

Tree Seed Dispersal

A Teacher's Guide

Use with ID3-What type of seed have I found?

Pre-visit Talk about seed dispersal; mention the purpose and the main methods by which it occurs.

During Pupils work in small groups to collect one example of each seed type they find at Oare, either in a small bag or on a piece of card with double - sided tape on so they can stick them to it.

Please note it is important that you remind children not to take more than one of each, because if everyone who visits Oare took away lots of seeds there would be none left for feeding or re-growth. Also remind them to wash their hands afterwards and not to eat any berries they find as they may be poisonous.

Keep a record of the seeds that are found (drawing, writing them down or taking photos).

After Back at school have a look at the different seeds found and talk about the methods of dispersal. The main ways are wind, water, humans, birds, animals and explosions.

Dispersed by animals

They carry the seeds and nuts and drop them, away from the parent plant. Some seeds have burrs or hooks which stick to animal fur and will be moved this way. Examples include:

Agrimony - uses hooks to attach to animal fur

Hawthorn - berries are eaten by small mammals

Hazel - fall to ground and taken by squirrels and mice-buried and lost/forgotten

Lesser Burdock - uses hooks to attach to animal fur to travel away from the parent plant

Oak - often fall to the ground and are buried by squirrels or mice. In the past; used to feed pigs

Dispersed by birds

Birds will fly far away from where they find the seeds, allowing the seeds to be spread further afield. The birds often eat the berries of plants and the seeds will then pass through their bodies unharmed and fall onto the ground to germinate.

Hawthorn – red berries ripen becoming soft and a favourite food for thrushes

Holly – a mistle thrush often guards a tree to keep the berries to itself

Yew – birds eat the berries, but don't eat the seed and drop it out

Dispersed by wind

These seeds have to be light and small to be carried by the wind. The wind will shake the plants scattering the seeds, but some lighter seeds such as the dandelion and thistle will be carried further and appear to float in the breeze, like mini parachutes.

Ash

Field Maple = They all spin away in the wind

Sycamore

Silver Birch = This is a very fine seed which is blown around

Dandelion

Rosebay Willowherb = They will float on the breeze with delicate ‘parachutes’

Thistle

Willow

Dispersed by Water

Some seeds use water and float along in the water until they open and release the seed. Other seeds may fall into the water as they are positioned near the water edge or the wind has blown them.

Alder = They float along in the water until they reach suitable soil and germinate

Yellow Flag

Dispersed by Explosions

Some plants disperse their seeds with natural catapults. Tension builds up as the seed case grows and suddenly the seed case splits open and the seeds are thrown in all directions, so the seeds are shot away from the parent plant. Others can be triggered by movement; wind or an animal brushing past.

Meadow Cranesbill

Vetch

Dispersed by Humans

Any seeds with hooks or burrs can attach themselves to clothes and be led about until they are brushed off. Also humans can collect seeds and move them from one place to another, by picking them up. One example is taking an apple from a tree, eating the fruit, then putting the core (with seeds) out to compost or collecting and throwing away conkers.

Horse chestnut – dispersed by children!