Sericea Lespedeza

(Chinese lespedeza) Lespedeza cuneata

Description -

- Perennial herb in the pea family.
- Grows erect from 3 to 5 ½ feet in height with alternate leaves.
- Each leaf is divided into three smaller leaflets about 1/2 to 1 inch long with awl-shaped spines.
- Leaflets are covered with densely flattened hairs making them appear grayish-green or silver.
- Flowers are pea-like, white with purple markings and emerge singly or in clusters of 2-4 in the upper axils.
- Older stems are woody and fibrous.

Distribution - Found in open areas throughout the eastern United States.

Threat - Invades bottomlands and burned grasslands, crowding out native plants and forming pure stands. Mature seeds may remain viable for up to 20 years. Seedlings may represent only 1% of the seeds actually available in the soil. High tannin content makes it undesirable to wildlife. Fruits are eaten and dispersed by animals and haying of infested fields disperses seed.

Control - Hand pulling is impractical, but mowing plants in the flower bud state for two or three consecutive years may reduce vigor and control further spread. Cut as low to the ground as possible. Foliar herbicide treatment in early to mid-summer with a 2% solution of triclopyr is effective. On wet sites a 2% solution of glyphosate is effective from late June until seed set.

Similar Plants - Do not confuse with the native slender bush clover, *Lespedeza virginica*, which has pink flowers.

Origin - Introduced from eastern Asia for erosion control, wildlife food and as a forage crop.

Crown Vetch

Coronilla varia

Description -

- Creeping stem reaches $1\frac{1}{2}$ feet in length
- Compound leaves range from 2-4 inches in length and have nine to twenty-five oblong leaflets
- Five to twenty pea-like flowers that vary from pink, rose, or lilac appearing in late May-August
- The seed is a four-angled legume with three to seven one-seeded segments.

Distribution - Widely distributed as an ornamental ground cover and for erosion control on banks and reclamation of mine lands.

Threat - Overgrows native vegetation and out competes for resources by covering over them. Can form single-species stands that can totally dominate open natural areas (grasslands). Spreads vegetatively by underground roots or rhizomes and by seed. Seeds remain viable in the soil for several years requiring consistent post-treatment monitoring.

Control - Hand pulling of mature plants can be effective for small initial infestations. Mowing in the flower bud stage for two to three consecutive years may reduce vigor and control further spread. Cut plants as low to the ground as possible before they seed. Mowing or burning and then applying an herbicide such as triclopyr or glyphosate to the leaves while the plants are actively growing has been effective for control. Repeated treatments are often needed due to the dense growth of plants and the inability to adequately cover all stem surfaces with herbicide in one application.

Similar Plants - Partridge pea (*Cassia fasciculata*) and other native vetches and non-native plants in the Pea family. Look for compound leaves and an odd number of leaflets. The flowers, stalks, and leaves arise from the main stem, and flowers form an umbel.

Origin - Native to Europe, southwest Asia and northern Africa.

Information and resources provided by TN & SE Exotic Pest Plant Councils (tneppc.org and se-eppc.org), Plant Conservation Alliance-Alien Plant Working Group, The Nature Conservancy, and the USDA .

Autumn Olive

Elaeagnus umbellata

Description -

- Shrub that grows to 20 feet with a bushy and spreading crown.
- Leaves are alternate, short-petioled, glabrous, dark green above and silvery underneath.
- Twigs are silvery or golden brown, often with prominent spines.
- Abundant berries turn red as they mature in the fall and are speckled with brown to silvery scales.
- Small clusters of fragrant tube-shaped yellowish flowers bloom May-June.

Distribution - It was actively promoted for wildlife habitat, shelterbelts, strip mine reclamation, and ornamental uses. Found throughout the eastern and Midwestern U.S.

Threat - Rapid growth enables this shrub to out compete native species. Prolific fruit production ensures ready distribution. An individual plant can produce up to 8 pounds of fruit that is eaten and spread by birds and small mammals. Plants develop fruits annually after 3 years of age. Fire stimulates re-sprouts, making grassland management in infested areas more difficult.

Control - Foliar spray with triclopyr or glyphosate should be considered for large thickets where threat to non-target species is minimal. Air temperature should be above 65 degrees F. Basal bark treatment with triclopyr and 2,4-D should be considered when treating individual trees.

Similar Plants - Resembles Russian olive (*Elaeagnus angustifolia*), another invasive species that has become a pest in much of the U.S.

Origin - Native to China, Korea and Japan.

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