Biodiversity Explorer Kit

Guides for Observing and Documenting Life Around You
GET STARTED WITH INVERTEBRATES

Invertebrates are animals which lack a backbone. They are cold-blooded and show a great diversity - in fact, invertebrates comprise more than 90% of the diversity of life on Earth. Here’s a look at a few common invertebrates you might encounter:

**Insects**
- 1 pair of antennae
- 3 pairs of legs
- 3 body segments – head, thorax & abdomen
- Have an exoskeleton
- Butterflies, dragonflies, ladybugs, ants, bees, among others

**Arachnids**
- No antennae
- 4 pairs of legs
- 2 sets of mouthparts
- 2 body segments
- Have an exoskeleton
- Spiders, scorpions

**Molluscs**
- Soft-bodied animals
- May / may not have shells
- Snails, slugs

**Others**
- Earthworms, crabs, sponges, starfish, flatworms, centipedes, millipedes, round worms

**MAKING OBSERVATIONS**

- **Shape & size** of the body
- Presence / absence & position of wings
- Pay attention to colours, markings & patterns
- **Sounds** - can be useful in detecting invertebrates like cicadas & crickets; try to observe sounds of insects like bees & dragonflies
- **Behaviour** - feeding, mud-puddling, mating, egg-laying, nest-building, bask, flight pattern
- **Habitat and Season** - where in the habitat did you see it? Which time of the year?
**Field Tips**

**What to look out for...**

The presence of invertebrates can be indicated by - eaten leaves, patches / squiggly lines on leaves, galls / bulges on leaves or branches, small holes on trees, nests / hives / mounds, birds / other animals feeding on them

**Where to look...**

Look for invertebrates on flowers, on & below leaves, in the leaf-litter, in & around organic material like animal poop, decaying matter, in waterbodies like puddles, water tanks, natural / artificial ponds, on the walls - near light sources / streetlights

**Explore Safely**

- **Avoid wearing any artificial scents** when exploring insects.
- **Maintain a safe distance** to avoid allergies and/or getting stung!
This 'Biodiversity Explorer Kit' is for simply anybody to fall in love with biodiversity in your backyard and engage with the fascinating flora, fauna, and fungi we live with. It comprises a series of guides for invertebrates, birds, mammals, reptiles, amphibians, and plants as well as one on how to Photograph Nature for Citizen Science.

WWF-India is committed to creating and demonstrating practical solutions that help conserve India's ecosystems and rich biodiversity. With a conservation journey spanning over 50 years, WWF-India works towards finding science-based and sustainable solutions. We work in different geographical regions pan-India through state and field offices. The uniqueness lies in the interconnectedness of our work and its impact across thematic areas, including conservation of key wildlife species, management of their habitats; rivers and wetlands; climate change adaptation; driving sustainable solutions for business and agriculture; empowering local communities as conservation stewards; combating illegal wildlife trade, as well as environmental education to students through outreach and awareness campaigns.

This resource has been developed by Nature Connect, an initiative of WWF-India's extensive Environment Education programme working pan-India. We focus on biodiversity education through immersive nature-based learning experiences geared towards taking localised actions and community building. Connect with us at +91-7011390259 or edu@wwfindia.net.

Concept
Shonali Chenzira

Content
Aparajita, Nikhil John & Shonali Chenzira

Artwork
Vanshika Mody