

Fishery Management Plan for Razor Clams in Killary_Bofin_Turk CPA

This management plan was drafted by Oliver Tully (MI) following a meeting of vessel owners, who may participate in the fishery, and representatives from the NWRIFF and Bivalve working group in BIM on March 26th 2019

Attendees at the meeting

B Whelan WRiff/BiValve WG Chair /Vessel Owner,	O Tully Marine Institute
M O Malley WRiff/BiValve WG/Vessel Owner,	D Nee BIM
P Mulloy NWRiff/BiValve WG/Buyer,	P Murray SFPA
D Johnson NWRiff/BiValve WG	S Curran SFPA
C Quinn NWRiff/Vessel Owner	
J O Flaherty Vessel Owner	
V Kane Vessel Owner	
T Naughton Vessel Owner	
T Davis (Crew)	

Background

Razor clam (*Ensis magnus* and *Ensis siliqua*) beds in the approaches to Killary, Inisbofin and Inisturk (Co. Galway, Mayo) are included in a single microbiologically classified production area (CPA). Classification is pending completion of a sanitary survey by SFPA. Consistent with the protocols outlined by the Inshore Management Group (DAFM and Marine Agencies) the measures outlined below seek to manage the sustainable exploitation of the stock of razor clams in the CPA.

Area

Razor clams (*Ensis magnus*) occur off the south shore of Inisbofin in clean well sorted sand. The main stock (*Ensis magnus* and *Ensis siliqua*) in the approaches to Killary are on the north shore at the harbour entrance and west off this area in clean sand or compacted mixed sediments. A separate bed at Inisturk will be re-surveyed in 2019 to estimate biomass.

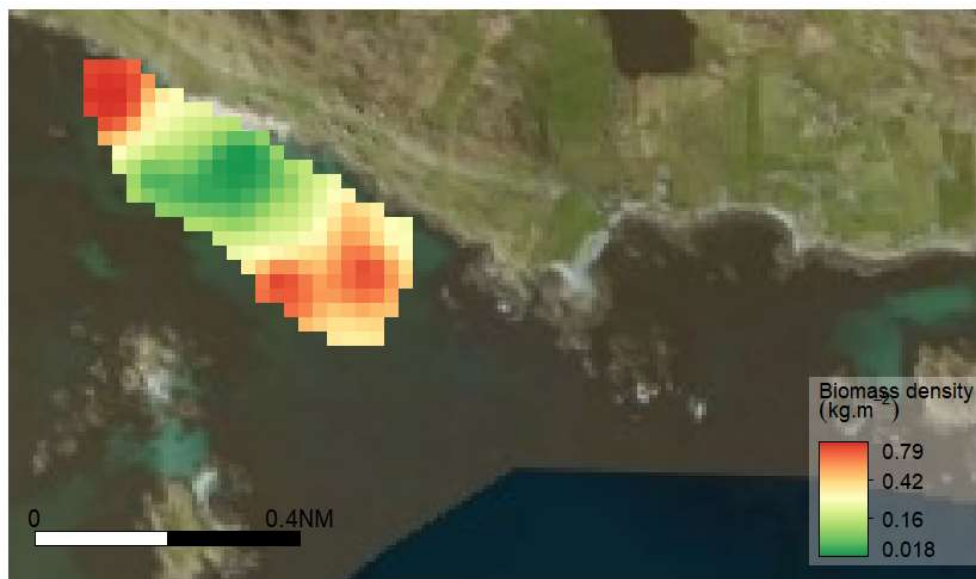


Figure 1. Distribution of razor clams at Inisbofin

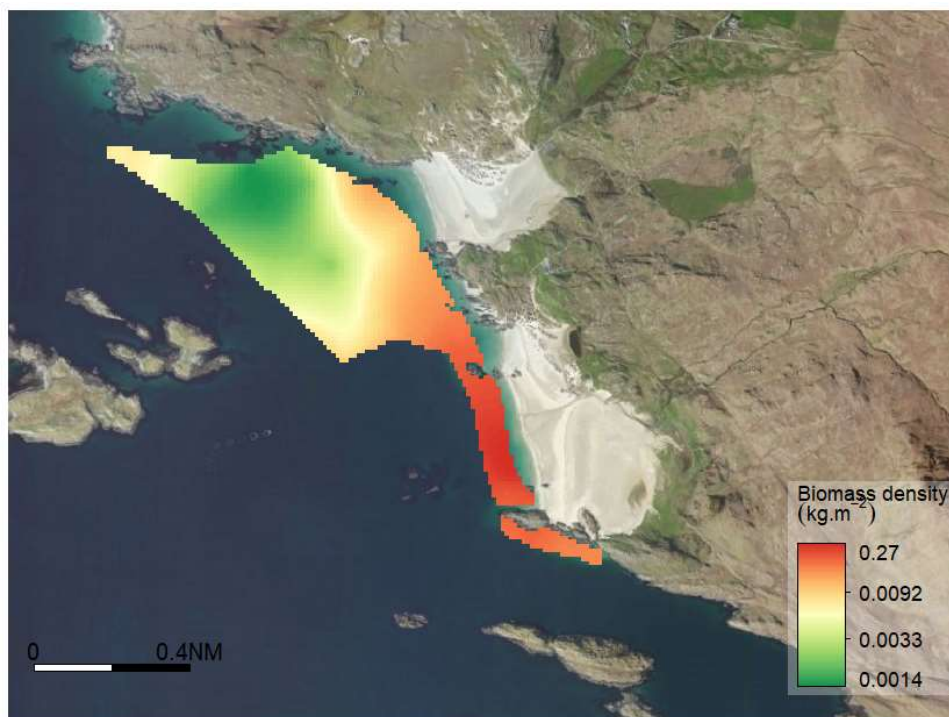


Figure 2. Distribution of razor clams at the approaches to Killary

Catch advice for 2019

Biomass of *Ensis magnus* at Inisbofin was estimated to be 73 tonnes in Sept 2016 and 105 tonnes in Aug 2018. There was no fishery between the surveys. TAC advice for 2019 is based on the 2018 survey and is **16 tonnes**.

Biomass of *Ensis magnus* at Killary was lower in 2018 at 24 tonnes compared to 46 tonnes in 2016. Biomass of *Ensis siliqua* increased from 60 tonnes in 2016 to 70 tonnes in 2018. TAC advice for both species is based on the 2018 surveys and is **4 tonnes** for *E. magnus* and **11 tonnes** for *E. siliqua* (Table 1).

The 2018 survey at Inisturk has not been assessed. A new survey in quarter two of 2019 is proposed.

Table 1. Biomass estimates from surveys in 2016 and 2018 at Inisbofin and Killary.

Year	Month	Species	Stock Unit	Survey Area (km ²)	Biomass (Tonnes)	
					Mean	95% CL
2016	September	<i>Ensis magnus</i>	Inisbofin	0.26	72.4	39.8
2016	September	<i>Ensis siliqua</i>	Inisbofin	0.26	0.3	0.3
2018	August	<i>Ensis magnus</i>	Inisbofin		105.0	67.0
2018	August	<i>Ensis siliqua</i>	Inisbofin			
2016	November	<i>Ensis magnus</i>	Killary Approaches	0.86	46.9	17.7
2016	November	<i>Ensis siliqua</i>	Killary Approaches	1.35	60.0	13.8
2018	August	<i>Ensis magnus</i>	Killary Approaches		24.0	38.0
2018	August	<i>Ensis siliqua</i>	Killary Approaches		70.0	

Risk factors

1. There are approximately 7 vessels in west Galway and Mayo that could access these stocks. Local voluntarily agreed management plans by local vessels have recently been implemented in Ballinakill and Clifden Bays. The risk of significant escalation in the number of participating boats is low although if 7 vessels fish the same area at the same time TACs could be overshoot and landings need to be monitored in near real time.
2. There are no Natura issues.
3. Although the TAC seeks to limit fishing mortality there is unaccounted for and unseen mortality due to the fishing process; mortality caused by the dredge. The use of catch rate as a second indicator of exploitation rate and the closure of the fishery after 3 weeks enable more control and response to unaccounted for mortality.
4. Dredge contact mortality may vary between vessels. This was the case in 2018 in other areas where landings for a given effort were unexpectedly low for some vessels suggesting inefficient use of the hydraulic gears. MI advise that weekly catch rates for all vessels be estimated. Any vessels, which appear as outliers relative to other vessels, would be identified. Observers would then be allocated to these vessels to assess breakage rates. A meeting of Skippers would follow to agree on management measures.

Measures

1. Biomass of both species (*E. magnus* and *E. siliqua*) combined, estimated from the surveys within the CPA, was 200 tonnes
2. Total Allowable Catch (tonnes) for the CPA for 2019 advised by the Marine Institute is 15% of biomass or **31 tonnes**. This is the combined TACs of **16 tonnes** for Inisbofin and **15 tonnes** at Killary. This proportion of biomass has been used to estimate the TAC for other new fisheries on the west coast and seems compatible with the productivity of the stock. However, future TACs may need to be adjusted in response to changes in size structure and recruitment. A new survey will be completed for Inisturk during May.

3. All vessels in the fishery will report position (using GPS trackers) all of the time irrespective of the activity of the vessel to presence and absence in the fishery (regulated)
4. A vessel will only fish for razor clams in one classified production area (CPA) per week and in the case of the Killary CPA will only fish one location (Killary, Inisbofin or Inisturk) in a given week
5. The minimum landing size will be 130mm shell length.
6. Hours of fishing will be from 07:00 to 19:00hrs Mon-Fri. If weather prevents fishing in week days fishing may occur on Sat and Sun with prior agreement of the SFPA.
7. Each vessel will fish with 1 dredge only. The dredge will not exceed 1m in width
8. Total landings for all vessels combined will not exceed 2 tonnes per week within any of the locations Killary, Inisbofin, Inisturk.
9. All operators will report landings data in the form of logbook or gatherers sheets to the SFPA within 48hrs of landing (regulated)
10. A Whats App group will be set up (Tom Davis allocated responsibility) for all vessel operators, SFPA staff at Rosaveal and MI. This app can be used on a daily basis to calculate landings from each site and to determine the TAC uptake each day. This can also combined with Logbooks/Gathers sheets inform MI/SFPA as to remaining balance.
11. Landings per unit effort will be estimated by the SFPA and MI and reported to the What's App group on a weekly basis
12. Sampling to maintain the microbiological classification (Razor samples), water samples for phytoplankton and Shellfish samples for BioToxins will be taken in consultation with SFPA (Bernard Whelan is the designated sampler).
13. The Fishery will close after 3 weeks (15 days at 5 per week) or when 50% of the TAC is taken whichever conditions arises first. During the closure an assessment of all data will be conducted to recommend a 2nd opening or not.
14. The Fishery will close from 7pm on 31st May 2019 until 7am on 15th July 2019. This is a conservation measure to allow remaining stock to Spawn.
15. There should be no discarding of Razors over 120mm.
16. The measures above so agreed by group on 26th March, where not already regulated for, will be implemented on a voluntary basis.
17. Where there is more than 1 buyer for the landings of this stock all buyers must report the volume of fish purchased to the SFPA.