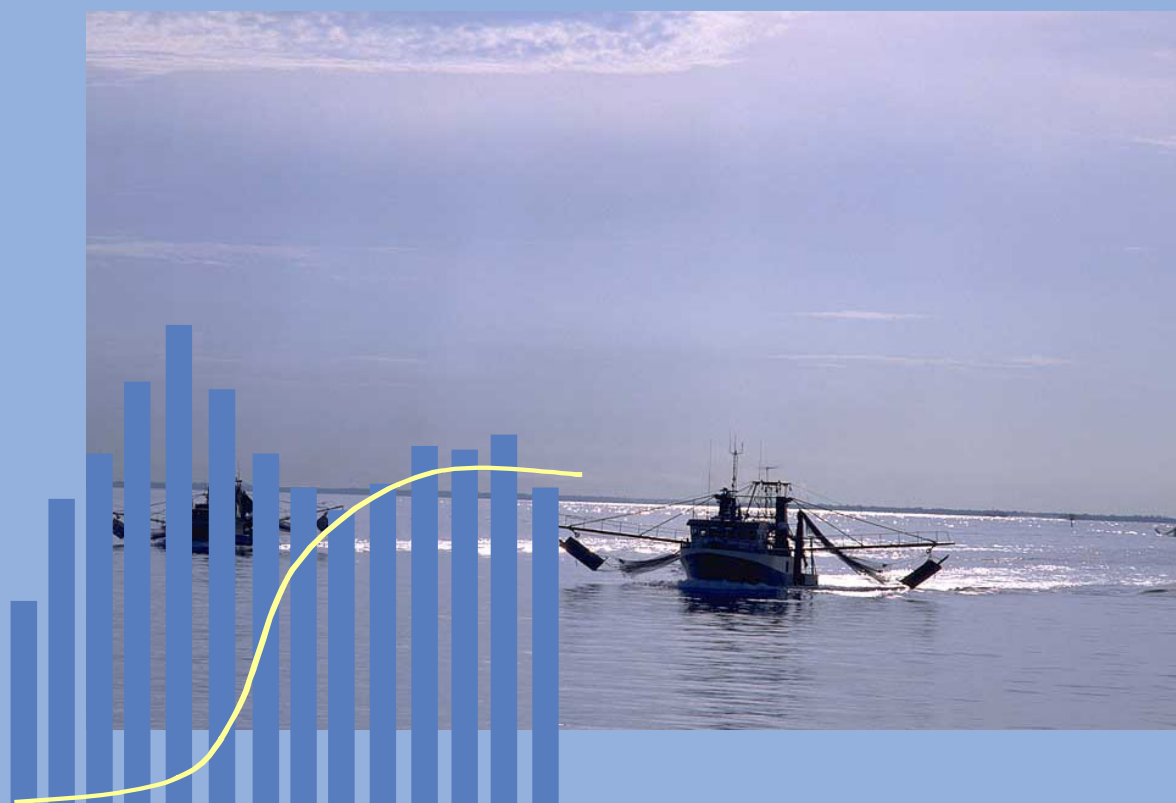




NORTHERN PRAWN FISHERY & KIMBERLEY PRAWN FISHERY

DATA SUMMARY 2001



John Garvey & Sandra Lilly
Logbook Program
March 2002

DATA SECTION

John Garvey & Sandra Lilly
Northern Prawn Fishery & Kimberley Prawn Fishery Data Summary 2001
March 2002

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Preface

Scope of the Report

The Logbook Program's data summaries provides a broad outline of the catch and effort for a fishery, on request by the Fishery Manager. They are an important mechanism for providing feedback to operators on the logbook data that they send to AFMA. In addition, the extraction and analysis of the data by the Logbook Program helps to identify data quality issues and provides valuable information on how data can be collected and managed better.

AFMA has produced data summary reports for the Northern Prawn Fishery on an annual basis since 1992. The following data summary reviews the 2001 season prawn catches and effort for the Northern Prawn Fishery (NPF) and the Kimberley Prawn Fishery (KPF).

Acknowledgements

Production of this report was made possible through the efforts of the skippers and vessel owners of the Northern Prawn Fishery (NPF) and Kimberley Prawn Fishery (KPF). Skippers supplied daily logbook information in the NPF logbook (NP13 and the TED01) and vessel owners completed Seasonal Landing Returns (SLR-B01 and SLR-T01). The log sheets were processed by Butch van Montfrans and D&S Datafix.

Information for the Kimberley Prawn Fishery summary was supplied by Errol Sporer of Fisheries Western Australia. Special thanks to Janet Bishop of CSIRO for providing reconciled catches and other assistance.

If you have any comments or queries on the Data Summary, please do not hesitate to call:

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Please note that this Data Summary is also available on AFMA's website:
www.afma.gov.au



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Introduction

The Northern Prawn Fishery Data Summary 2001 contains catch and effort statistics by prawn species, area, time and fishery. Comprehensive bycatch information is also included for the information of owners and skippers and to meet AFMA's obligations under Offshore Constitutional Settlements with Queensland, the Northern Territory and Western Australia. Turtle bycatch is also reported.

As with the 1998, 1999 and 2000 data summaries, information on catch, effort and bycatch in the Western Australian Kimberley Prawn Fishery has been included.

Description of the Northern Prawn Fishery

Area of Fishery

The Northern Prawn Fishery is located off Australia's northern coast, and extends from the low water mark to the outer edge of the Australian fishing zone (AFZ) in the area between Cape York in Queensland and Cape Londonderry in Western Australia (Figure 1).

Fishing Methods

Prawn trawling is an active fishing method that involves towing a conical-shaped net spread open by two steel or timber otter boards over the seabed, commonly called otter trawling. Groundchains are also used on the nets to stimulate prawns into the trawl mouth. Vessels in the NPF tow two nets simultaneously in a double rig configuration, from booms on either side of the vessel. In addition to the main nets a small net, or try-net, is used to test the catches for a given area. All trawl nets (other than try-

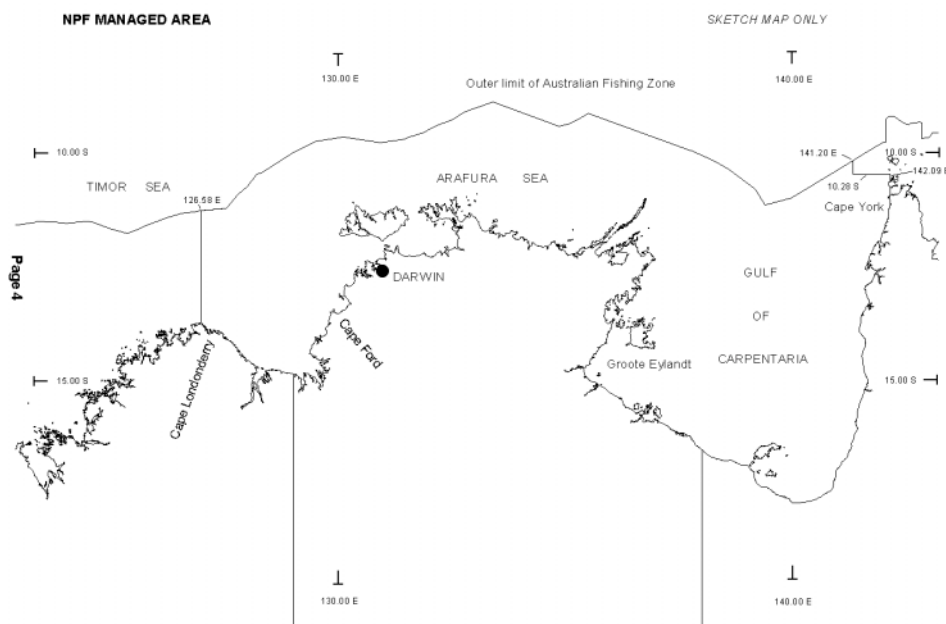


Figure 1. Northern Prawn Fishery Management Area



nets) in the NPF are required to be fitted with approved Turtle Excluder Devices (TEDs) and Bycatch Reduction Devices (BRDs).

Most of the vessels in the NPF are purpose built from steel and range in length from 14 m to 29 m. All NPF boats have modern, sophisticated catch handling, packing and freezing capabilities as well as wet (brine) holding facilities. All use electronic aids such as colour echo sounders and Global Positioning Systems (GPS). Satellite phone and fax equipment is used by most vessels and many have introduced on-board computing facilities. All vessels are required to have a Vessel Monitoring System (VMS).

Management Information

The Fishery is managed through a combination of input controls (limited entry, seasonal closures, permanent area closures, gear restrictions and operational controls) which are implemented under the Northern Prawn Fishery Management Plan 1995 (the Management Plan).

The Management Plan provides for the granting of fully transferable Statutory Fishing Rights (SFRs) that determine the number of trawlers that may operate and the amount of gear used in the Fishery.

Species

The Fishery targets nine commercial species of prawns including white banana (*Fenneropenaeus merguensis*), red-legged banana (*F. indicus*), brown tiger (*Penaeus esculentus*), grooved tiger (*P. semisulcatus*), blue endeavour (*Metapenaeus endeavouri*), and red endeavour (*M. ensis*). Scampi, squid, scallops and bugs are also taken.

The fishery is split into two seasons. For 2001, the seasons were from 1 April to 27 May and from 4 August to 9 November respectively.

Data Collection Program

Northern Prawn Fishery operators are required to complete the 'Northern and Torres Strait Prawn Fisheries Daily Fishing Log' (NP13) on a daily basis. The NP13 was introduced into the fishery in April 2001, replacing the NP12. This year operators could also nominate to participate in the TED project. This required operators to complete the 'Banana Prawn Fishery TED Performance Shot by Shot Fishery Log' (TED01) instead of the NP13 for the period between 1 April to 14 April, on a shot by shot basis.



Brief Description of the Kimberley Prawn Fishery

The management controls for the Kimberley Prawn Managed Fishery are based on limited entry, seasonal closures, gear controls and restrictions on boat replacements.

The Kimberley Prawn Managed Fishery is located off the north of Western Australia adjacent to the Northern Prawn Fishery (NPF). The boundaries of this fishery are '*all Western Australian waters of the Indian Ocean lying east of 123°45' east longitude and west of 126°58' east longitude*'.

Seasonal dates for the Kimberley Prawn Managed Fishery are aligned with those of the Northern Prawn Fishery.

Methods Used For Preparing Data Summary

Northern Prawn Fishery

The data used to prepare the Northern Prawn Fishery Data Summary is comprised of the logbook information (NP13 and TED01) submitted by NPF skippers and the seasonal landing returns (SLR-B01 and SLR-T01) completed by NPF vessel owners. This information is stored at the Australian Fisheries Management Authority on the Northern Prawn, Kimberley Prawn and Torres Prawn database.

The data used in this summary was extracted on 29th January 2002 after making every effort to reconcile the data provided by skippers with that obtained from vessel owners. This was to ensure that the logbook data and the landings figures approximated each other as closely as possible. 89 vessels from a total of 118 had catches from logbooks totalling within 10% of the catch recorded in the landing returns for banana and tiger prawns. At the time of extraction, 100% of all possible logbook and landing data had been received. Only 16 days are missing because of lost logsheets.

Over the entire fleet, the logbook figures for banana prawns were a little lower than the landings figures (by 1.1%). For tiger prawns and endeavour prawns, the logbook figures were a little higher than the landings - tigers by 1.3% and endeavours by 2.2%. The catch of king prawns accounted for on the logbooks was only 49% of the total landings figure.

The catch and effort estimates in Table 1 and Figures 2a, 2b, 2c and 2d were derived from a combination of logbook and landings figures. The remainder of the tables and figures in the summary represent logbook data only. This may cause discrepancies between totals. Discrepancies may also occur due to rounding.



Banana and Tiger Prawn Fishery Components

The fishery statistics have been split into banana and tiger prawn fishery components according to the composition of the catch in logbook records. If half or more of a vessel's daily catch was banana prawns or there was no prawn catch and the vessel was fishing, the vessel was defined as operating in the banana prawn fishery on that day; otherwise it was defined as operating in the tiger prawn fishery. Days fishing where vessels have been searching, but have not supplied details of the area searched, have not been included in the effort figures (95 days in the 2001 season).

Banana prawn fishery catch is the catch of all species (bananas + tigers + endeavours + kings) when a vessel is defined as fishing in the banana prawn fishery. Likewise, tiger prawn fishery catch is the catch of all species when a vessel is defined as operating in the tiger prawn fishery.

Kimberley Prawn Fishery

The Kimberley Prawn Fishery component of the Data Summary is based both on data from skippers using the NP13 daily logbook to record their KPF catches and from skippers using the Western Australian Prawn Research Logbook (a monthly catch and effort logbook). Data from both sources were consolidated on the 13th February 2002.

Catch and Effort Data For the Northern Prawn Fishery

Coverage

Statistics for the Northern Prawn Fishery (NPF) were collected from vessels that fished between Cape York (Queensland) and Cape Londonderry (Western Australia) (Figure 1).

The 2001 NPF seasons were from 1 April to 27 May and 4 August to 9 November. There were 57 days available to fish during the first season and 98 during the second season (the same as in 2000). Total effort in 2001 was 16,687 days compared to 16,433 in 2000.

The total NPF prawn catch for 2001 was 10,389 tonnes, compared with 5,335 tonnes in 2000 and 6,947 in 1999 (Table 1). The catch of banana prawns increased compared to the previous year by 230%, while the catch of endeavour prawns increased by 21%. The catch of tigers was down by 9% and the catch of kings was down by 69%. During the 2001 fishing year, 118 different vessels landed product (114 during the first season and 115 during the second season).



Table 1. Annual reconciled landings, effort and vessel numbers from 1970 to 2001.

<i>year</i>	<i>banana prawns (tonnes)</i>	<i>tiger prawns (tonnes)</i>	<i>endeav. prawns (tonnes)</i>	<i>king prawns (tonnes)</i>	<i>total prawns (tonnes)</i>	<i>number of vessels</i>	<i>banana fishery effort (days)</i>	<i>tiger fishery effort (days)</i>
1970	1702	1138	417	0	3257	191	2041	5818
1971	7364	1183	400	0	8948	169	5571	6057
1972	4801	1380	472	0	6654	180	4327	7380
1973	4226	1672	594	0	6492	217	4917	7362
1974	12711	666	434	4	13815	196	7537	3439
1975	3160	973	444	6	4583	107	5361	6010
1976	4519	1118	675	5	6319	145	7238	6660
1977	6345	2900	1125	28	10398	193	7257	11673
1978	2535	3599	1240	82	7456	237	5569	18749
1979	4775	4218	1213	94	10300	240	7328	17791
<i>'70-'79 average</i>	<i>5214</i>	<i>1885</i>	<i>701</i>	<i>22</i>	<i>7822</i>	<i>188</i>	<i>5715</i>	<i>9094</i>
1980	2835	5124	1891	111	9964	269	8391	30594
1981	5672	5559	2073	95	13400	286	11524	31895
1982	3875	4891	2124	144	11036	271	8751	32956
1983	2382	5751	1488	207	9831	254	6856	34551
1984	3770	4525	1714	83	10095	252	5932	32447
1985	4469	3592	1671	77	9811	231	6946	26516
1986	2935	2682	748	85	6451	238	7132	26669
1987	4257	3617	772	65	8713	234	7954	22478
1988	3381	3458	669	81	7591	222	6655	26264
1989	5466	3173	909	85	9636	223	7439	27036
<i>'80-'89 average</i>	<i>3904</i>	<i>4237</i>	<i>1406</i>	<i>103</i>	<i>9653</i>	<i>248</i>	<i>7758</i>	<i>29141</i>
1990	2221	3550	735	128	6636	200	5044	25525
1991	6605	3987	879	81	11554	172	6515	20744
1992	2254	3084	880	47	6267	170	5132	21789
1993	4292	2515	733	35	7572	127	6299	16019
1994	2157	3162	872	72	6263	128	4955	18592
1995	4961	4125	1150	58	10294	125	4880	16834
1996	4078	2311	1235	41	7665	127	5525	16635
1997	4587	2694	1870	51	9202	129	5476	15385
1998	3569	3218	1322	20	8123	130	5301	18003
1999	3904	2136	885	21	6947	129	5639	12675
<i>'90-'99 average</i>	<i>3863</i>	<i>3078</i>	<i>1056</i>	<i>55</i>	<i>8052</i>	<i>144</i>	<i>5477</i>	<i>18220</i>
2000	2195	2190	958	13	5355	121	3697	12736
2001	7245	1983	1157	4	10389	118	6247	10440
<i>'00-'01 average</i>	<i>4720</i>	<i>2087</i>	<i>1058</i>	<i>9</i>	<i>7862</i>	<i>120</i>	<i>4972</i>	<i>11588</i>
<i>'70-'01 average</i>	<i>4352</i>	<i>3005</i>	<i>1055</i>	<i>57</i>	<i>8469</i>	<i>188</i>	<i>6232</i>	<i>18366</i>

Source: Annual reconciled landings figures and AFMA Logbook data.



Catch

The catch in the banana prawn fishery increased by 5,042 tonnes (228%) in 2001 to 7,252 tonnes. The tiger prawn fishery catch decreased by 9 tonnes (0.3%) to 3,137 tonnes (Figure 2).

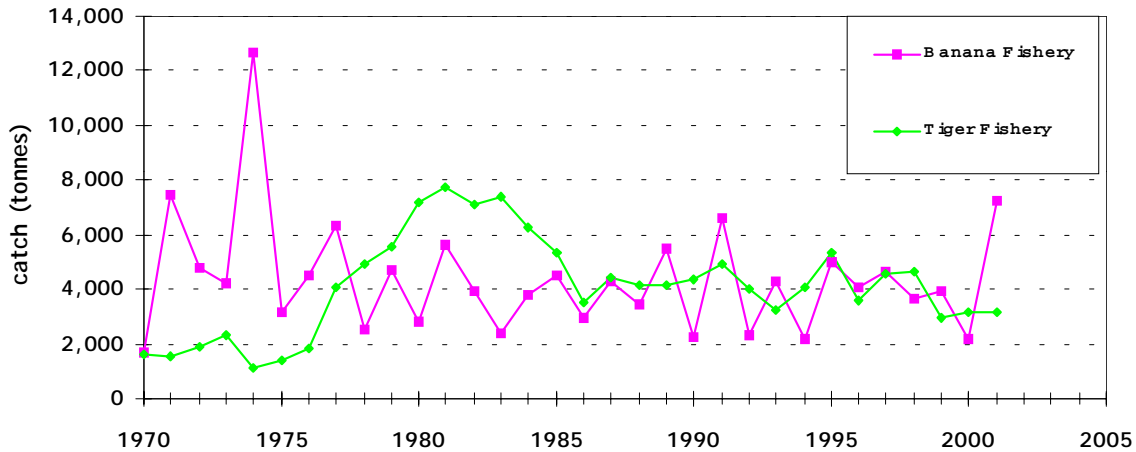


Figure 2. Catch in the banana and tiger prawn fisheries between 1970 and 2001

Source: AFMA logbook data adjusted to annual reconciled landing figures

Catch by Week

The highest catches were recorded in the first week of the banana season. Figures 3 (a) (b) and (c) show the catch of banana and tiger prawns by week during 1999, 2000 and 2001.

Effort

Nominal Effort and Effective Effort

Nominal effort is the number of days recorded by skippers in their logbooks. Effective effort applies only to the tiger prawn fishery based on the assumption that there has been an 'effort creep' (an increase in effectiveness of the gear utilised). A number of different approaches to effort creep are being used by NPFAG, including using an average 5% per year as well as variable effort creeps. As in previous years, for the purpose of preparing this report we have used 5% as recommended by NORMAC.

Nominal effort in the banana fishery increased by 2,550 days (69%). In the tiger fishery, nominal effort decreased by 2296 days (down 18%) and effective effort was down 2,496 days (14%) (Figure 4).

Missed Fishing Days

The various reasons for missed fishing days has been compiled from information recorded by skippers in the logbook (Figure 5). There were more days spent unloading/refueling compared to 2000, and less days spent broken down. In the first season



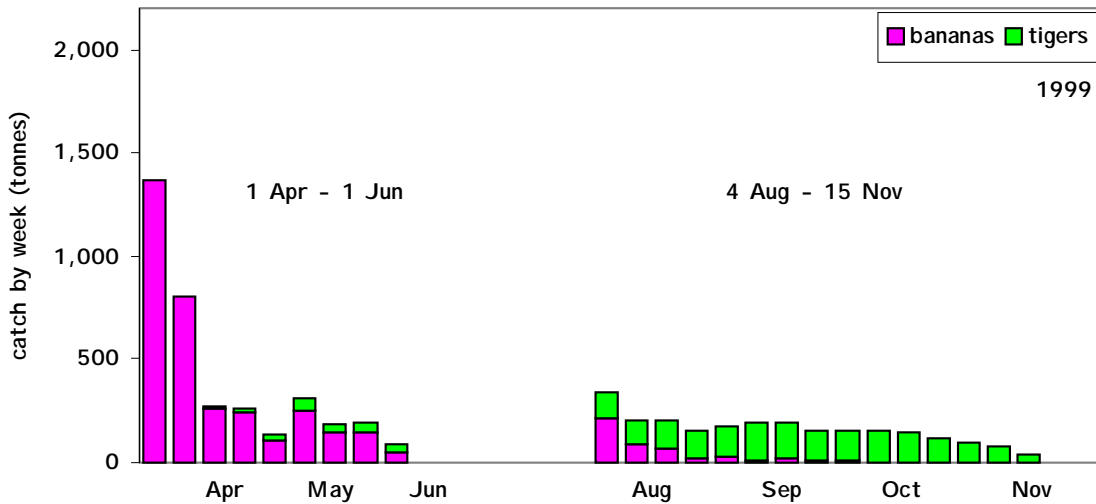


Figure 3a. Weekly catches of banana and tiger prawns (tonnes) in 1999

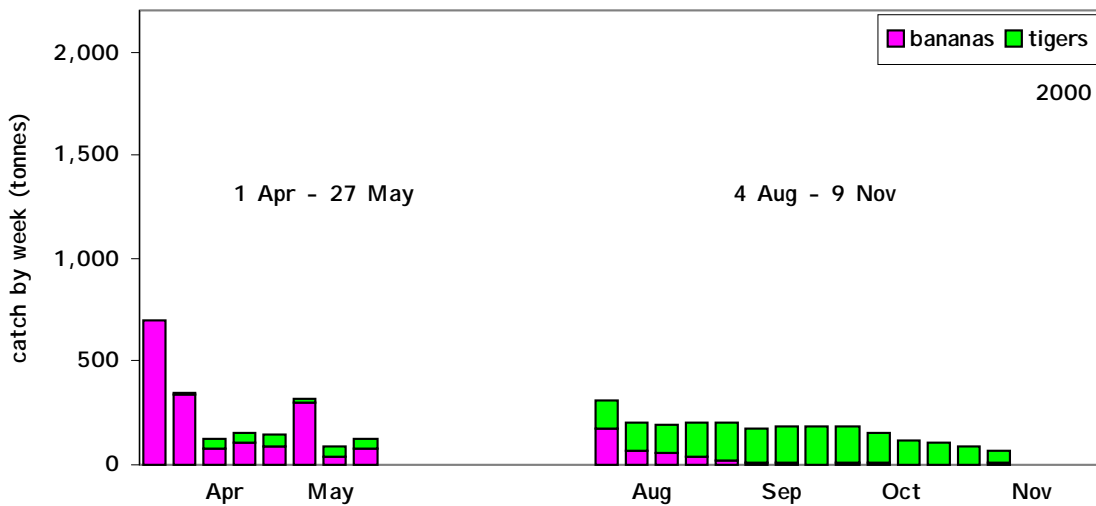


Figure 3b. Weekly catches of banana and tiger prawns (tonnes) in 2000

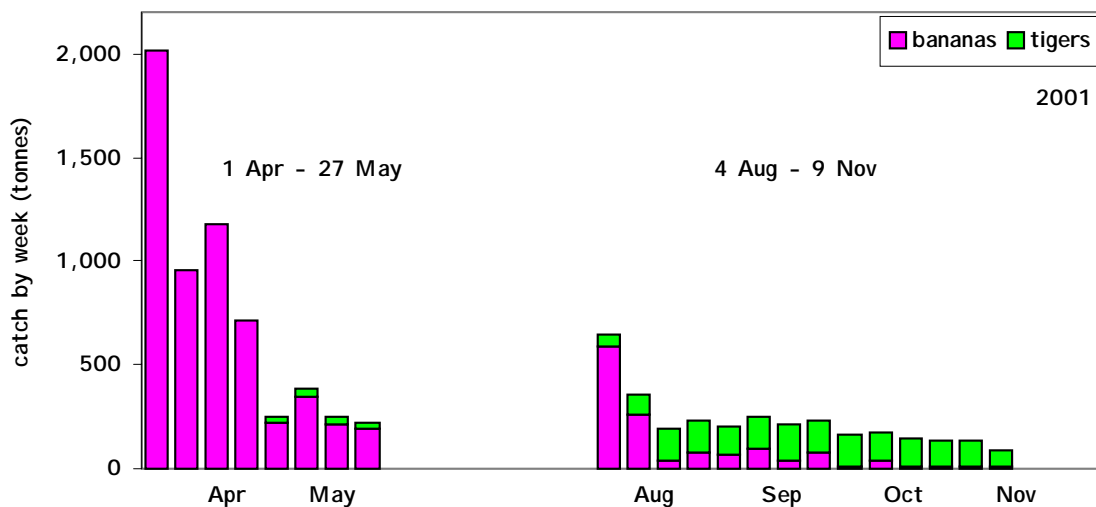


Figure 3c. Weekly catches of banana and tiger prawns (tonnes) in 2001

Source: AFMA Logbook data



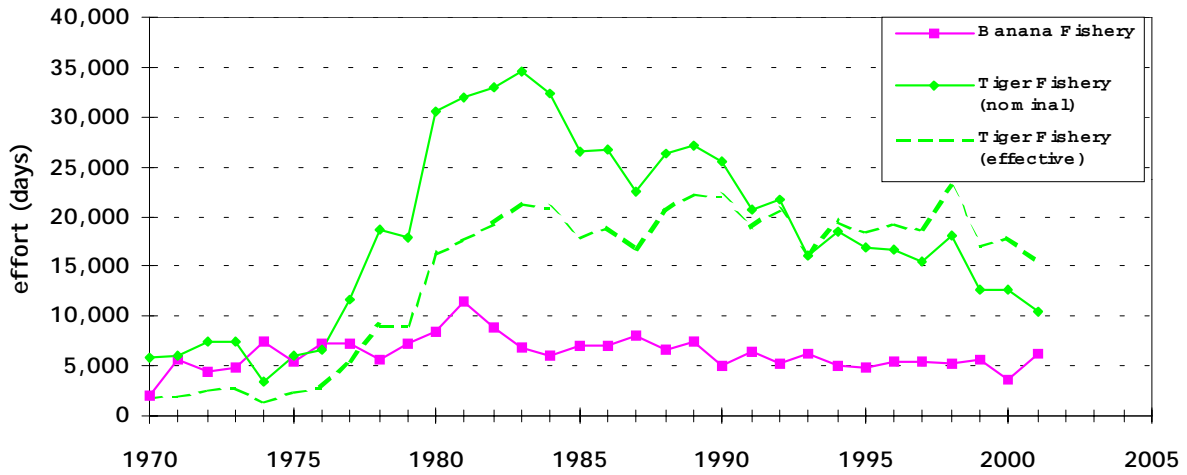


Figure 4. Effort in the banana and tiger prawn fisheries between 1970 and 2001
Source: AFMA Logbook data

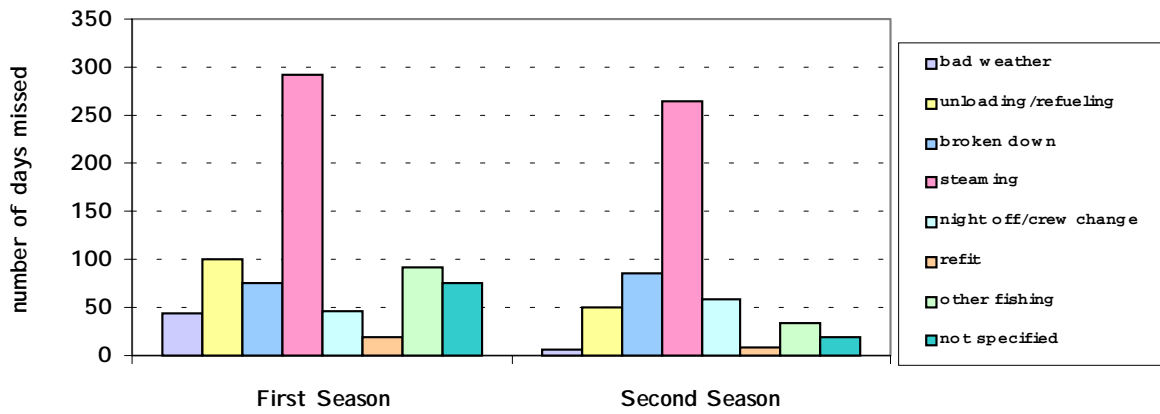


Figure 5. Missed fishing days for the banana and tiger prawn season 2001.
Source: AFMA Logbook data

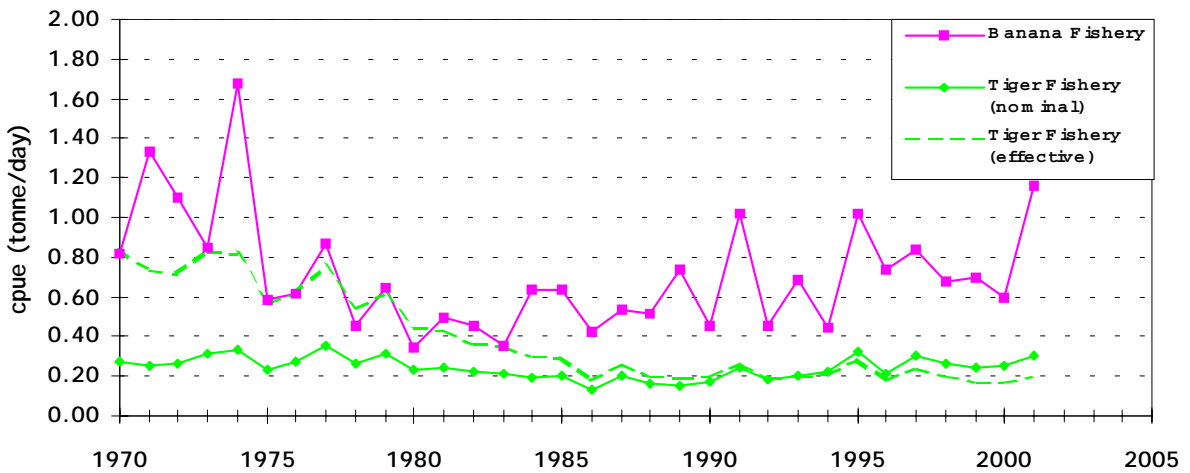


Figure 6. Catch rate in the banana and tiger prawn fisheries between 1970 and 2001.
Source: AFMA Logbook data adjusted to reconciled landings figures



of 2001 there was significantly less days spent in other fisheries than in 2000.

Catch Rate

The banana prawn fishery catch rate increased from 0.60 tonne/day in 2000 to 1.16 tonne/day in 2001. The nominal catch rate for the tiger fishery increased slightly to 0.30 tonne/day while the effective catch rate increased to 0.20 tonne/day (Figure 6).

Catch, Effort and Catch Rate by Month

The banana prawn catch (Table 2) was up in every month of 2001 compared with 2000, with catches up around 300% in April and 80% in May. The monthly catch of tigers was mainly lower in 2001 than 2000, however they increased slightly in August and September (9% and 28%). Monthly catches of endeavours were lower from April through August, but picked up in September and October (Table 2) when they were 65% and 79% higher than the 2000 monthly catches.

The highest catches in the Banana Fishery were recorded in April, with the lowest in November. The highest catches in the Tiger Fishery were recorded in October with the lowest in April (Table 3).

Effort in the banana fishery was up in every month except November compared to the effort in 2000, particularly in the first 3 months of the second season. Effort in the tiger fishery was down in all months except November, where it only increased marginally by 1%. Effective tiger effort was also down except in October and November where it was up by 3% and 6% respectively (Table 4).

Table 2. Monthly catch by species in 2001

Source: AFMA Logbook data

<i>Catch (tonnes)</i>	<i>Apr</i>	<i>May</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Total</i>
<i>banana</i>	4,959	875	965	284	70	10	7,164
<i>tiger</i>	6	147	452	668	596	114	1,983
<i>endeavour</i>	3	97	169	239	512	151	1,172
<i>king</i>	0	0	1	1	0	0	2
<i>total</i>	4,969	1,120	1,587	1,193	1,178	275	10,321

Table 3. Monthly catch in the banana and tiger prawn fisheries in 2001

Source: AFMA Logbook data

<i>Catch (tonnes)</i>	<i>Apr</i>	<i>May</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	<i>Total</i>
<i>Banana Fishery</i>	4,963	888	985	272	63	3	7,175
<i>Tiger Fishery</i>	6	232	601	920	1,115	271	3,146



Table 4. Monthly effort in the banana and tiger prawn fisheries in 2001

Source: AFMA Logbook data

<i>Effort (days)</i>	<i>Apr</i>	<i>May</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>	Total
<i>Banana Fishery</i>	3,068	1,616	1,069	348	131	14	6,246
<i>Tiger Fishery (nominal)</i>	27	1,043	2,046	2,961	3,298	874	10,249
<i>Tiger Fishery (effective)</i>	40	1,541	3,023	4,375	4,873	1,291	15,142

Table 5. Monthly catch rate in the banana and tiger prawn fisheries in 2001

Source: AFMA Logbook data

<i>CPUE (tonne/day)</i>	<i>Apr</i>	<i>May</i>	<i>Aug</i>	<i>Sep</i>	<i>Oct</i>	<i>Nov</i>
<i>Banana Fishery</i>	1.62	0.55	0.92	0.78	0.48	0.24
<i>Tiger Fishery (nominal)</i>	0.22	0.22	0.29	0.31	0.34	0.31
<i>Tiger Fishery (effective)</i>	0.15	0.15	0.20	0.21	0.23	0.21

Vessel and Gear Information

Vessel Length

The most common NPF vessel length in 2001 was between 22.00 - 22.99 metres (Figure 7).

Distribution of Catch By Vessel

The large increase in the catch of banana prawns in 2001 is reflected in the distribution of total catch by vessel (Figure 8a) for the first season where 47 vessels caught more than 60 tonnes. A lot of banana prawns were also caught in the second season (Table 2) and this is reflected with 42 vessels catching more than 40 tonnes (Figure 8b).

Average Catch per Vessel

The average catch per vessel of all prawns (89 tonnes/vessel) is the largest on record (Figure 9a). This is due to the second largest average catch for banana prawns of 62 tonnes per vessel, the largest being 65 tonnes per vessel recorded in 1974 (Figure 9b). The average catch per vessel of tiger prawns (Figure 9c) has remained fairly stable during the last 3 years with 17 tonnes per vessel in 2001, 18 tonnes per vessel in 2000 and 17 tonnes per vessel in 1999.



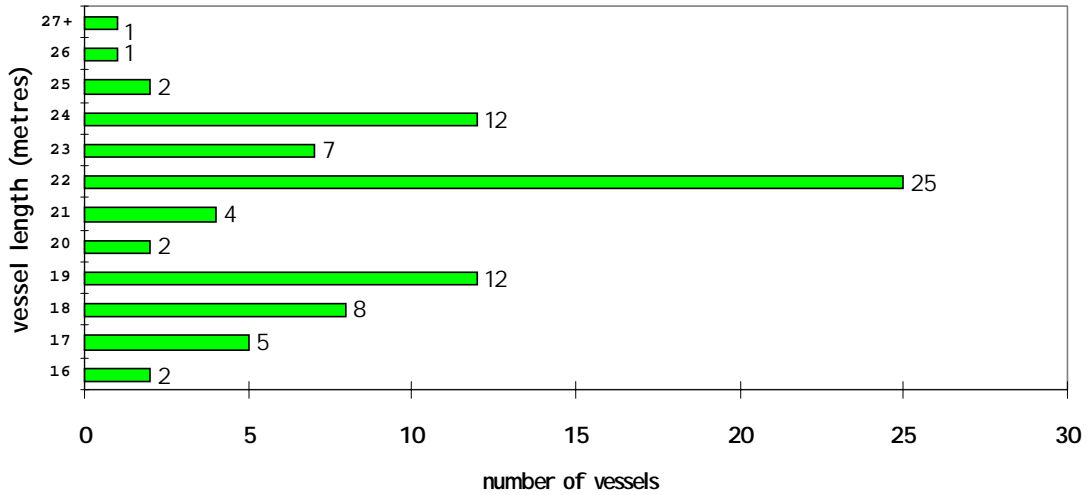


Figure 7. Frequency of vessels lengths in the NPF fleet in 2001

Source: AFMA logbook data

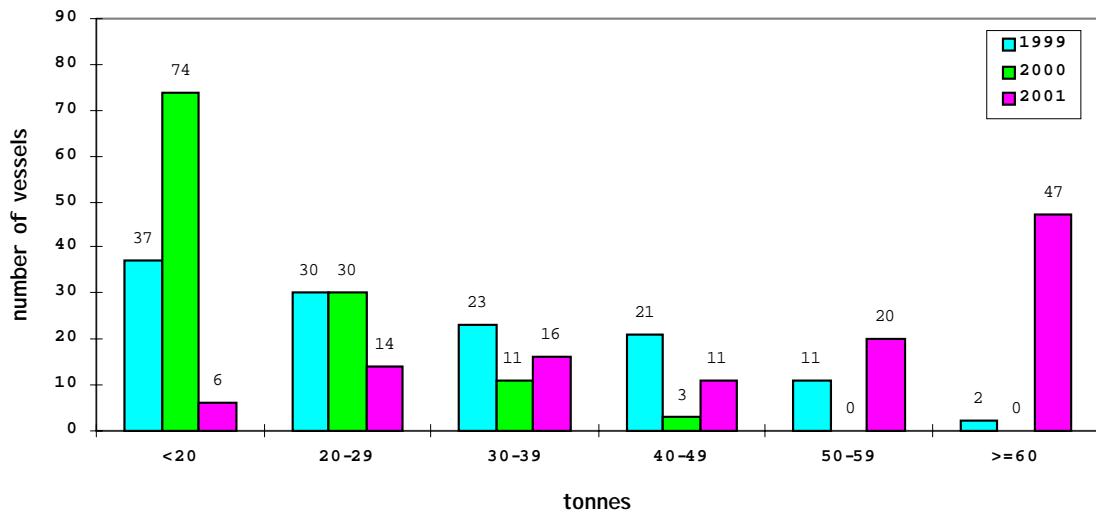


Figure 8a. Distribution of total catch by vessel in the first season, 1997 to 2001

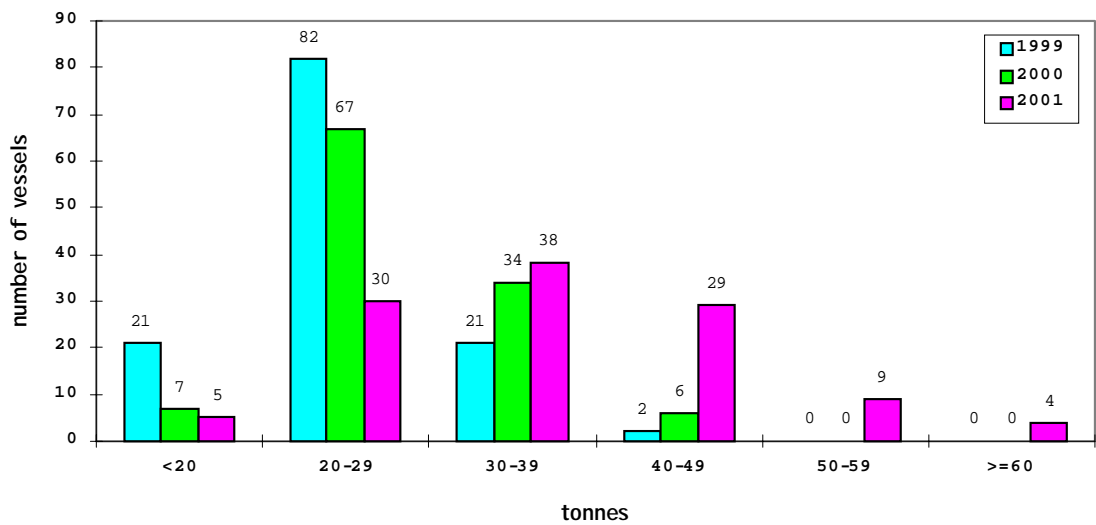


Figure 8b. Distribution of total catch by vessel in the second season, 1997 to 2001

Source: AFMA Logbook data



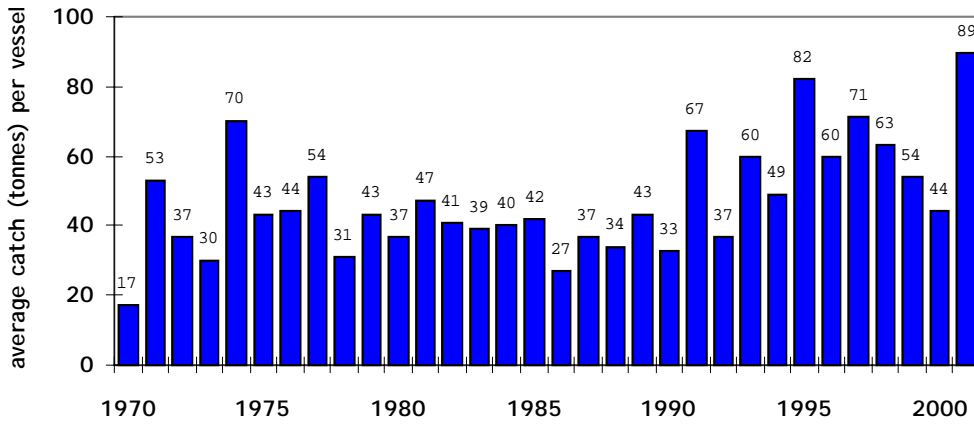


Figure 9a. Average total catch for all prawns per vessel from 1970 to 2001

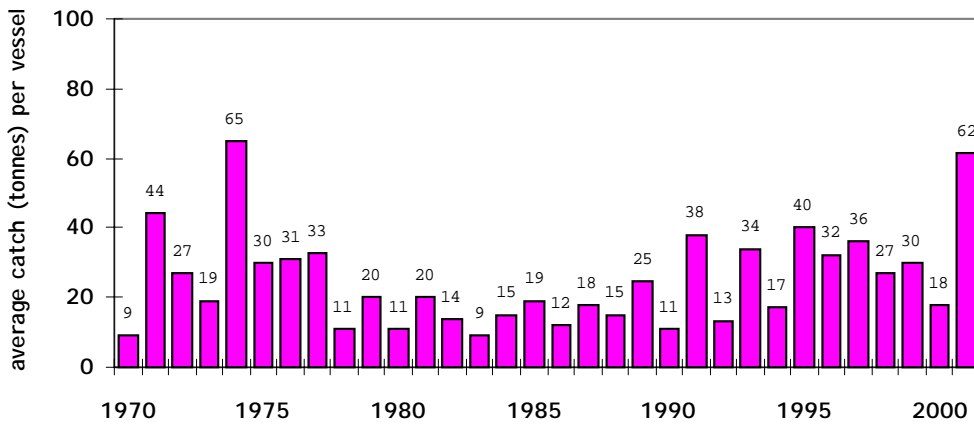


Figure 9b. Average total catch of banana prawns per vessel from 1970 to 2001

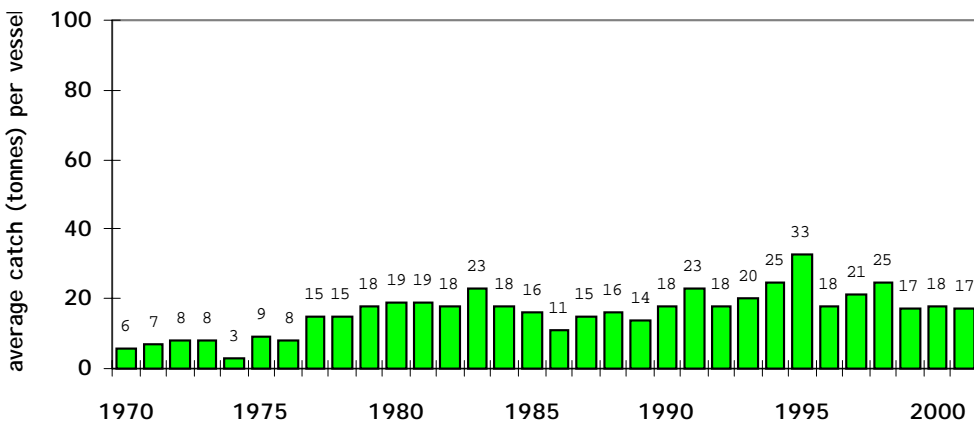


Figure 9c. Average total catch of tiger prawns per vessel from 1970 to 2001

Source: AFMA logbook data



Gear

Total tiger headrope length in 2001 was 2,862 fathoms (5.2 km) compared to 2,922 fathoms (5.3 km) in 2000 (Figure 10). In 2001 the most common headrope length per vessel was between 27.00 and 27.99 fathoms, with around 27% of the fleet towing this length of headrope (Figure 11). The average headrope length was just over 24 fathoms.

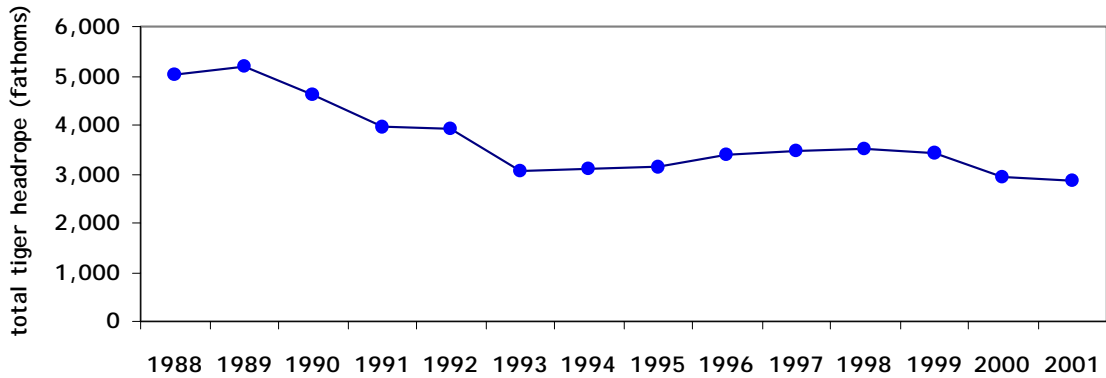


Figure 10. Total tiger headrope length from 1988 to 2001

Source: AFMA logbook data

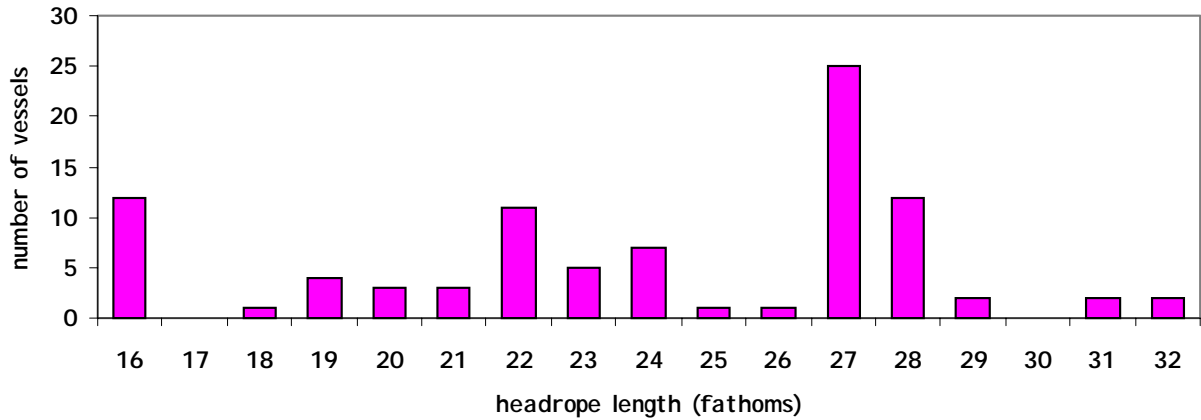


Figure 11. Frequency of tiger headrope length in 2001

Source: AFMA logbook data



Catch and Effort by Statistical Area in the NPF

General

Catch and effort has been partitioned into the 15 statistical areas illustrated below (Figure 12) and is detailed on the following pages. The highest banana catches were recorded in the Bold and Limmen areas with 1,736 and 1,732 tonnes respectively (Figure 13). The highest catch of tiger prawns was recorded in the Groote area (662 tonnes), closely followed by the Limmen area with 584 tonnes (Figure 14).

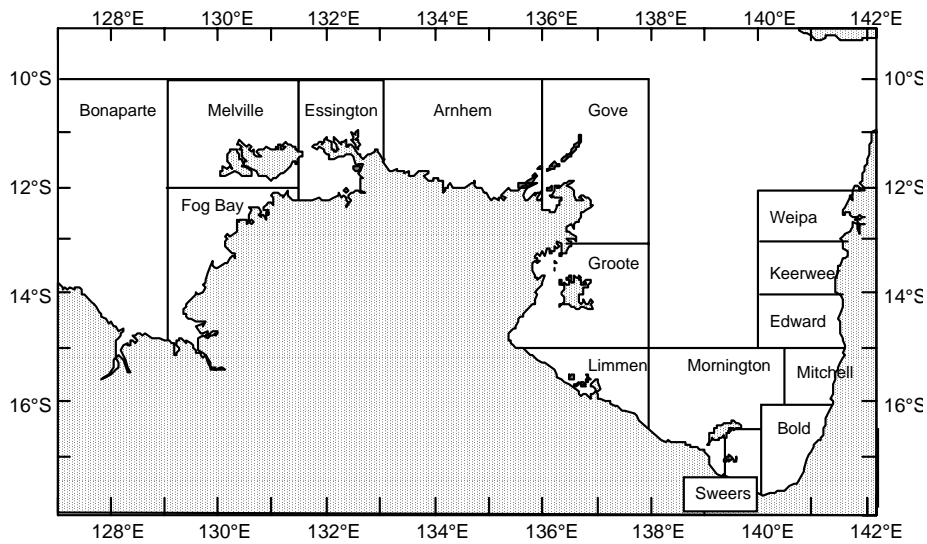


Figure 12. Statistical Areas of the Northern Prawn Fishery



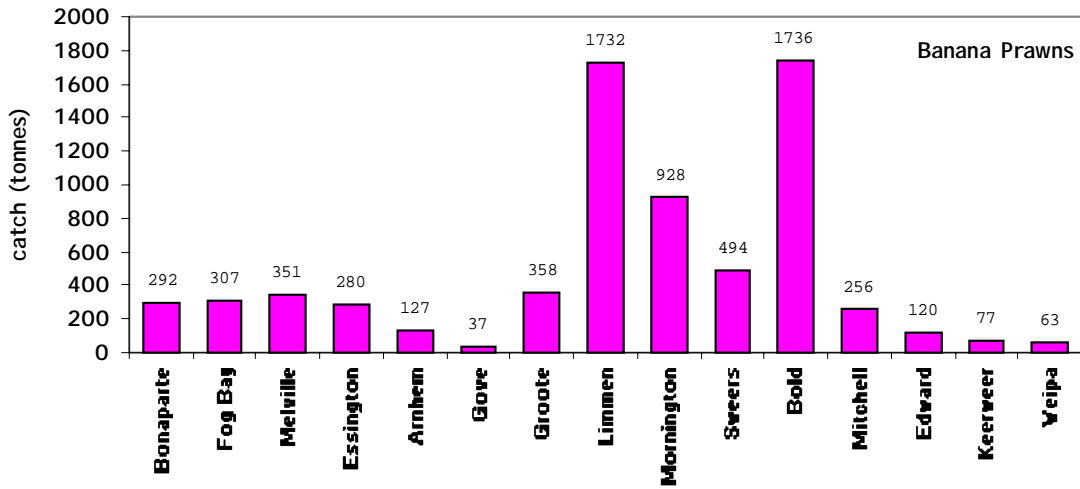


Figure 13. Catch of banana prawns in each statistical area of the NPF in 2001

Source: AFMA logbook data

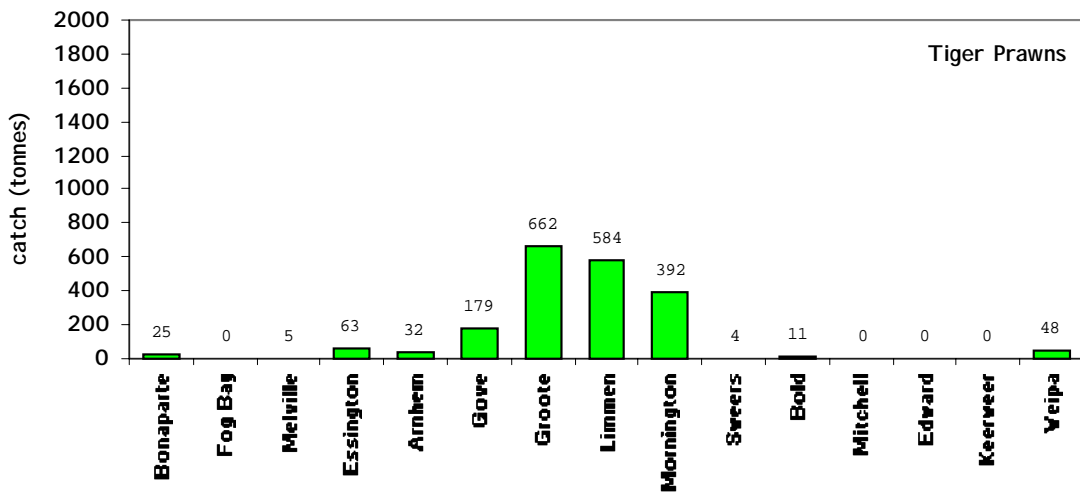


Figure 14. Catch of tiger prawns in each statistical area of the NPF in 2001

Source: AFMA logbook data



Weipa

Banana prawn catches increased to 63 tonnes, up 75% from the 2000 low of 36 tonnes. Tiger prawn catches decreased by 106 tonnes (69%) and the catch of endeavours also decreased by 86 tonnes (59%) (Figures 15a and 15b).

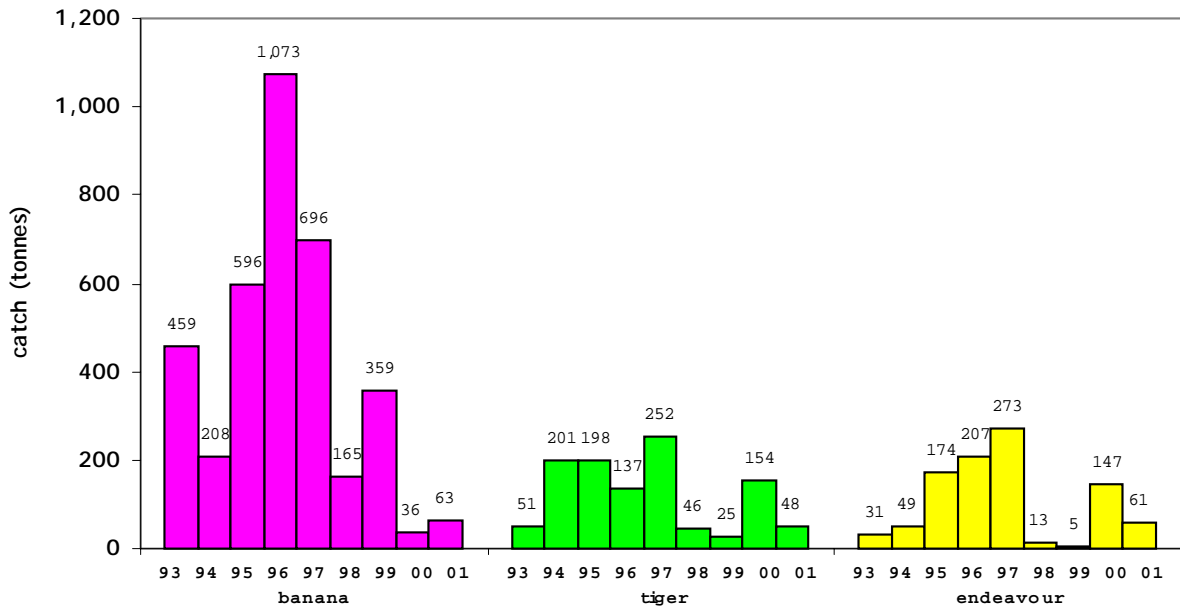


Figure 15a. Catch by species in the Weipa area between 1993 and 2001

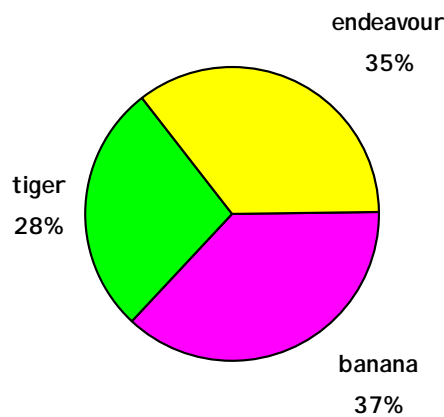


Figure 15b. Percentage catch by species in the Weipa area in 2001.

Source: AFMA logbook data



Effort in the banana fishery decreased by 65 days while effort in the tiger fishery decreased by 659 days (or 893 days effective effort) (Figure 16a-c).

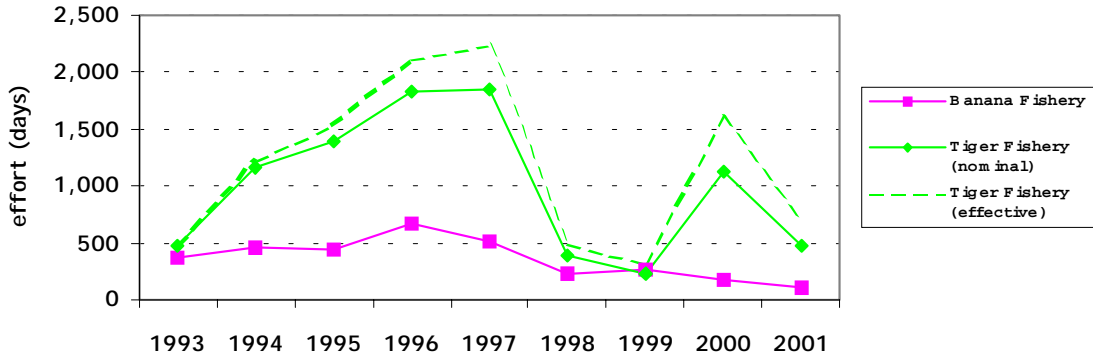


Figure 16a. Effort in the banana and tiger prawn fisheries in the Weipa area between 1993 and 2001

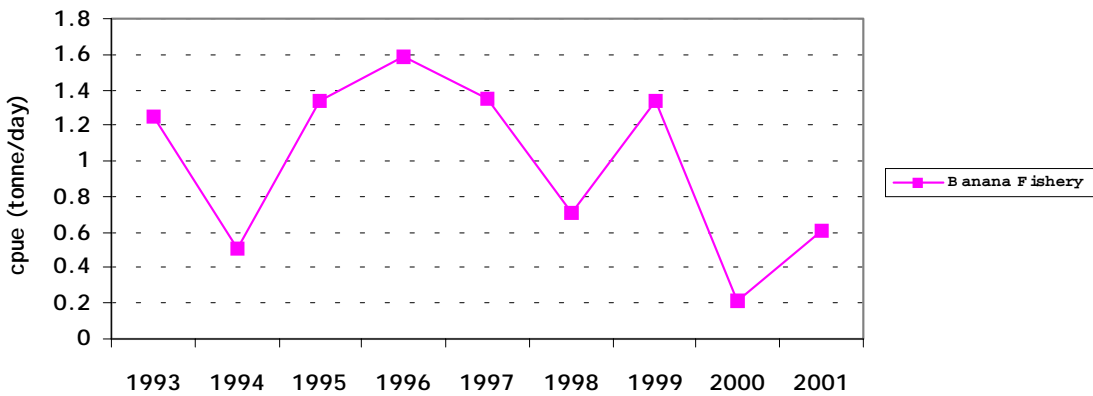


Figure 16b. Catch rate in the banana prawn fishery in the Weipa area between 1993 and 2001

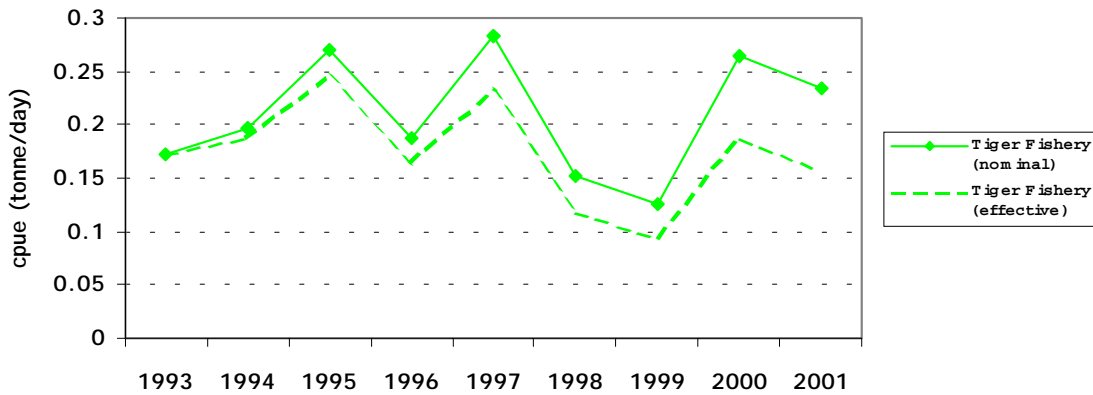


Figure 16c. Catch rate in the tiger prawn fishery in the Weipa area between 1993 and 2001

Source: AFMA logbook data



Keerweer

The banana prawn catch in the Keerweer area increased in 2001 to 77 tonnes, up 328% from last years low of 18 tonnes. The catch of tigers and endeavours was virtually nil. (Figures 17a & 17b).

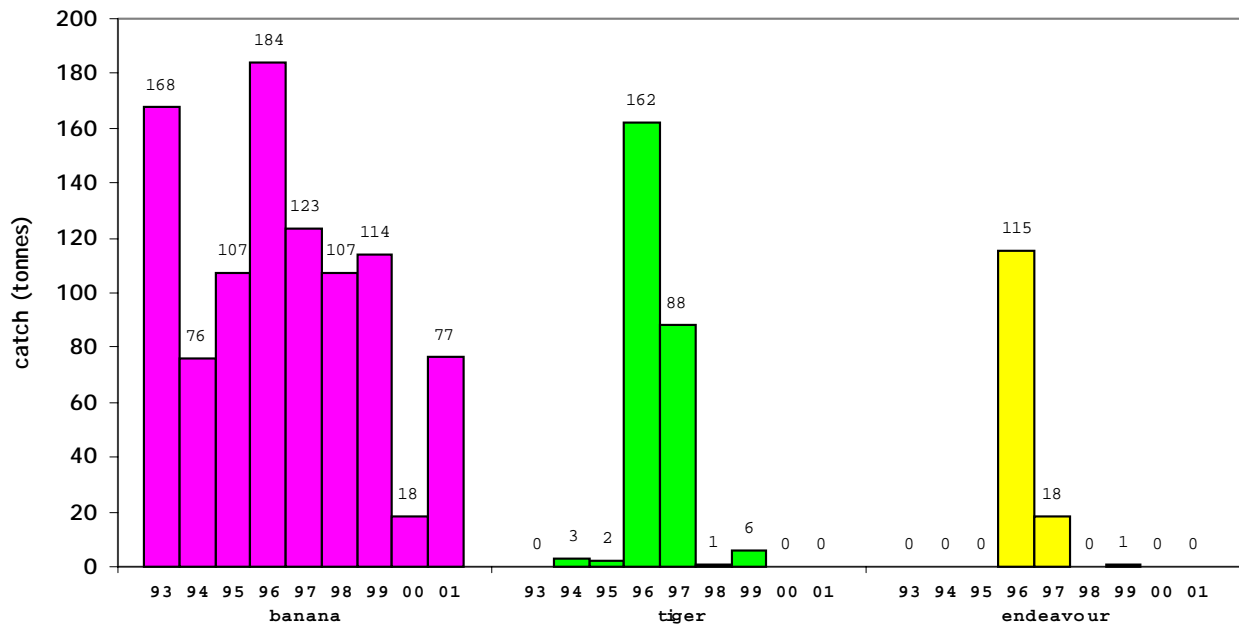


Figure 17a. Catch by species in the Keerweer area between 1993 and 2001

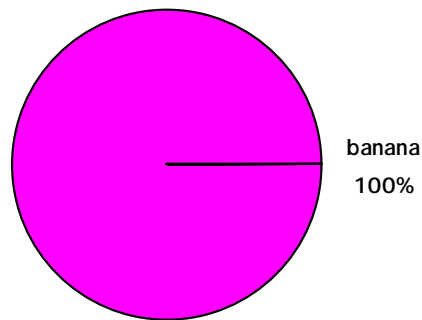


Figure 17b. Percentage catch by species in the Keerweer area in 2001.

Source: AFMA logbook data



Effort directed at banana prawns was down to 88 days (35% of the 2000 figure) and the effort in the tiger fishery was still extremely low - 2 days in 2001 (Figure 18 a-c).

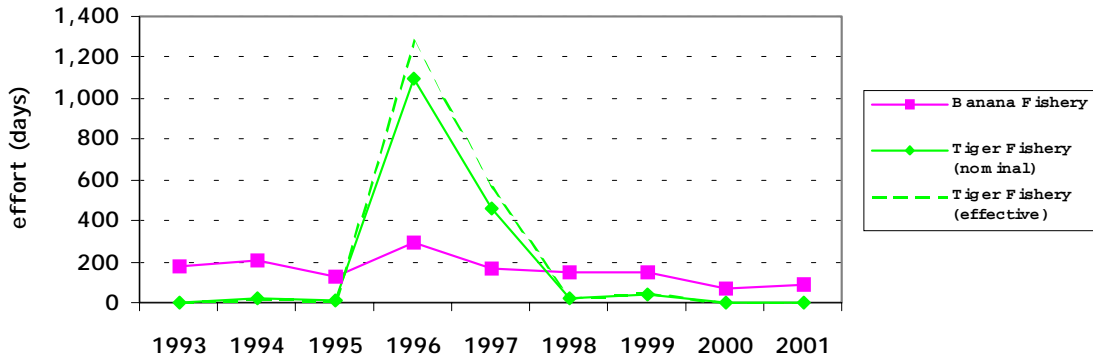


Figure 18a. Effort in the banana and tiger prawn fisheries in the Keerweer area between 1993 and 2000

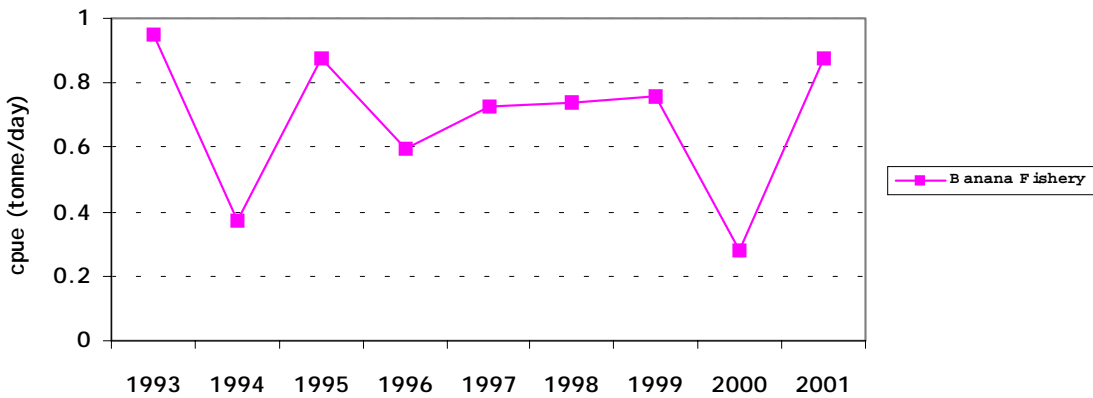


Figure 18b. Catch rate in the banana prawn fishery in the Keerweer area between 1993 and 2001

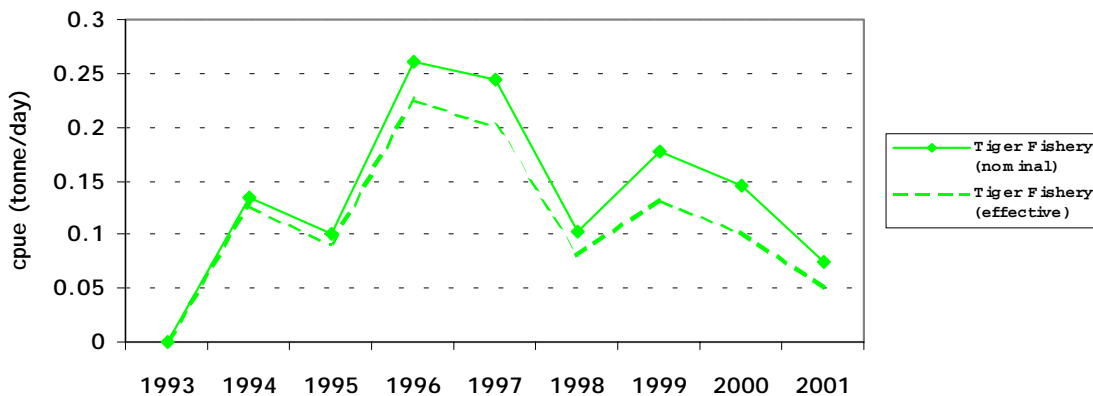


Figure 18c. Catch rate in the tiger prawn fisheries in the Keerweer area between 1993 and 2001

Source: AFMA logbook data



Edward

The banana prawn catch in the Edward area increased to 120 tonnes in 2001, up 344% from the 2000 catch of 27 tonnes. There have been no reported catches of endeavour or tiger prawns from this area for several years (Figure 19a & 19b).

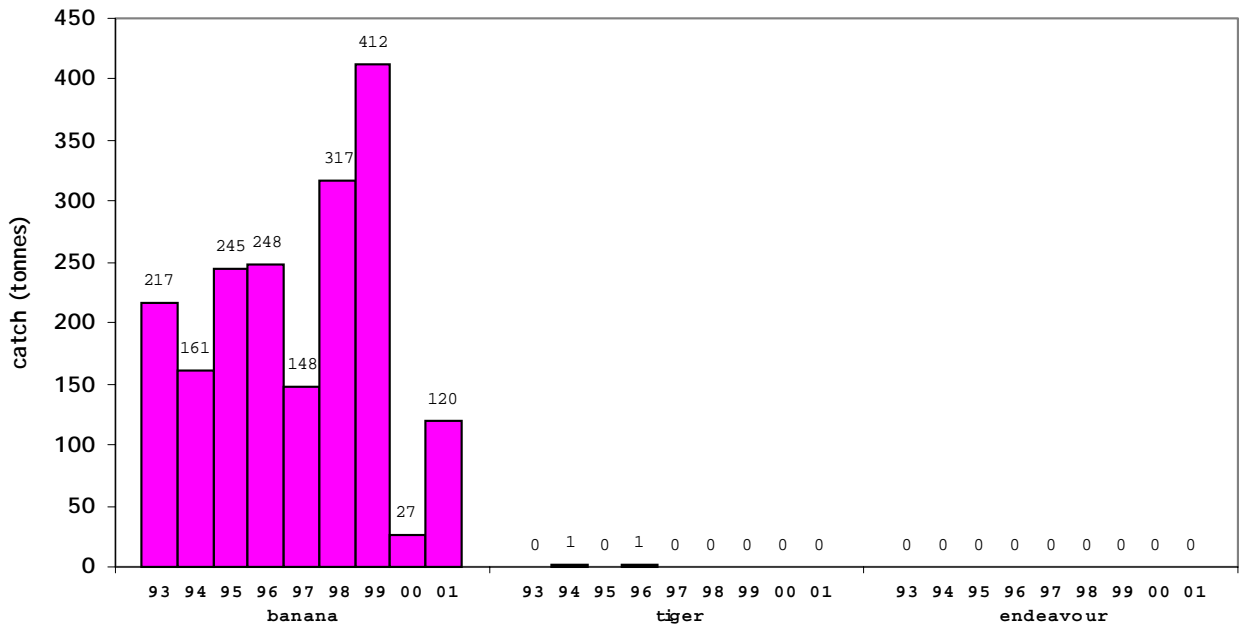


Figure 19a. Catch by species in the Edward area between 1993 and 2001



Figure 19b. Percentage catch by species in the Edward area in 2001.

Source: AFMA logbook data



Effort for this region was up 10% to 129 days for the banana fishery. Tiger prawn effort was too low to be reported (Figure 20a & 20b).

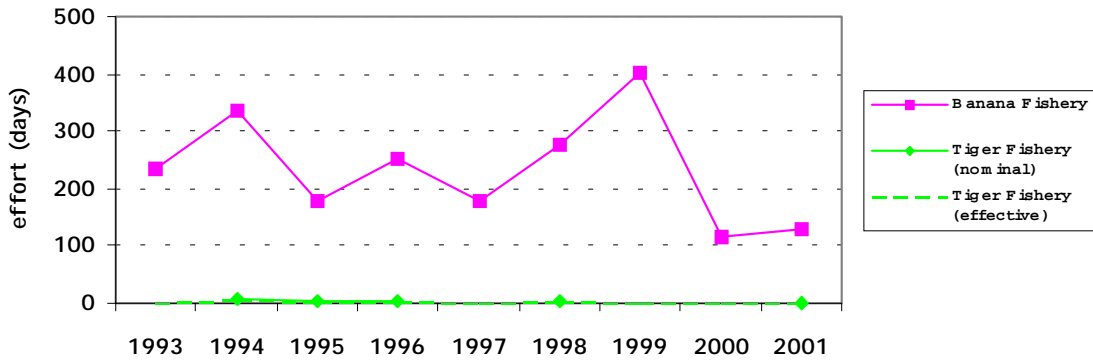


Figure 20a. Effort in the banana and tiger prawn fisheries in the Edward area between 1993 and 2001

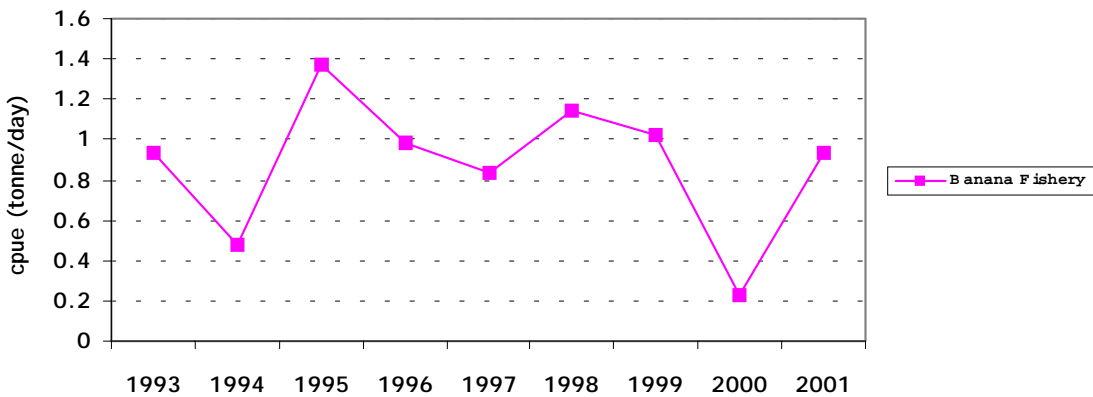


Figure 20b. Catch rate in the banana prawn fisheries in the Edward area between 1993 and 2001

Source: AFMA logbook data

* Please note that a chart of the catch rate in the tiger prawn fishery in the Edward area is not included due to the low catches of tiger prawns in the area between 1993 and 2001.



Mitchell

The banana prawn catch in the Mitchell area was 256 tonnes, up 156% from last year. Catches of tiger and endeavour prawns have been virtually nil for some years (Figures 21a & 21b).

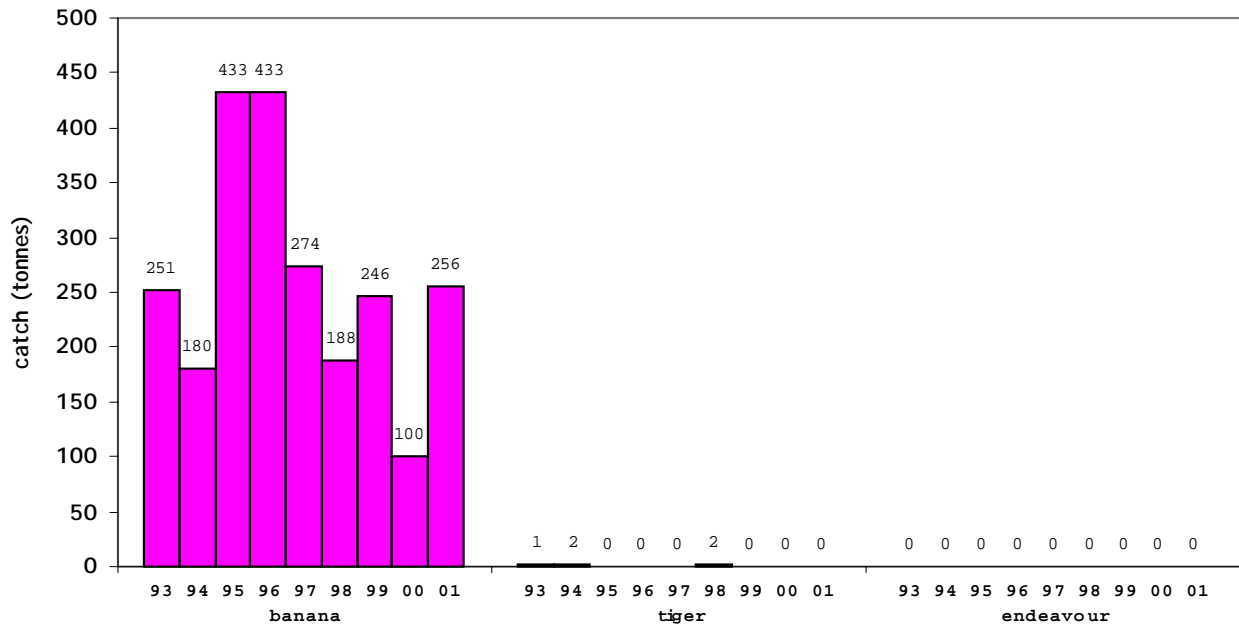


Figure 21a. Catch by species in the Mitchell area between 1993 and 2001

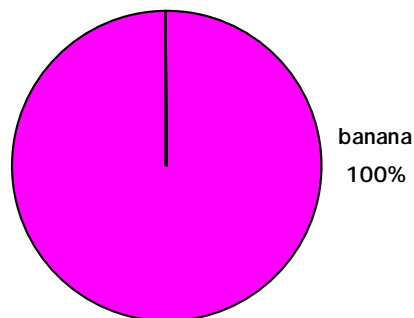


Figure 21b. Percentage catch by species in the Mitchell area in 2001.

Source: AFMA logbook data



Effort directed at banana prawns was up 69% to 300 days in the Mitchell area. There was no effort directed at the tiger fishery in this area during the 2001 season (Figure 22a & 22b).

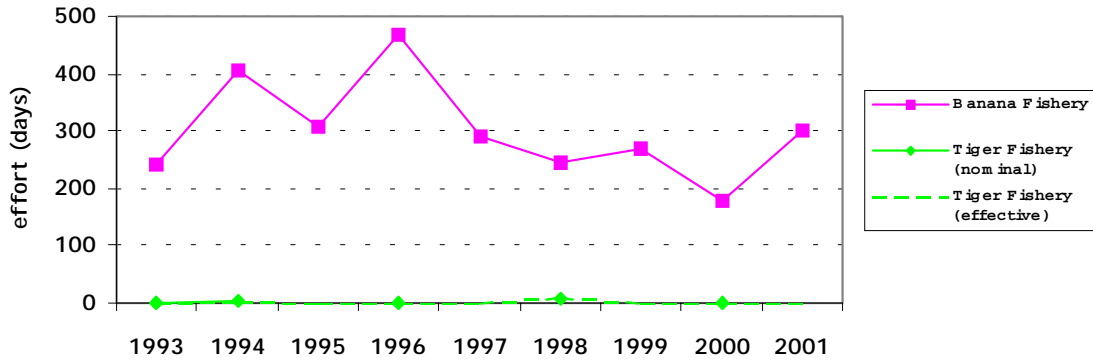


Figure 22a. Effort in the banana and tiger prawn fisheries in the Mitchell area between 1993 and 2001

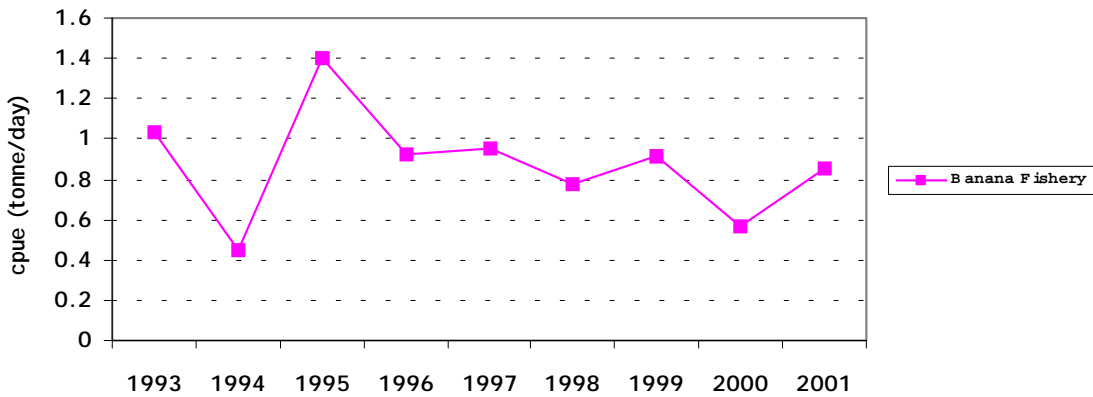


Figure 22b. Catch rate in the banana prawn fisheries in the Mitchell area between 1993 and 2001
Source: AFMA logbook data

* Please note that a chart of the catch rate in the tiger prawn fishery in the Mitchell area is not included due to the low catches of tiger prawns in the area between 1993 and 2001.



Bold

This area had the highest catch of banana prawns in the 2001 season, 1736 tonnes, up just over 500% from the 2000 catch of 289 tonnes. The catch of tiger prawns fell again, down 45% to just 11 tonnes. The endeavour catch increased to 16 tonnes, up from just one tonne in the 2000 season (Figures 23a & 23b).

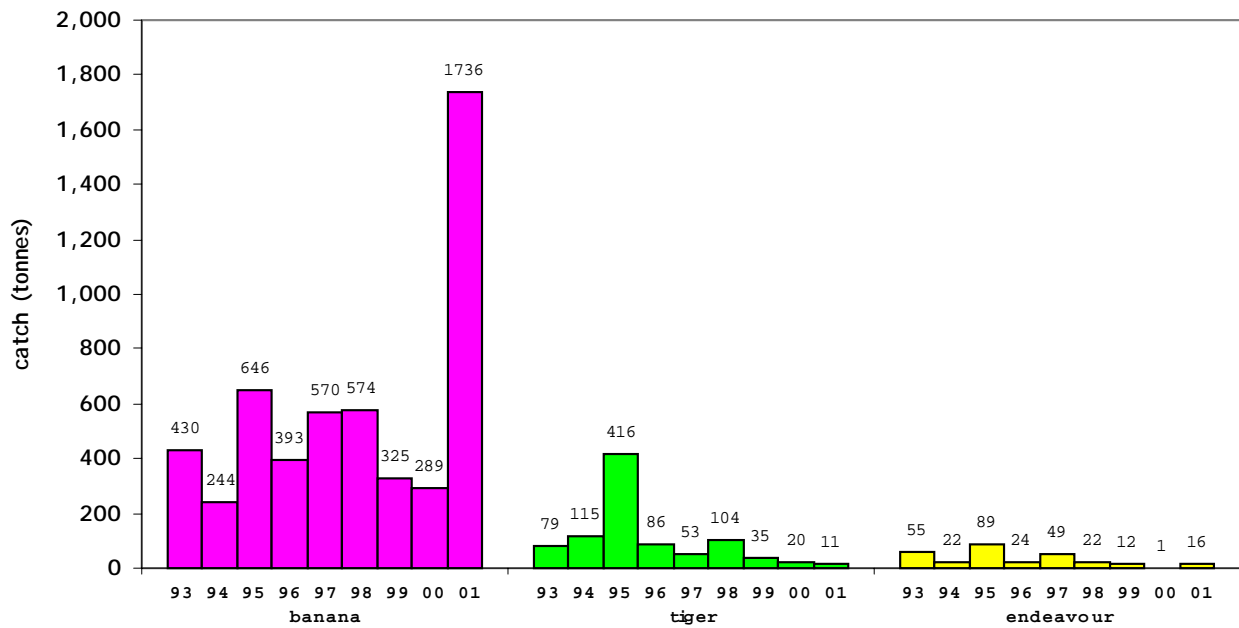


Figure 23a. Catch by species in the Bold area between 1993 and 2001

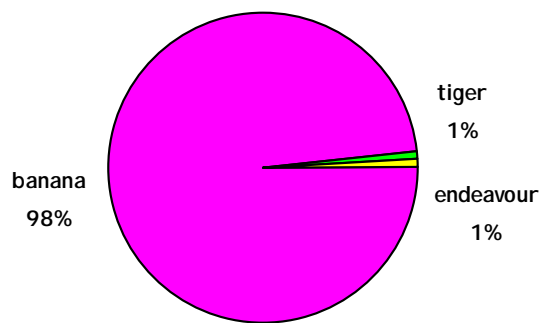


Figure 23b. Percentage catch by species in the Bold area in 2001.

Source: AFMA logbook data



Effort for the Bold area was up 161% to 912 days for the banana fishery, and fell to 91 days (134 days effective) for the tiger fishery (Figure 24 a-c).

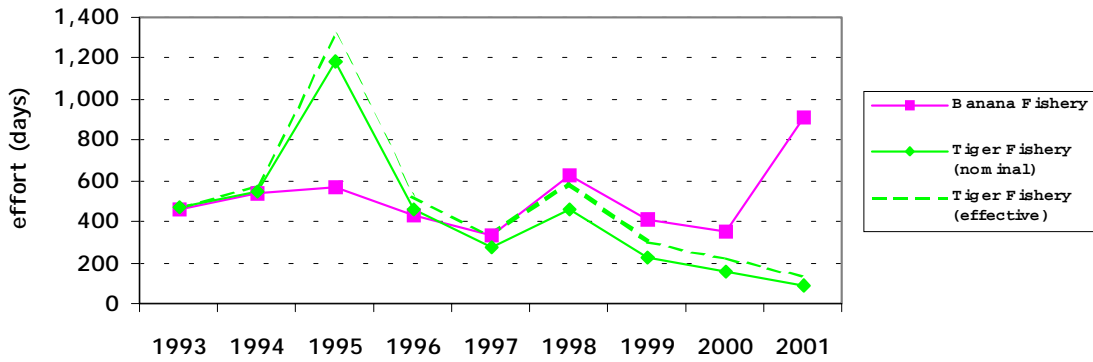


Figure 24a. Effort in the banana and tiger prawn fisheries in the Bold area between 1993 and 2001

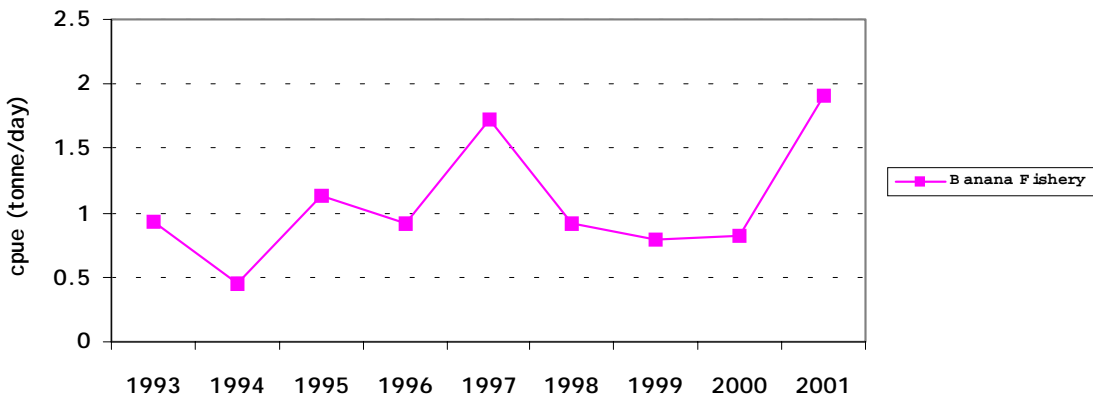


Figure 24b. Catch rate in the banana prawn fishery in the Bold area between 1993 and 2001

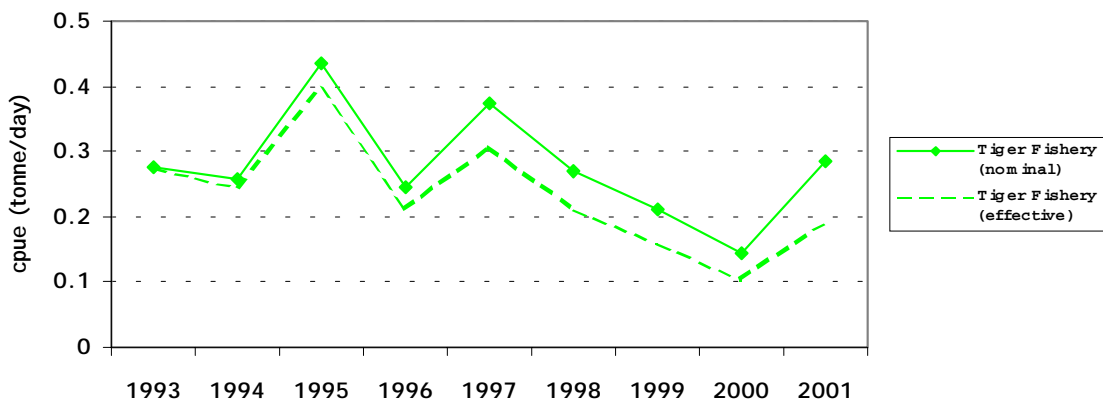


Figure 24c. Catch rate in the tiger prawn fisheries in the Bold area between 1993 and 2001

Source: AFMA logbook data



Sweers

The catch of banana prawns in the Sweers region increased to 494 tonnes in the 2001 season, up over 700%. The catches of tigers and endeavours were again low. (Figures 25a & 25b).

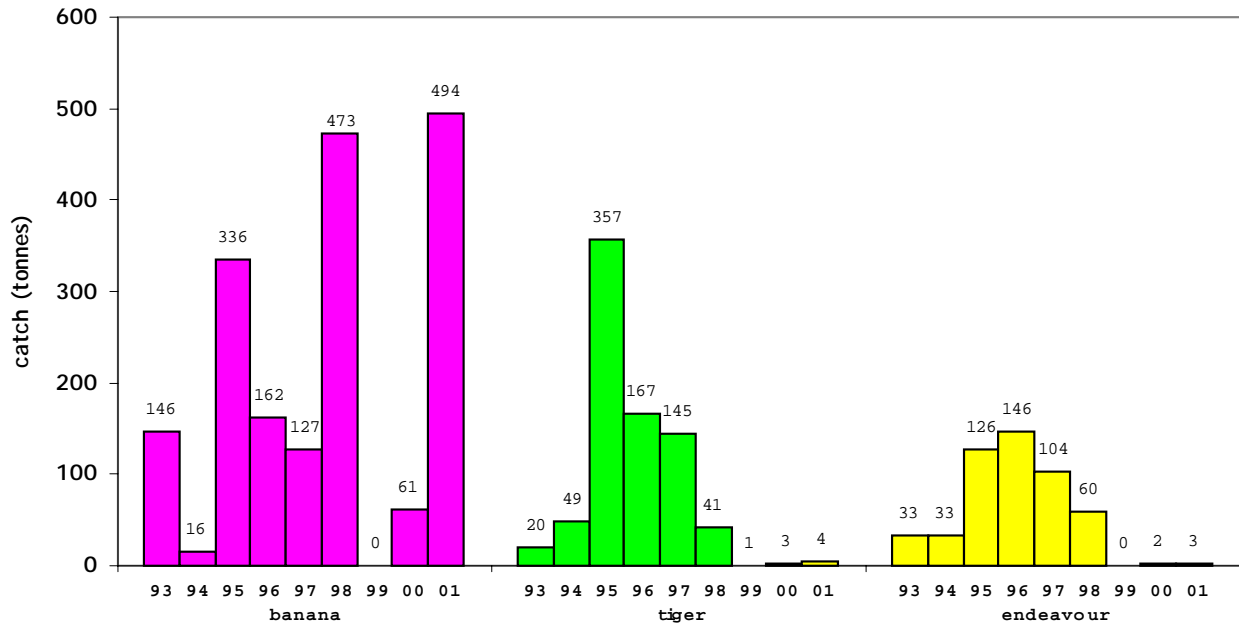


Figure 25a. Catch by species in the Sweers area between 1993 and 2001

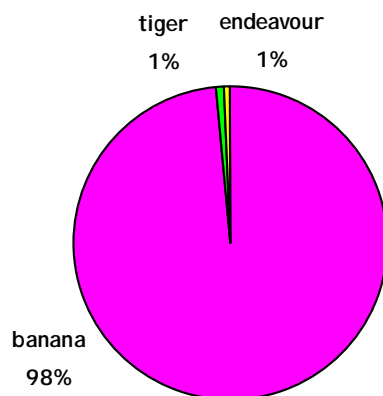


Figure 25b. Percentage catch by species in the Sweers area in 2001.

Source: AFMA logbook data



Effort in both the banana and tiger fisheries increased in the Sweers area during the 2001 season. Effort directed at the banana fishery increased by 237% to 330 days and effort in the tiger fishery increased by 55% to 34 days (50 days effective) (Figure 26 a-c).

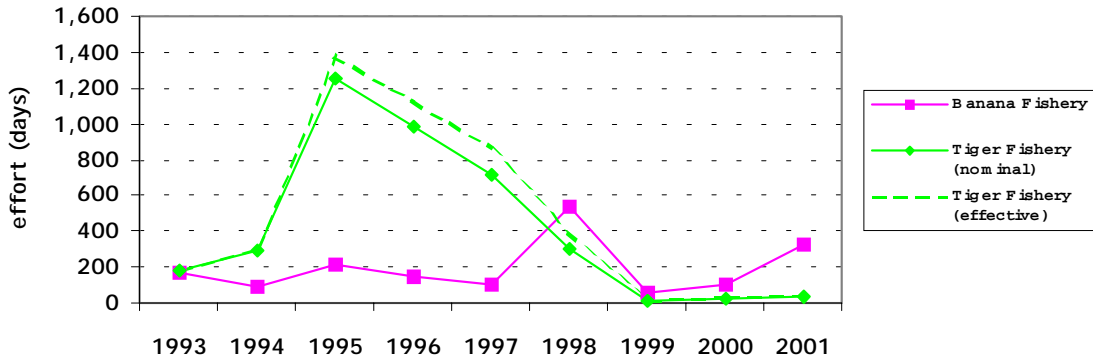


Figure 26a. Effort in the banana and tiger prawn fisheries in the Sweers area between 1993 and 2001

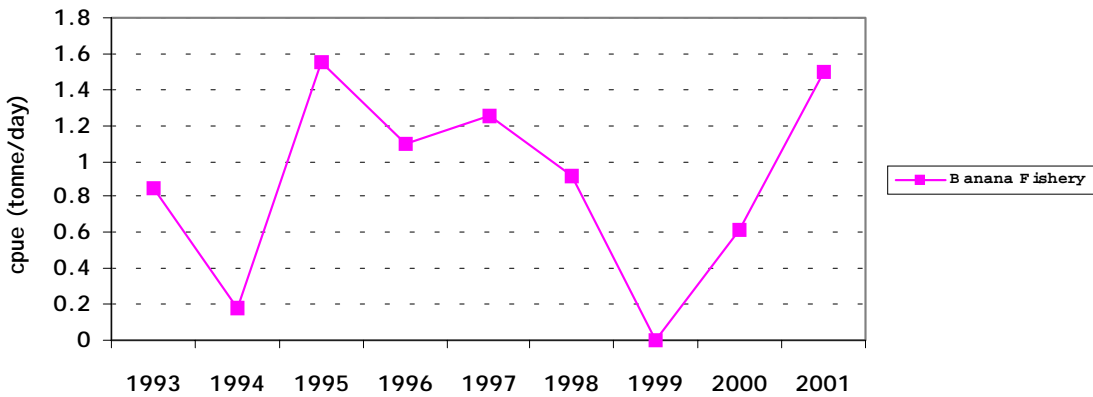


Figure 26b. Catch rate in the banana prawn fishery in the Sweers area between 1993 and 2001

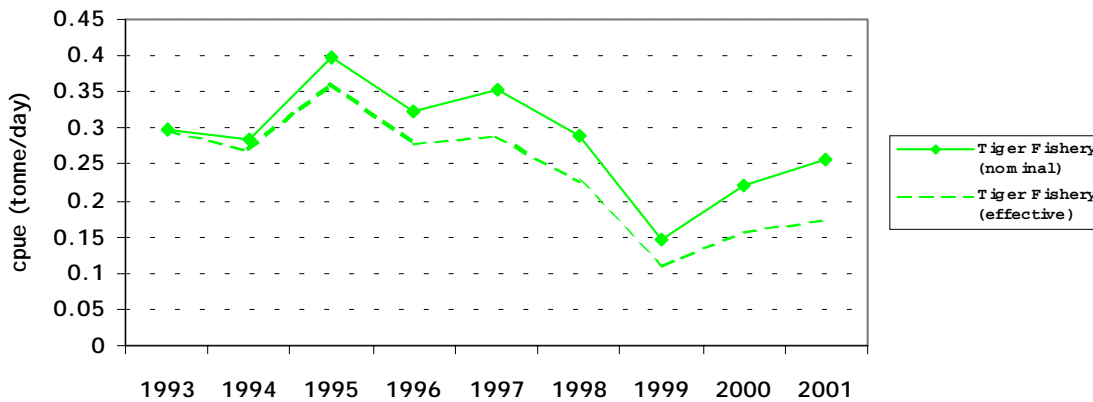


Figure 26c. Catch rate in the tiger prawn fisheries in the Sweers area between 1993 and 2001

Source: AFMA logbook data



Mornington

The 2001 banana prawn catch in the Mornington area increased to 928 tonnes, up from last seasons catch of 110 tonnes. Catches of tiger and endeavour prawns fell in the 2001 season, down to 393 tonnes and 184 tonnes respectively (Figures 27a & 27b).

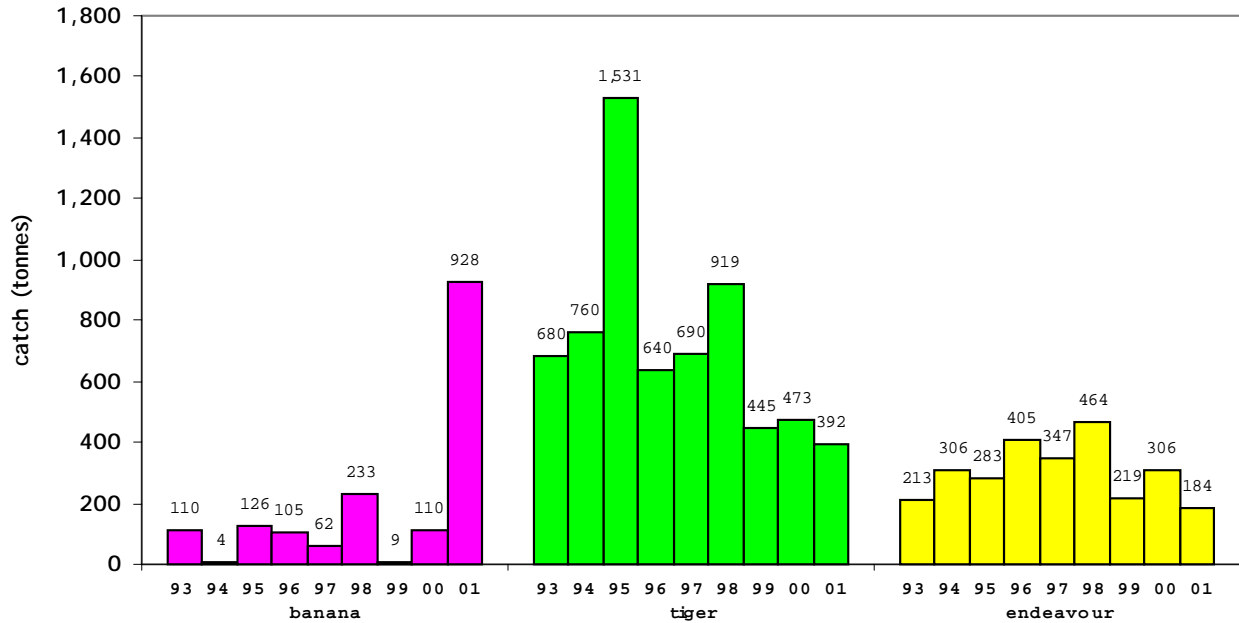


Figure 27a. Catch by species in the Mornington area between 1993 and 2001

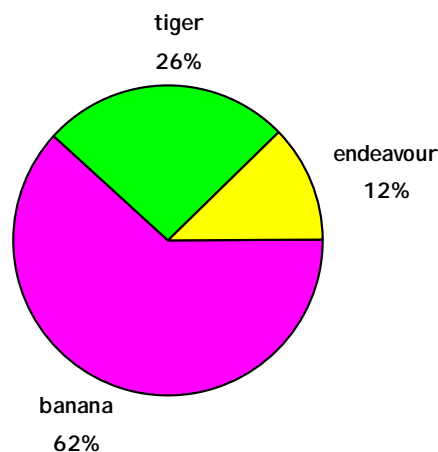


Figure 27b. Percentage catch by species in the Mornington area in 2001.

Source: AFMA logbook data



Effort for the banana fishery in the Mornington area was up by 463% to 827 days. Effort for the tiger fishery fell 37% to 2157 days (3187 days effective) (Figure 28 a-c).

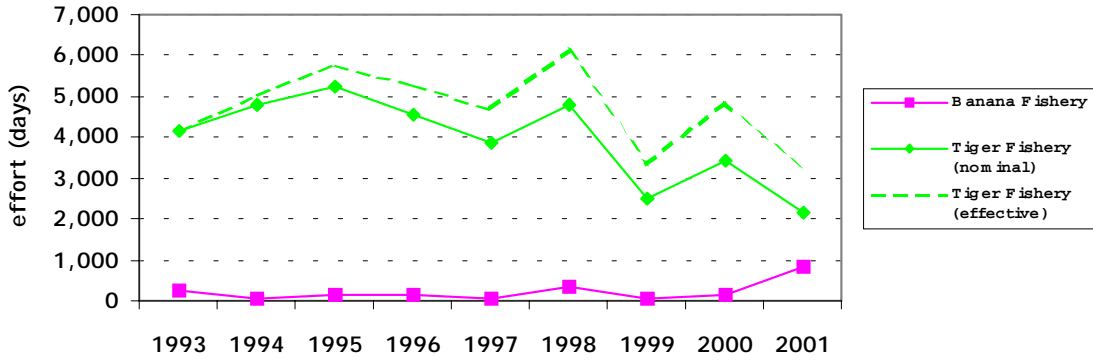


Figure 28a. Effort in the banana and tiger prawn fisheries in the Mornington area between 1993 and 2001

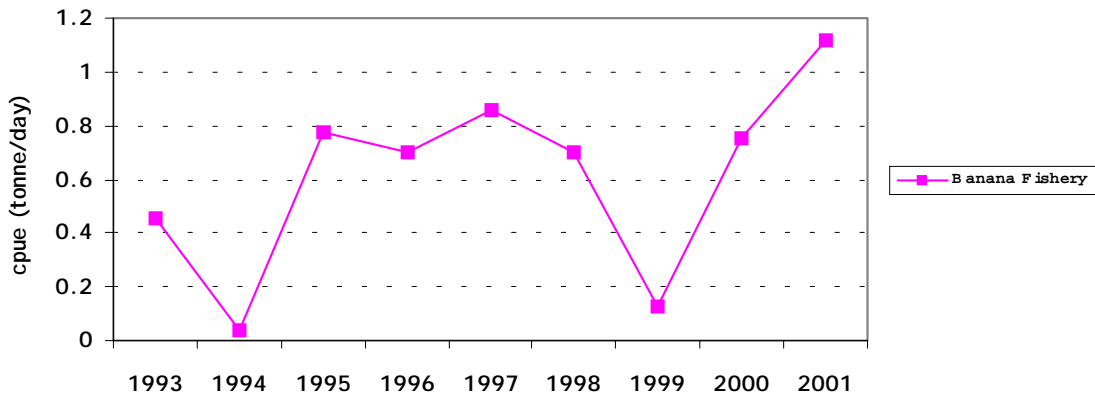


Figure 28b. Catch rate in the banana prawn fishery in the Mornington area between 1993 and 2001

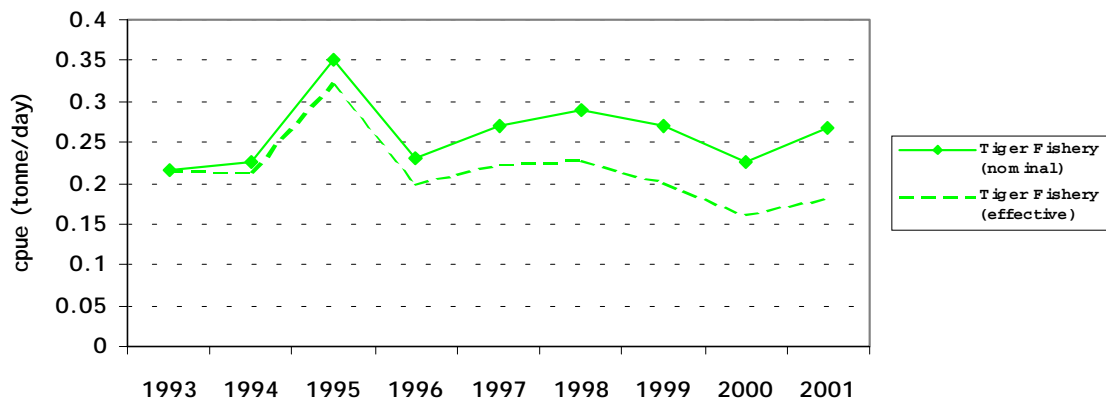


Figure 28c. Catch rate in the tiger prawn fisheries in the Mornington area between 1993 and 2001

Source: AFMA logbook data



Limmen Bight

The catch of banana prawns in the Limmen Bight area was the second largest in the 2001 season, up just over 650% to 1732 tonnes. Catches of both tiger and endeavour prawns also increase, tigers up 5% to 584 tonnes and endeavours up 40% to 250 tonnes (Figures 29a & 29b).

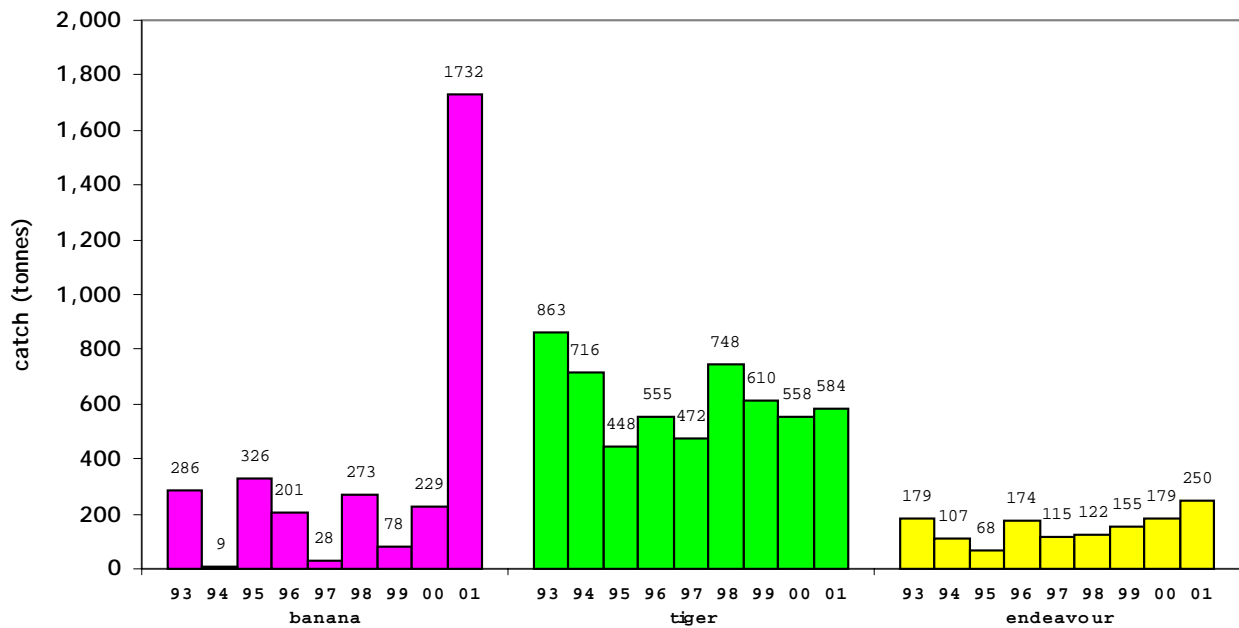


Figure 29a. Catch by species in the Limmen Bight area between 1993 and 2001

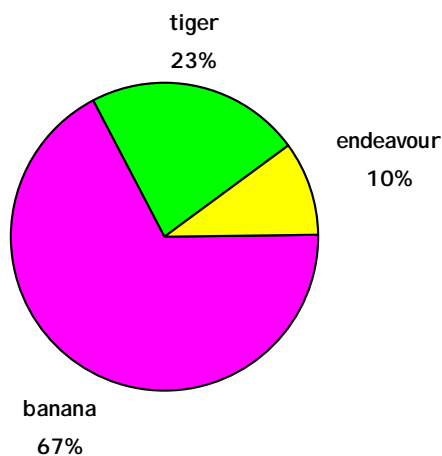


Figure 29b. Percentage catch by species in the Limmen Bight area in 2001.

Source: AFMA logbook data



Effort for the banana fishery in the Limmen Bight area was up 314% to 1440 days. Tiger fishery effort fell slightly by 5% to 2594 days (3833 days effective) (Figure 30 a-c).

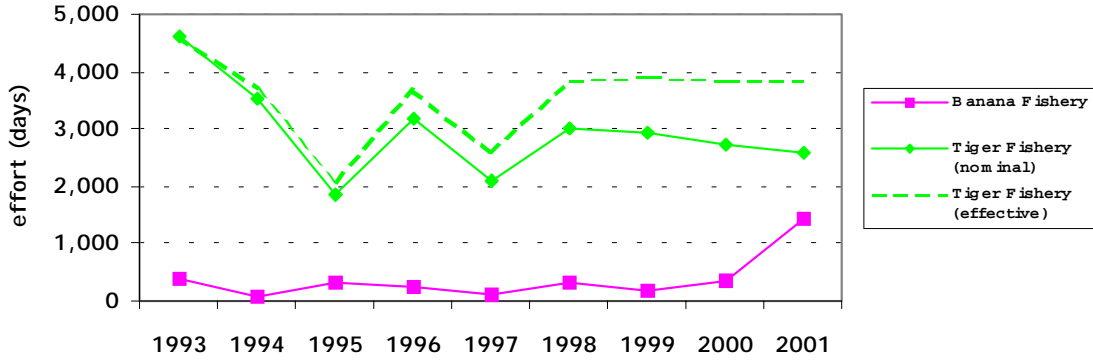


Figure 30a. Effort in the banana and tiger prawn fisheries in the Limmen Bight area between 1993 and 2001

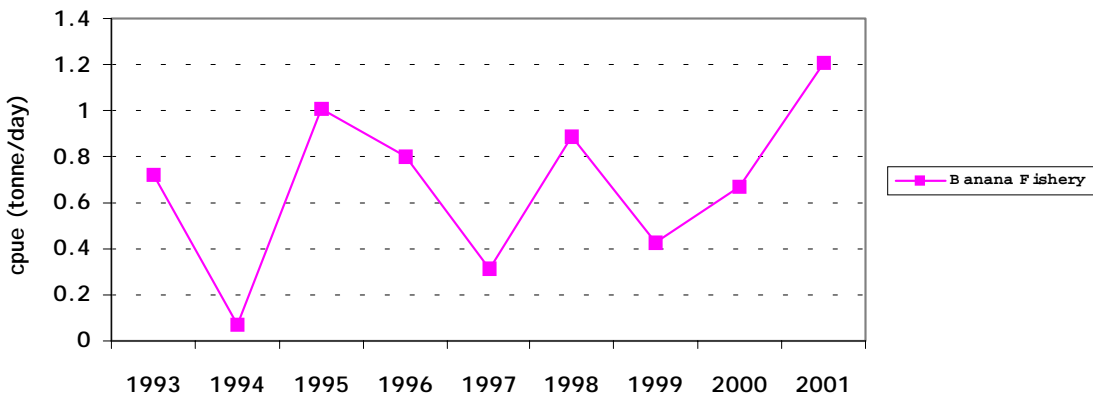


Figure 30b. Catch rate in the banana prawn fishery in the Limmen Bight area between 1993 and 2001

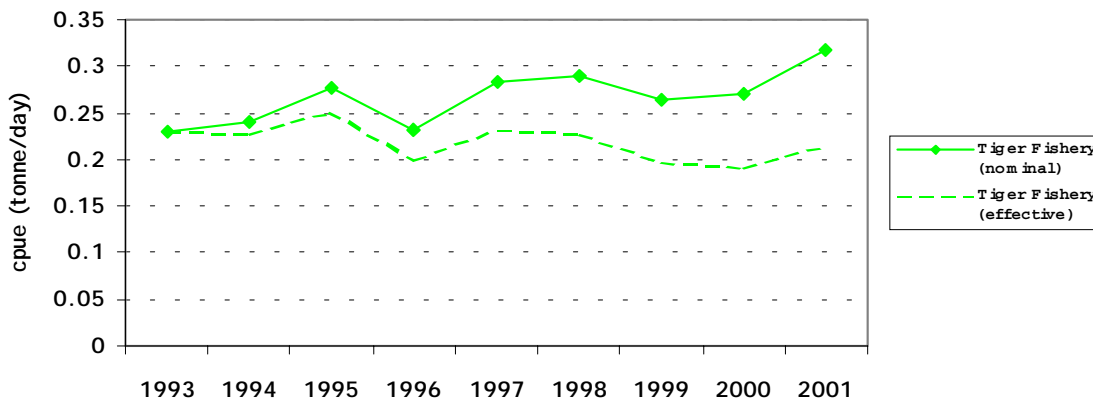


Figure 30c. Catch rate in the tiger prawn fisheries in the Limmen Bight area between 1993 and 2001

Source: AFMA logbook data



Groote

Banana and endeavour catches were all up in the Groote area in 2001. Banana prawn catches increased 65% to 358 tonnes and endeavours by 59% to 371 tonnes. Groote had the largest catch of tiger prawns in 2001 with 662 tonnes, although catches fell 15% from the 2000 season's catches (Figures 31a & 31b).

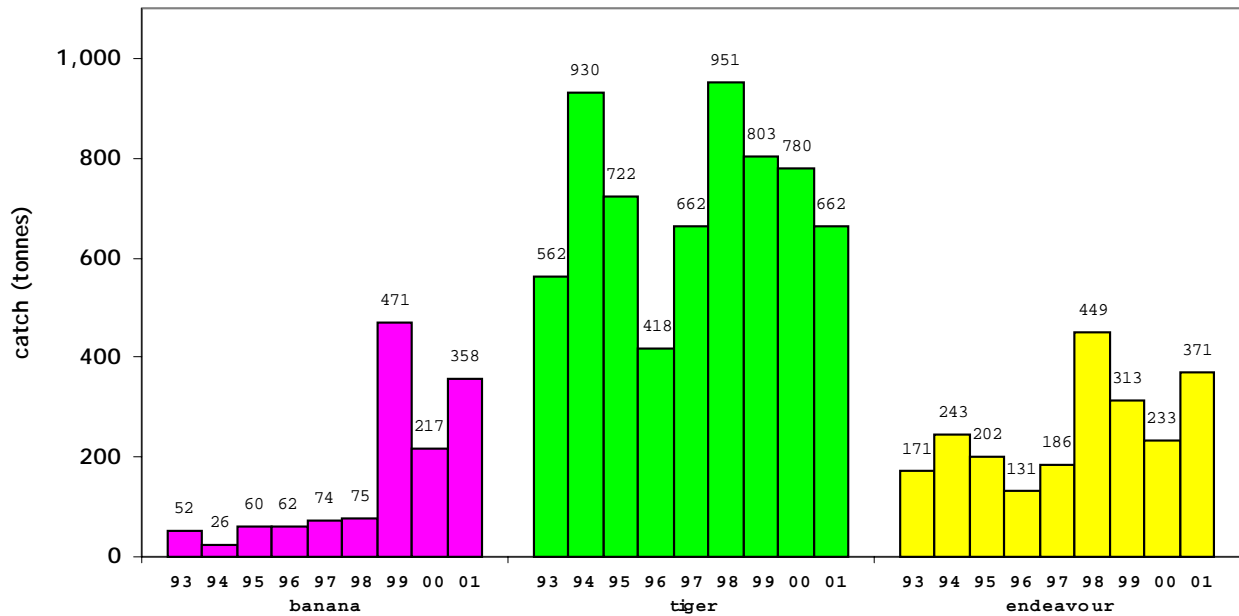


Figure 31a. Catch by species in the Groote area between 1993 and 2001

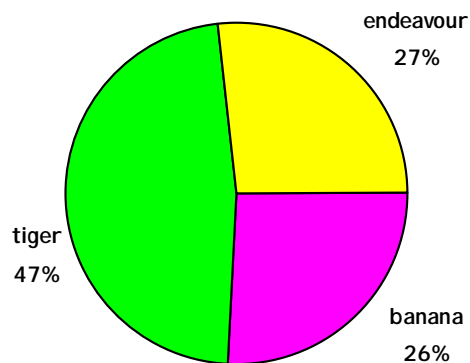


Figure 31b. Percentage catch by species in the Groote area in 2001.

Source: AFMA logbook data



Effort for the Groote area was up 14% to 469 days for the banana fishery and fell slightly by 12% to 3387 days (5004 days effective) the tiger fishery (Figure 32 a-c).

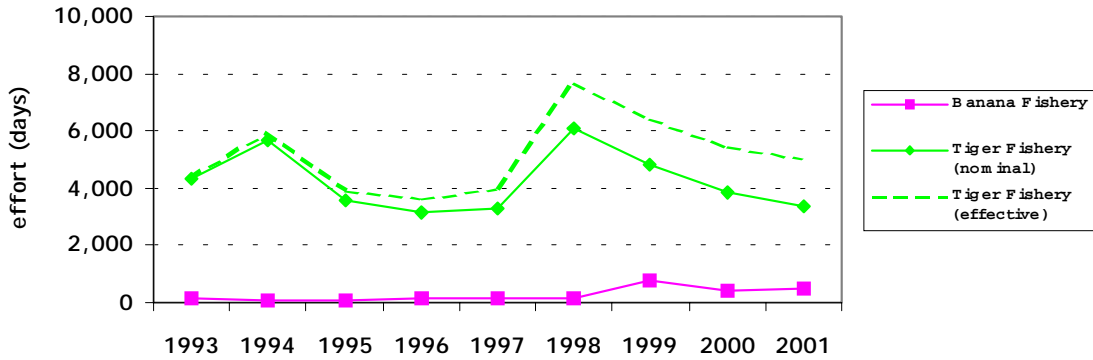


Figure 32a. Effort in the banana and tiger prawn fisheries in the Groote area between 1993 and 2001

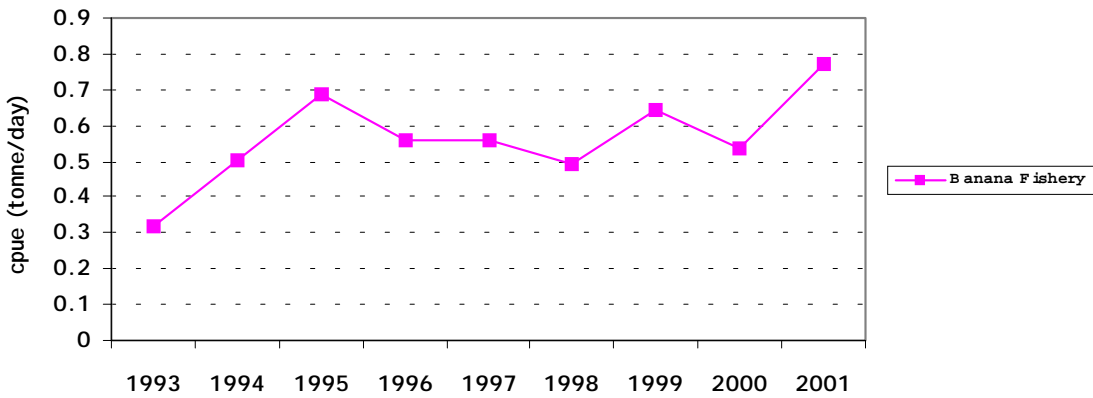


Figure 32b. Catch rate in the banana prawn fishery in the Groote area between 1993 and 2001

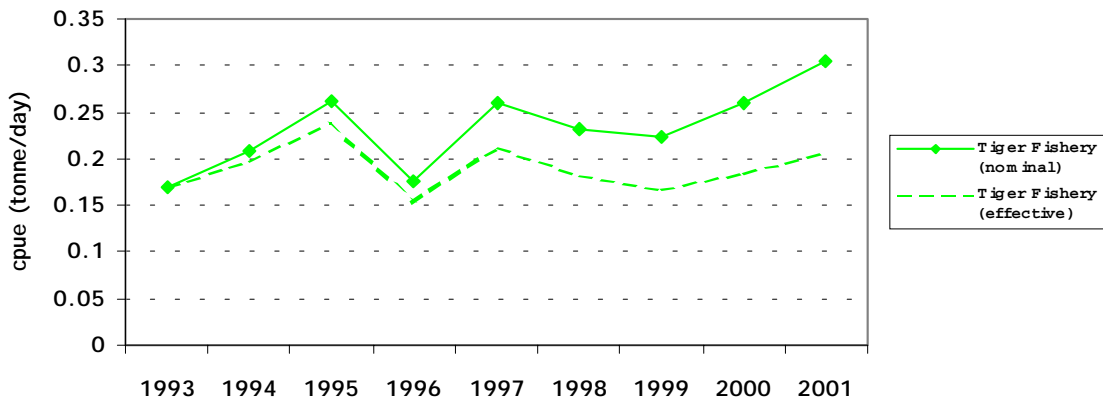


Figure 32c. Catch rate in the tiger prawn fisheries in the Groote area between 1993 and 2001

Source: AFMA logbook data



Gove

The catch of all species in the Gove area was up, banana prawns up 61% to 37 tonnes, tigers up 9% to 179 tonnes and endeavours up 115% to 101 tonnes (Figures 33a & 33b).

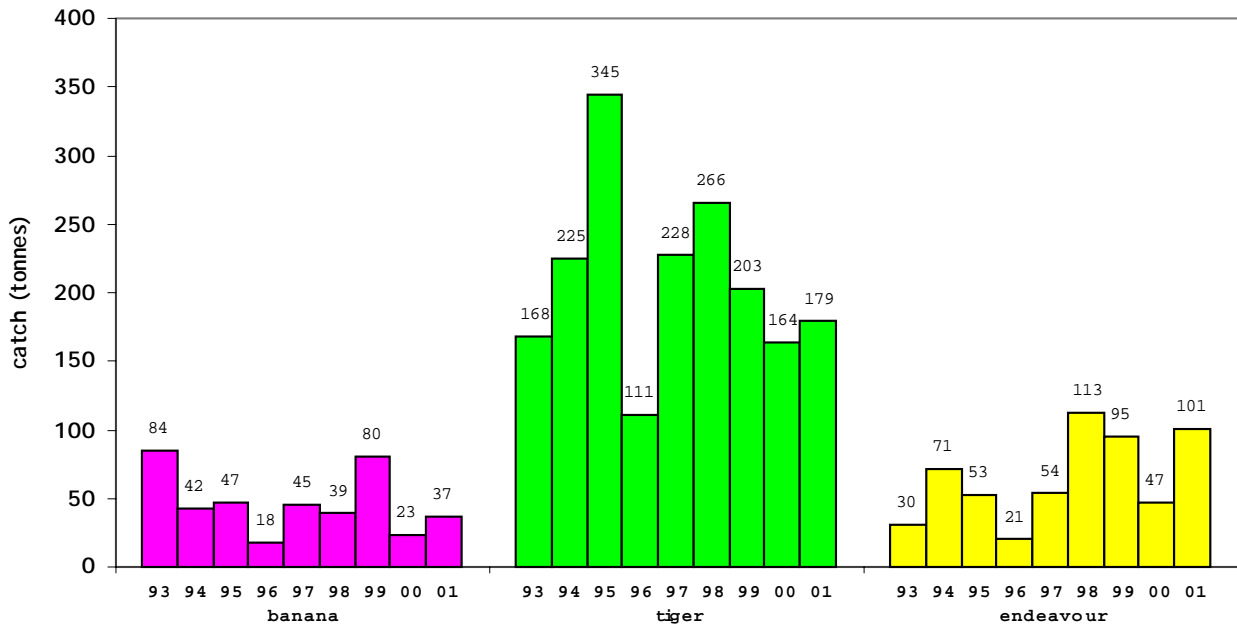


Figure 33a. Catch by species in the Gove area between 1993 and 2001

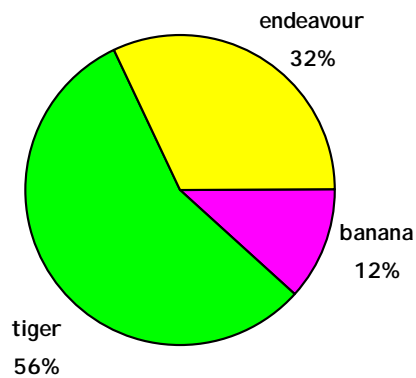


Figure 33b. Percentage catch by species in the Gove area in 2001.

Source: AFMA logbook data



Effort for the Gove area was down 19% to 99 days for the banana fishery and down 3% to 911 days for the tiger fishery. Effective effort in the tiger fishery actually increased slightly by 2% to 1345 days (Figure 34 a-c).

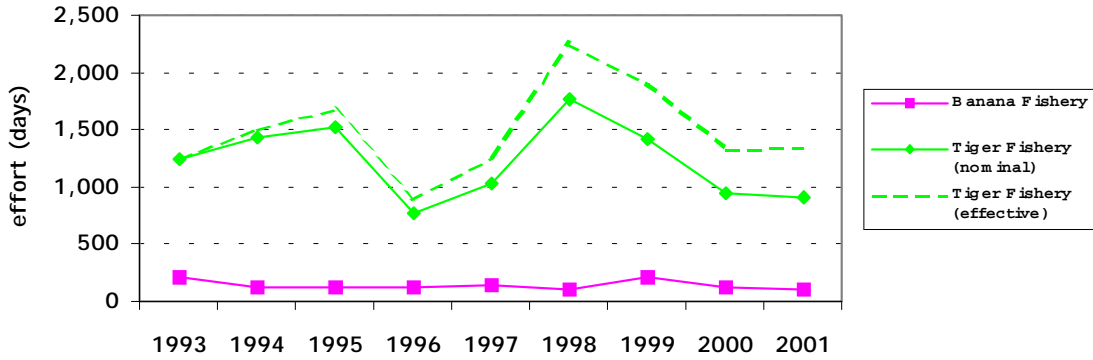


Figure 34a. Effort in the banana and tiger prawn fisheries in the Gove area between 1993 and 2001

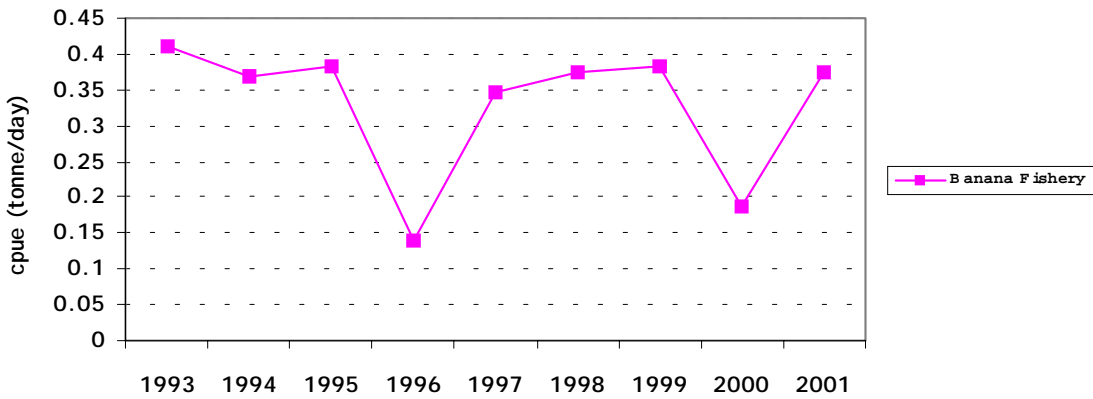


Figure 34b. Catch rate in the banana prawn fishery in the Gove area between 1993 and 2001

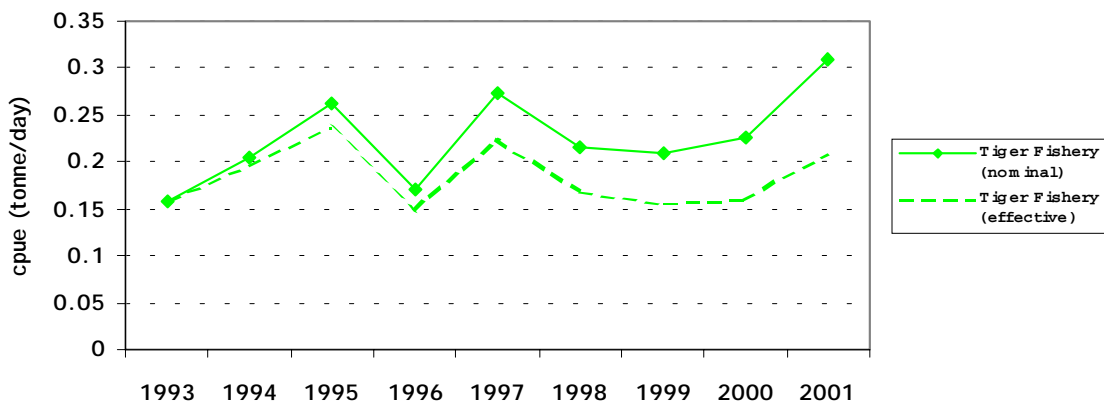


Figure 34c. Catch rate in the tiger prawn fisheries in the Gove area between 1993 and 2001

Source: AFMA logbook data



Arnhem

The catch of banana prawns increased by 154% to 127 tonnes and the catch of tiger prawns increased 52% to 32 tonnes. The catch of endeavour prawns stayed low at 2 tonnes (Figures 35a & 35b).

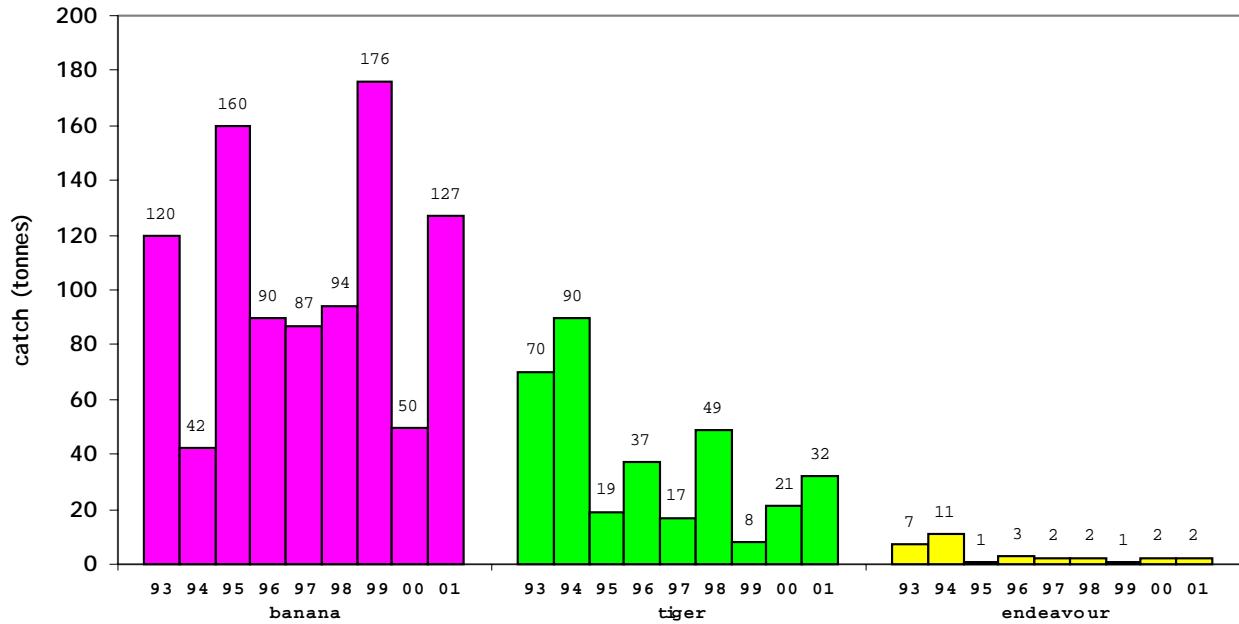


Figure 35a. Catch by species in the Arnhem area between 1993 and 2001



Figure 35b. Percentage catch by species in the Arnhem area in 2001.

Source: AFMA logbook data



Effort for the Arnhem area fell by 25% to 135 days for the banana fishery and fell 4% to 142 days for the tiger fishery. Effective effort in the tiger fishery increased slightly by 1% to 210 days (Figure 36 a-c).

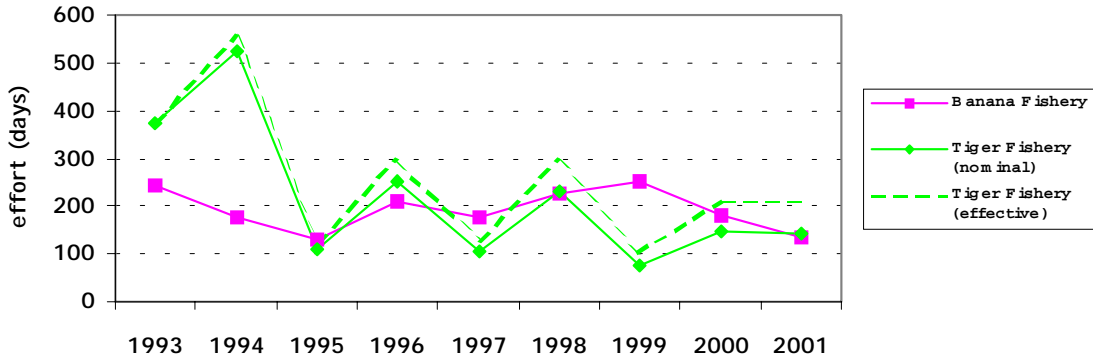


Figure 36a. Effort in the banana and tiger prawn fisheries in the Arnhem area between 1993 and 2001

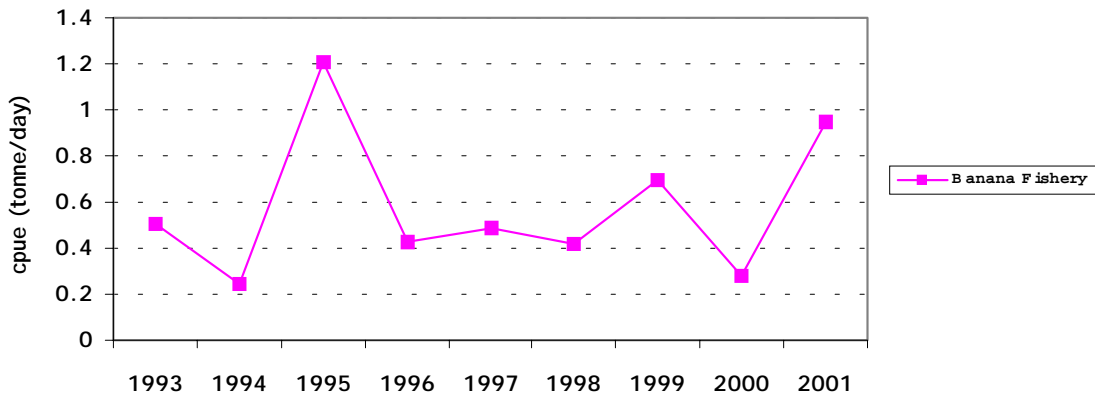


Figure 36b. Catch rate in the banana prawn fishery in the Arnhem area between 1993 and 2001

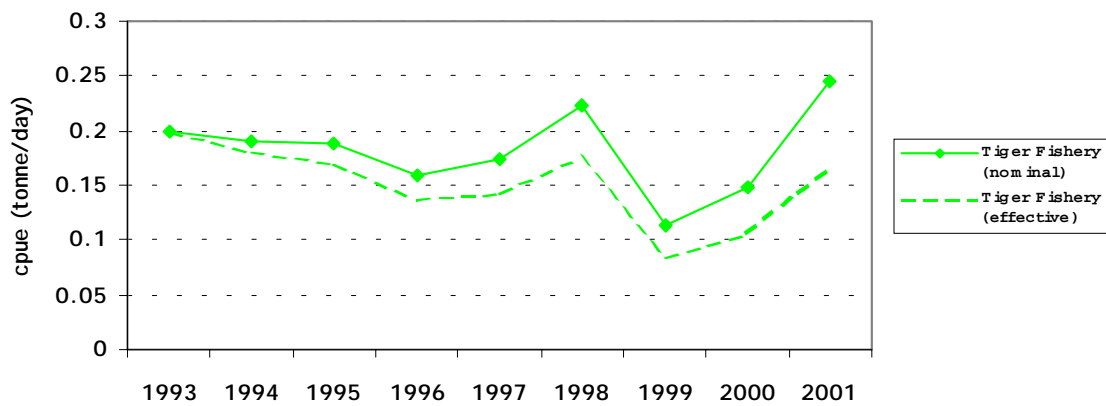


Figure 36c. Catch rate in the tiger prawn fisheries in the Arnhem area between 1993 and 2001

Source: AFMA logbook data



Port Essington

Catches of all species of prawns increased in the Port Essington area in the 2001 season. The banana prawn catch increased by 56% to 280 tonnes, the catch of tigers increased by 62% to 63 tonnes, and the endeavours was up by 468% to 142 tonnes (Figures 37a & 37b).

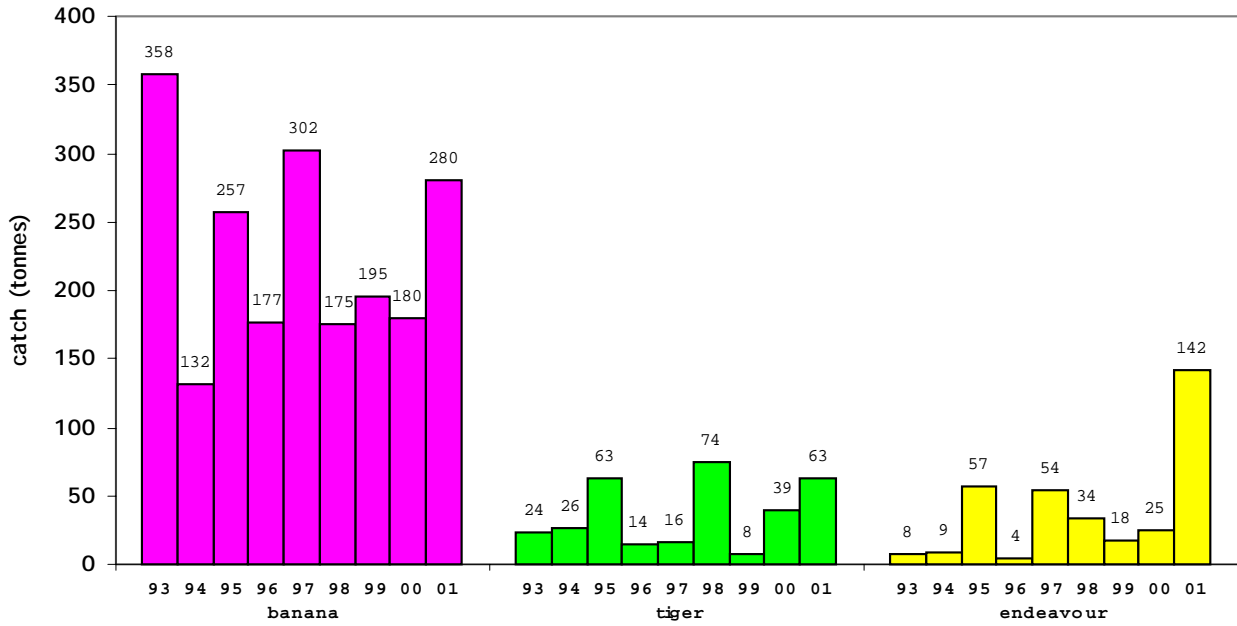


Figure 37a. Catch by species in the Port Essington area between 1993 and 2001

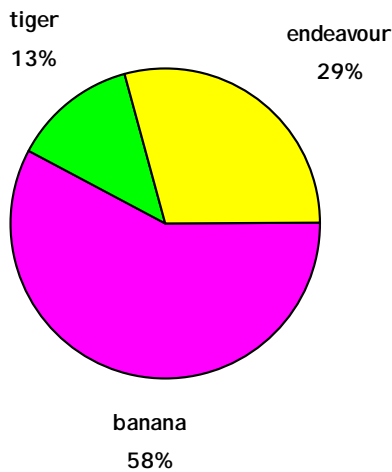


Figure 37b. Percentage catch by species in the Port Essington area in 2001.

Source: AFMA logbook data



Effort for the Port Essington area increased for both fisheries. Effort in the banana fishery was up by 20% to 345 days, while the tiger fishery was up by 83% to 395 days (584 days effective) (Figure 38 a-c).

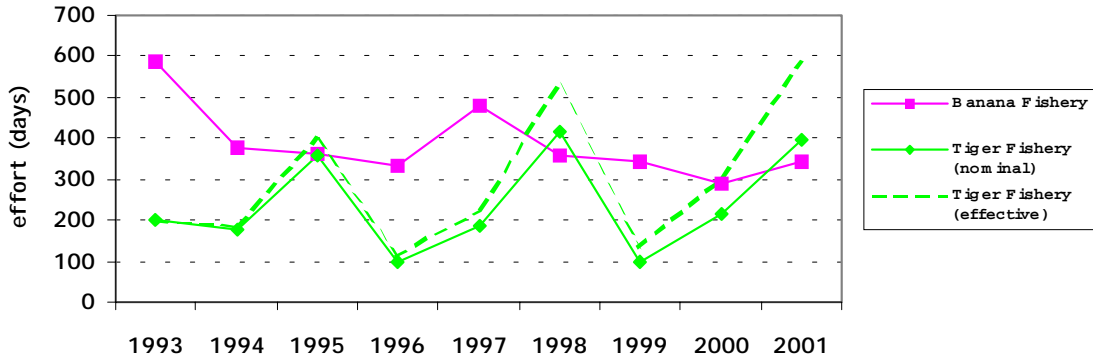


Figure 38a. Effort in the banana and tiger prawn fisheries in the Port Essington area between 1993 and 2001

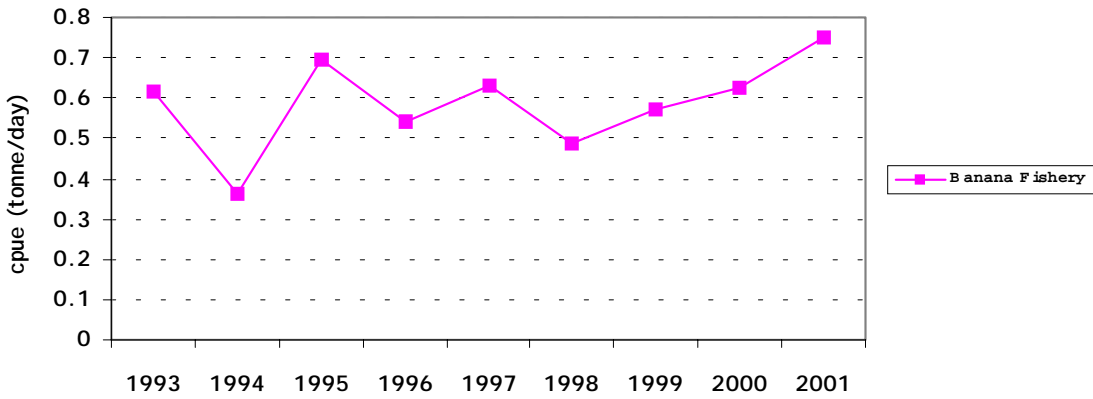


Figure 38b. Catch rate in the banana prawn fishery in the Port Essington area between 1993 and 2001

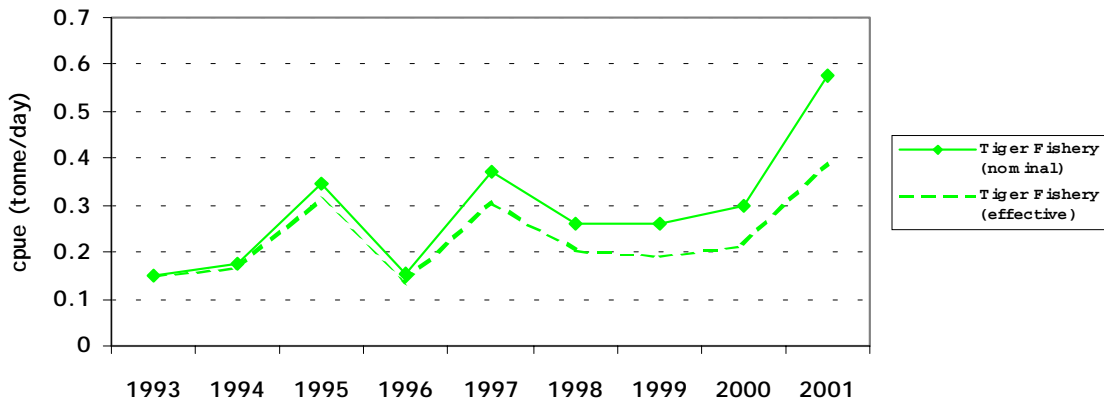


Figure 38c. Catch rate in the tiger prawn fisheries in the Port Essington area between 1993 and 2001

Source: AFMA logbook data



Melville

The banana prawn catch in the Melville area increased by 86% to 361 tonnes. Catches of tigers and endeavours remained low, with tigers increasing slightly to 5 tonnes from 3 tonnes in 2000, and endeavours up to 18 tonnes from 2 tonnes (Figures 39a & 39b).

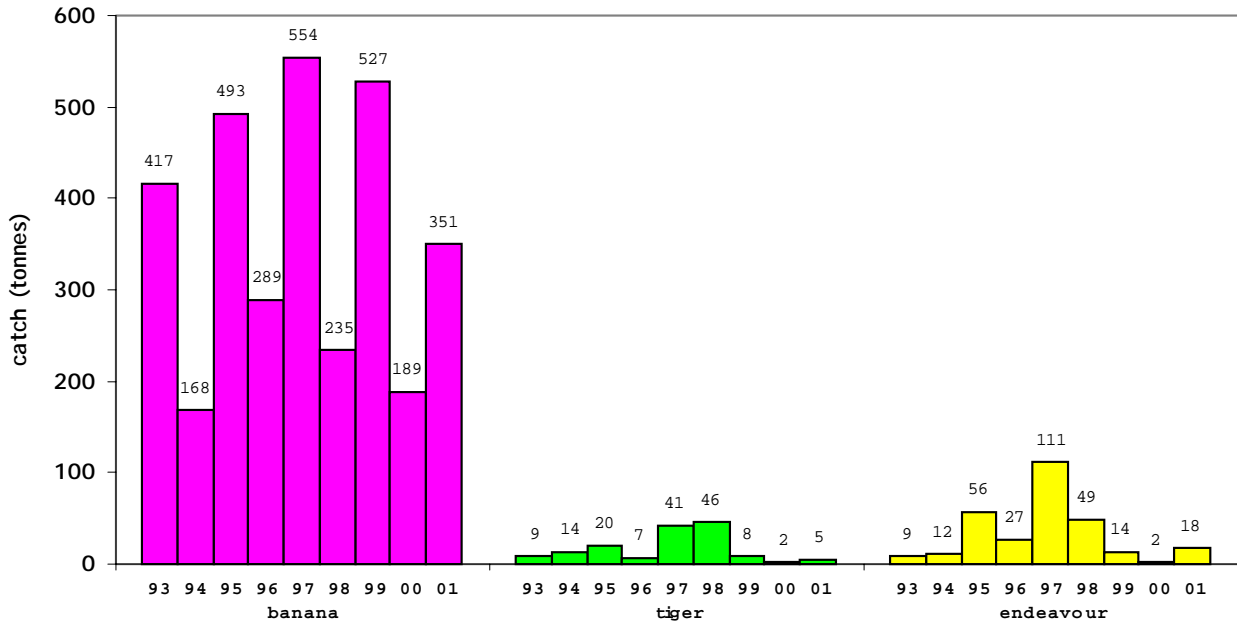


Figure 39a. Catch by species in the Melville area between 1993 and 2001

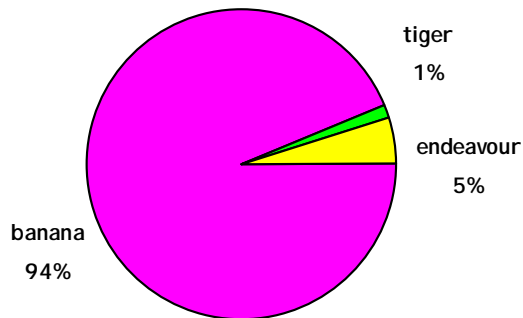


Figure 39b. Percentage catch by species in the Melville area in 2001.

Source: AFMA logbook data



Effort for the Melville area in the banana fishery was up 16% to 439 days during 2001. Effort in the tiger fishery remained low with 63 days effort (93 days effective) (Figure 40 a-c).

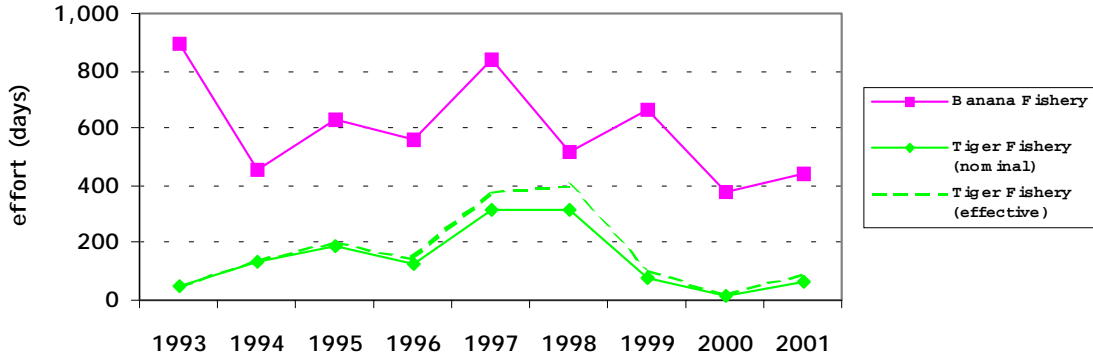


Figure 40a. Effort in the banana and tiger prawn fisheries in the Melville area between 1993 and 2001

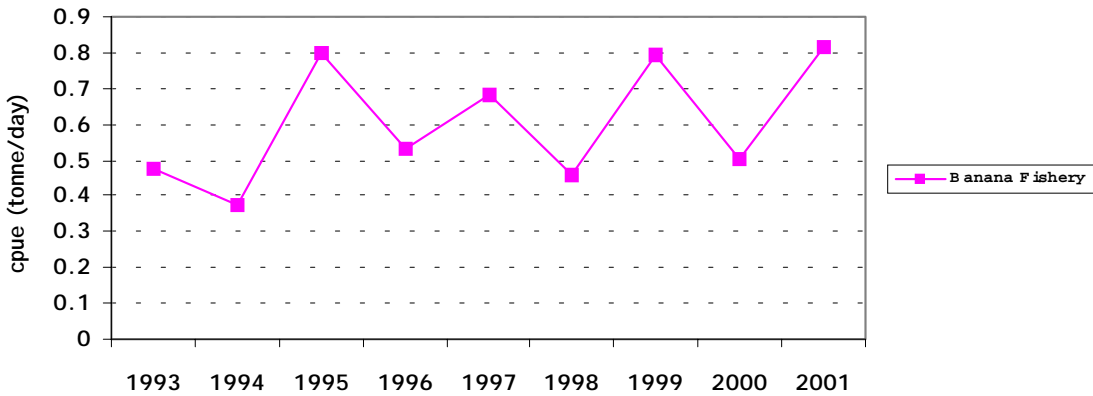


Figure 40b. Catch rate in the banana prawn fishery in the Melville area between 1993 and 2001

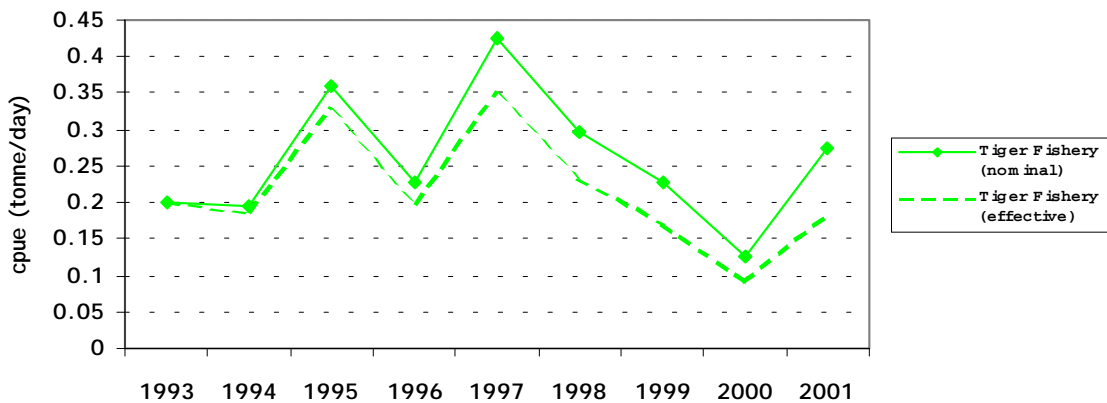


Figure 40c. Catch rate in the tiger prawn fisheries in the Melville area between 1993 and 2001

Source: AFMA logbook data



Fog Bay

The banana prawn catch in the Fog Bay area increased 39% to 307 tonnes in 2001. Catches of tigers and endeavours remained very low (Figures 41a & 41b).

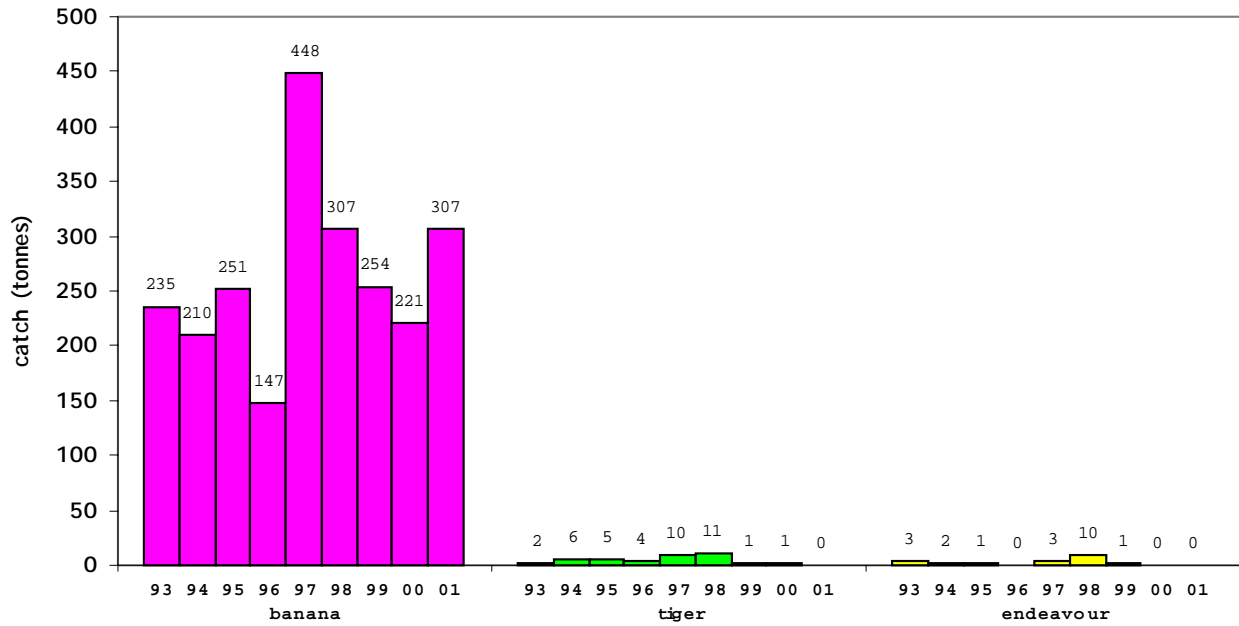


Figure 41a. Catch by species in the Fog Bay area between 1993 and 2001

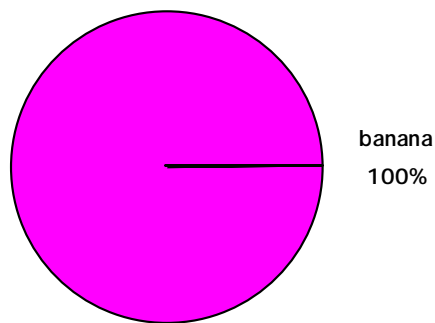


Figure 41b. Percentage catch by species in the Fog Bay area in 2001.

Source: AFMA logbook data



Effort for the banana fishery in the Fog Bay area during 2001 was the same as it was last year, 271 days. Effort for tiger fishery was very low (Figure 42 a-b).

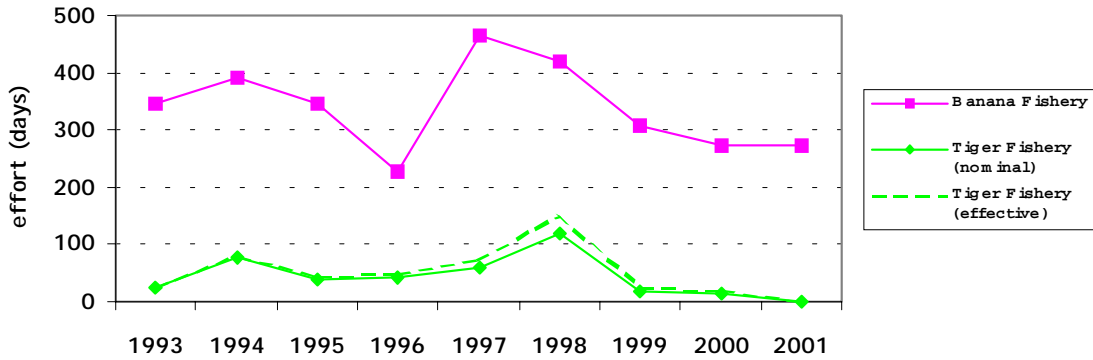


Figure 42a. Effort in the banana and tiger prawn fisheries in the Fog Bay area between 1993 and 2001

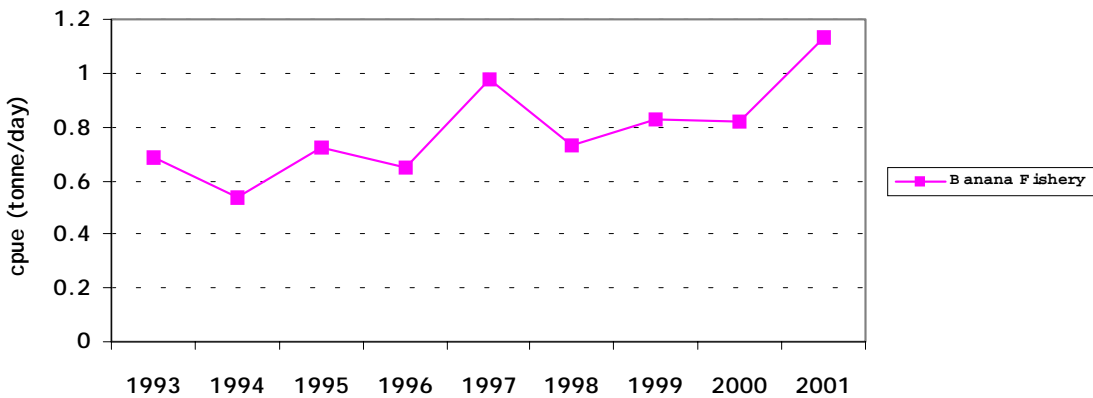


Figure 42b. Catch rate in the banana prawn fishery in the Fog Bay area between 1993 and 2001

Source: AFMA logbook data

* Please note that a chart of the catch rate in the tiger prawn fishery in the Fog Bay area is not included due to the low catches of tiger prawns in the area between 1993 and 2001.



Bonaparte

The banana prawn catch in the Bonaparte area decreased by 26% to 292 tonnes in the 2001 season. Catches of both tigers and endeavours increased. Tigers were up to 25 tonnes from 1 tonnes, while endeavours were up to 29 tonnes from 19 tonnes in 2000 (Figures 43a & 43b).

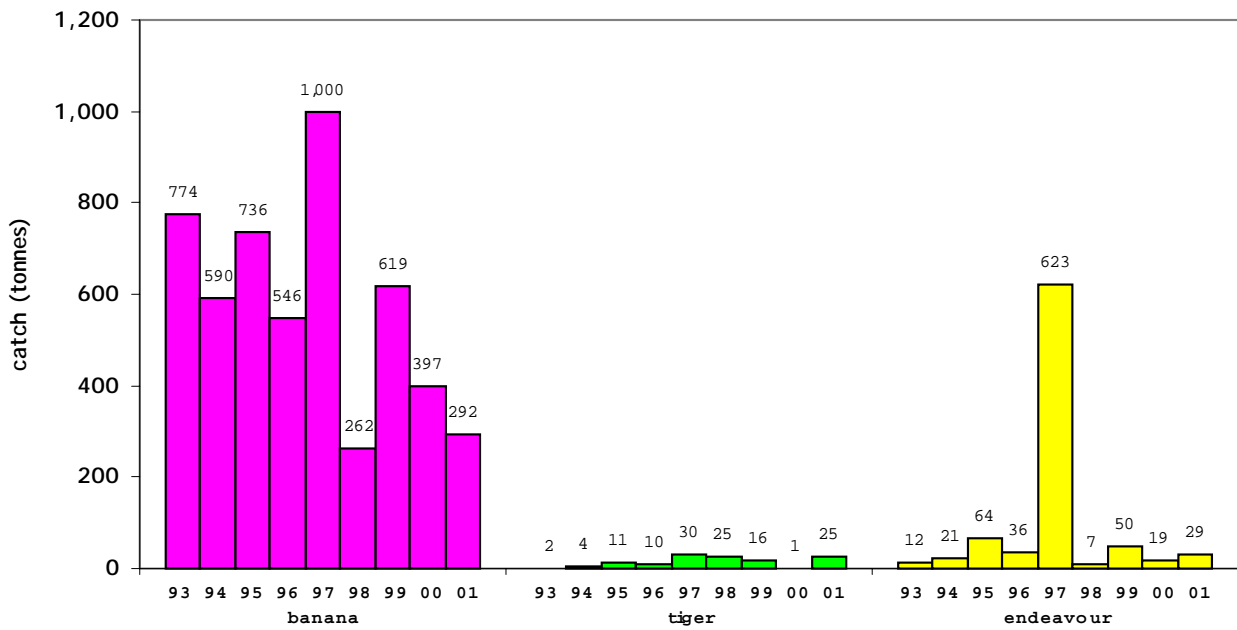


Figure 43a. Catch by species in the Bonaparte area between 1993 and 2001

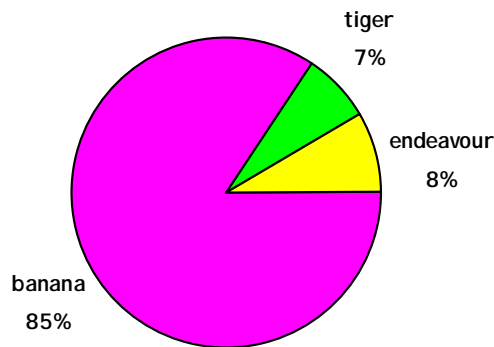


Figure 43b. Percentage catch by species in the Bonaparte area in 2001.

Source: AFMA logbook data



Effort for the Bonaparte area was down by 35% to 358 days for the banana fishery. The effort for the tiger fishery increased to 187 days (276 days effective) during the 2001 season, up from 32 days in 2000 (Figure 44 a-c).

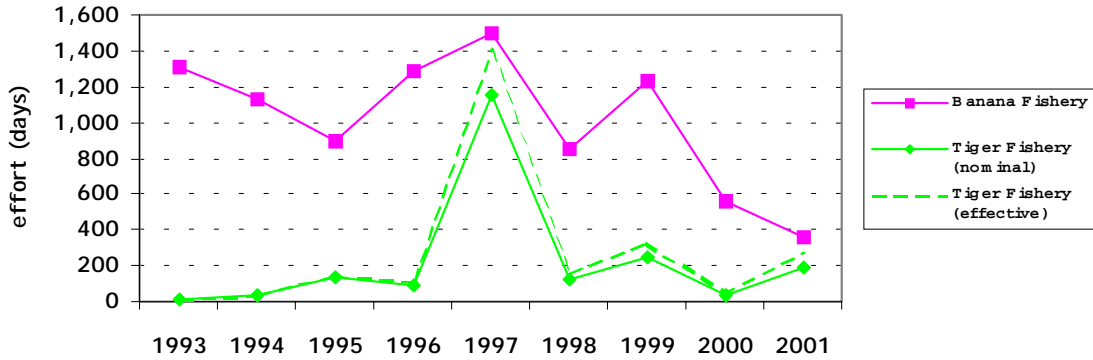


Figure 44a. Effort in the banana and tiger prawn fisheries in the Bonaparte area between 1993 and 2001

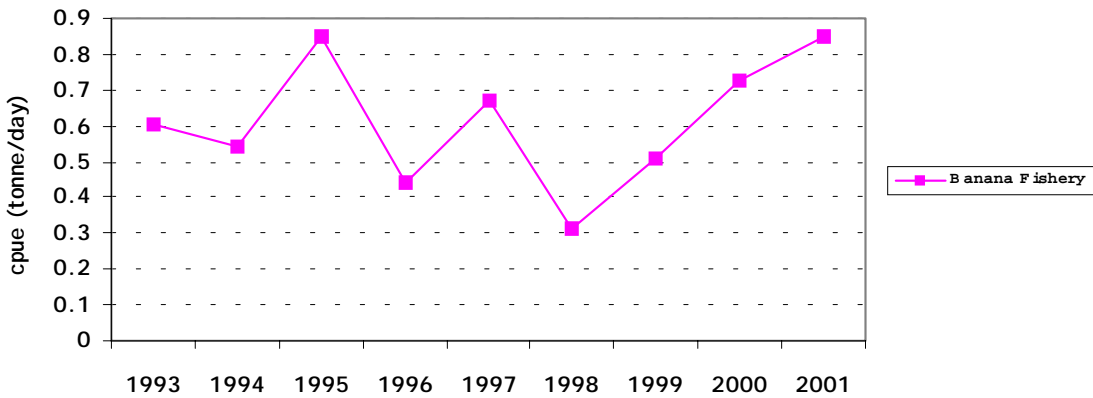


Figure 44b. Catch rate in the banana prawn fishery in the Bonaparte area between 1993 and 2001

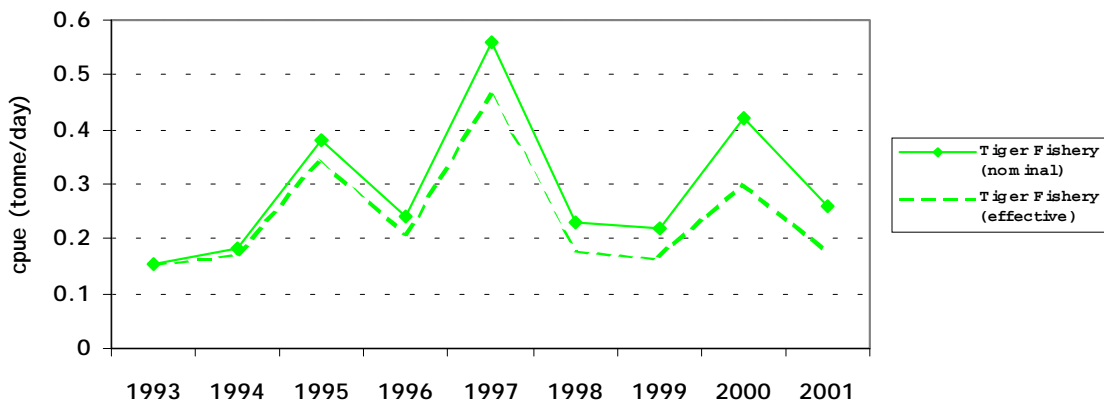


Figure 44c. Catch rate in the tiger prawn fisheries in the Bonaparte area between 1993 and 2001
Source: AFMA logbook data



Bycatch in the Northern Prawn Fishery

Turtle Bycatch

Turtle bycatch (and prawn effort) by area is shown in Figures 45a and 45b and Table 6. Catch by species is shown in Figure 46. Catches were significantly lower than in 1999, but were slightly higher than those in 2000 (Table 6).

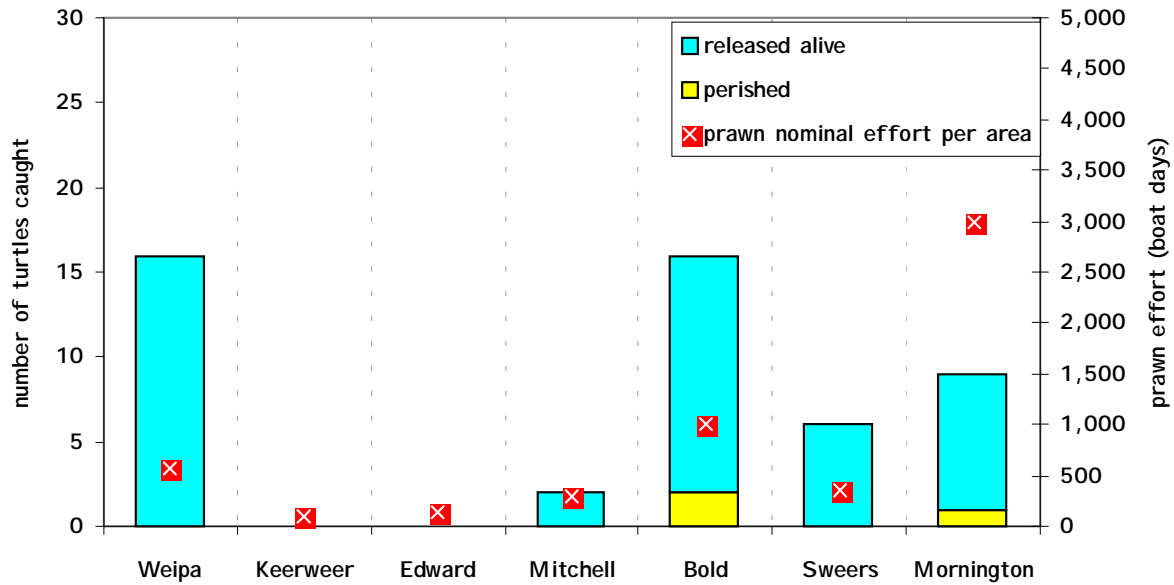


Figure 45a. Turtle Bycatch in the Northern Prawn Fishery by Statistical Area (Weipa - Mornington) in 2001.

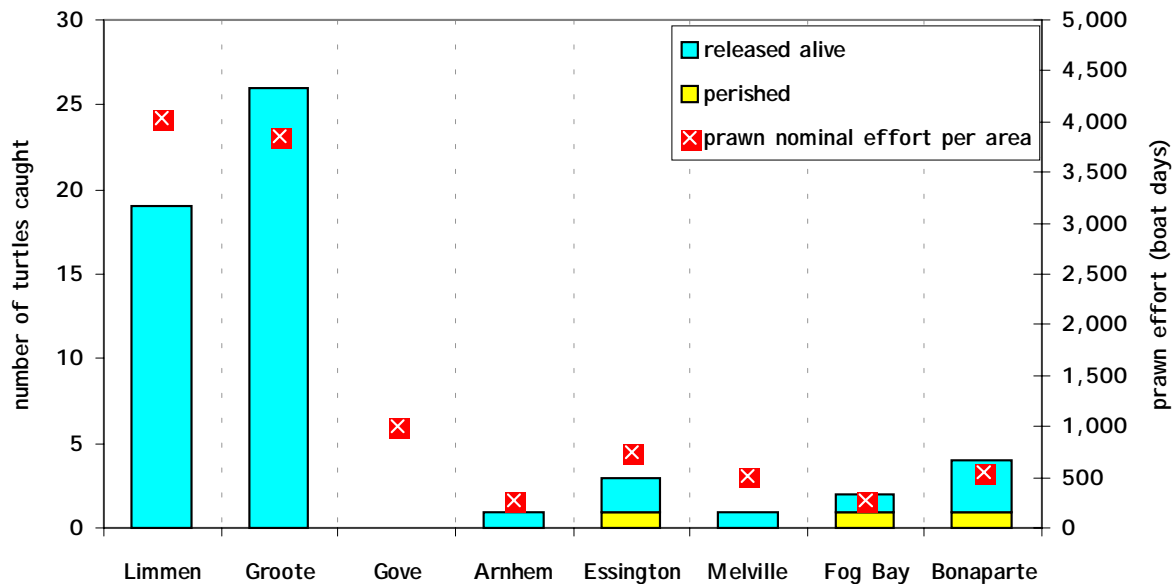


Figure 45b. Turtle Bycatch in the Northern Prawn Fishing by Statistical Area (Limmen - Bonaparte) in 2001.

Source: AFMA logbook data



Table 6. Turtle Bycatch by Species in each Statistical Area, 1998-2001.

Source: AFMA logbook data

Statistical Area	Turtle Species	Released Alive			Perished			Condition Unknown		
		99	00	01	99	00	01	99	00	01
WEIPA	<i>Flatback</i>	20		2	2					
	<i>Green</i>	10	1	7						
	<i>Loggerhead</i>	13		1						
	<i>Pacific Ridley</i>	2	4	6						
	<i>unidentified species</i>	3								
KEERWEER	<i>Flatback</i>	1								
	<i>Green</i>	1								
	<i>Pacific Ridley</i>	3								
	<i>unidentified species</i>		2							1
EDWARD	<i>Flatback</i>	2								
	<i>Pacific Ridley</i>	4								
	<i>Unidentified species</i>	1								
MITCHELL	<i>Flatback</i>	3	1							1
	<i>Green</i>			1						
	<i>Loggerhead</i>			1						
	<i>Pacific Ridley</i>		3			1				
	<i>unidentified species</i>	1	1							2
BOLD	<i>Flatback</i>	9	2	7			1			
	<i>Green</i>	14	1	2						
	<i>Hawksbill</i>	1		3						1
	<i>Leatherback</i>						1			
	<i>Pacific Ridley</i>	7	4	2						
	<i>unidentified species</i>	1			2					1
SWEERS	<i>Flatback</i>			4						
	<i>Green</i>	1		1						
	<i>Pacific Ridley</i>			1						
	<i>unidentified species</i>		1							
MORNINGTON	<i>Flatback</i>	32		2						
	<i>Green</i>	23			1	4				
	<i>Hawksbill</i>	2						1		
	<i>Leatherback</i>			1						
	<i>Loggerhead</i>	7			1					
	<i>Pacific Ridley</i>	30	2	5	7		1	1		
	<i>unidentified species</i>	6			1					
LIMMEN BIGHT	<i>Flatback</i>	34		1	3					
	<i>Green</i>	34	1	3						
	<i>Hawksbill</i>	5		1		1				
	<i>Leatherback</i>			3						
	<i>Loggerhead</i>	10		1						
	<i>Pacific Ridley</i>	51	3	10	3	1				
	<i>unidentified species</i>	18			1					
GROOTE	<i>Flatback</i>	96	1	5	14					
	<i>Green</i>	34	4	2	8	1				2
	<i>Hawksbill</i>	7	1		2					
	<i>Leatherback</i>	2		1						
	<i>Loggerhead</i>	9	2					1		
	<i>Pacific Ridley</i>	73	1		13					
	<i>unidentified species</i>	35	2	18	4			1		



NORTHERN PRAWN FISHERY & KIMBERLEY PRAWN FISHERY DATA SUMMARY 2001

Statistical Area	Turtle Species	Release Alive			Perished			Condition Unknown		
		99	00	01	99	00	01	99	00	01
GOVE	<i>Flatback</i>	25	2		5	1				
	<i>Green</i>	11	3		2					
	<i>Hawksbill</i>	2			2					
	<i>Leatherback</i>		1							
	<i>Loggerhead</i>	3	4							
	<i>Pacific Ridley</i>	37	1		3	2		1		
	<i>unidentified species</i>	6	1		3					
ARNHEM	<i>Flatback</i>	9		1						
	<i>Green</i>	3								
	<i>Hawksbill</i>	1								
	<i>Loggerhead</i>	9								
	<i>Pacific Ridley</i>	6								
	<i>unidentified species</i>	1								
PORT ESSINGTON	<i>Flatback</i>	4	2							
	<i>Green</i>		1		1		1			
	<i>Hawksbill</i>	1								
	<i>Loggerhead</i>	2								
	<i>Pacific Ridley</i>	1		2	1					
	<i>unidentified species</i>	4			1					
MELVILLE	<i>Flatback</i>	4		1		1				
	<i>Green</i>	4	1							
	<i>Leatherback</i>				1					
	<i>Loggerhead</i>	1								
	<i>Pacific Ridley</i>	5			1					
	<i>unidentified species</i>	5			4					
FOG BAY	<i>Flatback</i>	2	1		1					
	<i>Green</i>						1			
	<i>Hawksbill</i>				1					
	<i>Pacific Ridley</i>			1						
	<i>unidentified species</i>	2	1							
BONAPARTE	<i>Flatback</i>	7			1			1		
	<i>Green</i>	3		1						
	<i>Hawksbill</i>			1						
	<i>Loggerhead</i>	2								
	<i>Pacific Ridley</i>	7	1		6		1			
	<i>unidentified species</i>	8		1	1			1		
TOTAL ALL AREAS	<i>Flatback</i>	248	9	23	26	2	1	1		1
	<i>Green</i>	138	12	17	12	5	2			2
	<i>Hawksbill</i>	19	1	5	5	1		1		1
	<i>Leatherback</i>	2	1	5	1		1			
	<i>Loggerhead</i>	56	6	3	1			1		
	<i>Pacific Ridley</i>	226	19	27	34	4	2	2		
<i>unidentified species</i>	91	8	19	17			2		4	
GRAND TOTAL	ALL SPECIES	780	56	99	96	12	6	7	0	8

Source: AFMA Logbook data



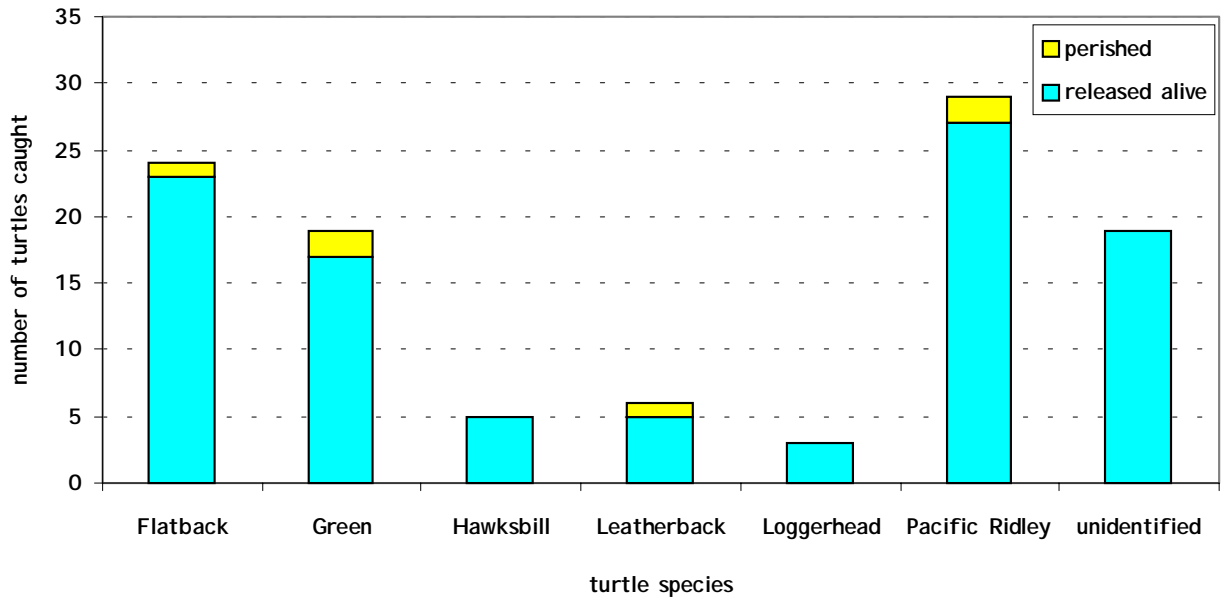


Figure 46. Turtle Bycatch in the Northern Prawn Fishery by Species in 2001.

Source: AFMA logbook data



Catch and Effort for the Kimberley Prawn Fishery

The Kimberley Prawn Fishery (KPF) extends west from Cape Londonderry to Koolan Island in Western Australia. It is closely aligned in its management with the NPF even though the two fisheries are administered by different governments - the NPF by the Commonwealth Government through AFMA and the KPF by the WA Government through Fisheries Western Australia. This summary of the KPF is included as a number of NPF operators also have access rights to the KPF.

Many KPF operators record their daily catches in the AFMA NPF logbook. These logsheets are processed by AFMA and entered on the joint NPF, KPF and Torres Strait Prawn database. The data is provided to Fisheries Western Australia upon request. Some KPF operators also fill in the Western Australia Prawn Research Logbook which is a monthly catch and effort log. There are also some operators who complete

Table 7. Annual landings, number of vessels fishing and average catch in the Kimberley Prawn Fishery from 1980 to 2001

<i>year</i>	<i>banana (tonnes)</i>	<i>tiger (tonnes)</i>	<i>endeavour (tonnes)</i>	<i>king (tonnes)</i>	<i>total (tonnes)</i>	<i>no. of vessels</i>	<i>KPF- only vessels</i>	<i>av. catch (tonnes/ vessel)</i>
1980	331	4	7	0	342	27	*	13
1981	198	8	6	0	212	28	*	8
1982	308	3	10	0	321	27	*	12
1983	309	13	25	0	347	40	*	9
1984	216	18	6	0	240	51	*	5
1985	158	6	15	0	179	35	*	5
1986	395	14	39	0	448	63	*	7
1987	276	9	14	156	455	63	*	7
1988	201	23	28	1	253	49	4	5
1989	184	6	11	1	202	47	2	4
1990	246	33	43	3	325	48	4	7
1991	440	66	106	11	623	51	7	12
1992	186	16	21	0	223	43	5	5
1993	374	57	63	1	497	41	15	12
1994	206	17	14	0	237	32	11	7
1995	253	17	13	1	284	31	12	9
1996	374	21	80	2	477	39	14	12
1997	451	15	62	0	528	42	14	13
1998	338	40	45	0	423	42	15	10
1999	295	16	11	0	322	44	14	7
2000	223	40	11	0	274	27	6	10
2001	238	47	18	0	303	20	14	15

Sources: AFMA Logbook data and Fisheries Western Australia Logbook data



the WA logbook only. Information for all years in this summary includes data from both the AFMA database and the Fisheries Western Australia database.

Catch And Effort

Catches of banana, tiger and endeavour prawns increased in 2001. Bananas were up 7% to 238 tonnes, tigers up 18% to 47 tonnes and endeavours up 64% to 18 tonnes (Table 7, Figure 47a & 47b). The catch of king prawns was again virtually nil.

Effort in the fishery declined by 300 hours (2%) to 13,908 hrs (Figure 48).

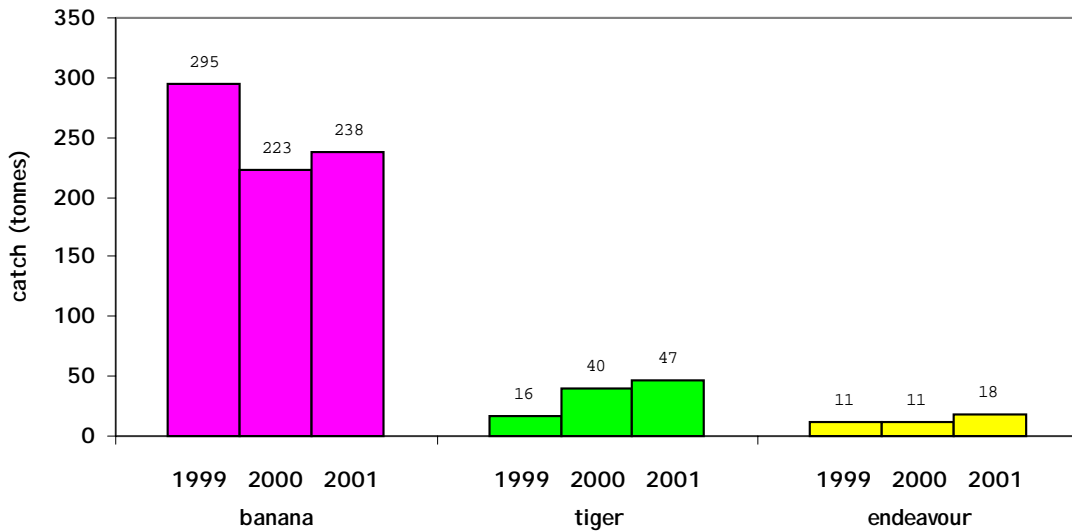


Figure 47a. Catch by species in the entire Kimberley Prawn Fishery in 1999 to 2001

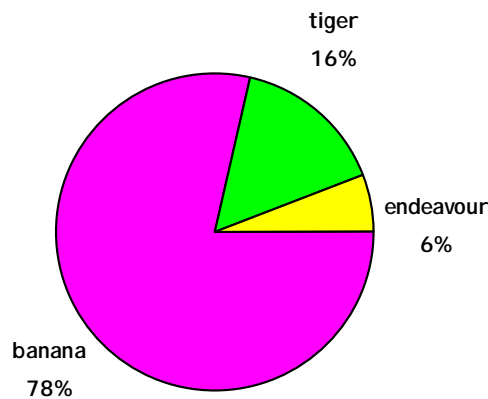


Figure 47b. Percentage catch by species in the entire Kimberley Prawn Fishery in 2001

Source: AFMA logbook data and Fisheries Western Australia logbook data



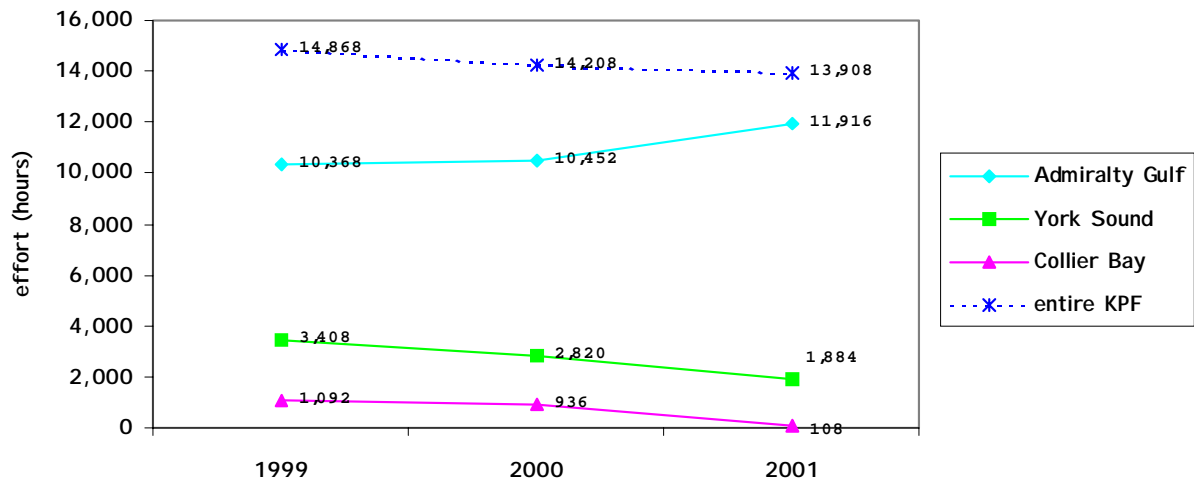


Figure 48. Annual effort by area in the Kimberley Prawn Fishery 1999-2001

Source: AFMA logbook data and Fisheries Western Australia logbook data

Catch and Effort by Statistical Area in the KPF

The Kimberley Prawn region is split into three statistical areas (Figure 49.)

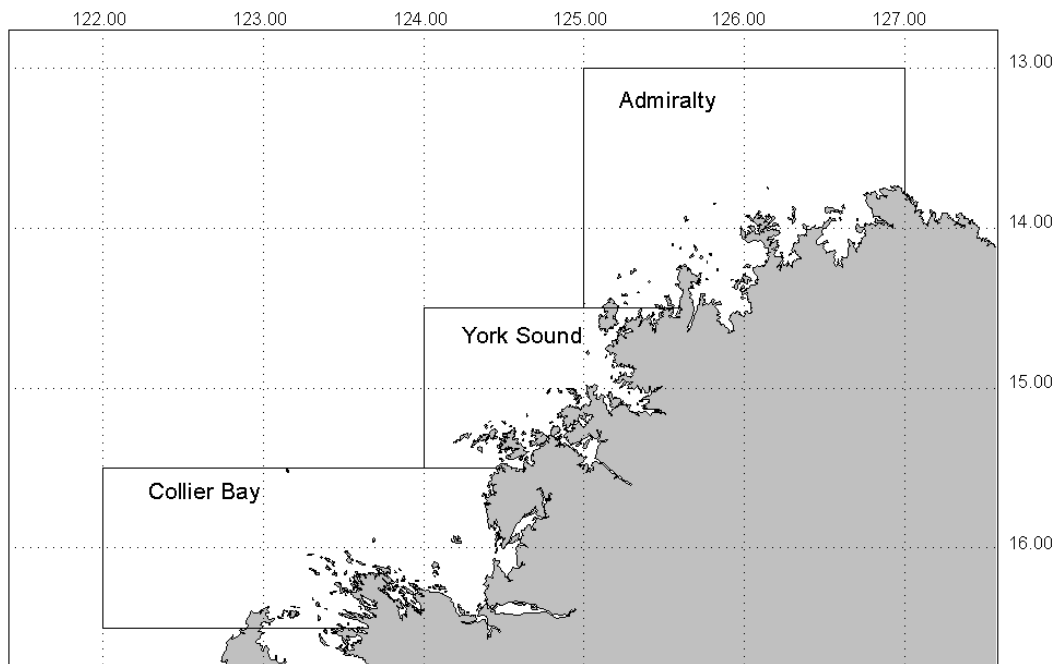


Figure 49. Statistical Areas of the Kimberley Prawn Fishery



Admiralty Gulf

The catch of banana prawns in the Admiralty Gulf area increased by 40% - up from 134 tonnes in 2000 to 188 tonnes in 2001. Catches of tiger prawns increased 18% to 46 tonnes in 2001, while endeavour prawn catches increased 78% to 16 tonnes (Figures 50a & 50b). Effort in the area increased by 1,464 hours (14%).

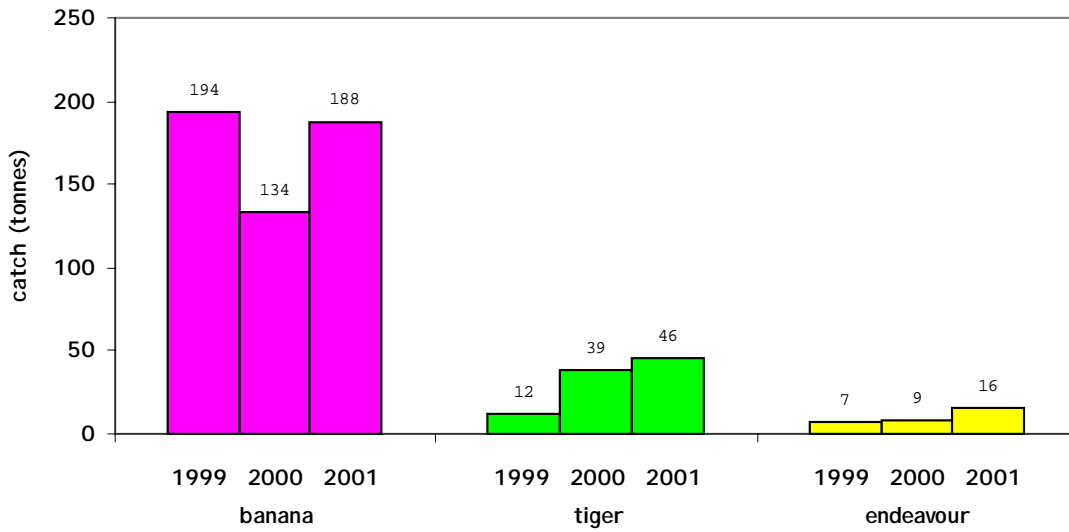


Figure 50a. Catch by species in the Admiralty Gulf area in 1998 to 2001

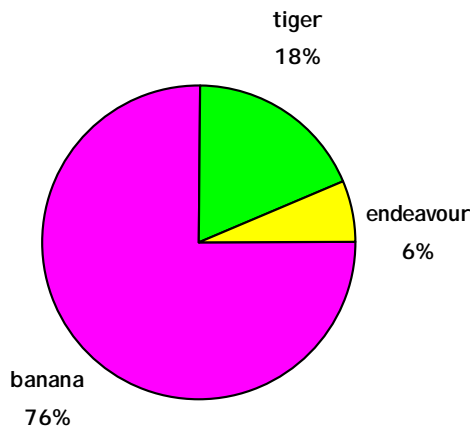


Figure 50b. Percentage catch by species in the Admiralty Gulf area in 2001

Sources: AFMA logbook data and Fisheries Western Australia logbook data



York Sound

In York Sound, the catch of bananas decreased by 23% to 47 tonnes in 2001. The catch of both tigers and endeavours were very low, at 1 tonne each (Figures 51a & 51b). Effort in the York Sound area decreased by 936 hours (33%).

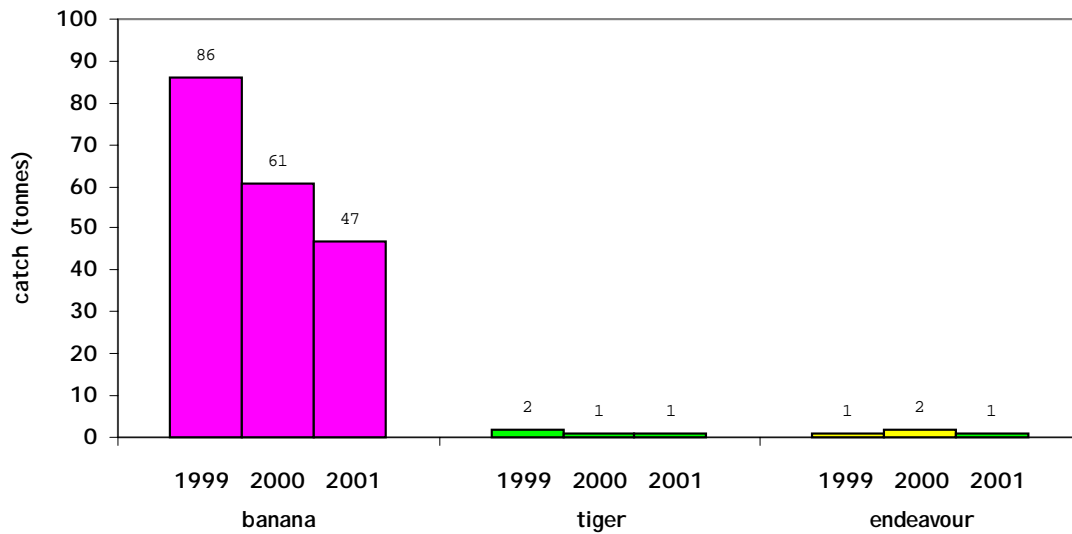


Figure 51a. Catch by species in the York Sound area in 1998 to 2001

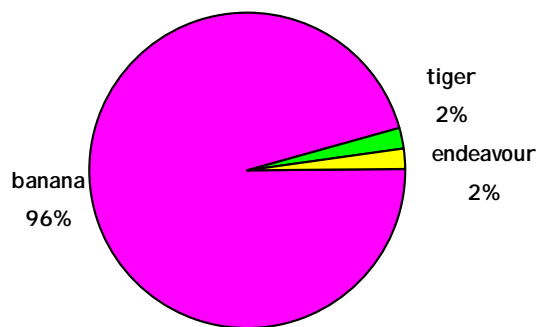


Figure 51b. Percentage catch by species in the York Sound area in 2001

Sources: AFMA logbook data and Fisheries Western Australia logbook data



Collier Bay

The catch of banana prawns declined by 24 tonnes (86%) to only 4 tonnes in the Collier Bay area in 2001. The catch of tiger and endeavour prawns continued to be virtually nil (Figures 52a & 52b). Effort in Collier Bay decreased by 828 hours (88%).

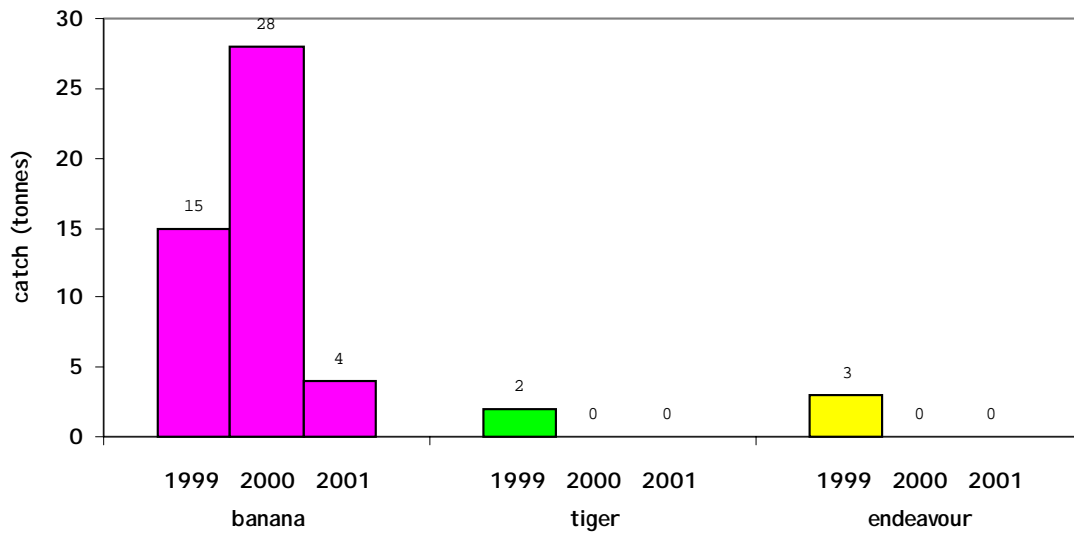


Figure 52a. Catch by species in the Collier Bay area in 1998 to 2001

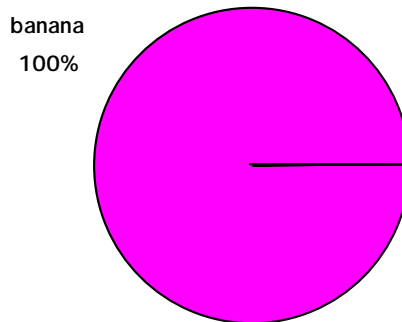


Figure 52b. Percentage catch by species in the Collier Bay area in 2001
Sources: AFMA logbook data and Fisheries Western Australia logbook data



Byproduct in the Kimberly Prawn Fishery

In addition to prawns, operators in the Kimberley Prawn Fishery retain several other species as byproduct. These include bugs, cuttlefish, saucer scallops squid and shark (Table 8).

Table 8. Retained Byproduct by Statistical Area in the KPF in 1998-2001.

Sources: AFMA logbook data and Fisheries Western Australia logbook data

Species	Admiralty Gulf			York Sound			Collier Bay			entire KPF		
	99	00	01	99	00	01	99	00	01	99	00	01
bugs (kg)	637	1424	2514	88	104	150	8	3		733	1531	2664
cuttlefish (kg)	10		10							10		10
squid (kg)	53	650	12670				10			63	650	12670
saucer scallop (kg)	20					110				20		110
mulloway (kg)	80									80		
shark (kg)	25									25		

Sources: AFMA Logbook data and Fisheries Western Australia Logbook data

Bycatch in the Kimberley Prawn Fishery

There have been no recorded catches of turtles in the KPF in either the 2000 or the 2001 season.



State/Territory Specific Data

Financial Year Catch of the NPF by State/Territory

Information on financial year catches taken in the waters of each State/Territory is included to meet Offshore Constitutional Settlement obligations with Queensland, the Northern Territory and Western Australia. The information is also used by the Australian Bureau of Agricultural and Resource Economics to calculate Gross Value of Product (GVP) figures.

Catches in QLD and the NT were higher during the 2000/2001 financial year with Queensland up 2946 tonnes (183%) and the Northern Territory up 953 tonnes (27%) (Table 9). Catches in Western Australia fell slightly by 48 tonnes (13%). This was mainly due to large increases in the catch of banana prawns in both Queensland and the Northern Territory.

Byproduct of the NPF by State/Territory

Logbook recording of retained bycatch (byproduct) in the NPF has been required since 1995.

Bugs, cuttlefish, scallops and squid were the most commonly retained bycatch species in 2001. Of interest is the catch of over 360 tonnes of squid, mainly in Queensland (Table 10).



Table 9. Financial year catch of the NPF by State from 1990/91 to 2000/01.

Source: AFMA Logbook data.

<i>State</i>	<i>financial year</i>	<i>banana (tonnes)</i>	<i>tiger (tonnes)</i>	<i>endeavour (tonnes)</i>	<i>king (tonnes)</i>	<i>total catch (tonnes)</i>
Queensland	1990/91	4646	1151	269	51	6117
	1991/92	1392	1710	548	30	3680
	1992/93	1857	968	357	18	3200
	1993/94	904	1032	416	8	2360
	1994/95	2540	1883	346	24	4791
	1995/96	2562	1570	761	23	4916
	1996/97	2050	1259	817	15	4141
	1997/98	1986	1318	878	11	4193
	1998/99	1548	634	335	5	2523
	1999/2000	637	629	348	1	1614
	2000/2001	3651	553	352	4	4560
Northern Territory	1990/91	1430	2156	380	46	4011
	1991/92	669	2332	434	27	3462
	1992/93	1639	1907	437	18	4000
	1993/94	697	1768	403	18	2886
	1994/95	1536	1855	423	19	3836
	1995/96	1072	1615	434	6	3127
	1996/97	1472	1184	387	9	3052
	1997/98	1241	1466	490	9	3206
	1998/99	1549	2141	778	6	4474
	1999/2000	1247	1564	586	11	3408
	2000/2001	2323	1546	489	3	4361
Western Australia	1990/91	579	86	42	0	707
	1991/92	231	8	11	0	250
	1992/93	498	5	6	0	508
	1993/94	828	4	13	0	845
	1994/95	414	2	16	0	432
	1995/96	713	18	65	0	796
	1996/97	1079	5	38	0	1122
	1997/98	756	66	686	1	1509
	1998/99	519	23	17	0	559
	1999/2000	329	2	38	0	369
	2000/2001	281	16	23	0	321

Source: AFMA Logbook data



Table 10. Retained byproduct of the NPF by State of capture in 2001.

Source: AFMA logbook data

<i>Species</i>	<i>Form Type</i>	QLD wt (kg)	NT wt (kg)	WA wt (kg)
broad-billed swordfish	<i>whole</i>	2		
bugs	<i>tails</i>	360	83	10
	<i>whole</i>	12041	15631	83
carrid prawn	<i>whole</i>		30	194
crayfish	<i>whole</i>		19	51
cuttlefish	<i>whole</i>	618	2349	140
flounder	<i>whole</i>		57	
flathead	<i>whole</i>		20	
gold band snapper	<i>whole</i>	5		
mackerel	<i>whole</i>		5	
mangrove jack	<i>whole</i>		16	
mud scallop	<i>whole</i>	132	3848	
northern cod	<i>whole</i>		4	
octopus	<i>whole</i>	14	208	18
orange perch	<i>whole</i>		9	
pike eel	<i>whole</i>	5		
Ray's bream	<i>whole</i>	9	585	120
red emperor	<i>fillets</i>		12	
rock cod	<i>whole</i>			6
saddle-tailed sea perch	<i>whole</i>	55		
	<i>fillets</i>	4	27	
saucer scallop	<i>whole</i>		2083	
scarlet sea perch / large mouth nannygai	<i>whole</i>		90	370
	<i>fillets</i>		2	
sea perch	<i>whole</i>		15	
school whiting	<i>whole</i>	6	12	
shark 'other'	<i>whole</i>	6		
shark school	<i>whole</i>		6	
spanish mackerel	<i>whole</i>		70	
snapper	<i>whole</i>		64	66
	<i>fillets</i>	16		
squid	<i>whole</i>	362729	4436	99
stingray	<i>whole</i>	25	2	
trevally	<i>whole</i>		384	
whaler shark	<i>whole</i>		1	
whiting	<i>whole</i>	48	60	
other	<i>fillets</i>		60	
	<i>whole</i>	5	191	

Source: AFMA Logbook data



