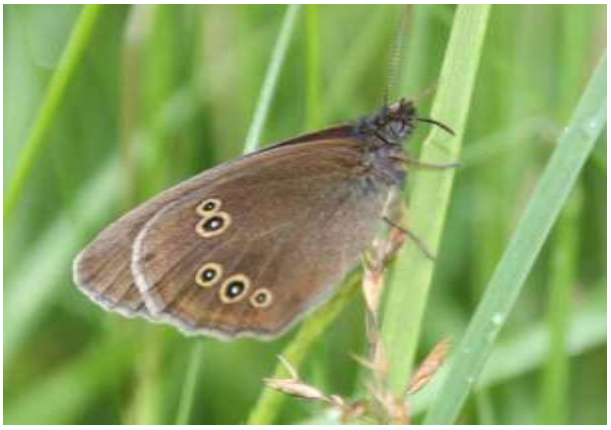
HONITON TOWN COUNCIL
ROUNDBALL WOOD FACTSHEET NO. 2
The Insects of Roundball Wood

Insects are the most abundant group of creatures in the world and over a quarter of all known species are beetles. Roundball Wood, with its trees, hedgerows, meadow, flowering plants and wetland areas is an ideal place to look for a variety of insects as well as other invertebrates like snails, slugs, centipedes and spiders. The best time to look for these 'minibeasts' is in the spring, summer and early autumn.

Butterflies

Around the periphery of the woodland, especially in the meadow area, below Roundball Hill, butterflies are the most obvious insects you will see. Flying only in the summer, they usually overwinter either as a chrysalis or as eggs and hatch out in the spring or early summer.



Ringlet

Meadow brown butterflies are the most common on the meadow and this is because their caterpillars feed exclusively on grasses. Flowers such as yarrow and knapweed provide a nectar source for the adult butterfly. Look for a brown butterfly with orange patches on the forewings and a black spot with a single white spot in the middle.

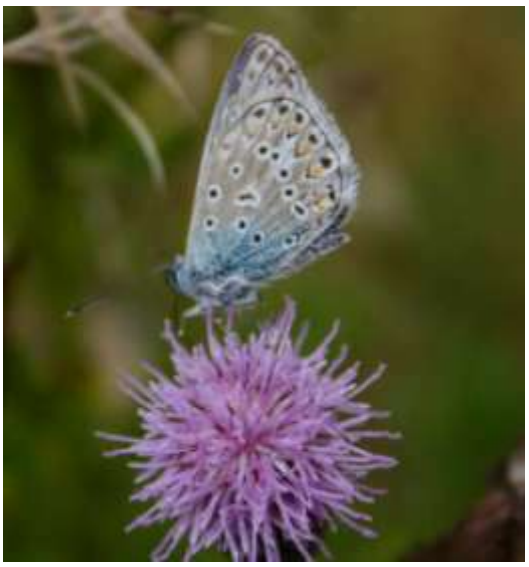
Occasionally you will also see *ringlet* butterflies whose caterpillars also feed in grasslands. They are much darker brown with a series of circles on the underwings. *Gatekeepers*, similar to the meadow brown, are a more orange butterfly and have a double white spot inside a black spot on the forewings. Their caterpillars are also grass feeders and the adults commonly feed on bramble flowers.

White butterflies include the *small white, large white, green-veined white* and *orange tip*. All these species feed on the cabbage and cress family of plants. Orange tips are the earliest ones to emerge in spring and they lay a tiny single orange egg on lady's smock plants. The large and small white are mainly distinguished by size but the green-veined white has prominent wide greenish veins on the underwings when at rest.

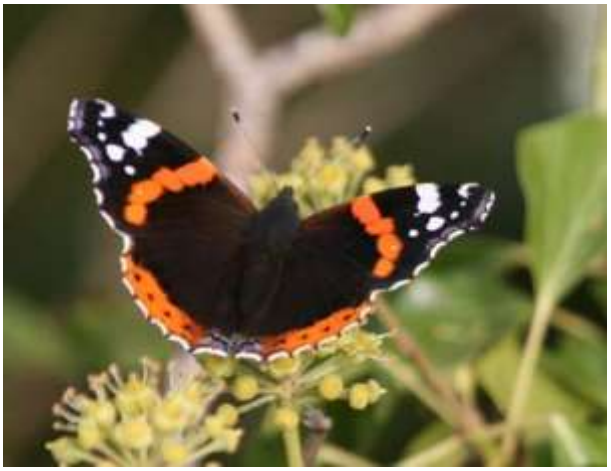
Smaller butterflies found at Roundball include the *common blue*, usually found on the meadow; *small skipper*, an orange-brown butterfly that holds its wings outwards at rest and occasionally the *small copper*, a stunning little butterfly with shiny orange wings with brown borders and distinct dark spots on

the forewings. Within the wood you may occasionally see the *holly blue* butterfly which has pale underwings and blue wings with a brown border.

Another woodland butterfly is the *speckled wood*, preferring rides or woodland edges and often seen feeding on bramble flowers. This brown butterfly is distinctly marked with large yellow spots. It is also a grass feeder as a caterpillar.

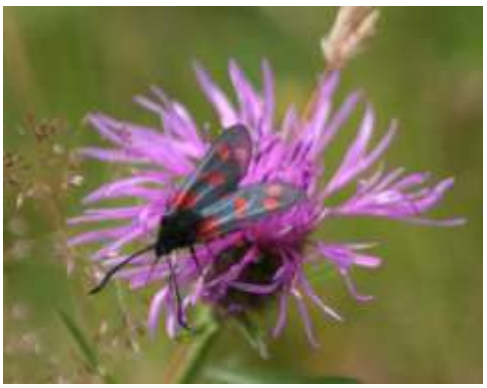


Common Blue



When the brambles and knapweeds are in flower, some of the larger butterflies can be seen feeding around the meadow and woodland edge including *peacock, red admiral, small tortoiseshell* and the *painted lady* which is a summer migrant. The first three feed on nettles as caterpillars and usually overwinter as adults if they can find a sheltered spot.

Red Admiral



Moths

Not all moths come out at night. There are some distinctive day-flying moths which are often brightly coloured. The *six-spot burnet* can be seen in the summer with its dark wings with large red spots, feeding on flowers in the meadow. Sometimes you may see a yellow and black striped *Jersey tiger moth* which has orange or yellow underwings.

Six-spot Burnet

Many moths live in the grasslands and as you wade through long grass these slender, indistinct *grass moths* can be seen. One of the larger moths, commonly found in this area is the *large yellow underwing* which is brown and indistinct until it opens its wings to reveal a bright yellow with brown border underwing.

Look on the leaves of holly, honeysuckle, bramble and other trees and plants for serpentine leaf mines and blotch mines. These 'tunnels' are formed by the caterpillars of 'micro-moths' that feed between the two layers of the leaf, finally emerging to pupate on the ground. If you look carefully you can see a speckled line within it which is the 'frass' or droppings. As the caterpillar grows the leaf mine gets broader. Micro-moths are, as their name suggests, tiny and often overlooked.

Leaf Mine

A number of moth species have been recorded in the area and are likely to be present in the woods and meadow. These include *privet hawkmoth*, *large emerald* and *vapourer*. All of which feed on trees as caterpillars. The vapourer has a wingless female and the male finds her by searching for her powerful scent with his sensitive antennae.

Look out for caterpillars or the holes in the leaves they have eaten. 'Looper' caterpillars only have legs at the back and the front and arch their bodies to form loops as they move along. These are the caterpillars of a group of moths called Geometers and are all distinguished by the way they hold their wings horizontally and flat. Many are very colourful like the large emerald already mentioned.

Other insects

A huge variety of insects live in the woodland and meadow including a variety of beetles, flies, bees, ants, wasps and bugs. Dragonflies, and their dainty matchstick-like cousins the damselflies, are usually brightly coloured blue or red, and can be seen in the summer darting around the wetland area. These colourful creatures are actually deadly predators to small flies!

Look around the meadow at the flowers during the summer to see a variety of bumble bees as well as honey bees feeding on nectar. These are important pollinators and many of our foods, including all fruits, rely on them. Widespread use of pesticides and climate change has been blamed for decline in bee numbers over recent years. Bees form colonies in the summer and feed their young on nectar and pollen which they collect from flowers and take back to the nest. The pollen is stored in 'pollen baskets' on their back legs so look out for yellowish lumps attached to them. Bumble bees often use vole and mouse burrows to make their nests underground.

If you dig around in the leaf litter in the wood you will find tiny jumping insects called *springtails*. These creatures are amongst our most primitive insects and help break down leaf litter.

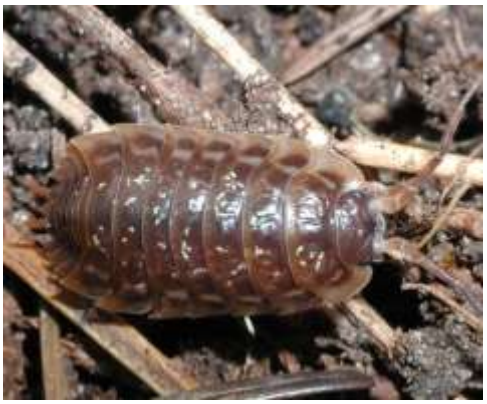
Dead wood habitat

Bark beetle tunnels

Look at the old decaying trees and you will soon find evidence of wood boring beetles. Some like *woodworm* make very small holes but the *long-horn beetles*, so called because of their extremely long antennae, make quite sizeable holes in dead wood. The larvae use incredibly powerful jaws to chomp their way through the wood and in turn they introduce fungal spores deep into the wood which helps set up the decaying process. Look out for woodpecker holes where they have been chipping away the wood to get to the juicy grubs inside. Woodpeckers can hear the grubs chewing inside the tree. Other beetles called *bark beetles* make radiating tunnels just under the bark. These wood-dwelling beetles only live in the wood as larvae and pupae whilst the adult beetles can fly and disperse.

Other invertebrates

Spiders of all shapes and sizes are common, each family making a distinct type of web. Orb-webs are large wheel-like webs whilst the tangle web and funnel web spiders make quite different webs. Spider numbers increase over the summer as the young hatch and disperse and it is in the early autumn that you start to see large orb-web spiders sitting in the middle of their webs waiting for lunch. Harvestmen (also known as daddy long-legs – but not the same as the flying version) have eight legs like spiders but only one body/head part and are often found in the leaves or leaf litter on the ground. Also found in leaf litter are woodlice, slugs and other creatures that are helping to break down the leaves to release nutrients for the woodland plants, and also centipedes and black fast-running ground beetles which are preying on them!



Woodlouse

Invertebrates and the ecosystem

Invertebrates, especially insects, play an important role in the woodland and meadow ecosystems. Some are important pollinators whilst others help break down dead wood or dead leaves. Some are predators of smaller insects but most in turn provide food for birds, mammals and amphibians.

Tips for watching insects

- **Go equipped:**
  Many insects are small and when you get close they will fly away. *Binoculars* are particularly good for getting good views of butterflies and bees feeding on flowers and dragonflies when they land on vegetation. For smaller insects you might find using a *hand lens* useful. A good insect *identification book* will also be useful to find out about what you have seen.

- **Where to look:**
  Most insects are only active in the summer and on warm sunny days later in the summer is the best time to see a good variety of butterflies, bees and flies. These groups of insects are mainly found in sunny areas such as the meadow below Roundball Hill.
  - Look on the open flowers for good views of butterflies and bees. Often you can just look at one or two flowers and a succession of insects will visit it over the course of a few minutes.
  - Dig around in the leaf litter to see springtails, centipedes and woodlice.
  - Look on the trees for wood-boring beetle holes and under loose bark for bark beetle tunnels.
  - *Beware of badger holes in the long grass.*