

# **Victorian Giant Crab Fishery Stock Assessment 2013**

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February 2013

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## Victorian Giant Crab Fishery Report 2013

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### Summary

- Eight fishers landed giant crab during the 2011/12 fishing year, with seven specifically targeting the species.
- In 2011/12, the total landed catch of giant crab by all fishers was 12.6 t (Table 1 and Figure 1) reflecting a 1.3 t increase from 2010/11 (11.3 t). The catch from fishers targeting giant crab was 11.0 t, 0.6 t more than the previous assessment year.
- The biological stock performance indicator of giant crab is targeted catch per unit effort (CPUE), measured as kilograms of giant crab catch per 24-hour potlift of soak-time (i.e. kg per potday) (Figure 2).
- The reference points prescribed in the Management Plan are based on 'fishing year' (November–September) and include target reference point (half peak CPUE) (0.83 kg per potday), a limit reference point (mean for the 3-fishing-year period from 1998/99 to 2000/01) (0.37 kg per potday), and the trigger (80% of limit reference point) (0.29) kg per potday (Figure 2).
- The trend in targeted CPUE by 'fishing year' for fishers landing more than 1 t triggered a review of the total allowable catch (TACC) by decreasing for five successive years from 0.52 (2006/07) to 0.20 kg per potday (2011/12) (Table 1, Figure 2) and by falling below the trigger CPUE during 2009/10, 2010/11 and 2011/12.
- Currently the giant crab CPUE is well below the target CPUE, below the limit CPUE, and below the trigger CPUE for review of the TACC (Figure 2).
- With the exception of the 2009/10 quota year, the TACC has never been fully taken in the history of the fishery (Table 2).

## Tables and Figures

Table 1. Giant crab trends in total and target catch, effort, CPUE and number of fishers during fishing years (16 November–14 September) from 1978–79 to 2011–12

Fishing year	Total catch and target equivalent fishing effort				Targeted catch, effort and CPUE						Number of fishers contributing			
	Catch		Target equivalent effort		E	Catch	Average weight (kg)	Fishing effort		Catch per unit effort		Total catch	Targeted catch >1 t	
	Weight (tonne)	Number ('000)	Potlifts ('000)	Potdays ('000)				Potlifts ('000)	Potdays ('000)	Potdays per potlift	Kg per potlift			Kg per potday (all fishers) (>1 tonne)
1978–79	4.4											44	<5	<5
1979–80	2.2											34	<5	<5
1980–81	1.8											28	<5	<5
1981–82	1.0											27	<5	<5
1982–83	0.4											15	<5	<5
1983–84	0.4											14	<5	<5
1984–85	3.2											28	<5	<5
1985–86	1.6											25	<5	<5
1986–87	4.0											23	<5	<5
1987–88	6.2											26	<5	<5
1988–89	4.4											26	<5	<5
1989–90	4.4											31	5	5
1990–91	18.5		12.6	21.9	4.7			3.2	5.5	1.74	1.46	26	5	5
1991–92	56.7		21.8	37.8	38.5			14.8	25.6	1.73	2.60	33	9	7
1992–93	226.2		55.7	136.1	186.5			46.0	112.2	2.44	4.06	44	19	17
1993–94	121.9		26.3	74.0	109.5			23.6	66.4	2.81	4.63	48	16	12
1994–95	38.8		19.0	47.8	24.9			12.2	30.7	2.52	2.04	51	15	7
1994–96	40.9		26.3	53.5	33.1			21.3	43.2	2.03	1.55	41	13	7
1996–97	68.5		40.6	79.3	53.5			31.7	62.0	1.95	1.69	40	20	12
1997–98	50.6		47.2	101.6	30.6			28.5	61.4	2.16	1.07	36	14	12
1998–99	50.2	14.6	41.4	84.9	20.5	6.5	3.16	17.0	34.8	2.05	1.21	43	9	12
1999–00	25.3	7.4	22.0	47.9	13.3	4.2	3.18	11.6	25.2	2.18	1.15	26	8	8
2000–01	19.5	6.0	11.1	31.4	9.9	3.1	3.23	5.7	15.9	2.82	1.75	27	6	6
2001–02	9.6	2.5	6.4	26.5	8.1	2.1	3.83	5.4	22.4	4.13	1.49	17	12	<5
2002–03	8.4	2.6	9.2	40.5	6.5	2.0	3.15	7.1	31.1	4.40	0.91	17	12	<5
2003–04	10.5	3.6	5.5	22.0	10.1	3.5	2.88	5.3	21.2	4.02	1.92	12	5	<5
2004–05	22.7	7.4	13.2	45.3	20.1	8.3	2.41	11.7	40.1	3.43	1.72	18	9	<5
2005–06	21.7	8.3	14.3	44.0	20.1	7.9	2.53	13.2	40.8	3.08	1.52	17	10	<5
2006–07	22.8	7.5	11.6	44.7	21.6	7.2	2.99	11.0	42.4	3.85	1.97	18	8	<5
2007–08	27.6	9.3	19.0	62.1	25.7	8.7	2.96	17.7	57.8	3.26	1.45	15	9	5
2008–09	27.2	7.8	14.9	75.3	24.7	7.1	3.49	13.5	68.4	5.05	1.83	13	7	<5
2009–10	16.4	5.0	10.6	62.1	14.7	4.6	3.22	9.5	55.7	5.85	1.55	12	8	5
2010–11	11.3	3.7	12.5	51.9	10.4	3.6	2.92	11.5	47.9	4.16	0.90	9	6	<5
2011–12	12.6	3.6	6.9	62.4	11.0	3.1	3.54	6.1	54.8	8.99	1.81	8	7	<5

Source: Fisheries Victoria CandE database (11 January 2013)

Quota year	Period	Weight landed (kg)	TACC (kg)
2001/2002	16 Nov - 31 Mar	7,922.96	16,718.00
2002/2003	1 Apr - 31 Mar	9,153.70	24,999.00
2003/2004	1 Apr - 31 Mar	11,869.40	25,000.00
2004/2005	1 Apr - 31 Mar	20,378.50	24,966.50
2005/2006	1 Apr - 31 Mar	21,387.80	24,963.00
2006/2007	1 Apr - 31 Mar	21,823.30	24,962.00
2007/2008	1 Apr - 31 Mar	22,676.70	24,962.00
2008/2009	1 Apr - 31 Mar	20,039.40	24,961.50
2009/2010	1 Apr - 31 Mar	24,316.10	24,961.50
2010/2011	1 Apr - 30 Jun	17,421.02	31,201.83
2011/2012	1 Jul - 30 Jun	13,033.16	17,972.28

Table 2: Victorian giant crab landed catch and annual total allowable commercial catch (TACC).

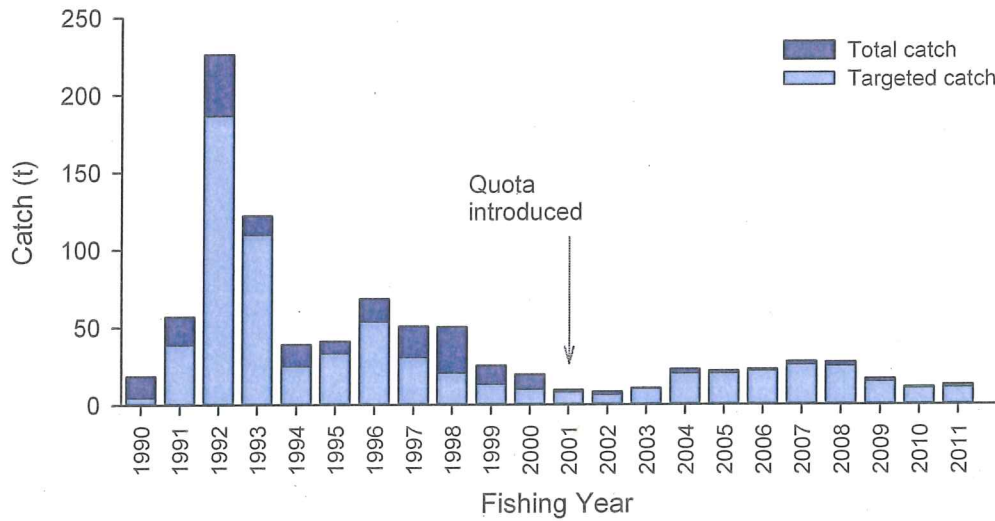


Figure 1. Total and targeted catch (t) history for the Victorian for the Victorian giant crab fishery.

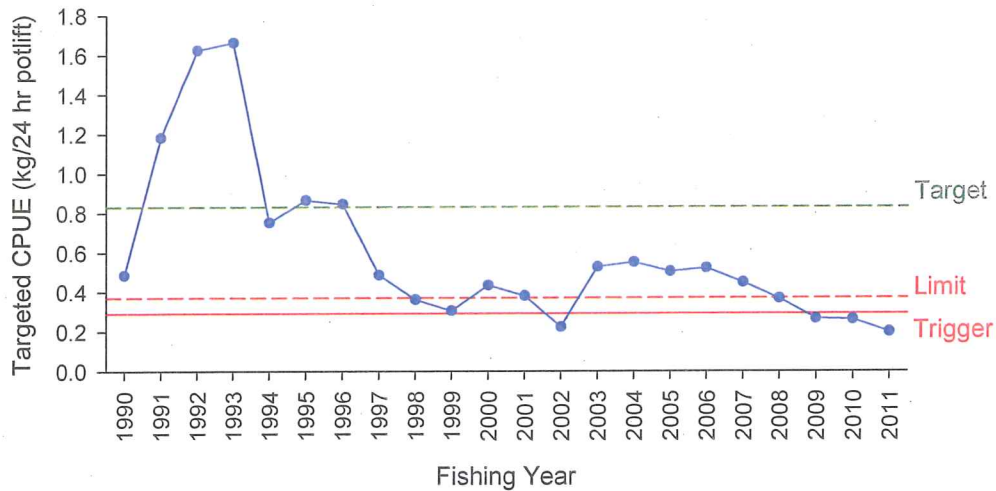


Figure 2. Targeted CPUE (kg/24 hr potlift) from targeted fishing by fishers with >1 t catch.

