

# Food Web

You may not think you have much in common with a puffin, a seal or a lobster but you all need to eat to gain energy and to grow. And you all live in the same ecosystem – a place where all the plants, fish, birds and other animals are linked together. If something changes in this ecosystem it can affect us all.

## Make your own food web

A food web is a way of linking all the different parts of an ecosystem by thinking about what they eat. You can see an example of part of food web on the last page.

- Explore! – if you're on the beach look in sand dunes and in rock pools as well as on the sand
- Make a list of all the living things you see, for instance: small fish, big fish, crab, sea urchin, barnacle, seal, dolphin, herring gull, tern, duck, puffin, human.
- Draw a picture of each of these animals. If you're doing this on the beach you could use the sand as your 'paper' and a stick to do your drawings.
- Draw lines between the animals that eat each other. For example, you might draw a line from big fish to little fish, or several lines from human to crab, human to small fish and human to big fish.
- What does the finished picture look like?
- What would happen if one of the animals wasn't there – how would it affect the other animals?

## Make a food web mobile

You will need: Two sticks, a large piece of card, some string and scissors.

- On your card, draw pictures of the plants and animals from your food web, and cut out each one.
- Tie the two sticks together in a cross shape.
- Tie each of the different cut-outs on to the sticks so they hang down from it.
- Hold the sticks up to see if the mobile balances. You may need to slide some pieces of card up or down the sticks to make it work.
- Once your mobile is balanced, try removing one of the pieces of card. What happens?

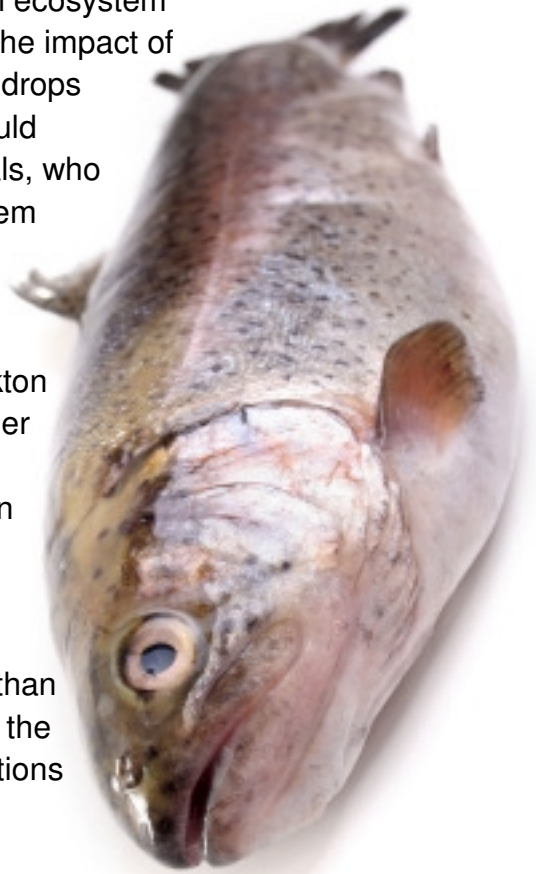
**Note: you can try both these activities with inland food webs too.**

You can find out more about marine food webs by playing the BBC's Blue Planet Challenge game:

[http://www.bbc.co.uk/nature/blueplanet/webs/flash/main\\_game.shtml](http://www.bbc.co.uk/nature/blueplanet/webs/flash/main_game.shtml).

## Cod fishing: good or bad?

The links between different plants and animals in an ecosystem can be very complicated and it is difficult to predict the impact of any changes. If the number of cod in the North Sea drops because of over-fishing, the number of sandeels could increase. That's good news for puffins and grey seals, who eat sandeels. So is eating cod good for the ecosystem then? Not necessarily. In the Atlantic, a drop in the number of cod has enabled snow crab, shrimp and herring populations to boom. But now these smaller fish and invertebrates are eating too much zooplankton and algae. So there may not be enough food for other small fish (like sandeels!) in the future. Ecosystems are very delicately balanced. Even a small change in one part can alter how everything else works.



## Find out more about sustainable fishing

Fishing has a greater effect on marine ecosystems than any other human activity. The RSPB, the WWF and the Food and Agriculture Organisation of the United Nations all recommend adopting an ecosystem approach to fisheries management. You can find out more here:

[http://www.panda.org/about\\_wwf/what\\_we\\_do/marine/our\\_solutions/sustainable\\_fishing](http://www.panda.org/about_wwf/what_we_do/marine/our_solutions/sustainable_fishing)

Eating fish may be good for you, but where does your fish come from? You can help ensure the long term health of our seas and marine wildlife by only choosing to eat fish from responsibly managed sources. Visit the Marine Conservation Society's website, download their 'Pocket Good Fish Guide' and share it with your friends:

<http://www.fishonline.org>



