## **Green Crab Fishery**

The green crab (*Carcinus maenas*) fishery is characterized by its sporadic nature, often occurring as incidental bycatch in the velvet crab (*N. puber*) fishery. Both landings and effort exhibit fluctuations (Figure 1), with peak landings recorded in 2002, followed by a decline until 2008, after which landings stabilized at around 20 tonnes annually. Subsequently, there was a decline in landings to 1.7 tonnes in 2017, with figures remaining relatively stable from 2018 to 2021. Market conditions and the availability of other species likely influence these fluctuations.

LPUE has shown a steady trend around 0.2-0.3 kg/creel since 2011, although there was a drop to 0.1 kg/creel in 2017. Interpretation of LPUE is challenging due to the opportunistic nature of the fishery. Despite the widespread occurrence of this species, it is unlikely that the fishery has a significant negative impact on the population. However, the data does serve as an indicator of annual changes. Moreover, irregular reporting and resulting low confidence in data consistency currently impede analytical analyses for the green crab fishery.

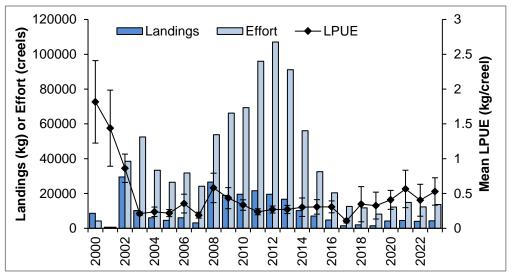


Figure 1 Total green crab landings (kg), total numbers of creels, and the average LPUE obtained from SSMO logbook data with 95% confidence intervals shown.

Reported landings of green crabs are sporadic with high values east of Yell and around Bressay and west of Scalloway (Figures 2-4). However, due to its widespread distribution, this is not deemed an accurate representation of its overlap with the fishery

## U'HI SHETLAND

		г		K07	L07	M07	N07 -	P07	Q07	R				r		K07	L07	M07	N07	-P07	Q07	R						K07	L07	M07	N07-	P07	QC
			J08	K08	L08	мов	N08	P08	008	R					J08	K08	L08	MO8	N08	P08	008	R					J08	K08	L08	M08	N08	P08	Q
		H09	J09	K09	L09	M09	N09	P09	Q09	R( 60.8°N				H09	J09	K09	L09	M09	, No9	P09	Q09	R( 60.8°N				H09	109	K09	L09	M09	N09	P09	Q
	G10	H10	J10	K10	L10	M10	N10	P10	910	R			G10	H10	J10	К10	L10	Mio	N10	P10	910	R'			G10	H10	J10	К10	L10	M10	N10	P10	9
	G11	ни	J11	K11		M11	N11	P11	Q11	R <sup>.</sup> 60.6°N			G11	ни	J11	K11	ÅL11 ∮	(M11)	N14~	R11	Q11	R' 60.6°N		-	G11	ни	J11	к11	L11	_M11	N11	ूम् <u>1</u> 1	G
F12	G12	H12	J12	б К12	L12	M12	N12	P12	912	R.		F12	G12	H12	J12	К12 Д	L12	M12	N12	P12	912	R'		F12	G12	H12	J12 \	К12	L12	M12	N12	P12	9
E13 F13	613	Н13	J13 2	K13	L13	M13	N13 _	P13	Q13	R	E13	F13	<b>G1</b> 3	Н13	J13 K	K13	13	M13	N13	P13	Q13	R'	E13	F13	613	H13	J13	K13	L13	M13	N13	P13	c
E14 F14	G14	.* H14	J14	K14 L	14W/14E	M14	NV14	P14	Q14	60.4°N	1 E14	F14	G14	.∞ H14	J14	K14 L	14W/14E	M14	NA4	P14	Q14	60.4°N	E14	F14	G14	.* H14	J14	K14 I	L14WL14E	M14	Nt4	P14	c
E15 F15	G15	 H15ζ	J15	К15N	_15W/15E	M15	N15	P15	Q15	R	5 E15	F15	G15	- Н15 ζ	J15		.15W/15E	M15	N15	P15	Q15	R′ 5	E15	F15	G15	√∑ H15 ζ	J15	K15N	1. 1.15W215E	M15	N15	P15	/.
E16 F16	G16	H16	~	K15S K16 I	16W 16E	M16	N16	P16	Q16	R <sup>-</sup> 60.2°N	3 E16	F16	G16	H16	1	K15S K16 L	16W 16E	M16	N16	P16	Q16	R′ 60.2°N 3	E16	F16	G16	H16	- <b>J</b> ÎĜ	K15S	L16W16E	M16	N16	P16	c
E17 F17	G17	HHZ	J17	K17	17W17E	M17	N17	P17	Q17	R	7 (E17	F17	G17	HNZ	J17	K17	17W17E	M17	N17	P17	Q17	R' 7	E17	F17	G17	HYZ	J17	K17	L17W17E	M17	N17	P17	c
E18 F18	G18	H18	J18	K18	181/18	M18	N78	P18	Q18		3 E18	F18	G18	H18	J18	K18	18W/18E	M18	N18	P18	Q18	3	E18	F18	G18	H18	J18	K18	18W/18E	M18	N#8	P18	c
E19 F19	G19	H19	J19	K19L	9W219E	M19	N19	P19	Q19	60.0°N	€19	F19	G19	H19	J19	K19L)	9W19E	M19	N19	P19	Q19	60.0°N —	E19	F19	G19	H19	J1/9	K19L	39W/19E	M19	N19	P19	c
E20 F20	G20	H20	J20	K20		м20	N20	P20			E20	F20	G20	H20	J20	K20	¥20	м20	N20	P20		_	E20	F20	G20	H20	J20	К20	220	M20	N20	P20	
	G21	H21	J21	K21	L21	M21	N21	Green Landi	2023 ings (kg	— 59.8°N			G21	H21	J21	K21	L21	M121	N21	Green 2 Effort (	2023 (creel)	59.8°N			G21	H21	J21	К21	L21	M121		ireen 20 LPUE (I	
	G22	H22	J22	K22	L22	M22		0	- 59				G22	H22	J22	K22	L22	M22	[	0	- 239			-	G22	H22	J22	К22	L22	M22		0	5 - 0
F23	G23	H23	J23	K23	L23	M23			0 - 179	— 59.6"N		F23	G23	H23	J23	к23	L23	M23			0 - 539	59.6°N		F23	G23	H23	J23	К23	L23	M23		0.17	
F24	G24	H24	324	к24	L24		1		80 - 390 90 <b>-</b> 555			F24	G24	H24	324	К24	L24				0 - 1229 30 - 1679			F24	G24	H24	<b>A</b> 24	К24	L24			0.43	
F25	G25	H25	J25	K25	L25				56 - 1094 <sub>0.5</sub>			F25	G25	H25	J25	K25	L25	1.0			80 - 6273	3		F25	G25	H25	J25	K25	L25	1.0		1.06	6 - 4

crab landings per SSMO stat square in 2023.

Figure 3 Geographic distribution of green crab effort per SSMO stat square in 2023.

crab LPUE per SSMO stat square in 2023.

Copyright © Shetland UHI 2024. All rights reserved. Shetland UHI, a limited company registered in Scotland, Number SC646337 Registered Scottish Charity Number SC050701