

## Fishery Management Plan for Clifden 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 26<sup>th</sup> 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

Clifden Bay is classified for the production of razor clams and a fishery has operated in the Bay for over 30 years. 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

Clifden Bay is in west Galway. The Bay supports a number of fisheries including shrimp, lobster and crab. Landings of razor clams has historically been approximately 25-30 tonnes per annum. Surveys were completed in 2016 and 2017 but not 2018. The most recent survey was in Feb 2019.

The area is not designated as a Natura 2000 site.

The razor clam stock (*Ensis magnus*) occurs in two areas; on the north and south shores of the inner Bay and east of Turbot Is in the outer Bay.

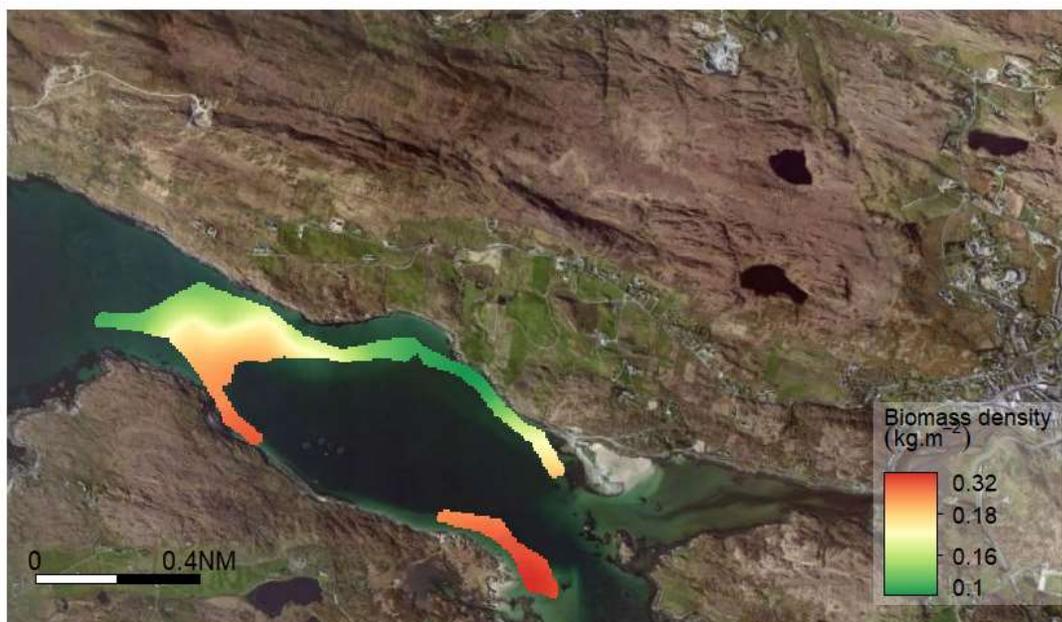
### Catch advice for 2019

Biomass of *Ensis magnus* in Clifden Bay declined annually between 2016 and 2019. Total biomass exceeded 300 tonnes in 2016 compared to 92 tonnes in 2019. TAC advice for 2019 is 14 tonnes based on a 15% harvest ratio.

**Table 1. Biomass and catch advice of *Ensis magnus* in Clifden Bay in 2016, 2017 and 2019.**

Year	Month	Stock Unit	Survey Area (km <sup>2</sup> )	Biomass	Catch advice (TAC)	
2016	April-May	Clifden Bay	0.45	230.6	14.5	50
2017	August	Clifden Bay	0.75	114.1	88.4	24
2018						

2019	Feb	Clifden Bay	0.38	70.0	28.0	11
2016	May	Turbot Island Clifden	0.07	63.9	6.9	
2017	August	Turbot Island Clifden	0.05	32.0		6
2018						
2019	Feb	Turbot Island Clifden	0.08	22.0		3



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



**Figure 2. Densities of *Ensis magnus* at Turbot Is outer Clifden 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 Ballinakill Bay, Iniskea Is., Inisbofin, Killary and Inisturk pending completion of sanitary surveys for the latter 3 areas.
2. The decline in biomass between 2016 and 2019 was significantly higher than the outtake in the intervening years and indicates other sources of mortality on the stock. Mortality due to dredging and inefficient dredging activity is thought, by industry, to have been a significant source of mortality. 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 92 tonnes
2. Total Allowable Catch (tonnes) for 2019 advised by the Marine Institute is 15% of biomass or **14 tonnes 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. Clifden has previously supported annual outtakes of 25-30 tonnes per annum for extended periods of time.
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 for razor clams 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 razor clam fleet in Clifden Bay will not exceed 1300kgs per week. This limit is to discourage all vessels from participating in the fishery at the same time
8. Vessels nominating to fish for razor clams in Clifden in a given week will not fish in another production area in the same week. This is to discourage all vessels from participating in the fishery at the same time
9. All operators will report landings data in the form of logbook or gatherers sheets to the SFPA within 48hrs of landing (regulated)
10. 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.
11. 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
12. 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)
13. Measures above, where not already legislated for, will be introduced on a voluntary basis

