Honey locust (Gleditsia triacanthos L.) is a native tree species also known as honey-shucks locust, sweet-locust, three-thorned acacia, sweet-bean or thorny locust. It has a natural range that extends from central Pennsylvania to South Dakota to southeastern Texas to Alabama. This range was probably expanded by Native Americans, who used the wood, pods and seeds for several purposes, and later by wildlife and ornamental plantings. It is best adapted to moist, bottomland soils, but can survive on a wide variety of sites. Honey locust is often one of the first trees to occupy an area that was once woods, was cleared and is reverting back to woods. It is a moderately fast growing tree that has proven to be hardy and tolerant of drought conditions and saline soils.

**Identification**

The honey locust is a leguminous tree or a member of the Pea family (Fabaceae). At maturity, trees may be 70 to 80 feet tall and 2 to 3 feet in diameter at breast height, although under ideal conditions they may be up to 140 feet tall and 5 to 6 feet in diameter at breast height. The bark is medium to dark gray or brown with elongated plate-like patches separated by furrows. These plate-like patches may produce warty growths resulting in a rough trunk texture. Honey locust leaf arrangement is alternate, and its leaves are doubly

Top photo: A mature honey locust tree growing on an upland site.  
Bottom photo: Bark pattern on a mature honey locust tree.
compound, meaning each leaf is divided into leaflets and secondary leaflets. The secondary leaflets are 1 to 2 inches long with smooth margins. Flowers are greenish-yellow and occur in small, numerous hanging clusters. Trees produce either predominantly male or female flowers; however, some perfect flowers (male plus female) are usually present as well. The fruits are flattened pods 6 to 18 inches long that turn brown when mature. The pulp from these seed pods was used by Native Americans as a sweetener and is the source of several of the common names for honey locust. The most notorious feature of honey locust is the large thorns found on the branches and trunk. The thorns typically have one to three points, but may have more, especially those found on the trunk.

Management Considerations
Honey locust management is highly dependent on the intended usage of a particular property. There are thornless cultivars that are commonly used for landscaping applications, but the naturally occurring trees are not suitable for landscaping due to the sharp thorns. The bean pods and leaves are utilized as a food source for white-tailed deer, sheep, goats, cattle, swine and many small mammals. It is also used as visual cover for many wildlife species while open pasture or range is reverting back to woods. Honey locust has been extensively utilized for windbreak plantings. These beneficial attributes must be tempered by the potential for honey locust to become invasive and displace more desirable species.

Honey locust is normally not a dominant species in naturally occurring forest stands. Due to its intolerance of shade, it tends to establish in openings of the forest canopy or on the edges. Due to its rapid growth capability and tendency to spread from the edges of wooded areas, it can rapidly develop into a problem in range and pastureland. Honey locust control is not usually required in naturally existing climax forest communities. However, when allowed to establish as the dominant species, it will take many years to develop normal species diversity.
ing program, obtain all necessary training and become familiar with laws pertaining to prescribed burning in a specific locality. In the case of extremely hot fires that top-kill slower growing tree species, fires may create openings where the rapid establishment and regrowth of honey locust may allow it to become the dominant species in the openings.

**Mechanical methods**

Honey locust can be mechanically cut with a chainsaw, tree shear, hand loppers or other suitable tools. The trees should be cut as close to ground level as possible with the cut as flat as feasible to aid in a stump herbicide treatment soaking into the freshly cut wood. Honey locusts are known to resprout, so unless the stump is treated with an appropriate herbicide, it is likely to grow back. This regrowth is typically multistemmed and will be more difficult to control with herbicide than the original tree, due to the low foliage to root mass ratio.

A very effective cut stump treatment is one part triclopyr (example: Remedy®) and three parts diesel or mineral oil. Apply to the sides of the freshly cut stump and outer portion of the cut surface, especially the cambium, in a manner which thoroughly wets the stem and root collar area, but not to the point of runoff. In order to be effective, the treatment must be applied to a fresh cut, preferably within an hour of cutting. If labor is available, having one person cutting and another immediately stump treating is effective to help ensure no stumps are missed and the treatment is applied quickly.

To clear large, dense areas, a bulldozer or trackhoe may be used, but resprouting from secondary buds will occur.

**Management Methods**

**Prescribed fire**

Due to its thin bark, honey locust is easily top-killed by burning. Unfortunately, it will readily resprout from the existing root mass. Maintaining a regular prescribed burning program will often prevent honey locust from developing into a significant problem. Prior to initiating a prescribed burn-
Chemical control

There are several herbicides labeled for honey locust control. The following options have been highly successful for many producers in Oklahoma and Texas.

For broadcast foliar treatments, apply 1 gallon of a picloram and 2,4-D premix (example: Grazon P+D®) per acre in sufficient volume to provide good coverage of the foliage. Use a surfactant at 0.25 to 0.5% of the total mix volume. Apply from late spring, after the leaves are fully expanded and mature, through fall. Do not apply during periods of drought stress. Application time frames are usually late May through June and again in September when early fall rains have alleviated summer drought stress.

For high volume foliar treatment of individual plants, apply 0.925% of a picloram and 2,4-D premix (example: Grazon P+D®) and 0.5% nonionic surfactant. Spray to thoroughly wet foliage. Apply from late spring, after the leaves are fully expanded and mature, through fall. Do not apply during periods of drought stress. Application time frames are usually late May through June and again in September when early fall rains have alleviated summer drought stress.

If the stand is mixed with bois d’arc, elms, oaks, etc., add 0.25% to 0.5% triclopyr (example: Remedy®) to the mix when a broader spectrum of activity is desired.

For basal soil treatments, apply undiluted Velpar L® with an exact delivery handgun applicator set to 4 milliliters per trigger pull. A Velpar Gun is available from Helena Chemical Company that works well or something like an Ivomec® gun also works. Apply 4 milliliters of undiluted herbicide for each inch of trunk diameter at breast height. If treating resprouts, base the number of 4-milliliter applications on the diameter of the original tree, not on the diameter of the resprout. If multiple 4-milliliter applications are required for each plant, space them evenly around the trunk. Direct the treatment to the soil within approximately 3 feet of the root collar. Apply from spring green-up through early summer. Rainfall is required after application to move the herbicide into the root zone. Expect the grass to be dead for one to two years in a 3- to 4-foot-diameter area around each application site.

After honey locust trees have been killed by herbicides, dispose of the dead trees by bulldozing into piles and burning or by burning in place. Be sure the trees are completely dead before disposal. When dead trees are left standing, they will eventually fall and decompose; however, the thorns decompose slower than the rest of the tree and may continue to pose a problem.

Summary

Honey locust is a native tree that is a normal part of many Texas and Oklahoma landscapes. It can be a positive or a negative component depending on the goals for the property. Each manager must decide how honey locust fits into their goals and how to best manage them.

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Literature Cited

