

BBFO Project Proposal

Name of Project: Manx Shearwater ringing / productivity monitoring

Carried out by: BBFO

Project description and purpose:

The Manx Shearwater is one of the two avian features noted in the re-notification of the SSSI on Bardsey. The current population of shearwaters on the island is between 10,000 and 16,000 pairs. Ringing of the shearwaters has proved over the years to be a very useful tool and helps give an indication on how the population is doing. The productivity of a sample of burrows from around the island has been monitored since 1998 and should be continued in accordance with the new management plan for Bardsey. In addition the Observatory has always ringed as many shearwaters as staff time allows. Bardsey shearwaters represent over 50% of the annual total for the whole of the British Ringing scheme and therefore will represent a large proportion of the number of shearwaters ringed annually in the world.

Methods

Ringing:

Ringing effort will continue with a particular focus on chicks which will provide birds of known age when re-trapped on subsequent occasions. Birds attracted to the lighthouse will continue to be trapped, ringed and released until the light signature is changed in 2014. Extra effort will be put into trapping and recording the ring numbers of the large number of birds already wearing rings (retraps).

Breeding Productivity:

A sample of up to 150 accessible Manx Shearwater nests will be monitored across various habitats to assess the outcome and the results used to calculate productivity.

Outputs

Ringing data will be entered on to IPMR and submitted to the BTO as required. All data from retraps will also be entered on to IPMR and sent to the BTO to be added to the national database. A full report will be included in the annual report on monitoring which will be produced by the end of March 2015. Copies of the document will be sent to Bardsey Island trust and Natural Resources Wales.

Constraints:

Conditions:

Timing: Spring-autumn 2014

Consents:

| | Consent required | Consent Obtained |
|----------------------------|------------------|------------------|
| BIT Scientific Committee | No | |
| BIT Council | No | |
| SSSI PDOs – NRW | Yes | Yes |
| Licenses and permits – NRW | Yes | Yes |

Equipment required:

Costs:

Capital items: Rings @ 37p each =
Non-capital items: £3,150

Form completed by: Peter Howlett

Date: 30/10/2013

BBFO Project Proposal

Name of Project: Manx Shearwater population census

Carried out by: BBFO

Project description and purpose:

The last whole island census of the Manx Shearwater population was carried out in 2008-2010. This should be repeated every six years and therefore should be carried out in 2014-2016.

In order that some sort of survey is undertaken in 2014 it is proposed that a partial survey is again undertaken which can be completed by one person. The 2014 survey would cover only readily accessible areas of the island principally the south end and the lowland areas as per the 2008 census. The survey would be carried out using the same methodology as the 2008-10 survey which means the results can be compared to assess any changes in population and used to produce an estimate of the whole island population.

Constraints: SDS will have to find a suitable person to undertake the census. Weather could be a factor in limiting fieldwork.

Conditions: This project can only take place with 100% funding from NRW. BBFO does not have the resources to be able to underwrite any of the costs involved in undertaking this survey.

Timing: Spring-Summer 2014

Consents:

| | Consent required | Consent Obtained |
|----------------------------|------------------|------------------|
| BIT Scientific Committee | No | |
| BIT Council | No | |
| SSSI PDOs – NRW | Yes | No |
| Licenses and permits – NRW | No | |

Equipment required:

Costs:

Capital items: Tally counters £10
 Mp3 player with built in speaker £50

Non-capital items: £3,800

Form completed by: Peter Howlett

Date: 30/10/2013

BBFO Project Proposal

Name of Project: Manx Shearwater ringing / productivity monitoring

Carried out by: BBFO

Project description and purpose:

The Manx Shearwater is one of the two avian features noted in the re-notification of the SSSI on Bardsey. The current population of shearwaters on the island is between 10,000 and 16,000 pairs. Ringing of the shearwaters has proved over the years to be a very useful tool and helps give an indication on how the population is doing. The productivity of a sample of burrows from around the island has been monitored since 1998 and should be continued in accordance with the new management plan for Bardsey. In addition the Observatory has always ringed as many shearwaters as staff time allows. Bardsey shearwaters represent over 50% of the annual total for the whole of the British Ringing scheme and therefore will represent a large proportion of the number of shearwaters ringed annually in the world.

Methods

Ringing:

Ringing effort will continue with a particular focus on chicks which will provide birds of known age when re-trapped on subsequent occasions. Birds attracted to the lighthouse will continue to be trapped, ringed and released until the light signature is changed in 2014. Extra effort will be put into trapping and recording the ring numbers of the large number of birds already wearing rings (retraps).

Breeding Productivity:

A sample of up to 150 accessible Manx Shearwater nests will be monitored across various habitats to assess the outcome and the results used to calculate productivity.

Outputs

Ringing data will be entered on to IPMR and submitted to the BTO as required. All data from retraps will also be entered on to IPMR and sent to the BTO to be added to the national database. A full report will be included in the annual report on monitoring which will be produced by the end of March 2016. Copies of the document will be sent to Bardsey Island trust and Natural Resources Wales.

Constraints:

Conditions:

Timing: Spring-autumn 2015

Consents:

| | Consent required | Consent Obtained |
|----------------------------|------------------|------------------|
| BIT Scientific Committee | No | |
| BIT Council | No | |
| SSSI PDOs – NRW | Yes | Yes |
| Licenses and permits – NRW | Yes | Yes |

Equipment required:

Costs:

Capital items: 600 Rings @ 37p each = £222
Non-capital items: £3,465

Form completed by: Peter Howlett

Date: 11/11/2014

BBFO Project Proposal

Name of Project: Manx Shearwater population census

Carried out by: BBFO

Project description and purpose:

The last whole island census of the Manx Shearwater population was carried out in 2008-2010. This should be repeated every six years and therefore should be carried out in 2014-2016.

In order that some sort of survey is undertaken in 2015 it is proposed that a partial survey is again undertaken which can be completed by one person. The 2015 survey will cover the east side of the island as per the 2009 census. In order to undertake this work safely a second person will be required for 6 weeks over the late spring-summer period. The survey would be carried out using the same methodology as the 2008-10 survey which means the results can be compared to assess any changes in population and used to produce an estimate of the whole island population.

Constraints: SDS will have to find a suitable person to undertake the census and a second person to assist. Weather could be a factor in limiting fieldwork.

Conditions: This project can only take place with 100% funding from NRW. BBFO does not have the resources to be able to underwrite any of the costs involved in undertaking this survey. Note that to complete the survey of the east side the census can only take place if funding is available for a second person

Timing: Spring-Summer 2015

Consents:

| | Consent required | Consent Obtained |
|----------------------------|------------------|------------------|
| BIT Scientific Committee | No | |
| BIT Council | No | |
| SSSI PDOs – NRW | Yes | No |
| Licenses and permits – NRW | No | |

Equipment required:

Costs:

Capital items: Tally counters x6 @£10 each £60
Mp3 player with built in speaker £50

Non-capital items: £5,700

Form completed by: Peter Howlett

Date: 11/11/2014

BBFO Project Proposal

Name of Project: Manx Shearwater ringing / productivity monitoring

Carried out by: BBFO

Project description and purpose:

The Manx Shearwater is one of the two avian features noted in the re-notification of the SSSI on Bardsey. The current population of shearwaters on the island is thought to be about 21,000 pairs making it the fourth largest colony in the world. Ringing of the shearwaters has proved over the years to be a very useful tool and helps give an indication on how the population is doing. The productivity of a sample of burrows from around the island has been monitored since 1998 and should be continued in accordance with the new management plan for Bardsey. In addition the Observatory has always ringed as many shearwaters as staff time allows. Bardsey shearwaters represent over 50% of the annual total for the whole of the British Ringing scheme and therefore will represent a large proportion of the number of shearwaters ringed annually in the world.

Methods

Ringing:

Ringing effort will continue with a particular focus on chicks which will provide birds of known age when re-trapped on subsequent occasions. Extra effort will be put into trapping and recording the ring numbers of the large number of birds already wearing rings (retraps).

Breeding Productivity:

A sample of up to 150 accessible Manx Shearwater nests will be monitored across various habitats to assess the outcome and the results used to calculate productivity.

Chick growth study

During 2015 a pilot study using 30 burrows to monitor the growth rate of the chicks took place. Each week the birds were removed from the burrows and the young weighed and measured. The project will continue in 2016 and the data from these nests will be part of the long-term study run by Dr Matt Woods at the university of Gloucestershire.

Outputs

Ringing data will be entered onto IPMR and submitted to the BTO as required. All data from retraps will also be entered onto IPMR and sent to the BTO to be added to the national database. Nest record will be entered on to the IPMR database and submitted to the BTO. A full report will be included in the annual report on monitoring which will be produced by the end of January 2017. Copies of the document will be sent to Bardsey Island trust and Natural Resources Wales and the Joint Nature Conservation Committee's Seabird Monitoring Program.

Constraints:

Conditions:

Timing: Spring-autumn 2016

Consents:

| | Consent required | Consent Obtained |
|----------------------------|------------------|------------------|
| BIT Scientific Committee | No | |
| BIT Council | No | |
| SSSI PDOs – NRW | Yes | Yes |
| Licenses and permits – NRW | Yes | Yes |

Equipment required:

Costs:

Capital items: up to 600 Rings @ 40p each = £240
Non-capital items: £3,800

Form completed by: Peter Howlett

Date: 10/12/2015

BBFO Project Proposal

Name of Project: Manx Shearwater population census

Carried out by: BBFO

Project description and purpose:

The last whole island census of the Manx Shearwater population was carried out in 2008-2010. This should be repeated every six years and therefore should be carried out in 2014-2016.

In order that some sort of survey is undertaken in 2016 it is proposed that a partial survey is again undertaken which can be completed by one person. The 2016 survey will cover the north and west sides of the island as per the 2010 census. The survey would be carried out using the same methodology as the 2008-10 survey which means the results can be compared to assess any changes in population and used to produce an estimate of the whole island population.

Outputs

A full report will be included in the annual report on monitoring which will be produced by the end of January 2017. Copies of the document will be sent to Bardsey Island trust and Natural Resources Wales and the Joint Nature Conservation Committee's Seabird Monitoring Program.

Constraints: Weather

Conditions: This project can only take place with 100% funding from NRW. BBFO does not have the resources to be able to underwrite any of the costs involved in undertaking this survey.

Timing: Spring-Summer 2016

Consents:

| | Consent required | Consent Obtained |
|----------------------------|------------------|------------------|
| BIT Scientific Committee | No | |
| BIT Council | No | |
| SSSI PDOs – NRW | Yes | No |
| Licenses and permits – NRW | No | |

Equipment required:

Costs:

Capital items: Rechargeable batteries £45 and Battery charger £20

Non-capital items: £3640

Form completed by: Peter Howlett

Date: 10/12/2015