

QUICK GUIDE

Installing, Maintaining, and Servicing Walnut Twig Beetle Pheromone-baited Traps

Complete in-depth guidelines with photos and videos for setting up traps and monitoring for walnut twig beetles are available online at <http://www.ipm.ucdavis.edu/thousandcankers>. It is helpful to read these before using this Quick Guide.

INSTALLING THE TRAPS

Traps for walnut twig beetles (WTB) can be set out whenever beetles are most active, usually between March and November. Before installation, collect the necessary materials and select good sites near walnut trees, preferably those showing crown decline.

Materials for Installing Traps

Trap	A four-unit black plastic multiple-funnel (Lindgren) trap with a wet cup that has a molded solid-plastic bottom.	Available from several vendors (e.g., Contech Enterprises Inc., Synergy Semiochemicals). When ordering, request traps with a wet cup and a solid bottom.
Lure	Male-produced WTB aggregation pheromone in a bubble cap.	Available from Contech Enterprises Inc.
Marine or RV antifreeze	Do not use automobile antifreeze. Read the label to make sure the product contains propylene glycol and does not contain ethanol, ethyl alcohol, ethylene glycol, or a corrosion inhibitor.	Available from auto parts stores as a pink solution. Antifreeze with ethanol (ethyl alcohol) attracts too many other types of beetles; antifreeze with ethylene glycol is very attractive and toxic to wildlife.
Pole and rebar stake	A 10-foot length of thin-walled galvanized steel conduit (EMT) and a 3- to 4-foot length of rebar—both 1/2 inch in diameter.	Drill a 3/16-inch, or larger, hole through both sides of the pole about 1 to 1 1/2 inches from the top to thread the wire for hanging the trap.
Wire	Heavy- and light-gauge wire.	For attaching the trap to the pole and the lure to the trap.
Tools	Wire cutters, a small sledgehammer, and leather or fabric gloves.	

Choose a Good Site

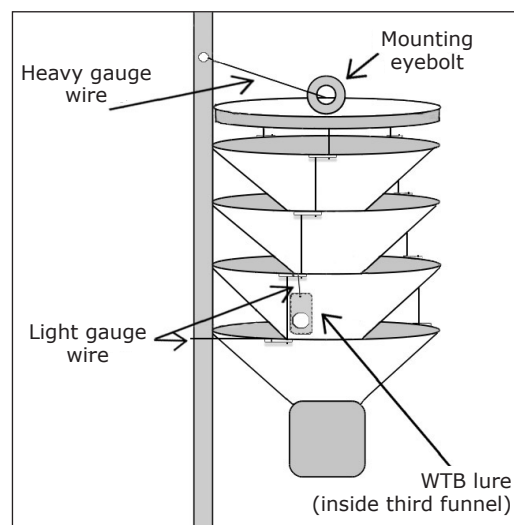
- Look for declining walnut trees in residential areas and parks, along rural roads, in or adjacent to orchards, near hardwood mills, or in wildland forest habitats.
- Place the trap about 9 to 15 feet from the main stem of the tree, 5 to 10 feet away from live branches, and 9 feet above the ground.
- Do not place the trap where it can easily be knocked over or near a sprinkler that might flood the trap cup.

Install the Pole

- Use a small sledgehammer to drive the rebar into the ground about 1 foot or more deep to provide a stable base for the conduit pole. Place the pole over the rebar stake.
- Wear gloves when handling and installing rebar.

Attach the Trap to the Pole

- Wire the mounting eyebolt that is on top of the trap to the pole using heavy-gauge wire. The lid of the trap should be about 8 to 9 inches from the top of the pole.
- Make sure the funnels of the trap are fully extended and the trap is hanging vertically.
- Use light-gauge wire (e.g., 12-gauge or heavier) to fasten the lowest strut or the molded plastic tabs at the bottom of the funnel to a location farther down on the pole. This will keep the trap vertical and reduce the risk of wind damage.



Attach the Bait and Add Antifreeze to the Cup

- Attach the lure with light-gauge wire to the plastic strut between the second and third funnel so the lure rests on the inside surface of the third funnel, but not so low that it blocks the funnel holes.
- Add antifreeze to the trap cup to a depth of about 1 to 2 inches and reattach it.

Raise the Pole and Trap

- Place the pole, with the trap attached, over the rebar. Check the trap to ensure it is fairly vertical and all funnels are fully separated.

MAINTAINING AND SERVICING THE TRAPS

Check the traps every 7 to 14 days, or sooner after major weather events.

- Make sure the trap is upright and unbroken, and that rain has not filled the cup.
- Check the trap for broken parts.
- Make sure the mounting eyebolt is snug.
- Clear spider webs and other debris from the funnels and cup.
- Replace the lures every three months.

Maintenance and Servicing Materials

- Quart- and gallon-sized zipper lock plastic bags
- Fresh RV or marine antifreeze
- Laser-printed or penciled slips of paper for labels
- Conical disposable paper paint strainers with nylon mesh inserts—one strainer per trap
- A secondary container such as a large yogurt container to catch the antifreeze during filtration
- A plastic container with a cap for waste antifreeze
- A small sledgehammer, wire cutters, and a plastic funnel
- Replacement lures, if necessary
- A cooler for transporting samples

Service the Traps Every 7 to 14 Days to Determine if Beetles are Present

1. Detach the trap cup and pour the contents through the paint strainer, catching the liquid in a second container. A plastic funnel can be used to support the paint strainer.
2. Once all the trap cup contents have been transferred into the strainer, fold the filter and place it into the zipper lock bag together with a laser-printed or penciled paper label.
3. Collect the filtered antifreeze in the plastic container for later disposal.
4. Lastly, add 1 to 2 inches of new antifreeze to the cup, reattach the cup, and reinstall the trap.

Bag and Preserve the Catch

- Plastic bags containing individual catches should be completely sealed, grouped, placed into a gallon-sized zipper lock bag, and frozen for a minimum of 72 hours to ensure all insects are killed.
- For long-term storage, keep samples in a freezer or transfer to 70% ethanol.

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