

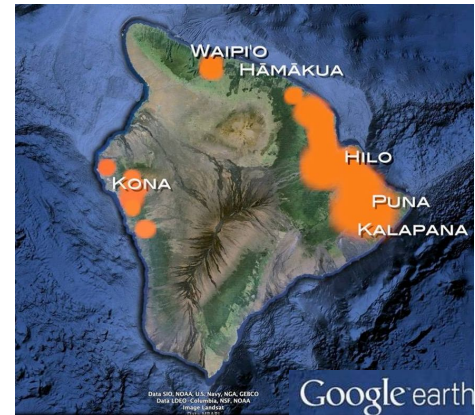
Spot the Ant, Stop the Ant for Citizen Scientists on Oahu



Little fire ants (LFA) are a new stinging ant that can infest yards, homes, farms, and forests. They are native to South America, but were discovered in the Puna area of Hawaii Island in 1999. LFA are spreading to new areas hidden in plants, logs, green waste, gravel, and even cars.

A multi-agency team is working on surveying for and treating the known infestations on Oahu. Eradication is possible, but they can't possibly survey everywhere. Please help by collecting ants from your yard or community park, and have them identified by the Oahu Invasive Species Committee, Hawai'i Ant Lab or Hawai'i Department of Agriculture.

Sadly, LFA are considered widespread on Hawaii Island, and we will always be at risk. Learning how to survey for LFA will give you the tools you need to help you protect your family. For more about LFA, or to view videos, visit www.StopTheAnt.org Mahalo!



Day 1: Survey for Ants

First, view this short (3-minute) video on how to survey for LFA: <http://stoptheant.org/resources/> Surveying your property and turning in ant samples are the best ways you can help, but it is very important that students follow the instructions, and be accurate and honest about where the ants were collected. Inaccurate or false data can harm our ability to find and eradicate LFA.



It is easy to avoid getting stung while surveying for LFA. LFA move very slowly; they do not run around when disturbed, and they do not sting unless they find themselves accidentally squeezed between clothes or watch bands and skin.

Materials & Setup

- 5 (or more) clean, disposable chopsticks (or popsicle/craft sticks). Optional: use bright orange paint or felt-tip markers to color one end of each chopstick so you can find them again
- Peanut butter (the inexpensive kind works best; the "natural" kind doesn't work as well). If you don't have or can't use peanut butter, use small squares of luncheon meat, with tongs to pick them up, or use mayonnaise. Do not use cookie butter or Nutella)
- 1 or more small, zip-top plastic bags (sandwich or snack size). If you use more than one bag, make sure you label all the bags with your contact information and keep the bags together.
- 1 Survey Log sheet (attached to this doc)
- Pencil for filling in the Survey Log sheet
- Permanent marker/sharpie to write on the bags

Survey Instructions

1. Survey in the morning or evening in dry weather. Do not survey when it is raining.
2. Fill in the Survey Log (attached) with your name and contact information, and draw an easy map of your yard in the space provided (see example on Survey Log). This information will remain with your teacher.

This activity has been modified with permission, from Hoike o Haleakala curriculum, "Fire Ants and the Future of Maui Wetlands," activity, <http://www.hoikecurriculum.org/activity/finding-the-little-fire-ant/>.

3. Smear a tiny amount of peanut butter on the non-painted end of each chopstick. Scrape almost all of the peanut butter back into the jar--if **you use too much, it will be impossible to identify the ants.**
4. Place the chopsticks around your yard or survey area in moist, shady areas, in and around plants, at the edges of your property, and near trash cans and pet food dishes.
5. On your Survey Log, number each site where you place your chopsticks, (1-5, or however many chopsticks you use) so that you can find your sticks again.
6. Leave the sticks alone for up to 1 hour (do not leave them for longer—the peanut butter becomes less attractive the longer it is out)
7. After at least 45 minute, open a zip-top bag and retrieve your sticks. Carefully pick up and place any chopstick with ants into the zip-top bag. You may want to use several zip top bags, 2-3 sticks per bag. Seal it, then use the permanent marker to label your bag with your address
8. Place all the bags in the **freezer overnight to kill the ants.**
9. Bring the frozen samples to school. Your teacher may arrange for you to help sort the samples, or they will be picked up from school for sorting by officials. If you are unable to get your samples to school or the group that organized the survey, please deliver or mail the labeled samples to the Hawai'i Department of Agriculture, 1428 S. King St. Honolulu, Hawai'i 96814.

Day 2: Little Fire Ant Identification Lab

Try to keep the bags with ant samples frozen or refrigerated until the day of the lab. Avoid carrying the bags with samples around too much, as the ants may get crushed or too coated with peanut butter to be able to identify them.

Materials & Setup

- Bags of frozen ant specimens
- Plastic petri dishes, forceps or teasing needles (1/sample or team)
- Completed Survey Log sheet
- Hand lens of at least 10x or dissecting microscopes (one for each lab group or student)
- Student page “*Quick Sort*” (use with hand lens), and “*Is It LFA*” (use with microscopes, if available)
- Rulers with millimeter markings

ID Lab Instructions

1. Divide students into lab groups of two to four students each. Or allow students to work on their own if you have enough magnifying lenses or dissecting microscopes.
2. Each student should remove the ants from their samples and place them in their petri dish for examination. Each ant should be looked at. Keep each ant sample with the appropriate bag and Survey Log.
3. Work through the sample bags one at a time using the Quick Sort sheet. Bags of ant samples that may be LFA (or that are unclear) should be brought to the teacher’s attention.
4. Repack suspect samples for transport to HDOA (make sure they are labeled with survey address and a contact number). A biologist will identify the ants and notify you if they are LFA. If you suspect you have found LFA, do NOT disturb or try to control the ants on your own, as this may spread the ants further. If they are LFA, we will help you.
5. Teachers should send the addresses where surveys have been conducted to the outreach specialist that assisted with the lab, or to the contacts below.

Didn’t find LFA? Don’t be disappointed! The information you have gathered is very important. You have contributed information that will help guide eradication efforts. We encourage you to re-survey at least once a year, and always survey newly bought plants or materials. To report LFA or other species of concern, call the **Pest Hotline at 643-PEST**, or the **Oahu Invasive Species Committee at 266-7994**.

Ant Survey Log Sheet

Please complete this form and bring with your ant samples for ID. This form is for School use only.

Your Name	Date of Survey
Address or Location of Survey	Start Time of Survey
Guardian or Parent Contact Name	Contact Phone (if LFA found)

In the space below, draw an easy diagram of your yard in the space provided. Number the approximate locations of each chopstick. Example if 15 chopsticks were used:

