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DEVELOPMENT OF MONITORING OF SEABIRD POPULATIONS AND PERFORMANCE

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CONTENTS

1 INTRODUCTION

This joint NCC/ITE study to collect biological data on a range of British seabirds was started in April 1986. Such data are needed to help interpret the results of schemes which monitor changes in the numbers of seabirds and to assess the health of British seabird populations. I report on the first full season of the project.

2 MONITORING NUMBERS

2.1 The schemes organized by NCC, RSPB, ITE, and SOTEAG continued. In general, populations of cliff-nesting seabirds remained high but the rates of increases noted in the 1970s and early 1980s had either slowed down or even been reversed (e.g. kittiwake).

2.2 RSPB are at present reviewing their commitment to the annual monitoring of Seabird numbers. Once they have done this, NCC will need to consider its role in the field.

3 ESTABLISHMENT OF BIOLOGICAL MONITORING PROGRAMMES AT KEY SITES

3.1 Detailed and comprehensive schemes are now in operation on Isle of May NNR (this study), Skomer NNR (NCC contract to Dr C M Perrins) and, after some initial problems, on Fair Isle (NCC contract to Fair Isle Bird Observatory Trust).

3.2 The siting of a study area in the northwest continues to be a problem. St Kilda NNR is the obvious choice but there are severe travel, logistic and practical problems. Canna has several advantages but, being in the Inner Hebrides, is perhaps not typical of the northwest. I plan to visit both islands this summer to clarify the situation.

3.3 It will be impossible to get identical coverage at all colonies due to varying practical difficulties. Similarly the species followed will vary slightly from colony to colony. I do not consider these points to be important.

4 BREEDING SUCCESS

4.1 The aim was to develop and test low-input methods (suitable for use by volunteers, wardens, etc.) for monitoring breeding productivity of kittiwake, shag, fulmar, guillemot, razorbill and puffin.

4.2 Satisfactory low-input techniques are now available for measuring the nesting success of kittiwake (Appendix 1), shag, fulmar and puffin.

4.3 The low input method was used successfully to monitor the breeding success of kittiwakes at colonies scattered around Britain (Fig. 1).

4.4 A method suitable for guillemots developed on the Isle of May (Appendix 2) will be tested on Fair Isle and Skomer in 1987 by A. del Nevo and B. Hatchwell.

5 ADULT SURVIVAL RATES

5.1 Data are now being collected at

Isle of May - puffin, guillemot, razorbill, shag, kittiwake
Skomer - puffin, guillemot (B Hatchwell), kittiwake, herring and lesser black-backed gulls
Fair Isle - kittiwake, shag (few), puffin (few)
Canna - kittiwake

5.2 Discussion with Prof. G Dunnet showed that fulmar was not suitable for widespread monitoring due to its very high survival rate, the effect of observer disturbance on the results and the high input needed to get accurate results. The survival of this species continues to be monitored at Eynhallow, Orkney by Prof. Dunnet.

6 FOOD SAMPLES

6.1 Geographic and species coverage was patchy (Appendix 4) but sandeels formed the bulk of the food of shag, kittiwake, puffin, guillemot and razorbill.