

Using Pitfall traps

Pitfall traps are an effective way of catching invertebrates that live at ground level. They will usually produce a collection of ground beetles, woodlice, ants, springtails, spiders, worms, centipedes, millipedes, and earwigs. They need to be put in place on the day before the animals are needed as they catch most during the hours of darkness.

Set at least 10 traps because they may not all be successful.

The best places to put them will be in uncut grassy areas, under hedges or in woodland. Flower-beds and shrub borders can also be productive.

The simplest traps are made from plastic yogurt pots, vending machine cups or similar. Anything with smooth steep sides will do. Bigger pots catch more animals, but they do take more effort to dig holes for.

Make sure that there are some small holes in the bottom to let out water. The holes can be made with the point of a pair of compasses, and is easier if the metal point is heated first. Great care is needed for this.

Dig a hole that is deep enough to sink the plastic pot with the rim level with the ground surface. A raised edge will deflect many animals around the hole. * This is the most important part of setting a pitfall trap *****

The position of the traps can be marked with a cane that has a safety cap to prevent eye damage or a descriptive note made about the location. A simple sketch map can be helpful in both cases.



Return to the trap the next day. In most cases, the traps will only be used once and can be lifted out of the ground with the animals inside. If using plastic cups, there are lids which can be used to seal the animals in, but very few will escape while the catch is being recorded.

There are several refinements that can be made:

Covering the trap with a piece of slate or plywood raised on stones will offer an inviting hideaway for some animals and may increase the catch of some types. It will also keep out the rain.

Bait can be put in the traps - pieces of fruit or other edible materials.

Comparisons can be made between habitats by setting an equal number of traps in each type.

Pitfall trapping provides an excellent opportunity for numeracy, map-making, and planning simple experiments.

This activity involves possible contact with soil-borne infections and care must be taken to cover cuts and abrasions with waterproof plasters and/or wear plastic gloves. Hands and equipment should be washed after use.