

# Marine Scotland

Report of the Inaugural Quinquennial  
Review of the Operation of Seal Licensing  
System under the Marine (Scotland) Act 2010

# **REPORT OF THE INAUGURAL QUINQUENNIAL REVIEW OF THE OPERATION OF SEAL LICENSING SYSTEM UNDER THE MARINE (SCOTLAND) ACT 2010**

## **1. Introduction**

Under Section 129 of the Marine (Scotland) Act 2010 a report on a review of the operation of the seal licensing system is required within 5 years of Section 110 of the Act coming into force on 1 September 2010.

In reality, the seal licensing system became fully operational with the issue of the first seal licences on 31 January 2011. The period from 1 September 2010 to 31 January 2011 was introduced to allow time for seal licence application forms to be prepared, completed and submitted by applicants and for Marine Scotland to consult with experts on seal management, conservation and fisheries or aquaculture (as appropriate) and for all applications and comments to be fully considered in deciding on whether or not to issue a licence.

This report therefore considers only 4 complete licensing years, namely 2011, 2012, 2013 and 2014, rather than 5 and covers the period from 31 January 2011 to 31 January 2015.

The report considers all aspects of the operation of the seal licensing system including all developments and improvements that took place during the period, previous interim reviews into the operation of the system and any significant changes made in the light of all of these.

## **2. Seal Licence Applications**

An interim review of seal licence applications was undertaken in the summer of 2011 in order to learn from the experience of the first application process for 2011. This highlighted a number of areas where improvement was required to enhance the quality of information provided with applications and to streamline the process where possible. The applications forms for both “the prevention of damage to fisheries and fish farms” and for “protecting the health and welfare of farmed fish” were revised and refined for each of these areas. In addition, the existing fish farm survey was further developed to ensure that responses were linked to individual fish farms.

In the period since then, a number of additional improvements have been made to the application forms and the related process to improve the information in support of applications and streamline the process. In addition, the survey of fish farms has been improved on an annual basis to improve the information in support of applications and streamline the process.

There remain some concerns about a variation in standards of applications between applicants. This is partly due to differences between the sectors themselves but it also involves differences in resources and capabilities between individual applicants. There are obvious differences between standards that can arise when applicants range from major multi-national aquaculture companies to individual fishery owners.

The application process would benefit from improved standardisation, wherever possible, and this will continue to be the aim. There also needs to be further work to improve the information being provided in respect of seal impacts.

### 3. Non-Lethal Measures

There have been improvements in the use of non-lethal deterrent measures across the first four full years of the seal licensing system in both fish farms and fisheries. This is in spite of significant differences between the sectors with fish farms based on a contained system enclosing their stock and fisheries based on an open system to permit the catching of wild fish.

#### Fish Farms

The closed nature of aquaculture systems means that measures to improve containment of the fish will also often assist with reducing or preventing seal predation.

A combination of measures appears to have contributed to a significant reduction in seal shooting at fish farms from 241 in 2011 to 80 in 2014, a reduction of 66%.

The expansion in the use of properly tensioned nets across the industry has improved overall containment and so helped to reduce seal predation. In addition, improved attention to the frequency of the removal of dead fish and the use of seal blinds has helped to reduce a potential attraction for seals. The introduction of stronger nets may also assist with reducing seal predation.

There remain issues, however, with the use of acoustic deterrents and anti-predator nets at fish farms due partly to their variable effectiveness but more importantly due to their potential impacts on other species. In the case of acoustic deterrents, mainly cetaceans, and in the case of anti-predator nets, including cetaceans, otters and seabirds.

A newly developed acoustic deterrent, which induces a startle response specifically in seals, is currently being tested by a private company and may offer a solution in the future to concerns about the potential impact of some acoustic deterrents on cetaceans.

Marine Scotland has been working with the Seals, Aquaculture and Salmon Working Group (SASWG) to secure improvements in all of these areas.

The work on improving non-lethal measures in fish farms will continue by improving existing measures and considering and developing new non-lethal measures like electric fields.

Marine Scotland will continue to work with the aquaculture industry towards this end.

## Fisheries

The open nature of fishery systems, whether at netting stations or in river systems, which allows wild fish to access the nets or river systems, means that they are also potentially open to seals which makes prevention of seal predation more problematic – i.e. it excludes the containment options used by fish farms.

The main non-lethal measures possible in fisheries are therefore the use of acoustic deterrents to reduce seal predation in netting stations and river systems and net modifications in the context of netting stations.

The scientific research currently being undertaken in respect of acoustic deterrents is promising but requires significant adaptation of existing technology which raises its own issues, including battery limitations, lack of robustness and design issues. It will probably take some time to resolve all of these issues but some progress is being made in relation to both river fisheries and netting stations.

In a research project, a reduction in seal presence and predation has been achieved at test sites at netting stations and in rivers by the use of acoustic deterrents although this has not proved completely effective in all cases.

The introduction of some changes into net designs has also reduced seal access to fish caught in salmon nets but there are some restrictions on potential changes under fisheries legislation.

There has been a reduction in seal shooting at fisheries from 218 in 2011 to 125 in 2014, a reduction of 42%.

The work on improving non-lethal measures for use in fisheries, which is at a less advanced stage than that in fish farms, should be continued by improving and testing current prototype measures and developing and testing new measures like electric fields, taste aversion and capture and relocation.

Marine Scotland will continue to work with the fishing industry towards this end.

## 4. Consultation Process

The consultation process developed for the seal licensing system involves consideration by Sea Mammal Research Unit (on behalf of NERC) for seal management issues, Scottish Natural Heritage for conservation issues and Marine Scotland Science for fisheries or fish farm issues as appropriate.

This advice process has developed into an established standard that provides invaluable information during the consideration of seal licence applications.

The consultees see each seal licence application (except for any personal details) and offer comments on any issue of concern or interest in their respective fields.

They can suggest specific conditions should be included in one or more seal licences and these suggestions are taken into account by the Seal Licensing Team in making decisions on licences.

The information provided by these three different sources allows Marine Scotland to take a balanced view on seal licence applications.

There are similar concerns amongst the consultees about a variation in standards of applications between applicants as noted under applications. The consultation process would also benefit from improved standardisation wherever possible and this will continue to be the aim.

#### Potential Biological Removal (PBR)

This has provided a key scientific support for the seal licensing system by setting an upper limit for anthropogenic losses in each seal management region. This provides a upper limit for the seal licensing system that ensures that numbers permitted under licence do not impact on the wider regional seal population.

It provides the basis for seal conservation areas and for restrictions or bans on seal management in each seal management region around Scotland.

This is an essential aspect of the seal management system which provides a vital base for the work.

The development of marine renewables around Scotland will present an additional potential anthropogenic risk factor in relation to the PBR for the future. It may be that the possible impact of these developments on seals will reduce the scope for seal management in some areas in the future. This is something that will need to be considered in due course.

#### 5. Seal Licences

The licences issued in response to applications after consideration of the advice received from consultees by Marine Scotland incorporate a range of conditions.

They include a number of standard conditions that appear in all licences, including maximum numbers of seals of each species that can be shot, restrictions on location of shooting, no shooting on land, shooting under the Code of Practice,

They can also include more specific conditions including no shooting of harbour or common seals in areas of decline, restrictions on shooting during the breeding season, restrictions on shooting in the vicinity of Special Areas of Conservation for seals,

The licences offer a flexible way of delivering a balance between conservation and welfare and seal management for fisheries or fish farms.

The basic design of the seal licence is due for review but in terms of layout rather than content or function.

## 6. Training of Marksmen

An independent assessment of a marksman's skills and experience was necessary to satisfy section 111(2) of the Act. Marine Scotland therefore worked closely with the Scottish Qualifications Authority to develop a formal training module based around the training and Code of Practice developed in association with the Moray Firth Seal Management Plan. This resulted in the Professional Development Award (PDA) in Seal Management a theoretical and practical training course and qualification for marksmen.

This PDA in Seal Management provides the standard for assessing the skills and experience of anyone operating as marksman under the seal licensing system.

## 7. Checking of Marksmen

Marine Scotland Seal Licensing Team carry out checks in respect of all marksmen entered on seal licence application forms.

The first is a check with the police that they have an appropriate firearm and the relevant current firearm licence to use that firearm.

The second is a check that the marksman has completed training course and was awarded SQA qualification developed for marksmen as a pre-condition for *involvement* on a seal licence.

Any marksman who fails to satisfy these checks will not be included on a licence. This has been the case, for example, where an individual has allowed a firearm licence to lapse, they have not been included on a seal licence until they can produce proof that the firearm licence has been renewed.

The marksman checks provide an effective means of confirming skills and experience of the marksman, as well as use of appropriate firearm.

## 8. Scottish Seal Management - Code of Practice

The seal management Code of Practice was developed on the basis of 5 years' experience gained during operation of Moray Firth Seal Management Plan (MFSMP) and in consultation with a range of fisheries, conservation and welfare organisations. It has provided a sound basis for the operation of the seal licensing system.

From time to time, there have been allegations made about one or other aspect of the Code of Practice being ignored or breached. There have, however, been no instances to date where such allegations have been proved. The police are responsible for investigating such allegations and Marine Scotland is always ready to assist them.

In 2013, a practical test was held to consider whether the firearm specification employed in the Code of Practice was appropriate. This suggested no significant changes were necessary and broadly endorsed the conditions set out in the Code of Practice. The final report is currently awaiting completion of some of the final technical scientific processes.

## 9. Seal Licence Returns

Under the seal licensing system, each licensee is required to submit a quarterly return within 10 days of end of each quarter, including nil returns. This includes the date and location of each shooting, the species of seal and, if possible, information on the recovery of the carcass.

This information is then summarised and published on Scottish Government seal licensing web-site at regional level on a quarterly basis. Marine Scotland initially published in this form as a result of concerns for public safety if individual fisheries or fish farms were identified and targeted by direct action. As a consequence of recent Decisions by the Scottish Information Commissioner, however, this information will in the future be published the level of individual fisheries or fish farms.

The current arrangements for quarterly returns provide a balance between seal conservation and protecting against damage to fisheries and the health and welfare of farmed fish. Marine Scotland will consider the need for more frequent and timeous submission of returns.

Periodically, there have been allegations that seal licence returns do not reflect actual practice and that more seals are being shot by licensees than are indicated in the returns. There have, however, been no instances to date where such allegations have been proved. Indeed in a number of cases, checks or initial investigations were quickly able to confirm that the seals were shot under licence and that this information was submitted on the quarterly returns. The police are responsible for investigating such cases and Marine Scotland is always ready to assist them.

The Scottish Government will provide details of seal licences on request to the police to assist with any investigations. It does not comment on any active investigations.

## 10. Carcass Recovery

This is one aspect of the Code of Practice and seal licence returns that could benefit from further improvement.

In the seal licensing system, to date, the recovery of the carcasses of shot seals enables us to assess if the animal has been shot cleanly, i.e. that death was almost instantaneous and therefore it did not suffer. Post mortem examination also permits us to assess stomach contents to establish what the animal had been feeding on.

The recovery of carcasses is a complex issue which requires close liaison between a number of organisations. It is possible that carcasses in some cases sink, or are too heavy or it proves too logistically awkward to recover them – i.e. from rocky areas at the foot of cliffs etc.

In spite of this, the usefulness of the data obtained from shot seals suggests that more effort should be made to encourage those involved to seek to recover seal carcasses for research.

## 11. Appeals

A formal appeal process was developed to allow applicants to raise any concerns about the licence issued to them.

The process involves the setting up of an appeals panel formed by members of the seal policy team but also engaging two individuals not involved in seal policy or licensing or, respectively, in fish farming or fisheries issues where appeals relate to these sectors.

The panel members are provided with all relevant documents concerning the relevant licence application and with information about the regulations and provisions of seal licensing by a member of the seal policy team.

The panel reach a decision, which is then communicated to appellant and Seal Licensing Team.

There have been a total of 5 appeals in the 4 years 2011 to 2014. In response 3 of these were rejected and 2 at least partially accepted.

The appeals process offers an effective tool for dealing with any concerns.

## 12. Seal Licence Fees

A decision was made on introduction of seal licensing that no fees would be charged at that point to facilitate the introduction of such a major change in seal management practice across Scotland.

In light of the passage of time and the establishment of the system and of the general emphasis on ensuring best use of public money, it is now perhaps the appropriate time to review this decision.

The issue of fees to at least cover the administrative costs of the seal licensing should now be considered for the future.

## 13. Summary and Recommendations

In summary, the seal licensing system as set out in the Marine (Scotland) Act 2010 has proved effective and works well. It has already been subject to a complete review after the first round of licensing and subsequently a range of minor improvements have been introduced as required.



A number of issues have been identified as recommended for further action including:-

- Seal Licence Applications – Marine Scotland to continue to seek to improve data collection including through improvements to the application forms and survey process.
- Non-lethal Measures – Marine Scotland to continue to work closely with the industry and others to improve various existing options in this field and to develop new ones.
- Seal Licence Returns – Marine Scotland to consider improvements in the frequency of seal licence returns
- Carcass Recovery – Marine Scotland to consider how to improve this process in discussions with Scottish Marine Animal Stranding Scheme, licensees and others
- Seal Licence Fees – Marine Scotland to consider possible future introduction of fees to cover administrative costs of seal licensing system

#### 14. Next Steps

Marine Scotland will now consider and develop proposals on how best to pursue the recommendations for further work listed above.

Marine Environment  
August 2015

## Seal Licences 2011

Marine Scotland received 74 applications for seal licences and 66 licences were granted. Table 1 below provides a full breakdown.

<b>TABLE 1</b>						
	Application Type			Licence Type		
Seal Management Area	Protection of Health and Welfare	Prevention of Serious Damage	Total	Protection of Health and Welfare	Prevention of Serious Damage	Total
East Coast	0	11	11	0	10	10
Moray Firth	0	4	4	0	4	4
Orkney and North Coast	2	10	12	2	10	12
Shetland	8	0	8	8	0	8
South West Scotland	5	2	7	2	2	4
West Scotland	14	6	20	12	6	18
Western Isles	10	2	12	8	2	10
<b>Grand Total</b>	<b>39</b>	<b>35</b>	<b>74</b>	<b>32*</b>	<b>34</b>	<b>66</b>

The maximum number of seals involved is 1025 grey and 314 common. Tables 2a and 2b over provide details. This maximum represents less than 1% of the grey seal population of 108,000 and slightly over 1.5% of the minimum common seal population of 20,400. The numbers are significantly lower than previous estimates proposed by Non-Government Organisations at between 2,000 and 5,000.

<b>TABLE 2a</b>	<b>Grey Seals</b>						
Seal management area	Grey seals applied for	PBR	Grey seals granted	Grey seals shot: 1st quarter	Grey seals shot: 2nd quarter	Grey seals shot: 3rd quarter	Grey seals shot: 4th quarter
East Coast	246	277	132	3	27	16	0

Moray Firth	85	152	75	2	7	4	3
Orkney & North Coast	461	959	349	26	62	44	35
Shetland	384	163	120	18	13	27	11
Western Isles	209	408	148	3	0	15	10
South West Scotland	115	45	31	2	2	0	0
West Scotland	206	297	170	8	6	9	13
<b>Grand Total</b>	<b>1706</b>	<b>2301</b>	<b>1025</b>	<b>62</b>	<b>117</b>	<b>115</b>	<b>72</b>

The 12 month total of 366 grey seals represents only 0.3% of the overall grey seal population of 108,000.

<b>TABLE 2b</b>	<b>Common Seals</b>						
Seal management area	Common seals applied for	PBR	Common seals granted	Common seals shot: 1st quarter	Common seals shot: 2nd quarter	Common seals shot: 3rd quarter	Common seals shot: 4th quarter
East Coast	92	3	0	0	0	0	0
Moray Firth	52	23	20	1	1*	2	2
Orkney & North Coast	53	18	10	0	2	2	0
Shetland	47	18	10	0	0	0	2
Western Isles	101	54	40	4**	0	4*	3
South West Scotland	153	35	31	4	3	1	4
West Scotland	296	442	203	11	11	21	15
<b>Grand Total</b>	<b>794</b>	<b>593</b>	<b>314</b>	<b>20</b>	<b>17</b>	<b>30</b>	<b>26</b>

The 12 month total of 93 common seals represents only 0.4% of the minimum common seal population of 20,400.

## Summary

The average level of shooting was 34% for the first year of operation.

32% of all licensees have shot no seals at all during the first year of operation.

52% of shooting has occurred at fish farms.

A total of only 241 seals were shot across 235 individual fish farms and 218 across over 40 river fisheries and netting stations.

## Seal Licences 2012

Marine Scotland received 63 applications for seal licences and 61 licences were granted. Table 1 below provides a full breakdown.

<b>TABLE 1</b>						
	Application Type			Licence Type		
Seal Management Area	Protection of Health and Welfare	Prevention of Serious Damage	Total	Protection of Health and Welfare	Prevention of Serious Damage	Total
East Coast	0	9	9	0	9	9
Moray Firth	0	5	5	0	5	5
Orkney and North Coast	2	7	9	2	7	9
Shetland	7	0	7	6	0	6
South West Scotland	2	2	4	2	2	4
West Scotland	11	6	17	11	6	17
Western Isles	10	2	12	9	2	11
<b>Grand Total</b>	<b>32</b>	<b>31</b>	<b>63</b>	<b>30</b>	<b>31</b>	<b>61</b>

The 30 licences issued for protection of health & welfare and 1 issued for prevention of serious damage, cover a total of 230 individual fish farms

The maximum number of seals involved is 878 grey and 289 common. Table 2 below provides details. This maximum represents less than 1% of the grey seal population of 100,000 and slightly over 1% of the minimum common seal population of 20,500. The numbers are significantly lower than previous estimates proposed by Non-Government Organisations at between 2,000 and 5,000.

<b>TABLE 2a</b>	<b>Grey Seals</b>						
Seal management area	Grey seals applied for	PBR*	Grey seals granted	Grey seals shot: 1st quarter	Grey seals shot: 2nd quarter	Grey seals shot: 3rd quarter	Grey seals shot: 4th quarter

East Coast	849	277	114	6	12	21	3
Moray Firth	836	152	100	7	24	11	1
Orkney & North Coast	475	959	280	28	62	35	15
Shetland	341	163	109	17	9	8	39
Western Isles	238	408	123	13	7	4	7
South West Scotland	63	45	26	3	0	0	0
West Scotland	206	297	126	12	1	8	6
<b>Grand Total</b>	<b>3008</b>	<b>2301</b>	<b>878</b>	<b>86</b>	<b>115</b>	<b>87</b>	<b>71</b>

The maximum number of grey seals allowed on licences granted in 2012 represents a 14% reduction on numbers involved in the previous year's licences.

The twelve month total of 359 grey seals represents only 0.3% of the overall grey seal population of 100,000.

<b>TABLE 2b</b>	<b>Common Seals</b>						
Seal management area	Common seals applied for	PBR*	Common seals granted	Common seals shot: 1st quarter	Common seals shot: 2nd quarter	Common seals shot: 3rd quarter	Common seals shot: 4th quarter
East Coast	106	2	0	0	0	0	0
Moray Firth	82	20	19	6	0	1	3
Orkney & North Coast	58	18	7	1	1	1	0
Shetland	32	18	6	0	0	0	1
Western Isles	120	54	43	2	0	0	0
South West Scotland	104	35	30	8	0	0	0
West Scotland	310	442	184	12	11	20	7
<b>Grand Total</b>	<b>812</b>	<b>589</b>	<b>289</b>	<b>29</b>	<b>12</b>	<b>22</b>	<b>11</b>

The maximum number of common seals allowed on licences granted in 2012 represents a 8% reduction on numbers involved in the previous year's licences.

The twelve month total of 74 common seals represents only 0.3% of the overall common seal population of 20,500.

### Summary

The average level of shooting is around 37% for the second year of operation.

31% of all licences have shot no seals at all during the second year.

Around 48% of shooting has occurred at fish farms and 52% at fisheries during the second year.

Only 208 seals have been shot across 230 individual fish farms and 225 across over 40 river fisheries and netting stations during the second year.

There was an overall reduction of 5% in the level of shooting in the second year of licensing, compared to the first.

### Seal Licences 2013

Marine Scotland received 59 applications for seal licences and 52 licences have been granted: three licences are pending issue, three licence applications were denied and one withdrawn. Table 1 below provides a full breakdown.

<b>TABLE 1</b>						
	Application Type			Licence Type		
Seal Management Area	Protection of Health and Welfare	Prevention of Serious Damage	Total	Protection of Health and Welfare	Prevention of Serious Damage	Total
East Coast	0	10	10	0	7	7
Moray Firth	0	3	3	0	2	2
Orkney and North Coast	2	7	9	2	5	7
Shetland	6	0	6	6	0	6
South West Scotland	2	2	4	2	2	4
Western Isles	9	2	11	9	2	11
West Scotland	11	5	16	11	4	15
<b>Grand Total</b>	<b>30</b>	<b>29</b>	<b>59</b>	<b>30</b>	<b>22</b>	<b>52</b>

The 30 licences issued for protection of health and welfare and 1 issued for prevention of serious damage, cover a total of 225 individual fish farms.

The maximum number of seals involved is 774 grey and 265 common. Table 2 below provides details. This maximum represents less than 0.7% of the grey seal population of 100,000 and slightly over 1% of the minimum common seal population of 20,500. The numbers are significantly lower than previous estimates proposed by Non-Government Organisations at between 2,000 and 5,000.

<b>TABLE 2a</b>	<b>Grey Seals</b>						
Seal management area	Grey seals applied for	PBR*	Grey seals granted	Grey seals shot: 1st quarter	Grey seals shot: 2nd quarter	Grey seals shot: 3rd quarter	Grey seals shot: 4th quarter



East Coast	142	314	82	2	20	6	0
Moray Firth	145	174	90	23	11	5	4
Orkney & North Coast	355	1448	220	18	46	17	6
Shetland	240	236	105	29	9	10	6
South West Scotland	63	57	26	0	0	0	1
Western Isles	198	387	125	1	1	6	2
West Scotland	204	386	126	4	3	5	3
<b>Grand Total</b>	<b>1347</b>	<b>3002</b>	<b>774</b>	<b>77</b>	<b>90</b>	<b>49</b>	<b>22</b>

The maximum number of grey seals allowed on licences granted in 2013 represents a 12% reduction on numbers involved in the previous year's licences and a 25% reduction since the system was introduced in 2011.

<b>TABLE 2b</b>	<b>Common Seals</b>						
Seal management area	Common seals applied for	PBR *	Common seals granted	Common seals shot: 1st quarter	Common seals shot: 2nd quarter	Common seals shot: 3rd quarter	Common seals shot: 4th quarter
East Coast	54	2	0	0	0	0	0
Moray Firth	34	17	16	0	1	1	1
Orkney & North Coast	37	17	5	0	1	0	0
Shetland	23	18	6	0	0	0	3
South West Scotland	88	35	30	0	0	0	0
Western Isles	75	82	45	1	0	0	0
West Scotland	291	446	163	7	3	11	7
<b>Grand Total</b>	<b>602</b>	<b>617</b>	<b>265</b>	<b>8</b>	<b>5</b>	<b>12</b>	<b>11</b>

The maximum number of common seals allowed on licences granted in 2013 represents a 9% reduction on numbers involved in the previous year's licences and an 16% reduction since the system was introduced in 2011.

### Summary

The average level of shooting is around 26% for third year of operation.

43% of all licences have shot no seals at all during 2013.

Around 38% of shooting has occurred at fish farms and 62% at fisheries during the third year.

Only 105 seals have been shot across 216 individual fish farms and 169 seals across over 40 river fisheries and netting stations during the third year.

There was an overall reduction in the level of shooting in 2013: 37% lower compared to 2012 and 40% lower compared to 2011 figures.

## Seal Licences 2014

Marine Scotland received 56 applications for seal licences and 53 licences have been granted: three licences are pending approval. Table 1 below provides a full breakdown.

<b>TABLE 1</b>						
	Application Type			Licence Type		
Seal Management Area	Protection of Health and Welfare	Prevention of Serious Damage	Total	Protection of Health and Welfare	Prevention of Serious Damage	Total
East Coast	0	7	7	0	6	6
Moray Firth	0	3	3	0	2	2
Orkney & North Coast	2	7	9	2	6	8
Shetland	6	0	6	6	0	6
South-West Scotland	2	2	4	2	2	4
Western Isles	9	2	11	9	2	11
West Scotland	12	4	16	12	4	16
<b>Grand Total</b>	<b>31</b>	<b>25</b>	<b>56</b>	<b>31</b>	<b>22</b>	<b>53</b>

The 31 licences issued for protection of health and welfare and one issued for prevention of serious damage, cover a total of 214 individual fish farms.

The maximum number of seals involved is 765 grey and 240 common. Table 2 below provides details. This maximum represents less than 0.7% of the grey seal population of 100,000 and slightly over 1% of the minimum common seal population of 20,500. The numbers are significantly lower than previous estimates proposed by Non-Government Organisations at between 2,000 and 5,000.

<b>TABLE 2a</b>	<b>Grey Seals</b>						
Seal Management Area	Grey Seals Applied For	PBR*	Grey Seals Granted	Grey Seals Shot: 1st quarter	Grey Seals Shot: 2 <sup>nd</sup> quarter	Grey Seals Shot: 3rd quarter	Grey Seals Shot: 4th quarter

East Coast	128	314	74	1	9	1	0
Moray Firth	239	174	90	3	12	4	6
Orkney & North Coast	330	1448	232	5	31	19	9
Shetland	198	236	105	5	8	9	6
South-West Scotland	66	57	25	0	0	0	0
Western Isles	188	387	116	6	7	2	2
West Scotland	188	386	123	5	5	1	8
<b>Grand Total</b>	<b>1327</b>	<b>3002</b>	<b>765</b>	<b>25</b>	<b>72</b>	<b>36</b>	<b>31</b>

The maximum number of grey seals allowed on licences granted in 2014 represents a more than 1% reduction on numbers involved in the previous year's licences, and a 25% reduction since the system was introduced in 2011.

<b>TABLE 2b</b>	<b>Common Seals</b>						
Seal Management Area	Common Seals Applied For	PBR	Common Seals Granted	Common Seals Shot: 1 <sup>st</sup> quarter	Common Seals Shot: 2 <sup>nd</sup> quarter	Common Seals Shot: 3 <sup>rd</sup> quarter	Common Seals Shot: 4 <sup>th</sup> quarter
East Coast	39	2	0	0	0	0	0
Moray Firth	24	17	10	1	2	2	1
Orkney & North Coast	39	17	6	0	0	1	0
Shetland	17	18	5	0	0	0	1
South-West Scotland	91	35	26	0	0	0	3
Western Isles	71	82	41	0	0	1	0
West Scotland	266	446	152	9	7	2	11
<b>Grand Total</b>	<b>547</b>	<b>617</b>	<b>240</b>	<b>10</b>	<b>9</b>	<b>6</b>	<b>16</b>

The maximum number of common seals allowed on licences granted in 2014 represents a nearly 10% reduction on numbers involved in the previous year's licences, and an over 24% reduction since the system was introduced in 2011.

### Summary

The average level of shooting is around 20% for fourth year of operation.

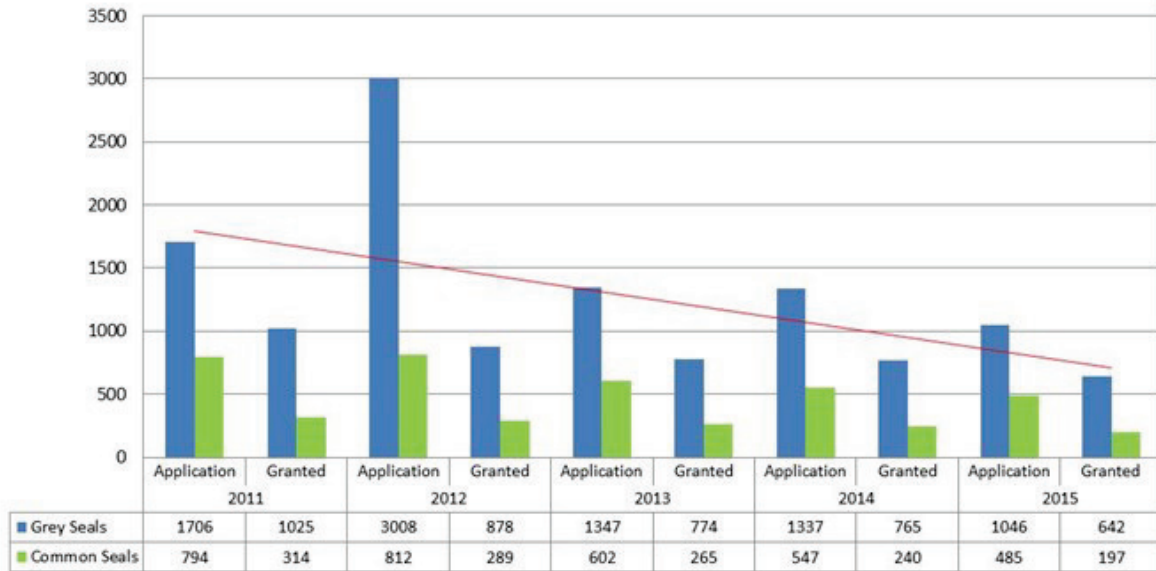
51% of all licences have shot no seals at all during 2014.

Around 39% of shooting has occurred at fish farms and 61% at fisheries during the fourth year.

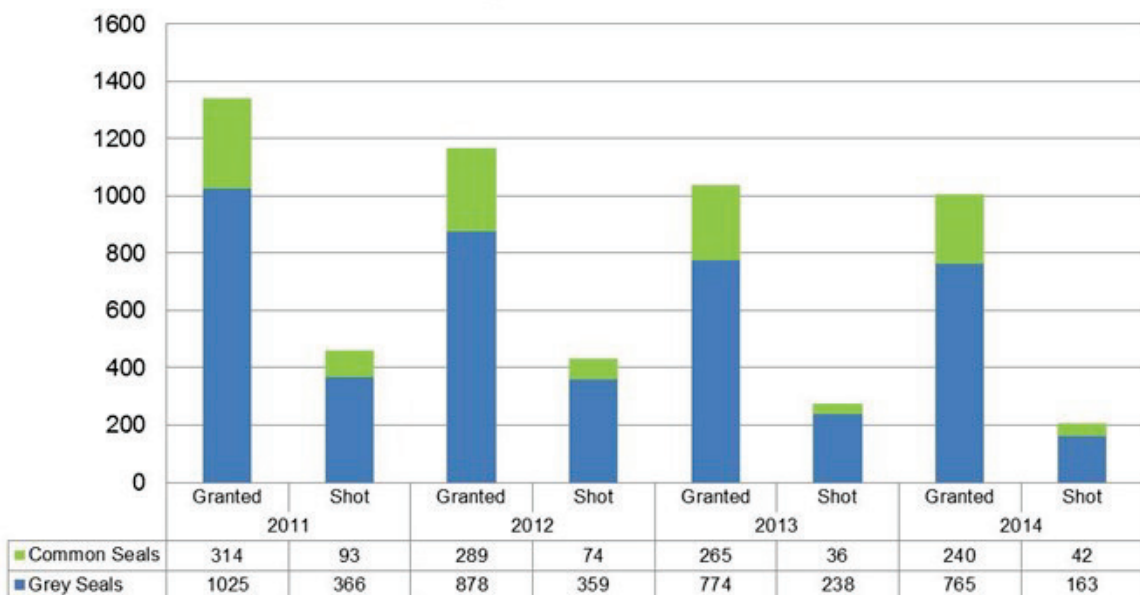
Only 80 seals have been shot across 214 individual fish farms and 125 seals across over 40 river fisheries and netting stations during the third year.

There was an overall reduction in the level of shooting in 2014: 25% lower compared to 2013 and 56% lower compared to 2011 figures.

**Comparison between numbers of seals on applications and numbers granted 2011 to 2015**



**Numbers granted in the licence against numbers actually shot 2011-2014**





© Crown copyright 2015

**OGL**

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit [nationalarchives.gov.uk/doc/open-government-licence/version/3](http://nationalarchives.gov.uk/doc/open-government-licence/version/3) or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: [psi@nationalarchives.gsi.gov.uk](mailto:psi@nationalarchives.gsi.gov.uk).

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at [www.gov.scot](http://www.gov.scot)

Any enquiries regarding this publication should be sent to us at  
The Scottish Government  
St Andrew's House  
Edinburgh  
EH1 3DG

ISBN: 978-1-78544-628-3 (web only)

Published by The Scottish Government, September 2015

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA  
PPDAS56098 (09/15)