

1. Introduction

SOS Puffin is a volunteer project sponsored by the Scottish Seabird Centre which started in 2007. It aims to bring under control the invasive plant tree mallow which has taken over the islands of Craigleith, Fidra and The Lamb near North Berwick and threatens the important populations of nesting puffins and other seabirds.

A progress report is sent to all the volunteers every six months and the last went out in June 2018. This report summarises what has happened since then - any comments or queries are very welcome.

2. Island Visits and Volunteers

A programme of 15 work parties was arranged for the period mid-August to mid-October starting later than usual because of the late breeding of most seabirds this year. Windy conditions prevailed for much of this time and eight work parties were cancelled. One additional work party was organised to Craigleith at short notice in October to take advantage of a brief weather window. In addition, RSPB organised three other work parties to Fidra in October and December.

The number of volunteers coming on each SOS Puffin work party varied from 10 to 13 (mean 12).



Members of the 300th work party since SOS Puffin began in 2007 – on Craigleith 6th October 2018.

Many volunteers will have fond memories of Margaret Wight who sadly died in September. Amazingly she helped on almost 100 work parties over the last eleven years coming out into her late 80s. She devoted her retirement to voluntary work of various kinds and was a great inspiration to us all.

The following tables show the number of work parties to Craigleith and Fidra each month (with the number of man/woman days shown in brackets) since the project started:

To Craigleith:

Year	Jan	Feb	Mar	April	Aug	Sept	Oct	Nov	Dec	TOTAL
2007	0	1(12)	1(7)	3(57)	2(19)	3(28)	5(50)	0	1(8)	16(181)
2008	0	5(59)	1(8)	3(24)	9(86)	4(40)	3(23)	2(18)	1(21)	28(279)
2009	2(14)	2(18)	6(60)	4(48)	6(81)	8(82)	2(25)	2(17)	3(28)	35(373)
2010	0	2(20)	5(40)	2(34)	5(54)	4(52)	5(53)	0	0	23(253)
2011	4(37)	0	1(18)	1(12)	3(34)	2(19)	3(34)	1(5)	0	15(159)
2012	0	0	3(34)	1(11)	4(35)	4(47)	2(20)	0	0	14(147)
2013	0	0	0	1(13)	2(25)	3(33)	1(9)	0	0	7(80)
2014	0	0	1(13)	1(11)	1(8)	3(25)	1(10)	0	0	7(67)
2015	0	0	1(11)	0	2(24)	4(47)	3(31)	0	0	10(113)
2016	1(9)	1(9)	5(57)	2(24)	6(74)	3(34)	2(25)	0	0	20(232)
2017	0	0	3(36)	2(21)	4(44)	3(29)	1(13)	0	0	13(143)
2018	0	0	2(23)	2(24)	1(12)	2(26)	3(38)	0	0	10(123)

As can be seen, the number of work parties each year has varied considerably over the life of the project. This is because so much tree mallow needed to be cut in the early years and then fluctuations in the rabbit population also influenced the amount that needed to be cut.

To Fidra:

Year	Jan	Feb	Mar	Apr	Aug	Sep	Oct	Nov	Dec	TOTAL
2007	0	0	1(10)	0	0	0	0	1(7)	2(16)	4(33)
2008	1(10)	0	0	0	2(17)	1(7)	3(39)	0	0	7(73)
2009	0	0	2(14)	4(54)	4(44)	1(12)	3(20)	1(9)	0	15(153)
2010	0	0	4(60)	3(44)	2(22)	0	2(25)	2(20)	0	13(171)
2011	0	0	4(51)	2(22)	0	1(12)	0	0	0	7(85)
2012	0	0	2(24)	0	1(10)	2(18)	0	1(9)*	0	6(61)
2013	0	1(7)*	0	0	3(33)	2(19)*	1(8)	1(6)	0	8(73)
2014	0	0	1(10)*	1(13)	2(20)	2(21)	0	0	1(10)*	7(74)
2015	1(4)*	0	2(18)*	1(11)	1(11)	1(8)*	0	1(7)*	0	7(59)
2016	1(10)	1(7)	5(31)*	0	0	3(27)*	1(10)*	1(10)*	1(11)*	13(106)
2017	0	0	3(21)*	0	0	2(22)*	0	3(31)*	0	8(74)
2018	1(9)*	1(10)*	0	1(10)	0	1(10)	2(20)*	0	1(4)*	7(63)

Note: The trips during the months starred above were mostly organised by the RSPB though many also involved volunteers from SOS Puffin. Thanks to Allison Leonard who organised and led most of the work parties to Fidra.

A party of Scouts from North Berwick was taken out to Fidra in September and they cut a little tree mallow during the visit. This visit is not included in the above table.

Volunteers have continued to give wonderful support to the project. All work parties during the period have been oversubscribed and new volunteers continue to come forward. However, work parties are still dependent on a small group of enthusiasts who come regularly.

Many thanks to those who volunteered for a work party but were disappointed because the trip was either cancelled or oversubscribed.

3. Boats

From August until October we were able to use the Seabird Centre's large inflatable and our thanks to Colin Aston and his skippers (Brian and young Colin) for taking us out. This boat came out of the water at the end of October and will not be available again until March.

Local boatman Dougie Ferguson conveyed the RSPB work parties to Fidra in his launch Braveheart. He is not willing to land work parties on Craigleith because of the risk of damage to his boat and, as there is no other boat available, this means that it is not possible to do any mallow control on Craigleith during the winter.

4. What has happened on Craigleith?

The dry summer resulted in tree mallow being late germinating, but it made up for that from August onwards when a lot of seedlings appeared. They continued to grow through the autumn.

Common Nettle appeared to have a good year and spread back into some of the areas sprayed in 2015 and 2016. Small Nettle remains widespread but does not appear to have increased. Orache spread into the south east corner of the island which was drenched in sea water during the March gales. Grasses now dominate the north half of the island and have spread further into the south half which is encouraging.

About half of the work parties planned for the autumn were cancelled and one extra trip was needed in October. In total six work parties took place and proved sufficient to cut almost all the island at least once with some areas cut a second time to deal with late seedlings. More could have been done particularly in the vicinity of the cormorant colony (which is on steep ground in the north-east corner of Craigleith) but on the whole the island was in reasonable condition going into the winter.

Rabbit numbers remained low throughout most of the year though there were signs in the autumn that they might be on the increase again. However, they had no significant effect on the tree mallow or other plants.



Cutting tree mallow at the west end of Craigleith, 6th September 2018. Note the white Sea Campion which is spreading nicely in this part of the island.

5. What has happened on Fidra?

With no work parties allowed in August the first to Fidra was on 1st September. By then tree mallow (TM) seedlings had appeared in the usual places though not at high density. Nettles have spread further and now cover extensive areas of the island. Of most concern are places where it is encroaching on puffin nesting areas and the RSPB is considering whether some control would be desirable.

Two further work parties in October and one in December helped to remove the larger mallow plants but there are still a number of areas where TM seedlings have regrown or regenerated since they were cut including around the arch, south of the Castle and west of the lighthouse. Inaccessible plants on the cliffs continue to produce seed some of which falls within the island. Unfortunately, it is too expensive to employ qualified climbers to cut TM on the cliffs each year which is what is really needed.

6. What has happened on the Lamb?

A count of puffin burrows was carried out in August. This is much later than the recommended date for these counts (which is May) but doing it any earlier would cause unacceptable disturbance to the nesting cormorants and other seabirds. 685 apparently occupied burrows were counted, an increase on the figure for 2015 which was 619.

16 members of the Lothian Sea Kayak Club made another trip to the Lamb in October and cut a large area of tree mallow. They hope to complete the task before the end of February.



Strange behaviour on the Lamb? In reality, volunteers counting puffin burrows, August 2018.

7. Wildlife on the Islands

Breeding seabirds on the islands in the Forth are counted each year by the Forth Seabird Group. The numbers nesting in 2018 on the three islands visited by SOS Puffin work parties were as follows. The counts were organised and collated by Bill Bruce and the units are apparently occupied sites, nests, territories etc.

Species	Craigleith	Fidra	The Lamb
Fulmar (aos)	123	152	13
Cormorant (aon)	54	0	52
Shag (aon)	155	170	41
GBB Gull (aot)	34	5	6
LBB Gull (aot)	97	131	1
Herring Gull (aot)	1092	1177	87
Kittiwake (aon)	375	251	37
Razorbill (aos)	186	161	76
Guillemot (birds)	2363	491	1940
Puffin (aob)	2640	992	685

Note: The counts of the Lamb were done from a boat in early June, apart from the puffin burrow count in August.

It was a very late breeding season for most seabirds in the Forth, presumably because of the severe weather and unusually cold sea temperature in late winter. Numbers of Fulmar and Kittiwake were down on Craigleith and Fidra, but numbers of Shag held

up. Guillemot numbers on Craigleith were a little up but declined significantly on both Fidra and The Lamb.

Elsewhere, seabird counts at St Abbs gave mixed results: Shag and Kittiwake were significantly down but the very large Guillemot and Razorbill colonies were at all-time highs. On the Isle of May, Fulmar, Shag and Kittiwake were all down but Guillemot and Razorbills held their own. No puffin count was available from the May.

On the Bass Rock, Gannets were late arriving though most birds did occupy their nest sites. However only about 20% of established pairs produced young compared with a more normal figure of 50% to 60%.



Fulmar chick at nest site in the medieval masonry near the top of the Castle on Fidra.

Bottle-nosed Dolphins were not seen on any of the work parties this year though they were around and seen regularly on the commercial boat trips.

It was not possible to land on Craigleith this autumn to get a full count of the grey seal pups born on the island though at least 33 pups could be counted from the boat. 55 pups were counted in 2017.

8. Puffins and Great Black-back Gulls

The puffin burrow count of Craigleith in 2018 (2640 apparently occupied burrows) showed a big drop in numbers compared with earlier counts in 2014 (5475 aob) and 2016 (4125 aob). As there was no decline in the numbers on the nearby islands of Fidra and the Lamb, we wondered whether predation by the large colony of Great Black-back Gulls (GBBs) on Craigleith might be responsible. This was investigated in 2017 by a student from Aberdeen University Joe Churchill and over 130 dead puffins were found at the end of the breeding season. Further work was done in 2018 by another student, Cameron Singh-Johnstone, and over 160 dead Puffins were found. These were a mixture of breeding and non-breeding birds – all or almost all are thought to have been killed by GBBs. One pair killed over 30 Puffins (see photo) but most took small numbers only. GBBs nesting on the island have increased markedly over the last 12 years though they have declined a little in the last two years during which time the rabbit population crashed. It is possible that rabbits have provided additional food for GBBs and thus encouraged their increase.

However, an assessment of the data indicated that the predation of Puffins could only account for at most 17% of the observed decline since 2014. Nevertheless, it is possible that the high GBB population is a deterrent to Puffins attempting to nest on the island. It was agreed that monitoring of GBB predation should continue but another puffin burrow count will not be carried out before 2020.



A "midden" of more than 30 dead Puffins found in the territory of one pair of Great Black-back Gulls on Craigleith, August 2018.

9. Other Matters

The annual meeting of the Craigleith Management Group was held in November to review the past year and look ahead to 2019. This included consideration of the ecological monitoring work carried out on Craigleith by Prof. Rene van der Wal of Aberdeen University. Some points of interest to come out of the meeting were:

- The summer drought curtailed plant productivity but overall there was no major change in vegetation though the annual grass Wall Barley (*Hordeum*) increased significantly and some of the larger Common Nettle patches increased as well. The extent of TM appeared low in August but that was mainly because the dry summer meant it was late germinating.
- The spread of the grass Yorkshire Fog (*Holcus*) continued and in time it could cover most of the island. As a tall grass it may present some difficulties for Puffins later in the summer. The preferred grass Red Fescue is not declining but is thought unlikely to increase further and may eventually be replaced to some extent by Sea Campion.
- Some elder bushes have died perhaps because of salt spray and drought.
- The issue of the TM seed bank was considered, and it was agreed that it would be good to repeat the earlier work on this to assess how much seed remains in the soil and how viable it is. It is hoped to analyse soil samples from Fidra as well.



Thrift (Sea Pink) on Castle Tarbet, Fidra. This attractive maritime plant has suffered from the spread of tree mallow but will hopefully increase again. There is no record of it ever being on Craigleith.

10. Finally

2018 has not been an easy year with more work parties than usual cancelled because of boat and weather problems. However, we have managed to keep the tree mallow under sufficient control thanks to the splendid support of our volunteers.

It seems likely that we will need to continue with the tree mallow control for several more years. A programme of work parties for March and April will be circulated to all volunteers in early February. Allison Leonard of the RSPB is also planning a small number of trips to Fidra during January and February. The aim as usual will be to ensure that the islands are effectively clear of tree mallow by the time the puffins return in April.

Many of you will have heard of the sad death of Sir Hew Hamilton-Dalrymple who died on Boxing Day. His family has owned Craigleith and the Bass Rock for many years and he was always very supportive of the SOS Puffin project. He was a fine man, much liked and respected in North Berwick and beyond.

The management plan for Craigleith has been updated and anyone is welcome to have a copy by email.

A big thank you to all those who have helped with the project during the year including those who volunteered but whose work parties were cancelled. I have enjoyed working with everyone and I look forward to seeing many of you during 2019.

John

Craigleith Management Group

