

# Hello Trees Resource Sheet

## What to look for outdoors in Spring Tree Flowers Quiz 3 Answers



All answers can be found in [Hello Trees books](#) which are aimed at 4-7 year olds, and have clear photographs of the 6 clues to a tree's identity. They cover ten common trees: **Ash, Beech, Birch, Crabapple, Hawthorn, Holly, Horsechestnut, Larch, Lime and Oak.**

However, the answer to the last question of Tree Flowers Quiz 2 was as follows:



Answer to Question 7, Quiz 2

(a) Crab apple (b) hawthorn (c) lime and (d) horsechestnut  
all have flowers with 5 petals, a pistil and lots of stamens.



All flowers being on the same tree (not male flowers on one tree and females on separate trees), these trees are *monoecious*, one-house trees.  
Male and female flowers both being within one flower, the flowers are *perfect*.

We decided they deserved a Tree Flower Quiz of their own.

So here is Quiz 3, four quiz questions about the flowers of

(a) crab apple (b) hawthorn (c) lime and (d) horsechestnut:



Question 1, Quiz 3

After which of them was the ship that carried pilgrim fathers to America in 1620 named 'The Mayflower'?



Question 2, Quiz 3

Which have petals of deep pink when in bud but white when they unfurl?



Question 3, Quiz 3

Which of them changes colour when their nectar has been taken?



Question 4, Quiz 3

Which of them has the scent of honey?



Answer to Question 1, Quiz 3 Mayflower trees

(b) Hawthorn flowers are called Mayflowers – or, simply, May.



Guess which month of the year, we can expect to see them 😊.



May flowers have 5 slightly overlapping white petals that curve inwards, and a pistil surrounded by lots of stamens with anthers that start bright pink and turn purple.



Hawthorn is a common hedge species in Britain.

Each May, our countryside becomes a network of cascades of white blossom.



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Answer to Quiz 3 Question 2: Pink to white petals

(a) Crab apple flower petals are deep pink and turn white as they gradually unfurl.



Crab apples are native to the British Isles, the ancestor of all cultivated apples today. It is often used as root stock on to which grafts are made to produce new varieties. Its botanical name is *Malus sylvestris*, apple of woodland. However, woodland apple trees may often be self-seeded from orchard apples – or from discarded apple cores. We are told<sup>1</sup> that they are more likely to be *orchard* apples 'if the flowers are very *pink*'.



My photographs are of the crab apple in my next-door neighbour's garden.

It is not quite all apples' ancestor: it is a crab apple cultivar, *Malus* 'Evereste'. You might think that, despite the 'e' on the end, it was the tree's mass of snowy white flowers that prompted it to be named for the world's highest snowy peak. It was in fact, named for a lady called Eve Reste!

Here are some photographs of blossom on an apple tree in an orchard.

The bud petals are pink, and unfurled petals are not 'very pink' but do have a pink blush. We are not surprised that crab apple and orchard apple trees have genes in common.



Answer to Quiz 3 Question 3:

Change colour when nectar is taken

(d) Horsechestnut flowers have a *yellow blaze* that turns *purple-red* when nectar is taken!

When in bloom, a horsechestnut tree looks as if it is covered in *white* candles.

😊 It reminds some people of candles alight on a Christmas tree.



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On closer inspection, each horsechestnut 'candle' is a *panicle* of white flowers each with a blaze of colour.



Each flower is on a *peduncle* radiating out from a central *panicle*.



When the flowers first emerge, the blaze at the centre of each flower is *bright yellow*.  
When nectar is taken from a flower, the blaze gradually turns *orange* and then *deep purple-red*.



Do take time to look at the individual flowers. Their filaments curve down and then up like a ski-jump - or a caricature of a glamour puss' eyelashes.



Can you see the different colours of blaze?  
As bees dive into a flower to take nectar from deep in the centre of the flower, pollen rubs onto their bellies.



On your horsechestnut, see whether you can see pale-apricot anthers swollen with pollen and purplish, dry anthers from which pollen has gone.



Are the full anthers on flowers with a yellow blaze?  
And empty anthers on flowers with a reddish blaze?



Of course, we hope that the pollen on the bees' bellies is rubbed off on the stigmas of the next flower so that fertilisation takes place.  
Do you know the 'fruit' that might develop from a fertilised horsechestnut flower?  
Conkers, of course!



Have you noticed that conkers only develop at the base of the flower panicle?  
There are never as many conkers as there were flowers, and above a cluster of conkers, there is always a bare spike where other flowers used to be.



What does this tell us about the flowers up the panicle?  
Yes, there are male flowers at the top of the panicle, and hermaphrodite (male and female in one) flowers below.



I realise I haven't ever looked for the female parts of a horsechestnut flower.  
I learn<sup>ii</sup> that female flower-parts have a 'single style small and simple, stigma minute'.



Also, 'male flowers [have] a small non-functional pistil and an underdeveloped ovary'.  
Difficult to distinguish male and hermaphrodite, then.



We all have reason to look more closely at horsechestnut flowers.  
I hope that you will delight in them as much as I do each year.



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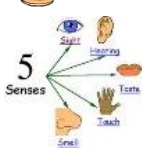


Answer to Quiz 3 Question 4: The scent of honey  
(c) Lime flowers smell of honey.



Many tree flowers have come and gone by the time Spring really gets underway, but we can look forward to lime flowers emerging in Summer.

Different varieties of lime tree bloom at varying times but June is the earliest, and July for certain, that we can anticipate that lovely sweet smell, heavy on the air.



We can use almost *all our senses* to explore lime flowers: a *low humming* warns us to *look carefully* for bees before we *look* at the pretty yellow petals, *look closely* to see the colour of anthers, and try to *discern* the stigma, style and swollen ovary that make up the pistil in the centre.

We need be especially wary of bees before we gently *touch* the squashy petals and stamens and *feel* the rigid pistil.



I have not mentioned *taste*. Lime flowers floating on the surface of a cup of lime-flower tea are pretty, and the tea has a delicate pleasant flavour, but we never taste – or even pick – anything without being sure of its effect on us.

Find out more about [lime flowers](#), [honeydew](#) (aphid poo!) and [lime-tree aphids](#) (the most extraordinary creatures that give birth to their own grandchildren!) – and much more about what to look for outdoors - at [Hello Trees Resources](#).



Whoops!

Lime trees bloom in *Summer*.

We shouldn't include lime trees in a *Spring* Tree Flower Quiz.

However, lime is the only one of my trees that flowers so late,



-and I can't have a quiz with only one answer!



So, that is the end of the [Hello Trees Tree Flower Quizzes](#).

I hope you have enjoyed them.



I have loved putting it all together.

I discovered all sorts of things I didn't know

- which is the point of a quiz, I suppose 😊.



There is so much more at [Hello Trees Resources](#)

Do have a rummage through its Discovery Sheets

- and do [share](#) how you get on.

<sup>i</sup> Mitchell, Alan, A Field Guide to the Trees of Britain and Northern Europe, 1974.

<sup>ii</sup> <https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2745.13116>