Annual status report 2008
Queensland Spanner Crab Fishery

Queensland Government
Department of **Primary Industries and Fisheries**

The Department of Primary Industries and Fisheries (DPI&F) seeks to maximise the economic potential of Queensland's primary industries on a sustainable basis.

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Introduction

The Queensland Spanner Crab Fishery is a predominantly commercial fishery that targets *Ranina ranina*. Most of the catch is exported live to Asia. The fishery was the first in Queensland to be managed under a quota system and is one of the benchmarks against which other quota fisheries are compared. The fishery operates along the Queensland coast, with most fishing occurring within south-east Queensland waters.

This report describes the fishery for the period January to November 2007.

Fishery Profile 2007

Total harvest from all sectors: Approximately 1533 t*

Commercial harvest: 1526 t (Total Allowable Catch of 1923 t)

Recreational harvest 2005: Approximately 2.5 t

Indigenous harvest: No estimate available, considered negligible

Charter harvest: 5.3 t (approximately 4 t retained and 1.3 t released)

Commercial Gross Value of Production (GVP): Approximately $6.87 million†

Number of licences: 507 (C2: 241, C3: 371; 144 operators hold both C2 and C3 licences)

Commercial boats accessing the fishery: 72

Fishery season: 1 January – 20 November

Description of the fishery

Fishing methods

Commercial and recreational fishers are permitted to take spanner crabs using dillies.

Legislation states that a dilly must have an area within its frame of no more than 1 m² and a net drop below its frame of no more than 10 cm. A dilly's net must have only one layer of mesh and each mesh in the layer must be square or rectangular. The mesh size of the net must be at least 25 mm.

Commercial fishers can use a maximum of 45 dillies in Managed Area A and a maximum of 30 dillies in Managed Area B (see following sections on Fishing area and Main management methods used).

Recreational fishers are permitted to use a maximum of four collapsible traps, inverted dillies or crab pots at any time.

Fishing area

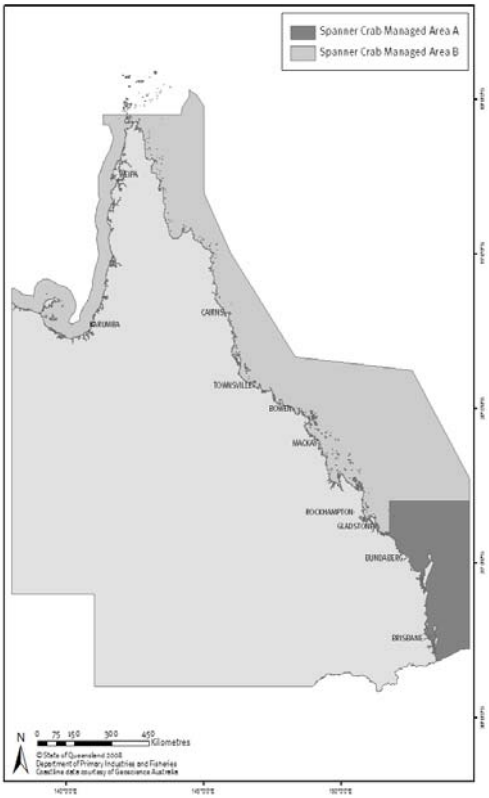

Figure 1: Queensland Spanner Crab Fishery

The area of the fishery encompasses the waters off the Queensland coast, from the New South Wales (NSW) border to the Northern Territory border (Figure 1). The fishery is concentrated in coastal waters up to 80 m depth between Yeppoon in central Queensland and the Queensland–NSW border.

* For the purpose of this report, the total harvest estimate for 2007 includes the recreational harvest estimate from 2005, based on the assumption that the subsequent years of catch would be similar.

† GVP was calculated using the indicative price of $4.50/kg for product in 2007. Prices ranged from $4/kg to $8/kg in 2007.

The commercial fishery is divided into two areas, Managed Area A and Managed Area B (Figure 1). Operators must hold a C2 licence to harvest spanner crabs in Managed Area A and a C3 licence in Managed Area B. Each managed area is subject to a different set of management arrangements (see following section).

Main management methods used

Queensland's Department of Primary Industries and Fisheries (DPI&F) manages the Spanner Crab Fishery in accordance with the objectives of Queensland's *Fisheries Act 1994* and the Fisheries (Spanner Crab) Management Plan 1999. The fishery is also subject to marine park zoning under the Commonwealth *Great Barrier Reef Marine Park Act 1975* and the Queensland *Marine Parks Act 1982*.

A range of input and output controls are in place to manage the harvest of spanner crabs by commercial and recreational fishers.

Output controls

- Managed Area A has a commercial total allowable catch (TAC), divided among licence holders using an individual transferable quota (ITQ) system. The TAC is currently 1923 t
- Managed Area B has a daily quota of 16 baskets
- Catch must be unloaded ashore before fishing operations move from one managed area to the other
- Recreational fishers are subject to a possession limit of 20 spanner crabs
- Minimum size limits of 10 cm carapace length apply to all fishers; if the carapace is damaged or missing, a minimum size limit of 3.7 cm sternite (under body) length applies
- Egg-bearing (berried) females are protected and are not allowed to be taken by any fisher.

Input controls

- Boat and apparatus restrictions apply to all fishers
- Spawning season closures apply to all fishers from midnight on 20 November to midnight on 20 December every year
- Managed Area A has a maximum possession limit of 45 dillies, set 15 per trot line
- Managed Area B has a maximum possession limit of 30 dillies, set 10 per trot line
- Recreational fishers have a maximum possession limit of four apparatus per fisher.

Approximate allocation between sectors

The fishery is predominantly a commercial fishery, with the recreational and charter sectors each taking less than 1% of the total harvest in 2007. Indigenous catches are considered to be negligible.

Fishery accreditation under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

In the second assessment of the spanner crab fishery in January 2007, DEWHA granted the fishery a five-year exemption from export controls under the EPBC Act. This exemption acknowledges that the Spanner crab fishery is being managed in an ecologically sustainable manner, and allows the export of the catch. The exemption expires on 5 February 2012.

Catch statistics

Commercial

Reported commercial catch of spanner crabs rose from 1415 t in 2006 to 1527 t in 2007 (Figure 2). This reported increase occurred even though there was a reduction commercial effort in the fishery, resulting in a rise in catch per unit effort (CPUE) for the fifth year in a row (Figure 2).

There has been a reduction in effort in the fishery in 2007 of 288 days (6.5%). This is likely to reflect the drop in the number of boats accessing the fishery from 87 to 72 boats.

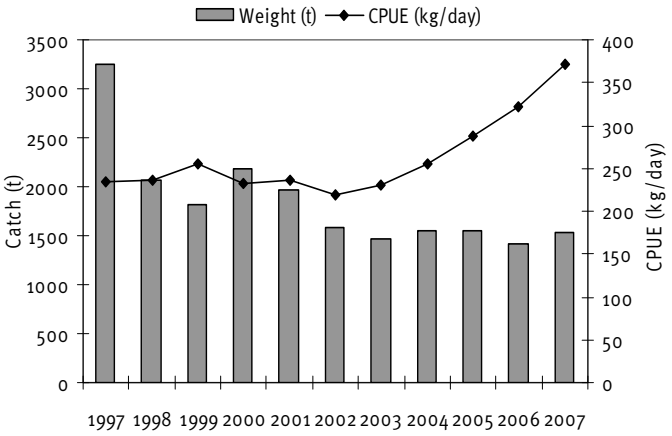

Figure 2: Total commercial catch and CPUE in the Spanner Crab Fishery 1997–2007. (Source: DPI&F CFISH database, 9 September 2008).

The number of boats accessing the fishery in 2007 has fallen from a peak of more than 300 in 1994 — before the introduction of the Fisheries (Spanner Crab) Management Plan 1999. This is typical of most quota-based fishery management systems and results from market forces driving the acquisition of significant amounts of quota by a decreasing number of operators. It is also likely to result from some fishers taking on the additional roles of processors and marketers (i.e. 'vertical integration').

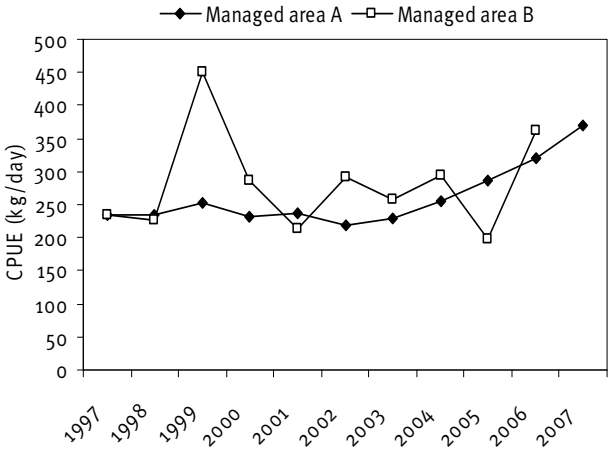

Figure 3: CPUE (kg/day fished) in Managed Area A and Managed Area B 1997–2007 (Source: DPI&F CFISH database, 11 September 2008).

Since 2002, catch per unit effort (CPUE) has generally trended upwards in both management area A and B (Figure 3). The rising CPUE indicates that spanner crab populations within Queensland waters are increasing. The rise in CPUE may have also partially resulted from fewer fishers holding a greater quotient of the TAC, which would in turn increase fishing efficiency through reduction in travelling time between fishing sites.

Recreational

There have been no updates to estimates of recreational spanner crab catch since the 2007 Annual Status Report. The report can be accessed online via the Monitoring Our Fisheries link at www.dpi.qld.gov.au/fishweb.

Charter

Charter catch contributes approximately 0.4% to the total reported spanner crab catch in 2007. Data from compulsory charter logbooks showed that in 2007 the charter sector reported catching a total of 5.34 t of spanner crab. Of that, 4.01 t were retained and 1.32 t discarded, which is slightly more than double the retained charter catch reported for 2006 (Table 1).

Table 1: Fishery details for charter harvest of spanner crabs 1998–2007 (Source: DPI&F CFISH database, 9 September 2008).

Year	Days	Total catch (t)	Retained catch (t)	Discard (t)	CPUE (kg/day)
1998	14	0.74	0.34	0.41	23.93
2001	3	0.01	0.01	0	3.33
2002	1	0	0	0	0
2005	34	0.44	0.36	0.08	10.52
2006	106	2.54	1.81	0.73	17.04
2007	122	5.34	4.01	1.32	32.91

Charter harvest has increased for the second consecutive year in 2007. Anecdotal evidence suggests that some charter operators are continuing to diversify their activities to provide clients with experiences in catching spanner crabs.

Indigenous

There have been no updates to estimates of indigenous spanner crab catch since the 2007 Annual Status Report. The report can be accessed online via the Monitoring Our Fisheries link at www.dpi.qld.gov.au/fishweb.

Anecdotal information suggests that Indigenous catch of spanner crabs is negligible.

Spatial issues / trends

The commercial sector of the fishery is concentrated a number of areas namely:

- Moreton—Rainbow Beach to the NSW border (part of Managed Area A)
- Fraser/Burnett—Baffle Creek to Rainbow Beach (part of Managed Area A)
- Great Barrier Reef (GBR)—Cape York to Baffle Creek (Managed Area B).

The regional distribution of reported spanner crab catches in these focal areas can be found in Figure 4. Since the introduction of the quota system in 1999, catches have remained relatively stable in all three areas.

CPUE in each of the three areas has been generally increasing since 2002, indicating that spanner crab stocks in Queensland are growing (Figure 5).

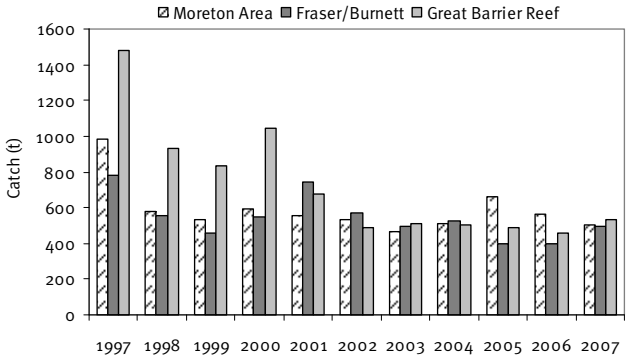

Figure 4: Regional distribution of spanner crab catch 1997–2007 (Source: DPI&F CFISH database, 9 September 2008).

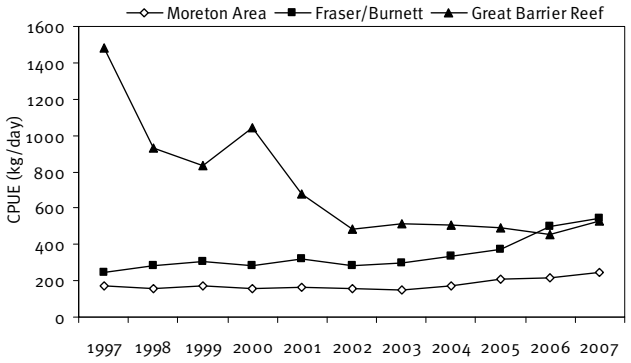

Figure 5: Catch per unit effort (kg/day) in the Moreton, Fraser/Burnett and Great Barrier Reef areas (Source: DPI&F CFISH database, 9 September 2008).

Socio-economic characteristics and trends

Prices paid to fishers for spanner crabs fluctuate between $4/kg and $8/kg, depending on the market (domestic versus export), the quality of the product and the level of demand from wholesalers to meet market conditions. The typical price obtained for live product in 2007 was $4.70/kg[‡]. There have been no significant upward or downward trends in prices over the last five years.

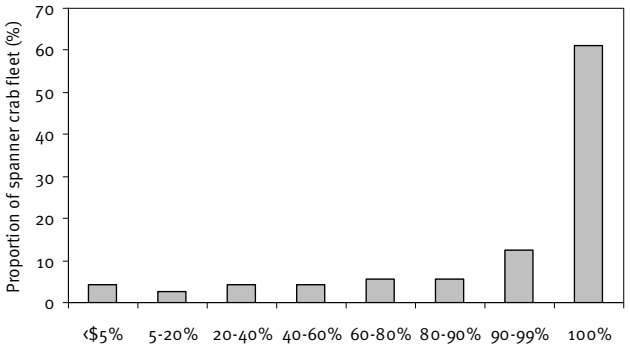

Figure 6: Contribution of spanner crab harvest to fishing vessel's annual fishing income in 2007 (Source: DPI&F CFISH database, 9 September 2008).

[‡] Based on prices obtained from the Queensland Seafood Marketers Association.

As in 2006, annual income from spanner crabs for the majority of vessels in the 2007 fleet were between $20 000 and $125 000 (Figure 6). Approximately 4% of the fleet make less than $2000 a year from the fishery, suggesting that a minority of vessels operate in other commercial fisheries throughout the year or that fishing provides only part of their income.

Figure 7 demonstrates the contribution that the spanner crab harvest makes to the total fishing income of all boats in the fishery. Just over half (60%) of the fleet make their entire annual fishing income from the Spanner Crab Fishery. A further 12% of the fleet derive 90-99% of their income from this fishery.

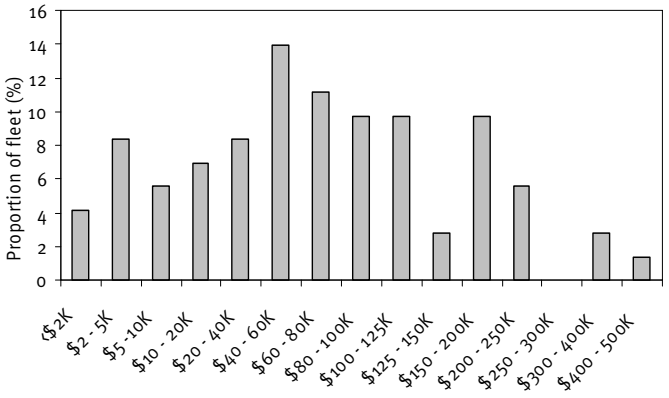

Figure 7: Income distribution of licence holders in the Spanner Crab Fishery in 2007 (Source: DPI&F CFISH database, 9 September 2008).

Fishery Performance

Appraisal of fishery in regard to sustainability

Reported logbook data indicates that there has been an upward trend in CPUE overall since 2002 both at a whole of fishery and at a regional scale (Figures 2, 3 and 5). This trend suggests an increase in the spanner crab population in Queensland waters. Independent estimates of CPUE from DPI&F's Long Term Monitoring Program (LTMP) from 2000-2003 also supported the suggestion of an increase in the abundance of spanner crabs (Dempster *et al.* 2003). These trends indicate that the fishery is managed in an ecologically sustainable manner.

The prohibition on taking egg-bearing females and undersized crabs in Queensland is a precautionary approach to management that protects the spawning capacity of the stock from increases in effort. The Spanner Crab Fishery was the first fishery in Queensland to be managed under a quota-based management system.

In 2006, an ecological risk assessment (ERA) of the impacts of the fishery on the benthic community and target and bycatch species was undertaken to assess whether the fishery continues to be managed in an ecologically sustainable manner. The ERA indicated that the risk to bycatch and to the benthic community were negligible to minor.

In January 2007 the Queensland Spanner Crab Fishery was re-assessed by the Commonwealth Department of Water Heritage and the Arts (DEWHA) and a second Wildlife Trade Operation (WTO) approval was awarded. DEWHA considered that the management arrangements in place provided the basis for the fishery to be managed in an ecologically sustainable way.

Progress in implementing Department of the Environment, Water, Heritage and the Arts (DEWHA) recommendations

DEWHA made a range of recommendations to DPI&F during its second assessment of the fishery in January 2007 in order to address any perceived risks or uncertainties. Details of the progress DPI&F has made in implementing each of these recommendations are provided in Table 2.

Table 2: Implementation of DEWHA recommendations.

Recommendation	Progress
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 byproduct, bycatch, protected species or the ecosystem.	*Ongoing* There were no changes to management arrangements in 2007.

Recommendation	Progress
DPI&F to ensure that management arrangements for the shared spanner crab stock with NSW take account of the results of the collaborative monitoring project, once available.	*Ongoing* LTMP maintain collaborative monitoring of spanner crab stocks that have included a monitoring site in NSW waters. The combination of QLD and NSW data will provide an enhanced fishery-independent reference for inclusion with the commercial logbook data in routine assessment of the status of the spanner crab stock across both states, ensuring that spanner crabs continue to be harvested sustainably.
By the end of 2007 DPI&F to develop a compliance strategy for the Spanner Crab Fishery addressing high risks identified in the compliance risk assessment, particularly those relating to data reliability.	*Complete* A compliance risk assessment was conducted for the Queensland Spanner Crab Fishery in March 2006. Detailed strategies to address the risks identified by this assessment were developed through the QBFP strategic and operational planning processes and were first implemented in July 2005. Through identification and prioritisation of compliance risks associated with the fishery, planning and operational processes at the district level have been improved and risks mitigated.
By the end of 2008, DPI&F to develop an improved method of estimating abundance of the spanner crab stock that takes into account relevant information on the biological characteristics of spanner crabs, changing fisher behaviour and increased effort in the fishery.	*Complete* The FRDC project 'Reducing uncertainty in the assessment of the Australian Spanner Crab Fishery' (FRDC Project 2003/046) has been completed by DPI&F's Dr Ian Brown and the report is finalised. It resulted in the adoption of a unified set of monitoring protocols across the NSW/QLD spanner crab stock, and led to the development of a new system of spanner crab stock assessment and TAC-setting. For the first time there is a formal use of fishery-independent data from the Long-Term Monitoring Program's annual spanner crab surveys, in addition to the conventional fishery-dependent logbook catch and effort statistics, in the decision rule-based procedure for setting the total allowable catch. The work also contributed to initiating a major project (FRDC 2007/033) evaluating a new approach to age-determination in a range of invertebrates species including spanner crabs, being run by DPI&F geneticist Dr Jennifer Ovenden. This telomeric DNA ageing method seems appropriate for some mollusc species, but whether it will work for any crustaceans has yet to be determined.
DPI&F to undertake an assessment of the impact of operations under GFPs that takes into account the impact of the operations on the target species and broader ecosystem and cumulative impacts of the permits issued, and incorporate this as part of the next review of the Spanner Crab Management Plan.	*Complete* A short study was conducted on the impact of General Fisheries Permits (GFPs) on catch rates and investigating changes in fishing operations. The results have been used in evaluating various management strategies for the spanner crab fishery.

Recommendation	Progress
By mid 2008, DPI&F to implement management responses for risks ranked as 'moderate' or above in the Spanner Crab Ecological Risk Assessment.	*Complete* DPI&F completed an Ecological Risk Assessment (ERA) of Queensland's crab fisheries in 2007. The ERA for spanner crabs considered fishing as presenting a moderate risk to the size of spanner crab populations, due to the intrinsic nature of the activity. The current management arrangements are precautionary in nature, ensuring sustainable use of spanner crab populations. At current fishing levels the resource is considered not to be fully exploited. Current fishing levels are not considered to adversely affect the long term recruitment dynamics of spanner crabs and so no management response is currently required. The response time to any changes in fishing pressure is rapid due to the biennial review of the commercial TAC.

Performance against fishery objectives

A number of review events are incorporated into the Fisheries (Spanner Crab) Management Plan 1999 to measure the fishery's performance against management objectives. The following table outlines the review events detailed in the management plan, and the evaluation of the fishery against these for the 2007 calendar year (Table 3).

Table 3: Review events in the spanner crab fishery.

Objective	Review Event	Performance
Ecologically sustainable use of spanner crabs	(a) the annual quota for managed area A significantly declines; or (b) the chief executive accepts a scientific study that shows a significant decline in the abundance of— (i) spawning spanner crabs; or (ii) egg-bearing spanner crabs; or (iii) juvenile spanner crabs.	*(a) Not triggered* The annual catch quota underwent a biennial review in 2008. The annual quota for the quota years 2008–09 and 2009–10 remained unchanged at 1923 t. *(b) Not triggered.* A comprehensive search of the scientific literature found no scientific studies that indicated a significant decline in the abundance of spanner crabs.
Managing the spanner crab fishery to give optimal, but sustainable, community benefit:	(a) the chief executive accepts a survey of recreational, Aboriginal or Torres Strait Islander fishing for spanner crabs that shows a significant decline in spanner crab catches; or (b) the chief executive's receipt of commercial fishing catch and effort data for spanner crabs that shows a	(a) *Triggered* The most recent RFISH results have suggested a significant drop in recreational spanner crab catch. This finding is not of concern. Anecdotal evidence suggests that recreational fishers rarely target spanner crabs, and that spanner crabs are most likely taken as incidental catch by fishers targeting blue swimmer crabs. The National Recreational and Indigenous Fishing Survey (NRIFS)(Henry and Lyle 2003) in 2000 - 2001 combined with anecdotal information suggest that the catch from Aboriginal and Torres Strait Islanders is negligible. *(b) Not triggered* Total reported commercial catch of spanner crab has remained fairly stable since 2002 (Figure 2). CPUE has been

Objective	Review Event	Performance
	significant decline in the commercial catch of spanner crabs.	rising since 2002.
Managing the commercial fishery to achieve optimal, but sustainable, economic efficiency	(a) the annual commercial catch of spanner crabs in managed area A significantly declines; or (b) a significant number of commercial fishers are consistently unable to obtain ITQ units by transfer; or (c) the chief executive accepts an economic study of the commercial fishery that shows a significant decline in the economic efficiency of the fishery.	*(a) Not triggered* Commercial catch of spanner crab in Managed Area A has remained relatively stable since 2002 (Figure 4, Fraser/Burnett and Moreton areas). *(b) Not triggered.* CrabMAC is the forum in which spanner crab fishers can raise concerns about obtaining ITQ units by transfer. During 2007 no such concerns were tabled in any of the CrabMAC meetings. *(c)Not triggered* There is currently no evidence to suggest that the economic efficiency of the fishery is in decline. Price paid for spanner crabs have been stable over the last five years.
Ensuring a fair division of access to spanner crabs	(a) the annual commercial catch of spanner crabs in managed area A significantly declines; or (b) the chief executive accepts a survey of recreational, Aboriginal or Torres Strait Islander fishing for spanner crabs that shows a significant change in catches of spanner crabs.	*(a)Not triggered.* Commercial catch of spanner crab in Managed Area A has remained relatively stable since 2002 (Figure 4, Fraser/Burnett and Moreton areas). *(b) Triggered* Refer to response to review event measured objective in the second objective above for response.
Monitoring and reviewing the commercial spanner crab catch.	there is a significant and progressive decline in— (a) the accuracy of information given by commercial fishers in logbooks required by the chief executive; or (b) compliance with logbook returns required by the chief executive.	(a) *Not triggered* Trends seen in the Long Term Monitoring Program studies match those found in logbook data, indicating that logbook data are accurate. *(b) Not triggered* Routine biannual logbook compliance checks show no decrease in compliance.

Resource concerns

There are no resource concerns for the fishery at current participation levels and with the precautionary management arrangements in place.

Ecosystem

Non-retained species/bycatch

The apparatus used in the fishery is considered to be highly selective and has high targeting efficiency.

The DPI&F LTMP routinely collects bycatch data during fishery-independent surveys using standard commercial fishing gear from chartered commercial vessels. Observations of fishery bycatch in Queensland regions during 2002, 2003, and 2005 show very low catch rates (McGilvray *et al.* 2006), as do observations of fishery bycatch from 2007 surveys (McGilvray 2008). Approximately 70% of the recorded bycatch were echinoderms (sea urchins, starfish etc.), which could be released with high survival expectancy (Dempster *et al.* 2003).

Interactions with protected species

An interaction is any physical contact an individual has with a protected species. In 2007, there were two reported interactions with species of conservation interest by crab fishers (blue swimmer, spanner and mud crab combined). Closer examination of the source of these interactions revealed that they did not occur in the spanner crab fishery.

Spanner crab apparatus are generally deployed on a trot line on the sea floor with up to 15 dillies attached. This minimises the amount of rope line in the water column and consequently the likelihood of large marine animals such as turtles, dugongs and whales becoming entangled.

Fishery impacts on the ecosystem

The impact of the fishery on the ecosystem is considered to be low. The fishing apparatus used (dillies) have little impact on the physical environment as they are lightweight and stable and because they are generally deployed on open sandy substrates.

Other ecosystem impacts

The Spanner Crab Fishery targets crabs in areas further offshore compared with other inshore crab fisheries (e.g. mud crab). This buffers the fishery to some extent against impacts from habitat modification and coastal development. Fishing pressure on stocks from non-spanner crab fisheries is negligible as spanner crabs are not permitted to be retained unless the operator holds a C2 or C3 licence.

Research and monitoring

Recent research and implications

The FRDC project 'Reducing uncertainty in the assessment of the Australian Spanner Crab Fishery' (FRDC Project 2003/046) has been completed by DPI&F's Dr Ian Brown and the report is finalised. It resulted in the adoption of a unified set of monitoring protocols across the NSW/QLD spanner crab stock, and led to the development of a new system of spanner crab stock assessment and TAC-setting. For the first time there is a formal use of fishery-independent data from the Long-Term Monitoring Program's annual spanner crab surveys, in addition to the conventional fishery-dependent logbook catch and effort statistics, in the decision rule-based procedure for setting the total allowable catch.

The work also contributed to initiating a major project (FRDC 2007/033) evaluating a new approach to age-determination in a range of invertebrates species including spanner crabs, being run by DPI&F geneticist Dr Jennifer Ovenden. This telomeric DNA ageing method seems appropriate for some mollusc species, but whether it will work for any crustaceans has yet to be determined.

Monitoring programs and results

Long Term Monitoring Program

The DPI&F Long Term Monitoring Program (LTMP), established in 1999, undertakes annual monitoring of the fishery.

The objectives of the spanner crab monitoring program are to:

- obtain fishery-independent catch per unit effort data to estimate annual changes in relative abundance
- record length frequency and sex-ratio data for long-term comparison of population structure and population sustainability indicators
- identify interactions with species of conservation interest and monitor bycatch

- determine whether catch rates are related to environmental variables such as temperature and water depth (McGilvray *et al.* 2006).

The sampling design includes five assessment regions within the Queensland commercial fishery (Managed Area A), which is subject to the commercial TAC. From 2005 onwards an extra survey region in NSW was included.

Between 2000 and 2008, the LTMP fishery independent spanner crab survey has undertaken approximately 29 800 and 2400 individual dilly lifts, in QLD and NSW respectively. In QLD, 85% of the overall catch was males, compared with NSW where only 46% were males.

More crabs were encountered during the 2008 Queensland survey than any previous survey. This continued the upward trend in numbers of crabs encountered which started in 2002 (Table 4). Crabs encountered during the 2008 NSW survey were lower than the previous year, 2007, but higher than 2005 and 2006 (Table 5).

Table 4: The number of crabs encountered each year during LTMP surveys in Queensland; * MLCL (minimum legal carapace length).

Year	Male crabs (no's)	Female crabs (no's)	Male crabs % above MLCL*	Female crabs % above MLCL*
2000	4774	855	67	10
2001	4786	526	65	13
2002	3329	440	72	10
2003	4328	695	67	8
2005	6250	1269	64	8
2006	6923	1198	65	10
2007	5870	1059	61	9
2008	7816	1138	63	8

Table 5: The number of crabs encountered each year during LTMP surveys in New South Wales; * MLCL (minimum legal carapace length).

Year	Male crabs (no's)	Female crabs (no's)	Male crabs % above MLCL*	Female crabs % above MLCL*
2005	209	217	90	37
2006	164	135	93	46
2007	305	372	71	5
2008	247	337	67	6

The LTMP spanner crab component has delivered a time series of size and sex-ratio data coupled with fishery-independent catch rate data for the five Queensland assessment regions in Managed Area A. The adoption of the QLD LTMP survey design by NSW fisheries in 2005 has delivered a time series of fishery independent catch rate data for its fishery.

Together with commercial logbook data, LTMP fishery independent data helps inform the quota setting (TAC) process for the Queensland fishery. The data also provides a platform to undertake joint stock assessments of the stock with New South Wales, and ensures that spanner crabs continue to be harvested in a sustainable manner.

Collaborative research

Refer to the previous section.

Fishery management

Compliance report

During 2007, 201 inspections were conducted in the Queensland Spanner Crab Fishery, including but not limited to 158 commercial fishing vessel inspections and 24 marketer premise inspections. During this period, 14 offences were detected in association with 14 inspections corresponding to a compliance rate of 93%.

Offences

Table 6: Offences recorded in the Queensland Spanner Crab Fishery in 2007.

Offence	FIN	Prosecution	Caution
Failed to comply with a regulated fishing apparatus or regulated fishing declaration	-	1	-
Take fish for trade or commerce with fishing apparatus not marked in the prescribed way	1	-	-
Failed to comply with a requirement to keep or give stated records, documents or other information in the approved form	7	-	5
TOTAL	**8**	**1**	**5**

A summary of offences is provided in Table 4. Offences are reported as either a Fisheries Infringement Notice (FIN); Caution (FIN Caution or official caution issued by Legal); or Prosecution (to proceed by complaint summons). The prosecution recorded in Table 6 is still pending.

Changes to management arrangements in the reporting year

There were no changes to management arrangements during 2007.

Outcomes of review processes

A general review of the Fisheries (Spanner Crab) Management Plan 1999 has not yet commenced. In 2008 priority was given to other fisheries such as the East Coast Inshore Fin Fish Fishery and the Rocky Reef Fin Fish Fishery. The review of the Fisheries (Spanner Crab) Management Plan 1999 is now scheduled to occur in 2009.

Consultation/communication/education

Promotion of regulations applying to both commercial and recreational fishers, including those relating to spanner crabs, is an ongoing role for DPI&F.

Consultation with stakeholders in the Spanner Crab Fishery mainly occurs through CrabMAC, with meetings generally held twice a year. CrabMAC provides advice to DPI&F on management measures for the fishery.

Complementary management

Queensland fisheries managers and researchers continue to work with their NSW counterparts towards complementary monitoring and research. In 2007, NSW DPI and QLD DPI&F continued their annual cross-border fishery-independent survey, covering the entire east coast spanner crab stock.

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Information compiled by

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Image

Spanner crab (*Ranina ranina)*