

Ian Dutton
Director Marine Resources
Department of Primary Industries, Parks and Water
(Via email)

Dear lan,

Thank you for the opportunity to provide comment on the Department of Primary Industries, Parks and Water (DPIPWE) preliminary position on calamari management.

TARFish's goal is to "protect, promote and create sustainable, accessible, enjoyable and safe fishing for the benefit of Tasmanians" and the Southern Calamar fishery is an extremely important one to Tasmania's recreational fishers, as evidenced by the high proportion of the overall take from the fishery and significant participation rate state-wide.

The summary overview provided to TARFish indicates measures under consideration in response to the declining stock health of southern calamari:

For the commercial sector:

- Introducing limited licence arrangements (i.e. reduce the number of commercial scalefishers who can take Southern Calamari); and
- Trip limits for those not qualifying for a limited licence.

For the recreational sector:

• Reducing the recreational bag limit from ten to five and reducing the boat limit to 15.

TARFish remains committed to ensuring the long-term abundance of the Southern Calamari and ensuring that recreational fishing access to it is fair and protected. Our response is framed in this context.

Stock status

We note the Southern Calamari (calamari) stock has been assessed as depleting and that "the current level of fishing mortality is likely to cause the stock to become recruitment impaired" according to the Status of Australian Fish Stocks (SAFS).

The SAFS assessment goes on to state "Sharp regional increases and subsequent fluctuations in catch and effort in recent years suggest that fishing pressure on Southern Calamari is likely to be too high to be sustainable. Despite closures during part of the spawning season, many operators rely on targeting spawning aggregations, which presents a high risk of recruitment impairment.

Aggregation fishing also means that data on catch and catch rates are unlikely to reflect abundance. Data-poor stock assessment results give further reason for concern that



fishing mortality might have been excessive and that stocks on the south-east and east coast might be depleted or still recovering, while more recently targeted stocks on the north coast might be depleting."

In addition, TARFish notes the importance of Tasmania's spawning populations as indicated in the Tasmanian Scalefish Fishery Assessment 2018-19 (the Assessment (2018-19)) which states "A more comprehensive genetic study revealed a single stock across southern Australia and that Tasmania is particularly important in terms of reproduction."

The Assessment (2018–19) goes on to state "Catches of more than 100 t in 2015/16, 2016/17 and 2018/19 exceed recent estimates of the state-wide maximum sustainable yield (MSY) of 75 t by more than 40%. The North coast region is of particular concern in this respect, given that recent catches in this area exceed the estimated regional MSY of 33 t by more than 100%. While uncertainty remains about the status of stocks, recent fishing mortality has been excessive and is likely to cause the stock to become recruitment impaired."

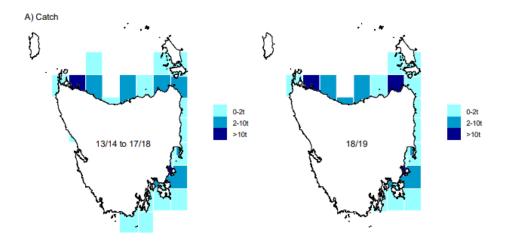
Concerningly, IMAS have indicated there is a similar pattern of overfishing risks to that experienced in the south east fishery several decades ago and that the south east spawning aggregations appear to have dispersed.

TARFish supports efforts to reduce fishing pressure on Southern Calamari to ensure that, at a minimum, it returns to a "sustainable" stock status and that catches do not exceed state-wide maximum sustainable yield (MSY).

Catch and effort

Commercial

The charts below are taken from the Tasmanian Scalefish Fishery Assessment 2018–19 (the Assessment 2018–19)) and clearly highlight the increased commercial effort in northern Tasmania when compared with the total state-wide commercial catch.



The Assessment (2018-19) states "With a regional species specific fishing licence in place, commercial effort has effectively been capped in the traditional fishing grounds in



Southeast Tasmanian (defined as waters between Whale Head to Lemon Rock for calamari management). However, fishing effort has subsequently shifted to the North coast, including a number of new entrants who did not qualify for a licence to fish in the South-East."

Commercial catch by region is shown in the table below.

Region	2015/16 (t)	2016/17 (t)	2017/18 (t)
North West coast (NWC)	25.0	37.4	11.4
North East coast (NEC)	45.8	44.2	17.1
Total North Coast (TNC)	70.8	81.6	28.5
East coast (EC)	3.4	1.7	2.5
South East Waters (SEW)	31.9	39.2	27.0
TOTAL	106.2	122.5	58

The commercial fishing effort has increasingly targeted the northern spawning aggregations driven predominantly by displaced effort from the southern fishery since 2009.

Recreational

The recreational catch and effort are shown in the table below. The data is taken from the Surveys of Recreational Fishing in Tasmania (Lyle, J et al) for 2012-13 and 2017-18.

Approximately equal catches of calamari are taken by boat- and shore-based fishers. There has been a significant reduction in the number of fish being caught by boat with around two-thirds of fish in 2012-13 reducing to around 50% in 2017-18.

Catch effort (% of numbers of calamari caught) is predominant in the southeast and is shown regionally below:

Region	2012-13		2017-18	
	% of fish	Tonnes*	% of	Tonnes*
	caught		fish	
			caught	
West Coast:	_		1%	
Total West Coast:	-		1%	
North West:	18%		8%	
North East (incl Tamar	7%		10%	
Est):				
Total North:	25%		18%	
East Coast (North)	13%		13%	
East Coast (South)	29%		17%	
Total East Coast	42%		30%	
Derwent Est. and Channel	8%		18%	
Great Oyster Bay	6%		4%	
North West Bay	1%		7%	
Southern - other	18%		22%	
Total South-East:	33%		51%	
TOTAL	100%	64	100%	31



The 2017-18 Survey of Recreational Fishing in Tasmania (pp 42) states "Over half of the Southern Calamari (Sepioteuthis australis) catch was taken off south eastern Tasmania, including the D'Entrecasteaux Channel and Derwent Estuary; outside of this general region the Central East and East coasts were of secondary importance followed by waters off porthern Tasmania."

TARFish is of the view that there is currently insufficient information on the recreational catch to assume that there is a trend demonstrating increased catch volumes by the sector. On the limited information available it can be seen that there has not been a substantial change in annual take or the regions from which they can be taken. If anything, it can be seen that effort (for a smaller tonnage) has been further concentrated in the south east and reduced in the north.

Discussion

Based on the relative efforts of the sectors, it can be seen that the dominant driver for the increased catches in the north are the commercial sector as supported by the State Government's 2018 Review of the Southern Calamari fishery (Analysis of Management Tools) which states, "there has been a substantial increase in catch and effort on the north coast, which is reflected in the total commercial catch for 2015/16 and 2016/17. Consequently, this increasing interest has resulted in increasing overlap and interactions within and between the commercial and recreational sectors."

Further, recreational fishers use of the fishery is predominantly in December- January followed by February-March and April – May. This is largely after the calamari have spawned which would indicate that recreational fishers are likely having a lower impact on spawning aggregations.

Recreational fishers typically fish proximate to their place of residence or shack and it is unlikely there is a large movement of effort into other regions to target the species. This is supported by the consistent catch rates in the south of the state.

TARFish accepts that recreational fishing is a significant contributor to mortality however the fishing effort is less likely to target spawning populations on the basis;

- There is no significant spawning population in the south where around half of recreationally caught Southern Calamari are taken;
- Recreational effort has not increased demonstrably in the north of the state;
- Southern Calamari are predominantly caught (recreationally) between December and May either after or at the tail end of the spawning season;
- There is no change to fishing method that would suggest there is a dramatic increase in targeting of spawning populations from boats and in fact there has been a significant decrease in boast-based fishing; and
- The current bag and possession limits are likely to prevent multi-trip visits to spawning aggregations.

This is further supported by the fishery being assessed as sustainable until relatively recently which has correlated with changes to commercial fishing effort rather than recreational.



Proposed management controls Commercial Sector measures

1. Introducing limited licence arrangements (i.e. reduce the number of commercial scalefishers who can take Southern Calamari

TARFish is of the view that limiting commercial catch in an area has led to stabilised catch levels and is generally supportive of this as a management control. The State Government's 2018 Review of the Southern Calamari fishery (Analysis of Management Tools) (Southern Calamari Analysis of Management Tools (2018)) states, "catch taken in South East Waters – where access is limited by the requirement to hold a fishing licence (southern calamari) – has remained fairly stable over the last three years."

The Scalefish Fishery Advisory committee (SFAC) Minutes of meeting #73 regarding commercial catch and effort state:

- Effort increasing and signs of a decline in CPUE over the last 4-5 years
- The number of vessels is increasing in both the north west and north east.

Given the North Coast fishery has only recently provided significant commercial catch levels and that limiting commercial access in an area has led to stabilised catch levels in the south east, it would appear logical to extend the same management measures that support the South East area to other key fishing areas of the state.

2. Trip Limits for those not qualifying for a limited licence
This measure may relieve some pressure from intensive fishing effort on spawning
grounds noting that commercial effort on the north coast has escalated significantly
since the introduction of the South East Waters Southern Calamari Licence in 2009.

TARFish is of the view that a trip limit is of limited use as a management control unless there are clear limits on the frequency of the trips.

Without any information to indicate the conditions of the trip limit and the modelled impact, it is not possible to determine if this measure should be supported or otherwise.

TARFish notes that such a control would require a review of the fisheries (Scalefish) Rules 2015 and a public consultation is required.

Before TARFish could reach a clear position on the proposed measures to constrain the commercial catch, it would be important for TARFish to have the following information:

 The modelled impact (i.e. reduction) in commercial take from the proposed measures both separately and collectively and how long it is estimated to return the fishery to a stock status of "sustainable"



2. How the potential for interactions between commercial and recreational fishers will be managed or reduced by applying the measures both separately and collectively.

Recreational sector measures

1. Reducing the recreational bag limit from ten to five and reducing the boat limit to 15

The current management controls for recreational fishers for Southern Calamari are:

Recreational:

Bag limit: 10 Possession limit: 20 Boat Limit: Nil

The proposal is to reduce those controls to:

Bag limit: 5
Possession limit: 15
Boat Limit: Nil

The proposed measures have the effect of potentially reducing the recreational take by over 50% which, on its face, is a wildly disproportionate response to that being proposed for the commercial sector although this is difficult to quantify for either sector given the absence of any modelling provided to support the implementation of the measures.

Further, the proposed boat limit targets a specific proportion of recreational fishers – those fishers that fish in groups via boat.

TARFish believes the current bag/possession limits are reasonable given the value that the recreational sector places on this fishery. The feedback we have received from recreational fishers is that no reduction in bag/possession levels for calamari are required/justified.

It is worth noting the daily bag limits for Vic are 10, WA 15, NSW 20 & SA 15 therefore any further reductions considered for Tasmania would be out of step with other states that have Southern Calamari.

TARFish further notes that given recreational fishers are targeting the species postspawning the effect of the measures is likely to be limited in value to protect the sustainability of stocks.

With regard to boat limits, TARFish does not support Boat Limits as they supersede the individual's bag/possession rights and unfairly weight the responsibility of the management control to a segment of recreational fishers with no evidence to support its implementation. That is, there is no evidence to support a view that recreational boat fishing for squid is having a greater impact on the sustainability of the population versus other methods. Further, this management control may result in an increase in unsafe



fishing with vessels being operated single handed which may increase the potential for safety incidents. Additionally, the cost to recreational fishers is potentially increased and the satisfaction of the experience potentially decreased by reducing the ability to fish with family and friends. One of the primary drivers of a fishing excursion is to "spend time with friends and family." Finally, the boat limit may actually prevent fishers from participating in the fishery with older people or mobility impaired more likely to be impacted.

It is TARFish's view that a boat limit is not an acceptable outcome.

Alternative management controls

TARFish would like to understand what other measures were considered and why they have been excluded.

In October 2018 in response to the State Governments "Review of the Southern Calamari Fishery – Analysis of Management Tools" TARFish suggested the following management options be further considered:

- Seasonal spawning closures that are based on scientific research should be part of the fishery management as they provide protection to spawning stock
- Commercial Trip Limits, pre-spawning area closures, should be considered as they may provide some respite from intensive concentrated fishing pressure in the lead up to spawning activity
- Minimum size limits should be investigated to determine if they provide any biological benefits to the stock
- Implementation of pre-spawning area closure catch caps should be considered for the commercial sector
- Area Closures should be considered where it can be determined they provide specific benefit that is not available via other measures.

Other matters

- 1. The maximum, sustainable yield (MSY) is estimated at 75t and has been consistently exceeded by the commercial sector by around 40% the in last three years. Given the rapid decline in the fishery (which was rated "sustainable" in 2016/17) it would appear that commercial management controls must be able to demonstrate with sufficient certainty that the sectors catch will be constrained below this level. Not to do so risks the long-term viability of the spawning populations in Tasmania.
- 2. TARFish is concerned there may be an over-reliance on limited information regarding the recreational catch of Southern Calamari in Tasmania. TARFish suggests that estimates of recreational catch are undertaken more frequently given the importance to the recreational sector and concern for the sustainability of the Southern Calamari.
- 3. TARFish welcomes DPIPWE's intention to increase communications about the depleting stock status of Southern Calamari and suggests that further information be provided to both TARFish and RecFAC on what is proposed and how TARFish can assist.



4. It is important that a statement of reasons together with the information that was relied upon to reach a view on a proposed management control, or group of management controls, is provided to TARFish to ensure that we, as the peak body representing recreational fishers, can provide an informed and considered response on behalf of Tasmania's recreational marine fishers.

TARFish's charter is to look after the interests of recreational marine fishers and to that end we have provided what we believe to be considered feedback on the proposed management measures with the limited information or reasoning provided to support their selection and potential impact both on the sustainability of the fishery or the sector to which they are applied.

As with all fisheries management there is no single "silver bullet" solution to the challenges this fishery faces, and it will take a package of measures working together to have the potential to address the challenges.

Thank you for seeking our views at this early stage in the development of Southern Calamari management proposals and please do not hesitate to contact me with any clarifications or questions you may have.

Yours sincerely,

Jane Gallichan

Chief Executive Officer