

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

A progress update is usually sent to all the volunteers every six months to summarise any volunteer activities that have been undertaken on the islands and to highlight any other relevant research that underpins the project. This update covers the period July to December 2023. Any comments or queries are very welcome.

Island Visits and Volunteers

During the six month period, one work party went to Craigleith and three to Fidra to cut Tree Mallow (TM). Members of the Lothian Sea Kayak Club also visited the Lamb during the autumn.

All the SOS Puffin work parties have been over-subscribed, which has meant rationing the allocation of places with priority given to those volunteers who had not been out before. New volunteers continue to come forward with 480 people now on the volunteer data base and we are very grateful for their continuing support and only sorry that we cannot offer more places on the work parties.

Each of the three islands is considered in turn:

Craigleith

A visit in July showed a strong growth of vegetation during the summer perhaps because of a wet March and despite a reasonably dry summer. However very little TM was to be seen apart from one area which could not be cut in March because of possible disturbance to nesting Cormorants. The grass Yorkshire Fog had a good year and now dominates large parts of the island even replacing Stinging Nettles in some areas.

By August there was a lot of bare ground with indications that there was still a large rabbit population. TM was restricted mainly to the south and south-east parts of the island and in the Cormorant colony at the east end – elsewhere in the southern half of the island there were tiny seedlings evident on disturbed ground next to puffin and rabbit burrows. Sea Campion was still spreading out from the south-western corner. One work party in September cut most of the TM including part of the area around the Cormorant colony. A further visit was planned in October to finish cutting but it had to be cancelled because of the weather conditions.

The number of volunteer work parties visiting Craigleith each month since the beginning of 2007 with the number of man/woman days in brackets are given in the table below. In practice each “man day” represents on average about 3 actual hours work.

| Year | Jan | Feb | Mar | Apr | 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(78) | 0 | 0 | 10(123) |
| 2019 | 0 | 0 | 1(13) | 0 | 1(13) | 4(46) | 0 | 0 | 0 | 6(72) |
| 2020 | 0 | 0 | 0 | 0 | 1(8) | 2(18) | 1(9) | 0 | 0 | 4(35) |
| 2021 | 0 | 0 | 1(8) | 0 | 1(5) | 0 | 0 | 0 | 0 | 2(13) |
| 2022 | 0 | 0 | 0 | 1(12) | 0 | 2(21) | 0 | 0 | 0 | 3(33) |
| 2023 | 0 | 0 | 1(12) | 0 | 0 | 1(10) | 0 | 0 | 0 | 2(22) |

As can be seen, the number of work parties each year has varied considerably over the life of the project. This is because huge amounts of tree mallow needed to be cut in the early years while, more recently, fluctuations in the rabbit population have influenced the amount of mallow that needed to be cut. However, it is a sign of the project’s success that in the last four years the amount of TM has been very low.

Nettles were widespread as small plants with a few larger patches but there was no apparent increase on 2022 with some of the areas declining a little. No nettle control was carried out this year, it having been agreed that further consideration of its value was needed.

Cormorants have extended their nesting areas in the south-east of the island with an increase in total numbers. A dead Peregrine was found on the island in March and it is not known if they nested this year though a live bird was present in July. No Puffin count was done this year but it was encouraging to see unusually large numbers of puffins during a visit in July. No puffin burrow count was done because of concerns relating to avian flu.



The Glen on Craigleith 21st August 2023, with areas of bare ground and very little TM

No unusual mortality of gulls or other birds - which could indicate avian flu – was apparent on the island.

The bio-security monitoring boxes spread across the island containing non-toxic baits were checked and refreshed as necessary during visits. No evidence of rats was detected.

Charlotte Tomlinson, a student at the Scottish Rural College, together with Helen Anderson visited Craigleith in August looking at puffin burrows and TM germination. See the last section in this update for information about the research and monitoring project being funded by the Scottish Marine Environmental Enhancement Fund (SMEEF).

Fidra

Three SOS Puffin work parties took place in late August and September and cut most of the considerable areas of TM which had developed in the usual places during the summer. The main areas still left to deal with were near the harbour and west of the lighthouse. As well as controlling TM, quite a lot of litter was removed. RSPB hoped to arrange one or more work parties in late October but weather conditions did not allow.

The number of volunteer work parties visiting Fidra each month since the beginning of 2007 with the number of man/woman days in brackets are given in the table below. In practice each “man day” represents about 3 actual hours work.

| Year | Jan | Feb | Mar | Apr | Aug | Sept | 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) |
| 2019 | 0 | 0 | 1(10)* | 2(21)* | 0 | 3(27)* | 3(35)* | 0 | 2(22)* | 11(115) |
| 2020 | 1(10) | 0 | 0 | 0 | 1(9) | 2(12)* | 1(5)* | 2(12)* | 0 | 7(48) |
| 2021 | 0 | 0 | 3(24) Kayak | 0 | 0 | 2(13)* | 1(4)* | 0 | 1(7) | 7(48) |
| 2022 | 1(5)* | 0 | 4(21)* | 0 | 0 | 0 | 2(12)* | 2(11)* | 0 | 9(49) |
| 2023 | 0 | 0 | 0 | 2(10)* | 2(23) | 1(10) | 0 | 0 | 0 | 5(43) |

Note:

The trips during the months starred above were mostly organised by the RSPB though many also involved volunteers from SOS Puffin.

Nettles are widespread and are encroaching on some of the main puffin nesting area near the lighthouse and it is hoped that RSPB will carry out some control during 2024. Cormorants nested for the first time on Fidra with nine nests recorded on Castle Tarbet (see photo). If they spread much further in future they could have an impact on the nearby nesting puffins!

No unusual mortality of gulls or other species was seen.



The Castle on Fidra taken from Yellowcraig with the lighthouse behind (30th July 2023). Cormorants nested for the first time on the large ledge just below and to the left of the top of the Castle though they are not visible on this photo.

The Lamb

Since 2016, parties of kayakers organised by David Simpson of the Lothian Sea Kayak Club have been visiting the Lamb to control TM. This year no work parties were arranged as they were not thought necessary. However, the three kayakers Tim Gibson, Chris Gordon and Neil Black, who helped so much to deal with the earlier rat incursion, have paid a small number of visits to the island to cut TM and check the monitoring boxes. No evidence of rats has been seen and TM has been kept under control.

However there is now sufficient TM to justify a work party and the Club hope to organise a trip to the Lamb in the next two months if and when the weather allows.

Avian Flu

The Scottish Avian Flu Task Force reported on the wild bird mortality for the period 3rd April to 1st October 2023 as follows:

- 9610 sick and dead wild birds with Gulls, Auks and Terns hardest hit.
- Of these 35% were Kittiwake, 37% Guillemot and 15% Gulls (inc. Black-headed Gulls), Terns 7% and Razorbill 4%.

- 29 other species were also affected but comprised only 2% of the total.
- Nearly all were recorded on the east coast.

More recent deaths of Guillemot and Razorbill on the north and east coast are not caused by Avian Flu and the cause is unknown though birds may have starved.

During 2023, SSC, The University of Edinburgh's School of Geosciences, and the UK Centre for Ecology & Hydrology formed a partnership to assess the impact avian flu had on the Bass Rock colony after the outbreak in 2022. The colony has reduced by 25-30% since the last major count in 2014, decreasing from 75,000 sites to around 55,000 sites. This partnership, along with other important research projects, will continue on the Bass over the coming years.

As regards seabirds, the impact of avian flu needs to be seen in the context of the recently published National Seabird Census which was carried out by volunteers between 2015 and 2021 (i.e. before avian flu). This showed that out of 21 seabird species, 11 had declined by more than 10% since the previous census 20 years earlier while only five had increased by this amount.

The Craigleith Management Group (CMG)

The project has been overseen by this group from the beginning. It is chaired by John Hunt (Volunteer) and members are as follows: Sir Hew Dalrymple (landowner), Sorcha Gibson (NatureScot), Toby Wilson (RSPB), Helen Anderson (Scottish Rural College), David Ross (Volunteer) and Maggie Sheddan (Volunteer). The CMG meets once a year in November to review what has happened during the year and agree future plans. It approves the management plan for Craigleith which is updated at the end of each year and anyone is welcome to have a copy of this.

Looking Forward

As usual our priority for 2024 is to ensure that the islands are reasonably clear of TM by the time puffins return to breed. Predicting the future is always risky, but it does seem that the project has reached the stage where the amount of TM control needed from now onwards will be relatively low. A schedule of trips for the coming spring will be circulated to all the volunteers during February, and RSPB will probably also organise some work parties to Fidra. However, the number of work parties will be determined by the amount of TM on Craigleith and Fidra and we expect that only a small number will be needed during 2024.

We hope to carry out a puffin burrow count on all three islands during the summer.

NatureScot turned down our SMEEF (Scottish Marine Environmental Enhancement Fund) application early in 2023 but came back in August offering to fund this work provided an application was submitted almost immediately. After some very speedy footwork a revised research project was approved running for two years from August 2023 and consists of the following main elements:

- Looking at the linkage between rabbits, soil disturbance and germination of TM
- Trialling methods for nettle control
- A puffin burrow count
- Include a student research project
- Assessment of the use of remote sensing (i.e. drone-based photography) monitoring
- Production of a Management Guidance Report drawing on the experience of the work carried out on the islands over the last 16 years.

This project will be a partnership between the Scottish Seabird Centre and the Scottish Rural College. It should provide valuable information to help guide SOS Puffin and we hope the Guidance Report in particular will be of help to others involved in controlling invasive species.

Many thanks to the members of the Craigleith Management Group and to all the volunteers who continue to support SOS Puffin.

With best wishes

The SOS Puffin team



A work party returning from Fidra, 5th September 2023