

## Advice note to DAFM 1 of 2024 June 11<sup>th</sup> 2024

(Shellfish and Environment Team, FEAS. Oliver. tully@marine.ie)

**Subject: Dundalk cockle fishery** 

## Advice for 2024 fishery

Biomass of cockles in Dundalk Bay in late May 2024 was estimated from survey to be 1,472 tonnes. Biomass of commercial size cockles, over 22mm shell width, was 1,001 tonnes.

The 5 year Fishery Natura Plan (FNP) 2021-2025, for this fishery, specifies the annual total allowable catch (TAC) is set at 0 if biomass is less than 1,000 tonnes. At a biomass between 1,000-1,500 tonnes the TAC is set so that post fishery biomass is at least 1,000 tonnes and where biomass is >1,500 tonnes the TAC is 33% of biomass. The zero TAC at biomass <1,000 tonnes is to protect food sources for overwintering oystercatchers and to provide spawning stock for the following Autumn and Spring spawning seasons.

The survey biomass estimate in 2024 of 1,472 tonnes provides for a TAC of 472 tonnes in 2024.

All other conditions set out in the FNP 2021-2025 should apply to the 2024 fishery.

## Cockle biomass (May 2024)

The 2024 cockle and benthic survey in Dundalk Bay was undertaken in late May over an approximate survey area of 27 km². Biomass in 2024 was 1,472 tonnes which was significantly lower than in 2023 (2,603 tonnes) and the lowest since 2015. Recruitment has been low in the years 2019-2021 and in 2023-2024 although a spat fall was observed by fishermen during the 2023 fishery after the May survey had been completed. Significant recruitment, from an Autumn 2021 and to a lesser extent a Spring 2021 settlement, was detected in the 2022 survey. Given there was no fishery in 2022 growth of this cohort led to an increase in biomass in 2023 particularly over 22mm which increased by approximately 800 tonnes between 2022 and 2023. Fishing in 2023, in the absence of significant recruitment in 2023, has reduced the biomass in 2024 (Table 1).

The biomass in 2024 is similar to that in years 2011-2013. Fisheries occurred in those years with TACs of 400-500 tonnes. The landings were lower than the TAC in each year suggesting that the viability of taking the entire TAC at biomass around 1400 tonnes is low. This was followed by two years of closure before the biomass increased in 2016 as a result of new recruitment.

Table 1. Annual biomass and landings of cockle in Dundalk Bay 2007-2023

Year	Survey Month	Biomass		TAC	Landings	
		Mean	95% CL	(tonnes)	Vessels	Hand gatherers
2007	March	2277	172	950	668	Unknown
2008	August	3588	1905	0	0	0
2009	June	2158	721	719	108	0.28
2010	May	814	314	0	0	0
2011	May	1531	94	510	325	0.25

2012	May	1234	87	400	394	9.40
2013	June	1260	99	416	343	0
2014	June	972	188	0	0	0
2015	June	1032	100	0	0	0
2016	July	1878	87	616	410	0
2017	May	2316	95	772	772	0
2018	June	1644	257	542	446	0
2019	July	3789		600	595	0
2020	June	3420	870	1128	1150	0
2021	May	1926	537	642	638	0
2022	May	1826	360	608	0	0
2023	May	2603	578	867	867	0
2024	May	1500	397	500	-	-