, so the addition of organic matter is cru-
Disease and insects run rampant through unwatched strawberry patches. They are host to a multitude of problems. Slugs love the berries, birds also, along with various sorts of weevils, grubs, tarnish bugs, nematodes, spider mites, and, I'm sure, others. Diseases include verticillium wilt, leaf spots, molds and black root disease. Cattacing is generally caused by improper or incomplete fertilization.

Another problem that is common in strawberries in desert soils is chlorosis. To help mitigate the problem make sure the plants have very good drainage and possibly reduce the amount of water. You may also treat with an iron chelate product.

In Arizona, the variety you choose should be dependent on your elevation. Below are some recommendations from the Cooperative Extension:

Everbearing varieties are best for only the most northern regions or highest elevations. They don't tolerate heat. Some varieties to try are Blakemore, Earlibelle, Gem (Superfection), Mastodon, Red Rich, Rockhill, Streamliner, Surecrop, Titian and Tennessee Beauty. Varieties that may do well in lower valleys are Gem, Ozark Beauty and Streamliner.

June-bearing varieties are best in lower valleys where spring frosts aren't a problem. Try Garfield, Fresno, Lassen, Quinault, Sequoia, Shasta, Tioga and Torrey.

If you live in elevations above 6,000 feet, plant between May 1 - 15. At elevations between 4,500 to 6,000 feet, plant between April 1 - 20. Between 3,000 to 4,000 feet, plant March 1 to April 1.

Planting strawberries can be frustrating. Plant too deep and the plant will rot, too high and the roots will dry out. Take a moment before you plant to really look at the plant. Look for the "crown". This area is about an inch long and is covered with overlapping buds from which the leaves develop. The midpoint of the crown should be level with the soil surface. Before you plant, check the roots and remove moldy or black roots and trim to about 4 inches long. The hole should be deep enough for the roots to go straight down. Firm the soil; good contact with the soil is important along with good watering practices. They will need extra water the first few weeks. Plants should be spaced out at least 12 inches apart. Rows can be 3 to 4 feet apart to allow runners to spread.

Many people grow strawberries in all sorts of containers—strawberry jars, towers, etc. This does not seem to work well in Arizona, although it doesn't mean you shouldn't try. I'm sure there are lots of successful growers out there. Whichever you plant them, good luck and enjoy the very symbol of spring luxury.

**Strawberry Tarragon Dressing**

\[
\frac{1}{2} \text{ cup strawberries, hulled} \\
\frac{1}{4} \text{ cup lemon juice} \\
1 \text{ Tbsp. sugar} \\
1 \text{ Tbsp. chopped shallot} \\
1 \text{ tsp. finely chopped tarragon or \frac{1}{2} tsp. dried} \\
\frac{1}{2} \text{ tsp. cornstarch} \\
2 \text{ Tbsp. orange juice}
\]

Whirl strawberries in blender until pureed. Rub through strainer into a 2 cup measure. Add lemon juice and enough water to make 1 cup. Transfer to a small pan, add sugar, shallot and tarragon. Mix cornstarch and orange juice together, add to strawberries. Bring to a boil over high heat, stirring constantly. Set in a bowl of ice water to chill quickly. Taste and add more lemon juice if needed. This can be refrigerated for one day. Use on a chicken or cobb salad.

from Sunset Quick, Light & Healthy Cookbook
Growing Strawberries in a Strawberry Pot

When it works, it looks great—plants flowing from the sides of the pot, berries dripping from the plants. You’ve seen the pictures but I’m sure they were all taken in a greenhouse or in Iowa. Here in Arizona the strawberry pot is more of an annoyance to take care of than anything.

The very nature of the pot creates an unfriendly environment. Small shallow pockets are difficult to get water to and water from the top doesn’t really travel into the pockets. But, if you must try, find a container with wider pockets. I’ve seen some that are so narrow it would be lucky to get anything to grow in them. Look for cup-shaped pockets rather than narrow slits. While you are out shopping, pick up a piece of 3/4 inch PVC pipe, two to four inches longer than the depth of the container. Actually, I’ve found two 1/2 inch pipes work better, giving more even distribution of the water. Purchase a cap for the pipe also.

Cap the pipe; you can glue it or not. Drill 1/4 inch holes in the pipe every 12 inches. Circle the holes around the pipe so the water will drain on all sides. Stand the pipe in the center of the pipe and start to fill the pot with soil. Don’t block the pot’s drainage hole. I found it easier to bring the soil up to the first level and place the plants at that point. This way you can reach in and get the root ball in place and the soil firmly packed around it. After the first layer is in, continue to fill the container with soil to the second level and so on. Keep the pipe centered in the pot. It is possible to fill the pot and then put in the plants but it means digging some of the soil out of the pockets, usually, and trying to force the roots into the container.

When you water, fill the pipe; it will carry water to the lower levels of the container. You will still need to water each pocket and from the top separately.

If you don’t want to grow strawberries, try other plants—herbs are a good choice. For the pockets, use something that mounds or cascades. Thyme and basil would be good choices. Lobelias make a colorful container. Or you can try strawberries. I used the native purple verbena this past summer and had the best luck ever. It grew well and it’s drought tolerance probably helped, even though I was pretty good about watering this year. My secret—I used a timed drip irrigation system with a dripper in each pocket. It really worked! Marilyn Perkins reports she has peanut cactus planted in hers. She keeps it in an area that freezes but the cactus does very well, even blooming each year.

Use your imagination but don’t get carried away in the nursery, for the pocket plants need to be small to comfortably fit them in when planting. You can take larger plants and cut the roots back but too severe surgery can delay the plants establishment and you will have to be very careful about keeping the soil from completely drying out. So, if you are home a lot or have a drip system on a timer, give the strawberry pot a try. When it works, it looks great.
Garden Basics: Spring
from the Cochise County Master Gardener Newsletter,
"High on the Desert", March 1998

Spring Equinox, the first day of spring arrives in March. Spring in the high desert signals wildflowers, possible rains, always wind, and of course, Spring Plant Sales! Here are a few tips to make your shopping foray enjoyable.

RESEARCH: Knowing what plants you are looking for before you enter the nursery will enhance the success of your trip. Browse through catalogs, books and magazines and make a list of plants that interest you. Be sure to consider heat and cold tolerance, height and width restrictions, what your soil structure is, fragrance or color, and what you want the plant to do—act as a windbreak, create shade, prevent soil erosion, wildlife value, etc. Match plants to the site and conditions to avoid heartaches later on.

BE PREPARED: I have found it useless to go shopping, bring back a truckload of plants, and not be prepared to plant them. If you already know where you want to plant something, begin digging the hole(s) now. It’s also a good time to inspect, repair, or install drip irrigation. In the vegetable garden rake out all old mulch to remove overwintering pests/diseases and lay down fresh mulch. And if you aren’t currently using mulches in the ornamental garden, spring is an excellent time to accomplish this chore before the heat of summer sets in and fries not only you but your plants.

BUY HEALTHY PLANTS: Inspect plants for any pests or diseases; check the rootball, it should not be rootbound; and avoid plants that are lanky or leggy. Plants should generally have compact, green growth. Now all that said I need to stress that some native plants look really funky in containers. It will be alive, sometimes small, sparse, and have a small amount of new growth. Buy it! Plant it! Give it a year and it will be beautiful! Look for annuals/perennials in bud, not in full bloom. Buy plants in bloom only if you are looking for a specific color.

When looking at trees check the crotches, they should be well-spaced and balanced looking. Select for single or multitrunk and don’t be put off by a tree that has branches starting very low on the trunk. This is good—studies show that it helps stimulate growth. It can be thinned up slowly over a period of pruning seasons.
Mexican Bird of Paradise
Caesalpinia gilliesii

If you are looking for something with flashy flowers, this plant is for you. No, this isn’t the bright red and purple flowers of the tropical variety that you see in florists shops frequently. This is a desert shrub that is commonly found in xeriscape. The first thing you’ll notice about the flowers is the long red stamens that can be up to four inches long. Along with a buttery yellow bloom, they make a striking summer display. If that isn’t striking enough for you, there is a variety that has bright red and orange blooms to go with those long stamens. The yellow-flowered plant is a native in Argentina and Chile. (The red is a nursery created cultivar.) Today the plant has naturalized in parts of Texas, New Mexico and Arizona.

This plant is very self sufficient. Once planted and established it doesn’t need fertilizer, much water or pruning. In higher elevations, it loses its leaves under extreme drought conditions or in the winter but it has branches with green bark where it continues with photosynthesis. Birds of Paradise are also nitrogen fixers so need little to no fertilizer.

While the plant can grow to the size of small trees (15 feet,) they more commonly stay around 4 to 8, feet making them an excellent small shrub. You can prune them up to be small trees or maintain them as shrubs. What little pruning is necessary is for the health of the plant. Remove crossed or damaged branches.

Birds of Paradise grow in areas up to 6,000 feet, preferring washes and grasslands. They are prolific seed producers and can be easily started from seed. As they are also fast growers, getting seeds from a friend and starting them yourself is a good alternative to purchasing nursery plants. The seed can be started fresh but to enhance germination soak in a hot water bath first.

In most of Yavapai county, they will lose their leaves in the winter but even during a hard frost, which can kill the branches they readily resprout from the roots.

The plant can be rather scraggily looking, so you might want to plant it in conjunction with another shrub that can hide the branches but the plant is well worth planting for it’s flowers.
EVENTS AND ACTIVITIES

February 17 & 18, 2000, The High Desert Gardening Conference, Sierra Vista, AZ, Lakeside Activity Center, Fort Huachuca. See flyer.

February 21—Yavapai Rose Society, 2:00 pm at the First Christian Church, 1230 Willow Creek Road. Jeff Schalau will present a program on “Integrated Pest Management.” There will also 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.

February Calendar

Time to start pruning trees. If you need help, pick up information at the Cooperative Extension office or attend one of the pruning demonstrations scheduled this month.

Apply dormant oil to trees if you have had pest problems in the past.

Continue to water trees, perennials and shrubs. We haven’t had any rain to speak of so far this winter and they need water.

Get those seed orders out. For those in the warmer areas of the County, time for planting the early spring flowers and vegetables is just around the corner.

Now is the time to plant bare-root plants.

2000 MG class

The University of Arizona Cooperative Extension invites you to attend Master Gardener training in Cottonwood February 2 through April 26, 2000. Classes will be held every Wednesday from 9:00 am until 12:00 noon at the Professional and Amateur Art Building at the Verde Valley County Fairgrounds. Current Master Gardeners are invited to attend any of the classes.

Yavapai County Website

Yavapai County Master Gardeners have a new website. It includes a copy of the newsletter, information from the Farm Fresh brochure and lots of other great stuff. Log on to see the latest on what’s happening in Yavapai County.

http://ag.arizona.edu/yavapai/

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:
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