



A **Longworth trap** is a humane live-capture device widely used in Britain for ecological surveys. It is especially effective for **small terrestrial mammals** that investigate bait and nest chambers

Wood mouse (*Apodemus sylvaticus*)

- Very common across the UK
- Large eyes, long tail, agile jumper
- Occupies woodland, hedgerows, farmland, gardens
- Often the dominant capture in surveys

Yellow-necked mouse (*Apodemus flavicollis*)

- Similar to wood mouse but larger
- Distinct yellow collar on chest
- Mainly southern England and Wales, woodland specialist

Bank vole (*Myodes glareolus*)

- Small, stocky, short tail
- Chestnut-brown back, grey underside
- Prefers woodland and dense vegetation

Field vole (*Microtus agrestis*)

- Short tail, blunt nose, shaggy fur
- Grassland specialist
- Common in upland and rough pasture

Harvest mouse (*Micromys minutus*)

- Britain's smallest rodent
- Prehensile tail, climbs grass stems

Shrews are insectivores, not rodents. They are frequently captured but require careful handling because of high metabolic rates.

Common shrew (*Sorex araneus*)

- Very widespread and abundant
- Brown back, pale underside
- Short tail relative to body

Pygmy shrew (*Sorex minutus*)

- Much smaller than common shrew
- Longer tail proportionally
- Found in a wide range of habitats

Stages of an Ecology Investigation

Planning & Question

- Identify a focus (e.g., "How does light affect plant growth in a woodland?")
- Formulate a hypothesis

Selecting Site & Habitat

- Choose a representative location
- Note environmental factors (soil type, shade, moisture, human impact)

Data Collection

- Carry out systematic sampling using chosen techniques
- Record observations accurately

Data Analysis

- Calculate averages, frequencies, or percentages
- Compare results between areas, times, or conditions

Presentation of Results

- Use tables for raw data
- Use graphs and charts to visualize trends

Conclusion & Evaluation

- Summarize findings relative to hypothesis
- Discuss reliability, errors, and improvements

For Animals / Mobile Organisms

- Pitfall Traps – capture ground-dwelling invertebrates
- Observation / Counting – bird counts, butterfly transects

Data Presentation Methods

Bar Charts

- Compare different species or habitats
- Height of bars represents abundance or percentage