

Wildlife in the MCZ

Ages 4-7



Wildlife in the MCZ

The wildlife of the MCZ offers an interesting context for teaching about feeding relationships and habitats. There are some slides to introduce the wildlife of the MCZ before looking in more detail at a particular unit. Rockpooling sessions provide great hands-on learning experiences linked to science.

National Curriculum objectives (ages 4-7):

Diet and food chains

Year 1 – Animals, including humans

- Identify and name a variety of common animals that are carnivores, herbivores and omnivores

Year 2 – Living things and their habitats

- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Rockpooling

Year 2 – Living things and their habitats

- Explore and compare the differences between things that are living, dead, and things that have never been alive
- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other

- Identify and name a variety of plants and animals in their habitats, including micro-habitats

Year 2 – Animals including humans

- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)



Activity 1

Food chains

Year 1

Discuss the terms carnivore, herbivore and omnivore. Give children copies of the [images](#) of creatures and 'I eat' [information](#). They should then cut and sort them into the three groups. Use the [slide](#) given to check their work.

Year 2

Give the children copies of the [food chain pictures](#). They should then use the 'I eat' [information](#) to create a food chain - cut out the images, order and draw arrows. The arrows must show the direction of the transfer of energy from the food.

Discuss the terms herbivore, carnivore, omnivore. Children can then label the herbivores, omnivores and carnivores on their food chains. Afterwards, use the [slides](#) to check their food chains.

Food chains provided:

[Seaweed, prawn, sea bass, seal](#)

[Plankton, mussels, starfish, herring gull](#)

[Algae, periwinkle, lobster, human](#)

These food chains have been chosen to show the range of plants that support life in the sea.

The reality is that these food chains are part of a very complex food web with many creatures eating a wide range of things.

Activity 2

Rockpooling

Year 2

Living, dead, never been alive activity

The beach is a great place to explore and find a wide range of things that are living, dead or have never been alive.

Let the children see what they can find. Draw a table into the sand with the headings 'living,' 'dead' and 'never been alive'. Gather together and ask the children to take turns adding the things they have found to the table. Do they all agree?

Explore the rockpools at Sheringham or West Runton beach at low tide to find a variety of life. Children use pictures to identify the creatures and plants they find. Encourage the children to carefully lift rocks and seaweed to find creatures that are hidden, then return rocks to the position they were found.

Can they name any creatures? What do animals need to survive? (food, water, air/oxygen, shelter/protection from waves & predators) How do they get these from their rockpool habitat?

Guidance about rockpooling can be found here: [NMMC How to rockpool](#).

Our [Rockpool Fact File](#) has some useful information.

Take a look at Essex Wildlife Trust's [Shoreline Identification Guide](#).

Whiteboard and printable resources about rockpool species available here: [Benny the Blenny rockpool poster](#)

Norfolk Wildlife Trust and the National Trust at Sheringham Park also offer rockpooling sessions.

Wildlife in the MCZ

Much of the wildlife in the Marine Conservation Zone is hidden beneath the surface but it is pretty amazing!

Watch the video on the next slide to see some of the amazing creatures that live there. Many can be seen in the rockpools on Sheringham and West Runton beaches on a good low tide.



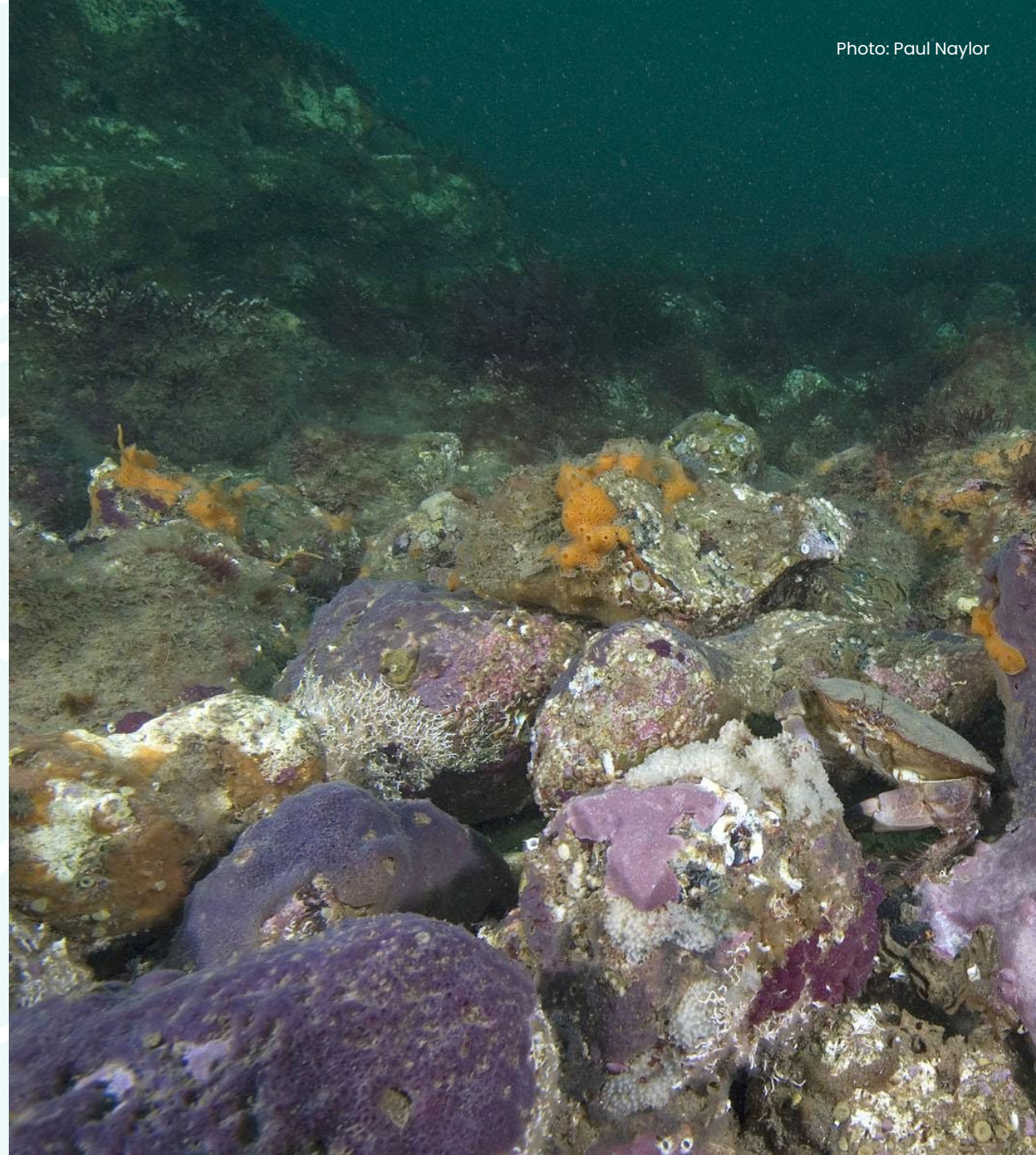
Wildlife in the MCZ



Parpal Dumplin

In 2011 some Seasearch divers noticed a purple sponge and with the help of scientists they realised it was new to science! It is the only place in the world where it is known to live.

In 2021 a competition was organised that a local schoolgirl won. She named it Parpal Dumplin because it's purple and looks a bit like a dumpling!



Threats to wildlife in the MCZ

Despite being hidden from view, the wildlife faces some threats.

The Marine Conservation Zone designation means that work is happening to protect the wildlife from these threats.

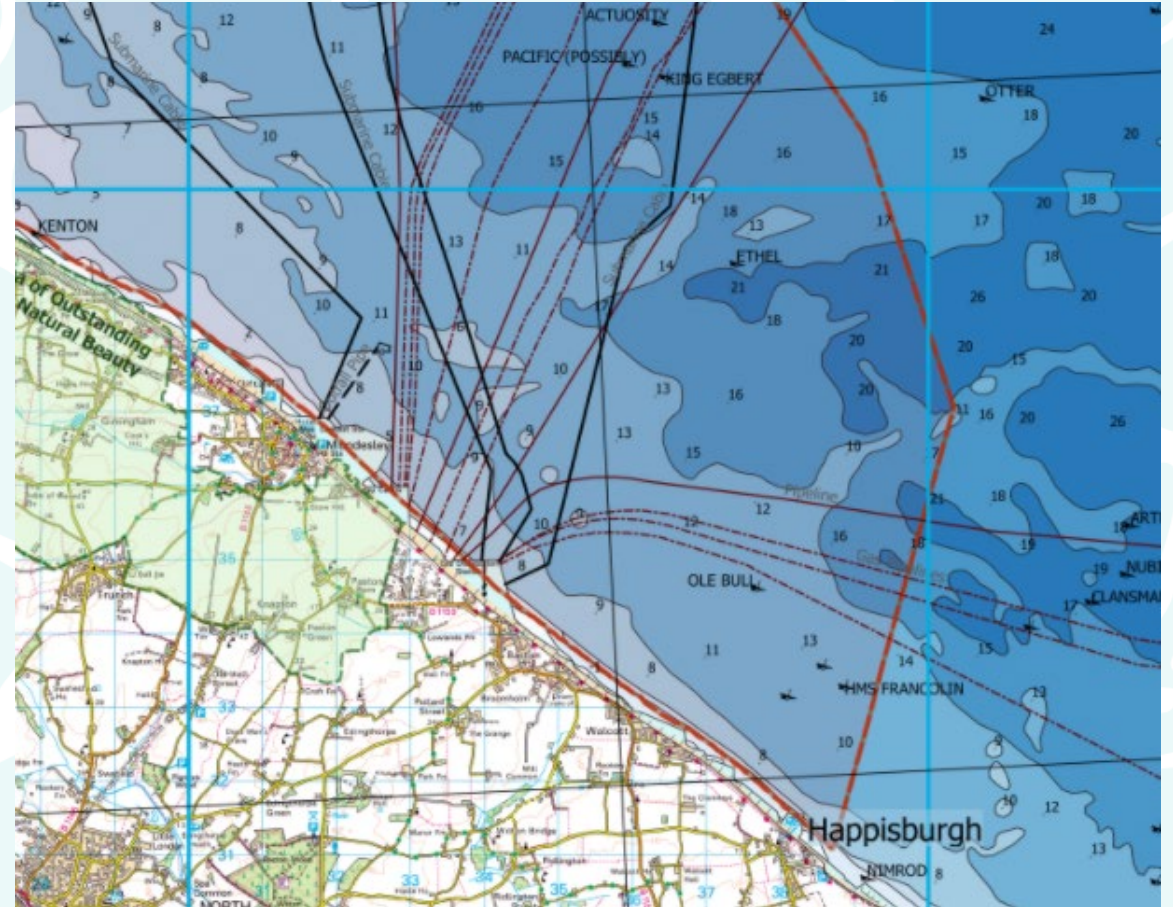
Threats include:

- Litter
- Wind farm development
- Fishing



Oil, gas and windfarm development

The MCZ designation means special permission needs to be granted for development within the area.



Beach cleans

Litter is sometimes dropped by visitors or fishing gear can get lost. This can cause a problems for wildlife, particularly with plastics.

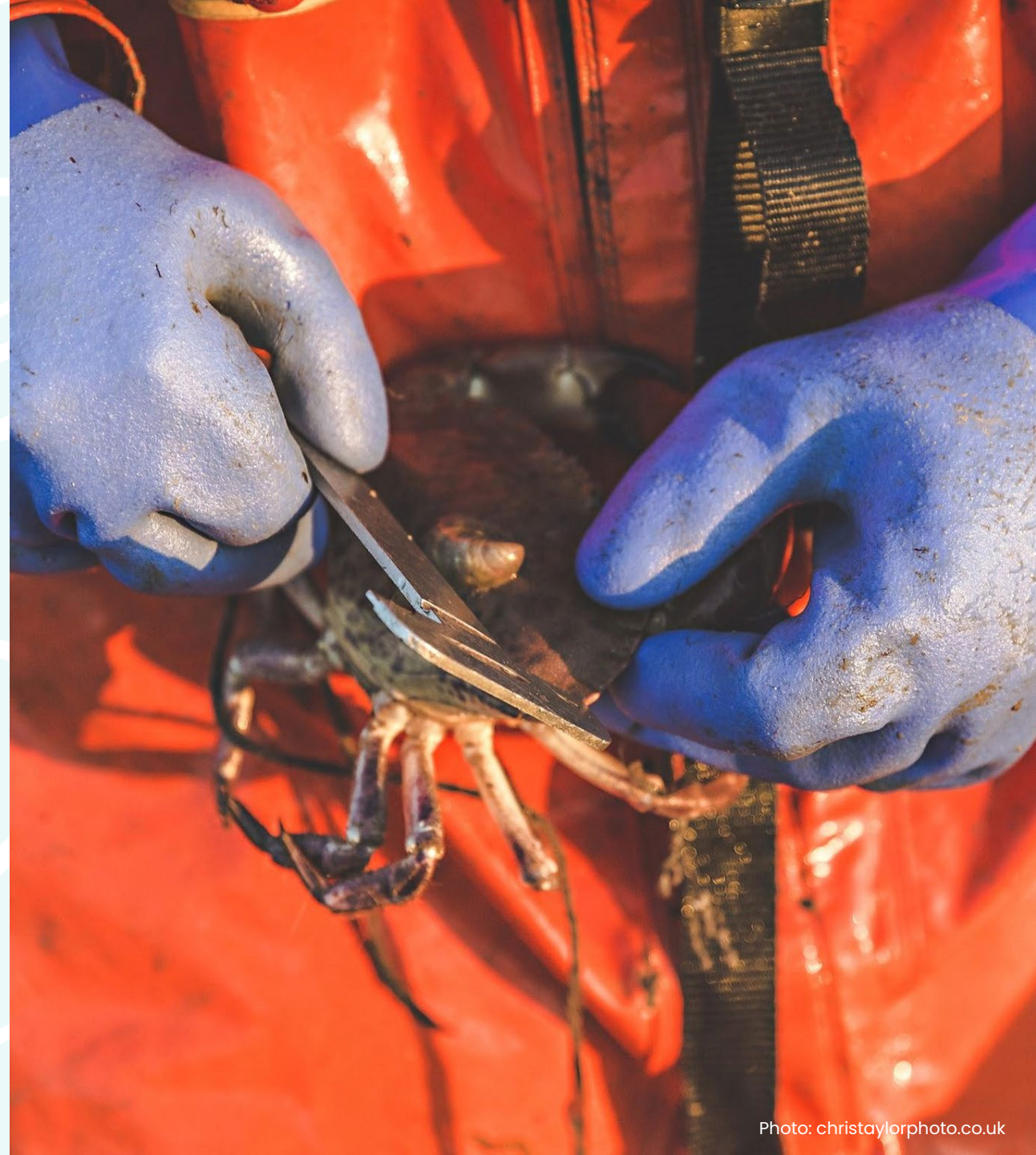
People volunteer at beach cleans to collect rubbish to keep it out of the sea.



Fishing

The fishers need to be careful that they don't harm the MCZ.

- They must not keep crabs that are too small.
- Crab numbers are monitored to make sure fishers aren't catching too many.
- There is guidance to lower the impact of the pots and ropes on the chalk and wildlife.



Amazing wildlife

There are lots of amazing creatures living in the Cromer Shoal Chalk Beds Marine Conservation Zone.

Threats to the wildlife that lives there are being monitored and new laws may be brought in to help the wildlife.



Herbivores, omnivores, or carnivores?



Photo: christaylorphoto.co.uk

Sea Bass

I eat shrimps, periwinkles, prawns, crabs and smaller fish.



Photo: Rob Coleman

Herring Gull

I eat eggs, starfish, crabs, fruit, grains and worms.



Common Starfish

I eat periwinkle, mussels, barnacles and limpets.



Limpet

I eat algae on rocks and young seaweed.



Photo: Rob Coleman

Seal

I eat fish, crabs, squid and octopus.



Photo: Rob Coleman

Prawn

I eat seaweed, carrion and small shrimp-like creatures.



Photo: Rob Coleman

Periwinkle

I eat algae on rocks and young seaweed.



Human

Herbivore



Limpet

I eat algae on rocks and young seaweed.



Photo: Rob Coleman

Periwinkle

I eat algae on rocks and young seaweed.

Omnivore



Photo: Rob Coleman

Herring Gull

I eat eggs, starfish, crabs, fruit, grains and worms.



Photo: Rob Coleman

Prawn

I eat seaweed, carrion and small shrimp-like creatures.



Human

Carnivore



Common Starfish

I eat periwinkle, mussels, barnacles and limpets.



Photo: christaylorphoto.co.uk

Sea Bass

I eat shrimps, periwinkles, prawns, crabs and smaller fish.



Photo: Rob Coleman

Seal

I eat fish, crabs, squid and octopus.



Photo: christaylorphoto.co.uk

Sea Bass

I get my energy from shrimps, periwinkles, prawns, crabs and smaller fish. I am eaten by seals and humans.



Seaweed

I get my energy from the sun. I am eaten by crabs, periwinkles, worms, prawns and shrimps.



Photo: Rob Coleman

Prawn

I get my energy from seaweed, carrion and small shrimp-like creatures. I am eaten by crabs, fish and sea anemones.



Photo: Rob Coleman

Seal

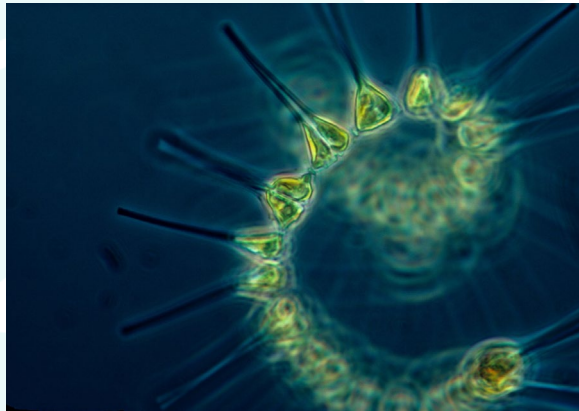
I get my energy from fish, crabs, squid and octopus. I don't have any predators.



Photo: Rob Coleman

Herring Gull

I get my energy from eggs, starfish, crabs, fruit, grains and worms. I do not have any predators.



Phytoplankton

I get my energy from the sun. I am eaten by barnacles and mussels.



Common Starfish

I get my energy from periwinkle, mussels, barnacles and limpets. I am eaten by crabs, seabirds and fish.



Mussels

I get my energy from plankton. I am eaten by humans, dog whelks, seabirds and starfish.



Human



Lobster

I get my energy from crabs, sea snails, sea urchins and starfish.
I am eaten by humans.



Algae

I get my energy from the sun.
I am eaten by limpets and periwinkles



Periwinkle

I get my energy from algae on rocks and young seaweed.
I am eaten by crabs, lobsters, seabirds and fish.



Seaweed

I get my energy from the sun. I am eaten by crabs, periwinkles, worms, prawns and shrimps.

Producer



Prawn

I get my energy from seaweed, carrion and small shrimp-like creatures. I am eaten by crabs, fish and sea anemones.

Herbivore



Sea Bass

I get my energy from shrimps, periwinkles, prawns, crabs and smaller fish. I am eaten by seals and humans.

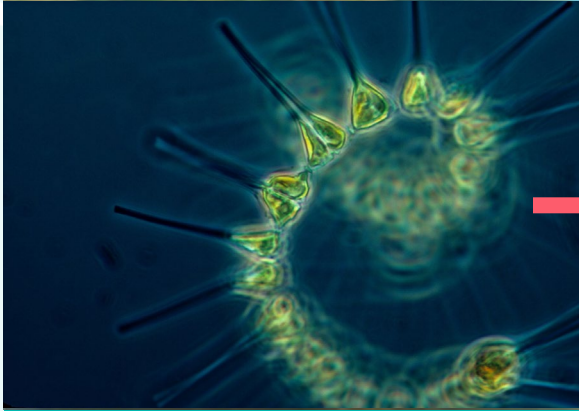
Carnivore



Seal

I get my energy from fish, crabs, squid and octopus. I don't have any predators.

Carnivore



Phytoplankton

I get my energy from the sun.
I am eaten by barnacles and mussels.

Producer



Mussels

I get my energy from plankton.
I am eaten by humans, dog whelks, seabirds and starfish.

Herbivore



Common Starfish

I get my energy from periwinkle, mussels, barnacles and limpets.
I am eaten by crabs, seabirds and fish.

Carnivore



Photo: Rob Coleman

Herring Gull

I get my energy from eggs, starfish, crabs, fruit, grains and worms. I do not have any predators.

Omnivore



Algae

I get my energy from the sun.
I am eaten by limpets and periwinkles



Periwinkle

I get my energy from algae on rocks and young seaweed.
I am eaten by crabs, lobsters, seabirds and fish.



Lobster

I get my energy from crabs, sea snails, sea urchins and starfish.
I am eaten by humans.



Human

Producer

Herbivore

Carnivore

Omnivore