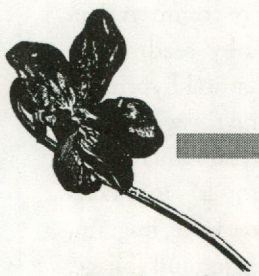
Texas Agricultural Extension Service
The Texas A&M University System

Horticultural Update



Plant of the Month . . . Violet

Dr. William C. Welch, Landscape Horticulturist
Texas A&M University, College Station, Texas

Violet *(Viola odorata)*

Violets were once considered indispensable perennials for the well designed garden. Although numerous native violet species occur in Texas, the violet of choice for most southern gardens was *V. odorata*, which is of European, Asian, and African origin. Dark blue or purple is the predominant color. Well into the early 20th century, violets were among the most popular florist cut flowers. Their fragrance, rich colors, and relatively easy culture contributed to nationwide popularity.

Violets prefer a rich, moist but well drained soil high in organic content. Partially shaded locations are preferred. Their natural bloom period is late winter and early spring. Although evergreen, garden violets become semi-dormant during our long, hot summers. They can, however, endure considerable drought and heat stress, and usually become lush and healthy with the onset of cooler and more moist fall and winter conditions.

Landscape uses include borders and ground covers. Large container shrubs can often be enhanced by a mass of violets at their base, providing attractive foliage, fragrance, and color at a season when few other plants are at their peak. Mature height is usually 8 to 10 inches. The rounded foliage is attractive even when the plants are not in bloom.

Usual propagation is by division of mature clumps during early to mid fall. Seeds can also be used to produce new plants, but require considerable attention during the early stages.

Borders of garden violets may still be found in some of the old gardens of East and Central Texas. They can be long-lived and relatively low-maintenance perennials. Few plants perform as well in shady areas and offer color and fragrance during January, February, and March. Availability in nurseries is inconsistent at present, but garden centers specializing in perennials or native Texas plants usually offer violets.

JANUARY/FEBRUARY 1998

In this issue . . .

Spring In To Narcissus

Greg Grant, Former Extension Horticulturist
Texas Agricultural Extension Service, Cherokee County, Texas

Perhaps no floral symbol epitomizes the impending arrival of a Southern spring as does the blooming of our assorted *Narcissus* species.

The genus *Narcissus* is a member of the Amaryllis family. The word 'narcissus' is derived from the Greek work 'narke', meaning numbness or stupor. Some attribute the naming of the flower to its narcotic fragrance, while others debate that it is associated with the poisonous nature of the bulbs – a built-in defense against nibbling rodents. As we know from classical mythology, it was the young lad Narcissus who was so enamored of himself that he stared at his reflection in a pool of water until he eventually turned into his namesake flower. A serious case of narcissism, don't you think?

> *The world seems sad*
> *mid winter's gloom,*
> *But all is well*
> *when the jonquils bloom.*

Most *Narcissus* species are natives of southern France, Spain, and the surrounding Mediterranean area. This explains their love of our dry summers and wet winters. Many species of *Narcissus* have been cultivated for hundreds, even thousands, of years.

Without exception, the most common species found growing throughout Texas today were brought over from Europe by the early colonists, and distributed westward by settlers from the East. Invariably, the naturalized types, found growing with reckless abandon at old home sites, cemeteries, and even roadsides throughout the state, are mostly wild species or hybrids of these species. The work 'naturalize' is just a nice term for 'run amuck' or 'go wild'. It's what the daffodils are always doing in the Dutch bulb promotional material. It is one step past 'perennial', which simply means 'returns each year'. There is no substituting for wild genetic vigor in any plant. As a matter of fact, it is difficult to find any old homestead in the South that doesn't have at least one of the 'big three' – jonquils, narcissus, or daffodils – still thriving on site.

What is the difference between jonquils, narcissus, and daffodils you ask? It's an age-old question. Botanically speaking, they are all different species of the genus *Narcissus*. To the average gardener, however, the differences are fairly distinct.

True jonquils *(Narcissus jonquilla)* have dark green, round, rush-like leaves, and clusters of small, fragrant, early, yellow blossoms. Almost all yellow cluster-flowered *Narcissus* are lumped into this group, including jonquil hybrids. Jonquils and their kin are most common in East Texas. Even more common than the straight species, which often spreads by seed, is the campernelle jonquil (*Narcissus x odorus*), a natural hybrid between the wild jonquil and the wild daffodil. It is normally sterile, and only grows where you plant it (or drop it). It is a bigger plant, with two to three large, fragrant, yellow jonquils above big jonquil foliage, which is slightly flattened and has a bluish gray cast. Also frequently found is the 'Texas Star' jonquil (*Narcissus x intermedius*), a natural hybrid between the wild jonquil and the wild narcissus. It has short, pale yellow flowers above very flattened, green jonquil foliage. It was painted by the great painter Redoute in the early 1800s. 'Golden Dawn' is a superior, repeat-blooming commercial cultivar available today.

The common name 'narcissus' usually refers to the early-blooming, white, powerfully fragrant, cluster-flowered varieties of *Narcissus tazetta*. This includes, but is not limited to, what we commonly call 'paperwhites' (*Narcissus tazetta papyraceous*). Naturalized paperwhites are limited to areas near the coast or other protected microclimates due to their extremely early bloom time (often between Thanksgiving and Christmas). Further inland, *Narcissus tazetta italicus* is frequently encountered. It has slightly twisted creamy-white flowers with a pale yellow cup. Like all narcissus, it blooms best during a mild winter, usually during January. The most common form encountered here is *Narcissus tazetta* 'Grand Primo'. Its widespread adaptability is due to the fact that it is the latest blooming narcissus, usually appearing between early February and early March. It has big bold clusters of powerfully sweet, creamy-white blossoms which make excellent cut as well as dried flowers. All narcissus have wide, flat-

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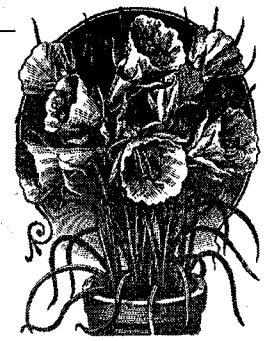
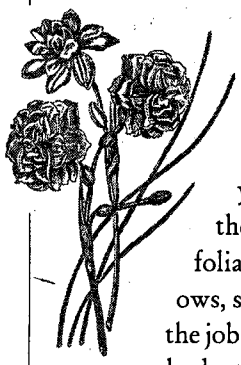


tened green foliage, with the exception of paperwhites, which have blue-gray leaves.

The name 'daffodil' is reserved for the large, normally yellow, single-trumpet-flowered cultivars of *Narcissus pseudonarcissus*. Without a doubt, modern, large-flowered daffodils are the most popular type of *Narcissus* planted today. Daffodils are most commonly found in the acid, well-drained soils of the upper South. Although big daffodils are most commonly planted, they happen to be the least adapted for naturalizing. The most common naturalized form found is, once again, the wild species known as the 'lent lily' or 'early daffodil'. It is considerably smaller and earlier than its modern cousins, with pale-yellow petals around a gold cup. And like all daffodils, it has thick, flattened blue-gray foliage. It is also much tougher and better adapted than its larger, showier kin. It, too, can spread by seed on good soils.

Without exception, the best types of *Narcissus* for naturalizing are the early-blooming species and hybrids. In addition to their early bloom, they tend to be cluster- or small-flowered. This early bloom (January through March) ensures that the foliage can mature before mowing begins or hot weather sets in, which kills the foliage prematurely. Any *Narcissus* that blooms after March 1 in Texas is not likely to be a long-lived perennial. It is extremely critical for successful perennialization or naturalization that the foliage be allowed to grow, mature, and ripen naturally. This means it should never be cut off or tied in cute little knots. Each year's foliage stores up the food reserves for the next year's bloom. Disguising the maturing foliage is up to the wits of the gardener. In meadows, spring grass, wild flowers, and clover often do the job. In flower beds, annuals or emerging perennials planted nearby can do the trick. Another ploy is to plant *Narcissus* along fence rows, along the edges of beds, or at the base of trees or landscape structures so that they won't be mowed until the dead foliage is edged at a later date.



Although they are commonly grown and seen, finding commercial sources for true naturalizing *Narcissus* is a problem. Reputable commercial sources are, of course, the easiest. Keep in mind that Southern-grown stock is genetically superior in vigor to the commercial Dutch forms. Swapping, trading, and "bulb rustling" from soon-to-be-dozed vacant lots are other options. When it comes to "rustling," the advice of an expert should be noted. Scott Kunst, garden historian and owner of Old House Gardens, says, "bulb rustling should always be done with permission and sensitivity. I believe historic plants are akin to endangered species, and should be approached with comparable ethics and care. Let your enthusiasm be tempered by the recognition that a plant that seems terribly 'at risk' has probably already survived right where it is for decades, if not generations, which is more than most of us can guarantee in our own gardens. Always collect the smallest possible sample, and never jeopardize the continued existence of the original plant." Amen.

The best time to plant and transplant *Narcissus* is mid to late summer after they have gone dormant. This means that clumps need to be marked and labeled with stakes when they bloom in the spring in order to locate them after the foliage has died. One option is to move them in late spring as the foliage turns yellow and can still be seen. In desperate (or lazy) circumstances, most tough species of *Narcissus* can be moved in full bloom or full foliage and planted immediately, with a good soaking, fairly successfully. As a rule, the following year's bloom will be jeopardized due to the interruption of the natural growth cycle. True naturalizing types of *Narcissus* begin root growth in late summer and early fall. Shoots often emerge as early as Thanksgiving. Therefore, all planting and transplanting should be finished before the first of October, or even earlier, for best results. Late planting with the rest of the Dutch bulbs is not recommended. In other words, START PLANTING!

There is nothing more invigorating than the arrival of the early *Narcissus*, growing like wildflowers with reckless disregard for horticultural boundaries. As a matter of fact, naturalizing *Narcissus* are even more adapted for roadside and highway plantings than wildflowers are. All they require is full sun to part shade (preferably deciduous), and a fairly well drained soil. They bloom early, thus avoiding premature mowing of flowers or foliage, and they are perfectly happy amidst the grass and weeds. Reseeding is not necessary, so there is no need for unnatural signs designating natural areas. They go dormant during the summer, and require no water (actually they need to become bone dry to bloom best). They bloom every year. And they live forever. What more could you ask? *Narcissus* is a natural!

Lichens

Dr. Jerral Johnson, Associate Department Head, and Program Leader for Extension Plant Pathology, Retired, Texas A&M University, College Station, Texas

Lichens are an example of a symbiotic relationship between algae and certain fungi. They are capable of producing their own food. The algae associated with the fungus are green or blue-green.

There are three forms of lichens based on growth patterns. *Crustose* are species that are closely pressed against the surface of a limb or trunk of dead or live trees. *Foliose* forms are leaflike, or prostrate, but are also tightly attached to the tree. *Fruticose* forms are bush-like, erect, or hanging. Although lichens are found in most areas of Texas, they are most noticeable in areas that have extended periods of high humidity.

The effects of lichens on a tree are only slightly detrimental. The plants are epiphytes. That is, they derive their nutrients from the air and not from the plant on which they are growing. Although they are not parasites, literature reports suggest that lichens do have a slight negative effect. The main concern is that lichens give a tree an unkempt appearance. Presence of lichens also is a good indicator of a thin tree canopy. This often leads home owners to conclude that lichens are the cause and not the effect of thin foliage. The best control for lichens is to maintain a tree in good condition. This will insure a dense canopy which will shade the limbs and reduce photosynthesis. Without photosynthesis, lichens are not able to manufacture food needed for growth and development.

Copper-containing fungicides are suggested as possible controls for lichens. Applications of Kocide DF for the control of ball moss have been observed to control lichens for a short period of time. Currently, copper fungicides are not approved for lichen control. Because of their limited effect on a plant, chemical control is not suggested.

Site Preparation for Fruit Tree Planting

Dr. Larry A. Stein, Associate Professor & Extension Horticulturist
Texas Agricultural Extension Service

Before a fruit tree is planted, there must be adequate space. Most fruit trees require an area 25 feet by 25 feet; dwarfs need about 12 feet by 12 feet. The site must have full sun. And, a single peach tree can easily produce two bushels of fruit -- about one hundred pounds -- so don't plant too many fruit trees for your needs.

Fruit trees are best planted in January to allow time for root development prior to spring growth. During the previous fall, the site should have been prepared as follows: clear the site of perennial weeds, and till an area at least 4 feet by 4 feet well. Any hard pan (layer) beneath the soil should be broken up. Level the site, and till again. Organic matter may be added to the planting area, but it is unnecessary, and never add fertilizer. To allow for soil water drainage, the site may be built up so that the tree will be sitting on a small berm. Seed the site in annual rye grass.

At planting time in January, kill the rye grass berm area with glyphosate herbicide (the dead root channels from the rye grass allow for better water intake in the planting area). Plant the tree in the middle of the killed sod area in a hole as big as the root system, usually about 12 inches square, and at least 18 inches deep. Plant the tree and refill the soil to the same depth that the tree grew in at the nursery, being careful the tree does not settle too deep. In April or May, as the grass greens up, spray 3 or 4 feet around the base of the tree with glyphosate herbicide. It is critical that this be done if the tree is to perform well; if you do little else but maintain this weed-free circle around the tree, the tree will do better than if nothing at all is done.

The best tree to plant is the variety adapted to and recommended for your area; to avoid getting stuck with the luck of the draw at your local garden center at planting time, be sure to order fruit trees in September or October. Select mid-size trees; they are cheaper and grow better than the larger trees. And, it is far easier to cut 3- to 4-foot trees back to 18 to 24 inches, than to prune 5- to 6-foot trees. Such strong cutback is necessary to remove apical dominance, put the top in balance with a reduced root system, and force out strong vigorous shoots which are easy to train. The trees should have healthy white roots with no brown streaks. Also check for borer presence or damage. With proper care, it is highly possible for your fruit tree to fruit the second year after planting.

NEW VINEYARD CHECK LIST

Dr. George Ray McEachern, Professor and Extension Horticulturist
Texas A&M University, College Station, Texas

A large number of individuals are looking into the feasibility of planting a wine vineyard in Texas. There are hundreds of items which need to be checked prior to an actual planting. Even when the best made plans are followed, surprises and unexpected happenings can create a need for rethinking what, how, and when jobs need to be done. New vineyard owners need to do the best they can at planning, and once their vines are in the ground, make changes as necessity demands.

Wet or Dry. If a winery is part of a long-range plan, select a vineyard site in a Wet area to obtain full use of retail wine sales at the winery. Recent laws have allowed the sale of samples at the winery, but the sale of wine for off-premises consumption is not legal in a Dry area; this has significantly reduced sales, and contributed to the downfall of more than several new Texas wineries.

Pierce's Disease. This very serious limitation in South, East, and Central Texas has resulted in total vineyard death, so PD needs to be studied completely before a vineyard is established. Only Lubbock and the High Plains are PD-free.

Financing. A vineyard is very expensive. One acre established over three years can cost from $10,000 to $20,000 per acre, and this does not include land, equipment, well, or deer-proof fencing.

Deep, Well-Drained Soil. The deeper and better drained the soil of the vineyard site, the better vine growth and production will be. New vineyard owners need to take as long as needed to locate a site with good soil. There is nothing one can do to make poorly drained soil acceptable.

Salt-Free Irrigation Water. Every area of Texas can have salty water. Two salts are most commonly a serious problem: sodium, which is measured as SAR, and chloride. Irrigation water at a potential vineyard site needs to have a salinity test run at a Soil, Water, and Tissue Testing Lab; there are labs at A&M in College Station or at the A&M Lab in Lubbock. The SAR for sodium needs to be less than 4.0, and the chlorides need to be less than 1,000 ppm. Bicarbonates and boron may be a problem, but rarely are. City water is usually too high in chlorides for commercial vineyard use.

Soil pH. It is important to know the pH of your soil, to determine the potential for Cotton Root Rot and Iron Chlorosis. A soil sample kit is available from the county Extension office in each county. Soils with a very high pH -- 8.0 or higher -- will need attention.

Irrigation Water. Grapes will need 2 acre inches of irrigation water per week from April to August for optimum vine growth and production. A 400-foot pumping depth will cost $1.00 per day per acre to lift and push the water to the vines during the growing season. Farm tanks or lakes are difficult to filter, but they can be used for small vineyard irrigation. For each acre of vineyard, 2 acres of a tank 10 feet deep will be needed.

Order Vines Early. Grapevines need to be ordered as early as possible. Late orders seldom deliver the variety or rootstock needed. Super jumbo rootings are never available for late orders, and vineyards started with green graft vines produced in greenhouses in 3 or 4 months are too weak for Texas conditions. Vineyard establishment from non-rooted cuttings is a gamble, and one should consider success from them a rare good fortune. Wait a year if necessary to obtain the variety, rootstock, and rootings of large size.

Site Preparation. Good vine growth the first year will depend on an early planting in January or February on a well prepared site. All perennial weeds need to killed with glyphosate herbicide in September or October for maximum weed death. The vineyard rows need to be deep-chiseled or slip-plowed down the row as deeply as possible in the winter. The trellis and irrigation systems need to be in place before planting.

Trellis, Vine Pruning, and Harvesting. In general, small vineyards may be hand harvested, while those over 10 acres will be mechanically harvested. There are 3 general types of trellis systems: non-positioned canopies, vertical shoot positioned canopies, and curtain canopies, which are high, with the shoots hanging downward. The non-positioned and curtain canopies are used when pruning and harvesting are mechanical. The trellis system should be installed prior to planting.

Heel In Vines. If vines are received prior to proper site preparation, they should be unpacked, and covered with soil, in the shade, until planting. Vines will remain healthy in the heel bed for up to 4 months. Do not store vines in water or a refrigerator. The heel bed should be watered periodically to keep the roots moist but not wet.

Facilities and Equipment. Roads, electricity, culverts, drainage ditches, deer-proof fences, barns, tractor, trailer, shredder, small herbicide sprayer, and other equipment need to be in place prior to planting.

Summary. With all of the above in place, a vineyard should be ready to plant. The vines should make very fast growth by May, and reach a trunk diameter of 2 inches or more the first year. A new vineyard will have a 90 percent potential for success if the soil is deep and well drained, if the irrigation system is installed before planting, and if strong, very large, dormant field-grown rootings are used.

Rose Culture

Dr. William C. Welch, Landscape Horticulturist
Texas A&M University, College Station, Texas

PLANTING

If planting only a few roses, dig individual holes for them. Holes should be at least 12 inches deep and 18 inches wide.

Mix about one-third organic material (peat, pine bark, or compost) with some of the soil from the hole, along with a gallon or two of well-rotted cow manure, if available. A half-cup of bone meal or superphosphate, thoroughly mixed with the soil, is a good addition. A similar amount of agricultural gypsum is beneficial for heavy clay soils.

Soil preparation can be done just prior to planting, but is more effective if completed several weeks or months before planting.

Spacing of the plants will vary with varieties. Most Polyanthas can be planted as close as 18 to 24 inches, while Chinas, Bourbons, Teas, Hybrid Perpetuals, Hybrid Teas, and Hybrid Musks are best at a 3- to 5-foot spacing, depending on the variety. Climbers and ramblers need more space to develop their potential. Eight to 10 feet is appropriate for most, but under good growing conditions, Banksias, Cherokee, and certain others could be spaced at 15-foot intervals.

Bare-root plants should be set out as soon after receiving them as weather and time allow. If a delay of more than a few days is necessary, remove the plants from the shipping bag and 'heel them in' by covering the roots and part of the tops with loose soil.

Container-grown plants may be set out at any time, but most rose growers avoid the hot summer months, when extra irrigation and care may be necessary to insure success.

Prune tops back an inch or two to just above a live and healthy bud on each cane. Cut back canes or roots damaged in shipping or handling to healthy tissue.

Dig the hole large enough to accommodate the natural spread of the roots, and fill with the soil mixture described earlier. Firm the soil well around the roots, and water thoroughly to remove air pockets and settle the soil firmly around the root system. Set plants at approximately the same level at which they had been growing, or slightly deeper.

FERTILITY

Roses are heavy users of nutrients and require frequent application of fertilizers. To determine fertility of existing soil, contact your county Extension agent for instructions on submitting a soil sample.

Do not apply fertilizers until the first set of flowers begins to fade for everblooming types, or in the case of once-blooming roses, 8 to 10 weeks after planting. A heaping tablespoon per plant of a complete fertilizer, such as 6-10-4 or 8-8-8, may be applied every 4 to 6 weeks until about September 1. Application after that time can promote soft fall growth that may result in freeze damage.

The time-honored fertilizer for roses is well-rotted cow manure. Since manure may not be available, commercial fertilizers have become popular. Phosphorus is the material that helps plants develop strong, healthy roots and prolific flowering. Superphosphate is usually available, and can be applied at the rate of 3 to 4 pounds per 100 square feet. Since phosphorus is not very mobile in the soil, it should be well mixed during preparation.

Nitrogen is easily and quickly depleted from the soil, and needs to be applied periodically during the growing season. It is necessary for more and bigger canes, stems, and leaves. Slow-release commercial fertilizer or natural materials, such as cottonseed meal, last longer and require fewer applications through the growing season.

Potassium is needed for promotion of new growth, disease resistance, and cold tolerance. All 3 nutrients (nitrogen, phosphorus, and potassium) are included in balanced fertilizers. Many rose growers apply a balanced fertilizer every 4 to 6 weeks during the growing season.

Vegetable Gardens

Dr. Sam Cotner, Head
Horticulture Department, Texas A&M University

If "green-thumb" vegetable gardeners have a secret to their success, it is proper soil preparation and fertilization. Experienced gardeners know the potential for producing good yields of high-quality, homegrown vegetables is greatly enhanced by a well prepared soil containing liberal amounts of organic matter and adequate available nutrients.

Cottonseed meal is an excellent means of providing both the organic matter and the nutrients vegetables need. It is an organic, slow-release, premium fertilizer containing nitrogen, phosphorus, and potassium, as well as numerous minor elements. When incorporated into the garden soil, cottonseed meal decomposes over a period of time, slowly releasing its nutrients and forming soil-improving humus.

When starting a new vegetable garden, apply 4 to 6 pounds of cottonseed meal and 1 to 12 pounds of recommended garden fertilizer per 100 square feet of gardening area. For soil improvement, spread 1 to 2 inches of cottonseed hulls, decomposed leaves or grass clippings, well rotted hay, or other form of organic matter over the surface of the garden. Till or spade the soil to a depth of 8 to 10 inches, thoroughly mixing in the meal, recommended fertilizer, and organic material. When soil is prepared for planting in established, productive vegetable gardens, apply the same amount of meal; reduce the amount of garden fertilizer by about one-half, and continue to work in liberal amounts of organic matter.

When the garden is established and the soil warms, mulch around the plants with a 1- to 2-inch layer of cottonseed hulls or other suitable organic material. About 2 to 3 weeks later, apply a topdressing of cottonseed meal at the rate of 1/2 to 2 pounds per 100 square feet, or per 35 feet of row. Lightly work the meal into the mulch, and water thoroughly. Depending upon the crop and the weather, additional applications of meal at the same rate may be needed periodically during the growing season.

For a Red Rerun . . .

With patience, you can coax your poinsettia to bloom again for another year, according to Ellen Ellison of the Ellison Greenhouses in Brenham, Texas. Here's how:

Christmas. Pick a colorful plant with tightly clustered yellow buds. Protect from hot or cold drafts, water when dry, and place in a room with enough natural light for reading.

New Year's. Apply all-purpose house plant fertilizer. Continue light, water, and fertilizer. Plant should remain colorful for many weeks.

Valentine's day. Do nothing unless your plant has become long and leggy. If it has, prune to 5 inches from the soil.

St. Patrick's Day. Remove faded and dried parts of the plant. Add more soil, preferably a commercially-available sterile mix.

Memorial Day. Poinsettia should be around 3 feet high. Trim off 2 or 3 inches from ends of branches, to promote side branching. Re-pot to larger container. Move plant outside . . . first to indirect, then direct light.

Fourth of July. Trim plant again. Make sure it has full sunlight. Slightly increase the amount of fertilizer. If you would like root cuttings, they will root easily if kept warm.

Labor Day. Poinsettia may have grown to 5 feet or more. Move indoors, but make sure it has 6 hours of direct light from an uncurtained window. Reduce fertilizer.

First Day of Autumn. Starting on or near September 21, give plant 13 hours of uninterrupted darkness and 11 hours of bright light per day. Keep night temperatures in the lower 60s. Continue to water and fertilize. Rotate plant each day to give all sides even light.

Thanksgiving. Discontinue day/night treatment. Put plant in a sunny area. Reduce water and fertilizer.

Christmas. Enjoy your now-new poinsettia!

Excerpt from an article about the Ellison Tourism and Gift Center which appeared in ***Weekend Gardener****, November/December 1996. Ellison Tourism and Gift Center is located at 808 S. Horton Street, Brenham, TX 77833. Telephone number is (409) 836-0084.*

Transplanting Native Plants

Dwight S. Hall, Extension Horticulturist (Retired)
Overton, Texas

Many desirable native or wild Texas plants are adaptable for the home landscape. The natives are hardy to local weather conditions, local soils, and perhaps more tolerant of local garden insects and diseases. Most natives are easy to grow, yet the task of successfully transplanting the desired native from the wild is often difficult, and must be done with care.

The wet, cold days of winter are ideal times for transplanting plants, both native or cultivated species. Due to cold, the plants are dormant or in a state of rest, and will not suffer the shock of moving and the interruption of growth.

Special precautions must be taken when selecting native plants for transplanting. Even though these plants are hardy, it is often difficult for the home owner to substitute the natural or native woodland environment which nature has provided. The gardener must first ask if he or she can provide growing conditions similar to those in which the plant now thrives. If not, leave the plant to nature.

Before digging, the home owner must decide which native plants will best fit his or her landscape needs. It would be unwise to select a native dogwood for a sunny location, since dogwood demands shade or overhead protection. The planting area for the new plant should be well prepared prior to transplanting. Dig the planting hole both wider and deeper than the native plant's root system. Add woods loam, peat or humus, or, preferably, the type of soil from which the native is taken. Have leaf mold and loam on hand to fill in or work around the new plant's root system.

In choosing the native plant to transplant, do not attempt to transplant an overly large specimen. Small plants are usually more vigorous. They grow much faster and are easier to handle. It may be necessary to tag the plant in the wild while in leaf or berry to be sure of a positive identification. Young elms, void of foliage, often resemble native redbuds. Not all hollies will produce berries; in selecting yaupon, deciduous holly, and American holly, choose the female plants with berries.

Particularly in the case of large specimens, it may be well to prune the root system of the selected native prior to digging. Prune the plant's lateral roots at least one growing season prior to complete transplanting. Making spade cuts around the plant helps it to adjust to shock prior to transplanting and develop a more intensive root system.

When transplanting, lift the plant with a ball of earth if possible. Wrap the ball with a moist burlap sack or similar material for easy transferal and to prevent disturbance of the root system. Plant the native plant at its normal growth depth immediately after digging. Water well after planting, and mulch over the root areas with leaves, straw, or leaf mold.

Pruning transplanted plants is often difficult for the gardener, but usually is essential for viability. Cut back the upper branches and end shoots of limbs to compensate for loss of root area and to encourage new branching and foliage growth come spring. Some of the foliage should be stripped or removed from evergreen plants.

Some of the most desirable and abundant native plants that may be transplanted now include:

- Dogwood
- Redbud
- River Birch
- Sassafras
- Cherry Laurel
- Native Oaks, Elms, and Maples
- Red Cedar
- American Holly
- Yaupon
- Native Hawthorn
- French Mulberry

Regardless of your choice, be sure you transplant with caution and care -- otherwise, leave it to nature.

✔ Garden Checklist for January and February

Dr. William C. Welch, Landscape Horticulturist
Texas A&M University, College Station, Texas

- ✔ Now is an excellent time to transplant mature or established trees and shrubs while they are dormant.
- ✔ Make flower and vegetable garden plans now before the rush of spring planting. Time spent in armchair gardening before the fireplace will pay off in improved plant selection. Besides, it is fun to page through the garden catalogs.
- ✔ Sow seeds in flats or containers to get a jump on plant growth before hot weather arrives. Petunias, begonias, and impatiens should be sown in early January. Warm temperature plants, such as tomatoes, peppers, marigolds, and periwinkles, should be sown in late January or early February.
- ✔ Apply a light application of fertilizer to established pansy plantings. Use one-half pound of ammonium sulfate per 100 square feet of bed area. Repeat the application every 4 to 6 weeks, depending on rainfall. Dried blood meal is also an excellent source of fertilizer for pansies.
- ✔ Prepare beds and garden area for spring planting.
- ✔ Select and order gladiolus corms for February/March planting. Plant at two-week intervals to prolong flowering period.
- ✔ Check junipers and other narrow-leaf evergreens for bagworm pouches. The insect eggs overwinter in the pouch, and start the cycle again by emerging in the spring to begin feeding on the foliage. Hand removal and burning of the pouches are ways of reducing the potential damage next spring.
- ✔ The life of the plant received as a Christmas gift can be prolonged with proper care. Keep the soil moist, but provide drainage so that excess moisture can flow from the pot. Keep the plant out of range of heating ducts and away from heating units. Keep in a cool room at night, preferably at 60 to 65 degrees F.
- ✔ Don't fertilize newly set out trees or shrubs until after they have started to grow, and then only very lightly the first year.
- ✔ When buying plants, the biggest is not always the best, especially when dealing with bare-root plants. The medium to small sizes (4 to 6 feet) are usually faster to become established and more effective in the landscape than the large sizes.
- ✔ Prune bush roses during February or early March. Use good shears that will make clean cuts. Remove dead, dying, and weak canes. Leave 4 to 8 healthy canes, and remove approximately one-half of the top growth and height of the plant.
- ✔ Now is an excellent time to select and plant container-grown roses to fill in those bare spots in your rose garden.
- ✔ When pruning shrubs, first prune out any dead or damaged branches; then thin out by removing about one-third of the canes or stems at ground level, removing the oldest canes only; and last, shape the rest of the plant, but do not cut everything back to the same height.
- ✔ Plant dahlia tubers in late February and early March.
- ✔ In Central and South Texas, the following flower seeds may be sown directly without protection in well prepared flower beds in February or March: nasturtiums, annual phlox, California poppies, coneflowers, and larkspur. Petunia plants may be set out in sunny, well drained locations, with little chance of cold damage except in far North Texas.
- ✔ Water foliage plants as well as other containerized plants only when needed and not by the calendar.
- ✔ Climbing roses should be trained but not pruned. Weave long canes through openings in trellises or arbors and tie them with jute twine or plastic/wire plant ties. Securing canes now prevents damage from winter winds, and contributes toward a more refined look to the garden when roses are blooming. Wait until after the spring flowering period to prune climbing or once-blooming shrub roses.

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The Landscape Design Study Courses are a joint offering from the Texas Garden Clubs, Inc., and the Texas Agricultural Extension Service. The courses are open to anyone interested in furthering their knowledge of landscape architecture. There are a total of four courses, with one being offered every six months. Participants can begin with any of the four schools. Many Master Gardeners have been registering, since the courses are an opportunity to receive in-depth training beyond what is offered in their normal curriculum. Master Gardeners also can receive 12 hours of continuing education credit toward maintaining their Master Gardener status by taking the course.

Registration fee for the course is $50.00, and forms can be obtained by calling the Extension Horticulture Office at (409) 845-7341

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