



COMMERCE AND EMPLOYMENT

A STATES OF GUERNSEY GOVERNMENT DEPARTMENT



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Sea Fisheries Section

Annual Report

2013



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1 Summary

1.1 Background

Landings data presented in the following report have been collated from logsheets submitted by all licenced Bailiwick fishermen. The requirement for logbook returns was introduced by the Sea Fisheries Section in 2004 and applies to all licensed fishermen, whether the annual landing is one box of mackerel or hundreds of tonnes of different species. The majority of the local Over 10m vessels now submit their logsheets to the Marine Management Organisation (MMO) directly via an e-log system. In these cases, the Section obtains catch records from the MMO.

The Section has produced a more comprehensive report for 2013 and included an insight to all aspects of Sea Fisheries' work, ranging from the implementation of the new licensing laws to an overview of the local aquaculture industry.

1.2 Executive Summary

On 1st February 2013 the Sea Fish Licensing (Bailiwick of Guernsey) Law, 2012, came into force bringing in commercial fishing vessel licensing within the Bailiwick's 12nm limit. This legislation ensures that fish stocks which are abundant within Bailiwick waters are not over-exploited and that the Bailiwick fishing fleets are given the protection that they need to continue to fish in a sustainable and profitable manner. In February the Commerce and Employment Department (C&E) also agreed, subject to consultation and impact assessment, that controls be introduced to limit the amount of scallop dredges which can be towed within inshore waters and also the introduction of a prohibition on Pair Trawling within the 0-6nm limit of Bailiwick waters.

The Department introduced a "Fisherman's Young Entrants Scheme" throughout the Bailiwick, allowing young people with a desire to start a career in fishing to be able to do so without the burden (in the short term) of purchasing a fishing vessel licence. Licences to fish can cost a significant amount of money and this can be a prohibiting factor for many people wishing to take up a career in fishing. The scheme was launched whereby young fishermen throughout the Bailiwick who have experience of working on a vessel and have completed the required regulatory training can apply for a "loan" licence to fish with their vessel for a period of three years. So far the Commerce and Employment Board have considered two applications to issue licences to two Guernsey based fishermen wishing to start a career in fishing with their own vessel.

Moving ahead into 2014, the Section will continue its core objectives in accordance with the Commerce and Employment Business Plan 2014 and will commence a review of the Fishing Ordinance 1997 (see Section 2.4) legislation which ensures that fishing and shore gathering activities within the 0-3nm area are carried out in a sustainable and responsible manner.

Chris Morris
Senior Sea Fisheries Officer

2 The Year in Brief

2.1 New Licensing Laws

On 1st February 2013 the Sea Fish Licensing (Bailiwick of Guernsey) Law, 2012, came into force which requires that all vessels fishing commercially within Bailiwick waters (0-12nm) hold a Bailiwick of Guernsey fishing licence. This law essentially gives the Bailiwick more control on how to effectively and sustainably manage Bailiwick fish stocks by restricting the number of vessels permitted to fish in our waters, as well as being able to apply various technical controls to restrict fishing methods.

Vessels already issued with a Bailiwick of Guernsey licence under the Sea Fishing Licensing (2003) Ordinance for 0-3 nautical miles automatically received a 0-12nm licence. However owners of non-GU vessels not in possession of a Guernsey licence had to submit verifiable evidence of fishing within Bailiwick 3-12nm waters within a defined 'track record' period (15th May 2007 to 15th May 2010) before they could be considered for a Bailiwick licence. Subject to approval of the application, the Section was able to implement specific licence conditions according to the track record of each individual vessel, allowing vessels to be subject to different technical controls (e.g. limiting the number of scallop dredges permitted to be used) in order to most effectively manage and protect local stocks. The technical controls formed part of the Fisheries Management Agreement (FMA) negotiations with the Department for Environment, Food and Rural Affairs (DEFRA).

This legislation has been supported by the States of Alderney General Services Committee and the Sark Chief Pleas Sea Fisheries Committee, and is welcomed and backed by the fishing industries in Alderney, Guernsey and Sark. The Commerce and Employment Department now manages a portfolio of around 195 Bailiwick Fishing Vessel Licences (and entitlements) which have a combined value of approximately £4m.

2.2 Out and About



Fig 1 – the Section performing a routine boarding of a trawler in the Sark Box

The Section continued to have a presence both on and around the local coast, as well as further afield. Shore patrols were conducted with the aim of identifying any illegally-set inshore fishing gear. All bays and marinas were checked regularly to ensure that vessels displaying a GU registration number hold a valid Bailiwick fishing licence.

Sea-based patrols are conducted using the Fisheries Protection Vessel (FPV) *Leopardess*. Routine boardings are regularly conducted on local, Jersey, UK and French-registered fishing vessels in order to ensure that the fishing gear being used is compliant with local and EU

legislation, that catches are being recorded properly, and that vessels are only fishing in areas where they are permitted. Inshore patrols are conducted using *Puma*, a RIB launched off the stern of the *Leopardess*. This allows access to inshore areas where the *Leopardess* cannot safely

operate and means that the bays and cliffs can be checked for improperly set fishing gear without putting the *Leopardess* in danger.

2.3 *Leopardess* Replacement

The *Leopardess* is not only used by the Section but by various other States of Guernsey government departments including the police and the renewable energy team, as well as non-governmental organisations such as Guernsey Electricity Ltd. She also carries out fisheries work with the UK Marine Management Organisation (MMO) and both *Leopardess* and her crew form part of Guernsey's Search and Rescue (SAR) assets. Although *Leopardess* continues to give excellent service to the Bailiwick, she is now 17 years old and the maintenance costs and operational and financial risks associated with running a vessel approaching the end of her working life of 20 years have risen considerably.

The Section has therefore applied for inclusion in the States Capital Investment Portfolio (SCIP) in order to be allocated funds for a replacement Fisheries Protection Vessel (FPV), with the hope that a replacement vessel will be commissioned and on-station by mid-2016.

2.4 Inshore Fisheries Consultation

Towards the latter stages of 2013 and the beginning of 2014, the Section researched and produced a consultation document to seek the public opinion and invoke discussion about the future of inshore (0-3nm) fisheries management. This consultation looks at all aspects of the inshore sector (both commercial and recreational), with topics ranging from netting to ormering. The paper is available to read and submit responses between 1st September and 1st December this year (2014). The easiest way to read the paper and submit your opinion is online via surveymonkey:

www.surveymonkey.net/s/fisheries-consultation

As part of the consultation, a separate study was undertaken to try and quantify the contribution of recreational angling to the local economy, as well as the social values and environmental impacts of the sport. It was decided to conduct the study as inshore netting and recreational angling are two known 'conflict areas' locally, so any potential changes brought about through the consultation process would need to be based on as much evidence as possible.

It was found that there is an average of 1,100 people practicing recreational angling. This figure includes all aspects of angling, from shore to boat and from the seasoned professional to the occasional part-timer. The local angling sector contributes between an estimated £900,800 and £1.067m to the local economy each year. This figure was larger than expected, mainly due to the fact that the participation rate was much higher than previously thought. As a direct result of this higher participation rate, it was also found that the environmental impacts were greater. The quoted figures account purely for locally-based anglers, and do not take into consideration any angling tourism. The full write-up can be found in the Annexe at the end of this report.

2.5 Sea Temperature

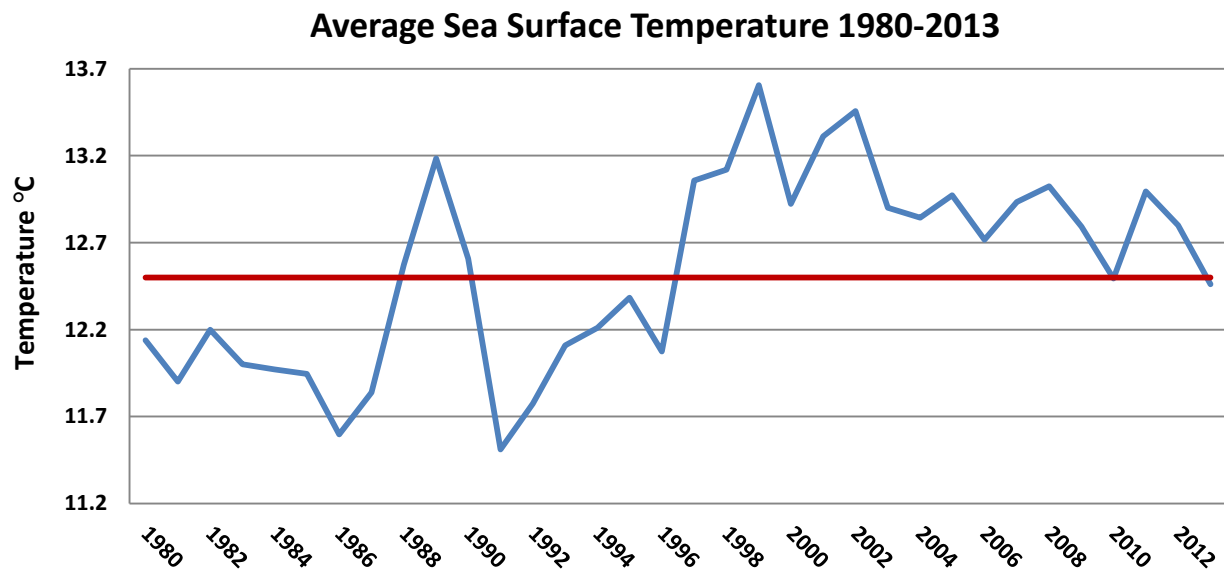


Fig 2 - average sea surface temperature from 1980-2013.

The average sea surface temperature (SST) for 2013 was 12.46°C, 0.3 degrees cooler than 2012 and marked the third consecutive year of cooling. 2013 was also a fraction cooler than the 33-year average of 12.5°C (see the red line in *Fig 2* above). This is due to the poor conditions that persisted from January through to June – visible in *Fig 3* (below) where we see that the curve for 2013 is below that of the average until August. The cold winter and spring gave way to the warmest summer since 2006, which itself was followed by a mainly mild autumn. This is reflected in *Fig 3* where the curve for 2013 remains above the average from August through to November.

Due to the huge volume being heated/ cooled and the high specific heat capacity of water (the amount of energy required to heat 1 kilogram of water by 1°C) SST experiences a lag time in response to heating and cooling. This is noticeable in *Fig 3* where, despite the warm weather arriving in June, it takes until early July for there to be a noticeable increase in temperature. Although wet and windy, air temperatures for the winter of 2013 were comparatively mild and the SST reflects this by being predominantly on or above the average temperature.

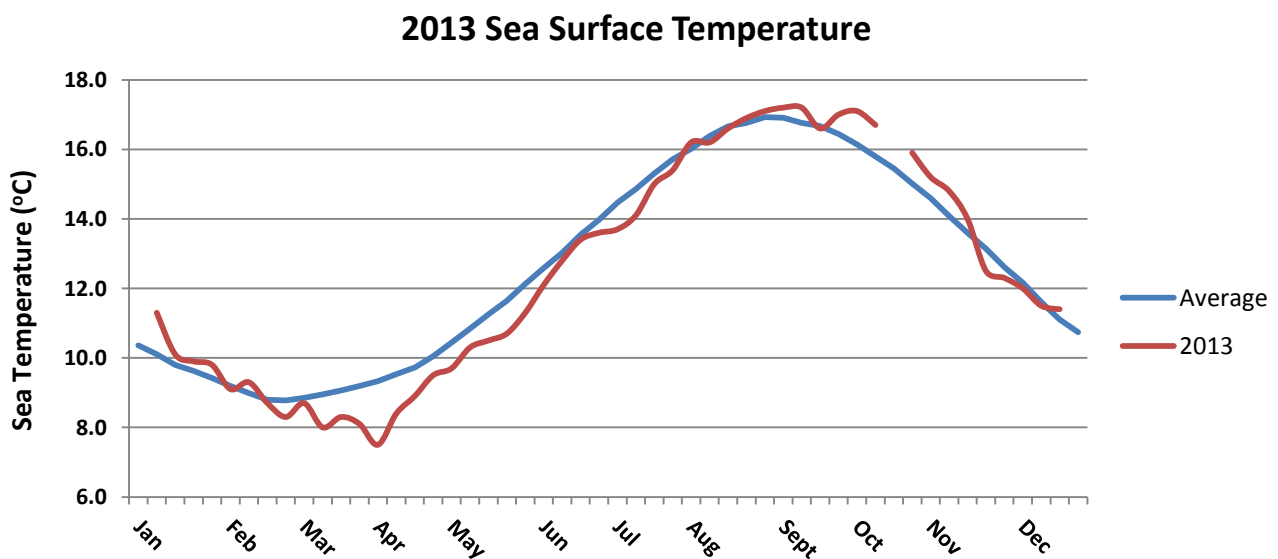


Fig 3 - comparison of 2013 SST and the 33-year average. SST readings are taken weekly at Havelet slipway and Number 6 berth in St. Peter Port harbour.

3 Aquaculture

3.1 Aquaculture Sites

There are a total of nine licenced aquaculture sites in the Bailiwick – eight on Guernsey and one on Herm – which are used to cultivate oysters and, to a lesser extent, mussels. The stock (or ‘seed’) is then either sold on to larger aquaculture sites overseas where it is grown to maturity or sold directly to suppliers once the seed has reached maturity locally (which takes approximately 3-4 years for oysters). The exception to this is the site at Houmet Paradis which is used by Guernsey Sea Farms as a holding ground for their breeding stock.



Fig 4 - upturned and damaged oyster tables at Torquetil (L'Eree) after the winter storms. All damaged tables have subsequently been removed or repaired.

Both oysters and mussels are stored in mesh bags, called ‘poches’, containing around 400 individuals (this number varies depending on the size of the seed). Poches are made with different mesh sizes, with each mesh size suitable for a particular size of seed. The pochés are strapped to trestles which are laid along the low water mark. Oysters and mussels both feed by filtering nutrients from water, thus a reduction in water flow through the poche means a reduction of available nutrients. With a reduction in nutrient availability comes a reduction in the growth rate of the

seed, increasing the amount of time taken to reach maturity. Turning the pochés prevents weed accumulating on the poche and hence maintains water (and nutrient) flow through the poche, maintaining higher growth rates.

Due to their location the tables are susceptible to damage by rough weather (as shown in *Fig. 4*). The Section performs regular inspections of the aquaculture sites to ensure that they are not left in a dangerous condition, with any required rectifications being undertaken by the relevant site licence holder.

3.2 OIE Results

Every year a sample of oysters from each active aquaculture site is sent to the laboratories at Cefas (Centre for Environment, Fisheries and Aquaculture Science) for the purpose of disease screening. This screening is designed to limit the spread of disease between aquaculture sites and a clean bill of health is necessary to enable local aquaculture farmers to export their produce to sites in the UK, Europe and further afield. This year a total of 30 oysters were sent from six of the aquaculture sites as well as oyster larvae from Guernsey Sea Farms.

The oysters and larvae were tested for ostreid herpesvirus-1 (OsHV-1) and other diseases which are stipulated by the OIE (Office International des Epizooties). All of the tests performed on the local oysters and larvae came back negative, showing that the local aquaculture sites continue to be in good health. This is particularly good news in light of the disease and mortality being experienced in aquaculture sites on the French Atlantic coast and even as close as Jersey.



Fig 5 - oyster tables on Fisherman's Beach, Herm.

3.3 Ormering

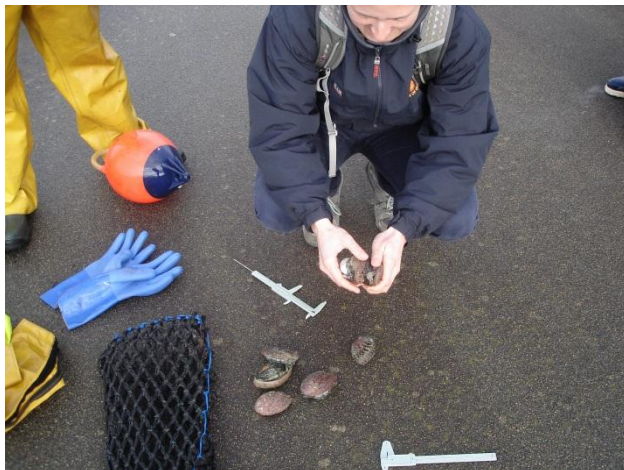


Fig 6 – checking for undersized ormers.

As with previous years, the Section was on patrol on each of the permitted ormering tides in 2013. The purpose of the patrols is threefold – to act as a deterrent to any persons who would otherwise be tempted to take undersized ormers, to enforce the legislation and to interact with the public. Public interaction is vital in order to gain feedback on stock levels and first-hand opinions about comparisons to previous years' yields.

The 2013 ormering season featured particularly low spring tides, revealing much more of the foreshore. As a result of this, catches for those people questioned by the

Section appeared good with plenty of undersize ormers reported around the coast – a positive sign for seasons to come. The public reported a particularly good season in comparison to previous years. Participation was also seen to be high, particularly on the first couple of tides at Lihou. There were no reports of people retaining undersized ormers and consequently no cautions were issued by the Section.

4 The Fleet

Vessel Category	Number of vessels 2008	Number of vessels 2009	Number of vessels 2010	Number of vessels 2011	Number of vessels 2012	Number of vessels 2013
GU registered <10m	175	175	171	160	158	159
GU registered >10m	12	11	8	8	8	7

Table 1 - the Bailiwick of Guernsey licenced fleet 2008-2013

4.1 Local Vessels: 10m and Under



Fig 7 - *La Roux* GU 139 pictured at Cobo on a still morning.

This sector continues to be the backbone of the local fleet with 159 registered and licensed vessels. Although in terms of overall numbers of licensed vessels this sector appears to have remained stable since 2011 there are, on average, 10-15 boats each year which either change ownership, are sold overseas or are new vessels brought in from overseas. Over 25% of the registered 10m and Under fleet did not fish commercially during 2013 (based on logsheet returns).

Harbour regulations require that a suite of five safety courses (1st Aid, Fire Fighting, Sea Survival, Stability and Safety Awareness) must be completed by anyone wishing to work on a fishing vessel before it can be registered. This has inevitably led to a number of the smaller, part-time vessels deregistering due to the extra expense, time and hassle required to complete the courses.

4.2 Local Vessels: Over 10m

2013 saw the arrival of two new Over 10m vessels – the 12.47m trawler *Gina Louise* GU 110 from Brixham and the 10.79m vivier crabber *Lady Helen-S* GU 33 from Jersey (working out of Alderney). This brings the Over 10m fleet to 7 vessels, consisting of three trawlers (practicing both demersal and beam trawling) and four potters. The introduction of the new licensing laws has meant that non-GU vessels not holding a Bailiwick licence are not permitted to fish inside Bailiwick waters, benefitting the local trawling fleet.



Fig 8 - the vivier crabber *Peadar Marie* GU 199

4.3 Non-GU Vessels

There are a total of 30 non-GU registered vessels holding a Bailiwick of Guernsey licence, from both the UK and Jersey, comprising of 21 boats over 10 metres in length and nine boats 10 metres and under. However of these 30 licenced boats only seven actively were fishing commercially in Bailiwick waters during 2013 (five under 10m vessels and two over 10m) which constitutes a large reduction in effort compared to the years pre-licensing. The most notable decreases brought about by the new licensing laws are in trawling and scallop dredging effort.



Fig 9 - the 27.55m *Jordan A* BM 225 is a Brixham-registered scallop dredger with a Bailiwick licence. Such vessels are still subject to the number of dredges that can be towed if working within Bailiwick waters.

5 Landings

5.1 Summary

All landings data are compiled from logsheet returns, which are now a licence requirement for all Bailiwick licenced fishing vessels.

Species	Annual Landings (tonnes)							Average value / kg (2010 prices)
	2013	2012	2011	2010	2009	2008	2007	
Anglerfish	1.9	1.3	1.1	1.1	1.1	3.3	2	7
Bass	27.6	44.4	74	120	94.2	123.2	142	7
Black Bream	13.7	12.7	13.9	34	91.5	55	212.5	2
Brill	6.8	7.9	10.2	7.4	7.4	10.3	8.7	8
Cod	1.7	3	3.4	2.7	0.9	2.2	1.9	4
Conger	8.8	10.1	8.7	12	31	38.6	38.2	1.5
Crayfish	0.6	0.2	0.3	0.4	0.5	0.7	0.4	25
Cuttlefish	1.6	1.7	1.4	0.2	0.4	2	0.7	2
Dogfish	16.2	15.3	18	9	23.5	16	10.4	1
Edible Crab	784.2	785.6	692.7	759	622	802	933	1.3
Grey mullet	1.7	2.6	5.5	4.9	5.3	1.8	1.2	1
John Dory	0.2	0.1	0.1	0.2	0.6	0.4	0.3	7
Lobster (number)	98.6 (139,654)	102.3 (146, 429)	101.5 (147, 204)	79 (105, 532)	66.5 (58, 881)	67.2 (no data)	71.5 (no data)	12
Ling	2.0	2	2.6	1.8	1.8	1.6	4.1	3
Mackerel	9.3	5.3	5.4	7.4	9.7	6.5	6.5	1
Plaice	1.4	1.3	1.8	1	0.9	1.6	1.5	5
Pollack	64.5	82.4	85.8	59.8	68.2	52	47.9	4
Ray	110.2	136.5	158.8	112	105. 8	149.8	72.8	4
Red mullet	4.7	6	4.8	5.2	4.3	8.3	8.2	6
Sand Sole	0.7	0.4	1.1	0.9	1.4	1.5	1	4
Sandeel	26.4	55.6	48.3	56.8	51.7	46	60	-
King Scallop	102.6	95.7	108.2	118	89.6	102	108	4
Smoothhound	6.6	4.4	3.5	2	16.7	19.8	23.1	2.5
Sole	4.0	2.3	4	3.1	3.2	6	3.6	12
Spider Crab	34.9	40.7	40.1	69	77.8	86.3	59	1.2
Squid	0.3	0.2	0.2	0.2	0.5	0.5	0.5	5
Turbot	7.8	10.2	10.3	6.2	3.4	2.5	3.2	14
Tope	5.7	3.2	4.8	8.9	14	16.2	24.7	4
Wrasse	4.0	7.9	8.1	8.2	8.5	5	4	1
Total (tonnes)	1348.7	1449.6	1426.3	1494.2	1403	1636	1851	
Value (£000's)	3899	4034	4214	4395	4014	3534	3877	

Table 2: Landings and average per-kilo prices (first sale) for commercial species landed by GU registered vessels 2007 - 2013. For 2013 only, **red** text indicates landings more than 10% lower than the 7 year average and **green** indicates landings more than 10% higher. Those in **black** text indicate landings within +/- 10% of the average.

5.2 Wetfish Analysis



Fig 10 - a typical mix of wetfish hauled during a routine boarding of a trawler performed by the Section.

Wetfish landings for 2013 were 86.8 tonnes lower than 2012 and 154.5 tonnes lower than the 7 year average. Just two species, seabass and sandeel, are responsible for 44 tonnes of this reduction. 2013 saw a continuation of the recent decreasing trend in seabass landings, with 2013's total of 27.6 tonnes representing a 16.8 tonne reduction compared to 2012. A particularly concerning point is that seabass landings are now less than 20% of those recorded in 2007. In contrast, sandeel landings had remained comparatively stable between 2007 and 2012 and have only seen a sharp (29.2 tonne) decrease in the past year. This is in part due to the

trawler *D-IMMP* GU 219 being out of action between September and December. It should be noted that sandeel landings do not include those caught by vessels for self-supply.

As can be seen in *Table 2* on the previous page, there are 4 wetfish species with landings more than 10% higher than the 7 year average and 16 with landings more than 10% lower. Mackerel and turbot landings for 2013 represent the largest percentage increases compared to the 7 year average, despite the fact that turbot landings actually saw a drop compared to 2012. Mackerel landings were their highest since 2009 at 8.8 tonnes. The landings for 4 wetfish species fell within +/- 10% of the 7 year average, indicating stability in the local stocks of these species.

5.3 Shellfish Analysis

Shellfish landings were broadly similar to 2012 landings, being only 18 tonnes lower, but remaining 5 tonnes higher than the 7 year average. Edible crab landings were almost identical to 2012, suggesting that local stocks of edible crab are remaining stable. Despite a negligible (3.7 tonne) reduction compared to 2012 landings, lobster landings remain more than 10% higher than the 7 year average. Interestingly, although in terms of total weight lobster landings were down compared to 2012 the figures indicate that the average size of each landed lobster has actually increased - from 698 grams in 2012 to

706 grams in 2013. Remarkably, in 2013 lobster landings accounted for over 25% of the total value of landings. Spider crab landings have been in decline since 2008, with 34.4 tonnes landed in 2013 – this is less than half the weight that was landed in 2008. Scallop landings saw the first rise since 2008, reflecting an increase in scallop dredging effort (see Section 6.8).



Fig 11 - the scallop dredger *Albatross* GU 472

6 Effort

6.1 Potting

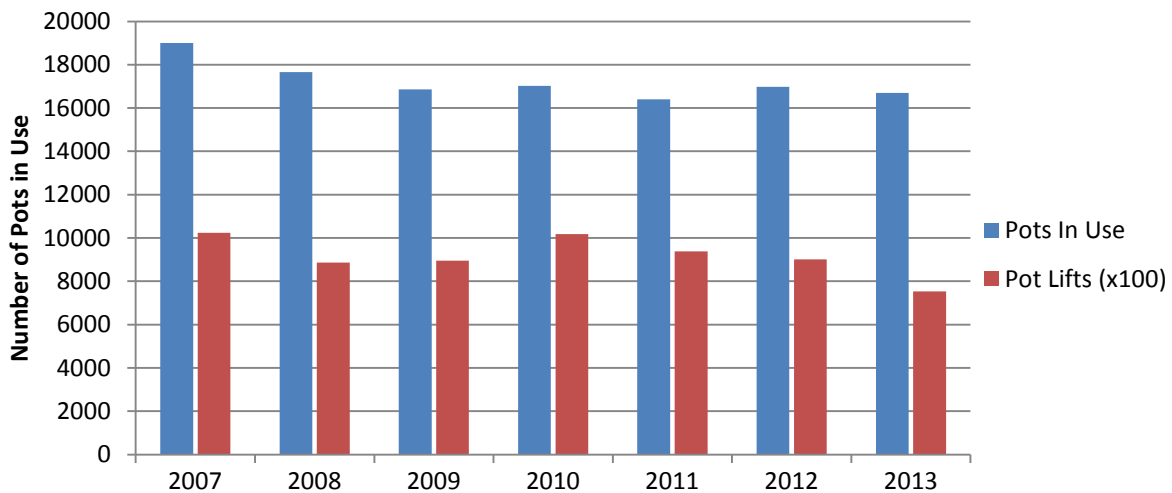


Fig 12 - number of crab pots in use (all types) and pot lifts (x100) in Bailiwick waters from 2007-2013

Both the number of pots in use and the number of pot lifts have remained stable throughout the past 7 years, fluctuating by less than 10%. The number of pot lifts peaked in 2010 at 1.2 million lifts of 17,023 pots, equating to an average of 70 lifts per pot. The decrease in pot lifts seen between 2012 and 2013 can be explained by the two largest potters in the fleet (*Sarah P* GU 399 and *Peadar Marie* GU 199) moving on to the UK e-log system, which does not require information about the effort to be recorded. Using effort recorded on 2012 logsheet returns for these vessels as an approximation for 2013 effort, we arrive at a number of pot lifts similar to that of 2012.

6.2 Set Nets

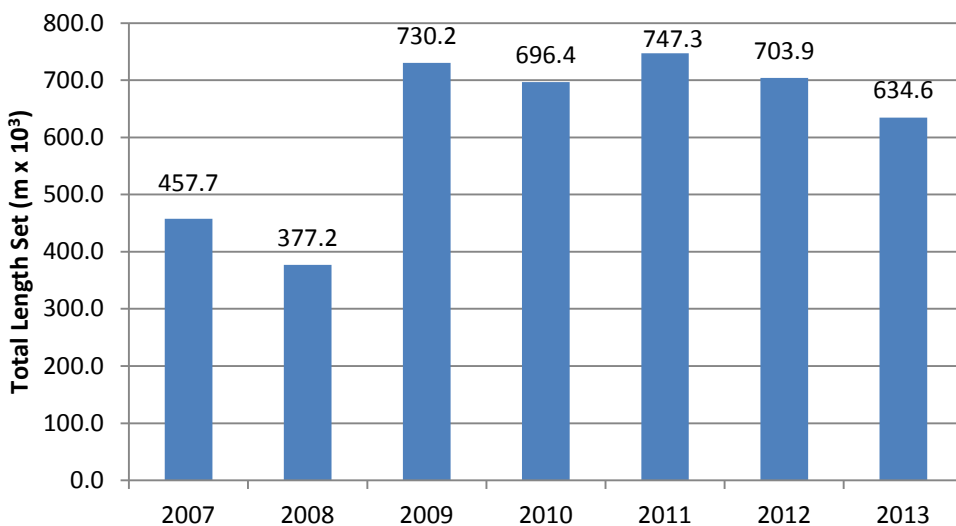


Fig 13 - total length of net deployed in Bailiwick waters from 2007-2013

Netting continues to be a very popular form of fishing in the Bailiwick, with 634.6km of net set in 2013. Common bycatch species, such as dogfish and wrasse, are often used as bait by crab fishermen. In recent years netting has come under the spotlight due to increasing amount of research into the subject of seabird bycatch. Although not recognised as a problem locally, it is an issue which is receiving growing international coverage and awareness.

6.3 Angling

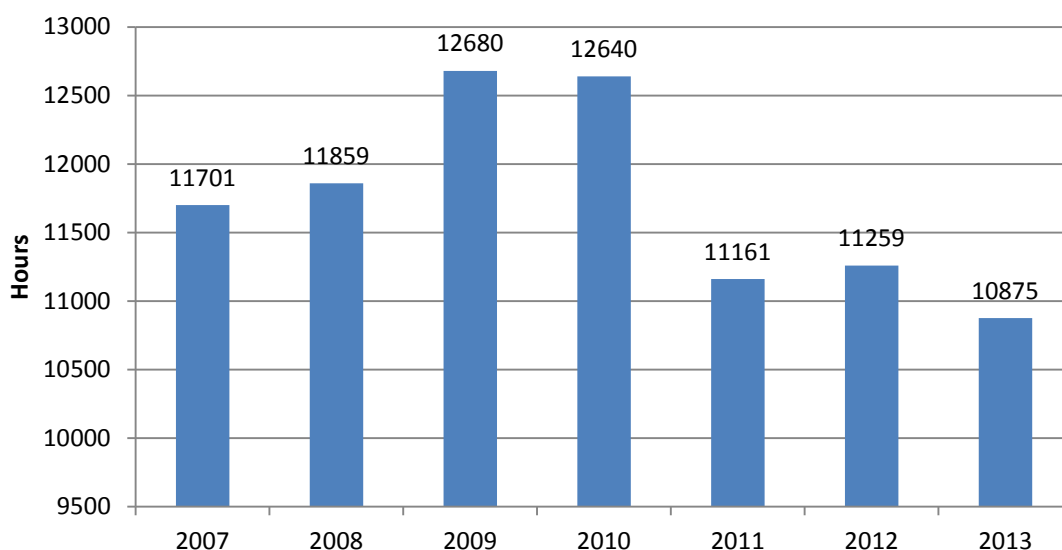


Fig 14 - angling effort (hours fishing) in Bailiwick waters from 2007-2013

Angling effort includes fishing by rod and line, handlines, jigging machines and trolling. In terms of the number of vessels, angling is by far the most popular fishing method. The recreational angling effort (not shown in *Fig 14* above) far outweighs that of the commercial fleet, with a conservative average of 1,100 recreational anglers. Although the practice of 'catch and release' is encouraged, that still means that landings by recreational anglers are considered significant.

6.4 Long Lining

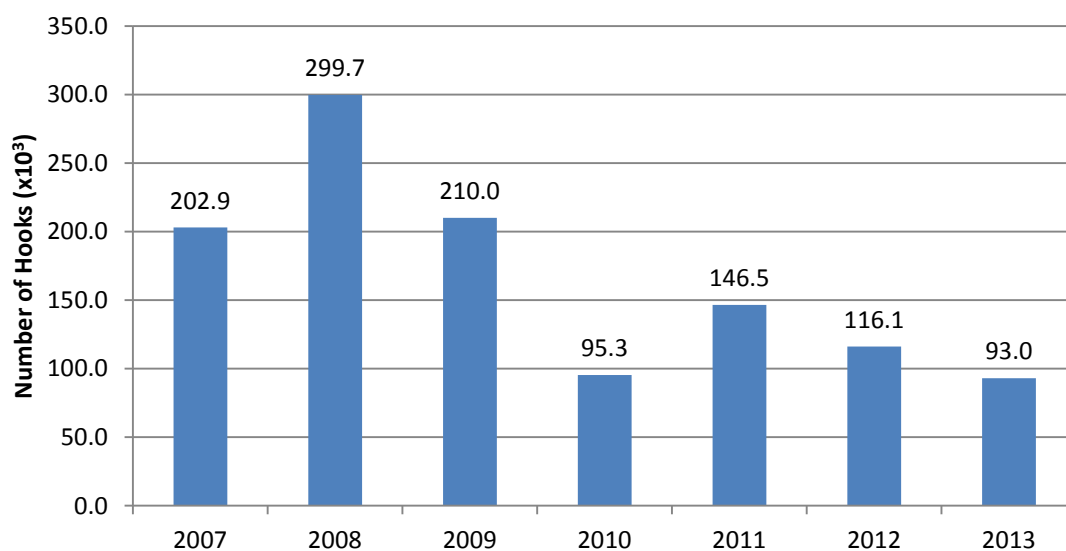


Fig 15 - long lining effort (number of hooks) in Bailiwick waters from 2007-2013

Long lining has seen a steady decline in popularity and effort since 2008, with the 93,000 hooks set in 2013 being just under one third of the effort seen in 2008. Although wind speeds for the majority of 2013 were below average, November and December saw above-average wind speeds and days of exceptional gales. This saw the already-small segment of the fleet which uses long lines reduced to just one vessel whose logsheets recorded long lining as a fishing method in the final two months of the year.

6.5 Demersal Trawling

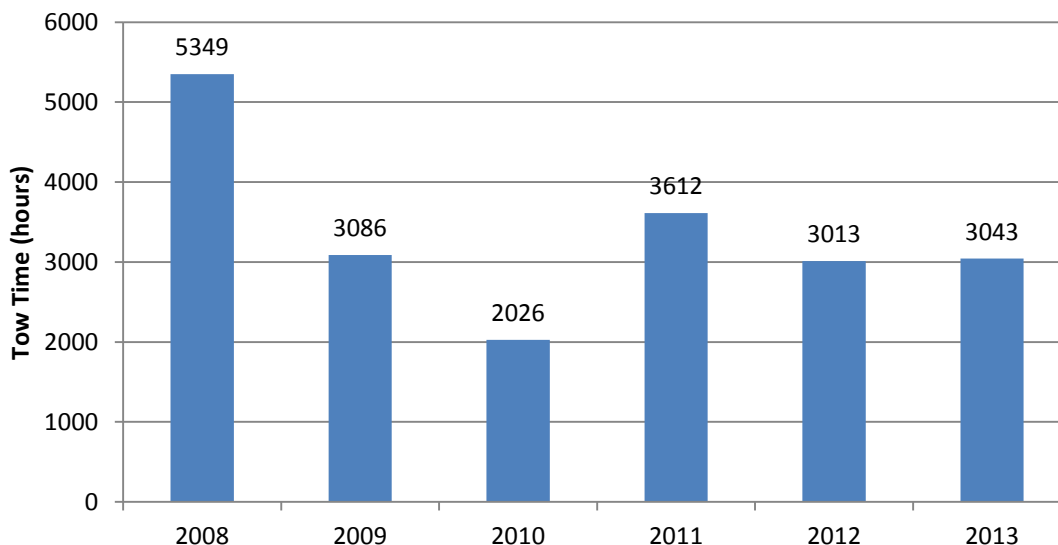


Fig 16 - demersal trawling effort (hours tow time) in Bailiwick waters from 2008-2013

Demersal trawling effort has remained at the same level as 2012, reflecting that the fleet segment equipped for demersal trawling has remained steady in the same time period. Those vessels equipped for trawling are the larger vessels in the fleet, meaning that they were less affected by the storms and bad weather experienced at the beginning and end of the year. Although this chart only shows effort for GU registered vessels, effort by non-GU vessels will have significantly decreased due to the new licensing laws coming into place out to the 12nm limit.

6.6 Beam Trawling

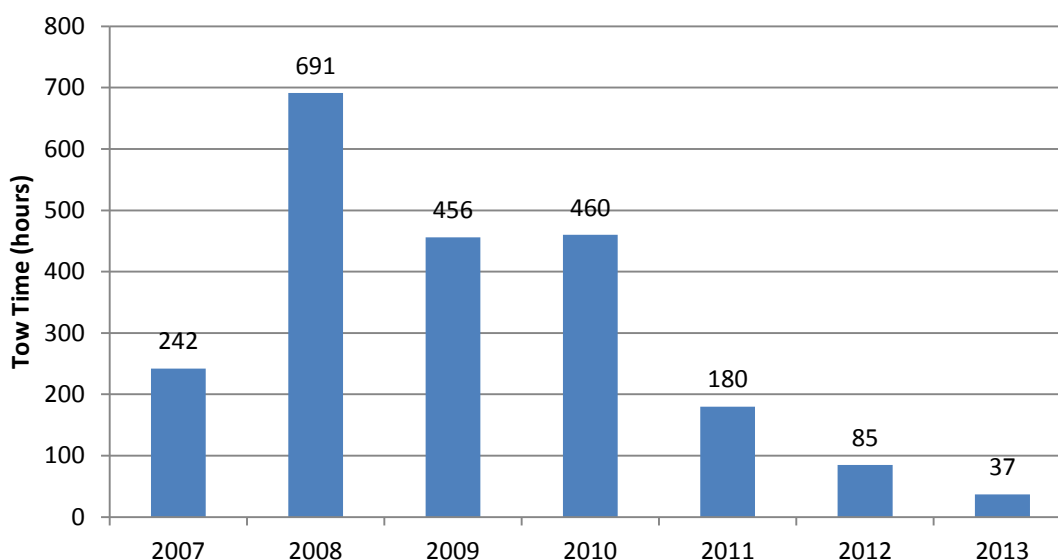


Fig 17 - beam trawling effort (hours tow time) in Bailiwick waters from 2007-2013

Beam trawling is used to target certain seasonal fisheries, and as can be seen in *Fig 17* (above) effort has been in decline since 2008. Only two vessels recorded beam trawling as a fishing method in 2013. Effort by visiting beam trawlers is not included in the above chart, however (as with the demersal trawling effort in *Section 6.5* above) effort by non-GU vessels will also have reduced in 2013 due to the implementation of the new licensing laws.

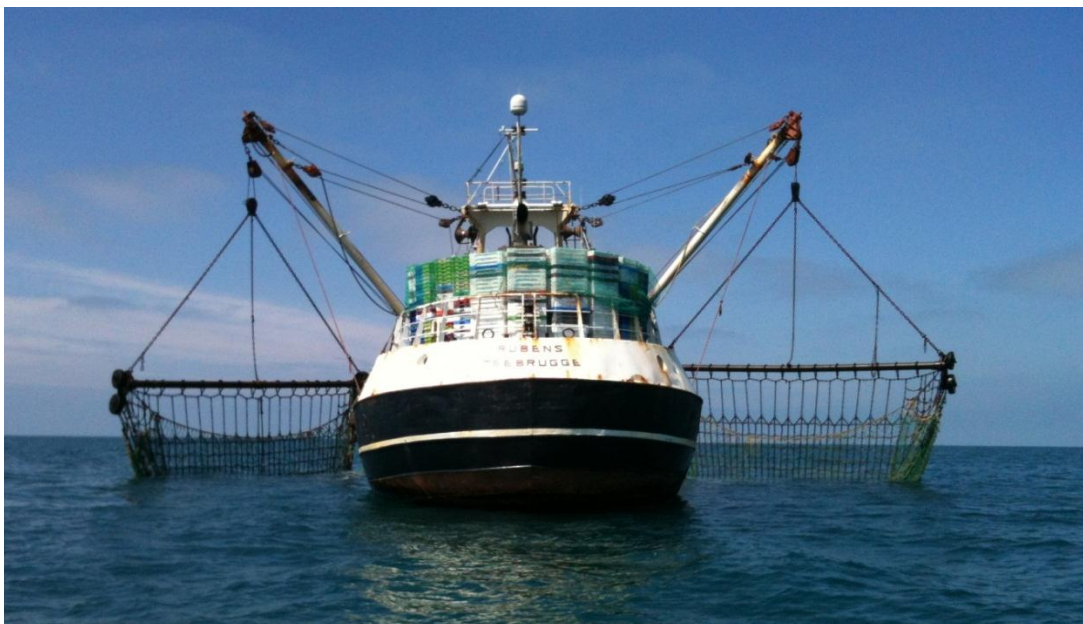


Fig 18 - the Belgian beam trawler *Rubens* Z67 seen hauling in gear 15 miles west of Guernsey during a routine patrol and boarding by the Section.

6.7 Hand Diving

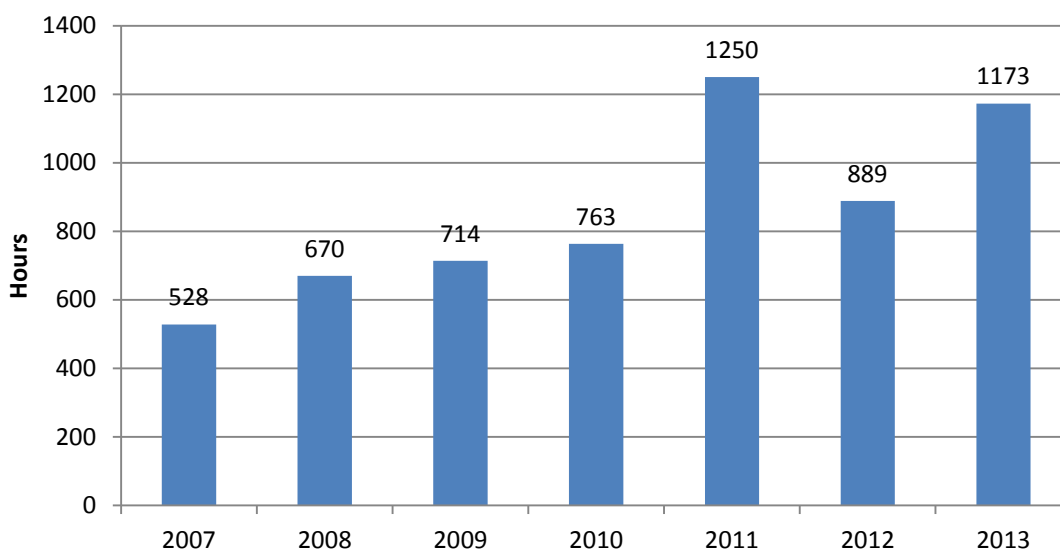


Fig 19 - hand diving effort (hours) in Bailiwick waters from 2007-2013

In contrast to the majority of the other fishing methods charted in this report, hand diving has actually seen an increase in effort since 2007. A total of 1,173 hours was spent hand diving in 2013; more than a two fold increase of the effort in 2007. With the closure of St. John's hyperbaric chamber and subsequent depth restrictions imposed on commercial diving in early 2014, it is anticipated that there will be a large drop in hand diving effort in 2014.

6.8 Scallop Dredging

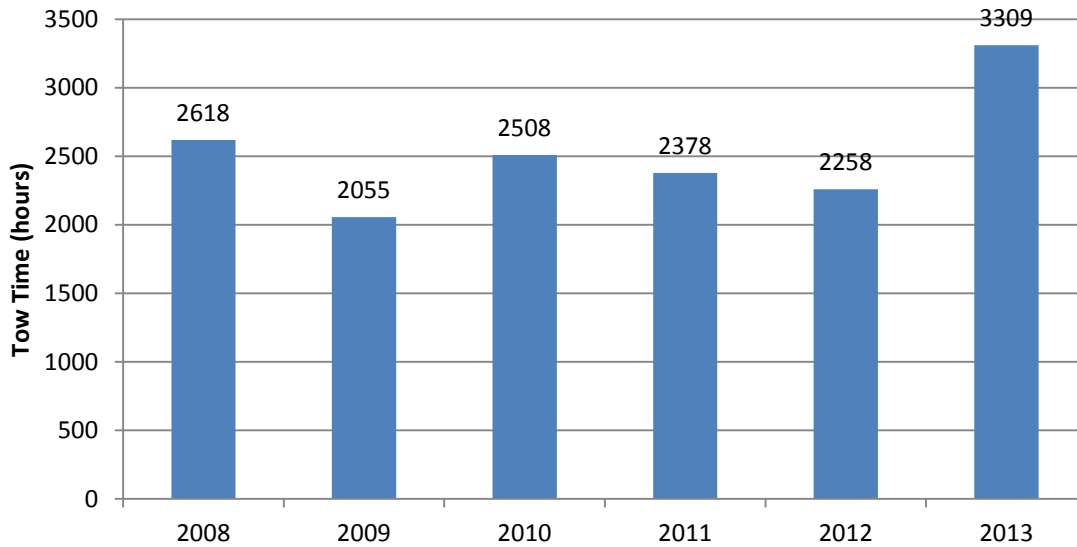


Fig 20 – scallop dredging effort (hours) in Bailiwick waters from 2007-2013

Scallop dredging effort saw a marked increase in 2013, with the total tow time of 3,309 hours being nearly 800 hours above the 6 year average. Despite this increase in effort, scallop landings were seven tonnes lower than 2012 (see *Table 2* on page #). *Fig 20* only shows the effort of GU-registered vessels, thus the reduction in effort by foreign vessels due to the new licensing laws is not taken into account.