

Proposed Total Allowable Commercial Catch for the Eastern Octopus Zone of the Victorian Octopus Fishery 2020/21

The Victorian Fisheries Authority (VFA) is proposing a Total Allowable Commercial Catch (TACC) of **68.7 tonnes** for the eastern zone for the Victorian octopus fishery, with quota to be allocated to licence holders for the fishing season commencing on 1 August 2020 until 30 June 2021. Based on historical beach price data, this initial TACC could result in a total landed catch value of about \$1 million in 2020/21. The TACC will be reviewed/adjusted annually.

Analysis summary

While there is currently no suitable estimate of available biomass of octopus in the eastern zone, the VFA analysed a range of data and information to determine the proposed TACC. This included:

- current literature informing the life history of target octopus species;
- catch history of octopus by Ocean Fishery Access Licence (OFAL) holders over the last five years (for the period 1 Jan 2015 to 30 December 2019), including trends in Catch Per Unit Effort (CPUE) over this relatively short period;
- voluntary research logbook data received from eastern zone OFAL fishers targeting octopus;
- other catch of octopus in Victoria, including average take in other Victorian fisheries (such as inshore trawl and rock lobster fisheries) and relevant Commonwealth fisheries;
- comparison of Victoria's management arrangements and harvest levels in the eastern zone with Tasmania's octopus fishery;
- impact analysis of the proposed TACC on licence holders (comparing expected allocation of catch with recent catch under an OFAL licence) and the economic viability of licences (including on potential licence holders with smaller quota holdings).

* Data from 2020 was not included in this analysis due to potential disruptions from the Victorian bushfires and COVID-19 impacting potential fishing trips and logbook returns.

Key pieces of information drawn from this analysis were that:

- catch in the eastern zone by OFAL licence holders increased significantly in the last 5 years, reaching a historical high of 84.6 tonnes in 2019 from 0kg in 2015;
- the predominant species taken in the eastern zone is pale octopus, and a considerable proportion of pots lifted contained brooding females with eggs;
- pale octopus has been assessed by the VFA to have a 'moderate' risk of overharvesting. Key considerations supporting this assessment include:
 - the lack of reliable and long-term catch data for this species using shelter pots
 - the biology of the species means it is easily depleted within small spatial scales (it is a semelparous species, i.e only reproduces once before dying, and its reproductive strategy results in low dispersal)
 - the Victorian fishery is expanding rapidly in a small spatial scale, with fishing effort high in some areas
- catch per hectare is much higher in some areas of the eastern zone in comparison to the long-standing Tasmanian fishery;
- a substantial reduction in allowable take below the 2018 and 2019 levels for the eastern zone could have a relatively significant impact on some potential licence holders and may also reduce viability of fishing for licence holders who have small quota holdings.

Rationale for the proposed TACC

Based on the analysis conducted, the VFA is of the view that a TACC close to or greater than the total catch from 2019 level (84.6 tonnes, which was a historical high for take in the eastern octopus zone by OFAL fishers) would be high risk, particularly given there is limited reliable data available and still some knowledge gaps about target species.

An initial TACC at this level would also be inconsistent with the precautionary principle of management and the VFA's documented commitment to set a conservative initial TACC on establishment of the fishery.

Consistent with this commitment to set a conservative initial TACC, the VFA is of the view that a TACC towards the lower end of total take in recent years is preferable to support the establishment of fishing under the new licence class and provide sufficient safe guards against over-fishing.

However, it was considered that if an initial TACC was to be set much further below the proposed 68.7 tonnes (the 2-year average of take in the eastern zone in 2018 and 2019 calendar years), licence holders would expect this decision to be supported by clear evidence of stock depletion. This was not demonstrated by the current data, although the time series for the data is short.

The VFA recognises that the proposed TACC of 68.7 tonnes would have an impact (i.e. a relative reduction in catch based on the quota allocation formula) on those licence holders who will be allocated a larger share of the quota when compared to their take in recent years. However, it needs to be acknowledged that an Octopus Fishery Access Licence is a valuable ongoing entitlement and that an initial TACC at 68.7 tonnes will still provide for substantial fishing opportunities in 2020/21.

It is important to note that quota for this fishery is transferable, meaning there is potential to lease quota from other licence holders in the short-term or to acquire quota permanently.

Using the quota allocation formula as recommended by the Independent Allocation Panel, the VFA has calculated that the proposed TACC would result in an initial quota of at least 1.87 tonnes to each of those licence holders entitled to the smallest share of the quota. This is based on the potential maximum of eleven licence holders in the eastern zone and may increase if the some eligible fishers to do not apply for a licence.

This annual take would be a significant increase in allowable catch for these licence holders in the east when comparing their take of octopus (if any) over recent years. It is also considered a viable amount to commence operating and investing in the fishery given they are partly set up to fish under their OFAL licence. The VFA acknowledges that an initial TACC much lower than the proposed 68.7t may result in fishing being unviable for the smaller quota holders, depending on their circumstances.

It is therefore proposed that the 2020/21 TACC for the eastern octopus zone be set at a value of 68.7 tonnes. This supports a precautionary initial TACC, to conserve the octopus resource in Victoria and help build an ongoing, successful, sustainable and efficient fishery for the benefit of Victoria and beyond.

Future work

The VFA is working with industry and fish marketing experts to help maximise the value of this emerging fishery.

The VFA is planning to develop a management plan and a harvest strategy for this fishery once octopus fishing is established for other licences in the central and western octopus zones. The plan and strategy will guide the long-term management of this fishery.

The VFA will also work with scientists from the University of Tasmania and Institute for Marine and Antarctic Studies on a new, FRDC-funded octopus research project which will provide information to help guide our future management of the fishery. This work is expected to commence this year.