Evergreen Hollies (Ilex spp.)

There are many species of evergreen hollies that can be used to beautify garden or landscape settings as well as serve architectural and ecological functions. In terms of aesthetics, evergreen hollies can have showy foliage, fruit, and form, and vary considerably in their size, form, and hardiness. There are hollies that 1) meet any landscape needs ranging from conical trees to small mounded shrubs; 2) have dark green leaves to showy variegated leaves splashed with gold or white colors; and 3) have showy red, yellow or red fruit to nondescript black fruit. Many evergreen holliesfunction as border (hedge) or foundation plants. Thus, they are usually used in mass to form short to tall walls (depending on species/cultivar), delineate parts of landscapes, and to create a base for structures when used as foundation plants. They can be used as accent plants (plants that emphasize a landscape element or structure). An example of this would to use conical or columnar cultivars on either side of a doorway or sign to frame or draw attention to that feature. Some species/cultivars have sufficient notable characteristics to be used as focal points (distinct points of interest in the landscape); American holly (*llex opaca*), for example, is a beautiful conical tree with showy foliage and fruit that can be featured by itself in the landscape.

Hollies are generally trouble free and easy to grow. Most evergreen hollies do best in full sun. While some will do fine in part shade, such as American and Japanese holly (*I.opaca* and *crenata*, respectively), fruit production tends to be the heaviest in full sun exposures. Because of their evergreen and usually dense habit, hollies make excellent habitats for birds; female hollies produce large amounts of fruit which are important to birds' diets.

While evergreen hollies are easily pruned, one must choose a species or cultivar that suits the available space. For example, one might be very proud of a 5-foot tall conical 'Nellie R. Stevens' holly that fits nicely next to the corner of a house, but unless one prunes this tree annually, in ten years this holly will be about 15-feet tall and 8-feet wide and completely consume the space. Thus one must take the mature size of a holly when matching a species to a particular site. Another point about evergreen hollies is that many of the species/cultivars have sharp spine-tipped leaves. This aspect will influence the proximity to walkways or other areas where one might come into contact with the plant(s). Additionally, pruning hollies with spine-tipped leaves requires gloves and long sleeves to avoid the sharp leaves. In the event a holly has grown to an unmanageable proportion, one can drastically prune the plant (preferably in the early spring) to about one-foot above ground level and it will generate new stems in a short period of time.

Some hollies have showy red fruit while others bear dark, relatively inconspicuous fruit. In either case, only female plants bear fruit. Hollies have separate male and female plants (termed dioecious). Thus, in most cases, a male is needed in the vicinity of the female to provide pollen for sexual fertilization and subsequent fruit set. There is a common belief that the male does not have to belong to the same species as the female to set fruit, the only apparent requirements are that the male holly plant be flowering at the same time as the female, and that the male be in the vicinity

as the female plant. Some female hollies do not require a male for pollination to set fruit. The name for this phenomenon is parthenocarpy (parthenocarpic is the adjective); even though a parthenocarpic cultivar does not require a male for fruit set, parthenocarpic cultivars are observed to have a heavier fruit set when a concurrently flowering male plant is in the vicinity.

This article will feature the array of species that can serve both functional and aesthetic uses.

English Holly

Ilex aquifolium

English holly is known for its beautiful glossy spine-tipped foliage. Cultivars that are usually large shrubs/small trees are found at garden centers. There are hundreds ofcultivars that vary in foliage, fruit, size, and hardiness characteristics. There are many cultivars with variegated foliage; most of these have leaves that are splashed or streaked with white or yellow. Females have showy red fruit. One must pay attention to the culture of this species. English holly, a zone 7 species, does not perform well in the heat and heavy soils of the southeast U.S. There are a few cultivars that are cold hardy in zone 6.

Chinese Holly

Ilex cornuta

There are many cultivars of this species in the nursery and landscape trade (the straight species is not sold). Cultivars are incredibly tough and tolerate heat, drought, and poor soils better than any other hollies. Most cultivars are not reliable hardy in zone 6a, so one must be in zones 6b or higher to escape winter damage. Most of the cultivars are shrub forms (or small tree forms depending on pruning practices), have spine-tipped teeth on leaves, and are used as hedges, foundation plants, or as a small tree.

Some of the more common cultivars are:

- Berries JubileeTM is a dome-shaped plant that grows slowly to about 10 feet tall and bears large clusters of red fruit.
- 'Burfordii' (Burford holly) is a large shrub or small tree; un-pruned it will be a dense shrub or if lower limbs are removed it will be a small tree. This cultivar has glossy green leaves and has a heavy fruit set; this is a parthenocarpic cultivar. 'Dwarf Burford' (Burfordii Nana') is a dwarf version of 'Bufordii'.
- Carissa' is similar to 'Dwarf Burford' but has a more tapered leaf apex and is apparently not as hardy as 'Dwarf Burford'.

Japanese Holly

Ilex crenata

There are numerous cultivars of Japanese hollies; they have either an upright oval or mounded form, and range in size from 3 to 10 feet tall. There are several cultivars that have a dense oval/round appearance that have the typical boxwood look. They are mainly used for hedges, foundation plants, and in mass. Leaves are relatively small and spineless. Fruit are black and relatively inconspicuous. Cultivars are quite tolerant of pruning but are slow-growing so pruning is not a big issue. Many cultivars (with a few exceptions noted below) are only reliably hardy in zones 6b and higher (not

reliably hardy in zones 6a and lower). Some cultivars, especially 'Helleri', 'Hoogendorn', 'Nigra', 'Green Cushion', 'Mobjack Supreme', and 'Hetzii' are quite susceptible to black root rot (*Thielaviopsis*) which is a seriousfungal disease.

Some of the more common cultivars are:

- 'Convexa' has an upright oval form that grows to about 8 feet tall. This is one of the few cultivars that are hardy in zone 5b and 6a.
- 'Helleri' has a mound form and grows to about 4 feet tall.
- 'Hetzii' is similar in form and size to 'Convexa' but has larger leaves; hardy in zones 5b and 6a.
- 'Hoogendorn' has a compact mounded habit to about 3 feet tall with handsome dark green foliage.
- 'Green Lustre' has a mounded form to about 4 feet tall with glossy green leaves; hardy in zones 5b and 6a. 'Sky Pencil' has a columnar (column-like) form to about 10 feet tall; hardy in zones 5b and 6a. 'Soft Touch' has a dense compact mounded form to about 3 feet tall with supple branched that lack the relatively rigid branches of most Japanese holly cultivars. 'Steeds' has an upright conical form to about 8 feet tall. 'Stokes' has a compact mounded habit to about 3 feet tall and glossy leaves; hardy in zones 5b and 6a.

Inkberry

Ilex glabra

Inkberry is a medium (sometimes large; > 8 feet tall) multi-branched shrub species. The species is most commonly used in mass, in border plantings, or as foundation plants. Inkberry tolerates moist/wet soils and will sucker (produce stems from the roost system) to form a colony of stems. Leaves are about 1.5 inches long without spine-tipped teeth. Females bear relatively inconspicuous black fruit. Cultivars should be selected that have dark green foliage in the winter (there is a tendency for leaves to go off-color), a compact habit, and retention of lower foliage (there is a tendency for plants to lose foliage at the bottom of the plant yielding a "leggy" naked appearance). Cultivars that tend not to become leggy are 'Nigra', 'Ivory Queen', Nordic®, 'Nova Scotia' and 'UGA'. Inkberry is susceptible to black root rot (*Thielaviopsis*), a serious fungal disease.

American Holly

Ilex opaca

American holly is a slow-growing conical tree species of great beauty worthy to be used as a specimen plant (focal point) in a landscape/garden. The form, foliage (oval leaves with spine-tipped teeth), and fruit (on females) are admirable aspects. In an ideal location, American holly can grow to 60 feet tall and 30 feet wide at maturity, but a tree this large would be very old. Seedling-grown American hollies exhibit a significant amount of variation. Hence, one would obtain an asexually propagated cultivar. There are numerous cultivars in the nursery trade; cultivar selection criteria are growth rate, hardiness, form, foliage, and fruit characteristics. For example, 'Old Heavy Berry' is a very hardy, vigorous, and fruitful cultivar. Like most other holly species, a male (in the vicinity of the female) is needed for fruit set.

Longstalk Holly

Ilex pendunculosa

Longstalk holly is a slow-growing, hardy (to zone 5), large shrub/small treespecies. Its claim to fame is it attractive foliage (without spine-tipped teeth on leaf margins) and red fruit that are borne on long stalks (called peduncles), hence the common name. A male, preferably of the same species, is needed for fruit set. This species is not suited to hot climates and may be unthrifty in zones 7 and 8.

Yaupon Holly

Ilex vomitoria

Yaupon holly is typically a small tree species, however, numerous cultivars have been selected for a compact, dwarf form. This holly has relatively small (about 1-inch long), smooth-margined leaves. Red fruits are generally borne in great amounts (on females) and are persistent through winter; there are a few yellow-fruited cultivars in the trade. Yaupon holly is exceptionally tolerant of adverse conditions; it can tolerate wet, dry, poor soils, as well as salt spray. Cultivars range from compact mound forms to upright tree forms, to weeping tree forms. Due to the many forms and toughness of this species, there are many landscape uses ranging from hedge/screen, to foundation planting, to specimen plant. Some popular cultivars in the nursery trade are: 'Schillings' (same as 'Stokes Dwarf') has a dwarf compact form with small leaves; 'Pendula' and 'Folsom's Weeping' have pendulous branches; BordeauxTM is a dwarf compact mounded form with small leaves that emerge with maroon color. Cold hardiness is an issue with yaupon holly, and this species is suites to zones 7 to 10. Hoskin ShadowTM is claimed to be

hardy in zone 6. The scientific name of yaupon holly is *Ilex vomitoria*. The second term of this two-termed Latin name (*vomitoria*; the specific epithet) refers to the fact that native American natives, in an effort to purge and purify themselves, made a vomit-inducing drink containing yaupon holly leaves.

Hybrid Hollies

The following is a description of some of the more popular evergreen holly hybrids. There is a hugeselection in the nursery trade (too numerous to list). See 6th edition of the *Manual of Woody Landscape Plants* by Michael A. Dirr, Stipes Publishing (pages 547-561) for a complete listing and descriptions.

Foster Holly

Ilex ×attenuata 'Fosteri'

Foster holly is a narrow conical species with narrow spine-tipped leaves that grows to about 20 feet tall. This female cultivar sets large amounts of showy red fruit that are persistent through the winter. Fruit set is reputedly parthenocarpic (no male needed). Foster holly can be grown in zones 6 to 9, however, winter damage (foliage burn/stem death) may occasionally occur in zone 6a.

Nellie R. Stevens Holly

Ilex 'Nellie R. Stevens'



Nellie R. Stevens is a conical small tree. Leaves are dark green, glossy, and spine-tipped. This cultivar sets showy red fruit (parthenocarpic – no male needed) that are persistent through the winter. Nellie R. Stevens is typically used as a hedge, barrier planting, and anywhere a conical evergreen small tree is needed. It is widely used in the nursery and landscape trades due it its tolerance to adverse conditions in addition to its aesthetic characteristics. While this cultivar is commonly grown in zone 6a, subzero temperatures (Fahrenheit) will damage leaves or kill stems but plants will generally recover.

Meserve Hollies - also known as the Blue Hollies

Ilex ×meserveae

The blue hollies are a group of medium to large shrub cultivars that were hybridized to produce a cold hardy holly with attractive foliage. The foliage of this group varies with cultivar but most have dark green/blue-green leaves with spine-tips. Female cultivars bear showy red persistent fruit. Cold hardiness varies with cultivar but most are hardy in zone 6 with the exception of Blue Angel® which is the least desirable cultivar of the group. Male pollinating clones are 'Blue Boy' and Blue Stallion®. Berri-MagicTM is produced and sold with 'Blue Girl' (very cold hardy) and 'Blue Boy' produced in the same container to ensure cross-pollination takes place. Other cultivars are Blue Maid® (very cold hardy) and Blue Princess®. Blue Hollies are quite attractive due to their handsome dark foliage and fruit set. They are suitable for mass plantings, hedges,

and foundation plants. However, they are generally not suited to hot and dry locations such as the south side of buildings. They also languish in the southern locations and may not be suitable for zones 7b and higher. Blue hollies are susceptible to black root rot (*Thielaviopsis*), a serious fungal disease.

Hybrids Related to the Blue Hollies

China Girl[®] and China Boy[®] Holly

Ilex China Girl® and Ilex China Boy®

China Girl® and China Boy® are large shrubs that bear lustrous medium green leaves with spine-tipped leaves. China Girl® sets showy red persistent fruit when China Boy® is in the vicinity. These clones are cold hardy in zone 5 and are more tolerant of heat and drought than the Blue Hollies.

Dragon Lady® Holly

Ilex ×aquipernyi Dragon Lady®

Dragon Lady® is an upright narrow conical (somewhat columnar) holly that will get 15 feet tall at maturity. This clone has lustrous dark green spine-tipped foliage (very spiny) and is most useful as a hedge or barrier planting. Dragon Lady® will produce large red fruit; Blue Stallion® is the suggested pollinator. This clone may suffer some winter damage in zone 6a but will recover.