

## Key Stage 3

**Our Key Stage 3 programmes introduce students to the study of nature and its systems through hands-on techniques and practical learning experiences.**

Our education programme is delivered at our two private nature reserves, Nower Wood and Bay Pond, and led by experienced staff who are first aid trained and DBS checked to give you peace of mind and your class a unique immersive experience. Choose two of our half day sessions to make up your visit. A day typically runs from 10:00 – 15:00 including a break for your packed lunch.

### Investigations & Data Collection

#### **Pond Study**

Half Day | Nower Wood or Bay Pond

The purpose-built platforms at our centres make dipping fun, safe and easy. Organisms are collected, identified with the aid of identification keys, tallied and their trophic levels noted. Abiotic data is also collected. Using this information, the students build up a picture of the food chains and webs in the pond community. At Nower Wood, two different pond communities can be compared. Life cycles, factors affecting population size, diversity and pyramids of numbers are included in the discussion. To end the session, the creatures are viewed under the video microscope and their adaptations to life in the pond are displayed in fantastic detail.

#### **Terrestrial Invertebrates**

Half Day | Nower Wood

This session begins with a chance to use various equipment to sample different habitats, such as under logs, leaf litter, trees, shrubs and grassland. Leaf litter is then collected and for an in-depth study the organisms are caught, identified, tallied and the results compiled. This leads to discussions on feeding levels, food chains and pyramids of numbers. To finish, the video microscope is used to show the creatures in fantastic detail so that their structural adaptations can be clearly seen.

#### **Woodland Comparison**

Half Day | Nower Wood

In this session ground flora in two areas of coppiced woodland is compared. This study uses quadrats on an XY grid with random numbers to measure either percentage cover or plant diversity. Simple-to-use keys aid plant identification and students measure various abiotic factors including light, soil type and pH. From their data, the students then work out why there is a difference in plants at the two sites and discuss the importance of abiotic factors in the environment.

**Why not combine two investigations? Terrestrial Invertebrates combined with Woodland Comparison brings interdependence to life, or Pond Study coupled with Terrestrial Invertebrates is a great way to look at how organisms are adapted to their habitats.**

### GIS: Dormouse Study or Village Study

Half Day | Nower Wood or Bay Pond

**Nower Wood:** a woodland study evaluating habitat suitability for dormice

**Bay Pond:** a village study looking at the human geography of Godstone

Geographical Information Systems (GIS) are increasingly important in the modern world, and this is being reflected in the geography curriculum. Give your students a hands-on introduction to GIS by collecting real data, generating maps and interpreting results. This session makes GIS simple and accessible for all.

### Ecological Sampling Techniques

Half Day | Nower Wood or Bay Pond

Practical experience is the best way to learn both biotic and abiotic sampling techniques. Students can get hands-on experience of transects, quadrats, sweep netting, tree beating and capture-mark-recapture and learn about pitfall traps, small mammal surveys and other techniques for protected species. Our abiotic measurements include light, temperature, humidity, soil type and pH. Pick and choose the techniques to fit your needs.

### Ecosystems

Half Day | Nower Wood or Bay Pond

This flexible session enables many aspects of ecology to be covered. Examples include food chains and webs, woodland structure and adaptations and distribution of plants in different habitats. In autumn, seeds, fungi and factors affecting decomposition can be considered, whereas in spring and summer there are ample opportunities to study the life cycle of flowering plants. Great as an introduction to the topic or a fantastic way to solidify classroom work by seeing theory in action.



# Prices & Booking

For visits to our centres, please see representative prices below. There is a room deposit of £50 for half day visits and £100 for a full day visit, and the prices below are per child (there is no charge for accompanying adults).

<b>Nower Wood visits</b>	<b>Per Pupil</b>	<b>Minimum Charge</b>	<b>Adult Ratio</b>
Key Stage 3	£14	£200	1:10
Key Stage 4	£18	£200	1:10
A Level	£23	£200	1:15
<b>Bay Pond visits</b>	<b>Per Pupil</b>	<b>Minimum Charge</b>	<b>Adult Ratio</b>
Key Stage 3	£12	£200	1:10
Key Stage 4	£16	£200	1:10
A Level	£20	£200	1:15

**If you have any questions or would like to make a booking, please get in touch:**

Call: 01372 379509

Email: [education.centres@surreywt.org.uk](mailto:education.centres@surreywt.org.uk)

