GROUP OF SPECIALISTS OF THE EUROPEAN DIPLOMA FOR PROTECTED AREAS Strasbourg 5-6 March 2019

Minsmere Nature Reserve (UK)

Blanca Ramos Spain



- Renewed in 1984, 1989, 2004 and 2009
- To be renewed in 2019
- Appraisal visit: 28 29 June 2018

spb giving nature a home



Overall description

- Natural Reserve since 1947
- Surface area: 982,15 ha
- Mosaic habitats: wetlands, dry heathland, woodland, sand dunes and shingle beach.
- Relevant bird species: bittern, avocet, marsh harrier, nightjar, woodlark, little tern and wildfowl.
- Other fauna species: otter, water vole, adder, silverstudded blue butterfly, dragonflies, ant-lion, ...
- Other national (SSSI, AONB) and international designations (SPA, SAC and Ramsar Site)
- Owned by RSPB
- One of the most important RSPB Reserves: more than 100.000 visitors/year.





- Diverse and skilfully managed habitats
- 95-100 breeding bird species
- +210 bird species across the year
- Rare bird species: Bearded tit (*P. biarmicus*), Bittern (*B. stellaris*), Garganey (*A. querquedula*), Marsh harrier (*C. aeruginosus*), Savi's warbler (*L. luscinoides*), Avocets (*R. avosetta*), Nightjaar (*C. europaeus*), Nightingale (*L. megarhynchos*), Woodcock (*S. rusticola*)
- High quality management model
- Scientific research as basis for conservation action
- Important site for awareness raising and education
- Good protection and guard

Habitat management and

restoration

"Sandlings" Heathlands restoration (240 ha)



Habitat management and

restoration Reedbed and wetland

restoration







Grazing management





The challenge of alien species

Pirri-pirri bur (Acaena novae-zelandiae)



A model of awareness raising and environmental education



- Improving habitat management and restoration: reedbeds and dry heathland
- Rare bird species:
 - Bittern (Botaurus stellaris) 11 booming males
 - Marsh harrier (*Circus aeruginosus*) 11 nests
 - Avocets (*Recurvirostra avosetta*) 110 pairs
 - Lapwing (Vanellus vanellus) 37 pairs
 - Nightjaar (Caprimulgus europaeus) 12 males
 - Woodlark (Lullula arborea) 18 pairs
 - Stone curlew (Burhinus oedicnemus) 9 pairs
 - Turtle dove (Streptopelia turtur) 10 pairs
 - Little tern (*Sterna albifrons*) 4 pairs (beach)

2018

- Other fauna species:
 - Harvest mouse (Micromys minutus)
 - Water vole (Arvicola amphibius)
 - Adder (Vipera berus)
 - Natterjack toad (Epidalea calamita)
 - Silver-studded blue butterfly (*Plebejus argus*)
 - Ant-lion (Euroleon nostras)
 - Bee wolf (*Philanthus triangulum*)
- Conservation and restoration based on scientific evidence
- Catalogue: + 5.600 species of fauna, flora and fungi
- The virtuous triangle of knowledge transfer: Science, Decision Making and Society
- Contribution to the local economy: 3M£/year, +100 jobs

2018

- Important site for awareness raising and education: large scale programmes for visitors of any kind: local people, children, families, professionals, tourists, teen agers, ...
- Volunteering and capacity building for future experts and managers
- Specialised, integrated, committed and motivated staff
- Good guard : 9 permanent staff and "Minsmere Young Wardens Programme".
- Good legal protection status at national and international level
- Management Plan periodically (5 year) updated
- Land use planning integrated in wider scope Management Plans and ordinance instruments:
 - North Suffolk Coast Reserves Coastal & Climate Adaption Plan
 - Suffolk Coast & Heaths AONB Management Plan
 - Higher Tier Countryside Stewardship agreement for SSSI



Key to Map



Lowestoft

A12

Southwold

0

Kessingland

Beccles

A145

Halesworth



Threats Related to Climate Change (CC)

- Increasing episodes of extreme climatic events: gales, strong wind, droughts, ...
- Increasing temperatures and reduction of rainfall
- Sea level rise: UK Climate Projections 2009 foresee 8,6 cm on average (2010-2030) under the high emissions

scenario.

- UK Climate Projections 2018 for 2100: between + 0,26-0,66 (RCP2,6) and + 0,52-1,12 (RCP8.5)
- Combined with a natural subsidence geological process of the UK Eastern coast:

FIGHER RISKS OF SALUND INTRUSION FOR DRESHWATER HABITATS

ADARTNON SYNRAM MECHERS

Threats

SIZEWELL NUCLEAR POWER STATION

• Existing station (EDF Energy):

• Sizewell A: 2 reactors in process of decommissioning

2 reactors to be placed north to the existing plant

Approachig Minsmere boundarie

Sure reactor

Lange surface area for temporary storage and

denstruction use

Staten C project.

Accomodation campus for 2.500 workers and their families

 Severely increasing local traffic, air pollution, water consumption and waste production

New shore-ine infrastructures likely to affect coastal, dynamics and wildlife



Saxmundham

Knodishall Green

Leiston

Data SIO, NOAA, U.S. Navy, NGA, GEBCO



Effect on Minsmere and wildlife

- Increasing disturbance, noise, air and light pollution
- Increase erosion
- Alterations of natural hydrology
- Alteration of natural balance
- Raising marine temperature
- Modifications of local marine streams
- Coastal occupation

Current situation of Sizewell C

- 3rd and final public consultation period: 4th Jan-29th March
- EDF consultation documents:

https://www.edfenergy.com/energy/nuclear-newbuild-projects/sizewell-c/proposals/stage-3#documents

SZC SZC



SZC

Volume 1 Development Proposals



Stage 3 Pre-Application Consultation



Volume 28 Preliminary Environmental Information



2B



Current recommendations (2009)

N°	Recommendation	Fulfilment	Proposal
I	The control of the invasion of bracken using mechanical means should be continued; if necessary very selective spraying of chemical products should be carried out and careful record of this kept	Partial	Reformulated
2	A contingency plan to deal with the issue of sea level rise and increased freshwater flooding of the grazing marshes should be drawn up; in the short term, the feasibility of preventing/limiting the risk of saltwater entering the reedbed and lagoon systems by building up existing internal banks should be studied; in the longer term, a strategy for sustainable management of the coast in conjunction with all key stakeholders should be developed; discussions with the Environment Agency to reduce the risk of freshwater flooding through modification of the Minsmere sluice should be continued.	Satisfactory	Reformulated
3	The Reserve Management Plans 2008-2013 and 2013-2018 should be implemented.	Satisfactory	Dropped
4	The purchase of land should be continued.	Failed but alternatives have been found	Reformulated

Current recommendations

(2009)

N°	Recommendation	Fulfilment	Proposal
5	Vigilance with regard to alien species of flora, especially controlling and managing pirri-pirri bur (<u>Acaena anserinifolia</u>) should be maintained, and the control of mink (<u>Mustela vison</u>) should be continued.	Fulfilled but little result	Maintained
6	The role of the Reserve as a demonstration site for a wide range of audiences, especially formal school parties, and for informal education/awareness-raising activities for children and families should be developed.	Satisfactory	Dropped
7	A rotational fallowing regime on the freshwater sections of the coastal lagoons to increase invertebrate biomass for breeding and passage waders should be implemented.	Satisfactory	Dropped

Proposed condition

WITH REGARD TO THE PROJECT OF THIRD REACTOR AT THE SIZEWELL NUCLEAR POWER PLANT (PROJECT SIZEWELL C), A PROPER STRATEGIC ENVIRONMENTAL ASSESSMENT AND AN ENVIRONMENTAL IMPACT ASSESSMENT ACCORDING TO INTERNATIONAL STANDARDS MUST BE CARRIED OUT. THE RESULTS OF THE ASSESSMENT SHOULD ENSURE THAT THE CONSTRUCTION OF THE NEW REACTORS WILL NOT BE AT THE DETRIMENT OF THE MINSMERE RESERVE.

Proposed recommendations

The control of the invasion of bracken using mechanical means should prevail over the use of herbicides; in cases of restoration of big areas the use of chemical products should be carried out in the minimum possible extent and a careful record of this practice should be kept in order to assess and cope with possible undesirable effects. Specific scientific research on this issue should be carried out.

Proposed recommendations

2

As regards the risk of sea level rise all along the Suffolk coast, the provisions of the different Management Plans elaborated by the different competent authorities like the Suffolk Coast, the Environment Agency, the authority of Area of Outstanding Scientific Beauty, etc., regarding the protection of the shoreline and the natural habitats, including the Minsmere Reserve, should be fulfilled. Nevertheless, efforts to mitigate the effect of sea level rise must be pursued. The possibility of restoring the lost habitats at other places of the Reserve and/or envisaging compensatory measures should be explored. Indicative plant and fauna species should be carefully monitored and the occurring changes duly registered and scientifically characterised. The eventual modification of habitats towards more saline standards will encompass modifications of the biota that should be optimised in terms of the European interest of the site, in so far as the scientific knowledge and the available resources allow it.

Proposed recommendations

3

Land purchase policy should be continued. In the absence of opportunities to buy new plots, long-term agreements with the owners of selected areas to improve their contribution to the biodiversity conservation and/or restoration should be established.

4

Vigilance with regard to alien species of flora, especially controlling and managing pirri-pirri bur (*Acaena novaezelandiae*) should be maintained and the control of mink (*Mustela vison*) should be continued.

Here & Later 小人人人生人 人人 美国 Phanks for you attention