Site Preparation

Spending a lot of time, effort, and money on preparing a site for black walnut may actually save you money in the long run. The most intensively prepared sites generally require the least weed control after planting.

Site preparation involves removing unwanted vegetation and/or improving the physical and chemical condition of soil on the planting site for tree establishment and growth. Vegetation can be controlled by various mechanical, chemical, or combination mechanical-chemical methods, depending on the density and size of existing cover, topography, soil type, and equipment available.

Mechanical Methods

Mechanical site preparation should be done in the fall, and precautions should be taken to minimize erosion. On brushy clearcuts, remove brush completely with bulldozer and attachments. Then disk to reduce the impact of compaction caused by roads, skid trails, and tractor tracks. Heavy sod areas may be prepared by plowing, disk harrowing, or rototilling several times. In some cases, subsoiling may be useful to destroy plow pan layers on old field sites.

Chemical Methods

Chemical methods of site preparation depend on the species, size, and density of vegetation present. Chemicals are quite specific in the kinds of vegetation they control. A list of commonly used chemicals is included at the end of this Note. Check with your county extension office to find which ones are registered for use in your area. For dense, mixed hardwoods, apply broadcast foliage or stem-foliage spray in early summer after leaves fully develop. Apply enough herbicide to thoroughly cover leaves.

Some herbicides used in chemical site preparation

I. Grass and herbaceous weeds
   Refer to note on weed control.

II. Woody vegetation

   A. Soil treatments
      1. Fenuron
      2. Tordon 10k
      3. Tordon 101
      Suggested rate
      50-100 lbs/acre
      60-85 lbs/acre
      1-4 gals/acre

   B. Foliage
      1. 2,4-D
      2. Glyphosate
      2 qts/acre
      2 qts/acre

   C. Basal-bark
      1. 24-D
      2. Monosodiummethane arsonate
      3. Triclopyr
      2-3 qts/acre
      1 ml/injection
      2 qts/acre

*Depending on formulation, triclopyr may be used as a basal spray or as a ground application for less selectivity.*
Chemicals may also be applied in the cut surface treatments listed below.

Cut stump: Thoroughly wet the surface of the freshly cut stump and the bark with chemical.

Frill-gridle: Cut through the bark around the tree, and girdle the trees by stripping a band of bark away. Spray chemicals over the area.

Tree injector: Make incision through bark and inject chemical.

Soil sterilants may be broadcast or spot applied to control non-selective hardwood brush. Use these chemicals carefully because they may be absorbed by roots or nearby desirable trees. Delay planting 6 to 12 months or longer because some sterilant chemicals persist in the soil. In all cases, follow directions.

In addition to killing competing vegetation, prepare the site chemically to accept the new seedlings. Soil should be analyzed for pH, nitrogen, phosphorus, potassium, calcium, and magnesium. The pH should be between 5 and 8. Some sites may require an application of lime to raise the pH.

The importance of site preparation cannot be overemphasized. Consult your State forester to find out if other methods of site preparation may also be appropriate.

_Felix Ponder, Jr._