

# Abalone Fisheries Resource Assessment Group

Annual Report 2017

Chair: Ian Cartwright

# Background

The FRAG is a committee established by the TAC to:

- consider outcomes of the abalone assessment, including the interim data report;
- review performance of the fishery against the MCDA, taking into account special circumstances and local knowledge;
- discuss and identify key drivers influencing catch and effort distribution, and catch rates;
- provide recommendations to AbFAC on the annual TAC, distribution of catch and related issues; and
- provide other advice as required, including advice relating to size limits, zone boundaries and research.

# Operation

- FRAG Membership: independent Chair, full membership of the TAC, CEO of the Council, 3 TAFI reps and 1 DPIPWE fisheries manager.
- Observers welcome and have provided valuable input.
- Four meetings per year (tried three once ...).
- Timing linked to FAC dates, to ensure timely advice from the FRAG to the FAC.
- FAC appointments made by the Minister.
- The Abalone Council considers advice from the FRAG and makes its own submissions to the FAC/Minister.

# Size Limits and zones

- Were discussed at all FRAG meetings with widely differing views on their role in the management of the fishery.
- Size limit regulation changes have effectively been suspended since 2014.
- Haddon completed simulations on the effectiveness on W. Zone size limits; low level of protection.
- Craig Mundy et al have now completed a review of size limits and have concluded L50 +3 years is the recommended minimum size (approx. 15% protection).
- FRAG/FAC/TAC will consider report outcomes and implications for future management.

# Meeting 1: 10 April 2017

Considered the status of the resource based on IMAS updates and diver observations and discussed:

- Further development of the harvest strategy and MCDA
- Extended heatwave and impact of heatwaves on the Eastern Zone
- A comparative survey for urchin barrens on the east coast
- Consideration of 'pulse fishing' due to the high level of fishing power now existing in the fishery
- The biosecurity risk of mother boats transiting from the west coast and landing in Margate

# Meeting 2: July 7 2017

Considered the status of the resource based on IMAS updates and diver observations and discussed:

- The effect of expanded deep water fishing on catch rates on W. Coast – not considered to me a major issue
- Recommendation to do a review of the Biosecurity Code and if necessary develop a new code.
- Options to reduce impacts of pulse fishing by using opening dates (January 1 and May 1).
- Early signs the east coast (other than the Acteons) was no fishing well noting – food, recruitment failure, increased natural mortality and habitat all additional (to fishing pressure) issues.
- Stock enhancement using larval raising and distribution
- Harvest strategy parameters and settings

# Meeting 3: August 15 2017

Considered the status of the resource based on IMAS updates and diver observations and discussed:

- The new abalone 'rules' including arrangements for the removal of the Central West Zone.
- Agreement to trial a 'reverse cap' arrangement for 2018, where least preferred areas fished first before opening area of higher value fish
- Agreement to use Harvest Control Rule (HCR) 6 and apply meta rules: i) no change if small change  $<4\%$  and ii) annual application of TACC change
- Application of the HCR to gain an appreciation of likely TACC recommendations



# Meeting 4: 12 October 2017

Considered the status of the resource based on IMAS updates and diver observations and discussed:

- Importance of addressing/understanding ecosystem issues on the east coast (*centrotephanus*).
- Biosecurity concerns with the import (from Victoria) of broodstock for Tasmanian abalone farms.
- Yet more discussion on boundaries for the west coast with the demise of the Central West Zone.
- 2017 TAC recommendations, using, for the first time the MCDA-based harvest strategy.



# Key issues

- The MCDA-based harvest strategy, including the application of metarules where necessary, provided a more objective way to set TACs.
- Hard caps not applied – use catch target and 80% review process
- Further reductions required for the E. Zone – not only because of fishing, but also driven by slow recovery, loss of habitat, warm water and storm events.
- No change on W. Coast – <4% reduction from MCDA
- Reduction in the N. Zone, mostly around King Island and Block 49
- Full FRAG support for reductions; some calls to be more conservative.

## FISHERY SUMMARY

Zone	TACC 2017	MCDA 2018	FRAG 2018
E	444.5	314.9	293.4
W	717	662.7	716.8
CW	42	0	0
N	148.3	124.5	115.3
BS	77	77	77
GZ	140	131.1	133.1
<b>TOTAL</b>	<b>1,568.8</b>	<b>1,310.2</b>	<b>1,335.6</b>

**2016 TACC = 1,569 t**

**2017 TACC = 1,335 t reduction of 234 t**

# EASTERN ZONE SUMMARY

BLOCK	IMAS 2017	FRAG 2017	JUSTIFICATION
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31A	12.1	3.0	Less than MCDA. Addressing recent climatic events
30	1.5	0.4	Less than MCDA. Addressing recent climatic events
29	15	3.8	Less than MCDA. Addressing recent climatic events
28	2.2	0.6	Less than MCDA. Addressing recent climatic events
27	11.4	2.9	Less than MCDA. Addressing recent climatic events
24	25.7	6.4	Less than MCDA. Addressing recent climatic events
23	14.7	3.7	Less than MCDA. Addressing recent climatic events
22	15	3.8	Less than MCDA. Addressing recent climatic events
21	18	18.0	MCDA Result accepted.
20	24	24.0	MCDA Result accepted.
19	1.7	1.7	MCDA Result accepted.
17	7.5	7.5	MCDA Result accepted.
16	18.4	18.4	MCDA Result accepted.
14	26.6	26.6	MCDA Result accepted.
13	121	172.8	MCDA Result modified.
EZ	314.9	293.4	

**2017 TACC = 444.5 t**

**2018 TACC = 293.4 t reduction of 151 t (33%)**

# WESTERN ZONE SUMMARY

BLOC K	MCDA 2017	FRAG 2017	JUSTIFICATION
6D	20	23	Improvement observed in all Western Zone blocks except Block 9. Overall Western Zone TACC retained. Catch reduced in Block 9 to MCDA recommendation, and small addition made to remaining blocks (3 t each).
7	51	54	
8	13	16	
9	84.8	84.8	
10	80	83	
11	160	163	
12	252	255	
13A-B	35.0	38	
TOTAL	662.7	717.0	

**2017 TACC = 717 t**

**2018 TACC = 717 t (No Change)**

# CENTRAL WEST ZONE SUMMARY

BLOCK	MCDA 2018	FRAG 2018	JUSTIFICATION
6A-C	35	0	4 consecutive years of TACC reductions 4 consecutive years of no response to reductions 4 consecutive years of new historic low CPUE. Classified as <b>RED – overfished</b> for 2017 SAFS reference year. N.B. open to fishing with small cap, but no TACC allocated
TOTAL	35	0	

**2017 TACC = 42 t**

**2018 TACC = 0 t reduction of 42 t (100%)**

# NORTHERN ZONE SUMMARY

BLOCK	MCDA 2017	FRAG 2017	JUSTIFICATION
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1	9.6	6	
2	0	0	
3			Fishing of deep patches in Block 3C masking true state of resource.
	25.6	20	MCDA. Result not considered sufficiently conservative, and catch allocation reduced to 30t by expert opinion.
4	4	4	
5	31.9	31.9	MCDA Result accepted.
31B	22.5	22.5	MCDA Result accepted
39	5.3	5.3	MCDA Result accepted.
48	4.5	4.5	MCDA Result accepted.
49			MCDA Result accepted.
	21.1	21.1	
TOTAL	168.5	148.3	

**2017 TACC= 148 t      2018 TACC = 115.3 t reduction of 40.7 t (33%)**

# BASS STRAIT SUMMARY

BLOCK	MCDA 2017	FRAG 2017	JUSTIFICATION
32	1.1	1.1	MCDA Result accepted for all blocks.
33	19.9	19.9	
34	1	1	
35	1	1	
36	2	2	
37	2	2	Target reduced from 17.6 t
38	15.8	15.8	
43	5	5	
44	1	1	
45	1	1	
51	5.5	5.5	Target increased from 18 t
53	20.7	19.7	
54	2	2	
56	0	0	
TOTAL	79.3	77	

**2017 TACC = 77 t**

**2018 TACC = 77 t No Change**



# GREENLIP SUMMARY

REGION	MCDA 2017	FRAG 2017	JUSTIFICATION
BASS ST. IS.	0		0 Zero catch YTD
C. NORTH	8		8 100Kg landed in 2016 & 2017.
FUR. GRP	47		47 MCDA Result accepted.
KING IS.	16		18 MCDA Result modified – management of effort at KI
NTH EAST	25.5		25.5 MCDA Result accepted.
NTH WEST	13.4		13.4 MCDA Result delayed due to effect of selective fishing.
PERKINS B.	21.2		21.2 MCDA Result accepted.
TOTAL	131.1	133.1	

**2017 TACC = 140 t      2018 TACC = 133 t reduction of (7t)**