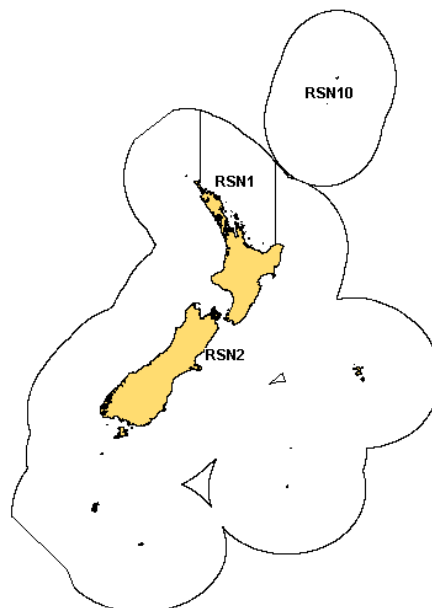


## RED SNAPPER (RSN)

*(Centroberyx affinis)*



### 1. FISHERY SUMMARY

Red snapper was introduced into the Quota Management System on 1 October 2004 with the following TAC, TACC and allowances (Table 1):

**Table 1: Recreational and Maori allowances, TACCs and TACs of red snapper .**

<u>Fishstock</u>	<u>Recreational Allowance</u>	<u>Māori Customary Allowance</u>	<u>Other sources of mortality</u>	<u>TACC</u>	<u>TAC</u>
RSN 1	13	2	1	125	141
RSN 2	2	1	1	19	23
RSN 10	1	1	1	1	4
Total	16	4	3	145	168

#### (a) Commercial fisheries

Small commercial catches of red snapper in New Zealand have almost certainly been made for decades, but would have been included among “assorted minor species” in reported landings. Annual landings ranged between 76 and 112 t from 1989-90 to 1994-95, increased to between 126 and 211 t from 1995-96 to 2002-03 and then dropped to 51 t in 2003-04 and have remained near this level in 2004-05 and 2005-06 (Tables 2 & 3).

Red snapper is mostly taken as a bycatch of 1) the longline fishery for snapper off east Northland, 2) the trawl fisheries for tarakihi off east and west Northland, and 3) the setnet fishery for snapper and trevally in the Bay of Plenty.

**Table 2: Reported landings (t) by commercial fishers of red snapper by FMA from 1989-90 to 2003-04. Data are derived from the landing section of CELRs and CLRs.**

	FMA 1	FMA 2	FMA 3	FMA 4	FMA 7	FMA 8	FMA 9	FMA 10	Unknown	Total
1989-90	67.9	3	3.1	0	1.8	0.9	0	0	0.0	76.7
1990-91	107.3	1.2	2.8	0	0.6	0.7	0	0	0.0	112.7
1991-92	89.1	0.7	1.1	0	0	1.6	0	0.6	0.0	93.2
1992-93	98.2	2.1	0.4	0	0	0.6	0	0	0.3	101.6
1993-94	78.2	2.6	0.3	0.1	0.4	0.4	0.2	0	0.0	82.4
1994-95	78.2	1.8	0.3	0	0.2	0.6	0.5	0	1.0	82.6
1995-96	126.7	2.1	0.8	0.2	1.2	0.2	1	0	1.3	133.4
1996-97	186.4	17.4	0.9	0	1	0.3	2.9	0.2	2.8	211.8
1997-98	159.1	3.4	0.3	0	0.2	0.7	3.6	0	0.8	168.2
1998-99	134.4	1.5	0.4	0.1	0.3	1	4.7	0	0.4	142.8
1999-00	108.1	1.3	0.8	0	0.1	21.3	25.4	0	0.7	157.7
2000-01	140	1.1	2.3	0.8	0	0.8	51.5	0	0.0	196.5
2001-02	109.7	1.5	2.2	0.1	0	0.4	12.3	0	0.6	126.7
2002-03	117.5	2.2	0.3	0	0	0.6	37.5	0	14.2	172.5
2003-04	40.9	1.8	0.2	0	0.3	1.3	6.7	0	0	51.3

**Table 3 Reported domestic landings (t) of Red Snapper Fishstock and TACC from 2005-06.**

Fishstock FMA	RSN 1		RSN 2		RSN 10		Total	
	1		2,3,4,5,6,7,8&9		10			
	Landings	TACC	Landings	TACC	Landings	TACC	Landings	TACC
2004-05	43	125	11	19	0	1	54	145
2005-06	41	125	8	19	0	1	49	145

**(b) Recreational fisheries**

The National Marine Recreational Fishing surveys in 1994, 1996, and 2000 do not provide an estimate of the recreational catch of red snapper. However, it is likely that recreational fishers will periodically catch red snapper while line fishing on deep reefs in Northland, the outer Hauraki Gulf, and Bay of Plenty.

**(c) Maori customary fisheries**

There is no quantitative information available to allow the estimation of the amount of red snapper taken by customary Māori fishers.

**2. BIOLOGY**

The red snapper (*Centroberyx affinis*) is present throughout New Zealand coastal waters, but is generally rare south of East Cape and Cape Egmont. In southeastern Australia (known as redfish) it occurs from Brisbane to Melbourne, and off northern Tasmania.

Red snapper occur in association with deep coastal reefs, in particular caves and overhangs, as well as in open water, to depths of about 400 m. Their relative abundance within this depth range is unknown. The southeastern Australian target fishery operates at depths of 100–250 m (Rowling, 1994).

There have been no formal aging studies of New Zealand red snapper, but Leachman et al. (1978) reported a maximum ring count of 80, based on examination of a few broken and burned otoliths. These rings were not, however, validated. Work in Australia, based on tagging and thin otolith sections suggest unvalidated ages of at least 35 (Rowling, 1994) and 40 years (Smith & Robertson, 1992). Radiocarbon analysis supported an age of at least 37 years (Kalish, 1995).

Red snapper attain 55 cm in New Zealand but average 30–40 cm. Nothing is known of their reproductive biology.

### 3. STOCKS AND AREAS

There has been no research to determine if there are separate biological stocks of red snapper.

### 4. STOCK ASSESSMENT

There has been no scientific stock assessment of the biomass that can support the Maximum Sustainable Yield (MSY) for red snapper.

### 5. STATUS OF THE STOCK

The reference or current biomass is not known for any red snapper stock. It is not known if the recent catch levels are sustainable or if they are at levels that will allow the stocks to move towards a size that will support the MSY.

TACCs and reported landings by Fishstock, for the 2005/06 fishing year, have been summarised in Table 4.

**Table 4: Summary of TACCs (t) and reported landings (t) of red snapper for the most recent fishing year.**

Fishstock		<u>FMA</u>	<u>2005-06 Actual TACC</u>	<u>2005-06 Reported landings</u>
RSN 1	Auckland (East)	1	125	41
RSN 2	Auckland (West), South east, Southland, Sub- Antarctic, Central, Challenger	2,3,4,5,6,7,8&9	19	8
RSN 10	Kermadec	10	1	0
Total			145	49

### 6. FOR FURTHER INFORMATION

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