plant this
not that

by Luke Williamson, education intern

Hundreds of plants have been introduced to the United States from other parts of the world. Some have come here accidentally in seed stock, while others were brought here intentionally for horticultural use. A small number of these introduced plants have gotten a little too comfortable in their new environment. Because they have no native predators and produce a lot of fruit and seed that are efficiently dispersed, they are invading natural areas. The aggressiveness of these invasive plants affects natural areas and wildlife by decreasing biodiversity, competing with native and rare plants and eliminating wildlife habitat and food sources.

**Plant This, Not That** features a list of native alternatives to a commonly used landscape plant that has become invasive. The alternatives were chosen because their characteristics – form, flowers, fruit or fall color – are similar to that of the invasive and fulfill the same landscaping need. On a broader scale, native plants help create a healthier ecosystem, attract a greater diversity of wildlife and may minimize the need for fertilizers and pesticides.

### The Invasive

**Lythrum salicaria (purple loosestrife)**

Like so many other invasive plant species, the seeds of *Lythrum salicaria* (purple loosestrife) arrived in North America in the ballasts of ships travelling from Europe throughout the 19th century. The wetland species gradually spread along canals and railroad ditches and can now be found in all Canadian provinces and U.S. states except Florida. Purple loosestrife has a tendency to overcrowd wetlands and turn them into homogenous fields of purple flowers, inhospitable to waterfowl and other plant species. A single, mature plant can produce over 2 million tiny seeds in a year, which are then spread via wind, water, or the fur and feathers of animals. Desired for its showy purple flower spikes, purple loosestrife began to be planted as an ornamental in the late 1800s and it can still be found today in many garden centers, mail order catalogs and seed mixes. Though “self-sterile” cultivars exist, they almost always produce viable seed when cross-pollinated with wild purple loosestrife or any other cultivars.

The showy flowers and lance-shaped leaves of purple loosestrife. Linda Wilson, University of Idaho, forestryimages.org

Stands of purple loosestrife overcrowd native wetland plants. Eric Cottrell, Oregon Department of Agriculture, forestryimages.org

### The Native Alternatives

#### Liatris spicata (dense blazing star, dense gayfeather, marsh blazing star)

Though blazing star is a well-known plant to the cut-flower industry for its stalks of densely-packed flowers, which range in color from rose-purple to mauve and even white, it makes a great addition to any prairie garden, perennial border or rain garden. The protruding styles of each tiny disk flower gives the Dr. Suess-like blazing star a generally feathery appearance, hence its alternate common name, ‘gayfeather’.

Dense blazing star blooms in midsummer and has the unusual habit of blooming from the top of the stalk and working its way down. The flowers are often frequented by bees, butterflies and hummingbirds, while birds enjoy eating the seeds in the fall. Hardy to Zone 3, this clump-forming plant grows 2-4 foot tall stalks from a basal tuft of grass-like leaves. The stalks may need staking to keep them erect. Dense blazing star does best in rich, evenly moist soils with full sunlight, but can tolerate clay soils and drought. While many species of *Liatris* are available for the home garden, *L. pycnostachya* (prairie blazing star) tolerates the most moisture.

Many different cultivars are also available, often with variation in flower color. Check out the white-flowered ‘Floristan White’ and the purple-flowered ‘Floristan Violet’ growing in the Arlene and Arthur S. Holden Jr. Butterfly Garden.

A red admiral on a blazing star. Brian Parsons

#### Filipendula rubra (queen-of-the-prairie)

Queen-of-the-prairie is a robust perennial plant that is admired for its flowers and its foliage. Hardy to Zone 3, queen-of-the-prairie grows 3-6 feet tall with frothy, rose-pink inflorescences that range from 5-9 inches in width. Each inflorescence is made up of clusters of tiny flowers with five petals and long stamens, which gives queen-of-the-prairie its distinctive cotton candy appearance. Its deep green, pinnately compound leaves can be over a foot long, each with a large, lobed terminal leaflet. The seed heads are attractive in the winter. Queen-of-the-prairie prefers moist, humus-rich soils with full sunlight or partial shade. Despite its name, queen-of-the-prairie also grows well near streams and ponds. Bloom time for this plant begins in early to late summer and lasts about three weeks. Look for these standout tufts of pink flowers in the prairie section of the Myrtle S. Holden Wildflower Garden.

The flowers will bloom from bottom to top. Brian Parsons

Queen-of-the-prairie growing in the Myrtle S. Holden Wildflower Garden. Rick Hederstrom

#### Lythrum salicaria (purple loosestrife)

A red admiral on a blazing star. Brian Parsons

Purple and white varieties of *Liatris spicata* growing in the Sally Gries Entrance Bed. Brian Parsons

Filipendula rubra (queen-of-the-prairie) growing in the Myrtle S. Holden Wildflower Garden. Rick Hederstrom

Queen-of-the-prairie growing in the Sally Gries Entrance Bed. Brian Parsons

**Dense blazing star,** *L. pycnostachya*...