

What does seed dispersal mean?

Seed dispersal is when seeds are transported from the plant to another area in order to grow.

Why do you think plants decide to spread their seeds out over a wider area?



If a mother plant and a young, growing plant are in the same place, they will compete for water, sunlight and carbon dioxide. The baby plant is much weaker and therefore will (in most cases) not receive enough and die.



With your talk partner
can you think of any
ways in which seeds
might travel from one
place to another?

We call these methods
of seed dispersal.

Click on the picture
for a short video.





Wind dispersal

Some plants, such as the dandelion, have seeds that act as parachutes, which are carried away by the wind.

In order for this to work, the seeds must be very light to float in the wind or it will just drop to the floor.

Some of the seeds are so small that they look like dust.

Examples of these very small seeds are orchid and poppy seeds. On a windy day, poppy fruit capsules will sway from side to side, shaking out the tiny seeds.



Wind dispersal

Maple fruits are winged, two-seeded pods called *samaras*. They spin like helicopters as they fall from the tree, providing a longer time for dispersal by wind which allows them to travel further distances away from the mother plant.

Elm and birch trees also have *samaras*.



Water Dispersal

Some plants grow near rivers, lakes, streams or oceans.

Their fruits/seeds fall from the plant, into the water and could be carried for long distances.

A good example of this method is the palm tree which drops its seeds, called coconuts, into the sea/ocean with powerful currents taking their seeds across continents.

The water lily is another plant that uses this method with its fruits eventually sinking to the bottom and taking root at the floor of ponds.



Animal dispersal

Some species of plant use hooks on their fruits.

These attach themselves to the fur of mammals or feathers of birds and get carried from one place to another.



The parent plant makes the spiky little 'burrs' from the flower. They are picked up by the fur of an animal from either the floor or the plant directly.

When the animal scratches or tries to get it off, the burr drops to the floor away from the parent plant and will then take root.

Animal dispersal

The acorn is the fruit of the oak tree. It is a nut and contains a single seed (rarely two seeds) enclosed in a tough, leathery shell.

Acorns are too heavy for wind dispersal

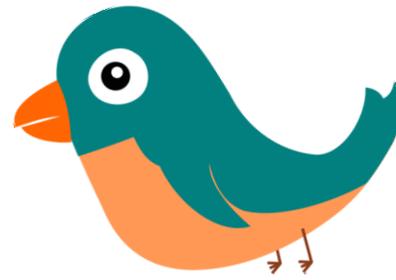
Due to their spherical shape, acorns fall from trees and roll.

If they are not destroyed by animals, white oak acorns can sprout rapidly after falling from the tree.

Alternatively, jays and squirrels that scatter-hoard acorns in caches for future use, effectively plant the acorns in a variety of locations where it is possible for them to take root and grow.



Animal Dispersal



Fleshy fruits are eaten by animals. Fruit has evolved over time to look and taste good so animals are encouraged to eat them.

The animals digest the soft fruit, but the seeds remain in the body until...

With the seeds now 'placed' on the ground away from the mother plant, they are able to take root and begin to grow.



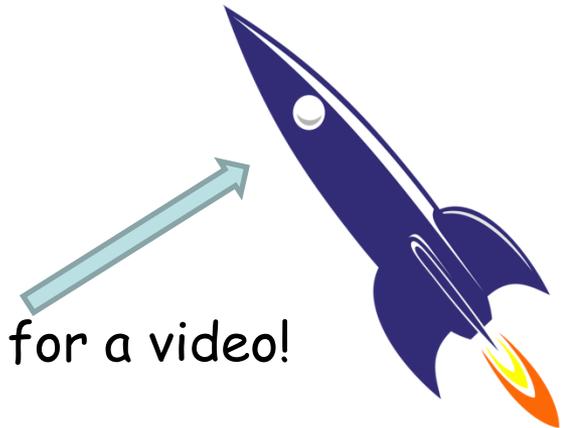
Exploding Plants

Some fruits can fling their seeds away when they're ripe. This is a type of rapid plant movement.

Pea pods often use this 'mechanical' dispersal. When the pod dries up, the inside of the pod dries up faster than the outside. This makes the pod twist inside, suddenly splitting open violently as it rolls into a little spiral. When this roll happens, it causes seeds to fly out in all directions.



[Click here for a video!](#)



Now we'll have a quick recap about the methods of seed dispersal we've learnt about today...

