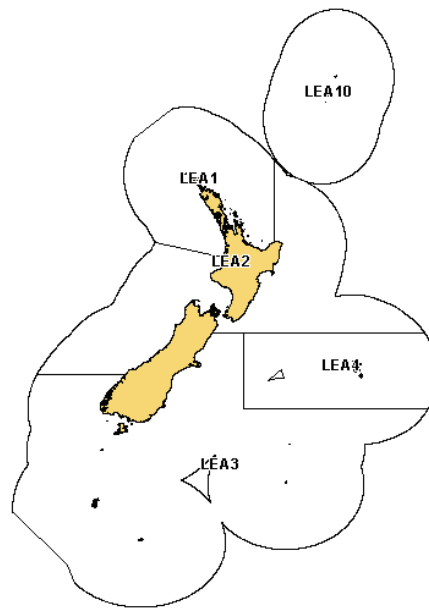


## LEATHERJACKET (LEA)

(*Parika scaber*)  
Kokiri, Hiriri



## 1. FISHERY SUMMARY

Leatherjacket was introduced into the QMS on 1 October 2003, with allowances, TACCs and TACs shown in Table 1.

**Table 1: Recreational and Customary non-commercial allowances, TACCs and TACs for leatherjacket, by Fishstock.**

Fishstock	Recreational Allowance	Customary Non-Commercial Allowance	Other sources of mortality	TACC	TAC
LEA 1	5	1	9	188	203
LEA 2	2	1	57	1 136	1 196
LEA 3	2	1	5	100	108
LEA 4	1	1	1	7	10
LEA 10	0	0	0	0	0
Total	10	4		1 431	1 517

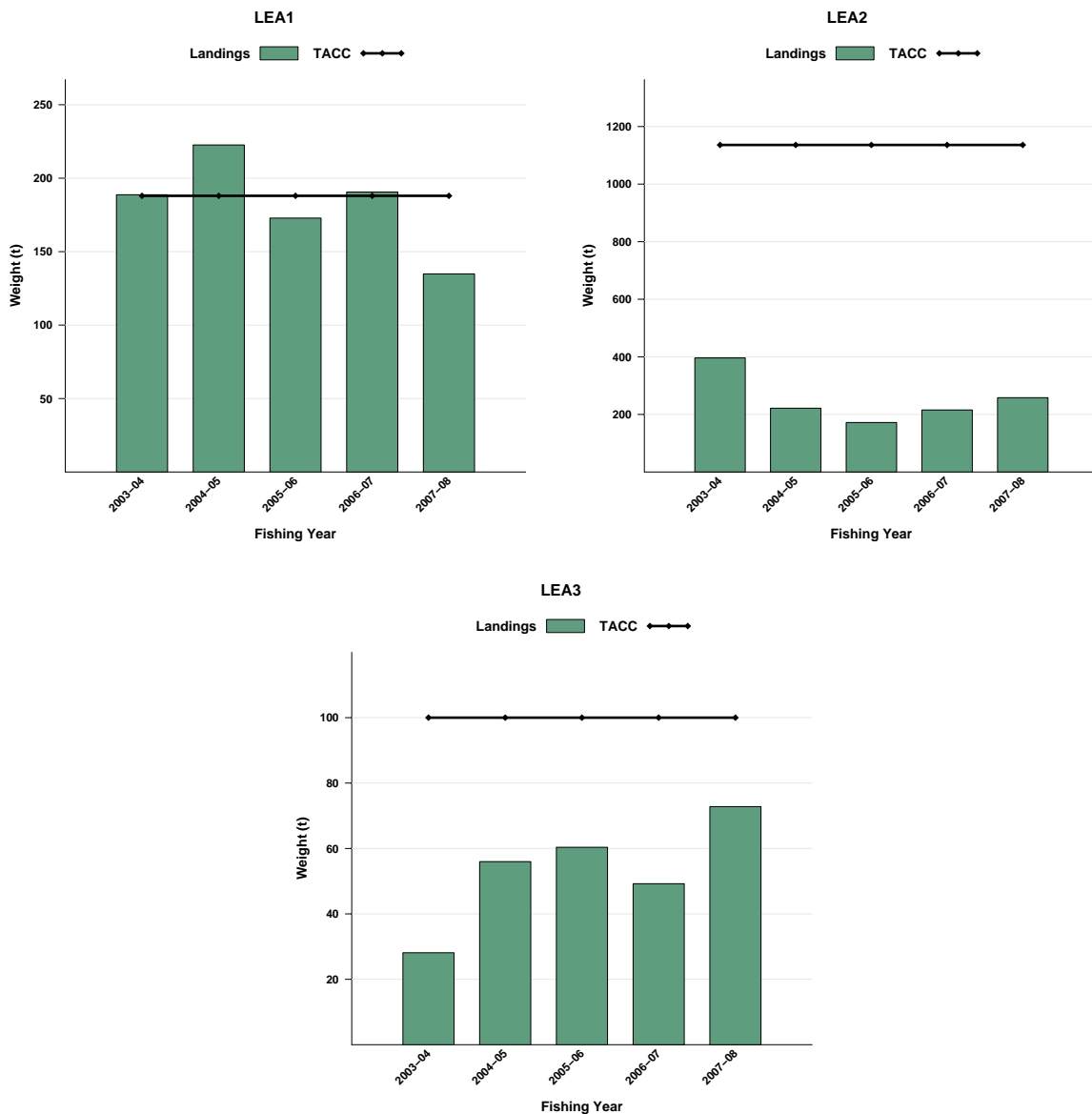
### 1.1 Commercial fisheries

Nationally, very small landings were first reported in 1948. Most of the current leatherjacket catch is taken as a bycatch, and it is very likely that leatherjacket has always been primarily a bycatch species. From only a few tonnes in the early 1960s, reported landings increased to 200–400 tonnes in the 1970s, 1980s and early 1990s (Table 2). Figure 1 shows the historical landings and TACC values for the main leatherjacket stocks. Landings increased further in the late 1990s to around 1000 to 1300 tonnes, but have decreased to less than 500 t in 2005–06. It is possible that actual catches were higher than reported prior to the 1970s, but that some catches were discarded without being reported due to low market demand in this period. On average over the last 4 years total landings have only been 35% of the TACC.

## LEATHERJACKET (LEA)

**Table 2: Reported commercial landings (tonnes) of leatherjacket by fishstock for the fishing years from 1989–90 to 2007–08. Landings for LEA 10 have not been shown as these were negligible and were rounded to zero.**

Fishstock	LEA 1		LEA 2		LEA 3		LEA 4		Total	
	Landings	TACC	Landings	TACC	Landings	TACC	Landings	TACC	Landings	TACC
1989–90	114	-	169	-	42	-	-	-	325	-
1990–91	143	-	178	-	61	-	-	-	382	-
1991–92	160	-	85	-	100	-	-	-	345	-
1992–93	154	-	98	-	41	-	-	-	293	-
1993–94	188	-	62	-	37	-	-	-	287	-
1994–95	186	-	148	-	50	-	-	-	384	-
1995–96	152	-	296	-	38	-	-	-	486	-
1996–97	128	-	908	-	70	-	-	-	1 106	-
1997–98	151	-	165	-	66	-	-	-	382	-
1998–99	110	-	413	-	30	-	-	-	553	-
1999–00	115	-	1136	-	35	-	-	-	1 286	-
2000–01	131	-	880	-	41	-	-	-	1 052	-
2001–02	185	-	953	-	43	-	-	-	1 181	-
2002–03	162	-	568	-	67	-	0	-	797	-
2003–04	189	188	396	1 136	28	100	0	7	613	1 431
2004–05	223	188	221	1 136	56	100	<1	7	500	1 431
2005–06	173	188	172	1 136	60	100	0	7	405	1 431
2006–07	191	188	215	1 136	48	100	0	7	454	1 431
2007–08	135	188	258	1 136	74	100	0	7	467	1 431
- no data										



**Figure 1: Historical landings and TACC for the main LEA stocks. From top left: LEA1 (Auckland), LEA2 (Central), and LEA3 (South East). Note that these figures do not show data prior to entry into the QMS.**

### 1.2 Recreational fisheries

The National Marine Recreational Fishing surveys in 1994, 1996 and 2000 do not provide an estimate of the non-commercial catches of leatherjacket because very few were caught. It is likely that recreational fishers, especially in the northern region, will have caught some leatherjacket by spear fishing, in rock lobster pots and setnets. Leatherjackets are seldom caught by hook and line.

### 1.3 Customary non-commercial fisheries

There is no quantitative information available to allow the estimation of the amount of leatherjacket taken by customary non-commercial fishers.

## 2. BIOLOGY

The New Zealand leatherjacket (*Parika scaber*) is present around much of New Zealand, but is most common in the north. Trawl survey records show it to be widespread over the inner shelf north of East Cape and Cape Egmont, in the South Taranaki Bight, in Tasman and Golden Bays, Pegasus Bay and the South Canterbury Bight, extending to depths below 100 m, but with greatest abundance at 40–60 m (Anderson *et al.* 1998). It was less commonly caught along the east coast of the North Island south of East Cape, off the northeast South Island (Cook Strait to Pegasus Bay), northwest South Island (Cape Farewell to Cape Foulwind), and around the South Otago and Southland coast. It has not been taken by trawl on the west coast south of Cape Foulwind.

The New Zealand leatherjacket also occurs in Australia, from New South Wales to the southern coast of West Australia. In the Australian southeast trawl fishery, *Parika scaber* is the main leatherjacket species caught (Yearsley *et al.* 1999). It was once believed that two similar species of leatherjacket occurred in New Zealand – ‘rough’ and ‘smooth’ – but these are now considered a single species with variable colouring. Kokiri is the Maori name, but is not in common usage. ‘Creamfish’ is a New Zealand trade name for the processed (headed/gutted/skinned) product, rather than a name for the fish itself.

Leatherjacket usually occur near reefs and over rough seafloor, but may be found over sand or some distance above the bottom. Although not a schooling species, it does occur in small groups.

There are no published studies on the age and growth *P. scaber*. According to Francis (1996) they live to at least 7 years, maturing at two years and 19–22 cm. The males defend territories and eggs are laid within nests on the seafloor in spring and summer (Ayling & Cox 1982, Milicich 1986).

## 3. STOCKS AND AREAS

There have been no biological studies directly relevant to the recognition of separate stocks.

The West Coast South Island (WCSI) trawl survey probably monitors pre-recruit biomass of leatherjacket. The total biomass trends are shown in Figure 2.

## LEATHERJACKET (LEA)

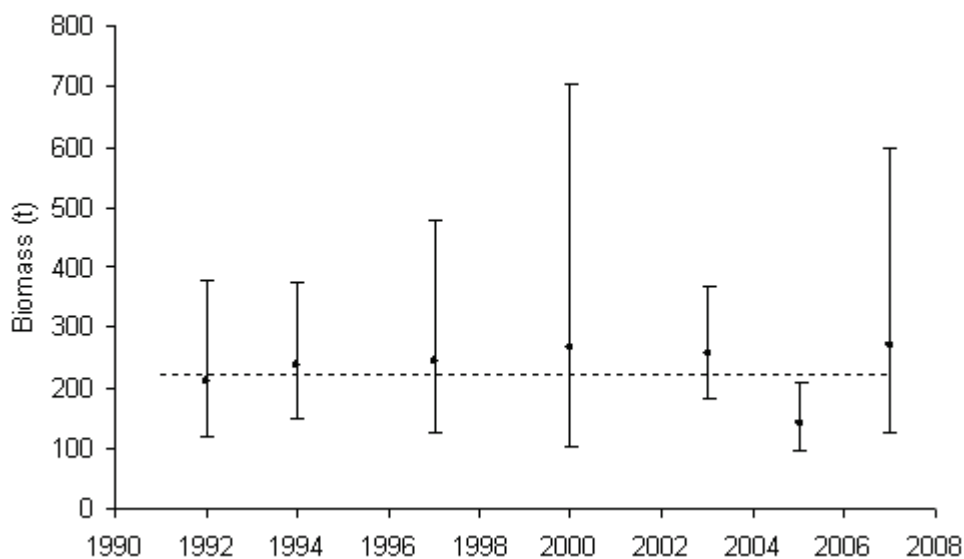


Figure 2: Leatherjacket biomass  $\pm 95\%$  CI (estimated from survey CV's) and the time series mean (dotted line) estimated from the West Coast South Island trawl survey.

## 4. STOCK ASSESSMENT

There has been no scientific assessment of the maximum sustainable yield, reference or current biomass of any of the leatherjacket stocks.

## 5. STATUS OF THE STOCK

There are no estimates of reference or current biomass. It is not known whether the leatherjacket stocks are at, above, or below a level that can produce MSY.

Reported landings and TACCs by Fishstock for the 2007–08 fishing year are summarised in Table 3.

Table 3: Summary of TACCs (t) and reported landings (t) of leatherjacket for the most recent fishing year.

Fishstock	FMA	2007–08 Actual TACC	2007–08 Reported landings
LEA 1 Auckland (East) (West)	1, &9	188	135
LEA 2 Central (East) (West), Challenger	2,7&8	1 136	258
LEA 3 South east (coast), Southland, Sub-Antarctic	3,4,5&6	100	74
LEA 4 South east (Chatham)		7	0
Total		1 431	467

## 6. FURTHER INFORMATION

Anderson OF., Bagley NW., Hurst RJ., Francis MP., Clark MR., McMillan PJ. 1998 Atlas of New Zealand fish and squid distributions from research bottom trawls. NIWA Technical Report 24. 303p.

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Yearsley GK., Last PR., Ward RD. (Eds) 1999. Australian seafood handbook. An identification guide to domestic species. CSIRO Marine Research, Australia. 461p.