THIRTY-TWO WAYS to REMOVE AMUR HONEYSUCKLE

(Lonicera maackii)

- 1. The "Pull Method": Young plants can simply be pulled out. Wear gloves with rubberized palms for a better grip as sometimes the young bark slips off, and the stem becomes slippery. This method works best after a good rain when the ground is moist and soft. If you leave the plant on the ground, be sure that you follow the protocol, "roots in the air", or the plant can re-root itself if those roots are left in contact with the soil.
- 2. The "Circlehoe®/Weed Eezy Method": The Circlehoe works well on young honeysuckle plants. It allows for "pinpoint" weeding in an established wildflower garden without damaging the stems and roots of adjacent plants. It is available at H.J.Benken Florist and Greenhouse, 6000 Plainfield Rd, Cincinnati, OH 45213, 513-891-1040 or available on-line at www.circlehoe.com, www.amazon.com, or www.gemplers.com It comes in three sizes. It also works well on garlic mustard rosettes in March, before the flower stalk elongates.



THE CIRCLEHOE





Another tool, the Weed Eezy, is also useful for pin-point application of herbicide. (11/11 - may be unavailable)
WE32 Weed Eezy

www.gardenersedge.com



Another version of this tool, the PVC Applicator, was designed by Jack McGowan-Stinski of the Michigan Chapter of The Nature Conservancy. For more information and construction plans, see: www.stewardshipnetwork.org/atf/cf/%7BB4AF8F8B-E671-4661-B91B-D446CE18410D%7D/Herbicide%20applicator.pdf

<u>3. The "Cut the Roots Method"</u>: Amur Honeysuckle in the $\frac{1}{2}$ inch to 3 inch diameter range has a relatively simple root system. It usually consists of three to four lateral roots and one or two vertical roots. Using a folding pruning saw, sever two or three of these roots. It may then be possible to pull out the rest of the plant. If the plant won't pull out, cut more roots. The plant will not grow back from any pieces of root left in the ground. Once the crown is removed, the plant will die. (**David L. Gorchov**, **professor**, **Miami University**, **Oxford**, **OH**) This method is nearly impossible, however, with really mature plants such as those in the 5 inch to 10 inch diameter range.

The folding saws are available at A.M. Leonard in Piqua, OH. They are very sharp, efficient, and work on the pull stroke. A.M. Leonard's web site is: www.amleo.com F600 is the product code. If you should break a blade, it is replaceable. The saws are compact and will fit into a pocket or tool belt.



THE FELCO® FOLDING PRUNING SAW

- 4. The "Cut the Trunk or Basal Pruning Method": With your pruning saw you may cut the honeysuckle at the crown or low to the ground; however, the plant will sprout back with a vengeance, especially in the spring. In a year you will have a large plant again. If you do not want to use herbicides and want to take the time, you may continue to cut the plant back repeatedly and eventually, it will run out of energy and die. When the foliage returns looking like a washboard, you know you are winning the war! If you basal prune in the fall, the new tender growth may die if there is a good freeze. If you use herbicide on small or resprouting plants, 2 ounces of Roundup Pro® concentrate per gallon is sufficient to kill the plant. This method is most effective in the fall and uses the least amount of herbicide a plus.
- 5. The "Cut the Trunk and Paint/Spray/Dab with Herbicide Method": With this method cut the trunk and immediately treat the stump by "painting", spraying with a coarse spray, or dabbing with the Weed Eezy tool using Roundup Pro® or Finale®. Use the strongest dilution which is generally 64 ounces Round-Up concentrate to 1 gallon of water or a 1:2 ratio; however, since there are now many different Round-Up and Finale products available, always follow the directions on the label. Use rubberized gloves. Adding a surfactant will help. Apply the mixture to freshly cut stumps. If you wait to apply the herbicide the next day, the wound will have "healed", and the herbicide will not be carried to the roots. This method is best done in the fall when the plant's sap is going down to the roots, as the herbicide will be carried there also. Remember, "delays in application may result in reduced performance" (from Round-Up label).
- 6. The "Drill & Fill Method": With a 3/8 inch drill bit and a portable or battery driven drill, make a down sloping or 45 degree slanting hole in the crown of the plant, one hole per one inch caliper trunk. Immediately (within 5 minutes) fill the holes with Roundup Pro® or Finale®. Once again, do not wait until the next day as the wounds will have "healed". This method also works well in the fall when the sap is going down to the roots and will carry the herbicide there. A year or so later you can simply push the plant over. Or you could also use the drill and fill method after basal pruning that way you can carry away and dispose of the top of the plant.



7. The "Weed Wrench™ Method": "The Weed Wrench™ is a manually-operated, all-steel tool designed to remove woody plants by uprooting." The weedwrench comes in several sizes, the largest weighs 24 pounds. It has an 18:1 gripping leverage. Check it out on the website: www.weedwrench.com

THE WEED WRENCH

8. The "EZ-Ject® Tool Method": The following description is taken from The Nature Conservancy website: "The EZ-Ject Lance is a red metal tube just over 5 feet long. The bottom end features gripping teeth and a spring loaded injection assembly. You prepare the EZ-Ject lance for use by loading it with pre-made plugs of herbicides encased in brass capsules. (It can accept up to 400 capsules at a time.) The lance is operated by first putting the gripping teeth against the trunk of the offending shrub. Then with a fast thrust of your arms, you PUSH! Your pushing force is focused into the brass capsule which is driven into the tree trunk."

"The EZ-Ject has some things that make it very nice. It is very safe for the operator. You would have to be very creative to hurt yourself with an EZ-Ject lance. Of course, the system has some negative sides. The EZ-Ject is hard to use in densely overgrown or tangled areas because it keeps getting snagged on branches. (A smaller, 4-foot version is available.) The lance is not cheap and the herbicide capsules help run up the bill." Check it out at their website: www.ezject.com





THE HONEYSUCKLE POPPER™

9. The "Honeysuckle Popper Tool Method": Check out the website of this entrepreneurial Hamilton, OH, resident: www.misterhoneysuckle.com. The tool comes in two sizes. Mr. Honeysuckle himself, Chris Grenner, will give demonstrations of his tool to gardening groups. He also has some of his own ideas for removing honeysuckle plants that are too large for ANY tool. See his methods #10, 11, 12, & 13 (below):

1-877-POP-M-OUT (767-6688)

10. The "Cut and Rub" Method: This method works best in late winter and early spring and only if you can return to the honeysuckle plants every two weeks to remove the new sprouts (over a period of about two months). For any honeysuckle too large to remove with The Popper saw off the stem(s) about 3 or 4 feet from the ground. Then go back to the plant every week or two and with a gloved hand "rub" off or remove the new growth as it re-sprouts on the 3 to 8 "branches" or stumps.

The reason for cutting 3 to 4 feet from the crown is that when cut high, the new growth comes out near the cut portion of the branches rather than from the crown down near the ground. The young, new growth is quite tender and can easily be "rubbed" off. By eliminating new sprouts quickly, the plant is starved and weakened. Each honeysuckle plant takes only a minute or two to service. After two or three rubbing sessions the new shoots do not appear to be as healthy as before. After another time or two the plant will be dead. Best of all, there is no bending involved!

The cut honeysuckle plants remain visible and do not become lost in the new vegetation that is going to grow in the now sunnier spot. Just leave them in place. After a year or so, you will be able to walk up to the weakened, rotting shrub, rock it back and forth and pull it out like a giant tooth. A great tool for cutting up to 3' honeysuckle stems is the FLORIAN® RL-201 MAXI LOPPER:



\$188.95 on their website: www.floriantools.com

- 11. The "Cut and Bag Method" or "Solarization Method": (for honeysuckle you may not be able to return to regularly to rub off the new shoots) Buy the thickest, strongest, construction grade garbage bags you can find. Cut the honeysuckle about 3 ft from the ground (to facilitate removal when it rots.) Put the bag over it and wrap it with some wire, strong string, or rope. At the ground, stake the bag with some long nails, wire or earth staples, making sure the bag is covering the entire crown. Leave the bag in place for a couple of months during the growing season, and the plant will die or "solarize" to death inside the bag.
- 12. The "Cut and Burn Method": Mr. Honeysuckle says, if you live in a rural area, cut the honeysuckle down, pile the branches on the stumps, and burn. Burning the stump (more below) seems to prevent the honeysuckle from re-sprouting. Burning brush piles in woodland areas, however, results in killing wildflower roots and seeds. TAKE PRECAUTION: do not burn on a dry, windy day!
- 13. The "Torch Method": Mr. Honeysuckle says that after cutting and removing the honeysuckle, rent an industrial or commercial propane torch and burn the stumps; however, a biologist with experience in honeysuckle removal has said that this method does not work on large plants unless you hold the torch on the cut stem for a very long time. It can be done on stems one inch or less, but there is danger of setting the entire landscape on fire.

 www.flameengineering.com





VT 2-23 SVC WEED DRAGON®



#2230 PRIMUS GARDENER WEED TORCH www.gardenersedge.com

14. The "Hack and Spray" Method: With a short or long handled hatchet or hand hoe make several gouges on the honeysuckle plant just above the crown. Immediately spray herbicide in the wounds. This method works best in the fall.

A suggested tool is the Kusakichi Brand #07 Hoso narrow hoe. It is very sharp and effective and available at www.hidatool.com/index.html



15. The "Pentra-Bark® Method": - Pentra-Bark is a bark penetrating surfactant (wetting agent) specifically designed for use on herbaceous woody plant surfaces. It opens up the lenticels (pores in the bark of the tree). A mixture of Round-Up and Pentra-Bark applied via a sponge to honeysuckle bark penetrates without further effort. The herbicide is conducted to the roots and is particularly effective in the fall. It may be purchased at: PSP Enterprises, 6400 Calland Road, Urbana, OH 43078, Toll Free: (877) 297-7532; Fax: (937) 362-3320. Website: www.pspenterprises.us/home.html



16. The "E-Z Reacher® or Clamper Method"

(i.e. "Wand of Death"): Developed by Paul Labus and John Drake of the Indiana Chapter of The Nature Conservancy, the clamper is basically a modified version of the E-Z Reacher tool available at www.reacher.com
(or any home health supply store.) The 32" E-Z Reacher, which comes with suction cups on the end, can be retrofitted with sponges. "Herbicide is applied to the sponge ends with a trigger pump hand-sprayer. Only enough herbicide to keep the sponges moistened is required. Many plants may be treated in succession before respraying the sponges is required." There is "little or no impact to native species."

- 17. The "Tin Can Method": Basal prune the honeysuckle. Cover the stump with a tin can. New shoots will become tangled and solarized inside the can. You could even paint the stump with Round-Up before covering with the can.
- 18. The "Trailer Hitch Method": Using a truck or four-wheel vehicle with a trailer hitch, connect a very sturdy chain to the hitch and the other end to the honeysuckle. Secure carefully. Then accelerate slowly and carefully....
- 19. The "Reciprocating Saw Method": Similar to method # 3, use a reciprocating saw instead of the Felco® Folding Saw to cut the roots. On large acreages a battery operated saw is invaluable. Available at: www.tylertool.com/misa.html and many other chain stores. Sawzall® is a good brand. Be sure to purchase a pack of replacement blades.





20. The "Balling Spade Method": The balling spade is a sturdy digging tool with a long, narrow blade and serrated sides. It is used by nurserymen for digging up trees in preparation for balling and burlaping. When used with a piece of 4 x 4 as fulcrum, it can be placed under the crown of the honeysuckle. Pull back on the spade, and the honeysuckle pops out similar to the honeysuckle popper tool. Available in various places such as Forestry Supplies, Inc. www.forestry-suppliers.com/product-pages/View Catalog Page.asp?mi=6829 and A.M. Leonard: http://www.amleo.com/index/item.cgi?cmd=view&Words=dhg A long handled spade works best if you can find it. The Cincinnati Zoo's favorite spade is the "King of Spades" from A.M. Leonard, (www.amleo.com) - rugged all steel design and most likely available locally at Forest Lytle on Galbraith Road, Cincinnati, OH.



21. The "Alligator Lopper" Method: If you have long lengths of electric extension cords, the Alligator Lopper Model # LP1000 made by Black and Decker® is an easy way to cut thick limbs. It has "innovative clamping jaws" to grab for cutting in one easy motion, and a four inch cut capacity for cutting heavy branches too big for manual pruners and loppers. Available on their website: www.blackanddecker.com/outdoor/LP1000.aspx



22. <u>The Ammbusher Skid Steer Rotary Cutter Method:</u> Ammbusher Incorporated is located in Dillsboro, Indiana. They develop, manufacture and market unique construction attachments for Bobcats. All attachments are equipped with universal skid steer hookup, standard auxiliary hydraulic coupler. The Ammbusher Rotary Cutter is built to fit all brands of skid steer loaders. Hookup is quick and secure.



See website: www.ammbusher.com/brushcutter.htm

23. The MEEC Method: At MEEC (Marianist Environmental Education Center) on the campus of Mt. St. John/Bergamo in Beavercreek, OH, Don Geiger sprays the foliage of honeysuckle in late fall after deciduous native plants have gone dormant. Quote from MEEC, "We have found that, in terms of time and personnel, the most effective and efficient method for removal of bush honeysuckle has been the fall foliar spraying with 1% glyphosate (Roundup®). Proper application of this method, where at least 70% of the foliage covered with spray, kills plants completely. Penetrating the shrub area to reach other plants can be physically difficult but our spray 100-gallon capacity spray apparatus can project 15ft forward into a towering line of honeysuckle." Remember that timing of the spray is extremely important. Spraying should only be done in the fall when the leaves of all native trees have fallen and only the leaves of Amur Honeysuckle remain. See complete explanation at:

www.cincinnatibirds.com/wildones/ManagCntrlInvasives.pdf

<u>24. The Miami University-Hamilton Method</u>: Make a 1 to 1 to 1 mixture of Round-Up, water, and vegetable oil. Apply to cut surfaces of honeysuckle.

<u>25. The Worksaver® Tree Clipper</u> Method offers a time saving way to clear honeysuckle and brush. Faster than using a chainsaw, it attaches to a skid steer (like Bobcat) or front loader. It is available at:



www.worksaver.com/product/LandManagement.html



Mighty Axe® Tree Shear www.mightyaxe.com

26. Nature Zap™ Electric Weed Killer: From the website: "This innovative weed killer uses thermogenic (heat) energy to stop normal plant functions and kill the weed at the root. 400 Degrees Fahrenheit applied into the weed's root, root crown, and leaves, sets off a chain of events that kills the weed. The "thermo-eradicating" process stimulates the fungus in the ground around the weed. The heat cuts off the water supply to the bottom of the root and ruptures the cells. The naturally occurring fungus in the soil then eats the root, which in turn eliminates the weed, not just the weed's leaves."



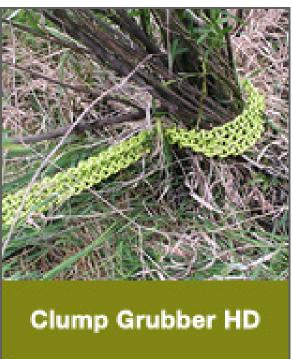
Global Neighbor, Inc.
1400 Brush Row Rd.
P.O. Box 1004
Wilberforce OH 45384
937-376-6021
\$99.00
www.g-neighbor.com/products.html
or www.naturezap.com

27. The BrushGrubber™ Method:









http://brushgrubber.com

28. <u>The Extractigator™ Method:</u> From the website: "The Extractigator begins the pull with a minimum 12:1 ratio with the handle at a height which allows the operator to use body weight as the pulling force. If the operator applies 10 lbs. of body weight to the end of the handle, he or she is applying initially 120 lbs. of uprooting force to the plant. After the initial pull from the ground, less effort is required. The fulcrum distance increases to remove the entire plant. If the operator applies 100 lbs. of body weight to the end of the handle, it becomes 1200 lbs. of uprooting force!"



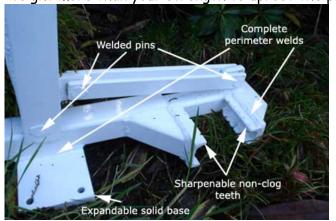


www.extractigator.com

29. <u>The Gator Claw Method</u>: Use the Gator claw with your vehicle, Quad (ATV) or tractor to pull out trees, unwanted plants and brush up to 4" in diameter!



30. <u>The Pullerbear™ Method</u>: The puller bear uses a combination of leverage and a vice-like grip working simultaneously together to pull trees and weeds out of the ground- roots and all. You use your weight more than your strength to uproot the plant.





www.pullerbear.com U.S. PRICE - \$99.99 - 13.5 lbs

31. <u>The Root Jack Method:</u> From the website: "One of the best tools ever. Quickly and easily uproots big weeds, brush, small trees and shrubs, young manzanita, blackberries, sumac, suckers, no problem! Just position the unwanted plant between the clamps and pull the handle forward. Maximum jaw opening is 2". Unit Weight: 11 lbs.





<u>www.agriculturesolutions.com/Weeders-</u> <u>Cultivators-and-Hoes/Root-Jack.html</u> 32. <u>The "BONUS METHOD":</u> Having someone else do the work is a big bonus! Call Habitat Stewards, 4560 Buckneck Road, Bradford, Ohio 45308. Phone: 419-336-5830 or 937-417-4035. Email: <u>john.kaiser78@verizon.net</u> John Kaiser will cut honeysuckle and treat the stumps for you. Cost: approximately \$500 to \$600 per acre.

Problems after removing honeysuckle:

- 1. **Erosion** eliminate honeysuckle small sections at a time to lessen erosion or replant with natives immediately.
- 2. Other Invasives (garlic mustard, lesser celandine, and Japanese Honeysuckle a vine) will be ready to overtake your newly cleared site. Be aware and "nip them in the bud".

Summary: Although removing non-native invasives is hard work, there are many rewards. When spring ephemerals come back (you may have to replant) and bloom, it is joyful and rewarding. Check www.cincinnatibirds.com/wildones for sources of native plants to purchase. Periodically, Wild Ones ® conducts plant rescues (members only) on land that will be developed. We obtain permission from the landowner before we dig.

The **Ohio Invasive Plant Council (OIPC)**, http://www.oipc.info, is an excellent educational resource for information on non-native invasive plants.



Chris McCullough, President, Greater Cincinnati Chapter Wild Ones <u>iluvdirt@fuse.net</u> Revised 11/17/10

Table of Equivalents

TEASPOONS

3 teaspoons = 1 tablespoon

TABLESPOONS

2 tablespoons = 1/8 cup or 1 fluid oz.

4 tablespoons = 1/4 cup or 2 fluid oz.

8 tablespoons = 1/2 cup or 1/4 pint

16 tablespoons = 1 cup or 1/2 pint

CUPFULS, PINTS, QUARTS

2 cupfuls = 1 pint or 16 fluid ozs

2 pints = 1 Quart

4 quarts = 1 gallon

DRY WEIGHT

1 ounce = approximately 2 tablespoons Dry weight