## **Topical Science Update**



## Do you know your oak from your beech?

According to the Woodland Trust (in 2016) about 80% of us can't even identify common trees from their leaves – this simple test will see whether you're one of the 20% minority. How well do you know your trees? Tree ID App Discover Trees

Autumn is the perfect time of year to get outside and collect leaves to learn about different trees. What trees do you have near your school or local park? Can you identify the trees from their leaves? What other distinguishing features do different trees have?

Many of our native trees are under attack from serious diseases; Dutch Elm Disease, Ash Dieback, Acute Oak Decline and Sweet Chestnut Blight. This has led to a decline in many of our native trees and even to some of them being completely wiped out in certain areas.

<u>Top Tree Diseases</u> <u>Tree Threats</u> <u>Recognising Tree Disease</u>

## **Insect Catastrophe**

Entomologists call it the windshield phenomenon – drivers worldwide are having to spend less and less time cleaning dead insects off their windshields after driving. Why?

New research from across the world shows a very concerning trend - numbers of insects are falling, one study in Germany shows a 78% drop in just 24 years!

So why does it matter? Well insects pollinate many of our crops, especially fruit and vegetables. They also form the base of many vital food chains across the world.

<u>Insect Decline</u> <u>Collapsing Ecosystems</u> <u>Importance of Insects</u> <u>What happens if Insects Disappear?</u>

## **Trophic Cascades**

Recent discoveries have changed the way scientists look at food chains. Traditionally it was thought that the organisms at the bottom of the food chain controlled the ecosystem. There is now growing evidence that in many cases it is the top predators that keep the food chain and ecosystem in balance.

<u>Trophic Cascade</u> <u>Yellowstone</u> <u>Mission Wolf</u> <u>Wolves change Rivers</u> <u>Rewilding Britain</u>





Zooniverse is the leading platform for Citizen Science. The range of projects is extraordinary and many of them are suitable for using in school. Some of my classes favourites are Wildwatch Kenya, The Plastic Tide, Planet Hunters and Solar Stormwatch II

WARNING- it's highly addictive!

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