

# Annual status report

## Rocky Reef Fin Fish Fishery

July 2006



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## Introduction

The Rocky Reef Fin Fish Fishery comprises a suite of species associated with inshore rocky reefs, including snapper, pearl perch and teraglin jew. The fishery is mostly restricted to the southern part of Queensland. Other minor species in the fishery include black kingfish, dolphin fish, yellowtail kingfish, amberjack and Samsonfish.

This status report covers the period up to December 2005.

### Fishery profile

**Total harvest from all sectors:** approximately 720 tonnes (including 523 tonnes snapper, 140 tonnes pearl perch, 15 tonnes of teraglin jew and 35 tonnes of other rocky reef fin fish)

**Commercial harvest:** approximately 325 tonnes (including 200 t snapper, 65 t pearl perch) in 2005

**Recreational harvest:** approximately 330 tonnes (including 280 tonnes of snapper and 50 tonnes of pearl perch — latest estimate is from 2002)

**Indigenous harvest:** no estimates available

**Charter harvest:** approximately 68 tonnes (including 43 tonnes of snapper and 25 tonnes of pearl perch) in 2005

**Commercial GVP:** approximately \$2.3 million in 2005

**Number of licences:** 1536 primary licences current with the symbols L1, L6 or L7

## Description of the fishery

### Fishing methods

Rocky reef fin fish are generally taken using hook and line. Both recreational and commercial fishers are permitted to use up to six hooks.

### Fishing area

Most rocky reef fin fish is taken in the area south of the Great Barrier Reef (GBR), which can be fished by commercial operators in possession of an L1, L6 or L7 fishery symbol. However, fishers are permitted to harvest rocky reef fish species throughout Queensland waters provided they have the appropriate line endorsement for the area.

### Main management methods used

A range of input and output controls are used by DPI&F to manage the harvest of rocky reef fish species, including:

- Minimum size limits for snapper (35 cm), pearl perch (35 cm) and teraglin (38 cm) for both commercial and recreational fishers.
- Recreational in-possession limits for snapper, pearl perch and teraglin (a limit of five for each species).
- Apparatus restrictions with a limit on the number of hooks and lines that can be used by both commercial and recreational fishers.
- Limited entry in the commercial sector.

## Approximate allocation between sectors

The reported commercial catch in 2005 was higher than the most recent estimate of the total recreational catch (in 2002). This is in contrast to previous years when the recreational catch has at times reached twice that of the commercial.

## Fishery accreditation under the EPBC Act

A Wildlife Trade Operation (WTO) approval was granted in 2005 under the *Environment Protection and Biodiversity Conservation Act 1999* and expires in April 2008.

## Catch statistics

### Commercial

Commercial catch statistics are presented in terms of total catch and catch rates (Figure 1) and by the amount of fishing effort being applied in the fishery (Figure 2).

Both pearl perch and snapper catches and catch rates have increased markedly since 2002 (Figure 1). The commercial catch of both snapper and pearl perch doubled between 2003 and 2005. Snapper catch increased from 55 tonnes in 2002, to 212 tonnes in 2005.

The increase in the commercial catch of snapper in 2003, 2004 and 2005 is related to improved catch rates, rather than an expansion in the number of days fished. Over this period, the number of days fished remained stable at around 2700 days while the catch rate increased from around 30 kg per day, to just under 80 kg per day over the same period. Prior to this period, a dramatic increase was observed in fishing effort for snapper between 2002 and 2003, when the number of days fished increased from an historic average of approximately 1800 days to 2700 days. This increase in effort may have been in response to the Investment Warning that was issued in September 2003.

In the case of pearl perch, figures show that the number of days where pearl perch were caught has increased dramatically, while the catch rate has only increased marginally. This is in contrast to the trends observed for snapper.

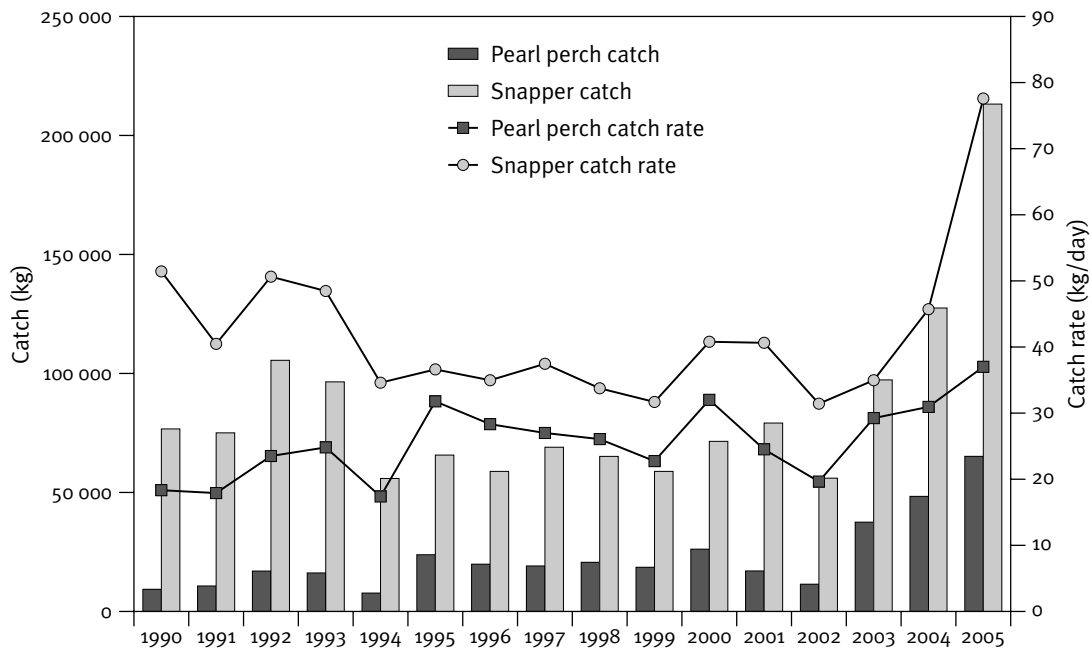
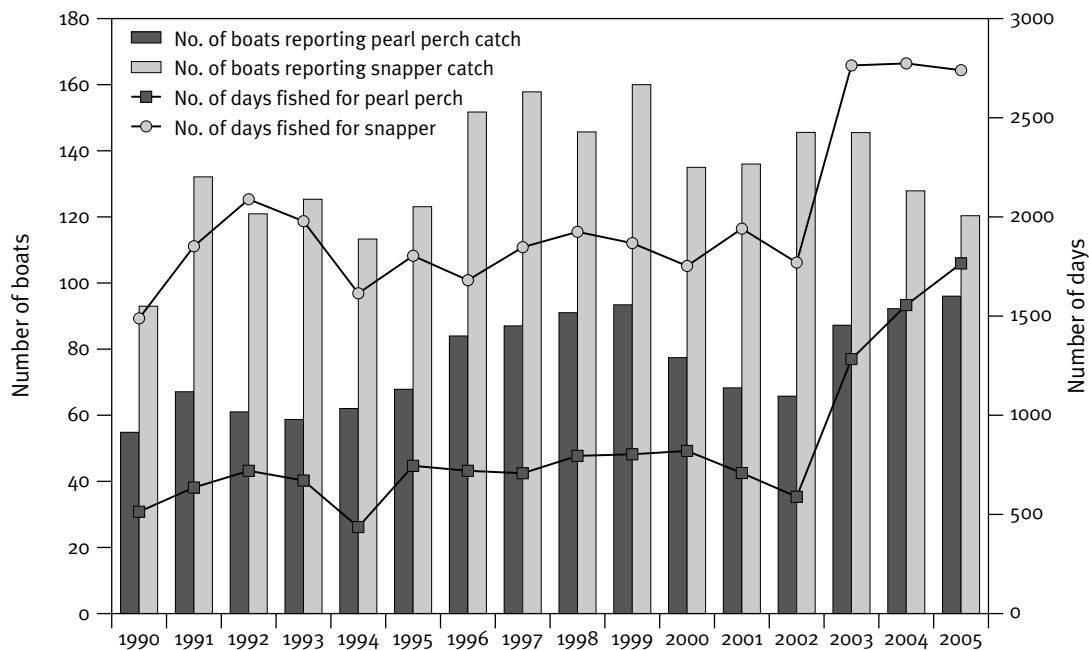


Figure 1: Snapper and pearl perch catch and catch rate south of Baffle Creek from 1990–2005.

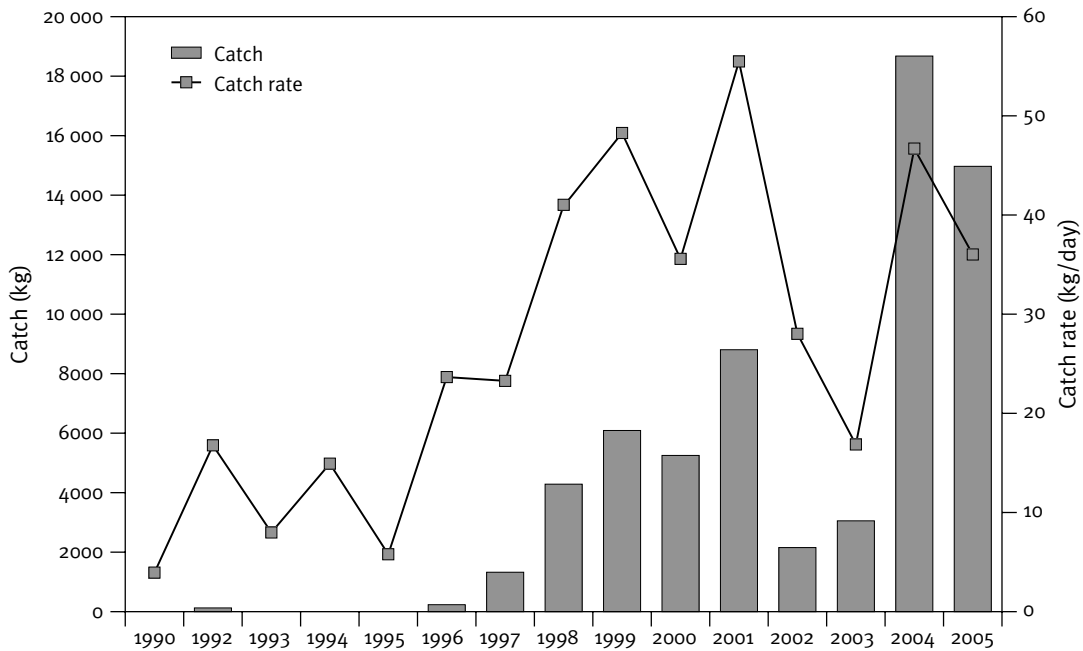
The increased catch rate for snapper may indicate the success of an increased minimum size limit for both species that was introduced in late 2002. Given that the majority of fish harvested in the fishery are two to three-year-olds, and that the increased size limit has been in place for three years, it is expected that the positive effects of the change would be evident currently.

However, the increased catch rate may also reflect changing fleet dynamics, with some operators more focused on targeting rocky reef fin fish, particularly following the introduction of the *Fisheries (Coral Reef Fin Fish) Management Plan 2003* and the rezoning of the Great Barrier Reef Marine Park which increased the extent of areas closed to commercial fishing. Spatial commercial catch information indicates that commercial operators have targeted new areas in recent times. In many fisheries, elevated catch rates are often seen when fishers start fishing new grounds.



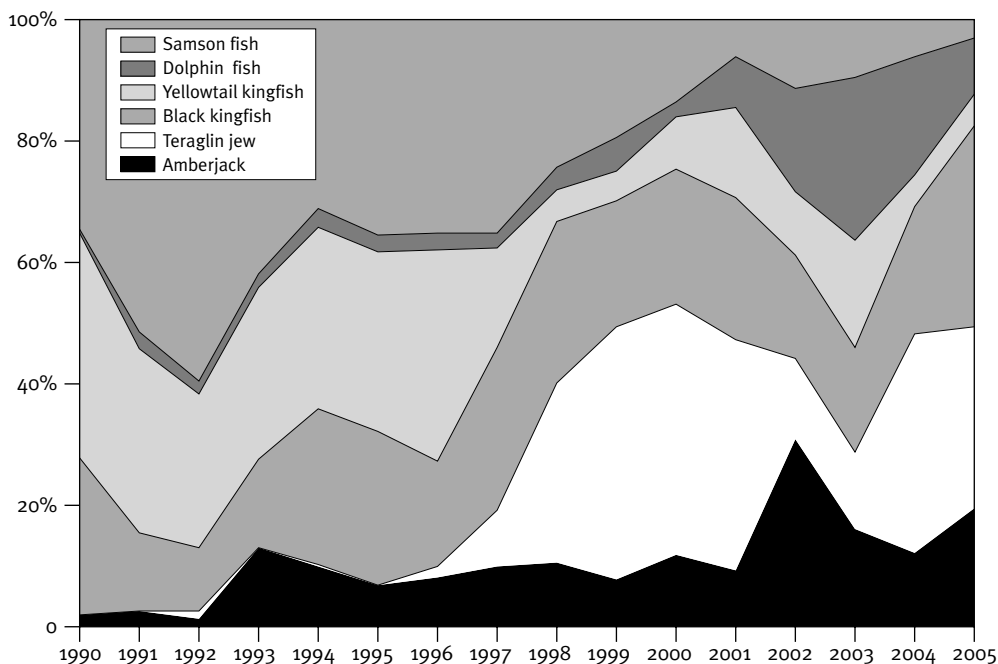
**Figure 2: Number of boats and days fished for snapper and pearl perch south of Baffle Creek from 1990–2005.**

Teraglin jew is historically one of the key secondary species targeted in the Rocky Reef Fin Fish Fishery, particularly in the recreational and charter sectors. Commercial catches and catch rates have tended to be variable, supporting the opportunistic harvest of teraglin jew by commercial fishers. A large increase in the commercial catch was observed during 2004 and 2005 (Figure 3) which may be due to a decrease in the minimum size limit from 45 cm to 38 cm in 2002. The reduction was made in an attempt to reduce the high mortality resulting from the release of undersized teraglin jew (up to 95% die following release).



**Figure 3: Teraglin catch and catch rate south of Baffle Creek from 1990-2005.**

A number of other species make up the remainder of the rocky reef fin fish commercial catch, including Samsonfish, dolphin fish, yellowtail kingfish, black kingfish and amberjack. As Figure 4 demonstrates, the catch composition of these minor species has been variable over time. During the early and mid-1990s Samsonfish and yellowtail kingfish dominated the commercial catch. A shift was observed in the late 1990s towards a commercial catch dominated instead by teraglin jew, amberjack and dolphin fish. A large increase in the contribution to the commercial catch by black kingfish was observed in 2004 and 2005.



**Figure 4: Contribution to the commercial catch by minor rocky reef species from 1990-2005.**

**Table 1: Commercial catch (in tonnes) of minor rocky reef species 1990–2005**

	1990	1991	1992	1993	1994	1995	1996	1997
Amberjack	0.2	0.2	0.2	2.4	0.9	0.8	1.1	1.5
Kingfish—black	1.9	1.1	1.2	2.6	2.3	2.8	2.3	3.9
Kingfish—yellowtail	2.8	2.6	3.0	5.3	2.6	3.3	4.7	2.4
Dolphin fish	0.1	0.3	0.3	0.4	0.3	0.3	0.4	0.4
Samson fish	2.6	4.5	6.9	7.7	2.7	3.9	4.8	5.1
<b>Total</b>	<b>7.5</b>	<b>8.7</b>	<b>11.6</b>	<b>18.5</b>	<b>8.8</b>	<b>11.1</b>	<b>13.3</b>	<b>13.2</b>
	1998	1999	2000	2001	2002	2003	2004	2005
Amberjack	1.6	1.1	1.5	2.2	4.9	3.8	6.3	9.9
Kingfish—black	3.9	3.0	2.8	5.5	2.7	4.1	11.0	16.5
Kingfish—yellowtail	0.8	0.7	1.1	3.4	1.7	4.1	2.7	2.7
Dolphin fish	0.5	0.8	0.3	2.0	2.7	6.3	10.1	4.5
Samson fish	3.5	2.8	1.7	1.4	1.8	2.3	3.1	1.6
<b>Total</b>	<b>10.2</b>	<b>8.5</b>	<b>7.4</b>	<b>14.5</b>	<b>13.8</b>	<b>20.6</b>	<b>33.2</b>	<b>35.0</b>

Table 1 shows the catch trends of minor rocky reef species since 1990. The catch of minor species has increased over time, with the major contributor being black kingfish (cobia).

### **Recreational**

No new recreational data is available beyond that presented in the 2005 Annual Status Report. A fourth RFISH telephone survey and diary round was undertaken during 2005; however, the results are not yet available.

Table 2 shows the RFISH data currently available on the recreational catch of rocky reef fin fish species. A more accurate conversion factor sourced from the average weights of snapper and pearl perch taken during research surveys<sup>1</sup> has been applied to estimate the total weight of the recreational catch.

As outlined in the 2005 status report, the total weight of the recreational harvest for both snapper and pearl perch has declined between each subsequent survey. It appears the decline in total harvest of snapper relates to an increase in the number of fish released. This supports previous research<sup>1</sup> that indicates that a large proportion of snapper caught are young (generally two to three-years-old) and below the minimum size limit. The numbers of pearl perch caught recreationally have declined between 1999 and 2002. However, due to the survey methodology and because of the smaller number of pearl perch caught compared with other species the data should be treated with caution. Recreational catch estimates for 2005 for snapper and pearl perch will be presented in next year's status report.

<sup>1</sup>Ferrel, D. and Sumpton, W.D. 1997. *Assessment of the fishery for snapper (Pagrus auratus) in Queensland and New South Wales*. Report to the Fisheries Research and Development Corporation. Project 93/704.

Table 2: Recreational catch statistics for snapper and pearl perch.

	Snapper			Pearl perch		
	1997	1999	2002	1997	1999	2002
<b>Number caught</b>	1 327 000 (±91 000)	1 284 850 (±115 700)	1 253 135 (±82 800)	—	109 095 (±23 820)	74 370 (±10 300)
<b>Number released (as a % of the number caught)</b>	750 000 (56%)	757 000 (58%)	956 695 (76%)	—	43 700 (39%)	32 474 (43%)
<b>Total estimated harvest</b>	577 000	527 000	296 440	—	64 400	41 903
<b>Estimated weight of total harvest</b>	~548 t#	~500t#	~281 t#	—	~76 t*	~50 t*

# Using an average weight of 0.95 kg per fish, obtained from research surveys undertaken by Ferrel and Sumpton.

\* Using an average weight of 1.2 kg per fish, obtained from research surveys undertaken by Ferrel and Sumpton.

### Charter

Figure 5 shows the charter catch and catch rate for snapper and pearl perch from 1996 to 2005. Following a peak in catch of snapper in 2001, the total charter catch declined slightly in 2002 and 2003. The observed increase in catch in 2004 and 2005 suggests an increase in the snapper biomass that may have resulted from the increase in the minimum legal size limit.

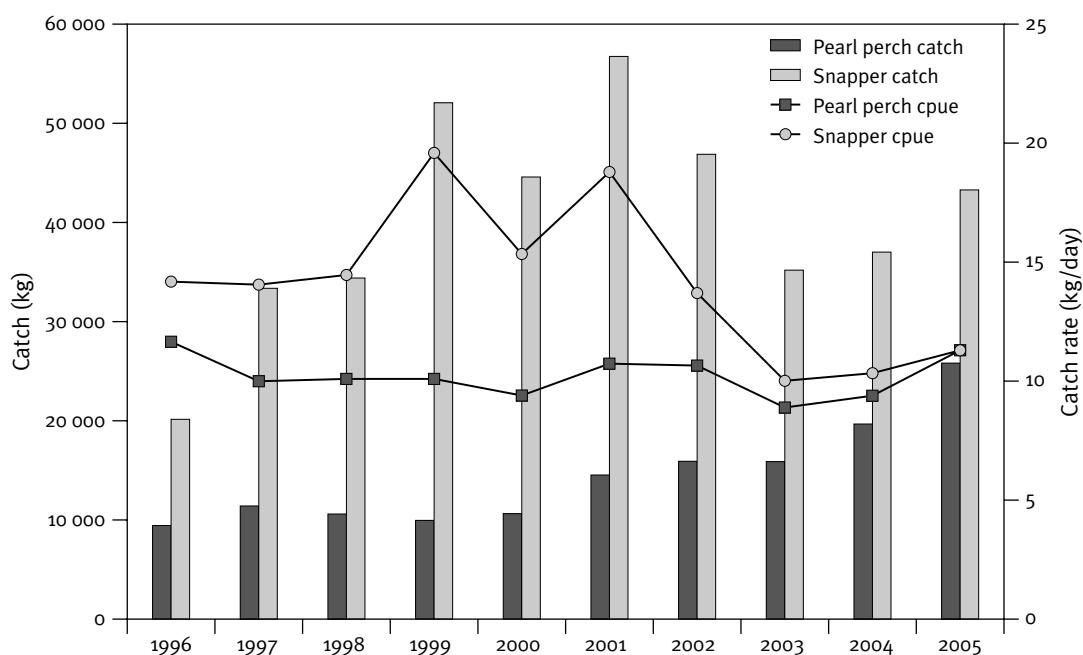


Figure 5: Charter catch and catch rate for snapper and pearl perch south of Baffle Creek (1996–2005).

The catch rate for pearl perch has remained relatively stable. The total catch has increased slightly over the last two years.

### Indigenous

The National Recreational and Indigenous Fishing Survey (NRIFS) provided initial estimates of indigenous harvest of a range of species; however, no data on the rocky reef target species was provided.

## Spatial issues/trends

Figure 6 provides examples of the distribution of snapper commercial catch in the fishery over the period 2003–2005. Increasing catches have been observed in offshore areas off Fraser Island, Moreton Island and Stradbroke Island.

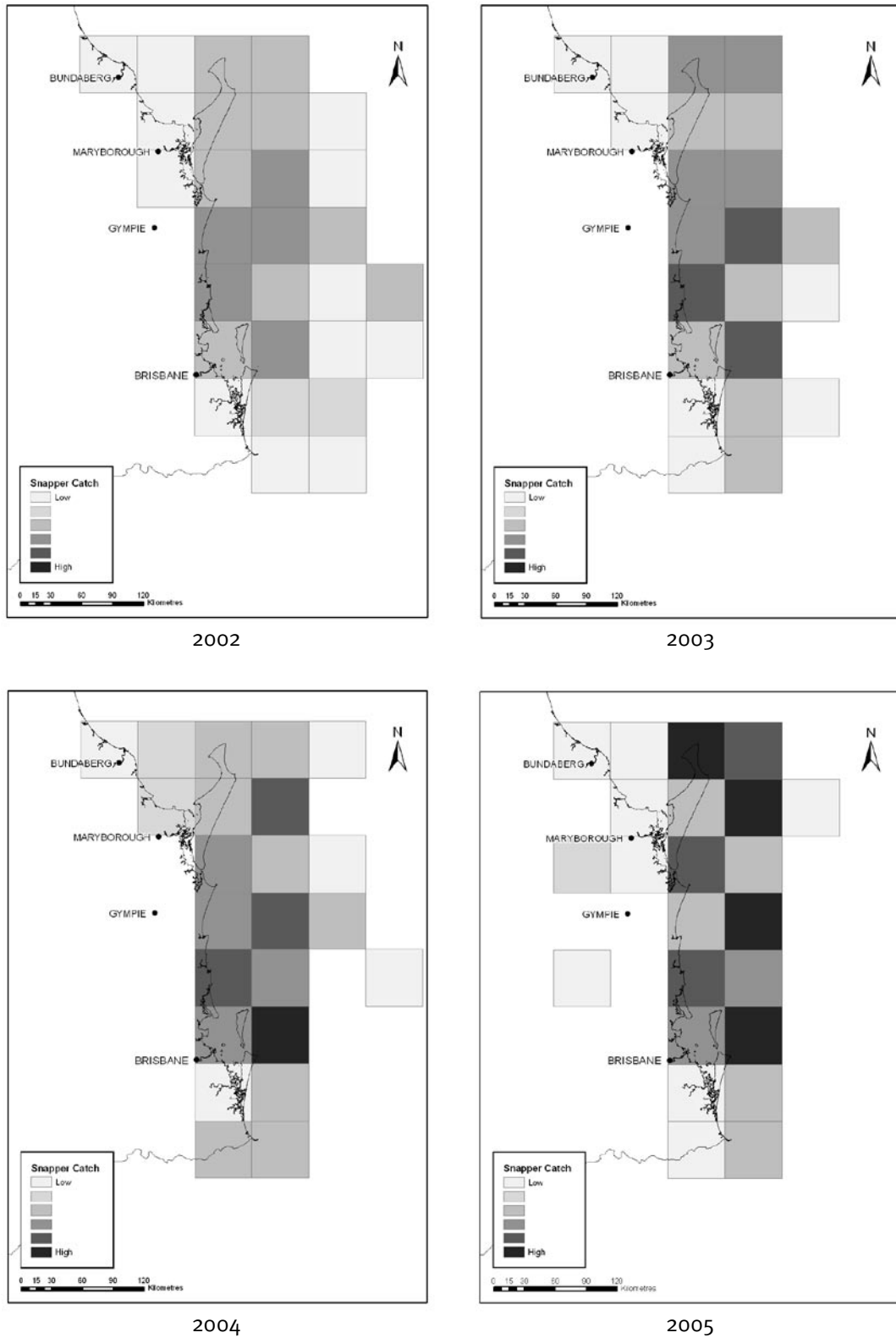


Figure 6: Examples of the distribution of snapper commercial catch over time (2002–2005).

## Socio-economic characteristics and trends

Commercial operators sell almost exclusively on the domestic market, with prices between \$6 and \$9 a kilogram (whole weight) for pearl perch and snapper. Other species command lower prices.

## Fishery Performance

### Appraisal of fishery in regard to sustainability

The Reef Management Advisory Committee (MAC) holds significant concerns about the status of the Rocky Reef Fin Fish Fishery, in particular snapper. DPI&F have recently completed a stock assessment on snapper that indicates fishing mortality is currently too high to ensure long-term sustainability of the fishery. Researchers and modellers agree that the results from the stock assessment may be confounded by hyperstability issues in the snapper fishery, where good catch rates can be maintained regardless of overall declining stock abundance. Fishers spend more time searching for fish to maintain catch rates, which is not reflected in the logbook information and makes catch rates appear constant. Figure 6 indicates that commercial fishing effort has moved northwards supporting a recent shift to new fishing grounds. This is further supported by commercial logbook data, fisheries observer information and anecdotal reports from recreational fishers over the last 12 months indicating good catches have been occurring with an increased occurrence of larger individuals.

A recent snapper stock assessment by Allan *et al*<sup>2</sup>, which was based on data from all fishing sectors, provided support for the concern expressed to date. An independent review has supported the results of the assessment and confirmed the use of the stochastic stock reduction analysis model. Further data is required to validate some of the assumptions about the age-structure of the snapper population, which was sourced from surveys undertaken between 1993 and 1997 and will ensure greater confidence in future assessments.

There is still some uncertainty surrounding the range of impacts on the stock, particularly in relation to habitat changes and the size of the recreational catch. Results from the 2005 RFISH diary round may help reduce the uncertainty of the recreational catch.

The status of pearl perch and teraglin jew is uncertain, in recognition that there is limited biological information available for the species on which to base a robust assessment.

Significant resources are currently being invested by DPI&F to collect further information to improve future assessments of the status of the fishery.

### Progress in implementing DEH recommendations

DEH made a range of recommendations to DPI&F during its assessment of the fishery, in order to address risks and uncertainties. DPI&F has made significant progress in implementing these recommendations. Details of the progress against each recommendation are provided in Table 3.

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<sup>2</sup>Allen, M.S., Sumpton, W.D., O'Neill, M.F., Courtney, A.J. and Pine, W.E. 2006. *Stochastic Stock Reduction Analysis for Assessment of the Pink Snapper (Pagrus auratus) Fishery*. Department of Primary Industries and Fisheries, Brisbane, Queensland.

**Table 3: Implementation progress.**

<b>Recommendation</b>	<b>Progress</b>
DPI&F to inform DEH of any intended amendments to the management arrangements that may affect sustainability of the target species or negatively impact on by-product, bycatch, protected species or the ecosystem.	<i>Ongoing</i> No changes were made to management arrangements during 2005.
By the end of 2006, DPI&F to develop fishery specific objectives linked to interim performance indicators and performance measures for target, by-product, bycatch, protected species and impacts on the ecosystem. Within three months of becoming aware that a performance measure has not been met, the DPI&F to finalise a clear timetable for the implementation of appropriate management responses.	<i>In progress</i> DPI&F and the ReefMAC SAG are developing performance measurement systems (PMS) for a range of line fisheries during 2006, including the Rocky Reef Fin Fish Fishery.
From 2005, DPI&F to report publicly on the status of the fishery on an annual basis, including explicit reporting against each performance measure, once developed.	<i>Ongoing—two reports completed</i> This annual status report represents the second to be completed for the fishery.
DPI&F to conduct a compliance risk assessment of the Rocky Reef Fin Fish Fishery and develop a strategy to implement key outcomes within two years.	<i>In progress</i> A Queensland Boating and Fisheries Patrol officer is responsible for coordinating compliance risk assessments and strategies across a range of Queensland fisheries. The Rocky Reef Fin Fish Fishery compliance risk assessment is planned for mid-2006.
DPI&F to continue to pursue collaborative management of shared rocky reef stocks with the Australian Fisheries Management Authority (AFMA) and NSW Department of Primary Industries and Environment (DPIE).	<i>Ongoing</i> Fisheries managers from NSW and Queensland routinely meet to discuss complementary management arrangements. The NSW Environmental Impact Statement for the Ocean Trap and Line Fishery <sup>3</sup> states that for shared stocks, action is required for more complementary management. arrangements, size limits, monitoring programs and recovery programs for overfished species. NSW has indicated its intention to pursue a more formalised approach to joint management.
DPI&F to develop and implement a robust system to validate commercial logbook reporting in the fishery within 18 months.	<i>Ongoing</i> DPI&F's logbook validation strategy encompasses a range of activities that may be undertaken across different fisheries. For the purposes of the Rocky Reef Fin Fish Fishery, DPI&F primarily intends to use observer coverage to validate logbook data. Independent fisheries observers have recently been introduced into the fishery on a voluntary basis.

<sup>3</sup>New South Wales Department of Primary Industries, Agriculture and Fisheries Division, 2006. *Ocean Trap and Line Fishery Environmental Impact Statement Public Consultation Document*. NSW Department of Primary Industries, Cronulla.

Recommendation	Progress
<p>Within 18 months, DPI&amp;F to develop a process to improve estimates of recreational take, which will be progressively implemented over the next three years .</p>	<p><i>In progress</i></p> <p>DPI&amp;F employed a consultant from the Australian Bureau of Statistics in 2005 to review the differences between the RFISH surveys, and the National Recreational and Indigenous Fishing Survey (NRIFS) and investigate possible new methods to improve future RFISH surveys. A preliminary investigation was also undertaken into the power of the data collected through the RFISH program, in context of whether it could be converted to the location of catch rather than the location of residence. A workshop was held in April 2006 to further investigate improvements to estimates of recreational participation and catch.</p>
<p>DPI&amp;F to develop a stock assessment program that considers all commercial, recreational, charter and indigenous harvest, provides information on the status of target species and estimates ecologically sustainable harvest levels for target species of the Rocky Reef Fin Fish Fishery.</p>	<p><i>Partially completed</i></p> <p>A stock assessment was recently completed for snapper by Allan <i>et al</i><sup>4</sup> using a stock reduction analysis (SRA) methodology. It has recently been independently reviewed and its results supported. Other species are being included in a three year stock assessment strategy being developed by DPI&amp;F.</p>
<p>DPI&amp;F to identify areas of localised depletion by the end of 2006, and progressively implement relevant mitigation measures the next three years.</p>	<p><i>In progress</i></p> <p>Commercial logbook data is being assessed to investigate changes in localised areas. Significant declines have been observed in commercial catches in the Gold Coast/Tweed area.</p>
<p>DPI&amp;F to develop and implement a recovery strategy by the end of 2006 to actively promote the recovery of overfished Rocky Reef Fin Fish Fishery target species to ecologically viable stock levels.</p>	<p><i>In progress</i></p> <p>DPI&amp;F is working towards development of a recovery strategy in consultation with key stakeholders.</p>
<p>DPI&amp;F to develop and implement a system sufficient to identify changes in the composition and quantity of bycatch, within two years.</p>	<p><i>Completed</i></p> <p>Information will be sourced from the fishery observer program and a new Long Term Monitoring Program that has been developed for the fishery. Bycatch data will be reported in annual status reports, including trends over time once sufficient data has been collected.</p>
<p>Within one year, to support the implementation of the Species of Conservation Interest logbooks, DPI&amp;F to ensure that an education program for fishers, both recreational and commercial, is developed and implemented, to promote the importance of protected species protection and accurate incident reporting.</p>	<p><i>Completed</i></p> <p>A protected species education program was released in September 2005. Material was delivered to both recreational and commercial fishers about ways to minimise interactions with protected species, how to handle them should an interaction occur and the importance of accurate reporting of interactions.</p>

## Management performance

A performance measurement system for the Rocky Reef Fin Fish Fishery will be developed and implemented during 2006. Development of performance measures will be done in consultation with stakeholders through ReefMAC. The fishery's performance will be reported against these measures in future status reports.

<sup>4</sup>Allen, M.S., Sumpton, W.D., O'Neill, M.F., Courtney, A.J. and Pine, W.E, 2006. *Stochastic Stock Reduction Analysis for Assessment of the Pink Snapper (Pagrus auratus) Fishery*. Department of Primary Industries and Fisheries, Brisbane, Queensland.

## Ecosystem

### Non-retained species/bycatch

Fishery observers have been introduced to the Rocky Reef Fin Fish Fishery, with a number of aims, one of which is to better identify and quantify the amount of bycatch in the fishery. Of the observer trips undertaken to date, a large part of the bycatch is undersize target species. In total, 94% of all snapper caught were retained, with the remaining 6% released alive as they were undersized. Of the pearl perch caught, 42% were retained, and 58% were released alive as they were undersized. Another 28 species were caught by rocky reef operators. Of this catch, 88% was retained. The remaining 12% were released alive as they were either undersized, not marketable, or the operator was not permitted to retain the fish as they did not have the appropriate fishery symbol (e.g. no RQ symbol to take coral reef fin fish).

Juvenile snapper have also been reported in trawl bycatch, particularly in the Moreton Bay trawl fishery. Under a model developed by Sumpton and Jackson<sup>5</sup>, it was estimated that approximately 30 tonnes of snapper may be caught and released by trawl operators annually, with the majority discarded dead.

In regard to the recreational sector, the release rate for snapper is estimated as being particularly high, with the RFISH survey suggesting approximately 75% of fish are released in Queensland, and the NRIFS suggesting a release rate of 66% across Australia. The RFISH survey also estimates between 40% and 45% of pearl perch are released. There is some concern that the mortality rates of some released rocky reef fish, particularly snapper, amberjack, teraglin jew and Samsonfish, may be quite high because of their susceptibility to barotrauma. Projects such as the Released Fish Survival program are helping to address these issues through education.

### Interactions with protected species

The logbook used by commercial rocky reef fin fish fishers (i.e. the LFO<sub>3</sub> logbook) does not currently require operators to record interactions with protected species. This is being reviewed across a range of fisheries as logbooks are updated. The current risk to protected species from the Rocky Reef Fin Fish Fishery is considered negligible as a result of the hook and line gear used. A number of rocky reef operators also use the LFO<sub>4</sub> logbook, which requires reporting of protected species interactions. No interactions were recorded in 2005 through the LFO<sub>4</sub> logbook. Fishery observers have not recorded any interactions with protected species to date.

### Fishery impacts on the ecosystem

It is unlikely that there is any significant physical impact on the ecosystem from the fishery due to the relatively benign line fishing method used. There is some concern, however, that heavy fishing pressure may have resulted in changes to the fish community structure.

### Other ecosystem impacts

Neither habitat use by rocky reef species nor the ecology of rocky reefs is well understood. Concern has been expressed by ReefMAC that areas of inshore and offshore rocky reef habitat in the Gold Coast area may have been smothered by sand, and that rocky reef fin fish that once inhabited these key areas can no longer be found. This has been supported by evidence of an increase in commercial spanner crab catches in areas that were previously predominantly reef, where spanner crab dillies were not normally placed in the past (Figure 7).

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<sup>5</sup>Sumpton, W. and Jackson, S. 2005. The effects of incidental trawl capture of juvenile snapper (*Pagrus auratus*) on yield of a sub-tropical line fishery in Australia: an assessment examining habitat preference and early life history characteristics. *Fisheries Research* 71: 335–347.

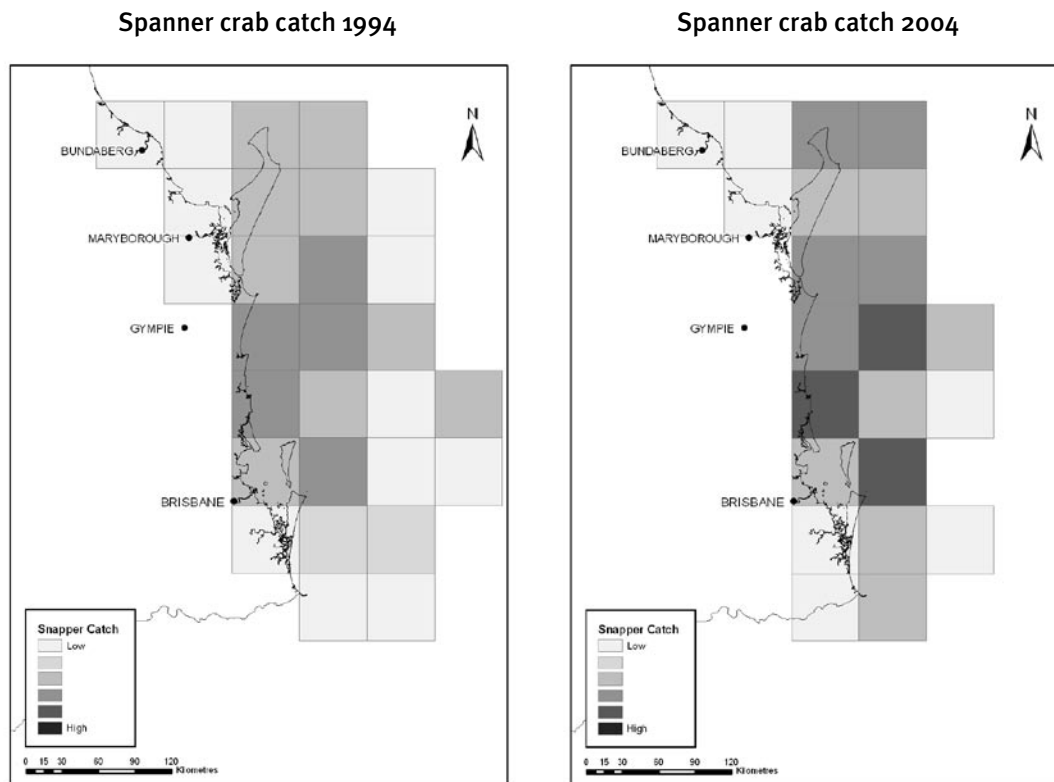


Figure 7: Spanner crab catch in the Gold Coast region in 1994 (left) and 2004 (right), with areas of reported habitat change highlighted (data sourced from Australian Marine Life Institute).

A sand dispersal meeting held at DPI&F in 2005, involving the Environmental Protection Agency and key researchers from Griffith University, agreed that further research is required to obtain historical bathymetric information including topographic information for reefs at depths 50 metres and greater.

## Research and monitoring

### Recent research and implications

Sumpton *et al*<sup>6</sup> undertook a preliminary assessment of the Gold Coast Rocky Reef Fin Fish Fishery in 2005. Preliminary surplus production models were fitted to commercial, recreational and charter catch and catch rate data. Results suggested that the snapper fishery was overexploited at the current harvest levels. Sumpton *et al* recommended that a more robust age-structured analysis was necessary to reduce the uncertainties that were encountered during the assessment.

An age-structured stock assessment was subsequently undertaken by Allan *et al* based on a stock reduction analysis model. The results of this assessment supported the preliminary findings of Sumpton *et al*, suggesting that the snapper fishery is growth overfished and requires intervention to reduce fishing mortality and maintain the sustainability of the stock long term. This assessment has been reviewed by Dr Carl Walters, a leading stock assessment modeller, who supported the type of model used and the overall results obtained.

<sup>6</sup>Sumpton, W., Pettitt, J., Joyce, R., Mayer, D. and Leigh, G. 2005. *Preliminary assessment of rocky reef fisheries in southern Queensland with emphasis on the Gold Coast charter boat fishery for snapper (Pagrus auratus)*. Department of Primary Industries and Fisheries, Brisbane, Queensland.

## **Monitoring programs and results**

A range of monitoring activities will be undertaken to gain a better understanding of the status and dynamics of the Rocky Reef Fin Fish Fishery. These monitoring activities include:

- observer coverage to help validate logbook information and determine the level of catch of snapper in trawl fisheries
- collection of population age-structure information from commercial, recreational and charter fishers
- development of a recruitment index for snapper.

### ***Fishery observer program***

A voluntary fishery observer program was introduced in the commercial sector of the Rocky Reef Fin Fish Fishery in 2005. The aims of the program are to collect information on catch composition, length frequencies, bycatch and any interactions with protected species.

A number of observer trips have been undertaken for the rocky reef fishery with approximately 30 different species of fish recorded. Snapper is the most common, comprising 31% of the catch by number, followed by pearl perch, which comprises 28% of the catch by number. A number of other species were also caught, including a number of species of coral reef fin fish.

Observer information on bycatch and protected species has been described elsewhere in this report.

## **Collaborative research**

No new research was undertaken during 2005. However, information collected as part of previous research activities has been used in stock assessments and helped provide a reference against which different sources of data can be compared. The recent stock assessment that was undertaken was a result of collaborative work with the University of Florida.

## **Fishery management**

### **Compliance report**

Compliance and enforcement in the Rocky Reef Fin Fish Fishery is the responsibility of DPI&F, Queensland Boating and Fisheries Patrol (QBFP). A new Compliance Activity System was implemented on 1 July 2005 that records detailed information on activities performed by QBFP. The system records:

1. Breach reports issued (including offences and court outcomes)
2. Unattended breach reports
3. Fisheries infringement notices (FINS) issued
4. All field activities (from new field occurrence logs)
5. Complaints made via the Fishwatch hotline (including follow up actions).

All offences and field activities are recorded to six nautical mile grids. This allows enforcement activities and offences to be represented spatially and to guide reviews of compliance strategies.

During the 2005–2006 financial year (up to and including 15 April 2006), more than 1000 units (recreational, commercial and charter/tour operators), were inspected in the Rocky Reef Fin Fish Fishery. The recorded compliance rate was approximately 94%. The majority of offences detected were associated with recreational fishers taking/possessing fish regulated by size and/or number. In addition to the above field inspections, several marketer premises were inspected during the period. In addition to compliance activities, QBFP officers also undertake educational activities with a public lecture of interest to fishers in the Rocky Reef Fin Fish Fishery delivered during this period.

A compliance risk assessment will be completed for this fishery in order to determine compliance priorities. The outcomes of the assessment will provide the basis for future compliance planning.

### **Changes to management arrangements in the reporting year**

No management changes occurred during 2005. An Investment and Effort Increase Warning remains current for the fishery.

### **Complementary management**

Currently, minimum size limit in NSW is 5 cm smaller than in Queensland and anglers have a daily bag limit of 10 (compared with an in-possession limit of 5 in Queensland). Discussions are ongoing with NSW fisheries managers regarding possible complementary management of shared rocky reef fin fish stocks. NSW DPIE are waiting on the results of a socio-economic impact study prior to implementing any changes to the snapper minimum size limit.

### **Information compiled by**

Claire Andersen

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