

How to make a light trap to capture insects.

From:

Oliveira, L.Q.; Marciente, R.; Magnusson, W.E.; Bobrowiec, P.E.D. 2015. Activity of the insectivorous bat *Pteronotus parnellii* relative to insect resources and vegetation structure. Journal of Mammalogy, 96(5): 1036-1044.



19 cm diameter funnel. Cut off the nozzle part of the funnel to hold the lid of a 150 ml pot (insect collector). The cap was secured with 3 rivets.



Top view of funnel



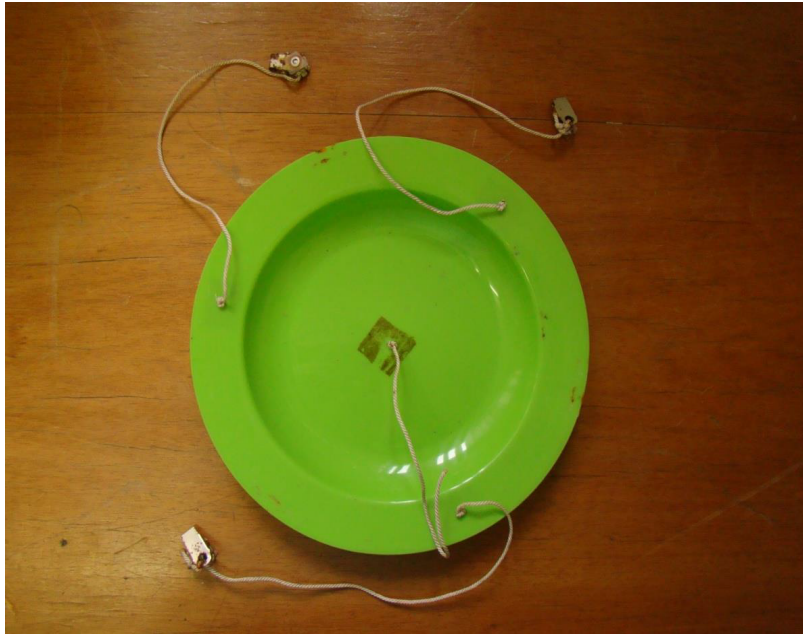
View of the underside of the funnel with the pot lid secured in place.



Side view of the funnel with the pot screwed into place.

Silicone sealant or similar will stop any water trickling down the inside of the funnel from entering the pot.

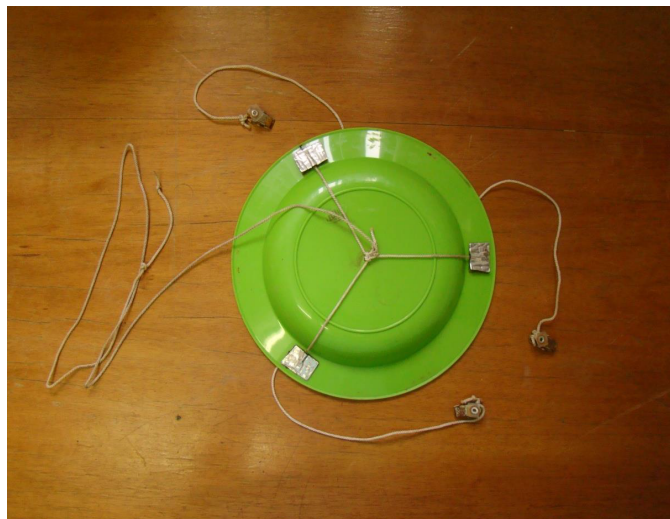
Put water and a little detergent into the collecting pot. Don't use alcohol because the smell will deter the insects.



A roof made from a 24cm diameter plastic plate, stops rain from entering the funnel. The funnel is suspended at 3 points. The center string is used to secure the small LED flashlight.



A knot secures the nylon string in place.



Top view of the dish. The longer rope in the center of the dish is used to attach the trap to a branch or tree.



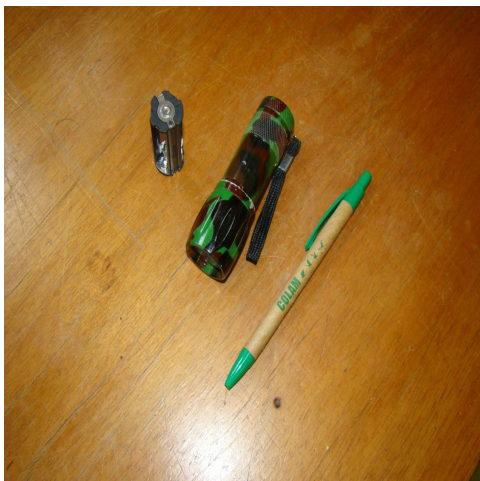
Close up of one of the anchor points on top of the plate. The waterproof tape is used to prevent rainwater from entering and trickling down the string into the funnel.



Clips used to secure the plate to the funnel. They are tied to the end of each of the nylon strings. Each funnel needs 3 clips. These are badge clips found at stationery stores.



Side view of assembled light trap.



A small 9 LED flashlight is tied to the center string. It is directed at the base of the funnel and attracts insects to the collecting pot.



The completed light trap.



Plastic bags used to store insects removed from collectors. Put a grease-proof paper label with the name of the plot written in pencil inside each plastic bag.

Small brushes were used for removing insects from the walls of the pot and the funnel taking care not to crush them. In the laboratory, remove the insects from the plastic bags and put them into smaller bags with 70% alcohol.