

*A sustainable future for*  
**RECREATIONAL FISHING**  
*in the*  
**Cocos (Keeling) Islands**

NAME: \_\_\_\_\_

RESIDENTIAL ADDRESS: \_\_\_\_\_

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\_\_\_\_\_ POST CODE: \_\_\_\_\_

Please indicate your response by  
marking one box with a tick (✓)

Any additional comments you may care to make  
can be made in the space provided.

Please feel free to add additional pages of comments  
if insufficient space is available.

**Further detail on the rationale behind each of the  
proposals is contained in  
Fisheries Management Paper No: 192**

*‘A sustainable future for*

***RECREATIONAL FISHING IN THE COCOS  
(KEELING) ISLANDS’***

## **HAVE YOUR SAY!**

The Cocos (Keeling) Islands offer a range of recreational fishing experiences. The sheltered lagoon, fringing reefs and offshore 'blue water' environments support a range of demersal and pelagic fish species which are highly sought by fishers for both recreational and subsistence purposes. Fishing activity on Cocos is essentially unmanaged at present and there has been some concern by the local community that a number of species, such as coral trout, have declined in numbers over the last decade.

The purpose of this questionnaire and its associated discussion paper (Fisheries Management Paper No. 192) is to seek community feedback on a range of management strategies, which are designed to help ensure that the people who live on the Cocos (Keeling) Islands can catch fish in the future. The draft strategy described in FMP No. 192 was developed by the Western Australian Department of Fisheries after reviewing available research data and meeting with the local community.

It is important to note that the rules proposed in this strategy have been specifically developed for the Cocos (Keeling) Islands and are not the same rules that apply in Western Australia. Separate rules are needed for the Cocos (Keeling) Islands due to its remote location and the need to protect breeding stocks to ensure fish for the future.

FMP No. 192 provides an opportunity for you to express an opinion on how the recreational and subsistence fishing on the Cocos (Keeling) Islands should be managed. It is equally important that you respond whether you agree or disagree with the various proposals. Anyone who has an interest in fishing is encouraged to carefully consider these proposals and provide input to help ensure that future generations of Cocos Islanders can continue to enjoy the same, or a better quality of fishing in the future.

### ***Where to send your submission***

The closing date for submissions is **14 June 2005**. Please send your submission along with your full name and address to:

Recreational Fisheries Program  
Department of Fisheries  
Locked Bag 39  
Cloisters Square Post Office  
PERTH WA 6850

Alternatively you can lodge your submission at the Shire Office on Home Island or the Group Training Centre on West Island. The Shire will forward these submissions to the Department of Fisheries.

*Comments on proposals*

**Proposal 1 – Study of existing literature on fishing**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Don't Know</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
A detailed desk study of existing literature on fishing be undertaken to incorporate all available information into a single source including <ul style="list-style-type: none"> <li>• Identification of species</li> <li>• Levels of abundance</li> <li>• Assessment of harvest levels</li> </ul>					

**Comments:**

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**Proposal 2 – Catch survey**

A catch survey be undertaken periodically to provide detailed information about the level of catch, on which management decisions can be based.

As a subset of the major survey, information could be collected more frequently on ‘indicator species’ to monitor recreational fishing and catch. These indicators should cover, at a minimum, the size and abundance of key species. This information could be collected on a voluntary basis through a logbook program or could be run as part of a schools-based project.

The indicator species should encompass those targeted by different types of fishing. For example, sweetlip and mullet are key species targeted by line and net respectively; and Maori wrasse is targeted by line and spearfishing, as well as being valued for conservation reasons by recreational divers.

It is proposed that the following species be used as key indicator species.

	<b>Environment where species is most often found</b>	
	<b>Lagoon</b>	<b>Outer lagoon</b>
<b>Indicator species</b>	<ul style="list-style-type: none"> <li>• Diamond scale mullet</li> <li>• Mud Crabs</li> <li>• Milk fish</li> <li>• Gong gong</li> <li>• Sweetlip</li> <li>• Coral trout</li> <li>• Maori wrasse</li> </ul>	<ul style="list-style-type: none"> <li>• Wahoo</li> <li>• Tuna – yellowfin and dog tooth</li> <li>• Rosy snapper</li> </ul>

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
A catch survey be undertaken to provide information about the level of catch.					
The species listed be used as indicator species to monitor the abundance and size of key species.					

**Comments:**

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**Proposal 3 – Research**

Research be undertaken on the following key recreational species in the (in order of priority) to provide information on species biology and the status of stocks.

Species	Gap Analysis of Research			
	Biology	Stock assessment	Exploitation status	Breeding stock level
Gong gong	N/A	N/A	Limited	N/A
Tropical snappers	Limited	N/A	N/A	N/A
Maori wrasse	Limited	N/A	N/A	N/A
Silveries	N/A	N/A	N/A	N/A
Mud crabs	Limited	N/A	N/A	N/A
Coral trout	Limited	N/A	N/A	N/A

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
Research be undertaken on the listed key recreational species					

**Comments:**

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**Proposal 4 – Bag and size limits for fin fish**

Fish stocks in Western Australia are managed on the basis of the level of risk of over exploitation. Many fish species do not breed at the same level each year. A successful breeding season which results in large numbers of small fish may be followed by several poor breeding years where very few small fish enter the fishery.

Management tools such as bag and size limits can help ensure Cocos (Keeling) Islanders can continue to catch fish over a number of years until the next big recruitment occurs. In the absence of these controls, a large number of fish may be caught immediately following a good year of recruitment, but catches will be poor for the next few years.

It is important to remember that the bag limits apply per person, i.e. if you have three people in a boat you can have three bag limits. In some instances, for example mud crabs, a *boat limit* may apply which sets a ceiling on the maximum number of crabs that can be caught from a boat.

**4(a) Category 1 Fish**

<b>Category 1 Fish – total mixed daily bag limit of 7</b>			
Category 1 fish are considered to have the highest risk of over exploitation. Many fish in this category have low catch rates and levels of abundance, while others may be highly valued for their fishing and eating qualities. Many Category 1 fish are slow growing and mature at four years-plus. For these reasons, Category 1 fish require a high degree of protection.			
<b>Species</b>	<b>Species bag limit per person</b>	<b>Minimum size limit (mm)</b>	<b>Other controls</b>
Billfish, sailfish, swordfish, marlins	1		
Coral trout and coronation trout -combined	2	450	
Hump headed maori wrasse - greenfish	2		
Wahoo, mahi mahi, yellowfin tuna, and dogtooth tuna -combined	4	900 - wahoo	

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Don't Know</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Do you agree with the mixed daily bag limit of 7 for Category 1 Fish?					
Do you agree with the individual species bag limits for Category 1 Fish?					
Do you agree with the list of species included in Category 1?					

**Comments:**

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**Category 2 Fish – total mixed daily bag limit of 16**

Category 2 fish have a moderate risk of overexploitation. Many fish in this category have moderate catch rates and levels of abundance. Category 2 fish are mostly found in inshore areas, are highly sought after by recreational fishers and mature at three to four years.

<b>Species</b>	<b>Species bag limit per person</b>	<b>Minimum size limit (mm)</b>	<b>Other controls</b>
Bone fish	4		
Bonito and tunas – (other)	8		
Cod– combined	8		
Dart	8		
Parrot fish - napoleon fish	8		
Sweetlip, paddletail, redthroat, moses perch – combined	8	280	

**4(b) Category 2 Fish**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Don't Know</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Do you agree with the mixed daily bag limit of 16 for Category 2 Fish?					
Do you agree with the individual species bag limits for Category 2 Fish?					
Do you agree with the list of species included in Category 2?					

**Comments:**

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4c bag limits – Category 3

<b>Category 3 Fish – Daily bag limit</b>		
Category 3 fish include all fish not listed in other categories except baitfish of the sardine, anchovy and hardyhead families (Clupeidae, Engraulididae and Atherinidae).		
<b>Species</b>	<b>Species bag limit per person</b>	<b>Other controls</b>
Garfish	40	
Mullet, sea	40	
Mullet, diamond scale	30	
Rabbit fish	40	
Silveries	40	
Unlisted species - (all species not specified except baitfish species)	40	

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Don't Know</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Do you agree with the individual species limits for Category 3 Fish?					
Do you agree with the list of species included in Category 3?					

**Comments:**

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**Proposal 5 - Proposed bag limits for crustaceans, molluscs and other reef animals**

5(a) Crustaceans

<b>Crustaceans</b>		
<b>Species</b>	<b>Bag limit</b>	<b>Other controls</b>
Crab, mud	5	<ul style="list-style-type: none"> <li>• Boat limit of 10</li> <li>• Minimum size limit of 150mm</li> <li>• Females with eggs protected and must be returned to the water</li> </ul>
Rock lobster	4	<ul style="list-style-type: none"> <li>• Boat limit 8</li> <li>• Minimum size limit 76mm</li> <li>• Females with eggs protected and must be returned to the water</li> </ul>
Slipper lobster	4	<ul style="list-style-type: none"> <li>• Boat limit of 8</li> <li>• Females with eggs protected and must be returned to the water</li> </ul>
Other crabs including; ghost, hermit and sand crabs (combined)	20	

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
A bag limit of 5 mud crabs and a boat limit of 10, should be adopted					
A bag limit of 4 rock lobster and a boat limit of 8 should be adopted					
A bag limit of 4 slipper lobster and a boat limit of 8 should be adopted					
A bag limit of 20 should apply for other crab species (combined).					

**Comments:**

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**5(b) Molluscs and other reef animals**

<b>Molluscs and other reef animals</b>		
<b>Species</b>	<b>Bag limit</b>	<b>Other controls</b>
All species of edible mollusc including gong gong and turban shell -combined	9 litres – in whole form not shucked (standard plastic bucket)	
Squid and octopus - large reef octopus (combined)	15	Boat limit of 30
Small octopus caught during the doldrums	9 litres (standard plastic bucket)	

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
Do you agree with the bag limit for molluscs and other reef animals?					

**Comments:**

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*Comments on proposals*

**Proposal 6 – Totally protected**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Don't Know</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Due to very low levels of abundance and vulnerability to over fishing it is proposed that clams be totally protected.					

**Comments:**

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**Permitted gear**

**Proposals 7 – line fishing**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Don't Know</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
<b>7(a)</b> That fishers be allowed to used a maximum of three hooks or gangs of hooks on each line.					
<b>7(b)</b> That unattended set lines be prohibited.					

**Comments:**

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**Proposal 8 – spear fishing**

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Don't Know</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
That spearfishing while using compressed air be prohibited.					

**Comments:**

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**Proposal 9 – Options for the future management on netting**

Netting is generally permitted as a fishing method to allow the targeting of fish that can't be readily caught by line.

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
<b>9 (a)</b> Limit the allowable length of haul or set net to 60m. A number of 60m nets cannot be strung together.					
<b>9 (b)</b> That the main channels between islands leading in and out of the lagoon be closed to all netting.					
<b>9 (c)</b> Prohibit the use of nets which have a mesh size smaller than 63mm or greater than 114mm. Note that a net mesh is measured by stretching it so that the two knots on the left and right hand side of the mesh meet. The size of the mesh is then the distance between the inside of the knots at the top and bottom of the mesh.					
<b>9 (d)</b> The northern lagoon on West Island be closed to all netting. The boundary of this zone is proposed to run from Pulu Melintang, on the north side of the entrance to Telok Jambu, to Pokok Poda (Banana Point) on the southern side of the entrance.					
<b>9 (e)</b> Nets must be attended at all times (People must stay with their nets).					

<b>Comments:</b>

**Proposal 10 – closed areas to fishing around dive sites**

Demersal fishing be prohibited within 150m of the dive sites (marked by yellow mooring bouys) known as:

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
The Aquarium Wall					
Cabbage Patch					
Two Trees					
Trannies					
North Point					
Cologne Gardens					
Rose Wall					

**Comments:**

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**Proposal 11 – Education and compliance**

A fisheries community education and compliance plan should be developed for the Cocos (Keeling) Islands which focuses on the issues and species most important in the region. Such a plan should seek to keep the community informed of management decisions, give a clear lead on the values and attitudes which will assist in sustaining fish stocks, and identify strategies for the enforcement of the fishing rules.

The plan should, at minimum, contain the following elements:

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Don't Know</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
<p><b>11 (a) Fishing Guide</b> A guide to recreational fishing in the Cocos Islands be produced to inform and educate local and visiting fishers about recreational fishing management controls and promoting stewardship for fish stocks and the environment.</p>					
<p><b>11 (b) Educational resource materials</b> Adequate quantities of practical educational tools such as fish measuring rulers, measuring gauges for rock lobster and crabs, and adhesive bag limit guides should be produced to support the regional fishing guide. All guides and educational material will need to be available in Malay and English.</p>					
<p><b>11 (c) Compliance</b></p> <p>1. That a member of the Malay community be appointed as a “fish warden” with powers to educate and enforce fisheries controls.</p>					
<p>2. That Fisheries and Marine Officers visit the island regularly to assist in providing training, education and raise awareness of fisheries rules.</p>					
<p>3. The Department of Fisheries should hold discussions with on-island authorities such as the Australian Federal Police and Parks Australia over possible involvement in enforcing fisheries legislation.</p>					

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Don't Know</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
<b>11 (d) Schools program</b> That a school education program is established to promote awareness of fishing rules, the need to protect breeding stocks and the best methods for handling fish.					

**Comments:**

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