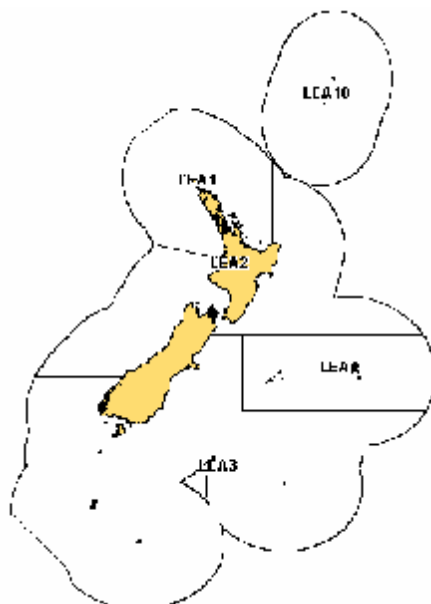


## LEATHERJACKET (LEA)

(*Parika scaber*)



### 1. FISHERY SUMMARY

Leatherjacket was introduced into the QMS on 1 October 2003, with allowances, TACCs and TACs as follows.

<u>Fishstock</u>	<u>Recreational Allowance</u>	<u>Maori customary Allowance</u>	<u>Other sources of mortality</u>	<u>TACC</u>	<u>TAC</u>
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

#### (a) 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. Landings increased further in the late 1990s to around 1 000 to 1 300 tonnes, but have decreased over the last few years to roughly half that amount. 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.

**Table 1: Reported commercial landings (tonnes) of leatherjacket by fishstock for the fishing years from 1989-90 to 2004-05. Landings for LEA 4 and LEA 10 have not been shown as these were negligible and were rounded to zero. (- no data).**

Fishstock	Landings	LEA 1		LEA 2		LEA 3		LEA 4		Total	
		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	-

### (b) 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 craypots and set nets. Leatherjackets are seldom caught by hook and line.

### (c) Maori customary fisheries

There is no quantitative information available to allow the estimation of the amount of leatherjacket taken by customary Māori 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 beyond 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 species of 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 Māori 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 19-22cm. The males defend territories and eggs are laid within nests on the seafloor in spring and summer (Ayling and Cox 1982, Milicich 1986).

### 3. STOCKS AND AREAS

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

### 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.

#### Summary of TACCs (t) and reported landings (t) of lockdown dory for the most recent fishing year.

Fishstock		<u>FMA</u>	2004-05	2004-05
			<u>Actual</u>	<u>Reported</u>
			<u>TACC</u>	<u>landings</u>
LEA 1	Auckland (East) (West),	1, &9	188	223
LEA 2	Central (East) (West), Challenger	2,7&8	1136	221
LEA 3	South east (coast), Southland, Sub-antarctic	3,4,5&6	100	56
LEA 4	South east (Chatham)		7	<1
Total			1431	500

### 6. FURTHER INFORMATION

Anderson, O.F., Bagley, N.W., Hurst, R.J., Francis, M.P., Clark, M.R., McMillan, P.J. (1998) Atlas of New Zealand fish and squid distributions from research bottom trawls. *NIWA Technical Report 24*. 303p

Ayling, A.M., Cox, G.J. (1982). Collins guide to the sea fishes of New Zealand. Collins, Auckland. 343p.

Francis, M.P. (1996). Coastal fishes of New Zealand. An identification guide. Revised edition. Reed books, Auckland.

Milicich, M.J. (1986). Aspects of the early life history of *Paricka scaber* (Pisces: Monacanthidae). M.Sc. thesis, University of Auckland.

Yearsley, G.K., Last, P.R., Ward, R.D. (eds)(1999). Australian seafood handbook. An identification guide to domestic species. CSIRO Marine Research, Australia. 461p