

Fishery Management Plan for Ballinakill Bay Razor Clams in 2019

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 Molloy 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

Ballinakill Bay has been classification for the production of razor clams and a fishery operated in the Bay in 2018. 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 Bay for 2019.

Area

Ballinakill Bay is in west Galway. The Bay supports a number of fisheries including shrimp, lobster, crab and scallop. There is also significant aquaculture production of Pacific oysters and Atlantic salmon. A new Razor clam fishery was developed in 2018 with a TAC of 13 tonnes for *E. magnus* and 1 tonne for *E. siliqua*.

The area is not designated as a Natura 2000 site. There are nevertheless some patches of seagrass and maerl in the Bay.

The razor clam stock is distributed mainly along the north shore of the inner Bay with a smaller area on the south shore. The main species is *Ensis magnus* with lower densities of *Ensis siliqua* to the west of the area.

Catch advice for 2019

A survey of razor clams was undertaken in the Bay on Feb 26th 2019. Biomass of both species was approximately 50% of the biomass in 2018. Biomass of *E. magnus* in 2019 was 37 tonnes compared to 85 tonnes in 2018. Biomass of *E. siliqua* was 3 tonnes in 2019 compared to 5 tonnes in 2018. The total landings in 2018 was limited by TAC at 13 tonnes. The survey area was similar in both years. In 2019 some tows were also taken on the south shore west of the area fished in 2018. Densities of clams were low and this area has not been included in the 2019 assessment.

TAC advised for 2019 is **6 tonnes** for *E. magnus* and **0.5 tonnes** for *E. siliqua* based on a harvest rate of 15% of biomass.

Table 1. Biomass of *Ensis* in Ballinakill Bay in 2018 and 2019.

Year	Biomass (tonnes)		95% confidence intervals		TAC advice
	Mean	Median	Lower	Upper	Tonnes
2018					
<i>Ensis magnus</i>	85	84	56	309.1	13
<i>Ensis siliqua</i>	5	4.8	3	8	1
2019					
<i>Ensis magnus</i>	37	37	30	45	6
<i>Ensis siliqua</i>	3	5			0.5

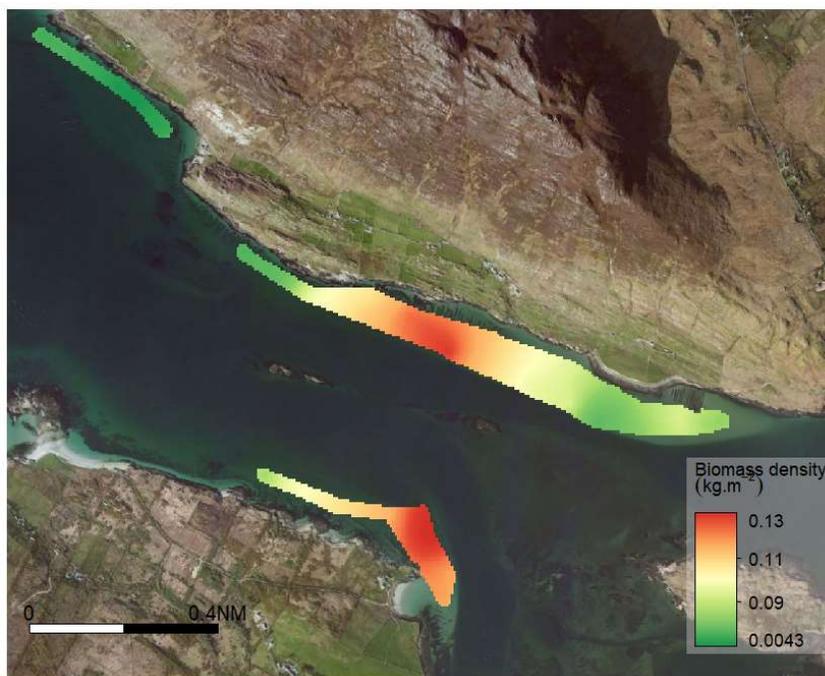


Figure 1. Densities of *Ensis magnus* in Ballinakill Bay in Feb 2019.

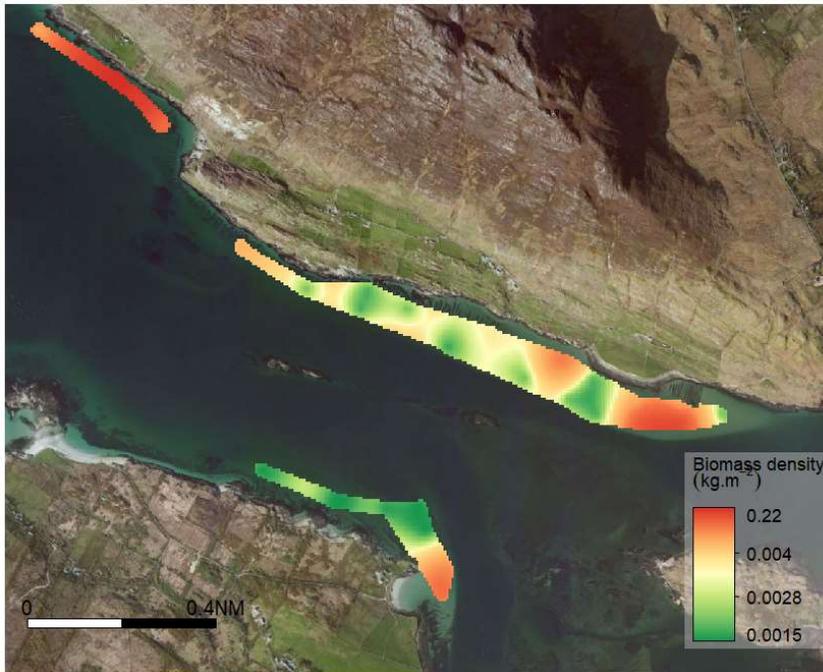


Figure 2. Densities of *Ensis siliqua* in Ballinakill Bay in Feb 2019.

Risk factors

1. There are approximately 6 vessels in the west Galway-Mayo area that could access the fishery in 2019. The TAC is insufficient to support 6 vessels however effort in 2019 may be distributed across a number of areas including Clifden Bay, Iniskea Is., Inisbofin, Killary and Inisturk pending completion of sanitary surveys for the Killary approaches CPA.
2. There are no Natura issues
3. The decline in biomass between 2018 and 2019 was significantly higher than the outtake in 2018 and indicates other sources of mortality on the stock. Unseen and unaccounted for mortality due to fishing (discarding, high grading, mortality due to the fishing gear) may have been significant. 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 estimated from the survey in 2019 was 37 tonnes
2. Total Allowable Catch (tonnes) for 2019 advised by the Marine Institute is 15% of biomass or **6.5 for 2019**. 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 and to fishing mortality due to dredging effects if this can be estimated.
3. All vessels in the fishery will report position (using GPS trackers) all of the time irrespective of the activity of the vessel (regulated)
4. The minimum landing size will be 120mm shell length
5. Hours of fishing will be from 07:00 to 19:00hrs Mon-Sat
6. Each vessel will fish with 1 dredge only. The dredge will not exceed 1m in width and will have a bar spacing not less than 10mm

7. Total landings for the fleet will not exceed 1300kgs per week (this measure has not been agreed but is consistent with the approach to managing outtakes in Ballinakill and Killary CPAs.
8. All operators will report landings data in the form of logbook or gatherers sheets to the SFPA within 48hrs of landing (regulated)
9. The SFPA and MI will collaborate to estimate landings and changes in landings per unit effort on a weekly basis when the fishery is open.
10. Landings per unit effort will be reported to the participating Skippers or representative during the fishery by the SFPA or Marine Institute. This secondary indicator could also be used to manage the fishery even when the TAC is not fully taken and in order to protect the economic viability of the fishery
11. Sampling to maintain the microbiological classification (razor samples), water samples for phytoplankton and shellfish samples for biotoxin will be taken by designated persons active in the fishery and in consultation with the SFPA (regulated)
12. Measures above, where not already legislated for, will be introduced on a voluntary basis