

COMMON BUTTONBUSH

Cephalanthus occidentalis L.
Plant Symbol = CEOC2

Contributed by: USDA NRCS National Plant Data Center



L. Allain

Alternate Names

Button ball, button willow, buttonbush, *Cephalanthus occidentalis* var. *californicus*, *Cephalanthus occidentalis* var. *pubescens*, honey-bells, riverbush.

WARNING: Common buttonbush contains the poison CEPHALATHIN. Cephalathin will induce vomiting, paralysis, and convulsions if ingested.

Uses

Erosion control: Common buttonbush is used for erosion control along shorelines. It forms dense stands and its swollen plant base stabilizes the plant.

Ethnobotanic: Native Americans used common buttonbush medicinally. Decoctions of the bark were used as washes for sore eyes, antidiarrheal agents, anti-inflammation and rheumatism medications, skin astringents, headache and fever relievers, and venereal disease remedies. The bark was also chewed to relieve toothaches. Roots were used for muscle inflammation and as blood medicines.

Ornamental: Showy flowers and fruit make common buttonbush a popular choice for use in native plant gardens, shrub borders, and along pond shores and water gardens. The persistent fruits give the plant some winter interest.

Wildlife: Waterfowl and shorebirds consume the seeds of common buttonbush. White-tailed deer browse foliage in the northeastern United States. Wood ducks use the plant's structure for protection of brooding nests. Butterflies, bees, and hummingbirds are attracted to common buttonbush for its nectar. Bees use it to produce honey.

Description

General: Madder Family (Rubiaceae). Common buttonbush is a warm-season shrub or small tree that reaches 6 m in height at maturity. Stem bases are swollen. Young twigs are green, 4-sided with elongated lenticels, and turn brown and scaly upon maturation. Leaves are opposite or whorled, lance-shaped, 18 cm long and 7.5 cm wide, glossy dark green, and emerge in May. Flowers are tubular, 4- to 5-lobed, white to reddish, 4 cm across, and form in dense clusters at the ends of the branches. Long styles give flowers a pincushion appearance. The fruit are ball-like and contain 2-seeded nutlets. Common buttonbush blooms in June through September and sets fruit in September and October.

Key characteristics of common buttonbush are its pincushion flower heads, elongated lenticels, and swollen stem bases. It is also the only wetland shrub that has whorled leaves and spherical-shaped flowers.

Distribution: Common buttonbush is native to North America. It occurs from Nova Scotia to Ontario, south through Florida, and west to the eastern Great Plains with scattered populations in New Mexico, Arizona, California, and northern Mexico. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site (<http://plants.usda.gov>).

Habitat: Common buttonbush is a wetland shrub common in swamps, floodplains, marshes, bogs, ditches that are underwater for part of the year, and alluvial plains with intermittent flooding. It is present in riparian and wetland communities and is associated with plants like American beech, red maple, sugar maple, black oak, pin oak, *Nyssa* species, bald cypress, southern bayberry, red bay,

holly, dogberry, grape, viburnum, poison ivy, Indian grass, big bluestem, switchgrass, and sedges.

Adaptation

The USDA hardiness zones for common buttonbush are 5 through 9. It is a pioneer species in flooded areas and colonizes lowland marsh communities dominated by hardstem bulrush. It grows well in sandy, loamy soils or alluvial soils with sand or silt surfaces. It favors acidic or neutral soils and is intolerant of alkalinity. It prefers medium to wet moisture levels and is intolerant of dry soils. Abundance increases with increased water levels and with increased light levels. Its distribution is limited to regions that have a mean July temperature of 20°C.

Management

Common buttonbush does not colonize along manmade waterways. It is moderately susceptible to herbicides and can be damaged by springtime flooding. Pruning is not necessary for control of spread but can be done in the spring to shape the plant. Dense shrubs can be cut back in the fall, when water levels are low, to maintain manageability.

It has been found in the South that common buttonbush remains dominant in the absence of fire. It will resprout in a few months following low-intensity burns in wet woodlands. Frequent fires will promote occasional sprouting, but common buttonbush is slow to resprout (7 years) following high-intensity burns. In the southern marshlands, fire decreases grass densities, releasing nutrients for common buttonbush, and increasing growth.

Seeds and Plant Production

Common buttonbush seeds are ready for collection in the fall when they have turned reddish-brown. No pretreatment is necessary. Sow seeds into moist, humus soils in full sun or part shade.

Cuttings will produce roots in moist sandy soil. Unrooted cuttings can be pushed into moist soil along shorelines and will establish on their own.

Cultivars, Improved, and Selected Materials (and area of origin)

In 1996, the Big Flats Plant Materials Center released the 'Keystone' common buttonbush cultivar for use in wetland and riparian area restoration for the entire common buttonbush range. 'Keystone' was selected for its increased plant vigor, stem and foliar abundance, and increased basal area.

Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government." The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

References

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