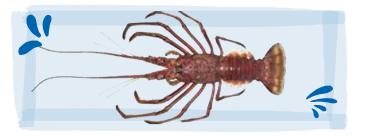


FISHERY FACTSHEET: WESTERN AUSTRALIA ROCK LOBSTER

Teacher resources - Activities



WA Rock Lobster Fishery Factsheet



The Western Rock Lobster industry is an iconic fishery that is based along Western Australia's coast between Shark Bay and Cape Leeuwin. It was the world's first fishery to be certified as sustainable by the Marine Stewardship Council (MSC) in 2000. Western Australia rock lobster is the most valuable single-species fishery in Australia. Exported to China and sold domestically in Australia.

Western Rock Lobster (Panulirus Cygnus)

Classification: Decapod family

Size: 70-90mm at maturity (up to 200mm at maximum), weighing up to 5kg

Diet: Coralline algae, detritus (dead and dying marine matter), molluscs and crustaceans

Eaten by: Large fish species and octopus. Lobsters can regrow legs and antennae lost as a result of skirmishes with predators.

Habitat: Juveniles live in shallow inshore reefs (up to 40m depth) and adults live in deep water habitats including coral reefs (up to 80m depth).

Markings: The Western Rock Lobster is identifiable by a single white dot on the outside edge of each tail segment.

Where do Rock Lobsters live?

Western Rock Lobsters are a temperate species, found on the continental shelf off the Southern coast of Western Australia.



J F M A M J J A S O N D

The Fishery

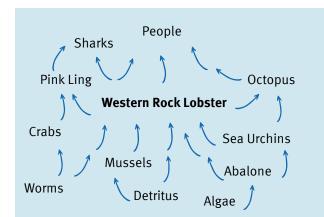
The Western Australia Rock Lobster Fishery is made up of around 250 commercial fishing boats, which operate under a quota management system. This means that commercial fishers have an allocated number of lobsters that they are allowed to catch during the lobster fishing season, which runs all year round.

Family & lifecycle

The Western Rock Lobster typically live for 15 to 20 years. They mate in Winter and Spring, after which females carry eggs on the fine hairs beneath the tail. The eggs hatch in 4 to 8 weeks, releasing tiny larvae which drift offshore and grow in a series of moults. A lucky few will be carried close enough to the onshore reefs to settle. Many however will not make it, or will be eaten by predators along the way. The juvenile lives for 3 to 4 years on inshore reefs, after which they will moult their shells and turn a creamy white or pink colour, a colour which they will keep for a few months as they migrate into deeper waters. Lobsters trek in large groups in the night, until they resettle and return to their normal red colour.

See this <u>WA Rock Lobster Lifecycle</u> poster from Marine Waters for more detail.

Western Rock Lobster food chain





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Environmental impact

The Western Australia Rock Lobster is caught using **baited pots and traps**. These are fitted with special Sea Lion Excluder Devices (SLEDs) which block access to juvenile sea lions while still allowing lobsters to be caught.



Hauling in a rock lobster pot

There are strict controls in place such as a minimum size requirement for lobsters caught and a **ban on catching breeding females**.

Scientific data on the Western Australian lobsters has been recorded since the 1960s. and migrating lobsters are tracked through tagging programs. This enables scientists to predict catches accurately and measure the growth, migration and mortality of lobsters. This scientific data helps fishers to ensure that they maintain a sustainable population of lobsters. for today and for the future.

The Western Australia Rock Lobster Fishery was the first in the world to achieve MSC certification, demonstrating its exceptional sustainability.

You can also read how science data is used to monitor, assess and manage the WA Rock Lobster fishery.

Markets

The Western Australia Rock Lobster Fishery is a highly valuable fishery, with more than 95 percent of the commercially caught lobster sold directly to China. This crustacean is highly prized, and can sell for over \$100 per kilogram. It is popularly eaten grilled with garlic butter, barbecued with lemon or steamed.

Rock lobster fishing is also a popular recreational activity in Western Australia. Fishers require a license and must follow strict size requirements and catch limits of 8 rock lobsters per licensed fisher per day.

The MSC Fisheries Standard m

The MSC Fisheries Standard is designed to assess if a fishery is well-managed and sustainable. To meet this standard, fisheries must demonstrate that they meet three principles:

1. Sustainable fish stocks

The fishing activity must be at a level which ensures that it can continue indefinitely.

2. Minimising environmental impact

Fishing operations should allow for the maintenance and diversity of the ecosystem.

3. Effective management

The fishery must comply with relevant national and international laws and have a management system that is responsive to changing circumstances.

Today, over 15% of the global fishing catch worldwide is MSC certified

Credits - Lobster Management profile by Department of Primary Industries and Resources



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WA Rock Lobster Quiz (Beginner)

How well did you read?

a. // b. // c. //	earance: The Western Rock Lobster is identifiable by A black stripe on it's head Blue-coloured eyes A white dot on it's tail A yellow belly
a. b. c.	itat and Distribution: Rock Lobsters live in Mangroves Inshore and coral reefs Estuaries Seagrass meadows
(3) Life cycle: When a juvenile lobster moults their shell they turn a or colour	
a.	cycle: Lobsters travel in groups during the Day Night
a. b. c.	d web: of Rock Lobsters include sharks and octopuses. Parents Prey Predators Producers
a. b. c.	ing method: Rock Lobsters are caught by Purse Seining Long lining Pots and traps Bottom Trawling
a. b. c.	ery Management: Scientific data is used by lobster fisheries to Track lobster migrations Predict and measure lobster catches Maintain a sustainable lobster population All of the above
a. <i>b</i> . c. 0	Western Australian Rock Lobster is mainly sold to which country? America Indonesia Queensland China



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WA Rock Lobster Quiz (Advanced)

How well did you read?

- (1) What is the Scientific name for the WA Rock Lobster?
- (2) What family of marine creatures does the WA Rock Lobster belong to?
- (3) How fast to WA Rock Lobsters grow, and how long do they live for?
- (4) Where in Australia is the WA Rock Lobster found?
- (5) How does the WA Rock Lobster reproduce?
- (6) What does the WA Rock Lobster eat?
- (7) What fishing method is used to catch the WA Rock Lobster?
- (8) How do fishers and scientists manage the sustainability of WA Rock Lobster populations?
- (9) Why is the WA Rock Lobster a special fishery for the Marine Stewardship Council (MSC)?
- (10) Where is the WA Rock Lobster mainly sold?





WA Rock Lobster Quiz Answers

Beginner

- (1) C
- (2) B
- (3) White/Cream or Pink
- (4) Night
- (5) C
- (6) C
- (7) D
- (8) D

Advanced

(1) What is the Scientific name for the WA Rock Lobster? Panulirus Cygnus

(2) What family of marine creatures does the WA Rock Lobster belong to? Decapod

(3) How fast to WA Rock Lobsters grow, and how long do they live for? Decapod juveniles for 3-4 years, and then they moult and become adults. They live for 15-20 years.

(4) Where in Australia is the WA Rock Lobster found? The continental shelf off the Southern Coast of Western Australia

(5) How does the WA Rock Lobster reproduce? They mate in Winter and Spring, after which females carry eggs on the fine hairs beneath the tail. The eggs hatch in 4 to 8 weeks, releasing tiny larvae which drift offshore and grow in a series of moults.

(6) What does the WA Rock Lobster eat? Mussels, Sea Urchins, Abalone, Worms, Detritus

(7) What fishing method is used to catch the WA Rock Lobster? Baited pots and traps

(8) How do fishers and scientists manage the sustainability of WA Rock Lobster populations? Minimum size requirements for lobsters caught, a ban on catching breeding females, using scientific data to track lobster growth, migration and mortality.

(9) Why is the WA Rock Lobster a special fishery for the Marine Stewardship Council (MSC)? It was the first fishery in the world to achieve the MSC certification for sustainable fishing.

(10) What is the main commercial market for the WA Rock Lobster? 95% of the commercial WA Rock Lobster caught is sold to China



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