

Victorian Central Zone

Blacklip Abalone

Total Allowable Catch

Submission for the 2009 – 2010 Fishing Season



Produced by

Victorian Abalone Divers Association Inc.





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Summary

The Victorian Abalone Divers Association Inc. (VADA) and its members are committed to ensuring sustainable harvesting of abalone from all Victorian waters. This incorporates development of principles for spatial management and practical application of those principles within a partnership management approach. This includes the establishment of sub zonal TACC's to assist in spreading the fishing effort and the setting of legal minimum lengths (LML) to ensure that abalone are harvested at a spatially applicable size.

On the 27 of November, 2008 the Victorian Abalone Divers Association Inc. (VADA) conducted a resource development workshop to assess the condition of blacklip and greenlip abalone resources in the Central Abalone Zone (CZ) in Victoria. This meeting was well attended by a large number of stakeholders, including divers, quota owners, and researchers. While a significant amount of work was done at the workshop, not all reefs were able to be assessed and the reef code assessment for the recommending a Central Zone (CZ) total allowable commercial catch (TACC) for the 2009 – 2010 fishing season was concluded on the 22nd of January, 2009.

Assessment Information

On the 27th of November, 2008 a spatially detailed assessment and recommendations were undertaken on a reef code by reef code basis. Apart from active divers' experience and direct observations, additional information that formed part of the individual assessments included;

- Central Zone Reef Reporting book (2007-2008), which includes;
 - Catch History from 1978
 - 5-year Cumulative Catch trends
 - Fishery Independent Abundance Surveys
 - Fishery Independent Length Frequency
 - Commercial Catch Length Frequency
- Fishweb MOU and Catch Information Including the;
 - Victorian Abalone Fishery Management Plan Catch Triggers
 - Actual catch amounts since 2001
- Draft Central Zone MOU (08/09)
- Central Zone Length of First Maturity (LOFM) studies, 2001.
- Victorian Central Zone Blacklip Abalone Total Allowable Catch Submission for the 2009 – 2010 Fishing Season
- Victorian Abalone Fishery Management Plan 2002 (VAFMP)
- Past divers' experience, observations

Assessment Process

The assessment and recommendation process for 2008 was conducted similarly to the previous years' assessment, in that it involved taking all of the above listed information into account to allocate catches for individual reefs while asking 6 questions. Results were not tallied until completion of the assessment and recommendation process.

The questions posed were;

1. What is the ideal sustainable amount to come off this reef code for next season?
This amount is reflected as the Ideal Reference point (IRP)
2. What is the maximum that you would like to see come off this reef code?
This amount is reflected in the tables as the Upper Reference Point (URP)
3. What is the amount that you would be worried about if it wasn't met or caught?
This amount is reflected in the Quota Reference Point (QRP)
4. What is the suggested ideal legal minimum length (LML)?
5. What is the current LML?
6. What must the LML be now to progress towards a sustainable LML?

The results of the assessment and recommendation process were recorded on a spread sheet. See ***“Workshop Assessment for TACC for Blacklip Abalone for 2009 – 2010 Season”***

TACC Quota Reference Definitions

QRP The Quota Reference Point (QRP) is the conservative catch level which could reasonably be expected from each sub-zone and reef code for the 2009/2010 season. The QRP is less than the optimal sustainable level of production for a given sub-zone or reef code. The QRP does not add up to the total TACC. If catches as listed in the QRP are not obtained as a result of fishing in the 2009-2010 season, investigations will be undertaken to try and assess the reasons for not achieving the QRP catches, and a remedial actions will be recommended. .

IRP The Ideal Reference Points (IRP) for each reef code is the ideal conservative and sustainable catch level which could reasonably and responsibly be expected from each reef code and sub-zone for the 2009/2010 season. The total of IQR's for each of the reef codes tallies to give the total recommended TACC for the season.

URP The Upper Reference Point (URP) is the absolute maximum catch level that industry believes should be responsibly harvested from the geographic sections of the coastline that align with existing reef codes and existing modelling regions. The totals of the URP amounts will exceed the recommended TACC for the 2009 – 2010 season. If a reef code or sub zone catch reaches the URP it should be presented as a candidate for detailed evaluation and possible closure for the remainder of the season.

Workshop Suggestion 1.

VADA to develop a draft of a harvesting policy and decision rules within 6 months.

Workshop Suggestion 2.

VADA to request that Divers Web be amended to show greenlip catches.

Abalone Viral Ganglioneuritis (AVG) Spread

The spread of the virus known as Abalone Viral Ganglioneuritis (AVG) continues to spread in an easterly direction in the CZ, with the virus front currently in the vicinity of Johanna Beach. There has been no further spread westerly since December, 2007 when it reached the large areas of sand at the Discovery Bay Marine Park at Cape Bridgewater.

There are a large number of jumps and movements of the virus to recreational land based ocean access points. VADA continues to monitor the spread of the virus as weather and monitor availability permits.

Other than lobbying government for the establishment of closed areas to avoid human activity in the active virus fronts, VADA's approach to slowing or stopping spread of the AVG virus has been one of avoidance of the known active virus areas. An avoidance area with a minimum distance of 5 to 7 kilometres is established on location of the disease front. In this way it is ensured that commercial abalone divers are not contributing to the spread of the disease.

In addition to this, divers have been focusing harvesting efforts on reef codes in front of the AVG front that are expected to be inundated. It is anticipated that this approach will continue, with the focus of harvesting effort in the Cape Otway area at the beginning of the new season. In addition, if industry wishes to harvest smaller abalone in reef code 6.04 then a permit will have to be applied for.

The AVG virus has affected abalone producing reefs in reef codes 4.01, 4.02, 5.01 to 5.03, and reef codes 6.01 to 6.03. The total production allocated to those reef codes in the 2008 – 2009 abalone fishing season was 33 tonnes. It was recommended that this amount be removed from TACC amount for the 2009 – 2010 season.

Spatial Management

VADA is committed to the process and implementation of spatial management of abalone resources in Victoria. Spatial management is a process of allocating catches to specific areas as well as the harvesting of abalone at the appropriate LML for the area of the coast they are situated.

These issues in relation to spatial management have been identified in the Victorian Abalone Fishery Management Plan and with the establishment of Marine Parks in Victoria there is a greater need to ensure the distribution of effort occurs because of the reduced areas of access for the rotation of abalone harvesting.

Legal Minimum Lengths

It has been recognised for many years that abalone along the coast mature at different lengths. The process of setting broad scale LML's while establishing a size to protect a significant amount of the abalone stocks, inevitably develops peculiarities for the harvesting some abalone populations.

This will see some abalone populations that are not protected by the LML because they are fast growing and larger maturing. Those abalone resources that are not protected by the LML can be over harvested, leading to the movement of fishing pressure to other areas as well as the process of serial depletion.

Conversely some abalone populations may never reach the LML because they are made up of slower growing or smaller maturing animals. Those abalone resources that never reach the LML, are not able to be harvested and don't contribute to the TACC. This can occur when increasing LML's to protect the majority of stock in an area.

There is a need to try and make the areas sufficiently large enough to allow for the implementation of a cost effective government management and enforcement regulations, while maintaining the areas sufficiently small enough to ensure a maximum sustainable yield.

The process of implementing spatially applicable legal minimum lengths into an abalone fishery is expected to involve an agreed mixture of regulated and voluntary measures. Each party needs the necessary tools when establishing the compromises between industries business needs to sustainably maximize harvesting and community returns against the ability and cost to implement and manage regulations.

In a meeting at Melbourne University in late 2008, it was recognised that the abalone Interactive Voice Response system (IVR) had sufficient capacity (with small alterations) to allow for multiple LML's on one day and the identification of catches to a particular area.

Additionally other possible solutions to the regulatory processes could be achieved by regulated MOU's or Codes of Practice (COP). This may result in enforcement and cost efficiencies.

Sub-Zonal TACC's

Sub-zonal TACC's allow for management of the sustainability of the abalone resources throughout a whole of zone. They are used to ensure the spreading of effort, equity in bearing the costs of effort distribution and to stop localized serial depletion of specific areas.

The reasons that abalone are harvested from any particular area at any particular time vary enormously. The influences include, weather conditions, market forces, fuel prices, equipment suitability, laziness, additional costs of travelling, harvesting returns, etc. It has been recognised by both government and industry that these influences should not be allowed to have an adverse outcome on the sustainability of the abalone resources.

As raised in the LML points there is a need to try and make the areas sufficiently large enough to allow for the implementation of a cost effective management and enforcement regulations, while maintaining the areas sufficiently small enough to ensure a maximum sustainable yield. It is expected that the final solution to the implementation of sub-zonal TACC's into an abalone fishery is expected to involve an agreed mixture of regulated and voluntary measures.

In the meeting at Melbourne University, it was recognised that Tasmania had implemented a range of sub-zonal TACC's and while there was a preference to not track sub unit allocations, other alternative methods of allocations were identified in having the ability to allocate catches to a particular area.

Catch Caps

Catch caps is the ability to close reef codes or sub zones when the catches as described in the Upper Reference Points (QRP) are reached. This can be done through voluntary or regulatory measures. At the workshop in January, 2009 the Department of Primary Industries offered the use of Catch Caps to help spread the effort throughout the Central Zone.

This was accepted by industry and it is intended to use this method for the 2009 – 2010 season.

It was agreed that these closures would be done by Fishery Notices.

Memorandum of Understanding (MOU)

While the MOU was not used for the 2008 – 2009 season, VADA did produce a draft which described the outcomes of the 2008 workshops and future direction. It is proposed to try and develop an MOU or other appropriate solution to the issues raised at this year's workshop.

Stunted or Smaller Maturing Abalone Harvesting

Cape Liptrap

In VADA's 2008 submission to the 2008 – 2009 TACC, it advised an area at Cape Liptrap had smaller maturing abalone that were not able to be harvested under the current LML. VADA recommended (with supporting information) an additional allocation of 25 tonne, a reduction of the LML in that area to 105mm and the application of a sub-zonal TACC. Unfortunately there was a number of difficulties eventuated and these catches were not caught.

While the 25 tonne was not caught in the Cape Liptrap area, more than 25 tonne of catches were harvested above the amounts allocated to the Cape Otway area in front of the AVG virus front. These areas will be voluntarily closed for the 2009 – 2010 season as they have now been affected by the AVG virus.

This movement of effort to the AVG front has ensured that the effort has not been displaced into other areas that would potentially have had adverse impacts, and also allows for the harvesting of the 25 tonne for the 2009 – 2010 season.

With the use of catch caps and voluntary measures VADA will attempt to ensure the additional effort is placed at Cape Liptrap. It is recognised that if the voluntary measures fail, this season then the TACC will have to be reduced by 25 tonne for the 2010 – 2011 season if sub-zonal TACC's are not implemented.

It was agreed to amend the current roll over LML Fishery Notice application to include the 105mm LML and the 113 mm LML described below.

Phillip Island – Inverloch Areas

In raising the LML through the use of a Fishery Notice from 110 mm to 115 mm it has now been recognised that harvesting in a number of areas with predominantly smaller stocks have been excluded from harvesting because of this increase in size.

It was agreed that 2 of the larger areas on Phillip Island and Inverloch have their LML reduced (in an amended Fishery Notice) from 115 mm to 113mm. The reef codes that are affected are;

- Phillip Island Reef Codes 14.05, 14.06, 14.07 and 14.08
- Inverloch area, Reef Codes 15.03, 15.04 and 15.05

Harvesting in More Than One LML Area Per Day

Part of the implementation of spatial management of the abalone fishery includes the ability to harvest abalone of more than one regulated LML per day. For the 2009 – 2010 season it was agreed to not harvest abalone of more than one LML per day until this issue can be resolved.

Data Loggers

It was recommended that the use of data loggers in the reduced LML areas should be mandatory.

Blacklip Total Allowable Catch Recommendations

The Victorian Abalone Divers Association Inc. makes the following recommendations in relation to the sustainable commercial harvesting of Blacklip abalone for the 2009 – 2010 fishing season. It should be noted that we have not made any allowance for the continued spread of the AVG virus.

The TACC for the 2008 – 2009 season was 462 tonnes of Blacklip abalone including the smaller maturing abalone from Cape Liptrap. The AVG virus has affected reef codes that were allocated to produce 33 tonnes of abalone for this period. The Workshop agreed that the TACC should be the same less the areas that have been affected by the AVG virus spread.

The recommendations for the 2009 – 2010 TACC for Black lip abalone in the Central Zone are:

1. The sustainable harvest of Blacklip abalone TACC for the Central Zone should be set at 429,150 kgs. This equates to 631 kg's per unit. (Including reduced size areas)

Fishery Notice Blacklip Legal Minimum Length Recommendations

In conjunction with the above TACC recommendations the following LML's need to be included on the current Fishery Notice application. This includes the current requirement that only one LML size area can be worked on one day.

The LML recommendations are:

1. All areas that are regulated at 120 mm have a LML of 123 mm.
2. All areas in Port Phillip Bay that are currently 100 mm be increased to 105 mm
3. All areas that have a regulated size of 110 mm, have an LML of 115 mm with the exceptions of reef codes;
 - 12.01 to 12.05 inclusive to have an LML of 120 mm
 - 14.05 to 14.08 inclusive to have an LML of 113 mm
 - 15.03 to 15.05 inclusive to have an LML of 113 mm
 - 16.03 to 16.06 inclusive to have an LML of 105 mm
 - Data loggers to be used in the above 3 areas.

Workshop Assessment for TACC for Blacklip Abalone For 2009 - 2010 Season

CENTRAL ZONE BLACKLIP ABALONE

		2009 - 2010					
Reef Name	reef_id	Ideal Quota	Lower Limit	Upper Limit	Ideal LML	Current LML	Transit LML
HOPKINS RIVER TO CHILDER'S COVE	4.01	0	0	0		123	130
PT DANGER TO SEWERAGE OUTFALL	4.02	0	0	0		123	-
BAY OF ISLANDS BOAT RAMP TO LONDON BRIDGE	5.01	0	0	0		123	-
LONDON BRIDGE TO PORT CAMPBELL PIER	5.02	0	0	0		123	-
PORT CAMPBELL PIER TO BROKEN HEAD, SHERBROOK RIVER WALL	5.03	0	0	0		123	-
GELLIBRAND RIVER TO CAPE VOLNEY	6.01	0	0	0	125	123	125
CAPE VOLNEY TO JOHANNA BEACH	6.02	0	0	0	125	123	125
JOHANNA BEACH TO AIRE RIVER	6.03	0	0	0	125	123	125
AIRE RIVER TO CAPE OTWAY LIGHTHOUSE	6.04	12,000	10,000	14,000	?	123	-
CAPE OTWAY LIGHTHOUSE TO FRANKLIN RIVER	7.01	7,000	5,000	9,000		123	-
THE TIDE (OFFSHORE>10M)	7.02	27,000	22,000	35,000		123	-
FRANKLIN RIVER TO BLANKET BAY	7.03	3,000	2,000	4,000		123	-
BLANKET BAY TO THE WESTERN END OF BALD HILL	7.04	2,000	1,500	3,000		123	-
WESTERN END OF BALD HILL TO APOLLO BAY BOAT HARBOUR	7.05	5,000	4,000	6,000		123	-
APOLLO BAY BOAT HARBOUR TO GREY RIVER	7.06	5,000	4,000	7,000		123	-
PARKER RIVER WEST	7.07	2,500	2,000	3,000		123	-
GREY RIVER TO WYE RIVER PUB	8.01	1,000	500	1,500		123	-
	8.02	100	0	700		115	-
	8.03	100	0	500		115	-
POINT DANGER TO SEWERAGE OUTFALL BUILDING	10.01	2,000	1,000	3,000		115	-
SEWERAGE OUTFALL BLDG TO BARWON RIVER ENTRANCE	10.02	1,500	1,000	1,800		115	-
	10.03	300	0	500		115	-
	10.04	600	300	1,000		115	-
	10.05				110	100	105

Reef Name

Reef Name	reef_id	Ideal Quota	Lower Limit	Upper Limit	Ideal LML	Current LML	Transit LML
ST. LEONARDS PIER TO PORT ARLINGTON PIER	11.01	0	0	500	110	100	105
	11.02	0	0	500	110	100	105
	11.03	0	0	500	110	100	105
POINT WILSON PIER TO WERRIBEE RIVER	11.04	10,000	5,000	15,000	110	100	105
WERRIBEE RIVER TO POINT COOK AIRPORT PIER	11.05	1,500	500	2,000	110	100	105
PT COOK AIRPORT PIER TO SANDY GROUND S/E OF THE PC MARINE PK	11.06	6,000	5,000	10,000	110	100	105
SANDY GRD S/E OF THE PC MARINE PK TO THE NTH BOUNDARY OF THE PC MARINE PK	11.07	300	0	800	110	100	105
NORTHERN BOUNDARY OF THE PC MARINE PARK TO ALTONA PIER	11.08	1,000	500	2,000	110	100	105
ALTONA PIER TO RIFLE RANGE	11.09	2,000	2,000	5,000	110	100	105
RIFLE RANGE TO WILLIAMSTOWN BREAKWATER	11.10	100	0	500	110	100	105
	11.11				110	100	105
POINT NEPEAN TO PORTSEA SURF LIFE SAVING CLUB	12.02	13,000	9,000	15,000	120	115	120
PORTSEA SURF LIFESAVING CLUB TO THE LAST BLUFF EAST OF THE DIVIDE	12.03	27,000	17,000	30,000	120	115	120
LAST BUFF EAST OF THE DIVIDE TO GUNNAMATTA SURF LIFESAVING CLUB	12.04	15,000	10,000	20,000	120	115	120
GUNNAMATTA SURF LIFESAVING CLUB TO THE SOUTH EAST END OF FINGAL BEACH	12.05	7,000	5,000	9,000	120	115	120
SOUTH EAST END OF FINGAL BEACH TO THE BASE OF THE STEPS AT CAPE SCHANCK	12.06	55,000	45,000	65,000	115	115	115
BASE OF THE STEPS AT CAPE SCHANCK TO PICNIC POINT	13.01	28,000	20,000	35,000	?	115	-
PICNIC POINT TO THE SANDY BEACH IN THE NORTH WEST OF SYMMONDS BAY	13.02	17,000	14,000	22,000	?	115	-
SANDY BEACH IN THE NORTH WEST OF SYMMONDS BAY TO SANDY BEACH EAST OF SYMMONDS BAY	13.03	8,000	6,000	10,000	?	115	-
SANDY BEACH EAST OF SYMMONDS BAY TO BLOWHOLE	13.04	5,000	4,000	7,000		115	-
BLOWHOLE TO FLINDERS PIER	13.05	10,000	7,000	11,000		115	-
WESTERN PORT BAY AND ENTRANCE	13.07	8,000	6,000	12,000		115	-
	13.06					115	-

Reef Name

Reef Name	reef_id	Ideal Quota	Lower Limit	Upper Limit	Ideal LML	Current LML	Transit LML
GROSSARD POINT TO CAT BAY	14.01	1,000	800	1,500	115	115	-
CAT BAY TO POINT GRANT	14.02	13,000	8,000	15,000	115	115	-
SEAL ROCKS	14.03	10,000	8,000	12,000	115	115	-
POINT GRANT TO PENGUIN PARADE	14.04	9,000	8,000	10,000	115	115	-
PENGUIN PARADE TO BERRY BEACH	14.05	2,750	1,200	3,500	113	115	113
BERRY BEACH TO PYRAMID ROCK	14.06	5,000	3,000	6,000	113	115	113
PYRAMID ROCK TO SUNDERLAND BAY	14.07	3,000	1,500	3,500	113	115	113
SUNDERLAND BAY TO WOOLAMAI SURF CLUB	14.08	2,000	700	2,500	113	115	113
WOOLAMAI SURF CLUB TO SAN REMO BRIDGE	14.09	8,000	7,000	9,000	115	115	-
	14.1	400	100	500		115	-
SAN REMO BRIDGE TO KILCUNDA RAILWAY BRIDGE	15.01	8,000	5,000	10,000	115	115	-
KILCUNDA RAILWAY BRIDGE TO COAL POINT	15.02	3,000	2,000	5,000		115	-
COAL POINT TO CAPE PATTERSON SURF CLUB	15.03	500	500	2,000	113	115	113
	15.04				113	115	113
EAGLES NEST TO WESTERN SIDE OF INVERLOCH ENTRANCE	15.05	100	0	400	113	115	113
WESTERN SIDE OF INVERLOCH ENTRANCE TO OUTFALL PIPE	16.01	100	0	400		115	-
OUTFALL PIPE TO MIDDLE OF MORGANS BEACH	16.02	3,000	2,000	4,000		115	-
MIDDLE OF MORGANS BEACH TO CAPE LIPTRAP LIGHTHOUSE	16.03	18,000	9,000	20,000	105	115	105
CAPE LIPTRAP LIGHTHOUSE TO GRINDER POINT	16.04	7,600	4,000	8,000	105	115	105
GRINDER POINT TO WALKERVILLE SOUTH BOAT RAMP	16.05	6,000	3,000	6,000	105	115	105
WALKERVILLE SOUTH BOAT RAMP TO WARATAH BAY TOWNSHIP	16.06	6,000	3,000	6,000	105	115	105
	16.07	100	0	700		115	-

Reef Name

	reef_id	Ideal Quota	Lower Limit	Upper Limit	Ideal LML	Current LML	Transit LML	
SHELLBACK ISLAND	17.01	2,000	1,500	3,000	120	115	120	
DARBY RIVER TO WHISKY BAY	17.02	7,000	5,000	9,000		115	-	
NORMAN ISLAND	17.03	3,000	2,000	4,000		115	120	
WHISKY BAY TO SQUEAKY BEACH	17.04	1,500	1,000	2,000		115	-	
SQUEAKY BEACH TO TIDAL RIVER	17.05	2,000	1,500	3,000		115	-	
GREAT GLENNIE ISLAND	17.10	10,000	8,000	11,000		115	120	
DANNEVIG ISLAND	17.11	2,000	1,500	2,500		115	120	
CITADEL ISLAND	17.12	3,000	2,500	3,500		115	120	
	17.13	1,000	1,000	1,500		115	-	
CAPE WELLINGTON TO SEALERS COVE RIVER MOUTH	18.03	2,000	1,000	2,500	115	115	-	
SEALERS COVE RIVER MOUTH TO FIVE MILE BEACH	18.04	1,500	1,000	2,000		115	-	
FIVE MILE BEACH TO THREE MILE BEACH	18.05	500	0	1,500		115	-	
RABBIT ISLAND AND ROCK	18.06	500	0	1,000		115	-	
THREE MILE BEACH TO KATE KEARNEY ENTRANCE	18.07	500	0	750		115	-	
SEAL ISLAND GROUP	18.08	3,000	2,000	4,000		115	-	
NINETY MILE BEACH	18.09	100	0	2,000		115	-	
Total Allowable Commercial Catch		429,150	304,100	542,050				
Historical Licence amount (20 Blacklip Units)		12,622	8,944	15,943				
Per Unit Amount		631	447	797				