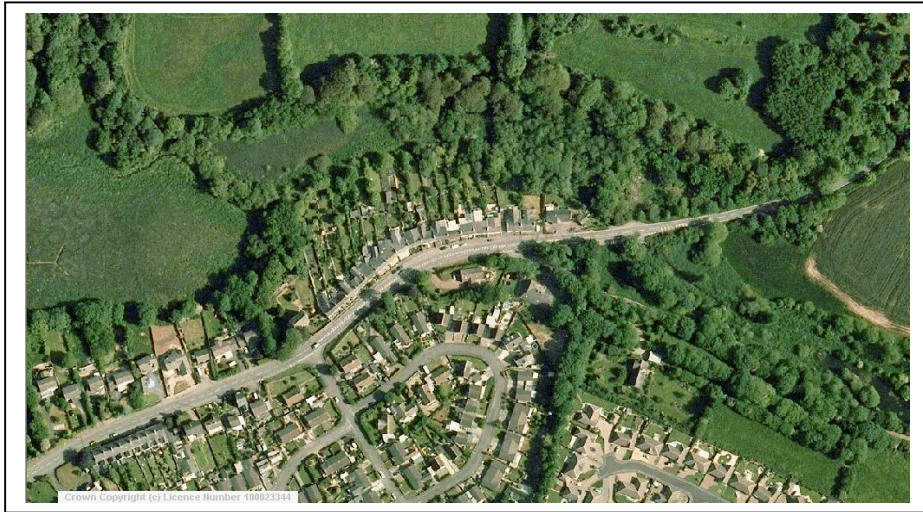
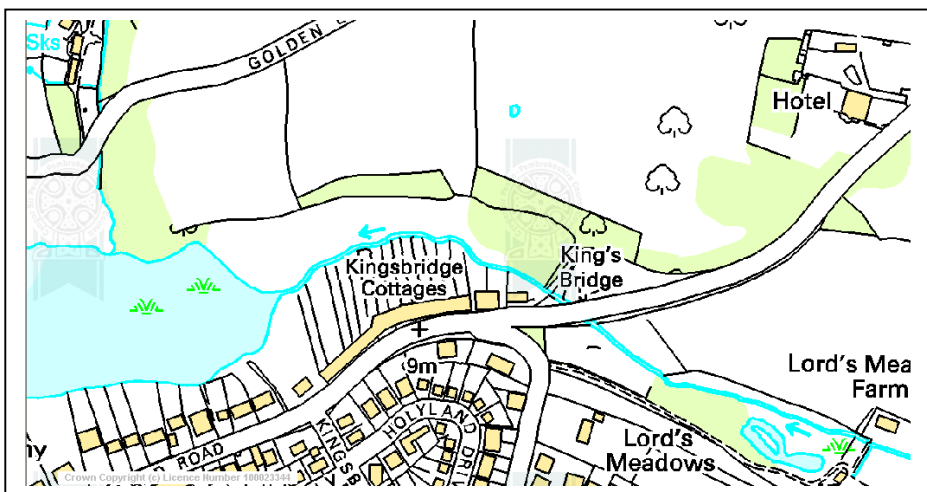


WILDLIFE ON YOUR PATCH

HOLYLAND WOOD PEMBROKE



17/10/2009



1. Introduction

We spent an afternoon in Holyland wood, observing and recording a variety of birds, plants, fungi and insects and their habitats. This short report highlights some of the more obvious, interesting or rare species that we found and looks at the main types of habitats you have in your community.

2. Car Park

As we were preparing to set off John Hayes saw a greater spotted woodpecker in the tree over the other side of the road. We also spotted a knot grass caterpillar eating its way through a blade of grass.



Knot grass moth caterpillar

The grassland around the car park is unimproved and has a mixture of species associated with grasslands such as salad burnet, birdsfoot trefoil. Evening primrose was also found in the car park area, it is associated with disturbed ground, it was still in flower and provides an important source of nectar for night flying invertebrates.

3. Woodland path to the board walk

The path leads through the damp woodland and gives fantastic views of the twisted tree trunks, fallen timber and associated species growing on the rotting wood. Rotting wood is a very important microhabitat for invertebrates as well as fungi and ferns. We saw ferns including common polypody and small fungi growing out of the damp timber lying on the woodland floor. On several of the trees we saw black fungus balls known as King Alfred's cakes as they look like burnt buns.





Further along the path the trees become less frequent as the ground becomes wetter, with the occasional willow and alder coping with waterlogged conditions. The area becomes dominated by common reed with occasional other species such purple loosestrife, yellow iris (flag iris) and hemp-agrimony. Bittersweet (also known as woody nightshade) was full of berries ripening to a bright red colour. There was a magnificent stand of bulrush (also known as reedmace) with a variety of stages of flowerheads from the tight brown spikes to those that had aged and opened up into feathery seeds. Along the edge of the board walk in the waterlogged areas poisonous hemlock water dropwort and water cress were growing.



4. Viewing platform

Just before reaching the viewing platform water forget-me-not was still flowering and water mint flowers were just going over. The view platform is at the perfect vantage point for spotting birds out on the Upper Mill Pond and some of the group were lucky enough to see a sparrowhawk and buzzard flying over the pond. A water rail was heard from here as well but typically it was not seen.

5. Holyland wood

The path climbs up away from the Upper Mill Pond towards the east, following the edges of pasture fields. The fence posts along these fields were good spots for insects looking for shelter, we found a few ladybirds and earwigs in amongst the cracks and crevices in the wood. Along the fence there was evidence of animal tracks and we found badger fur on brambles and bared wire. Badger fur feels angular when rolled between your fingers as apposed to dog fur which feels smooth. Further along the track there was obvious evidence of an active badger sett. This area had been fenced off to protect the sett from disturbance.

Further along the path there were some magnificent lime trees with very thin broom like whips growing around the base of the trunks. They have beautiful light coloured heart shaped leaves.



Some of the trees were starting to lose their leaves, and the leaves remaining on the trees were starting to show their autumn colours silhouetted in the bright sunshine. The fallen sycamore leaves had tar spots fungus growing on them, this fungus survives on the leaves overwinter and in the spring the windblown spores re-colonise the trees when the new leaf growth emerges.



Through the wood there were several species of fern including broad buckler, male fern, lady fern, soft shield fern which all took some careful examination to tell apart. The younger children managed to identify the hart's tongue fern with its long solid fronds which was common throughout the woodland.



Male fern

On path back down to the car park there are two different species of elm trees English elm and Wych elm. English elm was severely affected by Dutch elm disease and most mature trees were killed in the UK by 1990. English elm does not produce fertile seed, and propagation is entirely by root suckers and is common as a young tree in hedgerows, tree's over 20 years old often become infected by the fungus and are killed back to ground level. Wych elm is less favoured as a host by the elm bark beetles which act as vectors for the disease. Unlike English elm it doesn't sucker from roots but propagates from fertile seeds.

Wych elm (*Ulmus glabra*)

Leaves: oval-diamond, 8-16cm long, long tapering tip, toothed, rough and hairy, base uneven – long side extends beyond stalk to twig, alternate.



English elm (*Ulmus procera*)

Leaves: rounded-oval, 4-9cm long, short tapering tip, toothed, base uneven - long side does not extend beyond stalk to twig, alternate.



Close to the car park several trees have been planted including walnut and rowan. There is a beautiful beech tree close to the entrance which was looking magnificent in the sunshine and is great to climb in amongst the low branches.



7. Conclusion

Many species of animal and plant are unable to travel over large areas of improved farmland or built up areas. These areas tend to lack food and shelter from predators, or are simply too large for small creatures to find their way across. Therefore, many species may become confined to small 'islands' of habitat. If these islands become unsuitable for a species, the population may die out and. If the next nearest population is too far away, local extinctions result.

The interlinked habitats of the Holyland wood, Pembroke Mill pond and surrounding gardens designed with wildlife in mind create an excellent opportunities for species to move from one place to another, helping avoid local extinctions. This connectivity of habitats helps maintain the richness and diversity of our wildlife at both local and national levels; Communities such as yours can play an important role in this.



Thanks to the event leads / helpers
John Hayes, Nikki Anderson, Jo Brookman, Jean Hambley, Barry Potter.

Report produced by Bethan Cox
Photos taken by Nikki Anderson and Bethan Cox

Species list of Plants and Fungi for Holyland Wood and Boardwalk

Alder	<i>Alnus glutinosa</i> (L.) Gaertn.
Ash	<i>Fraxinus excelsior</i> L.
Beech	<i>Fagus sylvatica</i> L.
birch spp.	<i>Betula</i> spp.
Bittersweet / Woody nightshade	<i>Solanum dulcamara</i> L.
Blackthorn	<i>Prunus spinosa</i> L.
Bracken	<i>Pteridium aquilinum</i> (L.) Kuhn
Bramble	<i>Rubus fruticosus</i> agg.
Broad Buckler-fern	<i>Dryopteris dilatata</i> (Hoffm.) A. Gray
Broad-leaved Willowherb	<i>Epilobium montanum</i> L.
Butterbur	<i>Petasites hybridus</i>
Butterfly-bush	<i>Buddleja davidii</i> Franch.
Common Bird's-foot-trefoil	<i>Lotus corniculatus</i> L.
Common Couch	<i>Elytrigia repens</i>
Common Evening-primrose	<i>Oenothera biennis</i> L.
Common Figwort	<i>Scrophularia nodosa</i>
Common Knapweed	<i>Centaurea nigra</i> L.
Common Nettle	<i>Urtica dioica</i> L.
Common Polypody	<i>Polypodium vulgare</i> L.
Common Ragwort	<i>Senecio jacobaea</i> L.
Common Reed	<i>Phragmites australis</i>
Common Sorrel	<i>Rumex acetosa</i> L.
Cotoneaster spp.	<i>Cotoneaster</i> spp.
Cranesbills pp.	<i>Geranium</i> spp.
Creeping Buttercup	<i>Ranunculus repens</i> L.
Dandelion spp	<i>Taraxacum officinale</i>
Dock	<i>Rumex</i> spp.
Dog-rose	<i>Rosa canina</i> L.
Dog's Mercury	<i>Mercurialis perennis</i>
Duckweed spp.	<i>Lemna</i> spp
Elder	<i>Sambucus nigra</i> L.
Enchanter's-nightshade	<i>Circaea lutetiana</i> L.
English Elm	<i>Ulmus procera</i> Salisb.
False oat-grass	<i>Arrhenatherum elatius</i>
Field maple	<i>Acer campestre</i>
Goat or Grey Willow	<i>Salix</i> spp..
Great Willowherb	<i>Epilobium hirsutum</i> L.
Greater Stitchwort	<i>Stellaria holostea</i> L.
Ground-elder	<i>Aegopodium podagraria</i> L.

Ground-ivy	<i>Glechoma hederacea</i> L.
Hairy Bitter-cress	<i>Cardamine hirsuta</i> L.
Hart's-tongue	<i>Phyllitis scolopendrium</i> (L.) Newman
Hawthorn	<i>Crataegus monogyna</i> Jacq.
Hazel	<i>Corylus avellana</i> L.
Hedge Bindweed	<i>Calystegia sepium</i> (L.) R. Br.
Hedge mustard / Jack-by-the-hedge	<i>Sisymbrium officinale</i>
Hedge Woundwort	<i>Stachys sylvatica</i> L.
Hemlock water dropwort	<i>Oenanthe crocata</i>
Hemp-agrimony	<i>Eupatorium cannabinum</i> L.
Herb-Robert	<i>Geranium robertianum</i> L.
Holly	<i>Ilex aquifolium</i> L.
Holm (Evergreen) Oak	<i>Quercus ilex</i>
Honeysuckle	<i>Lonicera periclymenum</i> L.
Hornbeam	<i>Carpinus betulus</i>
Horse-chestnut	<i>Aesculus hippocastanum</i> L.
Horsetail spp	<i>Equisetum</i> spp.
Ivy	<i>Hedera helix</i> L.
Japanese Knotweed	<i>Fallopia japonica</i> (Houtt.) Ronse Decr.
Lesser Celandine	<i>Ranunculus ficaria</i> L.
Lime	<i>Tilia x europaea</i> L.
Lords-and-Ladies	<i>Arum maculatum</i> L.
Male-fern	<i>Dryopteris filix-mas</i> (L.) Schott
Marsh-bedstraw	<i>Galium palustre</i> L.
Meadowsweet	<i>Filipendula ulmaria</i> (L.) Maxim.
Mint spp (garden)	<i>Mentha</i> spp.
Oak spp probably pedunculate	<i>Quercus</i> spp
Opposite-leaved Golden-saxifrage	<i>Chrysosplenium oppositifolium</i> L.
Primrose	<i>Primula vulgaris</i> Huds.
Purple-Loosestrife	<i>Lythrum salicaria</i> L.
Ramsons (wild garlic) bulb	<i>Allium ursinum</i> L.
Red Campion	<i>Silene dioica</i> (L.) Clairv.
Red Clover	<i>Trifolium pratense</i> L.
Red Currant	<i>Ribes rubrum</i> L.
Reedmace (Bulrush)	<i>Typha latifolia</i>
Ribwort Plantain	<i>Plantago lanceolata</i> L.
Rose	<i>Rosa canina</i>
Rowan	<i>Sorbus aucuparia</i> L.
Salad Burnet	<i>Sanguisorba minor</i> subsp. <i>minor</i> Scop.
Sedge spp possibly yellow sedge	<i>Carex viridula</i>

Selfheal
Silverweed
Skullcap
Snowberry
Soft Shield Fern
Soft-rush
Sycamore
Thistle spp
Turkey Oak
Walnut
Water Forget-me-not
Water Mint

Water-cress
Wayfaring-tree
Wild Angelica
Wild Carrot
Wild Privet
Wood Avens
Wych Elm
Yellow Iris
Yellow-Loosestrife

Fungi

Sycamore Tarspot
Common Earthball
King Alfred's Cakes
Bracket fungus
Turkeytail fungus

Prunella vulgaris L.
Potentilla anserina L.
Scutellaria galericulata L.
Symphoricarpos albus (L.) S.F. Blake
Polystichum setiferum
Juncus effusus L.
Acer pseudoplatanus L.
Cirsium spp
Quercus cerris
Juglans regia
Myosotis scorpioides L.
Mentha aquatica L.
Rorippa nasturtium-aquaticum (L.)
Hayek
Viburnum lantana
Angelica sylvestris L.
Daucus carota
Ligustrum vulgare L.
Geum urbanum L.
Ulmus glabra Huds.
Iris pseudacorus L.
Lysimachia vulgaris

Rhytisma acerinum
Scleroderma citrinum
Daldinia concentrica

Trametes vesicolor

Species list of Animal for Holyland Wood and Boardwalk

Birds

Goldfinch	Grey Wagtail
Blue Tit	Jackdaw
Carrion Crow	Jay
Chaffinch	Long-Tail Tit
Coal Tit	Nuthatch
Common Buzzard	Robin
Dunnock	Sparrowhawk
Goldcrest	Treecreeper
Great Tit	Water Rail
Great-Spotted Woodpecker	Woodpigeon
Grey Heron	Wren

Mammals

Squirrel
Badger (sett)
Mole hill
small mammal holes

Invertebrates

Wasp spp
Bee spp
7 spot ladybird
Common darter dragonfly
Slug
Woodlice
Leaf miner
Earwig
Snail
Red admiral butterfly
Spangle gall