Why survey ancient trees?

Ancient trees are living relics, hundreds of years old, which invoke in us a sense of mystery and awe. They are not only valued as part of the heritage and culture of a place, they are also a conservation habitat in their own right, supporting a host of wildlife that are unable to survive elsewhere and are home to hundreds of specialised species, many of which are extremely rare. The UK also has more ancient trees than anywhere else in Europe and therefore they also have international importance.

Lincolnshire is one of the least wooded counties, the Woodland Trust says it has 4.2% tree cover — the national average is 10%. So our trees are all the more worth protecting!

Unlike historic buildings, they have no specific legal safeguard, leaving them unprotected. However, trees with historic or biodiversity value can be protected through Tree Preservation Orders (TPOs) or they may be within protected sites such as Sites of Special Scientific Interest (SSSI). By surveying ancient trees you will be able to highlight their historic value and make sure that your Local Authority is aware of them.

A 400 year-old surviving Elm near Irby. It is clearly much bigger than the trees around it.

Ancient Tree Ecology

Ancient trees are full of nooks and crannies, holes and dead and rotting wood, providing perfect homes for thousands of species of plants, animals and fungi. What makes ancient trees unique as a wildlife habitat, is the exceptionally species rich communities associated with wood decay and the bare surfaces of trunks, boughs and roots.

Fungi, **lichen** and **insects** are some of the specialists that utilise the ancient tree habitat, being so well adapted to the conditions that they couldn't survive anywhere else. Around 1,700 invertebrate species in the British Isles are dependent on decaying wood in order to complete their life cycles (Woodland Trust 2014). It can take 200 years for a tree to develop suitable conditions, and even 100 year old trees are unlikely to be favourable. So, losing an ancient tree can irreversibly affect the biodiversity of a community, even risking extinction of some species. These fungi and creatures work together to recycle the dead wood, releasing vital nutrients and minerals back to the soil, providing essential food for the trees' continued longevity.

Birds often nest inside the cavities of older trees, typically owls, kestrels, marsh tits, tree-creepers, woodpeckers and nuthatches. Others are dependent on the trees for the bulk of their food, feeding on the invertebrates associated with wood decay.

Mammals, such as squirrels, badgers, otters, dormice and stoats, make use of trees in some way as part of their life cycle. But it is bats in particular that like veteran and ancient trees as they usually have lots of nooks and crannies that can make good roost sites (any site a bat uses for shelter and protection) and provide an abundance of insect food.

The law and bats

All bats and their roosts are protected by law. It is an offence to destroy, damage or disturb a bat roost (even if bats are not present at the time). That means that ancient trees which have bat roosts in them are also protected.

If you spot a bat roost anywhere, please contact the Lincolnshire Bat Group. www.lincsbatgroup.co.uk

Equipment required:

The following items are suggested but the survey can be carried out without them.

- Digital camera
- Pencils
- Clipboard
- Tape measure.

Always ensure you have full permission from the landowner before you begin. Make sure you follow the Countryside Code when out and about.

Method:

Ancient trees could be anywhere, stood alone in a park or in a prominent position in a field, or with other trees in woodland or along a roadside.

If you think to yourself 'wow, that tree looks really old', or 'wow, that tree looks much bigger than the others around here' then you've probably found yourself an aged tree. Ancient trees are generally really stout but not that tall, shrinking with age like the rest of us! Also, like us, they age and grow at different rates, depending on their species, and have 3 general states of ageing:

- Formative
- Mature or veteran
- Ancient.

So, once you think that you've found an aged tree, you need to try and identify what species it is (which is much easier when they have leaves on!). Then, you need to measure the circumference of its trunk to gain an approximate age and fill out the survey form.

Although this survey is called the Ancient Tree Survey, veteran trees are also of interest as they're on their way to becoming ancient, and we can approximate a tree's age by measuring the girth of the trunk.

How to measure the girth:

Measuring can either be done with a tape measure or with hugs! The average adult arm-span, finger tip to finger tip, is approximately 1.5m and so 3 hugs all the way around a tree would mean the girth of the trunk is 4.5m.

So, for an oak tree

- with a girth of more than 4.5m or 3 hugs is potentially interesting - formative
- with a girth of more than 5m or 3.5 hugs is valuable in terms of conservation - veteran
- with a girth of more than 6m or 4 hugs is likely to be truly ancient!

All measurements are taken 1.5m above the ground, which, again, is handily the average adult arm-span!

Don't forget that photos are always welcome, especially of those trees getting a hug!

Where to find out more:

The Woodland Trust: www.woodlandtrust.org.uk
Lincolnshire Wildlife Trust: www.lincstrust.org.uk
Ancient tree hunt: www.ancient-tree-hunt.org.uk
Greater Lincolnshire Nature Partnership: www.glnp.org.uk
The Lincolnshire Naturalists' Union: www.lnu.org

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