

UNUSUAL PERENNIALS

SLIDE 2 - *Acanthus spinosissimus* - Bear's Breeches

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
6-9	2'	20"	Full Sun/Part Shade	Late Spring/All Summer	Normal	Average w good drainage

General Description: Spiny acanthus is a clump-forming, evergreen to semi-evergreen perennial native to southern Europe. It is a bold, old-fashioned perennial that offers tall spikes of interesting flowers of maroon and ivory as well as interesting rosettes of deeply lobed, coarsely edged, dark green leaves that look good through the season. Flowers resemble foxglove.

The statuesque *Acanthus spinosissimus* makes one of the finest silhouettes in the winter garden. Sturdy stems carry a whorl of 30 or so flowers, each capable of producing a shiny, rich-brown, elliptical seed capsule. As the year wears on, the pods' protective covers of spiny bract and large hooded calyx weather to form intricate lacy skeletons. It is the bracts, common to all perennial acanthus, that give the plant its name; acanthus literally means thorn. It is thought that the two most widely grown, *A. spinosissimus* and *A. mollis*, were brought here from the Mediterranean by the Romans, who boiled the roots for poultices to cure burns, sprains, gout and baldness. Acanthus survived in monastery gardens after the Roman retreat and is listed in *De Naturis Rerum* (c 1190) by Alexander Neckham, Abbot of Cirencester and foster brother of Richard the Lionheart. Both plants were later lost to cultivation, then reintroduced - *Acanthus mollis* in 1548 and *A. spinosus* in 1629. These two species have produced natural hybrids, which are listed as *A. spinosissimus*. These bloom from June onwards, handsomely set off by the deeply cut, dark, shiny leaves and distinctive hooded bracts, which vary from white, to pink or purple. And it is highly attractive to bees.

Growing tips: Acanthus can cope with low temperatures as long as their tap roots are established and drainage is good. Plant in spring with protective mulch for the first two winters. These huge roots mean clumps live for a long time without needing attention and are difficult to eradicate. Many gardeners have painstakingly removed a plant, only to see it grow back within two or three years from a broken section of root. They tolerate deep shade, but produce fewer or no flower spikes.

How to propagate: The easiest way to increase your plants is by taking cuttings in late autumn and early winter. Sections of root laid on a seed tray of compost will sprout within weeks. An acanthus grown in our climate only sets a few viable seeds per spike, which look like little wrinkled prunes. In the wild they'd be propelled 19ft or more when the capsule splits, but not here. Harvest in late winter and sow in spring, using soil-based gritty compost. Cover the seeds with vermiculite; they should germinate within 21 days in temperatures of 15C.

Good companions: These imposing plants need a starring role, flanking steps or in the forefront of a border. Don't allow them anywhere near your favorite smaller plants. *Crocsmia masoniorum* has bronzy orange flowers and sword-shaped, pleated leaves and forms a strong, branching seed head in winter. *Phlomis russeliana* produces stiff stems of two-tone yellow flowers, followed by whorled seed heads. All three have good winter silhouettes, sheltering many ladybirds that can be left until early spring without fear of flopping.

SLIDE 3 - Actinidia arguta 'Issai' – Hardy Kiwi

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
4-8	20' – 25'	8' – 10'	Full Sun	Late June/early Sep	Normal, well drained	Average

The fruit is referred to as hardy kiwifruit, kiwi berry, arctic kiwi, baby kiwi, dessert kiwi, grape kiwi, northern kiwi, or cocktail kiwi, and are edible, berry- or grape-sized fruit similar to **kiwifruit** in taste and appearance, but are green, brownish, or purple with smooth skin, sometimes with a red blush. Often sweeter than the kiwifruit, hardy kiwifruit can be eaten whole and do not need to be peeled. Thin-walled, its exterior is smooth and leathery.

The fast-growing, climbing **vine** is very hardy (hence the name hardy kiwi), and is capable of surviving slow temperature drops to -34 °C (-30 °F), although young shoots can be vulnerable to frost in the spring. The vines need a frost-free growing season of about 150 days, but are not damaged by late freezes, provided that temperature changes are sufficiently gradual to allow plants to acclimate. Indeed, a period of winter chill is necessary for successful cultivation.

While hardy kiwi may be grown directly from seeds (germination time is about one month), propagating from **cuttings** is also possible. Hardy kiwi cuttings may be **grafted** directly onto established kiwifruit **rootstock**, or **rooted** themselves.

In domestic cultivation, a **trellis** may be used to encourage horizontal growth for easy maintenance and harvesting; however, vines grow extremely quickly and require a strong trellis for support. Each vine can grow up to 20 ft in a single season, given ideal growing conditions.^[10] For commercial planting, placement is important: plants can tolerate partial shade, but yields are optimized with full sunlight. Hardy kiwi vines consume large volumes of water; therefore, they are usually grown in well-drained, acidic soils to prevent root rot.

SLIDE 4 - Alstromeria - Peruvian Lily - 'Glory of the Andes'

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
6-11	2' – 3'	Varies	Full Sun/Part Shade	Late June/early Sep	Normal, well drained	Average

Alstromeria, commonly called the Peruvian Lily or Lily of the Incas, is a **South American** genus of about 120 species of **flowering plants**. Almost all of the species are restricted to one of two distinct centers of diversity, one in central Chile, the other in eastern Brazil. Species of Alstromeria from Chile are winter-growing plants while those of Brazil are summer-growing. All are long-lived perennials except *A. (Taltalia) graminea*, a diminutive annual from the Atacama Desert of Chile.

You most likely bought your Alstromeria in bloom and ready to go into your garden. Alstromerias love sun and a good well drained soil. If you have clay soil it will be more difficult to be successful.

Alstromerias also enjoy a good level of fertilizer and plenty of regular watering. Keep feeding your plants all during their growing season. Keep them watered. If you let your plants go too dry the foliage will turn an ugly yellow and look terrible. You can cut the entire plant

down to about 4 to 8 inches above the ground, start being a better care-giver and usually your plant will regrow again.

Your Alstromeria should bloom most of the spring and summer. It's important to pick the flowers. After all this is a wonderful cut flower that lasts for days and days in your bouquet. You can either pull the flower stem straight up or cut it off. Be sure to get rid of the stems that have formed seed pods. Alstromerias multiply rapidly through underground rhizome like tubers. They can really grow sideways in your garden. In a pot they can quickly get too big and either break the pot or come right out of the top.

Perhaps the most fascinating- and telltale trait of Alstromeria and its relatives is the fact that the leaves are **resupinate**, that is, they twist from the base so that what appears to be the upper leaf surface is in fact the lower leaf surface. This very unusual botanical feature is easily observed in the leaves on cut flowers from the florist.

Divide and replant in late summer or fall. Dig the clump of roots and shake off the soil. Keep the strongest of the whitish rhizomes and roots. Replant, water in and leave them alone. Excellent cutting flower. Provide with a winter mulch and plant in a sheltered location. Watch for slugs.

SLIDE 5 - *Angelica archangelica*

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
4-8	6'	2'	Shade	July	Normal	Damp

Commonly known as Garden Angelica, Holy Ghost, Wild Celery, and Norwegian angelica, is a **biennial plant** from the Apiaceae family. During its first year it only grows leaves, but during its second year its fluted stem can reach a height of two meters (or six feet). Its leaves are composed of numerous small leaflets, divided into three principal groups, each of which is again subdivided into three lesser groups. The edges of the leaflets are finely toothed or serrated. The flowers, which blossom in July, are small and numerous, yellowish or greenish in color, are grouped into large, globular umbels, which bear pale yellow, oblong fruits. Angelica only grows in damp soil, preferably near rivers or deposits of water. Not to be confused with the edible *Pastinaca sativa*, or Wild Parsnip.

Cultivation: Cultivate in ordinary deep, moist loam, in a shady position, as the plant thrives best in a damp soil and loves to grow near running water. It can withstand adverse environment wonderfully well, and even endure severe winter frost without harm. Seedlings will even successfully develop and flower under trees, whose shelter creates an area of summer dryness in the surface soil, and such conditions are allowable when Angelica is grown merely as an ornamental plant.

Usage/history: From the 10th century on, angelica was cultivated as a vegetable and medicinal plant, and achieved great popularity in Scandinavia in the 12th century and is still used today. A flute-like instrument with a clarinet-like sound can be made of its hollow stem, probably as a toy for children. It is often used as a flavoring agent. In 1602, angelica was introduced in Niort (France), which had just been ravaged by the plague, and it has been popular there ever since. It is used to flavor liqueurs or aquavits (e.g. Chartreuse, Bénédictine, Vermouth and Dubonnet), omelettes and trout, and as jam. The long bright green stems are

also candied and used as decoration. Find recipes on-line.

<http://botanical.com/botanical/mgmh/a/anepl037.html>

Angelica is unique amongst the Umbelleferae for its pervading aromatic odor, a pleasant perfume entirely different from Fennel, Parsley, Anise, Caraway or Chervil. It is likened to Juniper. Even the roots are fragrant, and form one of the principal aromatics of European growth - the other parts of the plant have the same flavor, but their active principles are considered more perishable.

SLIDE 6 - *Astrantia major* - Masterwort

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
5-9	24"-28"	20"	Full Sun/Part Shade	Late Spring/Early Summer	Well drained	Average

Masterwort has a relatively low-growing bushy rosette of leaves from which spring tummy-high to head-high stems with one-inch pink-tipped white pincushion or dustmop flowers. There are cultivars with different color blossoms, but even the natural variety is very showy & pleasing. Besides the white wild form of masterwort, a named cultivar that is rather pinker, called Lars' Masterwort' is a bit smaller & slower in its growth.

The name *Astrantia*, as with *Asters*, alludes to the blooms' star-like presentation. Compared to one decade ago or less, when Masterworts seemed all but absent in American gardens, it is becoming increasingly favored. It is even now more popular in its native Europe than in America, but really should be more utilized here, being one of the flowerier perennials to do well in a considerable portion of shade.

Cut flowers last a long while in bouquets & are easily dried for winter reminders of summer gardens. It wants moist well-drained soil & though it can adapt to a little more sun than it prefers, it cannot abide drought. Bees & butterflies are very fond of the blooms. Deadheading assists rebloom, but if its last flowers of the season are left to go to seed, the dried flower stalks persist up to the start of winter with a moderate decorativeness of their own.

Masterwort is highly regarded by floral designers for the unique umbels of starry flowers, a bit like a refined Queen-Anne's-Lace in effect, but not at all weedy in habit. There is an outstanding red-flowered selection, reblooming in the fall. Flowers may be cut fresh, or dried for winter arrangements. It is easily divided in early spring. Remove faded flowers to encourage more buds, also to prevent plants from self seeding all over.

SLIDE 7 - *Belamcanda chinensis* - Blackberry Lily

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
5-10	3'	2'	Full Sun	Mid/Late Summer	Normal	Average

Very underutilized Iris-like foliage. Native to Central Asia. Reproduces by rhizomes or seed. The Blackberry Lily is an **ornamental plant** in the **Iridaceae** family. In 2005, based on molecular DNA sequence evidence, *Belamcanda chinensis*, the sole species in the genus *Belamcanda*, was transferred to the genus *Iris* and renamed *Iris domestica*.

Description: This introduced plant has sword-shaped alternate leaves about ¾-2' long; they originate primarily toward the bottom of the flowering stalk. The blooming period occurs

from mid- to late summer and lasts about 1-2 months. There is no noticeable floral scent. Each flower is replaced by a seed capsule about 1" long; the 3 sides of this capsule become strongly recurved, revealing a mass of shiny black seeds that resembles a blackberry. The root system consists of a thickened crown at the base of the plant, which has fibrous roots underneath; spreading rhizomes are also produced. Both the crown and rhizomes have an orange interior. This plant can spread by either rhizomes or seeds.

Cultivation: The preference is full or partial sun, moist to dry conditions, and soil that is loamy, rocky, or sandy. The flowers and foliage are rarely bothered by disease or insect pests.

Medicinal uses: The dried rhizome has long been used in East Asia to treat throat troubles, asthma, swollen liver and spleen, gonorrhea, malaria, and arrow poisoning. The blackberry lily is of Chinese origin and is locally used in Chinese villages for its medicinal values. Currently, studies are underway to investigate its apparent potential against **prostate cancer**.

SLIDE 8 - Carex (Many Varieties)

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
5-9	Varies	Varies	Part/Full Shade	Insignificant	Normal	Average

Carex is a **genus of plants** in the family Cyperaceae, commonly known as **sedges** (sedges have edges). Other members of the Cyperaceae family are also called sedges, however those of genus Carex may be called "true" sedges, and it is the most species-rich genus in the family. They are great for shade. Make sure you get one that is zone hardy, some are not!

Habitat: Most (but not all) sedges are found in **wetlands** such as **marshes, fens, bogs** and other **peatlands, pond and stream banks, riparian zones**, and even ditches where they are often the dominant vegetation.

Horticulture: Carex species and cultivars are well represented in the **horticulture** industry, landscape design projects, and private gardens. **Native species** are used in wildland habitat restoration projects, natural landscaping and gardens, and in **sustainable landscaping** as **drought tolerant grass** replacements for lawns and garden meadows. Both **ornamental cultivars** (many from Japan) and **native species** selections are used as perennials in traditional gardens. Some of the many cultivars are:

1. **Carex morrowii 'Ice Dance'** is a dense, spreading sedge grown for its foliage. Hardy 5-9. This sedge looks good year round, even in winter. The early-spring flowers are insignificant, but the white-edged leaves complement most other plants. Grow as a groundcover in woodland areas or in a shade garden. This sedge is evergreen in warm climates.
2. **Carex siderosticha 'Banana Boat'** - Hardy 6-9. Common name, Broad-leaved Sedge, is one of the most useful edging plants for shady gardens. This Japanese selection forms a low clump of wide, grassy looking neon-yellow leaves with narrow green edges and streaks. The appearance is almost like a dwarf Hosta. Greenish flowers appear in spring but are fairly insignificant. Prefers a soil that remains evenly moist. Clumps may be divided in early spring just as the growth shoots begin to appear. Foliage dies back over the winter. It is a long-lived sedge.

3. **Carex dipsacea - Autumn Sedge** Hardy 6 – 9 Carex dipsacea grows in river beds and thrives in places with cool, wet winters. The pleasant color of this sedge changes throughout the seasons. Forms a dense clump 32” tall and 24” wide. Prefers full sun to light shade and moderate water. In summer it bears contrasting black seed heads. This Carex makes a nice specimen or edging plant. Try it in a container. A native to New Zealand.
4. **Carex dolichostachya ‘Gold Fountains’** Hardy 5-9. This selection of Carex is a delightful easy-to-grow but difficult to pronounce addition to any plant collection, via an expedition to Japan. This evergreen deer-resistant carex has narrow, dark green leaves with a nice golden border. Also known as Carex 'Kaga nishiki' forms a delightful small clump, 10" tall x 20" wide, perfect for the rock garden or perhaps a woodland border.

SLIDE 9 - *Crocoshmia x crocosmiiflora* ‘Lucifer’ (Montbretia)

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
5-9	2’-4’	1’-2’	Full Sun/Part Shade	All Summer	Normal	Average

A South African member of the Iridaceae, or Iris, family it makes a great focal point. You get a tropical look in a zone 5 plant! *Crocoshmia lucifer* is a brightly flowered, showy plant that is considered a cousin to the gladiolus, as there are physical similarities. The cottage-style flower blooms through the summer months, creating an interest point in flower beds and gardens. The plants are appealing because they are easy to maintain and resistant to garden nuisances.

Identification: *Crocoshmia lucifer*, native to South Africa, is a perennial bulb-type plant that grows flowers of 4 to 20 inflorescences that are bright red and tubular in shape. The common name for the plant is Montbretia. *Crocoshmia lucifer* is compatible with growing zones 5 through 9 and is found growing in clumps or groups. *Crocoshmia lucifer* blooms from June through August and reaches a height of 2 to 4 feet with a 1-to 2-foot spread.

Growing Requirements: *Crocoshmia lucifer* should be planted at a depth of 2 to 3 inches and 6 to 8 inches apart. The plants prefer a soil that is a well-drained but remains moist. *Crocoshmia lucifer* grows well in full sun to part shade conditions. Plant bulbs should be dug and stored during winter in growing zones 5 to 6, as the plants do not survive temperatures below 0 degrees F. Apply mulch over the plants for best results during winter.

Uses: *Crocoshmia lucifer* plants grow best when planted in groups of 12 or more plants, making them useful as a color border. They also grow well in containers, which makes pulling the bulbs in winter easy. The colorful flower shoots are used in cut flower arrangements because of the color and height of the stems. *Crocoshmia lucifer* is a brightly colored plant that attracts hummingbirds to flower gardens. Deer and rabbits resist eating plant shoots.

Propagation: *Crocoshmia lucifer* is propagated through the division of bulb corms. Once the bulb clump has been dug, remove bulbs that have grown off the main bulb section. It is best to divide and plant in spring, prior to new growth. For best plant growth, divide the bulbs every 3 years.

SLIDE 10 - *Echinacea* (Many Varieties)

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
3-9	2'-4'	2'-3'	Full Sun/Part Shade	Late Spring/All Summer	Normal	Average

Bloom Time and Color: Echinacea plants typically bloom in the summer lasting for several weeks. Echinacea *purpurea* was called Purple coneflower because of the large, daisy-like, purple flowers but Echinacea flowers come in purple, white, blush, wine, cream, and yellow colors now.

Foliage: Echinacea plants have clumps of foliage with dark green, lance shaped leaves about 4" long.

Growth Habit: Purple coneflower plants grow in large, upright or semi-sprawling clumps that add rounded growth or upright growth accents to large containers or mixed, drought-tolerant borders.

Dimensions: Echinacea plants grow around 4' tall and wide although recent hybridizing has produced dwarf coneflower cultivars half as tall.

Maintenance: Some gardeners deadhead their Echinacea plants to keep the plants looking tidy. Gardeners can prune them back lightly after the growing season ends in late fall, or leave the dried seed heads for winter interest. Divide every 4 years or as needed to prevent overcrowding.

Propagation Methods: Self-seeding is common if Echinacea seed heads are allowed to stand and ripen. Some hybrid Echinaceas must be purchased as started plants and propagated through division.

Preferred Conditions: Echinacea plants are perennials hardy to zone 3 and best planted in the fall season although their ease to establish makes spring planting fine. Purple coneflower plants are drought tolerant and thrive in medium to poor soil and full sun.

Seasons of Interest: Echinacea plants provide garden interest in late spring through winter months. Late spring is when the coneflower buds begin to appear. Winter interest can be found by leaving the Echinacea seed heads standing.

Uses in the Garden: Use Echinacea for any full sun border, kitchen and herb gardens, drought-tolerant planters and containers, prairie or meadow gardens as well as a native, naturalized landscaped area.

Other Uses: Echinacea is used as an immune boosting supplement against colds, flus and minor infections. A 2007 study by the **University of Connecticut** combined findings from 14 previously reported trials examining Echinacea and concluded that Echinacea can cut the chances of catching a cold by more than half, and shorten the duration of a cold by an average of 1.4 days The seeds are also attractive to small song birds, especially goldfinch. Echinacea flowers are also great for cut flower arrangements.

There are 9 species of Echinacea. All are prolific bloomers and just as durable as the original.

SLIDE 11 - Erysimum - Wallflower

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
5-10	1' -2'	20"	Full Sun/Light Shade	Late Spring/All Summer	Normal	Average

Great for the front of a border or rock garden, also works well on sunny banks. The Wallflower is an old-fashioned garden flower which, although a perennial, is usually grown as an annual or biennial because it tends to 'bloom itself to death'. This 12"-24" plant produces a profusion of fragrant, brightly colored flowers all spring making it an excellent choice for your butterfly garden, flower bed, or garden border.

Growing Requirements: Wallflower Plants are hardy in USDA zones 5-10. Wallflowers grow well in full sun or light shade and should be planted in a well drained soil.

Cultivation: Poor, gritty, well-drained soil, full sun, wallflowers hate poorly drained, heavy clay soils. They grow best in cool, moist climates but once the plant has become established in the garden, it is very durable and can withstand a certain amount of drought. In cold climates, be sure to provide ample mulch in the winter. Wallflowers do not perform well in higher temperatures. Wallflowers benefit from transplanting while they are young. This helps the plant to develop a thick, robust root system, which enables them to survive the elements better. Pinching the plant back often will produce a fuller, bushier plant

Growing Wallflower Plants from Seed: Wallflower seeds can be sown directly into the garden in mid-summer or very early spring. Plant the seeds 1/8" to 1/4" deep, and about 8-10 inches apart. Wallflowers are easily started indoors from seeds. Keep the temperature within the growing medium at 55°-65°. Germination will take place within 7-10 days. Plant twelve inches apart in the garden after all danger of frost has passed. Wallflowers can also be propagated from softwood cuttings taken after the plant has finished blooming.

Species:

Erysimum allionii - Siberian Wallflower - Orange flowers on short, compact plants. Withstands dry or moist conditions and will grow in sun or part shade. Wonderful fragrance. Great for floral arrangements. Height 30 cm. Biennial/Perennial for full sun or partial shade. Flowers in spring-summer.

Erysimum kotschy anum - Dwarf Yellow Wallflower - Attractive perennial with light green, jagged leaves and a stunning show of yellow blooms in early spring! This plant has a mild sweet fragrance. Needs excellent drainage to be content. Drought tolerant.

SLIDE 12 - Hibiscus moscheutos - Rosemallow

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
4-9	3'-8'	2'-3'	Full Sun/Part Shade	Midsummer to Fall	Normal	Average

Hibiscus moscheutos, also known as Rose mallow or Swamp Mallow is a cold-hardy perennial that grows in zones 4-9. Robust, tropical-looking shrub. Needs ample space. Will not appear until late spring. The plant can grow up to 3-8 ft tall depending on cultivar and produces spectacular, dish plate sized, flowers 5-12" wide that bloom in mid-summer until first frost. The large, showy flowers attract hummingbirds and butterflies.

Care: Grow it in rich moist, well-drained soil with a ph 6.5-7.5. It will tolerate occasional wet soil. *Hibiscus moscheutos* can grow in full sun to part shade but blooms better in full sun. Fertilize in spring with a 10-10-10. Mulch the plant during the dry summer to maintain even moisture. They should not be allowed to wilt. To prolong blooming time, deadhead flowers and remove seed pods. When finished blooming allow the plant to dieback before cutting the

stems 3” above the ground or cut back in the spring. In cooler climates, it will completely die back to the ground in winter, therefore mark the area where it was growing so that you know where to find it next season and mulch the area to protect the roots. It will return the following late spring but needs warm weather and long days to break dormancy. In cooler climates, it may not appear until June.

Propagation: It can be started from seed. Soak the seeds overnight before planting. Start seeds indoors in late winter/early spring. **Hybrid seeds will not come true** but will revert to original plant. They can also be propagated from soft-wood tip cuttings in the spring or hard-wood cutting in fall as well as root division. A new cultivar for this season is “Cranberry Crush”, a deep red color.

SLIDE 13 - *Hydrangea anomala* subsp. *Petiolaris* – Climbing Hydrangea

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
5-9	30’ – 50’	5’ – 6’	Sun/Part Shade	May – Early July	Rich, fertile	low

Subsp. *petiolaris* (formerly known as *Hydrangea petiolaris*) is native to eastern Siberia, Japan, China and South Korea. It differs from the species by its larger growth (matures to 60’ long), larger flower clusters (to 10” diameter), fewer showy sterile flowers per cluster, more than 10 stamens per flower, elliptic-ovate leaves (to 6” long) and better winter hardiness. Subspecies name is in reference to the long petioles of this plant.

Best grown in rich, fertile, moist but well-drained soils in part shade to full shade. Tolerates full sun only if grown with consistently moist soils. Somewhat intolerant of the hot and humid conditions of the deep South, and typically will not thrive in USDA Zone 8. Slow to establish, but quite vigorous thereafter. Propagate by seeds or stem cuttings.

No serious insect or disease problems. Needs a strong support structure if grown vertically on walls, fences or into large trees.

This is an extremely versatile vine with year-round interest. It can be particularly effective when grown against building walls (brick, stone or wood) where it can easily attach and cling by “holdfasts” to the surface. It is also effective when grown on a wide variety of other structures, including arbors, fences or the trunks of large trees, or sprawled over low stone walls, unsightly tree stumps or rock piles. It is much less frequently grown as a ground cover in shady areas or on steep embankments.

SLIDE 14 - *Opuntia species* - Prickly Pear Cactus

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
4-9	Varies	Varies	Full Sun/Part Shade	Late Spring/All Summer	Normal	Average

Great for rock gardens and alpine troughs. Not prone to insects or disease. Edible. Beautiful soft flowers. Hardy to way below zero. Flowers orange or yellow. *Opuntia* is a very large genus of cacti, varying in size from 2in tall miniature plants to 100ft tall trees. They are native from Canada, to Chile and Argentina. The name *Opuntia* comes from the name of a Greek city.

Handling: Use leather gloves when working with these cacti! All Opuntias not only have normal spines, but they also have thin barbed spines barely visible, named glochids. These can get stuck in your skin and be very irritating. In some species, they are **particularly light and can become airborne** when the Opuntia is moved. Wetting the plant before handling it might be a good prevention.

Description: Opuntias often have large, colorful flowers. The fruit is also large and generally edible. Incidentally the unripe fruit of the Opuntia — when plucked from the mother plant and treated as above—is also capable of producing roots. Prickly pears typically grow with flat, rounded platyclades. Many types of prickly pears grow into dense, tangled structures. Cacti grow in hundreds of different shapes. The fibrous, juicy stems may be globular, cylindrical, branched, trailing and vine like, ribbed, grooved, or knob-bearing. Only two species have true leaves. The rest of the 2,000 species are leafless.

Range: Like all true cactus species, prickly pears are native only to the Western hemisphere; however, they have been introduced to other parts of the globe. Prickly pear species are found in abundance in Mexico, especially in the central and western regions. They are also found in the Western United States, in arid regions in the Northwest, throughout the mid and lower elevations of the Rocky Mountains such as in Colorado, where species such as *Opuntia phaeacantha*, *Opuntia polyacantha* and others become dominant, and especially in the desert Southwest. Prickly pears are also the only types of cactus found to grow natively far east of the Great Plains states; *O. humifusa* is widespread throughout southern New England and Long Island, where it can be found in Northport. Prickly pears also produce a fruit that is commonly eaten in Mexico, known as *tuna*; it also is used to make *aguas frescas* (Spanish for "fresh (cold) waters"). They are a combination of either fruits, cereals, or seeds with sugar and water, blended to make a beverage. The fruit can be red, wine-red, green or yellow-orange.

SLIDE 15 - *Physostegia virginiana* - Obedient Plant

Zones	Height	Spread	Light	Bloom Time	Soil	Moisture
3-9	2'-4'	20"	Full Sun/Part Shade	Late Summer/Early Fall	Lightly acid	Average

Description: Obedient plant is a stiffly erect perennial that grows from creeping rhizomes. Obedient plant overwinters as a basal rosette of willowlike leaves; during the growing season wandlike square stems emerge and bear leaves in opposite pairs. The leaves are narrow, 2-6 in (5.1-15.2 cm) long, smooth-surfaced, toothed along the edges, dark green above and lighter green below. The pale lavender-pink flowers are borne in showy spikes atop 2-4 ft (0.6-0.9 m) stalks in late summer and fall. The tubular 1 in (2.5 cm) blossoms are arranged in vertical columns along the flower spike and the lower ones open first. Each flower has a two-lobed upper lip and a spotted three-lobed lower lip. The flower bearing stems are usually unbranched, but they may have one or two forks near the top. The weakly three-sided 1/8 in (0.3 cm) nutlets that ripen in the fall are brown and have smooth dull surfaces. Cultivated forms have been selected to produce plants with short bushy form and especially showy flowers.

Location: Obedient plant is native to eastern North America from Quebec to Manitoba, and south to Texas, Louisiana, Alabama and Georgia. Obedient plant occurs in swamps, stream

banks, ditches, seepages, damp meadows and prairies, moist open woodlands, bogs, and pine savannas.

Culture: Lightly acid sandy loam is probably the best soil type for *Physostegia virginiana*, but it will grow on a variety of moist soils. Anywhere in the pH 5-7 range is fine. Fertilize often during the growing season and mulch well in the fall in cold climates. Divide every 2-3 years in the spring.

Light: Obedient plant is happy in either sunny or lightly shaded spots, but it does best with some shade on drier sites, and full sun where it is wetter.

Moisture: *Physostegia* likes moist soil. Low spots and wetland edges that flood occasionally are fine. It will even be happy in soil that is saturated much of the time, but less invasive and have sturdier stems under drier conditions.

Propagation: Obedient plant can be sown outdoors in spring or summer (up to two months before the first frost) or indoors anytime. For best germination rates, sow in the fall as soon as the seeds are ripe. Sow them where they are to grow or leave the flats outdoors for three months of damp stratification at about 40°F. Seedlings will appear a few weeks after spring temperatures rise into the 70°F range. Indoors, use a rich loamy soil mix and keep it moist and around 70-75 F. Germination will occur in 1-4 weeks. Seedlings will flower their second year. You can produce blooming plants faster by taking 2-3 in cuttings of young shoots in the spring and rooting them in a coldframe. It is safest to divide *Physostegia* in the spring. In mild climates you can divide them in the early fall, and then protect the new plants with mulch. Replant only the vigorous outer roots.

Usage: *Physostegias* are widely used in wildflower meadows and water garden fringes, as well as in more civilized borders. The blossoms are long lasting as cut flowers. They are especially easy to arrange because flowers pushed to face a different direction from the stem will stay in their new positions obediently, which is where the plant got its name.

Features: This is a wonderful plant to add luminous rosy lavender late season color to the bronzy golds and yellows of a damp meadow. It holds its own with grasses very well. And it is classified as deer resistant, so it should bloom well in places where deer would eat the tasty buds off other flowers.

SLIDE 16 – ARE THERE ANY QUESTIONS?

If you have any further questions, please call the Horticultural Response Line at Cornell
Cooperative Extension in
Binghamton, NY.

Their number is (607) 772-8958.

The Horticultural Response Line is open

April 15 to October 15, Thursdays 9:00 AM – 12:00 Noon.

Or online “Ask the Master Gardener” at www.ccebroomecounty.com