

INTERDEPENDENCE

Organisms in a food web (decomposers, producers and consumers) depend on each other for nutrients. So, a change in one population leads to changes in others.

The population of a species is affected by the number of its predators and prey, disease, pollution and competition between individuals for limited resources such as water and nutrients.

Keywords

Food web: Shows how food chains in an ecosystem are linked.

Food chain: Part of a food web, starting with a producer, ending with a top predator.

Ecosystem: The living things in a given area and their non-living environment.

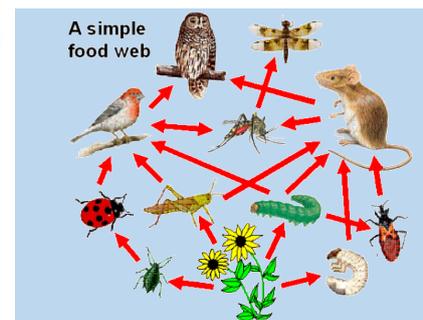
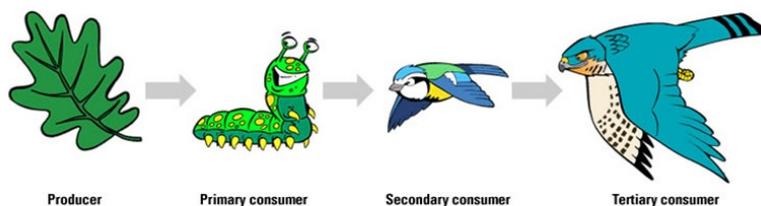
Environment: The surrounding air, water and soil where an organism lives.

Population: Group of the same species living in an area.

Producer: Green plant or algae that makes its own food using sunlight.

Consumer: Animal that eats other animals or plants.

Decomposer: Organism that breaks down dead plant and animal material so nutrients can be recycled back to the soil or water.



Predator - an animal that eats another animal.

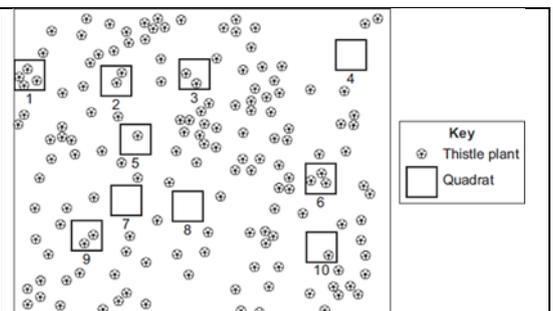
Prey - an animal eaten by another animal.

Quadrats

Used to count plants and investigate distribution. Should be placed randomly.

Several quadrats should be counted to reduce the effect of an unusual distribution.

May also be used for slow moving animals such as snails/slugs.



PLANT REPRODUCTION

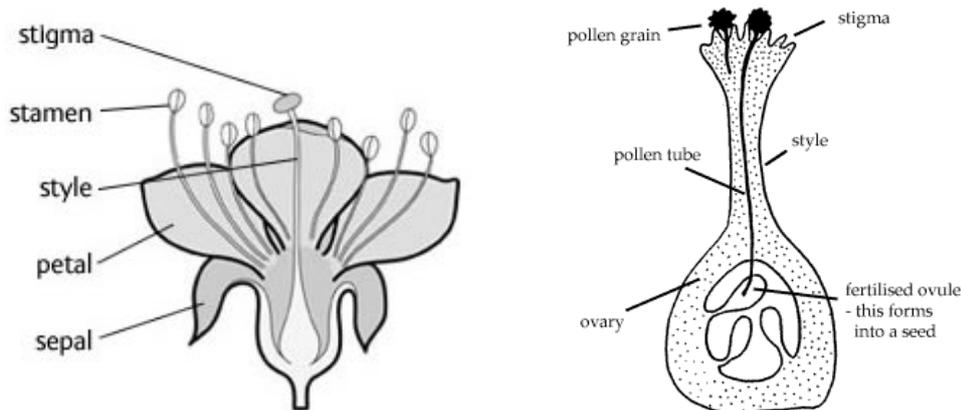
Flowers contain the plant's reproductive organs. Pollen can be carried by the wind, pollinating insects or other animals.

Plants have adaptations to disperse seeds using wind, water or animals.

Plants reproduce sexually to produce seeds, which are formed following fertilisation in the ovary.

Keywords

- Pollen:** Contains the plant male sex cells found on the stamens.
- Ovules:** Female sex cells in plants found in the ovary.
- Pollination:** Transfer of pollen from the male part of the flower to the female part of the flower on the same or another plant.
- Fertilisation:** Joining of a nucleus from a male and female sex cell.
- Seed:** Structure that contains the embryo of a new plant.
- Fruit:** Structure that the ovary becomes after fertilisation, which contains seeds.
- Carpel:** Female part of the flower, made up of the stigma where the pollen lands, style and ovary



Subject	Year 7 Ecosystems
Key word - A group of the same species living in an area.	Population
Key word - The surrounding air, water and soil where an organism lives.	Environment
Key word - The living things in a given area and their non-living environment.	Ecosystem
Draw a quadrat.	<input type="checkbox"/>
What do we use a quadrat for?	To count plants or to see the distribution of plants.
How should the quadrat be placed?	Randomly
How do we reduce the effect of an unusual distribution?	Place the quadrat several times. Repeat several times.
Why can a quadrat be used to count slugs and snails?	They move very slowly.
Calculate the average of these numbers: 3, 2, 2, 0, 0, 1, 2, 0, 3, 1	1.4
What does the answer above tell you?	On average, there is this number of plants per quadrat.
A field is 100 quadrats in size. Average plant number per quadrat is 7.4. How many plants are in the whole field?	740
What is a producer?	A plant.
How does a producer make food?	Photosynthesis
What is prey?	An animal that is eaten by another animal.
What is a predator?	An animal that hunts, kills and eats another animal.
What does a food chain always start with?	A producer.
If lots of food chains are joined together what is made?	A food web.
Where does pollen land?	The stigma.
What grows out of the pollen grain?	A pollen tube.
What does a fertilised ovule turn into?	A seed.

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How does a producer make food?	
What is prey?	
What is a predator?	
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