

Fishery Resource Advisory Group (FRAG)

Meeting 1/2018

Monday April 9, 2018

IMAS, Nubeena Crescent Tarooma

Minutes**Present:****Members:**

Ian Cartwright (Chair), J McKibben, D Lisson, D Hansen, A Brown, B Cobbing, B Ransom, T Bush, P Richardson, J Huddleston, A Gray, C Mundy, (IMAS), M Bradshaw (DPIPWE), J Freeman (minutes),

Observers:

R Searle, A Hansen, B Amos, M Porteus, J Ramsden, D Hogg, G Pacey, S Leonard, T Dermoudy, G Woodham, P Pyke, G Hughes, M Webster, T Lesser, B Lesser, J Gasparinatos, B Hite, B Allen, M Florence, G Hughes, S Leonard, T Chadwick, R Rex, B Rex, T Hitchens, G Hughes, P Pyke,

Apologies:

R Scanlon, M Haddon, K Hoskin, S Crocker

Welcome and opening remarks:

The Chair welcomed members and observers to the first meeting of the year, and outlined the main purposes of the meeting, which were to review catches, catch rates and other information for the season to date, gain an overall view of the status of the resource and begin initial discussions on TAC recommendations. The TAC recommendation, which will be made towards the end of the year will be based on IMAS data, diver, and other industry input and the MCDA process.

The Chair acknowledged the presence of observers, including divers, and thanked them for their time. It was emphasised that they are always welcome and their input was appreciated.

Adoption of agenda;

The agenda as circulated was agreed with the addition of;

- Explanation of Reverse Cap
- Motions submitted to the General Meeting
- Size limits

Minutes of the previous meeting:

Members agreed the minutes of the FRAG meeting held on October 12, 2017, and they were accepted as a true and accurate record.

Actions Arising from Previous Meeting:

Action 1. Research proposal – spawn and hand raise abalone larvae on bio-secure vessel and spray onto reefs.

Craig and Dean have been liaising to put a formal proposal to the Government for funding from the Abalone Industry Reinvestment Fund (AIIF). The funding would cover the design and construction of a bio-secure tank fitted to a boat with sufficient water pumps etc.

Craig Mundy has been discussing and seeking advice from Anton of 'Tiger Abalone' concerning the design components and logistics of releasing 20/30,000,000 larvae under this proposal on the East Coast. Target sites will be identified along with the time-lines to ensure the effective and timely implementation of the. Craig has researched other recent projects worldwide along with the logistics, success or failure of the projects and incorporated the knowledge gained into the current proposal. .

Dean Lisson has confirmed he is in the process of writing up an AIDF proposal, based on the premise that this method will augment natural recruitment on heavily depleted reefs.

Meetings with the Chief Veterinary Officer to discuss the biosecurity risks along with the cost and effectiveness will be investigated, and was noted that similar trials are being considered in SA and in NSW.

Despite a presentation to the last FRAG in 2017 it was reported the CVO is not yet convinced of the biosecurity of using juveniles raised on a land-based farm being re-located to the wild and creating potential genetic issues.

Ongoing

Action 2. Finalise report on size limits and boundaries:

IMAS noted that the report on size limits has been completed and circulated at AbFAC. This document has been peer reviewed with the scientific evidence suggesting that the LML should be set at L50 + 3 years.

IMAS estimate the *ultimate* size limit on the West Coast would 150mm.

DPIPWE is putting together a draft Harvest Strategy as per the Knuckey Report, which will be available by FRAG #2. The Harvest strategy will include policy guidelines from the Government on how the TACC and size limits will be set.

FRAG Comments:

Over the last 6 years the assessment and management of the fishery has gone from one based on observation and opinion to a system that is based on a science based, more objective management .

The creation of spatial management arrangements based on size limits on the West Coast to protect the viability of abalone on various reef systems was discussed extensively

The dispersal of larva is expected to be the same on the West Coast as the East Coast, only the physical environment is different.

Greenlip are stronger than blacklip in re-settling in the physical environment. Having a healthy biomass of blacklip will lower the incidence of serial depletion, and loss of stock due to repeated measuring.

Multi-year TACCs create more stability in the fishery and make it easier for industry to plan investment etc.

The weather patterns have been good for fishing this year with 50% of the quota taken so far in 2018.

IMAS and DPIPWE have looked closely at all available size limit and the data and are working on recommendations for revised LMLs, since at 140mm only around 8% of the spawning biomass is protected on the West Coast, and this figure should be 15-20%.

ACTION - Craig will run a workshop to underpin the science of size limits and the TAC setting process for a better understanding of the strategy.

Outcomes of FAC #4 meeting relevant to FRAG and review of 2017 fishing year.

There was nothing significant to report from FAC #4

IMAS presentation of undated data, fisheries assessment including the MCDA outcomes and additional diver/stakeholder input (NB priority areas of the fishery will be dealt with first)

Eastern Zone:

Summary;

Overall the East Coast catches are variable with a declining catch rate.

In 2017 the catch target for Block 13 was 190t. A joint decision by DPIPW, IMAS and the TACL allowed an overrun to 270t.

Doubling up doesn't affect the East Coast as much as the West Coast

Block 13 – 270t harvested in 2017. The catch target was 190t. in 2016 & 17 there was a

Block 14 – ok

Block 16 – ok

Block 17 – fished hard in 2015/16 not due to heat wave

Block 19 – variable data, low catch,

Block 20 – trending down over the last 5 years, not affected buy the heat or storm wave 2016.

Catch rates higher.

Block 21 – catch and catch rates down, drop due to heatwave event.

Block 22 – catch rates trending down

Block 23 – catch rates trending down

Block 24 – catch rates trending down

Block 27 – catch rates trending down

Block 28 – minimal catch with a lot of variability

Block 29 – catch rates trending down in the Gardens

Block 30 – experimental fishing in The Gardens

Block 31 – in decline

IMAS – overview;

There is an 8-year lag for recruits to come into the fishery. Environmental effects of the *Centrostephanus* incursion taking the food from the bottom, along with the heatwave event stresses small abalone resulting in a higher mortality.

A close watch on the Actaeons as Block 13 is carrying the fishery, the TACC of 290t for 2018 is set to keep a watch on the stock levels.

FRAG Comments;

The TACL has embarked on a comprehensive plan to combat *Centrostephanus* for the abalone to re-colonise and re-build the fishery. 70/80 tonne of urchin has been harvested to date.

The Government has agreed to \$5,000,000 over four years to the "Abalone Industry Investment Fund. It is intended that a large proportion of that funding will go to assisting to ' harvest urchins, and larval seeding.

An observer suggested closure of the east coast for (6) months from October to April, which gained some support both from FRAG members and observers.

A permit was issued to harvest 4 tonne under permit @ 132mm from Block 31, the fish were low quality north of Cod Bay

There have been (3) events that have affected the East Coast; warm water with a heat wave, a storm event and Centrostephanus.

The Gardens was overfished and recovery is slow; low aggregations can recover over 10years.

Western Zone:

Summary;

Catch rates are variable with positive signs; the offshore islands are trending up.

Blocks 13A & B are ready to be closed.

Block 6 – market affected, catch rates variable,

Block 7 – steady increase

Block 8 – variable, catches stable

Block 9 – positive signs, watch closely

Block 10 – 100t catch, cap taken

Block 11 – watch closely

Block 12 – offshore islands better than the coast, steadily picking up, good recruitment pulse?

FRAG Comments;

Suggest closing the West Coast to protect the fishery. Although there is a higher mortality and transport cost of picking up fish from the West Coast, there are processors sending trucks to bring back the catch.

A biosecurity review for motherboats has been flagged at AbFAC conditional on compliance for motherboats being mandatory due to the amount of work involved. The review will not be undertaken if compliance remains voluntary.

The TACL Board has approved a proposal for IMAS to study the effects of water temperature and transport from the West Coast in spring and summer with the aim to minimise fatalities.

To date the West Coast is 90% harvested; the trigger to review the cap is 80%. After discussion the decision to let it run and re-consider the closure again at FRAG #3.

Northern Zone:

Summary;

Overall the catch rates are stable with the catch trending down.

Block 31 – trending down, catch rates stable

Block 39 – catch stable, by-catch from greenlip

Block 48 – trending down, by-catch from greenlip

Block 49 – trending down overall, catch rate from Albatross higher than Hunter Island.

Block 5 – decline in catch rate, small amount of catch

Block 1 – small catch, volatile

Block 2 –

Block 3 – complicated pattern of diving, indication of serial depletion

Block 4 – volatile catch rates

Block 5 A & C – attention to a re-building strategy,

FRAG Comments;

Growth rates are slow and processors are reluctant to take abalone from Blocks 1 & 2. The market will take abalone if the size is lowered to 114mm. The price differential overall is minimal to date.

Options discussed;

Relocating stunted fish from Block 5 to a better environment to augment stock recovery.

1. Larval seeding

2. Juvenile seeding
3. Translocation under permit
4. TACC reduction
5. Centrostephanus reduction

Action: Move the Northern Zone boundary to south of Cod Bay and fish at 132mm without an increase in size limit.

The proposal to DPIWE requires a change in the Rules and the regulations. There was unanimous support for the change with acknowledgement that the changes will not be easy to implement.

Central West: (Northern Zone)

Central West Zone Summary;

Block 6 A & C – 10t has been taken with the catch rate the same as previous. Close immediately and reopen in June 2019

Bass Strait:

Summary;

Overall the fishing is stable from Blocks 32 to 53.

Block 32 – stable

Block 33 – stable, warning of an (8) year lag if the biomass is depleted

Block 37 & 38 – stable catch, size limit reduction, re-distribution of effort, Centro making inroads.

Block 43 – small amount of catch

Block 51 – ok

Block 53 – stable catch, increasing catch rate

Greenlip Zone:

Summary;

King Island – catch ok, small amount caught

North West – falling away,

Perkins Bay - selective fishing

North East – experimental fishing, catch rates lower,

Furneaux Group – stable

Central North – 8t cap taken out of other areas

FRAG Comments;

Propose a new management plan to be put forward a prior to FRAG #2, close Blocks 2 & 4 on the Eastern side King Island.

Reverse cap – 8t is to be fished from the Central North prior to the opening of Perkins Bay, King and Flinders Island.

Industry report, including funding arrangements for research and development:

IMAS has advertised for a new staff member to support Craig for a period of 5 years, plus an additional dive member which would bring the abalone scientist support staff to (3)

Action Chair to write to Hugh to thank him for his efforts in the science of abalone.

Research report, including progress with significant projects:

IMAS is obtaining raw data on sea surface temperatures on a weekly basis from wave rider buoys; this data from the East Coast includes datasets from NASA. The thermal maximum for blacklip is considered to be 27d and have been seen as far north as Coffs Harbour. During the heat event in southern Tasmania the water was 19d and the fish were showing signs of stress. The data shows as many heatwave events on the West Coast as the East Coast.

Loggers have been purchased by IMAS to install on Motherboats to monitor dissolved oxygen.

General Business:

Explanation of Reverse Cap – the information is explained simply in the ‘Commercial Abalone Fishery’, the document is on the website and has been mailed to all divers. Advise the quota holders at the General Meeting.

Motions for the General Meeting – Motion 1 & 2 should have been forwarded and discussed at FRAG meeting rather than motions at the General Meeting. FRAG uses a science process and information from divers for consideration and provides advice to the Government and Members.

Motion 1. Reduce the East Coast size limit to 132mm.

Motion 2. East Coast block closures.

Which could mean opening the whole East Coast on January 1.

Motion 3. Re-seeding from an East Coast farm.

Requires the CVO and the Department to sign-off on biosecurity.

IMAS have observed previous trials which haven't been successful and not followed up due to lack of financial support for research

There are no biosecurity risks with a mobile spawning hatchery if the hygiene is monitored.

Meeting closed 2.57pm

Action List FRAG #1 2018:

Action	Responsible Member	Task	Progress
1.	Dean Lisson/IMAS	Research proposal – spawn and hand raise larval on bio-secure vessel	Ongoing
2.	IMAS	Finalise report on Size limit and boundary paper	Draft policy completed
3	IMAS	Workshop to underpin science of size limits and TAC	
4	DPIPWE	Relocate Northern Zone boundary to south of Cod Bay	
5	Ian Cartwright	Letter of appreciation to Hugh Jones	

Blocks - Area	TAC 2018	KGs/Unit
Bass Strait Blacklip		
Blocks 32-38 Furneaux Group	42.8	
Blocks 50-56 Bass Strait Islands	27.2	
Blocks 42-46 Central North	7.0	
Total Bass Strait TAC	77.0	
Central Western Zone		
Blocks 6A-6C Couta Rocks		
Total Central Western Zone TAC	00	
Eastern Zone		
Blocks 13C, -14 E. Actaeons	172.8	
Blocks 14A and 14B. Lower Huon Channel, Huon to Southport Island, inc Dover, Southport	26.6	
Blocks 14C-16 Bruny Island	18.4	
Blocks 17-21 Hobart to Tasman Island inc Nubeena	51.2	
Block 22	3.8	
Blocks 23 and 24 Deep Glen Bay to Triabunna, inc Maria	10.1	
Blocks 25-29A Freycinet and Bicheno	3.5	
Blocks 29B, 29C, 29D and 30A North East	7.2	
Total Eastern Zone TAC	293.4	84
Greenlip		
Blocks 32-38 Furneaux	47.0	
Blocks 1-4 King Island	18.0	
North West not Perkins Bay	13.4	
Block 48A Perkins Bay	21.2	
Blocks 31,39,40 North East	25.5	
Central North	8.0	
Total Greenlip TAC	133.1	38
Northern Zone		
Blocks 5A-5C	31.9	
Blocks 47-48 NW not Block 5	4.5	
Blocks 1-4 King Island	30.0	
Blocks 31B, 39 and 40 North East	48.9	
Total Northern Zone TAC	115.3	33
Western Zone		
Blocks 6D, 7 and 8. Granville Harbour, Sandy Cape	93.0	
Block 9 South of Strahan	84.8	
Blocks 10, 11 and 12A. South West	501.0	
Blocks 12B-13B South Coast	38.0	
Total Western Zone TAC	716.8	33
2018 TAC TOTAL	1335.5t	381kg/unit

Eastern Zone

Block No	Catch 2016	Catch Targ	IMAS 2018	FRAG 2018
13	253	192	121	172.8
14	63.8	33.3	26.6	26.6
15	0.1	0	0	0.0
16	23.6	23	18.4	18.4
17	22.7	10	7.5	7.5
18	0	0	0	0.0
19	3.8	2	1.7	1.7
20	30.8	30	24	24.0
21	17.9	20	18	18.0
22	14.2	20	15	3.8
23	16.8	19.6	14.7	3.7
24	20.2	34.2	25.7	6.4
27	14.8	15.2	11.4	2.9
28	3.4	3	2.2	0.6
29	17.2	20	15	3.8
30	2.8	6	1.5	0.4
31	15	16.2	12.1	3.0
Total	520	444.5	314.9	293.4

Central West Zone

Block No	Catch 2016	Catch Targ	IMAS 2018	FRAG 2018
6	42	35	0	0
Total	42	35	0	0

Western Zone

Block No	Catch 2016	Catch Targ	IMAS 2018	FRAG 2018rev
6	19.3	20	20	23
7	30.9	51	51	54
8	11.5	13	13	16
9	61.5	106	84.8	84.8
10	77.3	80	80	83
11	168	160	160	163
12	297.2	252	252	255
13	34.2	35	35	38
Total	700.1	717	695.8	716.8

Northern Zone

Block No	Catch 2016	Catch Targ	IMAS 2018	FRAG 2018Dev	FRAG 2018
1	8.3	9.6	9.6	9.6	6
2	2.6	0	0	0	0
3	43.9	32	25.6	25.6	20
4	7.7	4	4	4	4
5	56.2	42.5	31.9	31.9	31.9
31	26.1	22.5	22.5	22.5	22.5
39	4.2	5.3	5.3	5.3	5.3
47	0.1	0	0	0	0
48	7.3	6	4.5	4.5	4.5
49	31.8	26.4	21.1	21.1	21.1
Total	188.1	148.3	124.5		115.3

Bass Strait Zone

Block No	Catch 2016	Catch Targ	IMAS 2018	FRAG 2018
32	0.4	1	1.1	1.1
33	20.2	19.9	19.9	19.9
34	0.1	1		1
35	0.1	1		1
36	4.1	2		2
37	1.7	2	2	2
38	18.4	17.6	15.8	15.8
41	0.8	0	0	0
42	1.8	0		0
43	5.2	5	5	5
44	0.4	1		1
45	0.1	1		1
51	11.8	5.5	5.5	5.5
53	9.8	18	20.7	19.7
54		2		2
56		0		0
Total	74.8	77	70	77

Greenlip Zone

Block No	Catch	Catch	IMAS	FRAG
	2016	Targ	2018	2018
Bass Strait	0.2	0.5	0	0
Central	0.1	8	8	8
North				
Furneaux	42.5	47	47	47
King Island	23.8	20	16	18
North East	34.5	25.5	25.5	25.5
North West	21.4	13.6	13.4	13.4
Perkins Bay	16.4	21.2	21.2	21.2
Total	188.1	140	131.1	133.1

