## **Brown Crab Fishery**

The brown crab (*Cancer pagurus*) fishery is active year-round using creels to target crabs in inshore waters. Landings from the fishery come from both a targeted brown crab fishery and as part of a mixed fishery with velvet crabs and lobsters. In addition to licensing there is regulation of the fishery via a limitation on creel numbers.

Since 2000, the SSMO recorded landings for brown crab have fluctuated with a low of around 200 tonnes in 2002 and 2003, and a peak of 600 tonnes in 2014 (Figure 1). After this, landings dropped to around 300 tonnes in 2016 and have stabilised at around 320 tonnes in recent years. Similar trends have been seen in effort data but the scale of change has differed, especially in 2014 compared to 2000 where landings doubled but not effort. Landings per unit effort (LPUE), a key metric for fisheries management, has been relatively stable since 2015 with a slow increase to a peak of 1.24 kg/creel in 2018. This has been followed by a sharp drop to below 1 kg/creel in 2019, the first such decrease since 2012 (Figure 1). Although LPUE appears to increase in 2020, it later declines in 2021 (0.80kg/creel) and 2022 to 0.75kg/creel, dropping below the average (0.87kg/creel) in 2022. However, this is not out with the range of historical fluctuations.

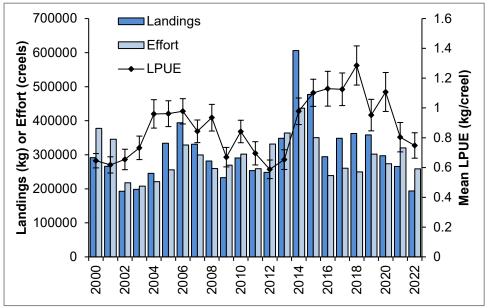


Figure 1 Total brown crab landings (kg), total numbers of creels and the average LPUE obtained from SSMO logbook data with 95% confidence intervals shown.

There is a strong geographical trend in brown crab LPUE, with the highest LPUE observed to the north and west of the Isles where most of the targeted fishery occurs (Figures 2 - 4) and is not observed to fluctuate annually. Lower LPUE is recorded in the south and east with this attributed to incidental bycatch in the velvet crab fishery.

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						K07	L07	M07	N07	P07	Q07	R07							K07	L07	M07	N07	-P07	Q07	R07							K07	L07	M07	N07	P07	Q07	R07
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.2°N 3	E16	F16	G16	H16	116	K155	L 16W 16	E. M16	N16	P16	Q16	R16	60.2°N 3	E16	F16	G16	H16	J16	K16	L 16W2 16E	M16	N16	P16	Q16	R16	- 60.2°N 3	E16	F16	G16	H16	116	K16 1	16W/16E	, M16	N16	P16	Q16	R10
,	E17	F17	G17	HTZ	J17	K17	L 17W 17	E M17	N17	P17	Q17	R17	7	E17	F17	G17	HTZ	J17	K17	L 17W 17E	M17	N17	P17	Q17	R17	7	E17	F17	G17	HYZ	J17	K17	17W176	M17	N17	P17	Q17	R1
3	E18	F18	G18	H18	J18	K18	L 18W 18	E M18	N18	P18	Q18		3	E18	F18	G18	H18	J18	K18	L 18W/ 16E	M18	N18	P18	Q18		3	E18	F18	G18	H18	J18	K18	18W/18E	M18	N18	P18	Q18	
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Figure 2 Geographic distribution of brown crab landings per SSMO statistical square in 2022. Figure 3 Geographic distribution of brown crab effort per SSMO statistical square in 2022. Figure 4 Geographic distribution of brown crab LPUE per SSMO statistical square in 2022.

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