

# PAPUA NEW GUINEA

## FISHERIES REGULATIONS

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The Coastal Fisheries Management and Development Project  
is funded by the PNG government through a concessionary loan  
by the Asian Development Bank



# PAPUA NEW GUINEA

## FISHERIES REGULATIONS 2005

produced by  
the Coastal Fisheries Management  
and Development Project  
and  
the Secretariat of the Pacific Community,  
Fisheries Information Section



SPC  
Secretariat  
of the Pacific  
Community

for  
the Papua New Guinea  
National Fisheries Authority



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Secretariat of the Pacific Community Cataloguing-in-publication data

Papua New Guinea fisheries regulations 2005 / produced by the Coastal Fisheries Management and Development Project and the Secretariat of the Pacific Community, Fisheries Information Section

1. Fisheries - Regulations – Papua New Guinea - Handbooks, manuals, etc.
2. Fishes – Size – Papua New Guinea - Handbooks, manuals, etc.
3. Invertebrates – Size – Papua New Guinea - Handbooks, manuals, etc.

I. Title

II. Coastal Fisheries Management and Development Project

III. Secretariat of the Pacific Community, Fisheries Information Section

639.209

AACR2

ISBN 982-00-0133-1

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Graphics of *Actinopyga lecanora*, *Trochus niloticus* and *Turbo marmoratus* by Jipé LeBars, *Cheilinus undulatus* and *Cromi-leptes altivelis* by Les Hata, and *Lutjanus argentimaculatus*, *L. rivulatus* and *L. sebae* by Rachel O'Shea — all ©SPC.

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## About this booklet

The purpose of this booklet is to inform fishermen and women, and to remind buyers and exporters, about the size limits and regulations for catching fish and other marine resources in Papua New Guinea's nearshore waters.

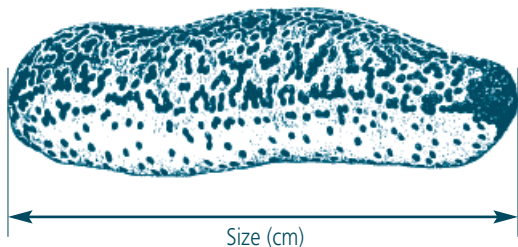
This is not a legal text. The full text of the Fisheries Management Act and Fisheries Management Plans are available on the National Fisheries Authority website at [www.fisheries.gov.pg](http://www.fisheries.gov.pg) or by writing to:

PNG National Fisheries Authority (NFA)  
P.O. Box 2016  
Port Moresby  
National Capital District  
Papua New Guinea  
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The information in this booklet is accurate as of the date of printing (November 2005).



# Sea cucumbers (beche-de-mer)



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Sea cucumbers are collected from the sea by hand and later processed as beche-de-mer (dried sea cucumber) for export, mainly to Asian markets. The increasing demand for beche-de-mer from Asia, and the over-collecting of sea cucumbers in some neighboring Pacific Island countries has caused NFA to introduce a tough management regime to control the harvest of this fishery in Papua New Guinea.

When sea cucumbers reproduce, the males release their sperm and the females release their eggs at the same time in the surrounding seawater. It takes many sea cucumbers gathering in the same place for the reproduction to be successful. In PNG, sea cucumbers reproduce from December to February. Most sea cucumbers are sexually mature (able to reproduce) when they are 2–3 years old, although some kinds of sea cucumbers mature in one year.



## Sea cucumber management regulations

Collecting sea cucumbers — and the production, trading and export of them — are guided by rules set under the National Beche-de-mer Fishery Management Plan.

### Size limits

- The size limits listed in the National Beche-de-mer Fishery Management Plan are showed on pages 4–7.

### Other important rules

- Closed season for harvesting sea cucumbers in a province is 1 October–15 January. The closed season may begin earlier if the total allowable catch<sup>1</sup> is reached before 1 October.
- The harvesting of all sedentary<sup>2</sup> animals, including sea cucumbers, at night using underwater lights and/or using scuba and hookah gear is prohibited.
- All exporters of beche-de-mer must have a license issued by the National Fisheries Authority. Licenses are restricted to nationally owned companies and there are limits on the number of licenses in each province. NFA can terminate licenses if the license holder breaks the Management Plan rules, regulations or Act.

1. Total allowable catch = NFA allows a certain amount of sea cucumbers to be harvested in a 12-month period before it closes the season. That amount is measured in tonnes. Each province has a different total allowable catch.
2. Sedentary animals are those that do not move or move very slowly. Examples of sedentary marine animals are pearl oysters, sea cucumbers, corals, and trochus.



# Sea cucumber size limits

## High value species

### Black teatfish

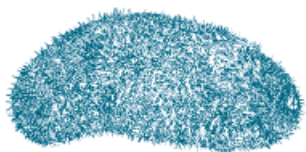
*Holothuria nobilis*



minimum size (live): 22 cm  
(dried): 10 cm

### Blackfish

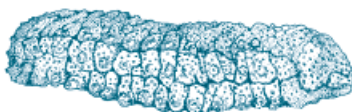
*Actinopyga miliaris*



minimum size (live): 15 cm  
(dried): 10 cm

### Curryfish

*Stichopus hermanni*



minimum size (live): 25 cm  
(dried): 10 cm

### Greenfish

*Stichopus chloronotus*



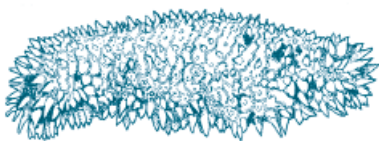
minimum size (live): 20 cm  
(dried): 10 cm





## Prickly redfish

*Thelenota ananas*



minimum size (live): 25 cm  
(dried): 15 cm

## Sandfish

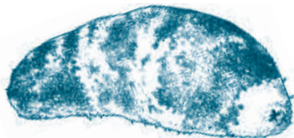
*Holothuria scabra*



minimum size (live): 22 cm  
(dried): 10 cm

## Stonefish

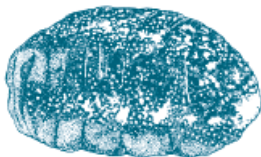
*Actinopyga lecanora*



minimum size (live): 15 cm  
(dried): 10 cm

## Surf redfish

*Actinopyga mauritiana*



minimum size (live): 20 cm  
(dried): 8 cm

## White teatfish

*Holothuria fuscogilva*



minimum size (live): 35 cm  
(dried): 15 cm

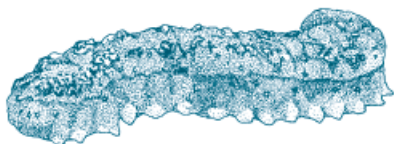


# Sea cucumber size limits

## Low value species<sup>1</sup>

### Amberfish

*Thelenota anax*



minimum size (live): 20 cm  
(dried): 10 cm

### Brown sandfish

*Bohadschia vitiensis*



minimum size (live): 20 cm  
(dried): 10 cm

### Chalkfish

*Bohadschia similis*



minimum size (live): 25 cm  
(dried): 7 cm

### Deep-water redfish

*Actinopyga echinites*



minimum size (live): 25 cm  
(dried): 15 cm



## Elephant trunkfish

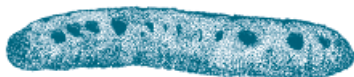
*Holothuria fuscopunctata*



minimum size (live): 45 cm  
(dried): 15 cm

## Lollyfish

*Holothuria atra*



minimum size (live): 30 cm  
(dried): 15 cm

## Pinkfish

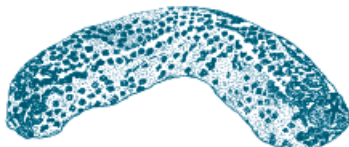
*Holothuria edulis*



minimum size (live): 25 cm  
(dried): 10 cm

## Tigerfish

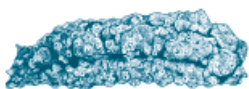
*Bohadschia argus*



minimum size (live): 20 cm  
(dried): 10 cm

- 
1. There are three more low value species for which no size limits have yet been set:

### Dragonfish (*Stichopus horrens*)



### Flowerfish

(*Pearsonothuria graeffei*)



### Snakefish (*Holothuria coluber*)



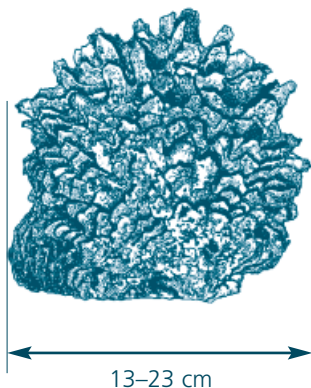
# Pearl oysters

## (black-lip and gold-lip)

*Pinctada margaritifera* and *Pinctada maxima*



Black-lip pearl oyster  
*Pinctada margaritifera*



Gold-lip pearl oyster  
*Pinctada maxima*

In traditional times, pearl oysters were collected for their shells, which were made into jewellery and fishing lures. Nowadays, pearl oysters are cultured for their pearls. Pearl oysters live in lagoons, bays and sheltered reef areas to around 40 m depth, but are most abundant just below low-water. How fast they grow depends in part on the quality of the seawater in which they live.

Black-lip pearl oysters (*Pinctada margaritifera*) and gold-lip pearl oysters (*Pinctada maxima*) are sexually mature (able to reproduce) when they are about 2 years old. At this age the basal width of their shell is about 9 cm; gold-lip oysters are sexually mature when the basal width of their shell is 13 cm. Spawning usually happens several time a year, depending on the temperature of the seawater, but mainly happens from August to December.



## **Black-lip and gold-lip pearl oyster management regulations**

The fishing, trading and export of black-lip and gold-lip oyster shells are regulated through a notice of prohibition issued by the Chairman of the National Fisheries Board and published in the National Gazette number G57 (4 April 2002).

### **Size limits**

- Black-lip pearl oyster shells with a basal width of less than 9 cm shall not be harvested and exported.
- Gold-lip pearl oyster shells with a basal width of less than 13 cm or more than 23 cm shall not be harvested and exported.

### **Other important rules**

- Harvesting of all sedentary<sup>1</sup> animals, including black-lip and gold-lip pearl oysters, at night using underwater lights and/or using scuba and hookah gear is prohibited.
- All commercial buyers need to have a license issued by the National Fisheries Authority. Licenses are restricted to nationally owned companies and there can be limits on the number of licenses in each province. NFA can terminate licenses if the license holders break these management rules.

1. Sedentary animals are those that do not move or move very slowly. Examples of sedentary marine animals are pearl oysters, sea cucumbers, corals, and trochus.



# Trochus

## *Trochus niloticus*



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Trochus are harvested for their valuable shells, which are mainly used to make buttons for clothing. Trochus are also eaten by some PNG people. Trochus are easy to collect by hand, but also easy to overharvest (take too many). This is why in PNG, trochus are protected.

When trochus reproduce, the males discharge their sperm and the females discharge their eggs at the same time in the surrounding seawater. A female trochus can produce up to 1 million eggs in one spawning. Eggs drift for 3 to 10 days. During this time they go through different stages of development. Out of the 1 million eggs produced by the female, less than 100 survive.

Trochus are sexually mature (able to reproduce) only when they reach a size of 6 cm (measurement taken across the base of the shell, see diagram). To give trochus a chance to reproduce at least once, PNG fishing regulations protect all trochus smaller than 8 cm across their shell. When they're 8 cm, they are approximately 3-4 years old. If we let trochus reach this size, then they will be around for many years and we will be able to earn cash from their valuable shells. PNG fishing regulations also protect all trochus larger than 12 cm; this is so the larger ones will continue to breed and produce more trochus.



## **Trochus management regulations**

The harvesting, trading and export of trochus shells are regulated through a notice of prohibition issued by the Chairman of the National Fisheries Board and published in the National Gazette number G57 (4 April 2002).

### **Size limits**

- All species of trochus with a basal width of less than 8 cm or more than 12 cm shall not be harvested and exported.

### **Other important rules**

- The harvesting of all sedentary<sup>1</sup> animals, including trochus, at night using underwater lights and/or using scuba and hookah gear is prohibited.
- All commercial buyers must have a license issued by the National Fisheries Authority. Licenses are restricted to nationally owned companies, and there are limits on the number of licenses given in each province. NFA can terminate licenses if the license holders break these management rules.

1. Sedentary animals are those that do not move or move very slowly. Examples of sedentary marine animals are pearl oysters, sea cucumbers, corals, and trochus.



# Green snail

*Turbo marmoratus*



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Green snail shells are used for decorative inlay work and to make buttons for high-quality shirts. Green snails are also eaten by some PNG people.

Green snails grow very slowly and are mature (able to reproduce) when their shell is about 15 cm across the opening (see diagram). At this size, they are 4 years old. To protect young green snails until they are able to reproduce, PNG's fisheries regulations forbid taking green snails that are less than 15 cm (note: NFA is considering a total ban on the taking of green snail). If we let green snails reach this size, then they will be around for many years and we will be able to earn cash from their valuable shell. PNG fishing regulations also protect all green snails that are larger than 20 cm; this is so that the larger ones will continue to breed and produce more green snails.

When green snails reproduce, the males release their sperm and the females release their eggs at the same time in the surrounding seawater. One female green snail can produce several million eggs during one spawning. After the eggs are released, they drift in the open ocean. During this time they go through different stages of development. Very few of the eggs that are released into the sea survive and are carried back to a reef.





## **Green snail management regulations**

The fishing, trading and export of green snail shells are regulated through a notice of prohibition issued by the Chairman of the National Fisheries Board and published in the National Gazette number G57 (4 April 2002).

### **Size limits**

- Green snails with a diameter of less than 15 cm or more than 20 cm shall not be harvested and exported.

### **Other important rules**

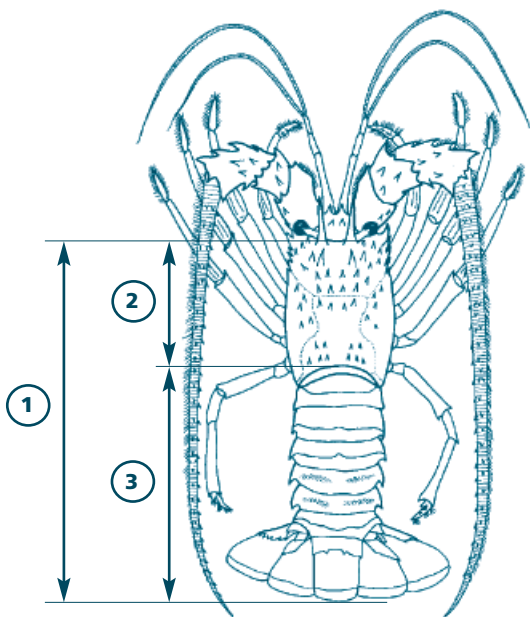
- The harvesting of all sedentary<sup>1</sup> animals, including green snails, at night using underwater lights and/or using scuba and hookah gear is prohibited.
- All commercial buyers must have a license issued by the National Fisheries Authority. Licenses are restricted to nationally owned companies and there can be limits on the number of licenses in each province. NFA can terminate licenses if the license holders break these management rules.

1. Sedentary animals are those that do not move or move very slowly. Examples of sedentary marine animals are pearl oysters, sea cucumbers, corals, and trochus.



# Lobsters

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1. total length (mid-section between the eyes to tail)
2. carapace length (mid-section between the eyes to base of carapace cover)
3. tail length

The main fishery for rock lobsters (*Panulirus ornatus*) in Papua New Guinea occurs on the reefs of the Torres Strait Protected Zone.

Lobsters reproduce year round, but mostly from October to February. After mating with a male, a female lobster carries the eggs for 3 to 4 weeks before releasing them in the open ocean. Eggs drift for 4–12 months while going through the different stages of development. Only a tiny number of the thousands of eggs that are released survive and are carried back to a reef.

By setting a minimum size limit, we protect young lobsters and give them a chance to reproduce several times before they are caught.



## Lobster management regulations

Fishing, trading and export of lobster are guided by rules set under the National Lobster Fishery Management Plan.

**Size limits** (see diagrams on pages 16–17)

- All species of rock lobster (painted lobster–*Panulirus versicolor*, long legged lobster–*P. longipes*, and scalloped lobster–*P. homarus*) with a tail length of less than 10.0 cm or a total length (midsection between the eyes to tail) of less than 17.5 cm shall not be harvested and exported.
- All species of rock lobster with a tail weight of less than 169 g or an overall weight of less than 409 g shall not be harvested and exported.
- The minimum tail length of the ornate rock lobster (*P. ornatus*) is 11.5 cm; *P. ornatus* less than this shall not be harvested and exported.
- The minimum carapace length (mid-section between the eyes to the base of the carapace cover) of slipper lobsters is 5.2 cm; slipper lobsters less than this shall not be harvested and exported.

### Restriction on egg-carrying females

- Berried (egg-bearing) female lobsters shall not be taken at any time of the month or year.

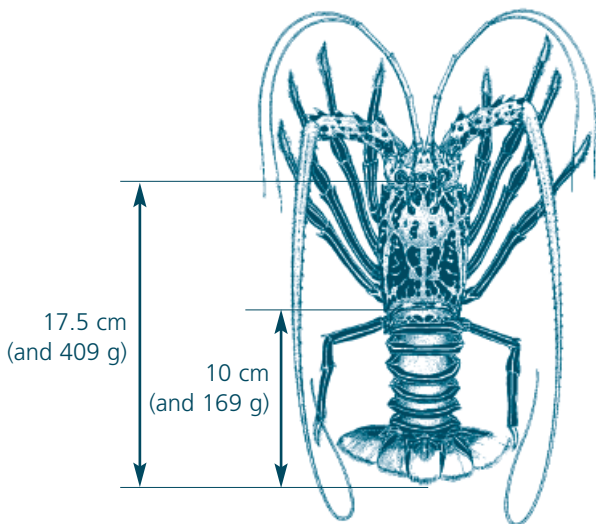
### Other important rules

- All commercial buyers must have a license issued by the National Fisheries Authority.
- Licenses are restricted to nationally owned companies and there are limits on the number of licenses in each province. NFA can terminate licenses if the license holder breaks the Management Plan rules.
- Some gear restrictions apply to the harvesting of lobsters. Check with the National Fisheries Authority or with your local provincial fisheries department.

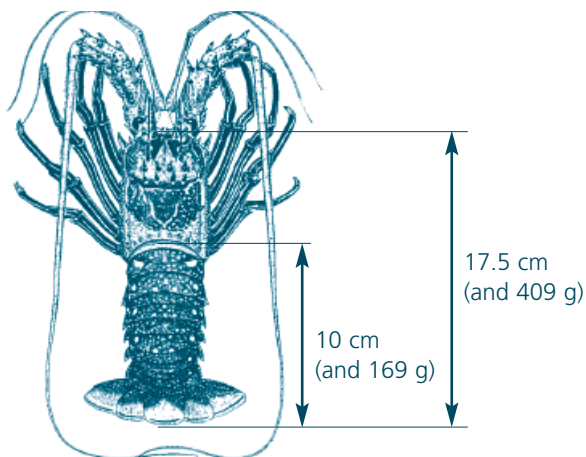


# Lobster size limits

16

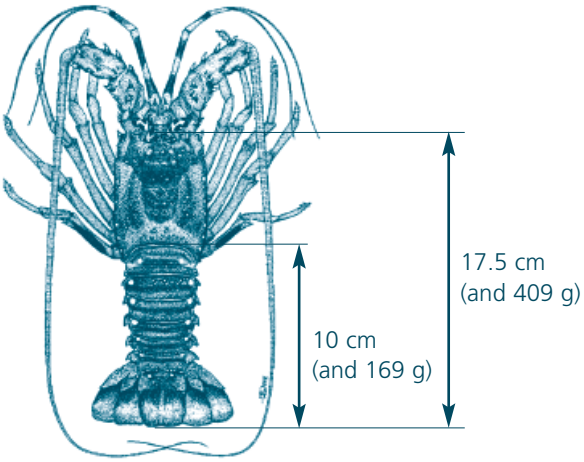


Painted lobster  
*Panulirus versicolor*

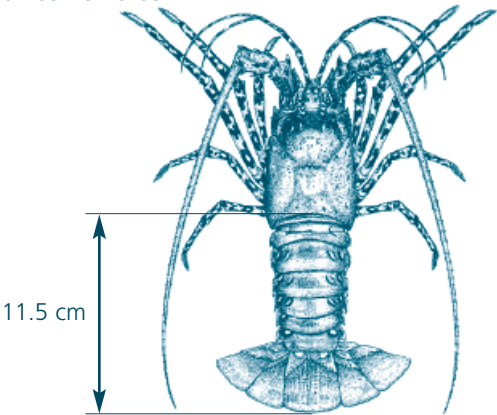


Long-legged lobster  
*Panulirus longipes*

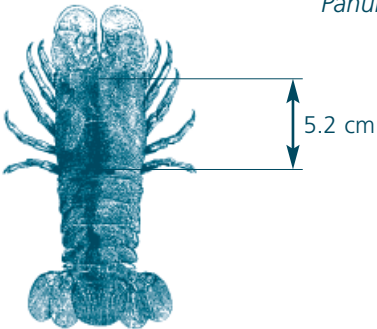




Scalloped lobster  
*Panulirus homarus*



Ornate lobster  
*Panulirus ornatus*

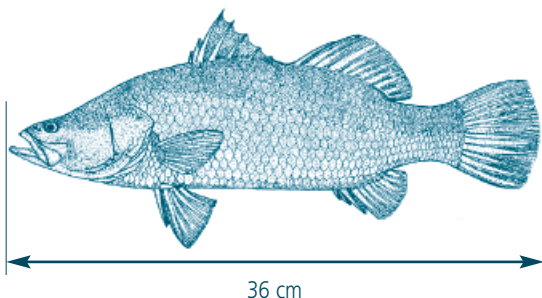


Slipper lobster

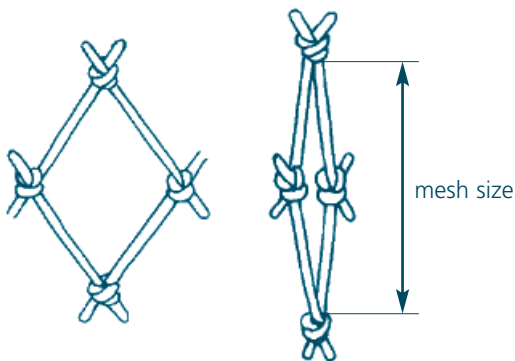


# Barramundi

*Lates calcarifer*



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Barramundi are found in rivers, lakes and deltas along the southern coast of PNG's mainland, mainly in the Western and Gulf Province. Barramundi are migratory fish that spawn in the sea and return inland to grow. Barramundi change their sex with age: that is, they become mature males when they are 4 years old. Most barramundi 7 years of age and older are females.

Barramundi are most vulnerable to fishing activities during their seasonal growth periods and spawning migrations (peak spawning occurs between October and November).



## **Barramundi management regulations**

### **Size limit**

- A barramundi with a total length of less than 36 cm shall not be taken for sale or export.

### **Total allowable catch**

- The total allowable catch is set at 260 metric tonnes per annum (whole weight).
- If the catch from the coastal fishery exceeds 60% of the total allowable catch in any one year, then the total allowable catch shall be subject to review.
- NFA closes the fishery when the total allowable catch is reached.

### **Other important rules**

- The owners of a licensed collector vessel are prohibited from the act of catching barramundi at all times.

### **Gear restrictions**

- Gill nets and beach seine nets with a mesh size greater than 15 cm are prohibited for catching barramundi.
- Gill and beach seine nets with mesh sizes between 6.35 cm and 12.7 cm are prohibited during the peak periods of juvenile recruitment, 1 March–30 April in the coastal waters from Sui Village in the east to the PNG/Irian Jaya border in the west.
- Gill nets with a mesh size greater than 12.7 cm are prohibited during the peak spawning migration period, 1 September–31 October in the coastal waters from Sui Village in the east to Buzi Village in the west.
- NFA, in consultation with all stakeholders, may consider putting prohibitions on line/lure fishing in future.

### **Area closure**

- The main spawning and breeding grounds between Sigabaduru Village and the PNG/Irian Jaya border shall be closed to commercial fishing during peak spawning periods, 1 October–30 November each season.



# Live reef food fish trade

The catching and selling of live reef food fish for overseas markets can contribute significant income to fishing communities in PNG. Called the live reef food fish trade, the trade can also bring negative environmental impacts. Of particular concern in PNG is the targeting of grouper spawning aggregation sites by live reef food fish operators. Also of concern is the possible use of cyanide (and other chemicals) to stun and capture the fish. Such activities have wreaked extensive damage on reefs in Indonesia and the Philippines. The live reef food fish trade began in PNG in 1991 and has operated in Central, Milne Bay, Manus, East New Britain, Bougainville and New Ireland provinces.

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## Live reef food fish management regulations

**Size limits** (see diagrams on pages 22–25)<sup>1</sup>

- humphead Maori wrasse (*Cheilinus undulatus*)<sup>2</sup>: 65 cm
- mangrove jack (*Lutjanus argentimaculatus*): 40 cm
- Maori perch (*Lutjanus rivulatus*): 55 cm
- Moses perch (*Lutjanus russellii*): 24 cm
- red emperor (*Lutjanus sebae*): 55 cm
- barramundi cod (*Cromilepes altivelis*): 40 cm
- flowery cod (*Epinephelus fuscoguttatus*): 55 cm
- camouflage grouper (*Epinephelus polyphekadion*): 37 cm
- squaretail coral trout (*Plectropomus areolatus*): 36 cm
- Chinese footballer trout (*Plectropomus laevis*): 60 cm
- leopard coral trout (*Plectropomus leopardus*): 36 cm
- highfin coral trout (*Plectropomus oligacanthus*): 36 cm

1. When harvested for the live reef food fish trade, the fish species listed here (also showed on pages 22–25) must be *at least* the length that is indicated.
2. This species is subject to Appendix II of CITES





### **Fishing methods restrictions**

- Fishing for live reef food fish is restricted to resource owners using only handlines.
- The licensee shall be allowed one station with a series of holding cages not exceeding 20 in number for each management area. The dimensions for each fish cage are 3 m x 3 m x 4 m, with a holding capacity not exceeding 700 kg.
- For transshipment purposes, fish cages may be towed to one management area only upon receipt of written approval from the Managing Director at least 14 days prior to actual transshipment.
- A quarantine cage shall be constructed separately from fish cages for storing diseased fish for observation and quarantine purposes.

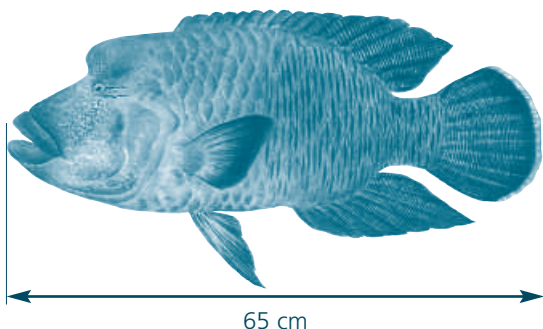
### **Other important rules**

- Live reef fish operators must obtain the following licenses from NFA: export, aquaculture, carrier vessel and storage facility licenses.
- Export by the licensee of target species of sizes less than the approved size limit is prohibited.
- Fishing within or close proximity of a declared spawning aggregation site is prohibited.
- Fishing for live reef food fish or other related activities within or close to the known diving spots is prohibited.
- Fishing for live reef food fish within the Torres Strait Protected Zone is prohibited.
- The use, storage and transportation of explosives, noxious substances (including cyanide and naturally derived substances in any form) for the purpose of killing, stunning, rendering disabled or capturing of fish is prohibited.
- The use of hookah gear and scuba for capturing fish for live reef food fish is prohibited.
- NFA reserves the right to cease live reef fish operations in a management area if it considers it necessary in order to maintain a healthy reef fish stock.
- Community approval is a prerequisite to any live reef food fish establishment in a management area.

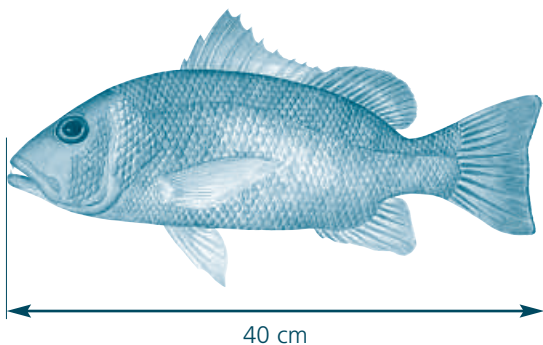


# Live reef food fish trade size limits

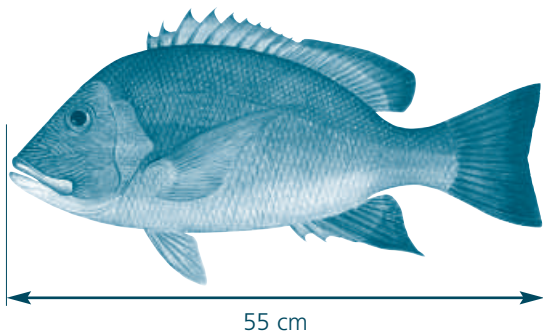
Humphead Maori wrasse (*Cheilinus undulatus*)



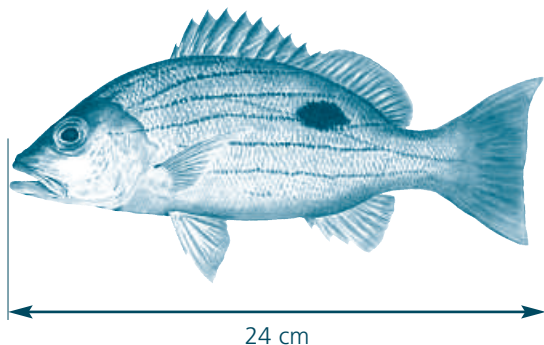
Mangrove jack (*Lutjanus argentimaculatus*)



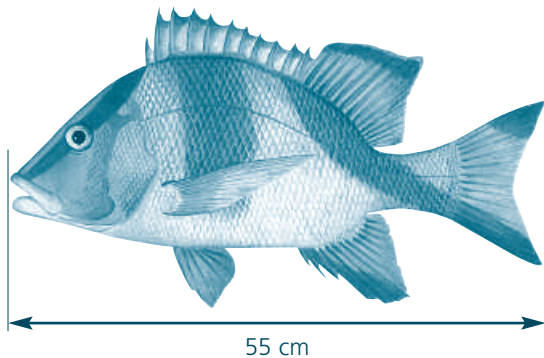
Maori perch (*Lutjanus rivulatus*)



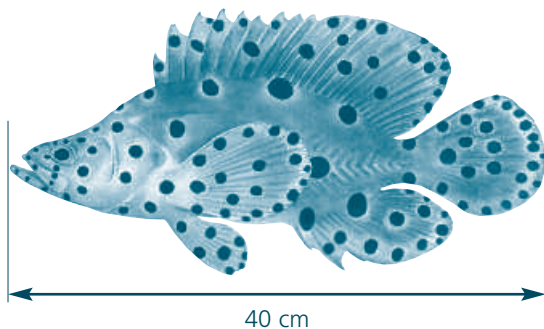
Moses perch (*Lutjanus russellii*)



Red emperor (*Lutjanus sebae*)

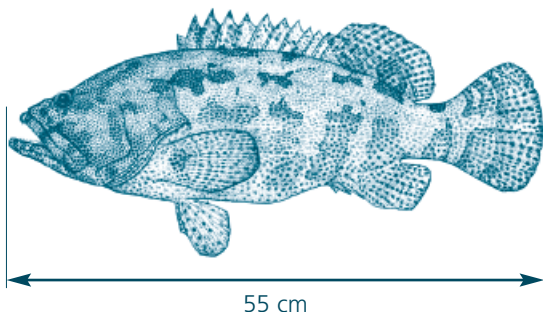


Barramundi cod (*Cromilepes altivelis*)

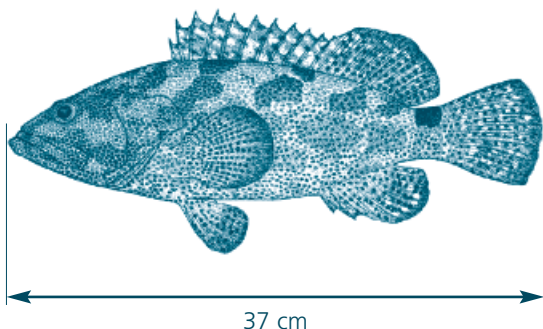


# Live reef food fish trade size limits

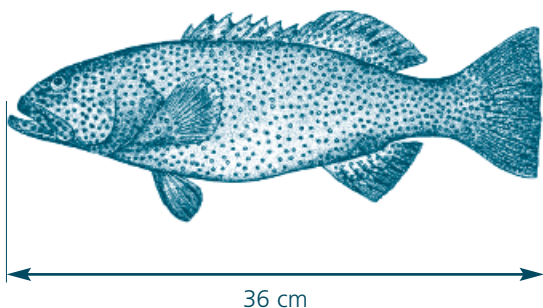
Flowery cod (*Epinephelus fuscoguttatus*)



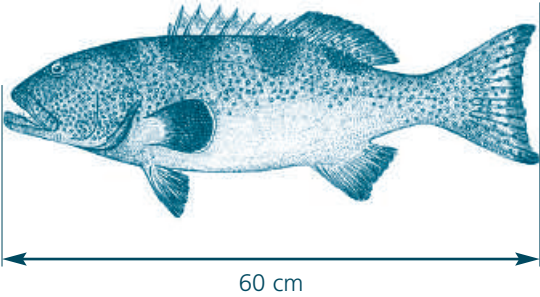
Camouflage grouper (*Epinephelus polyphekadion*)



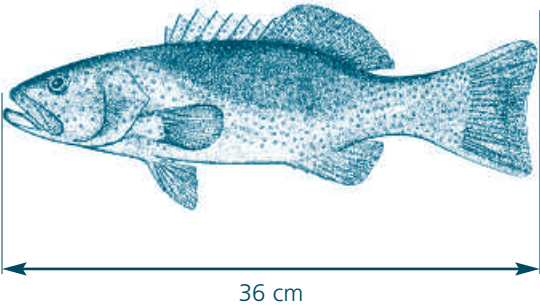
Squairetail coral trout (*Plectropomus areolatus*)



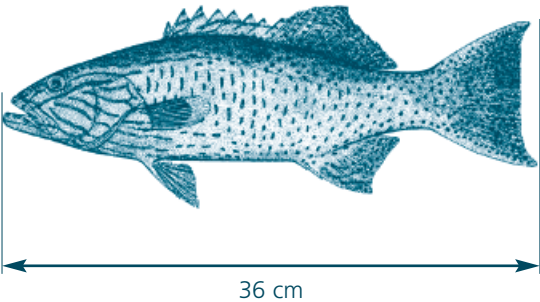
Chinese footballer trout (*Plectropomus laevis*)



Leopard coral trout (*Plectropomus leopardus*)



Highfin coral trout (*Plectropomus oligacanthus*)



# Destructive fishing methods

Destructive fishing methods include:

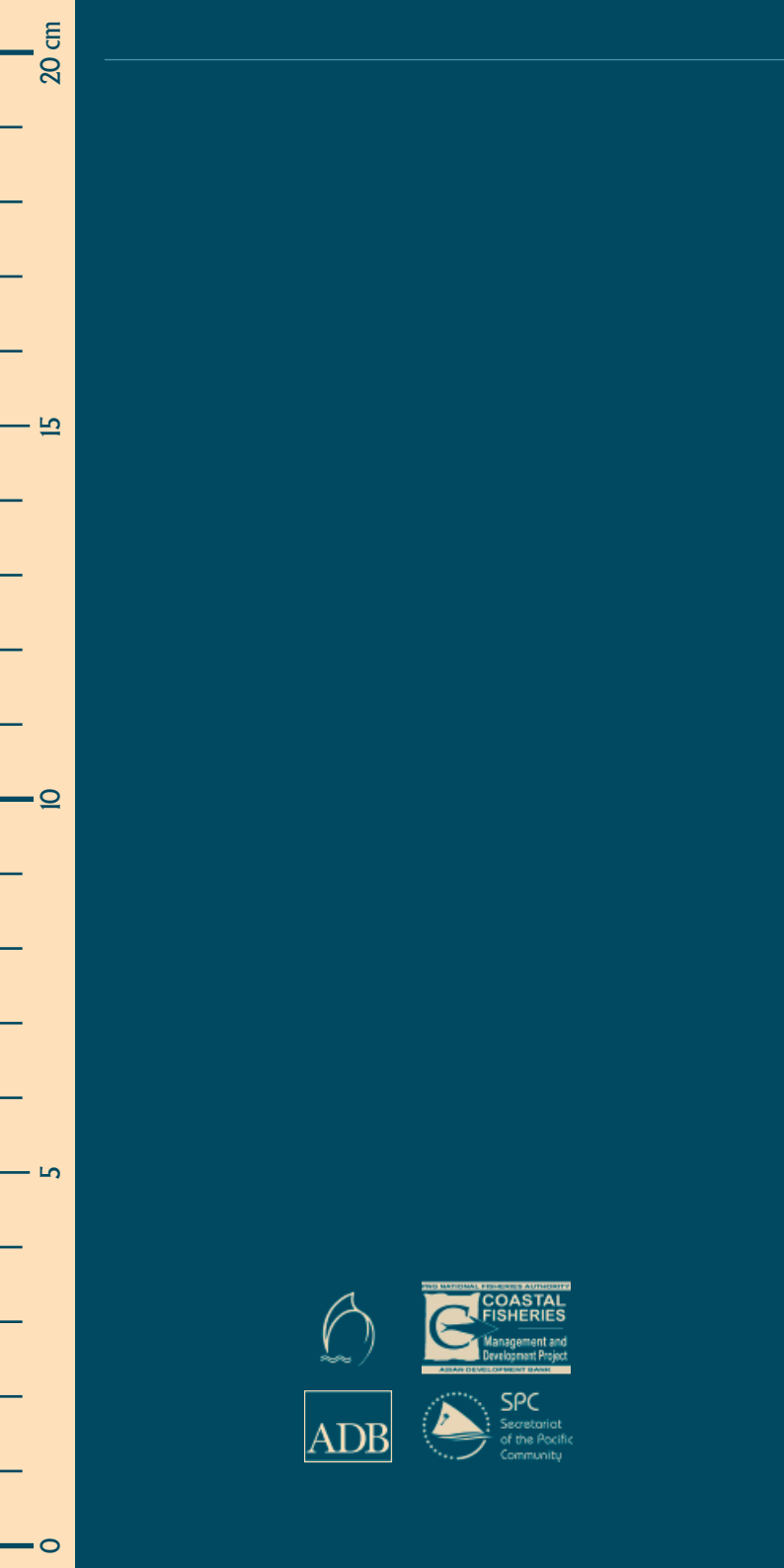
- fishing with explosives,
- using certain plants and chemicals (e.g. bleach and cyanide) to stun fish to make them easier to catch,
- purposely and continuously targeting fish when they are spawning,
- fishing competitions for status within a society or community.

The Fisheries Management Act (1998), section 32, states that using destructive fishing methods such as explosives (e.g. dynamite) and manufactured and natural poisons (e.g. bleach and certain plants) to catch fish is illegal. The law also states that any boat found with explosives, poisons or other such substances onboard may be confiscated.

If you see someone in your community using dynamite or certain plants to kill and capture fish, talk to the person and explain that these kinds of destructive fishing methods are harmful to the reef, fish and other sea animals. If they don't stop, then tell the people in the community that this person is destroying their fishing grounds. Organize a village meeting to discuss what should be done to prevent people from using destructive fishing methods.







SPC  
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Community