



There are many methods for collecting insects, most of which involve simple apparatus and can be done by amateur collectors.

The key to successful collecting is the right timing. Insect collecting is a seasonal business and the best time is during the warmer months from September to April.

Where you look for insects depends on the types of insects you wish to catch.

- flowers for bees and butterflies
- freshwater ponds and streams for dragonflies, caddis flies and may flies
- cow paddocks for dung beetles
- leaf litter for slaters and ants.

Methods of collecting insects:

Berlese funnels

These are devices to drive insects and other arthropods out of samples of leaf litter. They work by spreading the litter on a mesh screen in a large funnel with a hot electric bulb suspended above the litter. The combination of heat, light and gradual desiccation slowly drives the creatures out until they drop into a container below the funnel. You can make a Berlese funnel from a plastic soft drink bottle. Cut the bottom off and turn the bottle upside down. Place a circle of small wire mesh in the bottle and fill the mesh with leaf litter. Suspend the funnel over a container of water with a squirt of detergent in it. Place an electric light bulb above the leaf litter. The heat will cause the insects to drop into the water.

An example of leaf litter traps used in a scientific investigation can be found in the Terrestrial Invertebrate Status Review of Brisbane.



Flight intercept traps

Many insects fly in a random fashion just above the forest floor and fall to the ground when they collide with a vertical object. Flight intercept traps utilize this behaviour to trap insects. A vertical screen of transparent plastic, such as transparent kitchen film is stretched between two stakes and a trough (or row of ice cream containers) of preservative fluid (propylene glycol) is arranged below its bottom edge. These traps work best on a long-term basis but yield surprising catches of insects not normally caught by other methods. They are most effective at trapping slow-flying insects such as beetles, cockroaches and crickets.



Hand netting

Large flying insects such as butterflies, wasps and flies can be collected individually by a long handled insect net. These can also be swept over foliage for many small insects which rest on foliage and are difficult to see.



Light traps

Many night-flying insects are attracted to light. A strong light bulb hung in front of a vertical white sheet near bushland will yield a great range of insects which can be picked directly from the sheet when they come to rest. An ultra-violet light bulb will increase the catch markedly. For a simple overnight trap a bulb can be suspended over a dish of detergent water.



Yellow pan traps

It has been shown that many small day-active insects are attracted to the colour yellow. This trapping method uses small yellow dishes filled with water to which detergent has been added. The dishes are placed on the ground in conspicuous places in the morning. When flying insects land on the surface of the water they rapidly sink and drown. At the end of the day, the water is strained through a fine sieve and the specimens are retrieved.



Pitfall traps

These traps consist of suitable wide-mouthed containers sunk in the soil so their opening is flush with the ground surface. Containers ranging from disposable plastic cups to ice cream containers or plastic buckets are suitable. They can be used dry or with water and a squirt of detergent added. The detergent ensures that insects sink and drown rapidly when they fall into the trap. Pitfall traps collect invertebrates which walk over the ground surface, especially beetles, spiders, ants and myriapods.

An example of pitfall traps used in a scientific investigation can be found in the Terrestrial Invertebrate Status Review of Brisbane.



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