

**Minsmere Nature Reserve –
November 2012 to October 2013
Report to the Council of Europe**

Country: United Kingdom

Name of reserve: Minsmere Nature Reserve

Central authority: The Royal Society for the Protection of Birds
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I. GENERAL INFORMATION

1 Natural heritage

1.1 Environment

The Environment Agency through their contractor continues to monitor the internal flood defence bank and the sluice structure against tolerances agreed in the designs. Divers replaced the seals in the sluice in February 2013 after leakage rates became unacceptable. This work appears to have resolved the issue.

The Environment Agency have commenced a project in October 2012 to refurbish the main tidal sluice and raise embankments along the New Cut River which will reduce flooding into the southern reedbed areas and fen meadows. The Project experienced several delays including substantial rainfall over the spring and summer leading to the flooding of the Sluice Trail which was the main works access. Completed works from Phase I included:

- The establishment of the main compound near the Minsmere work centre and a satellite compound near the Tidal Sluice.
- Site investigations work.
- The embankment raising and asbestos capping in Sections A and B of the New Cut Embankment, between dam Bridge and the Main Tidal Sluice.
- A structural report on the sluice.
- Installation of two pedestrian footbridges

As a result of technical difficulties and the flood event the Project was extended into a Phase II which commenced in August 2013 with a projected end date of February 2014.

1.2 Flora and vegetation

The decision to begin controlling the red deer *Cervus elaphus* population was approved and a contractor has been appointed to manage the cull. Around 250 animals will be removed in the first year with the long term aim of reducing the population to a level at which it is benefitting the reserves important habitats rather than having an adverse impact. The heathland and reedbed will be closely monitored in order to assess the success of this project.

Chemical control of the invasive pirri-pirri burr *Acaena novae-zelandiae* continues but eradication is proving difficult. This species may be building resistance to the preferred chemical and alternatives will be investigated.

Shingle flora was surveyed by our first "Shingle Warden" employed through the Touching the Tide project with one highlight being the first reserve record of pyramidal orchid *Anacamptis pyramidalis*.

1.3 Fauna

Species	Breeding success (no. pairs/no. young)		Comments
	2012	2013	
Bittern (males) <i>Botaurus stellaris</i>	10/?	9/?	7 nesting attempts, an encouraging increase although the majority were thought to have failed before fledging. Reedbed rejuvenation and restoration projects aim to improve nesting numbers and success.
Marsh harrier <i>Circus aeruginosus</i>	10/24	9/15	The lowest productivity since 2000.
Avocet <i>Recurvirostra avosetta</i>	108/1	97/2	Poor productivity as a result of predation.
Stone Curlew <i>Burhinus oedicephalus</i>	9/9	9/5	Two pairs also nested at nearby Dingle Marshes.
Nightjar <i>Caprimulgus europaeus</i>	9/?	8/?	The population continues to decline. It is hoped that a reduction in the red deer population will benefit this species.
Woodlark <i>Lullula arborea</i>	12/?	15/?	A continued increase on the recent low of 11 pairs in 2011.

Cetti's warbler <i>Cettia cettia</i>	66/?	48/?	Another cold winter led to a drop in numbers.
Dartford warbler <i>Sylvia undata</i>	12/?	9/?	Cold winters and the decline in heathland habitat condition (due to red deer grazing) led to another drop in population.
Bearded tit <i>Panurus biarmicus</i>	23/?	15/?	Continues to be difficult to survey. Despite the low numbers, breeding success appeared to be good with many fledged young seen

One Savi's warbler reeled in the reedbed for at least 29 days but remained out of sight and it is not known if it managed to attract a mate. There was no repeat of the possible nesting of golden oriole in 2012. Turtle dove numbers dropped to three pairs reflecting the national trend and stonechat disappeared completely as a breeding species.

A full antlion *Euroleon nostras* pit survey was undertaken, but a comparison of the sites surveyed on the last full survey in 2011 shows a reduction in pit numbers from 4022 to 3971. A full colony count of silver-studded blue *Plebejus argus* was undertaken this year with 4439 imagos recorded; an increase as compared to the last full survey in 2011 of 3241 imagos. Neither the heathland nor the adjacent ex-arable ponds were used by natterjack toads *Buffo calamita* this year in common with the poor breeding season across all East Anglian populations.

2 Cultural heritage and socio-economic context

2.1 Cultural heritage

2.1.1 Changes concerning cultural heritage

Working with Colchester University, we started work on our Oral History project, gathering contributions from members of the local community and staff and volunteers who had been involved at Minsmere in the 1940s – 1960s. Further progress was made with WW2 interpretation, with an event scheduled for autumn 2014.

2.2 Socio-economic context

2.2.1 Changes concerning the socio-economic context

Minsmere was voted one of the top 100 Anglia Green businesses. We further developed our Corporate Membership offer, with several local businesses now supporting our work financially, engaging their staff and visitors in our work and taking opportunities to promote their services to potential customers in partnership with RSPB Minsmere. We joined the Suffolk Chamber of Commerce, which has identified further partnership links.

3 Education and scientific interest

3.1 Visitors - information policy

3.1.1 Arrangements for receiving and informing the public

The face-to-face welcome provided by RSPB staff and volunteer receptionists alongside regional membership development officers is continuing to prove very successful. Permanent visitor information is augmented by a range of leaflets, the style and presentation of which is flexible and constantly reviewed to reflect brand and seasonal changes.

Visitor infrastructure continues to be maintained in accordance with the Reserve Management Plan. A lightning strike during the night of 4 October 2013 damaged Minsmere's communications links and equipment. Repairs were not completed until 4 November, during this period all incoming telephone enquiries from the public were diverted to RSPB Headquarters. On 28 October 2013 a major storm caused fallen trees to block access to Minsmere. These were quickly cleared by reserve staff and access was restored the same day.

3.1.2 Frequentation by visitors and behaviour

Visitor numbers for the period were 81,683, slightly less than the previous year. Fifty eight schools participated in the reserve's formal education programme, attended by 1,981 children. A full programme of guided walks was run throughout the year, including some more specialist walks to watch flora, insects and wildfowl or to listen to nightjars, nightingales and warblers or dawn choruses. Event attendance was lower than usual during the spring due in part to the poor weather. A new approach to family activities saw us offering an activity on

most weekdays during the school holidays. This increased our engagement with families and allowed us to maximise promotion of the Wild Zone and den building throughout the year. We also successfully trialled a series of short introductory, themed walks for families. The annual deer rut viewing point was well attended this autumn and 4x4 deer safaris were again available allowing visitors a premium experience; getting close to the deer stags and hinds.

3.1.2 Special visits

During the period we hosted visits by Natura People INTERREG 2 Seas partners from Belgium and the Netherlands; 200 delegates from a European Ornithologist Union conference; staff from the Institute for Avian Research in Germany; Dutch conservationists working on a project with breeding godwits and local communities; a conservation delegation from Okinawa, Japan and the past president from the Birdlife partner in New Zealand. RSPB delegations included a visit by Council members and Directors; a conference that we hosted for Site Managers of major visitor sites; teams and individuals from Eastern, South West, South East and Northern England, Northern Ireland and Scotland to learn about our conservation and visitor work. We also worked closely with the World Land Trust, Butterfly Conservation and reptile specialists on conservation management and visitor projects and hosted a meeting of the Wild Anglia partnership. The BBC made several visits to investigate Minsmere's potential to host next year's Springwatch television series.

3.2 Scientific research

3.2.1 Current/completed research

Moth trapping continues on the reserve. Jeff Higgott provided assistance with identification and helped run two public moth nights. National Moth Night coincided with the RSPB Big Wild Sleep Out and several traps were run at the Sluice. Nigel Cumming and Colin Lucas continued to survey invertebrates. Students Georgia Kelly and Lizzie Green conducted research into 1) habitat selection of nightjar and woodlark and 2) cetti's warbler and dartford warbler populations as part of a project on climate change response.

3.2.2 Scientific publications

Cadbury, J. (2012). **Botanical Riches at the RSPB's Minsmere Nature Reserve**. Paper to Botanical Society
Harvey, R. & Higgott, J. 2013. **Reports from Coastal Stations - 2012: Minsmere RSPB, Suffolk**. Atropos 48: 64-65.

Rowlands, A. & Harvey, R. 2012. **Minsmere RSPB Reserve 2011**. Suffolk Birds 61: 14-15.

4 Site description

4.1 Changes in legislation or regulations

None.

4.2 Changes in ownership title

None.

4.3 Extension or transfer

None.

5 Site management

5.1 Improvements made

5.1.1 Ecological action

Reedbed – The Truxor amphibious cutter was used to maintain 3015m of reedbed ditch and cut 2.34 ha reed, a combination of clearing pools and cutting plots. Management by brushcutter was limited by bad weather/time constraints with 1.63 ha cut in total. Previous years ditch slubbings were levelled off and 650m of ditches cleared.

Lowland wet grassland – South Levels grazed by cattle, ponies and sheep and some areas cut for hay. Some grazed fields were also topped. Winter 2012 - 1543m of routine ditching was carried out and 780m of footdrains were cleared out. Autumn 2013 690m ditches were slubbed out and a number of gateways and crossings were also built up in the process to aid access around the levels

Scrape – The Scrape was grazed 6 Konik ponies during the late Autumn and Winter of 2012/13. Post breeding

season vegetation on all islands was cut, raked and burnt. West South was fallowed and all the islands on this compartment were turned over. West South and Mid were flooded with salt water in Autumn to try and kill off encroaching Mare's Tail. The fen areas are due to be cut late November 2013. Six Konik ponies were back on post management works by mid October

Heathland/acid grassland – This year, 0.47 ha of birch was felled and 0.36 ha of gorse was removed from the heathland and acid grassland

Deer management – The deer management group continues to oversee the implementation of a cull to reduce the population of red deer, which is having a detrimental impact on several of Minsmere's important habitats. A deer larder, in which carcasses will be chilled and stored has been purchased. Culling is due to commence on 1 November 2013.

5.1.2 Protection against the elements

The reserve's existing firebreaks were maintained. The Environment Agency Flood Risk Management Project has provided protection of the main freshwater areas of the reserve from saline inundation in a storm situation.

5.1.3 Approaches and thoroughfares

The reserve's visitor trails and public rights of way continued to be maintained. New permissive footpaths are being well used and providing variety for visitors. The woodland trail which follows in part a national butterfly transect route is particularly popular and new seasonal interpretation along the trail informs visitors of species likely to be present. The short temporary seasonal trails through the scrub bushes, within the reedbed and along the river to the wader pools were again opened outside the breeding season.

5.1.4 Field equipment

New facilities provided through the Discover Nature project continue to receive positive feedback from visitors.

5.1.5 Waste management

All recyclables are collected by a local contractor.

5.1.6 Use of renewable energy systems

A new array of 8KWP Solar PV panels for generating solar electricity were sited on the east facing aspect of the Work Centre roof. These panels are owned by Ethical Power and will provide solar-generated electricity for the Work Centre which will reduce the amount required from the national grid, offsetting the carbon demand of our office and conservation operation. Analysis by Groundwork Suffolk has indicated significant energy savings as a consequence of the installation of this array, alongside the other renewable energy systems that were installed as part of the Discover Nature development on the site.

5.2 Management

5.2.1 Administrative department

Learning Manager, Andrea Titchiner, left in January 2013, she has been replaced by Sarah Wood to deliver informal and formal education elements of the Discover Nature Project Activity Plan

5.2.2 Warden's department

Sue Rendell-Read left the wardening team on 5 October 2013, Katie Fairhurst has been temporarily appointed to cover some of Sue's role on a part-time basis. We are reviewing the team structure to determine appropriate arrangements for 2014. Work planning management continued to focus towards operating as a Suffolk Coast team to gain economies of scale; large work parties have particularly benefited work in the reedbed and on the heathland at Minsmere. The use of long-term residential volunteers continues to be a valuable support to the warden team.

5.2.3 Internal policing measures

Trespass and encroachment continues to be infrequent, with no significant adverse impact. Open access heathland blocks within 450 metres of breeding stone curlews were closed for the summer as sanctioned under the UK Countryside and Rights of Way Act.

5.2.4 Infringement of regulations and damage

None.

II INFLUENCE OF THE AWARD OF THE EUROPEAN DIPLOMA OF PROTECTED AREAS

The high esteem with which the reserve is held nationally continued to be enhanced by the diploma award.

III CONDITIONS AND/OR RECOMMENDATIONS FOR AWARD OR RENEWAL

The following progress has been made with the conditions stipulated when the reserve's Diploma was renewed:

- 1. Bracken control** – With Asulam being given 'emergency use' approval by the EU for the control of bracken for the 2013 spraying season, efforts continued to selectively control bracken by spot-treatment on areas (37.1 Ha) that had been controlled in previous years. Full records are maintained within the reserve filing system. Particular attention was paid to areas where bracken was growing amongst heather stands that would prohibit cutting as an effective future management option. These actions have helped with the designation, by Natural England, of one heathland SSSI unit, where we have been controlling bracken for a number of years, now being classified as being in favourable condition.
- 2. Sea level rise issues** – EA Minsmere Sluice and embankments project recommenced in August 2013, completion is expected by the end of February 2014. The Minsmere Sea Defences Project has increased the standard of protection for important reserve habitats south of the North Wall. However, it should be seen as the first stage in the process of adapting the reserve to the threats posed by rising sea levels. Global warming is also resulting in increased "storminess" and this is reflected in the increase in incidents of freshwater flooding at Minsmere. Both sea level rise and flooding have an impact on access along public rights of way and reserve visitor trails, as well as directly affecting important habitats and species.
- 3. Management Plan** – The Management Plan 2008-2013 remains in place following consent from Natural England to extend the existing plan to March 2014. All scheduled priority one projects were implemented. Writing the new Management Plan 2014-2019 is now in progress.
- 4. Land purchase** – None this year.
- 5. Monitoring and control of alien species** – Pirri-pirri-bur continues to be sprayed regularly, Control of American mink *Mustela vison* continues .
- 6. Demonstration site** – Formal and informal learning activities are developing rapidly, new activities arising from the Discover Nature project included several overnight stays by schools and other young people's groups at the Discovery Centre. A programme of Employability Skills training for twenty students from four local Secondary Schools was completed, the students participated in practical conservation, education, visitor engagement, retail and catering tasks to develop their skills. We have liaised with colleges and other further education providers and developed programmes offering new learning experiences including practical conservation work for these audiences.
- 7. Scrape fallowing project** - West South compartment was fallowed this year, with a good coverage of annual vegetation growth achieved. Wet weather in Autumn meant it was not possible to rotovate the fallowed plot, the vegetation was left instead to decompose naturally and for the seed to be available to wildfowl. All islands were turned over and some shallow channels added between islands to provide some more topography.

Adam Rowlands
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November 2013