

Resolution CM/ResDip(2008)1 on the revised regulations for the European Diploma for Protected Areas

(Adopted by the Committee of Ministers on 20 February 2008 at the 1018th meeting of the Ministers' Deputies)¹

State: United Kingdom

Name of the area: Minsmere

Year and number of years since the award or renewal of the European Diploma for Protected Areas:

2018, nine years since the renewal of the European Diploma of Protected Areas

Central authority concerned:

| Name: | The Royal Society for the Protection of Birds | | | |
|---|---|--|--|--|
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¹ As amended by Resolution CM/ResDip(2014)2 on 2 July 2014 at the 1204th meeting of the Ministers' Deputies.

1. Conditions: List here <u>all</u> conditions which were attached to the award or the renewal of the European Diploma. Explain <u>either</u> how the conditions have been totally complied with <u>or</u> detail the progress in complying with the conditions. Please also indicate any unresolved difficulties that you have encountered.

N/A There were no conditions attached to the renewal of the European Diploma.

2. Recommendations: List here <u>all</u> recommendations which were attached to the award or the renewal of the European Diploma. Explain <u>either</u> how the recommendations have been totally complied with <u>or</u> detail the progress in complying with the recommendations. Please also indicate any unresolved difficulties that you have encountered.

1. 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 records of this kept:

A combination of severe winter weather during February/March and a summer heatwave and drought impacted on heathland management and breeding bird success. The planned aerial bracken spraying programme which formed part of the Countryside Stewardship capital works could not proceed due to drought conditions and has been postponed. However, some local bracken spraying was possible early in the season. Bracken litter removal by mechanical means will take place during winter 2018/19.

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:

The Minsmere Coastal and Climate Change Adaption Plan has identified that there are no immediate risks to the site in the absence of catastrophic storm surge events on the coast. The development of plans for the site was developed aligned to the RSPB's <u>Sustainable Shores</u> project. No significant storm surges occurred during the reporting period. RSPB continue to liaise with the Environment Agency and the pressure structures are working effectively to prevent unwanted saline incursion and to manage freshwater flooding to achieve target conditions. We will continue to develop work on longer-term planning with the appropriate agencies.

3. The reserve management plans (2008-2013 and 2013-2018) should be implemented:

All scheduled priority one projects were implemented.

4. The purchase of land should be continued:

There were no land purchases this year.

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

Pirri-pirri bur control continues to prove challenging despite excellent progress on trials. Control has continued through a combination of physical plant removal and spot and boom spraying. Various trials such as rotovation have been undertaken and have included germination experiments and comparison of chemical treatments. This work is helping to contain the further spread of the species on site, but the measures that will enable the plant to be eradicated still remain to be identified.

No evidence of mink on the site this year so no control was required.

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:

99 schools and colleges participated in the reserve's formal education programme, attended by 2,900 children (a 30% increase on 2016/17). Our Primary and Secondary School programmes continue to be well received. Links have been maintained with the Green Light Trust, who work with vulnerable adults to assist their well-being through engagement with conservation management programmes. We have also established a programme with a local home school network and trialled seasonal drop-in sessions for younger home educated groups.

Promotion to youth groups, including girl guiding and scouts, has seen more of these groups visiting the reserve (including overnight visits). Other groups and activities that continue to run successfully include Minsmere 'Reedlings' (a group for under 5's and their parents), the Minsmere Young Wardens, facilitated and self-led family activities, bespoke children's birthday parties, and activities for local groups.

We continue to support learning within and beyond the RSPB in regard to our engagement with visitors. Reserve staff contribute to the regional and national RSPB Visitor Operations work sharing and learning from best practice. Staff have also assisted the RSPB's national Reserve Development Strategy Programme.

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:

West Scrape North was fallowed during the drought conditions from June onwards then flooded with salt water from 18th-31st July to control encroaching mare's tail *Hippuris vulgaris*. Early signs are that this has been successful with salinity measured as 24.6ppt on 8th August and significant vegetation die off noted.

Habitat targets were largely achieved although water level and salinity management proved challenging due to winter flooding and summer drought. The planned drying out of the western side of the South Levels whilst keeping the eastern side and the North Levels wet was not realistic given the climatic conditions. The aims of the reedbed restoration project on the North Levels are starting to come to fruition with greater hydrological control and separation between the reedbed and wader pools. This will continue to be fine-tuned. Contractor work on the Scrape was postponed pending revision of the Scrape Enhancement Project. There was no monitoring of invertebrate biomass on the Scrape this year, but good numbers of passage waders were recorded, indicating that the management regime was proving successful.

3. Site Management: List here any changes to the European Diploma holding site management, in relation to both terrestrial and aquatic environments (as appropriate), and in relation to staff and finances, since the last annual report was submitted to the Council of Europe. Please also indicate any unresolved difficulties that you have encountered.

The following staff changes occurred during the period – Ben McFarland, the RSPB Suffolk Area Manager left his post in November 2017 and Adam Rowlands was appointed to the role in February 2018. The post of Senior Site Manager remains vacant, but it is intended to recruit in 2019. Sue Green, Operations Officer, was seconded to a Project Manager role at RSPB HQ in September 2018 and is due to return in April 2020. Temporary roles have been established to cover the Operations Officer duties in the interim period.

It was a much drier than average summer and the wetland habitats began to draw down significantly from mid-June onwards. The coastal lagoons on the Scrape were prevented from drying out but it was necessary to use more water than usual from the reedbeds. Rainfall continued to be below average into the autumn and by the end of this reporting period reedbed levels were at their lowest for many years. To date there

appears to have been no adverse impact, but there has been no scientific assessment of the impact on fish populations.

Deer Management continued. A survey of selected heathland areas indicated that there was some evidence of browsing but this was not significant enough to warrant culling on the dry habitats in 2018-19. 13 red deer *Cervus elaphus* were culled on the Minsmere wetlands.

The Heathland restoration project continued with work beginning on stump height reduction and the removal of the litter layer to expose the underlying mineral soil and the dormant heathland seed bed. This phase of work is due to be completed in December 2018.

Natterjack toads *Epidalea calamita* were present and breeding was confirmed. Work began on refurbishing the heathland ponds and creating a new scrape on the South Levels adjacent to the colony south of the reserve boundary.

Turtle dove *Streptopelia turtur*. Last year's increase in turtle dove territories was not sustained but this year's tally of 10 territories was still above target. Given the large number of territories in the surrounding area, Minsmere is to take part in a national research project by provisioning an area with managed plots to test different turtle dove seed mixtures and seed sowing rates. The autumn plots have been cultivated with the seed still to be broadcast and rolled. Similar mixtures will be broadcast on a nearby strip next spring. The area around Westleton and Dunwich remains a hotspot for this species with prescriptive land management being undertaken being undertaken by a number of neighbouring landowners supervised by RSPB.

Stone-curlew *Burhinus oedicnemus.* 7 pairs recorded, with the cold spring weather potentially affecting the population and fewer nesting attempts, probably associated with the availability of food during the summer drought. Nonetheless, productivity was still on target fledging 7 chicks aided by a combination of nest protection and ground predator control. Minsmere continues to be the most productive site on the Suffolk coast. The Sandlings consistently out-performs both the North Norfolk coast and The Brecks re productivity.

Avocet *Recurvirostra avosetta*. 96 pairs represented an encouraging increase but no young fledged. Blackheaded gull numbers continue to rise with at least 2500 pairs breeding this year. Predation by this species is still thought to be the main reason for poor productivity.

Mediterranean gull *Ichthyaetus melanocephalus*. 28 pairs fledged 30 young, the most successful breeding season ever recorded at the site.

Sandwich tern *Thalasseus sandvicensis*. 31 apparently occupied nests were recorded, the highest number since 2009, and 2 young fledged.

Work to continue to review investment requirements for the visitor infrastructure has continued. At present the infrastructure remains appropriate to support management activities and visitor engagement. Some minor improvements are planned during 2019 and an investment plan for future years is in development.

4. Boundaries: Give details of any changes to the boundaries of the European Diploma holding site since the last annual report was submitted to the Council of Europe. If there are any changes, please attach an appropriate map to this report. Please also indicate any unresolved difficulties that you have encountered.

No additional land purchases or boundary changes this year. Scotts Hall Cottage was marketed for sale, but no purchaser has come forward at the time of writing.

5. Other information: List here any other information about the European Diploma holding site which you consider should be provided to the Council of Europe.

103,029 visitors were recorded during the period, a 10% decline on the previous year, with the impact of the exceptionally cold weather in the early spring and then the prolonged summer heatwave having an effect.

The proposed route of the English Coast Path was provisionally agreed with Natural England. This recommended route will follow the existing public access along the path inland of the coastal dunes. The proposal is due to be consulted upon in 2019. It is not anticipated that this will have an adverse impact on the integrity of the site.

EDF Energy continued with plans to develop the Sizewell C nuclear reactor to the south of the reserve. The intention to hold the Stage 3 public consultation early in 2019 was announced in the summer and RSPB continues to work with the developer. The RSPB England Director met with the CEO of EDF Energy in September to raise the importance of Minsmere and the need to evaluate impacts appropriately. We await the Stage 3 consultation to determine whether the appropriate assessment of impacts and how they will be avoided or mitigated has been undertaken. This work will continue post-Stage 3 during 2019 ahead of EDF's intention to submit a planning application in 2020. RSPB staff will continue to engage with this process.

The reserve hosted a visit by Blanca Ramos, acting as an independent expert on behalf of the Group of Specialists to assess whether the conditions of the site remain the same as when the Diploma was awarded and extended, or whether they have improved or deteriorated. The visit took place on 28 and 29 June and a report has been submitted recommending that the Diploma Award is renewed in Sept 2019.

Acknowledgement of the European Diploma award was included on the RSPB Minsmere website and in the Reserve Leaflet which is used to promote visits to the site.

The following sections of the form should only be filled in if your area is in the year before a renewal of its European Diploma for Protected Areas, i.e. <u>year 4</u> after the award of the European Diploma or <u>year 9</u> after its renewal.

6. Natural heritage (general abiotic description: geomorphology, geology and hydrogeology, habitats, flora, fauna, landscape) – State of conservation

6.1. Environment

During the period since the last renewal of the Diploma Award in 2009 there has been no significant change or deterioration in the environment on the site. Coastal erosion has led to some loss of dunes and shingle foreshore through erosion, but this process is being allowed to progress naturally and plans are being developed for the site to reduce the likelihood of coastal squeeze, and long-term loss of shingle and dune habitat whilst protecting freshwater habitats *in situ* for as long as possible.

The proposed development of the new nuclear reactor at Sizewell C on the southern boundary of the reserve has the potential to have significant adverse impact on the coastal processes affecting the site, the hydrology of the area, the designated bird populations (through noise and disturbance effects) and the visitor interest in the area. We are working with the developer, EDF Energy, to ensure that these potential impacts are assessed appropriately, following due legislative procedure.

6.2. Flora and vegetation

The extent of Heathland vegetation was increased during the period since the last renewal, through the successful establishment of dwarf-shrub and acid grassland vegetation on the arable reversion areas and the other management interventions recorded in 10.1.1. below.

The nationally scarce red-tipped cudweed *Filago lutescens* responded positively to management operations to benefit the population, with over 3000 flowering spikes recorded in 2017, the highest number ever counted at the site.

6.3. Fauna

Mediterranean gull *Ichthyaetus melanocephalus* first bred at the site in 2005. One to six pairs bred in six years between 2009-2016 and then the population increased dramatically, with 35 pairs in 2017 and 48 pairs in 2018.

Sandwich tern *Thalasseus sandvicensis* 550 pairs attempted to breed in 2009. These individuals were thought to have been displaced from a colony on the Belgian coast and their late nesting attempts proved unsuccessful. The next event involved a single pair in 2014, followed by 11 pairs in 2016, 13 in 2017 and 32 in 2018. The 2017 breeding attempt produced the first fledged young from Minsmere for 40 years and was followed by successful breeding in 2018.

Little tern *Sternula albifrons* last attempted to breed at the site in 2009, when a single pair were recorded. Suitable nesting habitat has been provided on the coastal lagoons but the species has not been attracted to breed. The main breeding colony appears to have moved north along the Suffolk Coast, with most recent successful nesting at Kessingland and Benacre.

Savi's warbler *Locustella lusciniodes* returned to breed in 2010, having been absent from 1999 - 2009. One or two males of this nationally rare species held territory in six years between 2010 - 2018 and breeding was suspected in several years.

| Species | Mean population 2009 - 18 | Population trend | |
|------------------------|------------------------------------|-------------------------------|--|
| Eurasian Bittern | 10.5 booming males | Increasing | |
| Botarus stellaris | 6.7 nesting females | Stable | |
| Western marsh harrier | 9.4 nests Declining | | |
| Circus aeruginosus | 1.8 fledged yg/nest | Stable | |
| Eurasian stone-curlew | 7.9 pairs | Initial increase, now stable | |
| Burhinus oedicnemus | 1.0 yg/pr | Stable | |
| Pied avocet | 90.4 pairs | Decline, followed by increase | |
| Recurvirostra avosetta | 0.16 yg/pr Stable, but fluctuating | | |
| | | | |
| Northern lapwing | 36.8 pairs | Increasing | |
| Vanellus vanellus | | | |
| Common redshank | 26.2 pairs Increasing | | |
| Tringa totanus | | | |

The table below illustrates the mean populations and trend during 2009 - 18 for key species.

| European turtle dove | 7.7 pairs | Stable |
|-----------------------|------------|-------------------------------|
| Streptopelia turtur | | |
| European nightjar | 9.8 pairs | Stable |
| Caprimulgus europaeus | | |
| Woodlark | 17.9 pairs | Increasing |
| Lullula arborea | | |
| | | |
| Dartford warbler | 13.9 pairs | Decline, followed by increase |
| Sylvia undata | | |
| Common nightingale | 18.3 pairs | Declining |
| Luscinia megarhynchos | | |

The natterjack toads *Epidalea calamita* population has been retained, with breeding activity being recorded in several years during the period.

Ant lion *Euroleon nostras* populations have been retained, although at a lower level than the peak period during 2005 - 2009.

7. Cultural heritage and socio-economic context

7.1. Cultural heritage

7.1.1.The site has hosted a number of BBC television broadcasts during the period, including three weeks of live broadcast each year during May/June 2014 - 2016 and features on *The One Show* and *Countryfile*. An archaeological dig was hosted at Minsmere in autumn 2016 to excavate the foundations of the old Abbey at the site of Minsmere Chapel.

7.2. Socio-economic context

7.2.1.The value of Minsmere to the local economy demonstrated through the RSPB's <u>Natural Foundations</u> report. Following this report, further economic analysis was undertaken in 2016 in response to the increase in visitors to the site. This latter study concluded that Minsmere supports 160 FTE jobs and £3.8million income annually in the local economy, over and above the 33 FTE jobs employed by RSPB and the £2.7 million income directly received by the reserve. The reserve participates in the <u>Suffolk Coast</u> <u>Destination Marketing Organisation</u> and <u>Visit Suffolk</u>, highlighting the value of the site to local businesses.

8. Education and scientific interest

8.1. Visitors

There is an extensive network of public rights of way and open access areas throughout the reserve. Access is limited seasonally within some of the open access areas to afford protection to ground-nesting birds. The core wetland area of the site has more restricted access, via permissive nature trails where nonmembers of the RSPB are required to pay an entrance fee.

8.1.1. Arrangements for receiving and informing the public

The reserve has a visitor centre that was extended in 2012 to include a larger café area and a new reception building. A new Discovery Centre was also opened at the same time to accommodate education

visits and activities for families and children. The reserve car park was extended by 40 places in 2011 in anticipation of the increased number of visitors to the new facilities. A reserve flyer is produced each year for use off-site to encourage people to visit Minsmere. A visitor trail map and a list of recent bird and wildlife sightings is offered to all visitors on arrival at the visitor centre. Further leaflets promoting events and activities, the reserve's education programme and local places to eat and stay are prepared on an annual basis. The <u>RSPB Minsmere web page</u> provides information for visitors and the site also has a <u>TripAdvisor page</u> and maintains <u>Facebook</u> and <u>Twitter</u> accounts.

8.1.2. Frequentation by visitors and behaviour

Visitor numbers increased during the period with the provision of new facilities and promotion via the reserve's marketing activity and the BBC TV broadcasts. Peak numbers were recorded in 2015, when 122,115 people visited. The highest number of visitors were recorded during April - October. Visitor surveys in 2017/18 indicate that approximately 20% of visits are first-time, whilst 22% of visitors come at least monthly, 20% every 2-3 months and the remainder less frequently. 35% of visitors spend 4 hours or more on the site, with only 14% visiting for 2 hours or less. 69% of visitors are coming to watch birds and/or nature, with 16% coming to enjoy a walk in the countryside. 66% of visitors had travelled from home to visit the reserve, with 34% visiting as part of a holiday. 99% of visitors reported that they were satisfied or very satisfied with their visit. An extensive programme of events and activities is provided by the reserve. Reception staff and volunteers welcome visitors and provide them with information to enhance their visit, and volunteer guides are present every day around the site to help provide information for visitors on site.

8.1.3. Special visits

The reserve hosted a number of distinguished visitors during the period, including the local MP Therese Coffey; Andrea Ledward, Natural Environment Director at DEFRA; numerous visits by delegations from Birdlife International from around Europe and beyond. In 2018 we hosted a visit from Blanca Ramos, acting as an independent expert to inform the Group of Specialists with regard to the renewal of the Diploma award.

8.2. Scientific research

8.2.1. Current or completed research

Annual monitoring of key species is undertaken by reserve staff and volunteers and reported in the RSPB Annual Reports. Specialists have visited the site during the period to record moths & butterflies *Lepidoptera*, flies *Diptera*, hoverflies *Syrphidae*, bees *Hymenoptera*, invertebrates, adders *Vipera berus*, otters *Lutra lutra*, badgers *Meles meles*, bats *Laurasiatheria*, fungi, bryophytes and plants. Heather condition surveys were undertaken to assess the impacts of deer browsing and the success of deer control measures. An ongoing programme of experimental study has helped inform approaches to controlling the spread of invasive non-native pirri-pirri bur on the site. Bird ringing studies as part of the BTO's Constant Effort Site (CES) and Ringed Adult Survival (RAS) programme have also been undertaken and stone-curlew chicks were colour-ringed in most years during the period to aid monitoring of the increasing population. University and PhD students conducted studies on woodlark, nightjar, Dartford and Cetti's warblers *Cettia cetti.* Studies relating to coastal processes, associated ecological surveys and engineering work to maintain the integrity of the site were undertaken by the Environment Agency. Studies of unexploded ordnance were also conducted by specialists to assist with the safety of reserve management work.

8.2.2. Scientific publications

Published reports

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Anon (2011) Natural Foundations. Conservation and local employment in the UK. RSPB Report. Sandy

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Baker, J. 2015. Adder Survey & Habitat Assessment RSPB Minsmere. Unpubl. report for RSPB

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9. Site description (vulnerability, protection status, ownership, documentation)

9.1. Changes in legislation or regulations

No changes during the period, but there is a potential future risk from the BREXIT process if the standard of protection offered by European site designations is not improved

9.2. Changes in ownership title (conversion to public property, rentals, etc.)

None to report

9.3. Extension or transfer, new uses (for example, conversion into total reserve)

No additional land was purchased during 2009 – 18. The reserve Management Plan was extended in 2015 to incorporate the management of Dingle Marshes and Dunwich Forest adding an additional 104ha to the area managed.

10. Site management (management plans, budget and personnel)

10.1. Improvements made

10.1.1. Ecological action affecting the flora and biotopes; controls of fauna

Management efforts to improve the extent of Heathland vegetation were undertaken during the period, with the removal of invasive Scot's pine *Pinus sylvestris*, silver birch *Betula pendula* and bracken *Pteridium aquilinum* to enable the development of dwarf-shrub Heathland and acid grassland vegetation communities and their associated scarce fauna. The final management actions to revert former arable land to dwarf-shrub and acid grassland Heathland were also completed during the period. Grazing by Exmoor ponies has been used to manage vegetation growth on some of the Heathland areas and domestic sheep have been deployed on the acid grasslands, alongside mowing operations as required to maintain the short grassland sward. Highland cattle were deployed to strip graze sections of the dunes to keep vegetation succession in check.

Efforts also continued to control the spread of invasive non-native pirri-pirri bur on the acid grasslands and salinity was used to check the spread of mare's tail in the freshwater lagoon habitats.

Browsing impact from red deer was determined to be having an adverse impact on the Heathland vegetation structure, and population management of the deer population was introduced in 2013. This management has successfully reduced the population, and monitoring of the vegetation has confirmed that the vegetation structure has been restored. It is intended to continue a maintenance cull to manage this situation into the future.

Grazing, with domestic cattle, sheep and Konik ponies, along with mowing regimes were used to manage the growth of reed *Phragmites australis* in the reedbeds, providing open water and edge habitat for key species and to maintain vegetation structure on the wet grasslands for breeding and over-wintering waders and wildfowl. These vegetation management operations have improved conditions for key fauna.

The water levels throughout the wetland have been managed in line with the management plan prescriptions, including a more dynamic approach to wetter and dryer periods working with natural conditions. A number of replacement and new sluice structures were installed during the period. A programme of excavating areas within the reedbed that had silted-up or become drier through vegetation succession was completed, improving the connectivity of water to enhance fish populations and to maintain feeding opportunities for breeding bittern. Ditches continued to be maintained within the wetland habitats, and foot drains in the wet grassland fields were re-excavated to provide foraging habitat for waders and habitat for waterfowl. The fence to exclude mammalian predators from the coastal lagoons was renewed and has afforded significant extra protection to the colonial breeding birds. Temporary fencing was also deployed around nesting stone-curlew pairs and this was augmented by red fox *Vulpes vulpes* control in these locations. Monitoring for the presence of American Mink *Neovison vison* continued, with measures put in place to remove any individuals found. Large gulls were prevented from breeding successfully on the coastal lagoons, to reduce their predation impact on other ground-nesting birds. Feral barnacle geese *Branta leucopsis* were also prevented from hatching young to reduce their population expansion which poses a threat to native ground-nesting birds on the coastal lagoons.

Breeding ponds for natterjack toads were maintained and improved and a new shallow pool area was created at the southern end of the site to provide further habitat for this species.

10.1.2. Protection against the elements (fire, water regime)

The site has a Fire Management Plan which is maintained to manage the risk of fire, principally in the Heathland habitats.

A network of large ponds was restored to act as a reservoir for freshwater supply to the coastal lagoons in anticipation of future increased brackish influence at the northern end of the site through coastal change. The installation of new sluice structures took account of potential changes in water supply through anticipated climate change.

The Environment Agency completed a project in 2012 to assist with this process and enable the majority of the brackish and freshwater habitat to be retained for at least the next 50 years. The infrastructure installed as part of this project successfully survived the North Sea storm surge in December 2013, the most significant and damaging event since 1953. The site team continue to evaluate anticipated climate changes and incorporate these in management decisions through the management plan and coastal adaption project plan.

10.1.3. Approaches and thoroughfares (paths, roads, car parks, signposting, fencing, etc.)

All existing tracks and roads were maintained. Additional seasonal and permanent permissive paths were introduced to enable visitors the opportunity to get closer to wildlife in locations where it could be demonstrated that this did not have a detrimental impact on the interest features of the site. The main car park was extended and upgraded in 2011 including the provision of electric vehicle charging. Signposting was all renewed in 2012 with periodic improvements subsequently. All fencing was maintained and improved where necessary to enable suitable visitor or habitat management.

10.1.4. Field equipment (hides and study facilities)

All existing hides on the site were maintained throughout the period and the Island Mere hide was replaced in 2011, with an improved facility enabling access for all visitors and greater opportunities for viewing and photographing wildlife. All wildlife monitoring was undertaken from hides, on foot and/or via the reserve's fleet vehicles. The Discovery Centre was built in 2012, providing a bespoke facility for visiting schools and college groups. This has been used for other study functions including presentations by the local mammal study group, hosting meetings for statutory agencies and activities for families and children.

10.1.5. Waste management

The site followed all legal and recommended waste management practices and successfully achieved a Level 2 Green Dragon accreditation for environmental and waste management practices during the period.

10.1.6. Use of renewable energy systems

The site undertook an audit of opportunities to improve energy efficiency and identify what renewable services could assist, and a number of new measures were introduced during the period. These included replacement boilers, solar hot water, solar and PV electricity generation, energy efficient lighting, sun

pipes, solar-powered ventilation systems, an air source heat pump and electric car charging. A project to install further solar electricity generation for the site has recently been approved, with installation planned for 2019. The measures taken have considerably improved energy efficiency and operating costs, and the new installation should also provide a source of revenue with anticipated production of electricity for the national grid.

10.2. Management

10.2.1. Administrative department

The management staffing structure remained the same between 2009-2018, with Area Manager, Senior Site Manager and Site Manager roles retained throughout. The structure of the visitor operations team was changed during the period, with the previous Visitor Centre Manager role being changed to Visitor Operations Manager, covering a broader remit and supported by new Membership Recruitment Manager and Visitor Experience Manager positions. This expansion coincided with the increase in visitor engagement on the site and has had positive benefits for visitor engagement and income generation to support conservation management. The Senior Administrator role was enhanced to Operations Officer/Facilities Manager to reflect the wider duties undertaken by this role.

10.2.2. Wardens' department

The overall structure of the Wardens' department remained the same throughout the period, with 3 Warden positions, an Assistant Warden and Estate Worker. The role of Livestock Manager was revised to Estate Manager, but the duties remained broadly similar.

10.2.3. Internal policing measures

RSPB Codes of Practice are followed to ensure all due legal and statutory requirements associated with the site management are undertaken to a satisfactory standard. An annual risk register is maintained to monitor compliance and identify any issues arising so appropriate action can be taken. Appropriate consents and permissions are sought for relevant activities by site staff. Support is provided by regional and national colleagues from RSPB and the relevant authorities to ensure compliance with regulations is observed.

10.2.4. Infringement of regulations and damage; legal action

No infringement of regulations occurred during the renewal period and no legal action was taken.

One of the SSSI site units was lost due to coastal erosion, but this was deemed to be a consequence of natural processes with the management of the site not causing an acceleration of coastal squeeze. Therefore no further legal action was deemed appropriate.

11. Influence of the award of the European Diploma for Protected Areas

The European Diploma for Protected Areas award continues to be a valuable accolade highlighting the value of RSPB Minsmere as a nature reserve of national and international importance. It has proved a valuable opportunity for shared learning, with the 50th anniversary event in Pisa, Italy being very valuable for RSPB staff from site and the national team who attended. The visit by Blanca Ramos, Council of Europe Specialist in 2018 was very valuable for sharing learning. The threat posed by the proposed new nuclear development at Sizewell C on the southern boundary of the site provides a challenge for the successful management of the site in the coming decade. The renewal of the award will demonstrate the continued high importance of Minsmere in a UK and European context and assist with affording the protection required to ensure that the wildlife on the site continues to thrive.

Adam Rowlands

Statutory, planning and other designations

Details of statutory, planning and other designations are given in the following table and map.

| Designation | All or part of site? | Name and other details |
|---------------------------|-------------------------|--|
| SSSI/ASSI | Part | Minsmere – Walberswick Heaths and Marshes, 1989 |
| NNR | Part | Walberswick NNR |
| SPA | Part | Minsmere – Walberswick, 1992 |
| pSAC | Part | Minsmere – Walberswick Heaths and Marshes, 1995 |
| RAMSAR | Part | Site no 10 Minsmere – Walberswick, Jan 1976 |
| ESA/HLS | Part | RSPB Minsmere – AG00196616, RSPB Dingle Marshes – |
| | | AG, Dunwich Forest – AG |
| AONB | All | Suffolk Coast & Heaths AONB (1969) |
| Heritage Coast | Part | Suffolk Heritage Coast (1979) |
| Finds | Part | Gold coins |
| Scheduled Ancient | Part | Remains of the chapel of the original Leiston Abbey, |
| Monument | | monument no. SM21404 – conditions apply to |
| | | management operations in c.101 (e.g. depth of |
| | | ploughing, proximity of the ruins) |
| IACS registered | Part | |
| Past military landuse | Part | Extensive use during WW2 |
| Council of Europe Diploma | All | 1980 (renewed 2009) |
| Wildlife Heritage Site | Part | Suffolk County Council designation |

