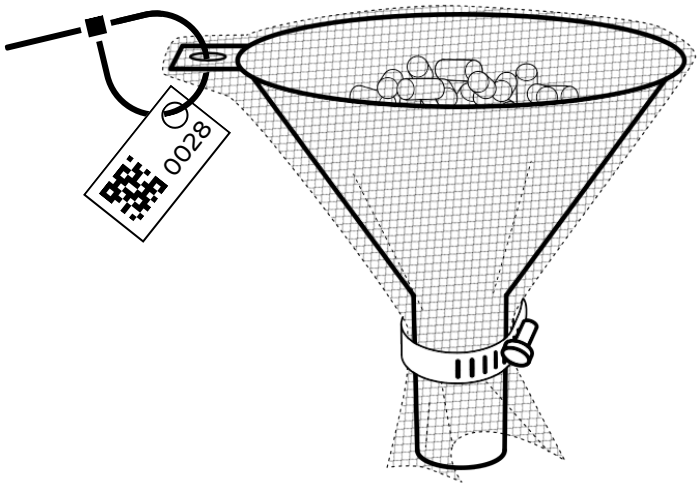
Step 4:
Wrap It Up!

Put unwrapped cigarette filters in the funnel.

Cover the funnel in the 40 cm square of mesh. Bunch it at the bottom to slip the hose clamp over, pushing it up toward where the funnel flares out. Use a screwdriver to tighten.



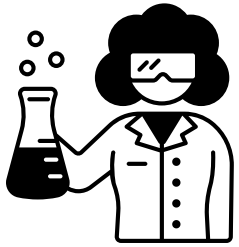
Attach the tag and voila!
Find installation instructions at our website:
https://linktr.ee/vegemap (QR code on next page)

What's next:
- ☒ ~~Build a Pollen Trap~~
- ☐ Install a Pollen Trap
- ☐ Do a Vegetation Survey
- ☐ Collect a Pollen Trap

Thank you for participating!

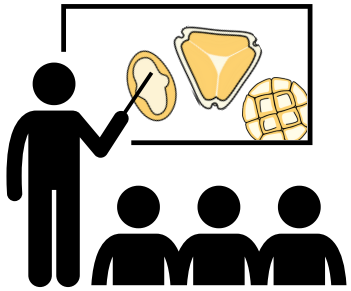
Learn more!

The VegeMap team does peer-reviewed research!



Teach more!

VegeMap has resources for your classroom!



https://linktr.ee/vegemap

VegeMap is part of:

AUSTRALIAN RESEARCH COUNCIL
Centre of Excellence for Australian Biodiversity and Heritage

Build a Pollen Trap

Welcome to VegeMap!

You are joining an Australia-wide group of Artisan Scientists. We're collecting pollen because every environment has a unique pollen fingreprint. Data you collect will be used in ecological research!

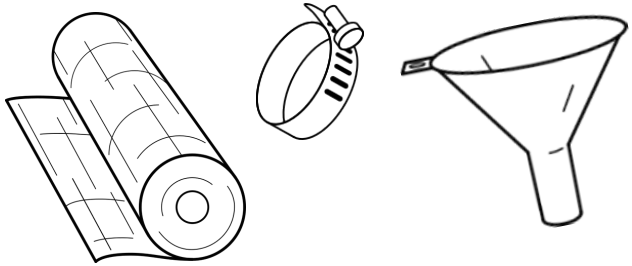
Before you begin

Email VegeMap at vegemap@jcu.edu.au, We will send you a piece of cellulose acetate filter paper, the only part you won't be able to easily buy. We estimate the trap will be less than $15 in materials and $10 to mail to us once its mission is complete. Please let us know if you'd like help with these costs. We'll also send a trap ID tag.

Components:

- Cellulose acetate filter paper
- ~14 cm diameter funnel
- Polyester fly screen mesh (must be easily foldable, ~1 mm weave)
- Cloth tape
- 21–38 mm perforated hose clamp
- Packet of 100 cigarette filters

Tools: Scissors, flat head screwdriver



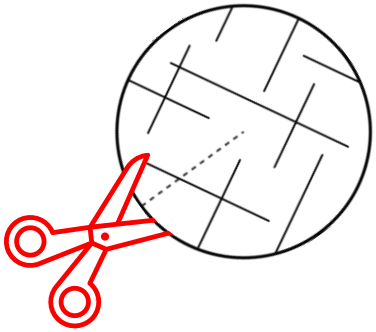
These instructions will show you how to build a pollen trap, but not how to install one. Consider reading our installation guide and think about where and how you'll put up your trap.

Step 1:
Prepping pieces

Unfortunately, all of the cigarette filters need to have the outer paper wrapping removed. The filter itself is made of cellulose acetate, just like the scientific filter and will dissolve in acetone, which is crucial for our lab work! Unwrap all the filters.

Cut flyscreen mesh into one 40 x 40 cm square and one circle 10–12 cm across (diameter).

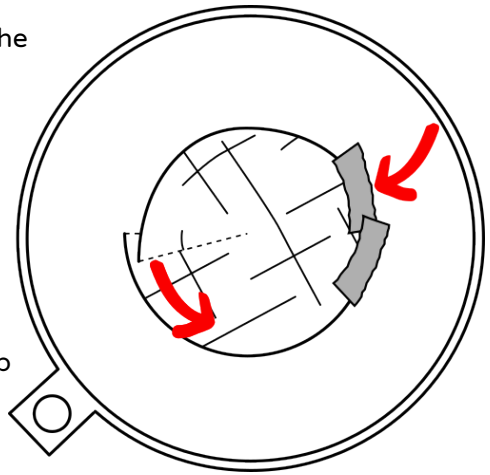
Then cut a slit from the edge to the centre of the mesh circle.



Tip: Tear a few pieces of cloth tape a few cm wide and stick them somwhere handy.

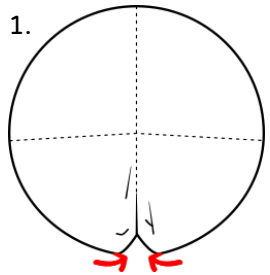
Step 2: Mesh Circle

Put the mesh in the funnel, letting it overlap itself at the slit to form a cone. Tape in place, over-lapping pieces to form an unbroken circle. This will help keep bugs out!

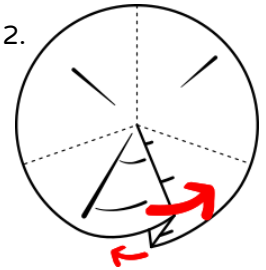


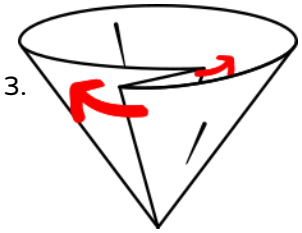
Step 3:
Filter Paper

Fold the cellulose acetate filter in half once, then unfold it. Perpedicular to the first fold, fold it in half again, and unfold again. Now, fold it into a cone using the following steps:



1. Pinch one of the folds along the edge of the circle.
2. Push down at the centre of the filter while pulling the pinched portion to one side, so the filter begins for form a cone.
3. Bring the fold of the pinched part toward another fold and press them together, creasing the fold that naturally forms between them.





4. Place in funnel on top of the flyscreen circle. As with the mesh, be sure to completely seal the filter with tape so water can't leak around it.