Kudzu – Pueraria Montana

Kudzu is a semi-woody perennial invasive vine (liana) with three leaflets native to China, Japan, and Indian subcontinent where it is used as a medicinal herb. Kudzu produces flowers in late summer, usually in August or September followed by seed pods. Kudzu loses its leaves in the winter.



Kudzu is a drought tolerant nitrogen-fixing legume. Kudzu is listed as a rank 1 invasive plant in North Carolina. Kudzu is a sun loving plant, can grow up to one foot per day and typically grows 50 feet per year. Kudzu can grow up to five feet high, but it is not a clinging vine and must use something else as a trellis to grow higher. Typically, Kudzu grows up and over trees, eventually killing them.

Large Kudzu patches are a monoculture where only Kudzu can grow. No other plants, insects or animals live in these areas, and they become ecological wastelands. Removing Kudzu allows native plants to thrive. Insects and other animals need these native plants to survive. Removing Kudzu helps the entire eco-system.

Volunteers Lead the Way

Since 2011, a small group of dedicated volunteers have been working to remove Kudzu and other invasive plants from Polk County. Over the years significant progress has been made. Wildflowers and other native plants are returning to areas previously overrun by Kudzu.



Polk County Appearance Commission

PCAC provides matching grants for Kudzu removal for towns, non- profits, churches and HOA's in Polk County. Using grant funds from PCAC as well as significant volunteer efforts, Kudzu is slowly being removed from Polk County.

For more information on Kudzu and Kudzu removal grants visit the PCAC website.



Prepared for information purposes by: **Polk County Appearance Commission** PO Box 308, Columbus, NC 28722 http://www.BeautifulFoothills.org © 2023

How to Remove Kudzu



To kill a Kudzu vine, you must remove or kill the crown. The crown is found below the surface of the ground. (See the figure inside this brochure) Cutting the vine above the ground a single time, will not kill the crown and the vine will re-grow. Kudzu crowns can be killed in three ways:

- 1. Dig the crown up and physically remove it.
- 2. Repeatedly deprive the crown of its leaves. In time, this will cause the crown to die.
- 3. Poison the crown with herbicide.

There are five approaches that can be used to kill the crown and remove kudzu. These approaches can be used in combination to achieve the desired results.

- Cutting and Daubing Vines
- Goats
- Digging Crowns
- Mowing
- Foliar Herbicide Spraying

Cutting and Daubing Vines

This approach involves cutting each vine as close to the ground as possible and coating (daubing) the end of the vine entering the ground with an appropriate herbicide. The herbicide will then travel to the crown and destroy it. Dye is typically added to the herbicide to improve visibility of the herbicide while it is being applied. For larger vines, spray bottles may be used to spray the herbicide on the cut vine. The herbicides listed below under Foliar Spaying can be used undiluted to daub the vines. Follow all label instructions for each herbicide.

Goats

Goats will eat the Kudzu leaves. If the goats are allowed to repeatedly eat the Kudzu leaves, in time, the crowns will die. This approach is like mowing; however, the goats will not eat the vines. The advantage is that goats can be used in virtually any topography. There are farms that rent goats for Kudzu removal. These farms will provide temporary fencing and water for the goats, as well as periodic checks on the goats' welfare. This approach can only be used while the Kudzu is growing, and leaves are present. Goats should not be used in areas previously treated with herbicides.

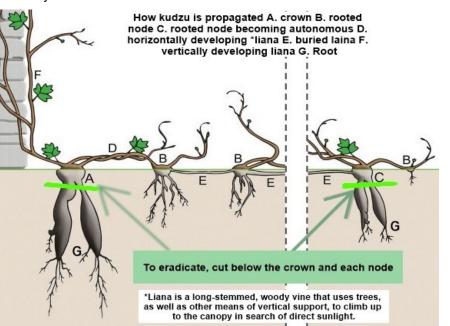
Digging Crowns

The most effective way to remove Kudzu is to dig up the crown, remove it and allow it to dry out and die. The depth of the crown can vary. To remove the crown, dig down below the crown and cut below the crown to free it from the tap root. A hand mattock and folding razor saw are useful tools for digging and removing crowns. For larger crowns, battery operated reciprocating saws make the work easier.

Digging crowns has many advantages: 100% effective, Immediate destruction of the crown, Kudzu can be precisely targeted., Can be done any time of year.

Unfortunately, digging crowns is not a very efficient approach. It is very labor intensive. While it can be used on small amounts of Kudzu, it is impractical for very large tracts of Kudzu.

Drawing credit: Schweiz Z Forstwes 169 (January 2018) 2: 102–109. Rita Conedera and Patrik Krebs, 2017



Foliar Herbicide Spraying

Spaying Kudzu leaves with an appropriate herbicide is an effective and cost-efficient approach to Kudzu control. Kudzu should be sprayed between mid-July and mid-October. Two applications are recommended, a month or so apart. It will likely take more than one year of spaying to eliminate all the Kudzu. Prior to spraying, it is advisable to cut any vines that are going up trees. Cut the climbing vines at ground level and eye level. This eliminates the need to spray herbicide directly on the trees.

Herbicides for Kudzu Control

- **Clopyralid** is a more selective herbicide, that works well on thistle, knotweed and legumes (Kudzu). It is slow acting, and it will take time to see results. It is sold under a variety of trade names. It has little to no impact on grasses. It is practically non-toxic to animals and insects.
- *Triclopyr* –is a selective systemic herbicide for controlling woody and herbaceous plants like Kudzu and Wisteria. It has little to no impact on grasses. It is fast acting. It is only slightly toxic to birds and animals. It is sold under a variety of trade names
- *Glyphosate* a non-selective herbicide sold under a variety of trade names.

Herbicides are available in concentrated form and are diluted for spaying. Follow manufacturer's direction for application rates. Typically, a surfactant (wetting agent) is added to the herbicide to improve contact of the herbicide with the Kudzu leaves, as well as a dye to improve visibility of the herbicide during application.

Herbicide application businesses may be able to assist in your kudzu removal. Check the PCAC website for a list of suggested local firms. [www.BeautifulFoothills.org]

Mowing

Mowing can be effective and is very efficient in terms of labor requirements. Mowing will destroy the leaves and the vines. Repeated mowing will, in time, kill the crown. It may take a few years to destroy the crowns. For areas where the topography will allow mowing, this is an excellent approach for Kudzu control. Mowing can begin in the winter and then continue in the spring and summer as the Kudzu grows.