Siberian Elm (Ulmus pumila)

DESCRIPTION:
Siberian Elm is native to northern China, eastern Siberia, and Korea. They were first brought to the United States in the 1860s, and commonly used as windbreaks during the Dustbowl era. Siberian elm is often seen growing along roads, in rangeland, pastures, and old fence-lines. They were occasionally used as ornamental trees after the outbreak of Dutch Elm Disease killed many American elms. Though they grow fast, their weak wood and tendency to drop large branches makes them a poor choice for placement near structures. This species is well adapted to bitter cold Midwestern winters and occasional summer droughts and seeds readily in poor sandy soils. According to Michael Dirr, author of A Manual of Woody Plants, Siberian elm is “...one of, if not the world’s worst, tree.”

IDENTIFICATION:
The leaves of Siberian elm look very similar to native elms except that they are smaller and have a single tooth margin. The broad pointed leaves are arranged alternately on their twigs and are heart shaped at the base. The flowers of Siberian elm are petal-less with a greenish-red to brown color. A single seed is found in the center of the round-winged seed cases it produces in clusters. These papery brown seeds often cover the branches of the tree in spring as the trees leaf-out, and then fall to the ground en mass. Under open conditions the Siberian elm can grow to 60 ft. in height. The brittle branch and regular sprouting around the trunk cause most Siberian elms to have a irregular shape. Mature trees have a light gray-brown bark with furrows.

CONTROL METHODS:
Organic: Seedlings can be hand-pulled, though this work can be extremely tedious due to the large number of seeds these trees produce. When removing saplings a sharp shovel, Parsnip Predator or a weed wrench will aid in removing the root. Siberian elm will readily resprout if the tree is simply cut down. To prevent this, tie a heavy-duty black plastic bag around the stump or cover with a weighted bucket and leave in place for 2 growing seasons. Otherwise, repeated cutting of resprouts immediately after they appear will be needed for 1-3 growing seasons. Girdling, if done correctly, may also be effective (see reverse side).

Chemical: After cutting the tree down, treat cut stumps with solution of triclopyr (Garlon® 4, etc.) in oil, or glyphosate (Round-Up®, etc.) in water. Triclopyr can also be sued to chemically girdle Siberian elm, especially for smaller plants, under 8” in diameter. Always read herbicide labels carefully before use and always apply herbicide according to the product label. Avoid treating in spring when sap is flowing up to the leaves.

NATIVE ALTERNATIVES:
Bur oak (Quercus macrocarpa) white pine (Pinus stobus) and many other native trees will make a better windbreak than Siberian elm. For ornamental use hackberry (Celtis occidentalis) seems like an ideal replacement in both form and vigor, but also consider ironwood (Ostrya virginiana), honey locust (Gleditsia triacanthos) and sugar maple (Acer saccharum). There are now a few Dutch Elm disease tolerant American elm (Ulmus americana) varieties, so consider these as well.