

Advice note to DAFM

1 of 2023

June 9th 2023

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

Subject: Dundalk cockle fishery

Advice for 2023 fishery

Biomass of cockles in Dundalk Bay in late May 2023 was estimated from survey to be 2603 tonnes. Biomass of commercial size cockles, over 22mm shell width, was 1930 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 2023 of 2603 tonnes provides for a **TAC of 867 tonnes in 2023**.

All other conditions set out in the FNP 2021-2025 should apply to the 2023 fishery.

Cockle biomass (May 2023)

The 2023 cockle and benthic survey in Dundalk Bay was undertaken in late May over an approximate survey area of 27 km². Biomass in 2023 (2,603 tonnes) was higher than in 2022 or 2021 (<2000 tonnes) but lower than in 2020 (3420 tonnes) and 2019 (3789 tonnes). Recruitment was weak in the years 2019-2020 compared to 2018 and as a consequence fisheries in 2019-2021 fished down the biomass which recruited mainly in 2018. 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 1000 tonnes between 2022 and 2023 (Table 1).

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

Year	Survey Month	Biomass		TAC (tonnes)	Landings	
		Mean	95% CL		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	-	-