

UIST WADER PROJECT: CONSERVATION MANAGEMENT FOR THE BREEDING WADER POPULATIONS

Purpose

- 1 This paper updates the Board on the conservation status of the internationally important breeding populations of waders on South Uist, Benbecula and North Uist, and presents proposals for conservation action.

Board Action

2 The Board is invited to:

- (1) **Note the importance of breeding wader populations on SPAs in the Uists and Benbecula, and the detrimental effects of the introduced hedgehogs to these populations;**
- (2) **Note the requirements upon Member States, under the terms of the EU Birds Directive, to safeguard qualifying species and their habitats on NATURA 2000 sites;**
- (3) **Note the options for addressing the threat to the Natura interests, and in particular the implications of a policy change from the use of non-lethal to humane lethal control of the hedgehog populations; and**
- (4) **Support a bid for LIFE funding in order to implement measures to help restore the breeding wader populations on Uist SPAs.**

Preparation of paper

- 3 This paper has been prepared by Nigel Buxton, Iain Mackenzie, Des Thompson and Jeff Watson. The authors acknowledge substantial contributions from RSPB staff and SEERAD officials.

Background

- 4 North Uist, Benbecula and South Uist in the Western Isles of Scotland support some of the most important populations of breeding waders (dunlin, ringed plover, redshank, snipe, lapwing and oystercatcher) in the British Isles and Europe. Surveys in 1983 found 17,000 pairs, including approximately 25% of the total UK breeding populations of dunlin and ringed plover, making it one of the best areas in Europe.
- 5 As a result the islands support 14 SSSI (notified under the Wildlife and Countryside Act) and two extensive Special Protection Areas (classified under the EU Birds Directive).

- 6 Hedgehogs are not native to the Uists or any other Outer Hebridean island but were introduced to the Uists in 1974. There are now estimated to be over 5000 adults, having spread northwards throughout South Uist and Benbecula into the southern part of North Uist. With an estimated production of approximately 10000 young each year colonisation of all suitable areas of these islands is imminent. The hedgehog's preferred habitat in the Western Isles is machair but they also occur at lower densities to the east, especially on the blackland.

The Problem

- 7 Subsequent re-survey of breeding waders in 1995 and 2000 has shown significant decreases by all species except oystercatcher. Six years of research has conclusively demonstrated that the declines in four of the species (dunlin, redshank, snipe and lapwing) were due to high levels of egg predation by hedgehogs. Ringed plover are also predated but the causes of their decline appear to be less straightforward. Between 1995 and 2002, overall numbers declined in South Uist and Benbecula by almost half (snipe, dunlin and ringed plover numbers declined by almost 60%, redshank by 40% and lapwing 30%). Although in North Uist the numbers of lapwing and redshank have increased (contrasting with the downward national trend for these species), there has been a marked decline in ringed plover and dunlin.
- 8 Overall this issue is both sensitive and complex. Any work to further the conservation of the waders through management of the hedgehog population must recognise the full context of ongoing work in the UK and Europe to review the impact of alien/non native species and recognise precedents which might potentially be set for the management of other contentious and sensitive species. It must also recognise that the hedgehog, as a species, is beloved by the general public in the UK. Nevertheless the Birds Directive sets a clear requirement for Member States to "..... take requisite measures to maintain the population of species referred to..." and the relevant parts of the Habitats and Species Directive (replacing obligations arising in pertinent Articles in the Birds Directive) states that "*Member States shall take appropriate steps to avoid, in special areas of conservation (in this specific situation referring to SPA), the deterioration of natural habitats and the habitats of species.....*".
- 9 Thus the Uist Wader Project (UWP) was established in 2000, as a joint partnership between SNH, SEERAD and RSPB, with four main aims:-
- To slow down the spread of hedgehogs to new areas on the Uists, and where possible safeguard existing populations of breeding waders,
 - To evaluate appropriate methods of locating and catching hedgehogs,
 - To investigate methods of reducing the hedgehog population on the islands, initially via non-lethal methods,
 - To raise awareness of the issues and maintain close links with relevant external organisations.

Options for Management

10 The work of the UWP has clearly demonstrated that, at least potentially, there are options for management: In brief these are:-

- Do nothing
- Fencing to exclude or reduce the spread of hedgehogs
- Sterilisation or contraception of the hedgehog population
- Capture and removal of hedgehogs through permanent captivity
- Capture and removal of hedgehogs via translocation to the mainland
- Capture and removal of hedgehogs via humane lethal control

11 These various options have been substantially reviewed in terms of the conservation benefits for Uists waders, welfare risks to the hedgehogs and associated legal aspects. The detailed processes and predictions for success are currently being investigated through mathematical modelling. It is apparent however that the only way to ensure that both the conservation of the waders and the requirements of the Birds Directive are fully met is to remove the hedgehogs. For six years, through research under the UWP, the range of non-lethal options has been investigated. These either fail adequately to safeguard Uist waders (doing nothing or exclosures/barrier fencing), are currently not available (sterilisation/contraception), or are associated with significant animal welfare issues (translocation and long-term captivity). In the short and longer term, however, there may be a role for fencing and potentially immuno-contraception to be used in conjunction with other methods.

12 The logical and inevitable conclusion is that humane lethal control of female hedgehogs between emergence but before they give birth and male hedgehogs throughout the breeding season offers the only method of promoting wader conservation whilst ensuring individual hedgehog suffering is minimised. The priority aim must be total eradication, hence avoiding an ongoing commitment to long-term population management. This method of control will ensure the UK meets its responsibilities under the Birds Directive.

Public Relations

13 While there appears to be public sympathy for the conservation of breeding waders, achieving this through population management of the hedgehog is, potentially, not a popular exercise in the eyes of sectors of the public. To date all UWP work has been conducted in an open manner underpinned by a policy of proactively canvassing external opinion and involving wide ranging expertise. Consultees have included SSPCA, Universities Federation for Animal Welfare, the research and conservation community, animal welfare and hedgehog carer organisations, local island interests and the media. Whilst there are clear differences in opinion as to how the problem should be tackled there has been general agreement on three key points:

- Recognition of the international importance of the Uist Waders, underpinned by the EU Directives

- Acceptance that research carried out demonstrates a serious decline in waders and that this is caused by hedgehogs
- Agreement that hedgehogs should not have been introduced to the islands.

The SSPCA regrets the necessity of a cull of hedgehogs in order to conserve waders. The Society has reached an agreement for their unrestricted monitoring of any hedgehog management being undertaken. The SSPCA views appropriate levels of training for all staff involved as paramount and is ready to advise and assist .

14 It is therefore recognised that any practical management of the hedgehog populations will continue to be an extremely sensitive issue for all the above parties, especially if this were on a protracted basis. Hence a strategic approach, which carefully, proactively and clearly, continues the involvement of interested parties and explains the logic of the approach, has been defined and continues to be implemented.

The Way Forward

15 It is suggested that the conservation of breeding waders in Uist will require trials of the techniques to be implemented, supported by additional, rigorous, predictive modelling of the responses by the hedgehog population and ultimately progression to a full programme of eradication. It is inevitable that to achieve practical wader conservation will involve significant timescales, costs and additional partners. It is our view that the most effective way to address this extended challenge is to bid for funding through the EU LIFE – Nature programme.

16 A range of work is required to further develop the detail of the eradication programme and how this might be delivered. Priority actions that require immediate attention are:

- **Work programme** – detailed proposals need to be produced for all the elements of the eradication programme.
- **Funding** – further work is required on this, although indicative figures suggest that a LIFE project could involve costs of at least £1 - £1.5m.
- **Partners** – further work is required with a range of potential partners (including SEERAD, SEPA, RSPB and local interest in the Western isles) who will be essential in delivering the overall programme.
- **Legislation** – The taking or killing of hedgehogs for the purposes of conserving wild birds appears to be specifically omitted from Section 16 (3) of the Wildlife and Countryside Act 1981. The UWP has been operating under a “science” licence issued by SNH and this trial has been possible because the work to date has been designed to test different approaches under the terms of a scientific trial. For a full eradication programme it will be necessary to ensure that work is done in compliance with all relevant legislation. Views are currently being sought from SNH solicitors on what, if any, legislative changes may be needed in order that a full eradication programme can take place.

Recommendation

- 17 Whilst it is recognised that financial and legal issues still require to be resolved, it is recommended that there is an overwhelming case for a management initiative to attempt the successful eradication of hedgehogs in the Uists and Benbecula using humane lethal methods. This is the only effective way to ensure the conservation of breeding waders and hence fully meet the requirements of the Birds Directive.
- 18 The anticipated complexity and level of funding required is such that this can only be achieved through a partnership bid for external funding such as that provided by LIFE.
- 19 The Board is asked to endorse work leading to eradication of the introduced hedgehog population by humane lethal control and support an appropriate LIFE bid to implement such measures.

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