

# What to look for outdoors

## April - June

### Holly flowers



Have a magnifying glass in your pocket.

There are two kinds of holly flower.

Each holly tree has only one kind of flower.

Your holly tree will have only pollen-bearing flowers or only berry-forming flowers.



If your holly tree has only pollen-bearing flowers, scientists call it a 'male tree' and its flowers 'male flowers'.

Guess what scientists would call a holly tree that has only berry-forming flowers?

Yes, a 'female tree', of course, and its flowers are 'female flowers'.



### Questions

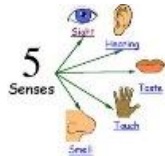


Is your holly tree a male or female tree?

If it has a berry on it from last year the tree is certainly female. Does it have any flowers?

### Do

If it has flowers, give the flowers a sniff.



Do you like the fragrance?

### Questions



What advantage to the holly tree is fragrance?



Clue: Fragrance attracts bees and other insects.

For berries to form, pollen must reach the female flowers.

Bees carry the pollen from male holly flowers to female holly flowers.

As well as being attracted by their fragrance, bees can see holly flowers clearly against the dark green leaves.



*A cluster of holly flowers*

Both male and female flowers are small, white and fragrant and grow in clusters where leaf stems meet the twig.

Both kinds of flowers have 4 petals. Some of the petals curve backwards.



Do you think *all* the petals would curve back if there was enough room?



*Pollen-bearing holly flower*

Male holly flowers have 4 stems curling upwards out of the flower. Pollen forms in the bulge at the end of each stem. Only male flowers have pollen bulges at the end of the stems.



Scientists call the stem and its bulge a '**stamen**': the stem part a '**filament**' and the pollen-bearing bulge an '**anther**'.



*Seed-forming holly flower*

Female holly flowers also have stems curling out of the flower, but there is no pollen at the end of the stems.



Can you see another difference?



Yes, the obvious difference is that green blob at its centre.

The blob collects pollen and can then begin to form a berry.

Scientists call the green blob a '**carpel**'. It has a '**stigma**' at the top to catch the pollen, an '**ovary**' below and a '**style**' in between.



Bees can see the white holly flowers clearly against the dark green holly leaves.

It is fun to make a note of what you saw and did today. Will it be the same next year?



For more about holly trees, what came before and what comes next, see Hello Trees book 'Hetty and Homer Holly', [www.hellotrees.co.uk](http://www.hellotrees.co.uk)