A Comprehensive Field Guide to the Plant Life on Our Campus
The University of Illinois at Chicago is an ever-evolving institution, and the campus grounds are no different. In order to effectively manage our surroundings, we must first understand what they are comprised of. The ability to accurately identify plant species is important when having educated conversations about campus aesthetic, work requests, and community inquiries. Understanding their growth habits and horticultural requirements elevates our capabilities.

This booklet highlights 23 of the most popular shrubs, ornamental grasses, and perennials found throughout the University of Illinois at Chicago. Not only will the reader be able to identify each plant specimen, they will also learn about common pests afflicting each as well as general maintenance practices. Whether these plants are found in the Memorial Grove, Medical Sciences Building Courtyard, lecture centers, or containers, users will continue their grounds keeping education one plant at a time.
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A boxwood is considered to be a low-maintenance shrub, but certain practices are recommended to keep the plant healthy.

Fall is the best time for boxwood planting and mulching. Winter is the ideal time for pruning, thinning, and protection.

Boxwoods can be planted in the spring, which is also the time for monitoring of insects.

Inspection of plants for insects should continue in the summer, during which time there should be attention to weed control and the watering needs of the plants.

Boxwood keep their foliage for three years. When current growth completely covers the leaves that grew during the previous two seasons, it clearly needs thinning. This severely reduces air circulation and favors the development of diseases.

To thin boxwood, use a sharp bypass pruner. Reach inside the shrub about six inches and prune off the stem. Continue thinning until the small interior twigs just start to become visible. You should only remove about ten percent of the outer branches.

**Boxwood**

*Scientific Name: Buxus*

*Approximately 70 species in the family Buxaceae*
Yew

photo credit: Lambique

Scientific Name: Taxus

A medium-sized evergreen shrub in the family Taxaceae

Yew plants have reddish bark and dark-green leaves that are arranged spirally on the stem with the leaf bases twisted to align the leaves in two flat rows on either side of the stem.

While this evergreen shrub flourishes in sun to partial sun and well-drained soil, it is tolerant to most any exposure and soil make up with the exception of overly wet soil, which may cause root rot.

Yews mature to a height of five feet tall by 10 feet wide and are almost exclusively pruned into the size desired for a particular location. Slow growing, they can be heavily sheared into a variety of shapes and are oftentimes used as a hedge.

While susceptible to root rot and other fungal diseases brought on by overly wet soil conditions, the yew is an easy-care, drought tolerant, and highly adaptable shrub.

Prune yews in the early spring just as new growth begins. Remove one-third of the thickest, longest branches. Cut the branches back to their base, making the cut at a 45-degree angle. These are called thinning cuts. In a formal hedge, the top of the hedge can be sheared flat or slightly rounded. Remove the growing tips so the hedge is wide at the bottom and narrows at the top. Dispose of yew clippings. All parts of the plant are highly toxic.
Juniper

Scientific Name: Juniperus
Approximately 170 cultivated varieties of juniper

Juniper shrubs provide the landscape with well-defined structure and a fresh fragrance that few other shrubs can match. The care of juniper shrubbery is easy because they require minimal pruning to maintain their attractive shape and tolerate adverse conditions without complaint.

Junipers grow in any type of soil as long as it is well-drained. Many types make excellent street shrubs because they tolerate the spray from road salt and other urban pollution. Best planted in the fall.

Fertilize the shrub with 10-10-10 fertilizer in spring. Generally need little pruning, unless they are getting too overgrown for site. They may be pruned at any time except during subzero weather. The best time is early spring, prior to new growth.

The best pruning method is to cut individual branches back to an upward growing side branch, which keeps the plant looking young and natural.

Shearing is not recommended. New foliage will not grow from the brown stems.
Viburnum shrubs have showy, often fragrant flowers that are followed by colorful berries and fall foliage. The species Juddii is widely used on campus. Most viburnums flower in spring. The sometimes fragrant flowers range from white and cream to pink-flushed or wholly pink. Most grow in moderately fertile, moist but well-drained soil in full sun to partial shade. Most have a full spreading habit.

While light pruning can be performed anytime throughout the year, it’s best to leave any major shearing or severe pruning for late winter or early spring.

Viburnum juddii flowers on last season’s wood so you would prune soon after flowering so the plant can set flower buds for next season without the danger of them being cut off later on. Typically, viburnum shrubs should be trimmed back about a third of their size each year. Most pruning is done for shaping purposes only. Thinning out of unsightly branches can help open these shrubs up as well.

Prune by cutting it back just above the nodes so the plant can continue to put out new shoots. For overgrown shrubs, reshaping may take several years of pruning to correct.
The majority of cultivated hydrangeas grow as shrubs and are classified as woody or herbaceous. Plants produce large, impressive, long-lasting flower clusters in spring and summer.

Flowers are produced from early spring to late autumn; they grow in flower heads at the end of the stems. In most species, the flowers are white, but can be blue, red, pink, light purple, or dark purple. Color is affected by soil pH.

The best way to prune is to thin older plants by cutting out a portion (one-third) of the old woody canes to the base as well as dead wood in late winter before the new buds begin to swell.

To check to see if a dormant stem is alive or dead, nick the bark away slightly and look at the color beneath. If it's green, the stem is alive. If it nicks to reveal brown, it's dead at that point along the stem. Do not prune by shortening stems, except to remove old flower heads, as you are likely to cut off your flower buds.

A young plant may be cut back in June/July to enhance its structure or fullness. Any corrective pruning, including rejuvenation shaping or thinning, should be done smack in the middle of the summer. This allows the plant to have the maximum time to produce new branches and harden off before the winter.
Low, wide spreading habit. Excellent for mass beds and bank control because of its deep roots. Aromatic small yellow flowers in spring followed by red hairy fruit. Does best in full sun and has beautiful fall color. Tolerates poor soils. Once established, needs only occasional watering. Low maintenance.

Prune out dead, broken, or diseased branches with a pair of pruning shears in the late winter while the shrub is dormant. Make each cut one-fourth inch above a lateral branch or the limb's base. Prune out any vigorously growing branches that detract from the shrub's overall shape. Remove no more than one-fourth to one-third of the sumac's total mass at one time.

Check both surfaces of the sumac's leaves periodically for the presence of yellow or brown stippling resulting from feeding spider mites, green-bodied aphids, or brown to white scale. Examine the leaves every two to four weeks for white powdery spores characteristic of powdery mildew or irregular gray spots with purplish margins signifying the fungal disease leaf spot.

Do not require fertilizer as they grow best in soil poor in nutrients.
The Knock Out Rose is a shrub that produces vibrant roses in three primary colors: pink, red, and yellow. It is known for their low maintenance requirements and overall hardiness. Most grow about 3–4 feet high by 3–4 feet wide in naturally compact, upright round shape. They begin blooming in spring and keep it up full tilt until well into the fall. Full sun plants, but will tolerate some partial shade. Drought and heat tolerant. They do best if watered every week or so.

Prune back heavily in the early spring. Prune out the broken canes and prune the overall bush back by about one third of its overall height. While doing this pruning, be sure to keep an eye on the finished shape of the shrub desired. This pruning in the early spring will help to bring on the strong growth and blooms production desired.

Deadheading, or the removal of the old spent blooms, is not really needed with knockout rose bushes to keep them blooming. However, doing some deadheading on an occasional basis does help not only stimulate the new clusters of blooms, but also overall rose bush growth.

Performing the deadheading about a month prior to a special event may put the bloom cycle in line with the timing of the event.
Spirea

Scientific Name: Spiraea

Tor and Little Princess are varieties common on campus.

Spirea comes in a wide range of sizes and types, each with its own use in the landscape.

Water deeply in spring and summer if you get less than an inch of rainfall in a week. Apply water slowly and stop when the water begins to run off.

Never fertilize in the fall, since it encourages a growth spurt and tender young shoots are easily damaged by frost.

Spirea look best when pruned annually. Prune spring-blooming types soon after the blossoms fade and summer-blooming varieties in winter. Cut spring-blooming spirea back to 3–4 inches above the ground and then cut out the oldest and largest stems down to the crown. Summer blooming spirea also tolerate cutting back close to the ground, but you sacrifice the season's flowers with severe pruning. Instead, cut out the oldest canes all the way to the crown, leaving the youngest to produce flowers. Remove about one-third of the canes each year. Remove damaged and diseased canes any time of year.

Spider mites and aphids sometimes infest spirea. Symptoms include webbing and small, light colored dots where they feed.
Lilacs are hardy, easy to grow, and low maintenance. They can grow five to 15 feet tall, depending on the variety. Each spring, apply a layer of compost under the plant, followed by mulch to retain moisture and control weeds. Water during the summer if rainfall is less than 1 inch per week.

Lilacs bloom on old wood, so it’s critical to prune in the spring right after they bloom. If you prune later in the summer, you may be removing the bloom. Tip: If your lilac flower clusters are getting smaller, time to prune!

Every year after bloom, remove any deadwood. Prune out the oldest canes (down to the ground) and remove the small suckers. Cut back weak branches to a strong shoot. Cut back tall canes to eye height.

If your lilac is old and in really bad shape, remove one-third of the oldest canes (down to the ground) in year one, half of the remaining old wood in year two, and the rest of the old wood in year three. It must be recognized that severe pruning results in the loss of blooms for one to three years. For these reasons, a wise pruning program aims to avoid severe and drastic cuts by giving the bushes annual attention.

Powder white mildew may appear after a summer of hot, humid weather. It does no harm.
Karl Foerster Feather Reed Grass
photo credit: Rotary Botanical Gardens

Scientific Name: Calamagrostis

This versatile ornamental grass has slender, upright, deep-green foliage. A cool season grass, it is upright and clump forming, with purplish-green, feathery plumes that can reach six feet in height. It blooms in early summer rather than fall and must have winter chill to bloom.

Medium moisture, full sun to part shade. Blooms early summer and has a purple flower.

Annual maintenance consists of cutting the old growth down in early spring before new growth starts. Leave about one-third of the plant in place. Do not cut too close to the crown of the plant.

Reed grass grows out from the center and after a few years, you may discover a hole-in-the-doughnut effect. When this happens, dig the plant up and divide it. Preferred time for dividing is in spring.
Fountain Grass

Scientific Name: Pennisetum

Numerous cultivars available.

Fountain Grass (Pennisetum) is a mound-forming ornamental grass. The care of Fountain Grass is easy. The cascading leaves on this plant have a fountain-like appearance. Fountain Grass is an attractive perennial grass with densely clumped growth.

Blooming of its foxtail-looking flowers generally takes place from late summer through the fall.

The small flowers of Fountain Grass are tan, pink, or purple. During fall and winter, this plant will have spectacular foliage displays. Fertilizer can be applied as growth resumes in the spring.

Established plants do not need regular watering, except during periods of drought.

Annual maintenance consists of cutting the old growth down in early spring before new growth starts. Leave about one-third of the plant in place. Do not cut too close to the crown of the plant.

Can be dug up and divided in area where overcrowding may occur. Division can be performed in early spring prior to new growth or after the growing season in late summer or fall.
Switchgrass is an upright prairie grass that produces feathery, delicate flowers from July to September. This clumping grass may grow four to six feet tall, has fine bladed foliage, and produces feathery inflorescence in late summer, which may be deep red or purple. The foliage is bluish-green most of the time and produces a haze of soft color in the landscape.

As a native species, the plant is well suited to growing wild and does not need any special, supplemental care.

Switchgrass may die back in the winter, but the rhizome will remain alive underground, especially if the plants are mulched.

Annual maintenance consists of cutting the old growth down in early spring before new growth starts. Leave about one-third of the plant in place. Do not cut too close to the crown of the plant.
Maiden Grass

Scientific Name: Miscanthus sinensis

Various varieties exist with different sizes and foliage colors.

Miscanthus sinensis is a family of ornamental plants with a clumping habit and graceful arching stems. This group of grasses has added appeal in late summer with spectacular plumes and in fall with bronze to burgundy colored foliage.

May get six feet wide with a 10 foot spread. Requires a well-drained soil but is tolerant of excess moisture, dry conditions, acidic soils, and even hard clay sites.

When center of plant is showing signs of dying out, you may dig up a mature plant in early spring before new growth has appeared. Cut the root base into two to four sections and plant each as a new plant.

Annual maintenance consists of cutting the old growth down in early spring before new growth starts. Leave about one-third of the plant in place. Do not cut too close to the crown of the plant.
Most daylilies have a distinct, three- to four-week bloom period in early to late summer, although some varieties continue to bloom sporadically all season long. Foliage height ranges from one to four feet, depending on variety.

Easy care/low maintenance. Water plants during the summer if rainfall is less than one inch per week. Remove individual spent flowers daily and cut back flower stalk once all flowers have gone by.

Divide plants every three to four years as new growth begins in the spring, lifting plants and dividing them into clumps.

**Daylily**

**Scientific Name: Hemerocallis**

*More than 13,000 cultivars available*

Most daylilies have a distinct, three- to four-week bloom period in early to late summer, although some varieties continue to bloom sporadically all season long. Foliage height ranges from one to four feet, depending on variety.
The most familiar catmints are those with purple-blue flowers that bloom heavily in early summer. These come in a range of heights, from a foot tall up to as much as 3–4 feet tall, making them useful in many garden settings.

Prefer full sun and well-drained, not overly fertile soil, although plants in hot summer areas do well with some afternoon shade. Established plants are drought tolerant.

Shear back plants by one-third after their first flush of bloom is past to neaten plants and encourage a second flush of flowers later in the summer. Keep plants vigorous by dividing every 3–4 years in spring or early fall.

Cut the catmint to the ground with the pruning clippers in late fall, early winter. This pruning clears space to make room for new growth that should begin to grow in late winter or early spring.
Allium species are herbaceous perennials with flowers produced on scapes. They grow from solitary or clustered tunicate bulbs and many have an onion odor and taste.

Drought tolerant plants that actually prefer to be grown on the dry side. There are no serious diseases or insect pests that bother them.

The foliage of the early bloomers lasts only briefly, often disappearing as the plants come into bloom, while the foliage of the alliums that bloom later in the season remains green and attractive much longer.

Dead head ornamental onions to prevent self-sowing by clipping off the flower stems at their base. Water plants in the summer if rainfall less than one inch per week.
Sedum

Genus: Sedum

Sedum are well-known perennials for their distinctive fleshy foliage and come in a wide range of shapes and sizes—from upright varieties to groundcovers.

Star-shaped flowers are usually in clusters or sprays that often change color throughout their bloom time.

Easy care/low maintenance. Full sun to light shade and very well-drained soil. Tolerates dry soil.

Water plants during the summer if rainfall is less than one inch per week. After the first killing frost, cut stems back to an inch or two above the soil line.

Divide plants every three to four years as new growth begins in spring, lifting plants and dividing them into clumps.

Scientific Name: Sedum

Sedum contains up to 600 species of leaf succulents.
Euonymus coloratus is a creeping, spreading ground cover that can get six to 12 inches high as a ground cover, up to two to three feet high as mounded shrubs and spreads 40 to 50 feet wide as a vine. They prefer a moist, well-drained soil and exhibit evergreen foliage (foliage year-round).

Season of interest in early winter, mid-winter, late winter. Grows in full sun to dense shade.

Prune for size control, to remove dead or diseased plant parts, or to shape or train plants into hedges. Prune in late winter or spring, depending on when the plants flower.

Eyonymus scale is a common problem. Scale are white, unusual insects in appearance and generally cover the undersides of leaves.
Rudbeckias are easy-to-grow perennials featuring golden daisy like flowers with black or purple centers and include the popular Black-Eyed Susan.


Apply two-inch layer of mulch to retain moisture and control weeds. Water plants during the summer if rainfall is less than one inch per week.

After the first killing frost, cut stems back to an inch or two above soil line. Divide plants every three to four years as new growth begins in the spring, lifting plants and dividing them into clumps.

**Scientific Name: Rudbeckia hirta**
Russian Sage

**Scientific Name:**
Perovskia atriplicifolia

Russian Sage has airy spires of small, purple-blue flowers and finely cut, gray-green foliage on upright, grayish-white stems.

Prefers full sun and well-drained, even dry soil of average fertility for the plant to thrive. If plants are too floppy, try pinching them back by half in early summer when they are about a foot tall.

Cut back plants to about a foot in the fall or leave standing for winter interest. Then cut back to about six inches in the spring. In long-season areas, if flowering stops after the first flush of blooms, cut back plants by half to encourage a second flush of flowers.

Water newly set-out plants if the weather is dry. Established plants are quite drought tolerant.
Hostas have a lush foliage, and they are easy to take care of. Once established, hosta plants are not fussy and are very tolerant of summer drought.

Prefer moderate shade, rich organic soil with a slightly acidic pH. Prefer a well-drained soil. Dormant season crown rot is one of the few diseases that attack these plants.

Hostas will wilt and turn brown if their soil gets too dry, so make sure to water them frequently to keep the soil moist. Water hostas under their foliage at their bases to prevent the leaves from getting burned by the sun. Best time to water hostas is in the morning.

Mulch around hostas to help keep the soil moist. Cut hostas back after the first frost. Hostas do not stay green all winter. They will dry up and look dead all winter. Use pruning shears or a scissors to cut them back to a couple of inches.

Divide hostas after three to four years. Hostas are quite durable, and it's easy to divide them. This is best done in early spring when the leaves are still curled, but you can do it any point during the summer if your plants are healthy. Relatively disease free with the exception of crown rot and leaf rot.
Liriope

Scientific Name: Liriope spicata

Also known as lilyturf or border grass, liriope is a clump-forming perennial member of the lily family characterized by dark green, graceful foliage that grows to lengths between 10 and 18 inches. The plant produces spikes of violet or white blooms in the summer, resembling grape hyacinth flowers. Blooms are followed in the fall by white or black berries.

Fairly easy to care for, provided its basic needs are met. Needs water regularly throughout the growing season but not so much that the soil becomes water-logged or flooded. Moderately drought tolerant, lush plant.

Regular weeding is required during the first year or two of the plant’s life, as liriope is somewhat slow to establish and weeds compete for its water and nutrients.

Leaves may turn brown in frost, but new shoots are quick to appear in the spring. If the plant looks worn in the winter, simply cut back or mow before new growth emerges.
A relative of the familiar kitchen sage, flowering salvias produce spikes of small, densely packed flowers atop aromatic foliage. These heat- and drought-tolerant plants bloom from early to late summer in shades of blue, violet, red, pink, and white. Plants grow 18 inches to five feet tall, depending on the variety.

Salvia

Scientific Name: Salvia

Easy care and low maintenance. Tolerate dry soils. Prefer full sun and a very well-drained soil.

Apply a thin layer of mulch around the Salvia to retain moisture and control weeds. Water plants during the summer if rainfall is less than one inch per week. Some types can be sheared back after flowering to induce a second flush of flowers in the fall.

After the first killing frost, cut stems back to an inch or two above the soil line. Divide plants every three to four years as new growth begins in the spring, lifting plants and dividing them into clumps.