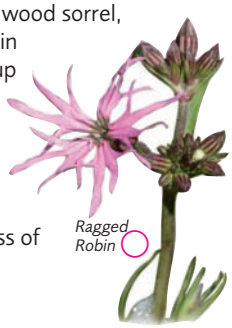
10 Ahead and left of the bridlepath is a wet meadow, a severely threatened habitat in the UK. Please do not trample the meadow but look left to see the bright yellow flowers of marsh marigold in spring and the pink of ragged robin in summer. Also present is greater birdsfoot trefoil. Darwin remarked how in this species, like the wood sorrel, the leaves move at night; in this case the leaflets rise up and press against the stem. This is made possible by the presence of small cells at the base of the leaflet stalks which through the intake and loss of water act as a hinge.


Marsh Marigold


Greater Birdsfoot Trefoil


Ragged Robin

Turn R, cross bridlepath and another meadow, passing into woodland via an old boundary bank marked by big veteran trees. Turn L and after 50m turn R to walk through the remains of a Scots pine plantation.


Sphagnum

11 After 60m, Keston Bog is on your R. The bog is here due to the presence of impermeable Eocene clays at a depth of 3 feet below the surface. One of London's few sphagnum bogs and home of some rare plants and animals, in Darwin's time it was much more extensive. Look R to see the waving cottony heads of cotton sedge in June and July, the bright yellow flowers of bog asphodel in July and August and cross-leaved heath which flowers into September. In the wettest places different types of sphagnum and other mosses grow. Please help us look after this very special place by not walking on it and keeping your dogs to heel or on a lead here. Work to restore the bog for the rare plants and animals that live here is being undertaken. If you would like to help please contact the Rangers at High Elms on 01689 862815.


Bog Asphodel (with Skipper butterfly)


Cotton Sedge


Cross-leaved Heath with bee

When you reach road, cross with care and continue for 30m, then turn R and walk about 100m along a path through pine woodland. Turn L into a clearing above the top pond.

12 In Darwin's time this area was open and grazed. Since grazing stopped in the mid 20th century, trees have colonised; first birch, then oak, but beneath your feet look out for patches of heather still remaining. Using heather as an example, Darwin described how insects visit flowers of the same species as long as they can, which aids cross pollination. He also remarked how later in the flowering season bees frequently sucked the nectar from these flowers after biting holes in them and so avoided transfering pollen between flowers.The grasses growing here on the thin, poor soil are typical of acid grassland and include fine-leaved sheep's fescue.


Heather


Fine-leaved Sheep's Fescue


Gorse

Turn R and walk in a southerly direction for about 100m across clearing, turning L by forked pine tree onto a main path. Turn R. After 50m you reach an iron age earthwork, thought to have been built slightly earlier than the main fort at Holwood. Cross earthwork into open area of relict heathland, gorse and acid grassland. Continue on pebbly path with gulley on your L.


Common Cow Wheat


Leptopterna dolabrata on Wavy Hair Grass

13 Look for common cow wheat, the food plant of the rare heath fritillary butterfly and the beautiful wavy hair grass. Also growing here is gorse. Darwin remarked how the very young leaves of gorse are pinnate, or divided, like the ordinary leaves of many other plants in the legume family to which they belong, such as acacias and vetches.

Where footpaths meet, continue south, parallel to the road on your L until you reach the junction of Westerham and Heathfield Roads. Cross Heathfield Road with care and walk south down Westerham Road. On your right is the site of a Roman farmstead and burial place overlooking the valley. This was deserted in the 4th Century AD and later occupied by AngloSaxons thought to have named the area *'Cystaninga'*, literally, *'field of stone coffins'*: giving Keston its name.


Ground Ivy

14 After about 400m, take public footpath on your R down 22 steps, passing scrub which provides food and shelter for a variety of minibeasts and birds. In spring look for white dead nettle, red dead nettle and ground ivy at path and roadsides between here and Holwood. As with heather, Darwin reported how individual bees visiting these plants where they grew together always visited the same species. Because the pollen of these 3 plants differs in colour the examination of captured bees confirmed that each only had pollen from one of the three species.


White Dead Nettle


Red Dead Nettle

When you reach the end of the path turn L into Church Road. Take care to face the oncoming traffic.

Pass Keston Church on the R which was built about 1250 on the site of an earlier building.