

There are no prizes for guessing why this is called a blob fish! The blob fish doesn't move much. Instead, it sits and waits for its food to drift by.

BLOB FISH FACTS

SIZE: up to 30 cm across
HOME: deep waters off Australia
EATS: any small morsels that float by

Scientists don't know much about the blob fish – except that it's under threat. It's inedible, but trawlers net it while fishing for crabs and lobsters. It certainly doesn't look very cheerful, does it?

WEIRD OR WHAT?

The blob fish's jelly-like flesh is slightly lighter than water. That means the fish can float just above the seabed without using up any energy.

BLOB FISH



Rosy-Lipped Batfish

Look at this glamour puss! The rosy-lipped batfish isn't a good swimmer, but has modified fins that allow it to walk across the seabed. They make it look like it has legs!

WEIRD OR WHAT?

The batfish has a lure of frilly flesh on its forehead that tempts prey close enough to eat.



The fish's red 'lipstick' helps other rosy-lipped batfish recognize it at spawning time.

ROSY-LIPPED BATFISH FACTS

SIZE: up to 36 cm long
HOME: off Cocos Island, Costa Rica
EATS: small fish, crustaceans (shrimps, molluscs, crabs)

Frogfish

Frogfish live in warm, shallow seas. There are about 60 different species. Some blend in with the seabed and some with their colourful coral-reef surroundings.

WEIRD OR WHAT?

Some frogfish can change colour to match their surroundings.

Like batfish, frogfish have leg-like pectoral fins. They use these to crawl slowly across the seabed.



Most frogfish are bottom-dwellers. This shaggy-looking beast is a hairy frogfish! It feeds on flounders and other flatfish.

FROGFISH FACTS

SIZE: up to 30 cm long
HOME: tropical and subtropical waters worldwide
EATS: crustaceans, fish (including other frogfish)



New frogfish species are still being found. This one, the psychedelic frogfish, was discovered off the coast of Indonesia in 2008. Its pattern matches the stripy corals in which it lives.



STONEFISH

STONEFISH FACTS

SIZE: up to 35 cm long
HOME: shallow, tropical waters of the Indo-Pacific
EATS: small fish, shrimps

Is it a piece of weed-covered rock, or a fish? Stonefish are disguised to look like stones lying on the seabed. This camouflage hides them from prey and predators, such as bottom-feeding sharks and rays.



Stonefish have another defence, too – a row of needle-like spines on their back that can inject deadly venom.

WEIRD OR WHAT?

Stonefish venom can kill a person within two hours – unless he or she is treated in time with antivenin.

This fish isn't called 'sarcastic' because it makes harsh remarks. Sarcastic originally meant 'tearing of flesh'. Sarcastic fringeheads are certainly very aggressive. They defend their territory from other fringeheads by tussling with their mouths.

SARCASTIC FRINGEHEAD FACTS

SIZE: up to 30 cm long (usually around 15 cm)
HOME: off the Pacific coast of the USA
EATS: small crustaceans

SARCASTIC FRINGEHEAD

WEIRD OR WHAT?

If it can't find a rocky crevice, a sarcastic fringehead may set up home in an empty snail shell or even an old bottle!

The fringehead squashes itself into a crevice but pops out to ambush prey. The hidey-hole also protects its scaleless body.



JAWFISH



Jawfish have outsize jaws. Like sarcastic fringeheads, they fight each other in mouth-wrestling competitions.

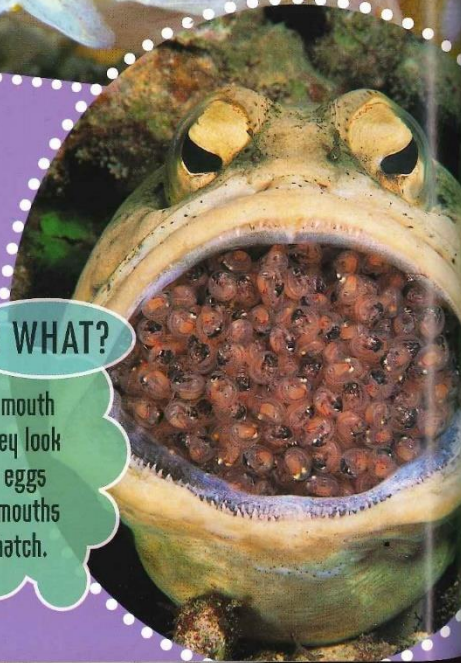
JAWFISH FACTS

SIZE: usually less than 10 cm long
HOME: Atlantic, Indian and Pacific oceans
EATS: small invertebrates

The jawfish also tunnels with its mouth. It scoops up a mouthful of sand and transports it elsewhere, gradually hollowing out a home.

WEIRD OR WHAT?

Jawfish are mouth brooders. They look after their eggs inside their mouths until they hatch.



Leafy Sea Dragon

Now you see it; now you don't. The leafy sea dragon is named for the flaps of skin all over its body that look just like seaweed. They provide brilliant camouflage!

WEIRD OR WHAT?

Female sea dragons lay their eggs in a pouch on the male's tail. He looks after them until they hatch.



LEAFY SEA DRAGON FACTS

SIZE: up to 24 cm long
HOME: off the coast of Australia
EATS: shrimps, sea lice, fish fry

Sea dragons are relatives of sea horses. They have a mouth like a drinking straw for sucking up tiny shrimps.

LIONFISH

Lionfish live in coral reefs. They're named for their impressive 'mane' of stripy spines.

LIONFISH FACTS

SIZE: around 30 cm long

HOME: the Pacific Ocean, but they've recently spread to the Caribbean and Mediterranean

EATS: small fish, crustaceans

WEIRD OR WHAT?

Lionfish are pests in parts of the Caribbean. They prey on native fish and have no natural predators. Fishermen who catch them and hand them in are paid a reward!

Lionfish sometimes herd their fish or shrimp prey into a corner before tucking in.



These spines may look pretty, but they're very dangerous. Each one is coated in venomous mucus. You wouldn't want to step on one of these while swimming!



PARROTFISH

Parrotfish change colour at different stages in their development. Most parrotfish start out female and later change into males. Imagine that!



This fish has a beak like a parrot, but it can't talk! Parrotfish use their beaks to scrape algae off rocks and corals.

PARROTFISH FACTS

SIZE: usually 30-50 cm long (but some species top 1 m)

HOME: tropical and subtropical shallows worldwide

EATS: algae, coral polyps

WEIRD OR WHAT?

Some parrotfish wear pajamas! At night they wrap up their body in a coating of mucus. Scientists think it makes them more difficult for eels and other hunters to sniff out.



PUFFERFISH

BEFORE

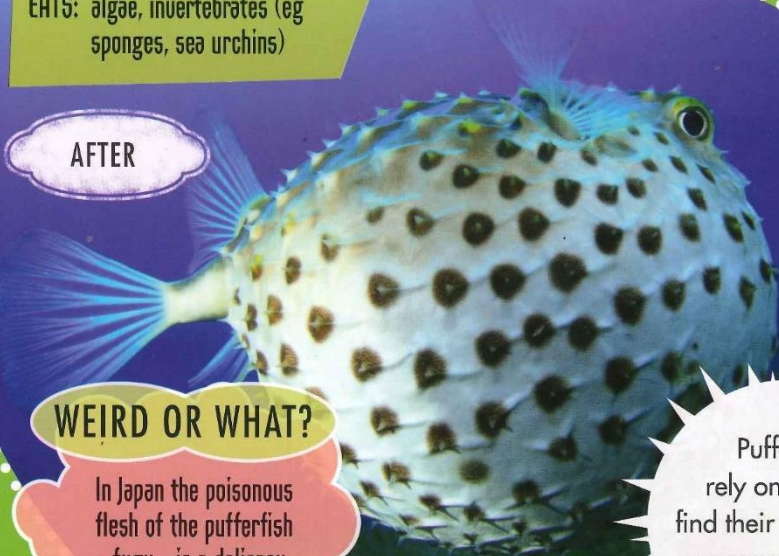


Pufferfish can puff up like a balloon. This defence makes them too much of a mouthful for most predators – especially since many species are covered in prickles. They're poisonous, too!

PUFFERFISH FACTS

SIZE: up to 90 cm long (but the smallest species is just 2.5 cm)
HOME: usually tropical waters
EATS: algae, invertebrates (eg sponges, sea urchins)

AFTER



WEIRD OR WHAT?

In Japan the poisonous flesh of the pufferfish - fugu - is a delicacy. Only trained chefs can prepare it.

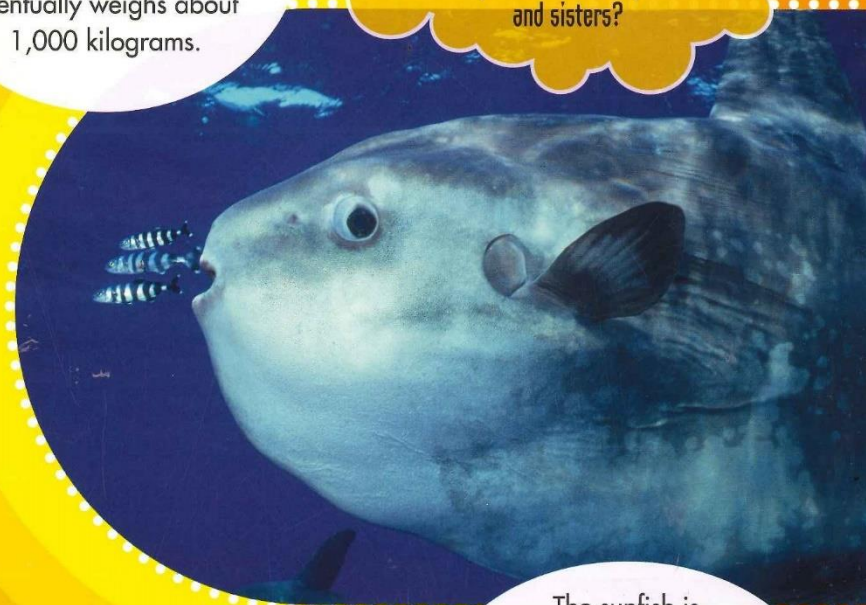
Pufferfish rely on sight to find their food. They can move each eye independently.

OCEAN SUNFISH

WEIRD OR WHAT?

The ocean sunfish is no beauty, but it is the world's heaviest bony fish. It starts life measuring just a millimetre or so, but eventually weighs about 1,000 kilograms.

Ocean sunfish females produce more eggs than any other vertebrate - as many as 300 million at a time! How would you like that many brothers and sisters?



OCEAN SUNFISH FACTS

SIZE: usually up to 1.5 m
HOME: open ocean, tropical to temperate waters
EATS: jellyfish, fish, crustaceans

The sunfish is named for its habit of 'sunbathing' at the surface. It may do this to encourage seagulls, which land and pick off parasites!

OARFISH

The four species of oarfish are true 'monsters of the deep'. This giant oarfish is the world's longest bony fish. It usually grows to about 9 metres, but there are reports of sightings of fish as long as 17 metres.

WEIRD OR WHAT?

Myths about sea serpents might be based on sightings of oarfish.



OARFISH FACTS

Oarfish spend most of their time in deep water. They sometimes swim in an upright pose.

SIZE: usually 9 m long
HOME: deep waters of tropical and subtropical seas
EATS: zooplankton (eg tiny crustaceans), jellyfish, squid, small fish

PELICAN EEL

PELICAN EEL FACTS

The pelican eel is a deep-sea weirdo. It's named for its elastic mouth, which resembles a pelican bird's stretchy throat.

SIZE: about 1 m long
HOME: deep waters of tropical and subtropical seas
EATS: small crustaceans



WEIRD OR WHAT?

The pelican eel produces red flashing lights from its tail, probably to attract prey in the gloomy deep where it lives.

The fish's gaping mouth is about 25 centimetres long. The rest of its body is snake-like.

Most fish soon die if they are taken out of the water – but not the mudskipper. It can breathe on land as well as under water.

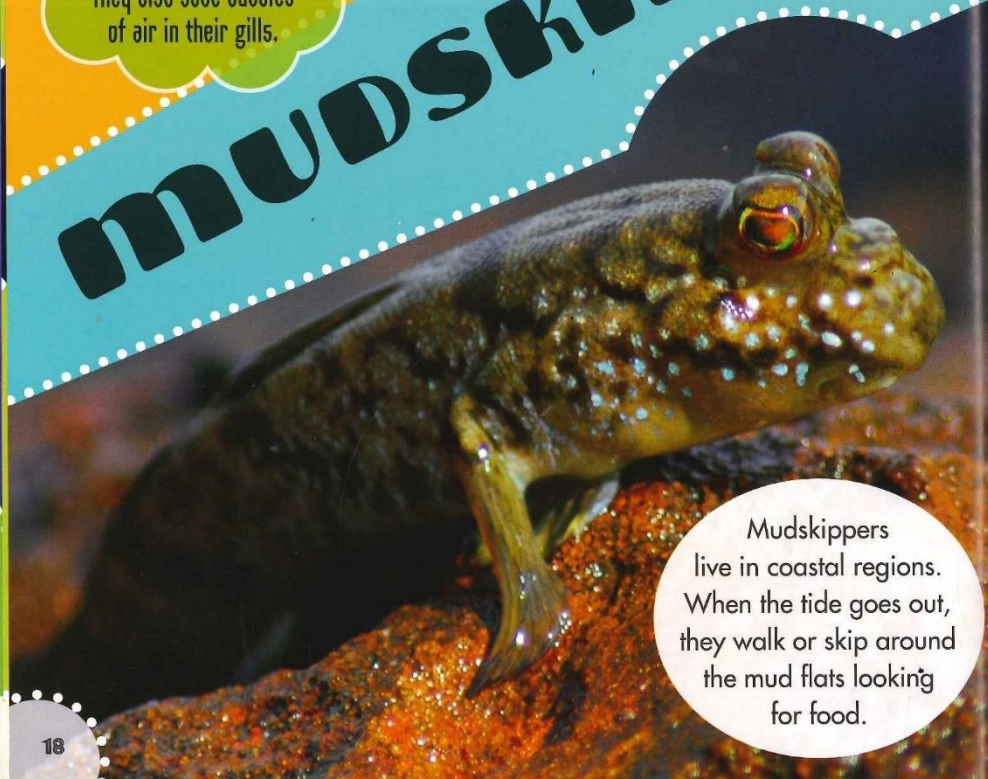
WEIRD OR WHAT?

Mudskippers take in oxygen from the air through their skin. They also save bubbles of air in their gills.

MUDSKIPPER FACTS

SIZE: up to 30 cm long
HOME: tropical swamps and estuaries around the Indo-Pacific
EATS: small crustaceans

MUDSKIPPER



Mudskippers live in coastal regions. When the tide goes out, they walk or skip around the mud flats looking for food.

WEIRD OR WHAT?

Coelacanth eggs develop inside the mother's body, perhaps for as long as three years. Then the mother gives birth to about five well-developed young.

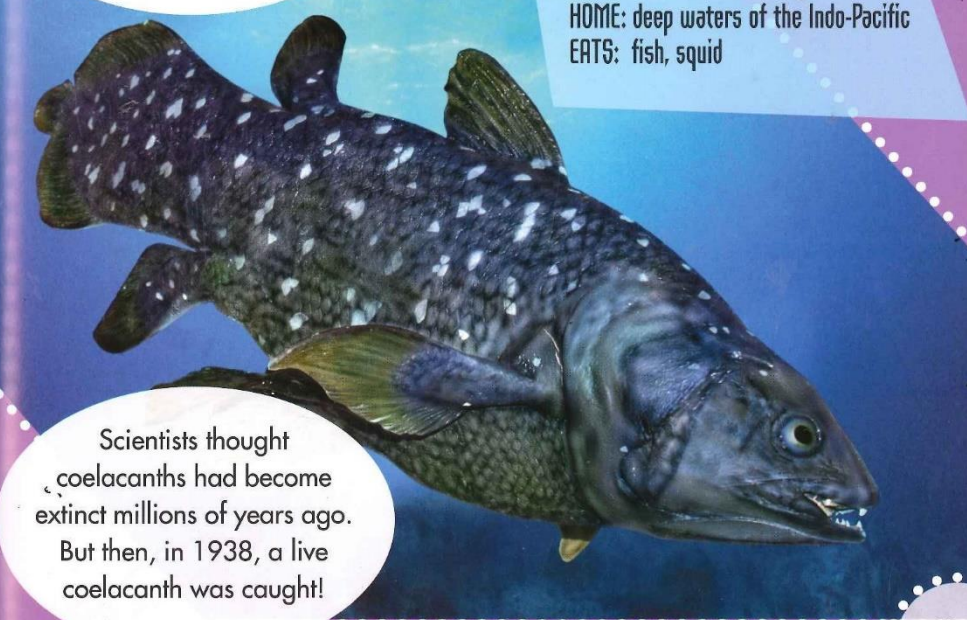


COELACANTH

For a long time scientists only knew about the coelacanth from fossils. This fossil from Germany is 150 million years old.

COELACANTH FACTS

SIZE: around 150 cm long
HOME: deep waters of the Indo-Pacific
EATS: fish, squid



Scientists thought coelacanths had become extinct millions of years ago. But then, in 1938, a live coelacanth was caught!

SWORDFISH, MARLIN AND SAILFISH

Marlins, swordfish and sailfish are three of the fastest hunters in the ocean. They can power through the water at speeds of about 110 kilometres per hour.

WEIRD OR WHAT?

The sailfish can change colour depending on its mood.

sailfish

This sailfish is feeding on sardines.

SAILFISH FACTS

SIZE: up to 3.5 m
HOME: warm and temperate waters worldwide
EATS: fish

swordfish

These fish hunt by sight. Marlins and swordfish even have a special organ next to their eyes that heats their eyes and brain, helping them to see better.

SWORDFISH FACTS

SIZE: up to 4.5 m
HOME: warm and temperate waters worldwide
EATS: squid, fish

Game fishermen like the challenge of trying to catch marlins. Luckily, this one seems to have got away!

marlin

MARLIN FACTS

SIZE: up to 6 m
HOME: warm and temperate waters worldwide
EATS: fish

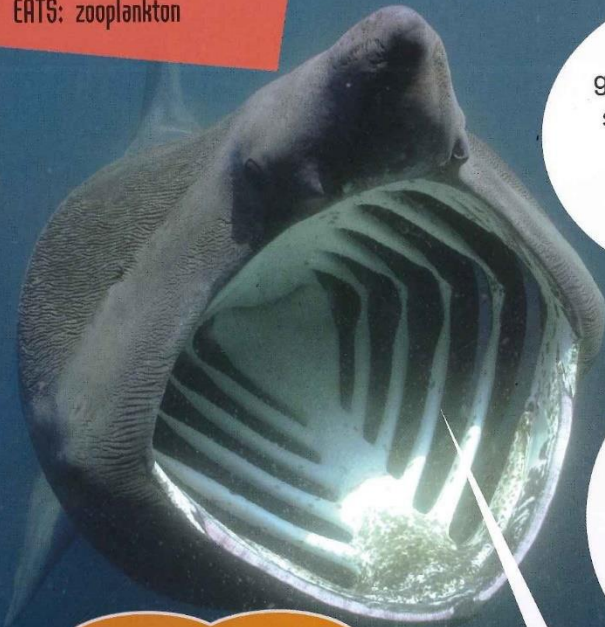
BASKING SHARK

BASKING SHARK FACTS

SIZE: up to 14 m long

HOME: temperate waters of the Atlantic, Pacific and Indian oceans

EATS: zooplankton



With its gigantic, gaping mouth, the basking shark is a terrifying sight! However, this shark is a gentle giant, feeding on tiny zooplankton.

The basking shark is a filter feeder. When it closes its mouth, it forces water out through its gills. The gill rakers sieve out any plankton prey.

WEIRD OR WHAT?

Only one other fish is larger than the basking shark - the whale shark.

gill raker

HAMMERHEAD SHARK

Hammerheads have to be the strangest-looking sharks!

HAMMERHEAD SHARK FACTS

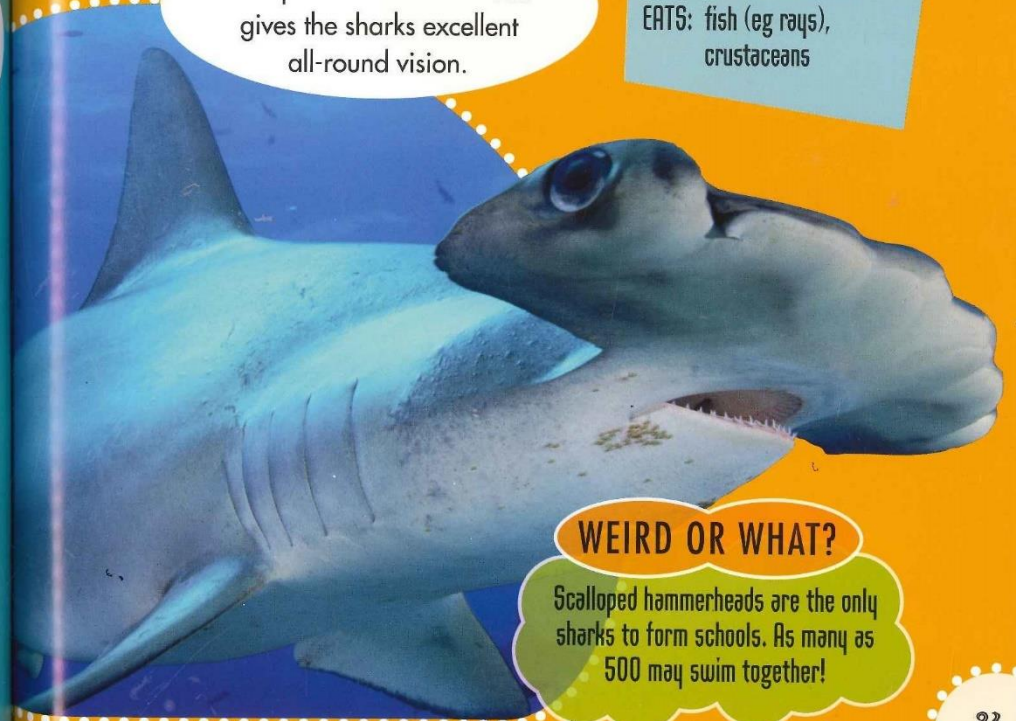
SIZE: 90 cm-6 m

depending on species

HOME: temperate and tropical waters worldwide

EATS: fish (eg rays), crustaceans

Having their eyes at the tips of the hammerhead gives the sharks excellent all-round vision.



WEIRD OR WHAT?

Scalloped hammerheads are the only sharks to form schools. As many as 500 may swim together!

ARCHER FISH

No fish can match the archer fish at target practice!

WEIRD OR WHAT?

The archer fish can hit prey from a distance of 1.5 metres.

When the fish spots a creepy-crawly on an overhanging plant, it shoots a jet of 'spit' at it. Gotcha! The prey falls into the water and is gobbled up by the fish.

ARCHER FISH FACTS

SIZE: 5-10 cm (but one species grows up to 40 cm long)
HOME: fresh and coastal waters around the Indo Pacific
EATS: insects, spiders



FLYING FISH

Is it a bird or a fish? Flying fish have a neat trick for escaping marine predators – they leave the water! Swimming at top speed, the fish can break through the surface and glide through the air.



FLYING FISH FACTS

SIZE: up to 45 cm long
HOME: tropical and subtropical waters worldwide
EATS: plankton

WEIRD OR WHAT?

A flying fish can cover a distance of 180 m in a single glide.

The fish glide on stiff, outstretched pectoral fins. Their average gliding speed is about 16 kilometres per hour.

CLEANER WRASSE

Fish can't brush their teeth, like you can. Instead, they use cleaner wrasse. Cleaner wrasse are the refuse collectors of the coral reef.

WEIRD OR WHAT?

A cleaner wrasse may clean around 50 fish an hour.

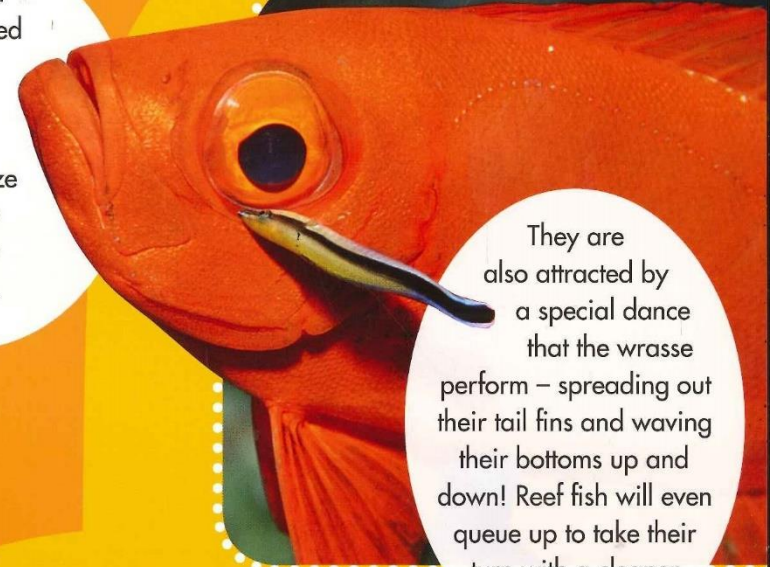
Look closely inside this grey reef shark's mouth – a fearless cleaner wrasse is cleaning its teeth!



CLEANER WRASSE FACTS

SIZE: up to 20 cm long
HOME: tropical reefs
EATS: parasites, dead skin

Cleaner wrasse feed on parasites and dead skin. Fish that need cleaning recognize the wrasse by their stripy bodies.



They are also attracted by a special dance that the wrasse perform – spreading out their tail fins and waving their bottoms up and down! Reef fish will even queue up to take their turn with a cleaner wrasse.



This moray eel is at a wrasse 'cleaning station'. Three wrasse and two cleaner shrimps are giving its skin a spring clean.

FANGTOOTH

This fish looks like a monster from outer space! The fangtooth is one of the fiercest-looking fish in the ocean, thanks to its long, needle-sharp teeth. It lives in the deepest parts of the ocean.



WEIRD OR WHAT?

When it shuts its mouth, the fangtooth houses its longest lower fangs in two special sockets on either side of its brain.

FANGTOOTH FACTS

SIZE: up to 16 cm
HOME: deep waters worldwide
EATS: anything that passes by

This fangtooth baby, or larva, has protective spines to put off predators.



ANGLERFISH

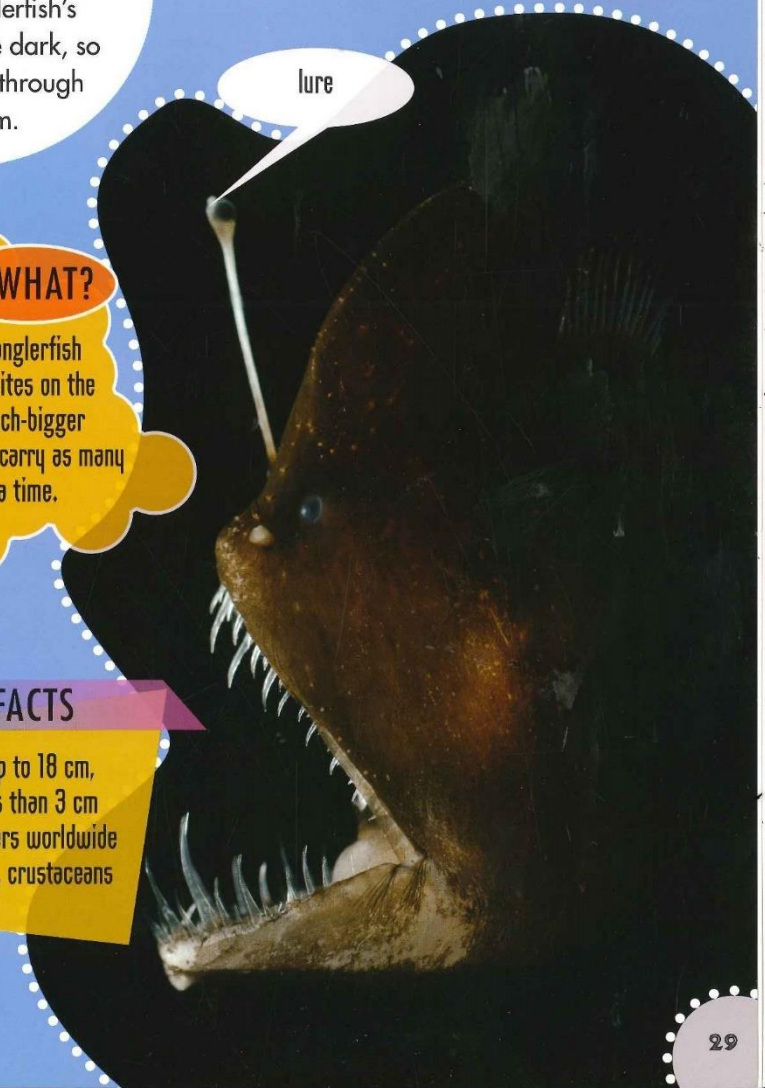
All anglerfish have a lure that dangles above their face, tempting prey to come near. The deep-sea anglerfish's lure glows in the dark, so it can be seen through the gloom.

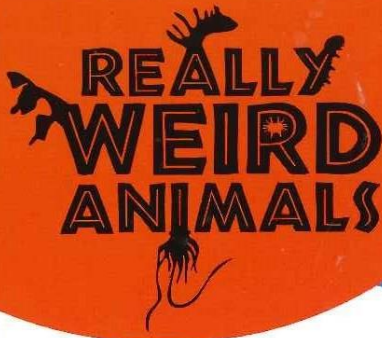
WEIRD OR WHAT?

Some male anglerfish live like parasites on the body of a much-bigger female. She may carry as many as six at a time.

ANGLERFISH FACTS

SIZE: females up to 18 cm, males less than 3 cm
HOME: deep waters worldwide
EATS: small fish, crustaceans





GLOSSARY

alga (plural algae) One of a group of living things that include seaweeds and some plankton.

antivenin A chemical that can stop the effects of venom, such as paralysis.

camouflage Colours or patterns that help an animal to blend in to the surrounding environment to avoid being seen by predators, prey or both.

coral A tiny marine animal related to sea anemones. Its soft body, known as a polyp, has a circle of tentacles.

crustacean An animal with two-parted legs and a segmented body covered by a hard outer skeleton (an exoskeleton). Crabs and shrimps are crustaceans.

fry Newly-hatched fish.

gill The organ that allows fish and some other underwater animals to breathe.

inedible Describes something that cannot be eaten or is not good to eat.

invertebrate An animal that has no backbone. Some invertebrates, such as crabs, protect their bodies with a hard outer skeleton, called an exoskeleton. Others, such as jellyfish, have soft bodies.

lure Something that is used to tempt – for example to bring prey animals near.

modified Altered or changed.

mollusc A soft-bodied animal with no backbone and, often, a shell. Snails and mussels are molluscs.

mucus A slimy substance that an animal secretes.

parasite A living thing that does not produce or find its own food, but instead lives on a host that it relies on for food.

pectoral fin One of the pair of fins on either side of a fish's head.

plankton Microscopic plants, algae and animals that float in the oceans. Animal plankton is known as zooplankton.

predator An animal that hunts and kills other animals for food.

prey An animal that is hunted and killed by another animal for food.

reef A stony structure that forms in warm, shallow waters, built from the old exoskeletons of tiny corals.

spawning Laying eggs.

species One particular type of living thing. Members of the same species look similar and can reproduce together in the wild.

subtropical Describes the regions of the earth that lie between tropical and temperate areas.

temperate Describes the two regions of the earth that lie between the tropics and the poles, where the climate is warm in summer and cool in winter.

tentacle A slender, flexible organ used to sense, grab or move around.

territory The area that an animal defends against other animals, usually of the same species.

trawler A fishing boat that catches fish and other sea creatures by dragging a net over the seabed.

tropical Describes the warm part of the world near to the equator (the imaginary line that circles the middle of the earth).

venom A chemical that is injected into another animal to paralyze it.

vertebrate An animal that has a backbone.