Victorian Giant Crab Fishery Stock Assessment Report 2014

**Victorian Giant Crab Fishery Stock Assessment: 2012/13 Season**

March 2014

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# Victorian Giant Crab Fishery Stock Assessment: 2012/13 Season

# Summary

* In 2012/13, the total catch of giant crab by all fishers was 10.2 t, based on licence year (July-June) (Table 1 and Figure 1). The catch from fishers targeting giant crab was 8.0 t. Targeting fishers are considered to be those who land more than a tonne of giant crab during the assessment year.
* The number of fishers participating in the fishery decreased in 2012/13. Less than five fishers landed more than one tonne of giant crab. The fishing effort, in terms of pots lifted, also decreased (Table 2).
* The average weight of targeted crabs was 3.4 kg (Table 2).
* The Giant Crab Fishery Management Plan prescribes catch per unit effort (CPUE) as the main biological stock performance indicator of giant crab. It is measured as kilograms of targeted giant crab catch per 24-hour pot-lift based on fishing year (November-September) (Figure 2).
* The Management Plan also prescribes reference points that are used in determining the annual total allowable commercial catch. The reference points are based on fishing year (November–September) and include a limit reference point that is the mean for the three-fishing-year period from 1998–99 to 2000–01 (0.37 kg/24 hr pot-lift), and a trigger reference point that is 80% of limit reference point (0.30 kg/24 hr pot-lift) (Figure 2).
* In 2012/13, the targeted CPUE was 0.24 kg/24 hr pot-lift reflecting the fourth consecutive year that the CPUE has been below the trigger reference point.

***Tables and Figures***

Table 1. Giant crab landed catch and annual total allowable commercial catch (TACC) based on licensing year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| QUOTA YEAR | PERIOD | TACC(t) | TOTAL CATCH\* (t) | TARGETED CATCH (t) |
| 2001-02 | 16 Nov – 31 Mar | 25 | 7.9 | 4.2 |
| 2002-03 | 1 Apr – 31 Mar | 25 | 9.2 | 6.0 |
| 2003-04 | 1 Apr – 31 Mar | 25 | 11.9 | 10.6 |
| 2004-05 | 1 Apr – 31 Mar | 25 | 20.4 | 18.8 |
| 2005-06 | 1 Apr – 31 Mar | 25 | 21.4 | 18.8 |
| 2006-07 | 1 Apr – 31 Mar | 25 | 21.8 | 19.5 |
| 2007-08 | 1 Apr – 31 Mar | 25 | 22.7 | 20.2 |
| 2008-09 | 1 Apr – 31 Mar | 25 | 20.0 | 16.1 |
| 2009-10 | 1 Apr – 31 Mar | 25 | 24.3 | 21.7 |
| 2010-11 | 1 Apr – 30 Jun | 31 | 17.4 | 13.2 |
| 2011-12 | 1 Jul – 30 Jun | 18 | 13.0 | 10.1 |
| 2012-13 | 1 Jul – 30 Jun | 12 | 10.2 | 8.0 |

\* Interactive Voice Recognition (IVR) data used for total catch for licensing season

Table 2. Giant crab total and targeted catch based on fishing year (Nov – Sept).

|  |  |  |  |
| --- | --- | --- | --- |
| FISHING YEAR | TOTAL CATCH | TARGETED CATCH | NUMBER FISHERS |
| **Catch (t)** | **# 24 hr pot lifts (‘000)** | **Catch (t)** | **# 24 hr pot lifts (‘000)** | **Mean weight (kg)** | **CPUE (kg/24hr pot-lift)** | **Total** | **Targeted** |
| 1990-91 | 18.5 | 58.5 | 12.7 | 26.2 |  | 0.49 | 26 | 5 |
| 1991-92 | 56.7 | 79.1 | 44.4 | 37.5 |  | 1.18 | 33 | 7 |
| 1992-93 | 226.2 | 187.4 | 195.1 | 120.0 |  | 1.63 | 44 | 17 |
| 1993-94 | 121.9 | 109.5 | 108.4 | 65.1 |  | 1.66 | 48 | 12 |
| 1994-95 | 38.8 | 97.9 | 26.8 | 35.6 |  | 0.75 | 51 | 7 |
| 1995-96 | 40.9 | 103.4 | 31.0 | 35.9 |  | 0.87 | 41 | 7 |
| 1996-97 | 68.5 | 137.6 | 54.2 | 64.0 |  | 0.85 | 40 | 12 |
| 1997-98 | 50.6 | 133.0 | 37.2 | 75.9 |  | 0.49 | 36 | 12 |
| 1998-99 | 50.2 | 152.5 | 39.6 | 109.3 | 3.3 | 0.36 | 43 | 12 |
| 1999-00 | 25.3 | 99.0 | 19.9 | 65.2 | 3.2 | 0.31 | 26 | 8 |
| 2000-01 | 19.5 | 63.4 | 14.0 | 32.4 | 2.9 | 0.43 | 27 | 6 |
| 2001-02 | 9.6 | 33.9 | 5.5 | 14.4 | 4.3 | 0.38 | 17 | <5 |
| 2002-03 | 8.4 | 45.0 | 4.6 | 20.7 | 3.0 | 0.22 | 17 | <5 |
| 2003-04 | 10.5 | 26.7 | 9.5 | 18.1 | 2.9 | 0.53 | 12 | <5 |
| 2004-05 | 22.7 | 55.8 | 19.0 | 34.5 | 2.4 | 0.55 | 18 | <5 |
| 2005-06 | 21.7 | 54.1 | 19.3 | 38.4 | 2.5 | 0.50 | 17 | <5 |
| 2006-07 | 22.8 | 61.0 | 21.5 | 41.2 | 3.0 | 0.52 | 18 | <5 |
| 2007-08 | 27.6 | 74.4 | 25.2 | 56.0 | 3.0 | 0.45 | 15 | 5 |
| 2008-09 | 27.2 | 88.1 | 23.8 | 64.6 | 3.5 | 0.37 | 13 | <5 |
| 2009-10 | 16.4 | 72.6 | 13.7 | 51.7 | 3.2 | 0.27 | 12 | 5 |
| 2010-11 | 11.3 | 45.9 | 9.1 | 34.7 | 2.8 | 0.26 | 9 | <5 |
| 2011-12 | 12.6 | 61.6 | 10.1 | 50.8 | 3.5 | 0.20 | 8 | <5 |
| 2012-13 | 8.8 | 41.4 | 7.9 | 33.8 | 3.4 | 0.24 | 5 | <5 |

Figure 1. Total and targeted catch (t) history for the Victorian giant crab fishery based on licensing season. Quota management was introduced in 2001/02.

Size limit introduced

Limit

Trigger

Figure 2. Targeted CPUE (Kg/24 hour pot-lift) for the Victorian giant crab fishery, based on fishing year.