

Octopus Fishery – Eastern Zone

Proposed Total Allowable Commercial Catch 2025-26

Consultation Paper

Executive Summary

As in previous years, a weight of evidence approach has been applied in the determination to **propose continuing the total allowable commercial catch (TACC) at 68.7 tonnes for the 2025-26 fishing season.**

This proposal reflects the level of available information for the fishery, including stock status, species biology, fishery management settings and recent catch and effort data. Analysis of the available data indicates that:

- In the 2023-24 quota year, the most recent complete season, the TACC was almost reached, with a total of 64.92 tonnes landed.
- Spatial data indicates that the effort in the fishery has continued to contract, with most catch taken from a small area close to Lakes Entrance. Given the biological characteristics of the pale octopus, there is potential for resultant localised depletion in subsequent years. Effort in past years has covered a larger area further west and offshore, which is a better practice considering. However, overall fishing effort is still limited to a relatively small proportion of the area available in the Eastern Zone, so there is little information about the resource within the entirety of the zone.
- The standardised catch-per-unit-effort (CPUE) appears stable. The 2023-24 CPUE was 0.44 kg/potlift, which is consistent with that of the previous two years.
- The short time series of fishery-dependent data does not provide evidence to support a change to the TACC at this time.

Octopus Fishery Management

The Octopus Fishery commenced in 2020, following a rapid increase in catch and effort within the Ocean Fishery in 2015-16, with average octopus catch reaching about 10 times the annual 2006-07 levels. In response, the Victorian Fisheries Authority (VFA) removed octopus from the broader Ocean Fishery Access Licence and established a new, quota-based Octopus Fishery Licence class. Current management arrangements are described in Table 1.

The Octopus Fishery has three management zones. Those with an Octopus Fishery licence are authorised to take octopus from the Eastern Zone, where most of the commercial octopus fishing in Victoria has occurred to date. The Eastern Zone extends approximately from Seaspray to the Victorian/NSW border, and out to 20 nautical miles offshore, except for marine reserves (Figure 1).

A limited number of temporary, exploratory octopus fishing permits are currently being issued for the central and western zones to build information on the octopus resource. Catch and effort data from these permits are not part of this assessment.

Table 1: Fishery management settings

Octopus (Eastern Zone) Fishery	
Licences	11 transferable licences
Species	Pale octopus (<i>Octopus pallidus</i>) - makes up majority of catch Māori octopus (<i>Macroctopus maorum</i>) Gloomy octopus (<i>Octopus tetricus</i>)
Catch management	Annual TACC; individual transferable quota units
Gear management	Octopus shelter pots, with tiered system of limits on lines and pots/line to fish quota to reduce likelihood of interactions with threatened, endangered or protected species and other water users. Licence holders with a quota allocation ≥ 10 t are authorised to use up to 10,000 pots arranged over a maximum of 20 lines and 1,000 pots/line, while those with <10 t quota allocation are limited to 2,000 pots arranged over a maximum of 4 lines and 1,000 pots/line.
Vessel monitoring system	Introduced November 2020
Compulsory logbook reporting	<ul style="list-style-type: none"> Octopus-specific logbook with reporting by species, including discards Research logbook including data on females and eggs eCatch quota app

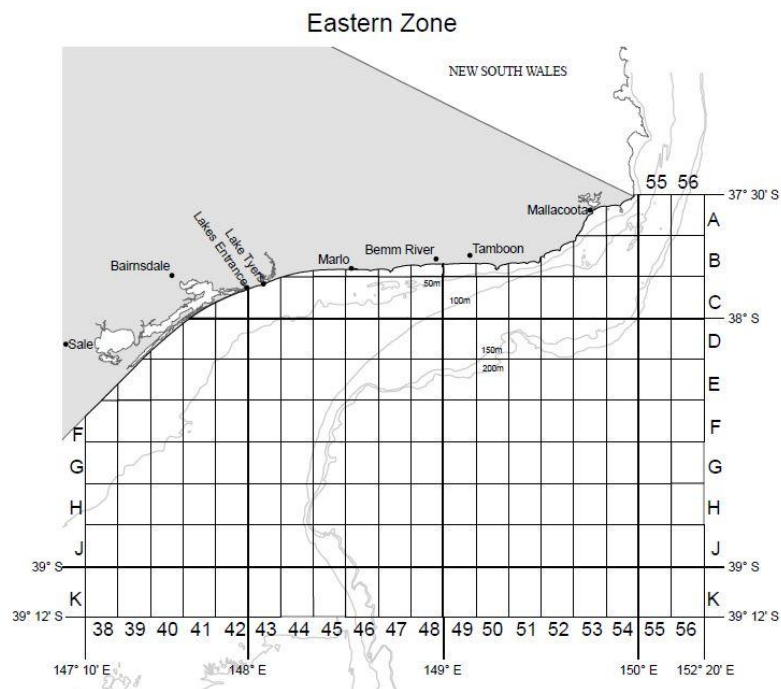


Figure 1: Eastern zone octopus fishery zones

Octopus Stock Assessment

Pale octopus biology

In Victoria, pale octopus (*Octopus pallidus*) is harvested by multiple fisheries, predominately the Octopus (Eastern Zone) Fishery, the Victorian Inshore Trawl Fishery and the Commonwealth Trawl Fishery. Despite this, data is very limited for the species and several aspects of its life cycle are important to factor into management settings for long term sustainable harvest.

While the species has rapid growth and a lifespan of 12 to 18 months, the female octopus only reproduces once before it dies. It seeks out a sheltered structure in its sandy environment, such as an octopus pot to lay eggs. Pot fishing selectively removes breeding females and their eggs, making populations vulnerable to depletion without careful management. Further, young pale octopus do not disperse far from their hatching sites, therefore there is limited capacity for depleted areas to be replenished from neighbouring subpopulations.

Stock status

Pale octopus in Victoria is classified as 'Undefined' in the *Status of Key Australian Fish Stocks (SAFS) Report 2024* due to a lack of detailed data and because it comprises an incidental byproduct of many fisheries¹. Accurate and comprehensive reporting by industry via the octopus catch and effort logbooks and research logbooks introduced when the Octopus Fishery commenced are continuing to provide improved information for future assessments.

The species has been assessed by VFA as having a 'moderate' risk of overharvesting, considering its biology, as well as the limited reliable and long-term catch data from shelter pots.

Because pale octopus has a small dispersal range and is structured at fine spatial scales, avoiding local and/or serial depletion of areas within the zone is a high priority for maximising ongoing sustainable harvest.

There has been no spatial management of catch in the fishery as yet, and the TACC each year can be fished anywhere in the zone. To date, the TACC has virtually all been caught from a relatively small proportion of the zone in the Lakes Entrance region (Figure3) meaning there is little information about the resource across the entirety of the zone.

Catch and effort review

The Octopus Fishery commenced as a quota managed pot fishery in 2020. The TACC of 68.7 tonnes was set based on the average annual octopus catch in eastern zone over 2018-19 by Ocean Fishery Access Licence holders. The TACC has been maintained at that level since inception and has been considered fully caught in all years (Table 2).

Table 2: Summary of total catch and standardised CPUE

Quota Year	Quota (tonnes)	Total Catch (tonnes)	Standardised CPUE (kg/potlift)
2020-21	68.7	66.85	0.38
2021-22	68.7	65.30	0.46
2022-23	68.7	66.53	0.45
2023-24	68.7	64.92	0.44
2024-25*	68.7	51.28*	-

¹ See Status of Australian Fish Stocks Report 2024 at www.fish.gov.au

*2024-25 data is an incomplete year and represents logbook data submitted to the VFA to 30 March 2025.

Catch per unit effort

Trends in octopus CPUE are currently the best available proxy indicator for biomass. At a fishery-wide scale, the standardised octopus CPUE has been relatively stable since 2016, when octopus landings began to sharply increase. Since 2016, when pot/trap fishing effort has been sufficient to reliably analyse catch rates, standardised CPUE has been relatively stable, ranging between 0.32 and 0.46 kg/potlift (Figure 2) and appears to be at an appropriate level based on the available information at this stage of the fishery.

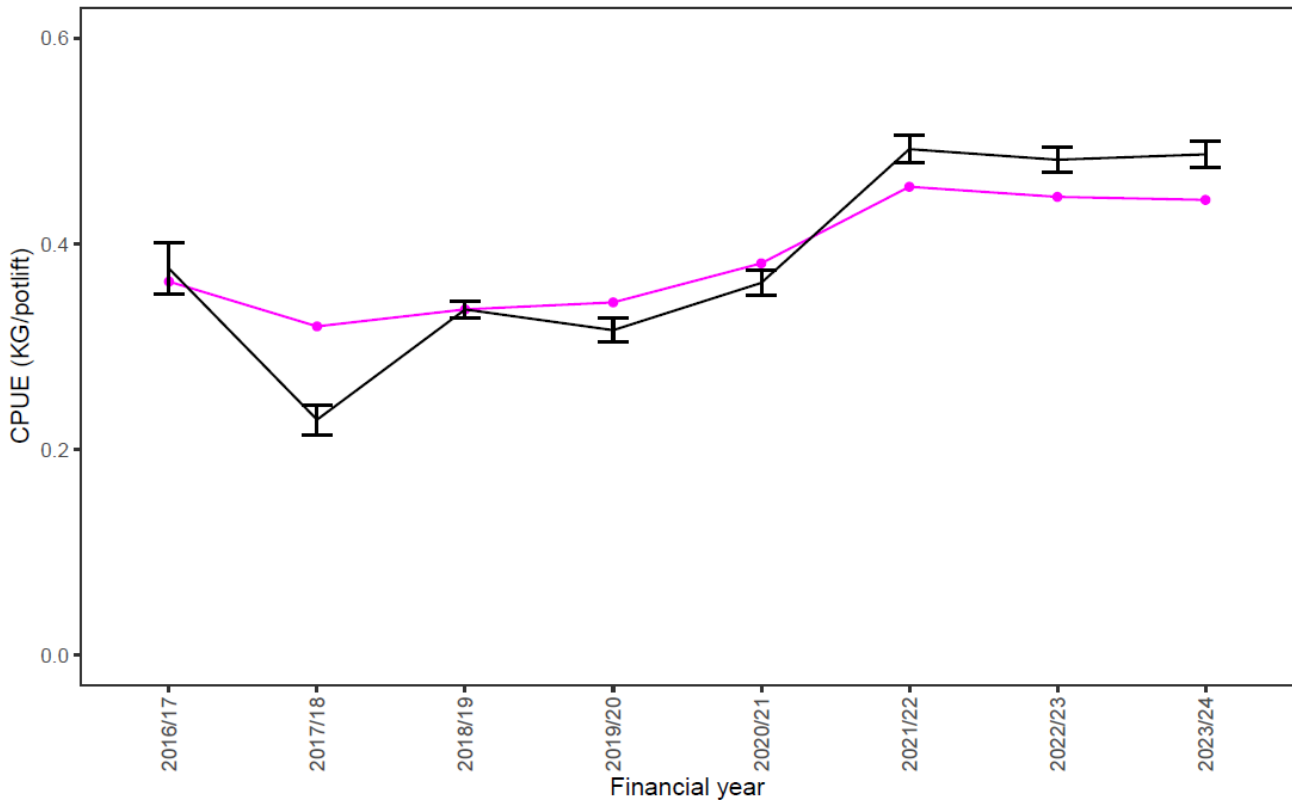


Figure 1: Trends in total octopus CPUE by the Octopus Fishery at fishery-wide scale. (The pink line represents standardised CPUE).

Spatial effort

When octopus catch rapidly increased in the Eastern Zone in 2015-16, it was initially focused on a small number of coastal grid cells near Lakes Entrance. Fishing effort over 2018-22 indicated that octopus catch by Ocean/Octopus Fishery licence holders was spreading out further across the zone. While fishing was still focused on the Lakes Entrance 'region' of the zone, catch was reported from approximately twice as many grid cells. In 2023-24 however, effort has retracted substantially to a small number of grid cells, which means there is an increased risk of serial depletion (Figure 3).

As noted earlier, pale octopus do not disperse far from their hatching site, therefore if populations become depleted and reproductive capacity is reduced, biomass is unlikely to recover quickly, even in relatively small areas. Optimising spatial spread of octopus catch across the eastern zone is therefore a key factor in avoiding localised or serial depletion within the zone. In turn, this maximises long term sustainable harvest.

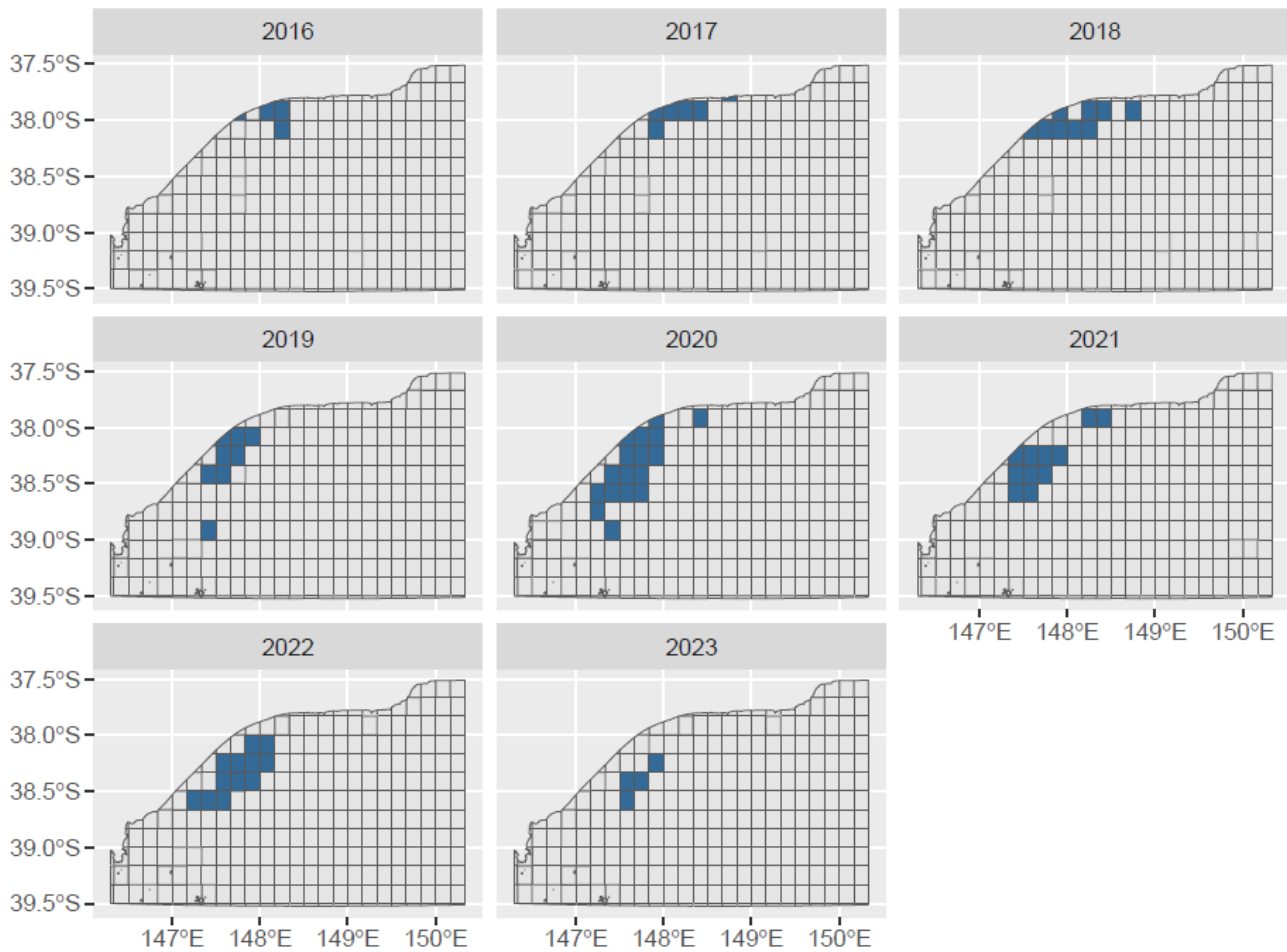


Figure 3: Spread of octopus fishing effort