Prickly ash (Zanthoxylum americanum)

DESCRIPTION:
A North-American member of the Citrus family, prickly ash is an upright, colony-forming shrub that is found most commonly in partially shaded woods and woodland edges. The shrub also tolerates full sun and can spread rapidly via shallow root suckers. It appears to be most valued by songbirds for its protective cover, although some birds will also eat the fruit. The foliage is the only food source in our area for giant swallowtail butterfly caterpillars. Native Americans would chew the bark and twigs, which contain salicylic acid, to relieve toothache pain, giving it the name ‘toothache tree’.

Despite the many beneficial attributes of this species, it can spread extremely aggressively and dominate woodlands and savanna habitats, particularly in sites that were heavily grazed in the past. As a result, prickly ash is often a primary target for removal to allow for a more diverse ground layer flora when restoring these habitats.

IDENTIFICATION:
Prickly ash grows up to 15 feet tall with distinctive, short paired thorns on stems and branches. Black locust has similar paired thorns but is a tree. Prickly ash bark is dark-grey to brownish and often covered with light-gray lichen patches. The erect shrub has pinnately compound, egg-shaped to oblong leaves with a pointed tip that exude a lemony scent when crushed. Flowers are inconspicuous, yellowish-green clusters that bloom in April before leaf-out. Fruits are red to brown with small, shiny, black seeds. Reproduces by seed and spreading rhizomes.

CONTROL METHODS:

**Organic:** Repeated mowing, multiple times per growing season as the plants resprout can weaken the colony significantly, but will not kill it entirely. A regular prescribed fire regime can help keep them in check and maintain a smaller, more natural population size.

**Chemical:** The most effective method of control is to cut each stem as close to the ground as is practical and treat the stump with concentrated herbicide. We recommend a 20-40% solution of glyphosate (Round-Up®, etc.) in water during the summer and fall. In winter or early-spring a 12.5% solution of triclopyr (Garlon® 4, etc.) may be more effective, but has a higher potential to kill neighboring plants. It is best to apply the herbicide to the cut stumps immediately so as not to lose track of them.

You can also use triclopyr for basal bark treatment. Use a hand-sprayer, or sponge, paint brush or paint roller to applying herbicide completely around the stem in a strip 8-12" tall. For stems less than 1/2" in diameter applying the herbicide to just one side of the stem should be sufficient. Always read herbicide labels carefully before use and always apply according to the instruction on the product label.

NATIVE ALTERNATIVES:
In most cases we are trying to reduce the shrub density in woodlands when clearing prickly ash. But if shrubs are needed for screening, some species that will suit this roll without spreading significantly include black chokeberry (Aronia melanocarpa), leatherwood (Dirca palustris), serviceberry (Amelanchier arborea or A. laevis) or nannyberry viburnum (Viburnum lentago). Leatherwood prefers moist to boggy habitats, whereas other species can tolerate drier soils.