



COCKENZIE POWER STATION BIODIVERSITY INFORMATION



OVERVIEW

Cockenzie is a coal-fired station, built in 1968 on the south shore of the Firth of Forth, that can generate electricity for 500,000

households. The disposal of ash produced as part of the generating process has reclaimed 134 hectares of land from the sea at nearby

Musselburgh Lagoons. This man-made area has matured into a network of rich habitats for wildlife – especially wading birds and

waterfowl. Cockenzie Power Station has implemented a biodiversity action plan (BAP) to protect the habitats and species on its sites.

SITE DESCRIPTION

The grounds of Cockenzie Power Station, its coal plant and ash settling lagoons provide a range of habitats that are attractive to wildlife, including woodland, meadows and wetlands.

The ash lagoons at Musselburgh are widely recognised as one of the best places to watch birds in Scotland.

The 120-hectare site includes a large area of redundant lagoons that has been handed over to benefit the local community and promote biodiversity.

Lagoon No.8 and wader scrapes built on a decommissioned lagoon have been included within the Firth of Forth Site of Special Scientific Interest (SSSI) in recognition of their value to birds.

The lagoons also form a component in the Firth of Forth Special Protection Area and Ramsar site designations.

Known as Levenhall Links, the site is a working example of industry and conservation going hand in hand, with the creation of wildlife-rich habitats from reclaimed land.

PUBLIC ACCESS

The John Muir Way, a long-distance footpath created with funding help from ScottishPower, skirts the seawall along the northern edge of the lagoons.

Access to Levenhall Links, the wader scrapes and a boating pond is reached from a signposted track off Prestonpans Road, west of the race course.

For health and safety, the public is encouraged to stay on designated footpaths around the active lagoons.



■ The purpose-built wader scrapes at Musselburgh, with Cockenzie in the distance

WILDFLOWER MEADOW

Efforts are ongoing to establish at 10 ha wildflower meadow at disused lagoon No.7 at Musselburgh.

Local school pupils planted seeds



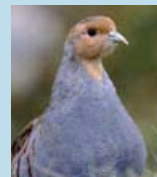
of 19 wild plants, including Ox-eye Daisy (above right), to recreate a habitat that is scarce in East Lothian.

Grey Partridge and Skylark breed in the meadow, while hay is harvested in autumn by a farmer to create conditions for roosting waders.

GREY PARTRIDGE

ScottishPower has helped restore the fortunes of the UK BAP listed Grey Partridge on East Lothian farms. The company was a key partner in East Lothian Biodiversity's scheme to sow crops to provide food for the partridges on 40 local farms.

Partridge numbers doubled on participating farms after two years of the scheme. The birds also nest at Levenhall Links and Battlefield.



PRIORITY HABITATS AND SPECIES

The Forth Estuary, with its mudflats, mussel beds and sandy shores, offers feeding grounds for thousands of wading birds and wildfowl.

At high tide, however, these birds need a safe place to roost until the invertebrate-rich mud is exposed again.

Coastal roost sites are becoming increasingly rare due to pressure from waterfront developments.

Musselburgh Lagoons offers the only major roost on the south shore of the Forth between Cramond and Aberlady.

In winter, hundreds of waders, gulls and ducks will congregate on the flat ashflats of active lagoons, on the purpose-built wader scrapes and on the short grassland of the meadows.

Key species include Oystercatcher (peak 3250); Bar-tailed Godwit (1136); Redshank (463); Dunlin (420), Golden Plover (1450); and the UK BAP species Curlew (386) and Lapwing (1198).

The wader scrapes – six shallow freshwater pools lined with clay – offer extra feeding for waders throughout the tidal cycle.

More than 250 species of birds have been recorded at the site including many rarities, such as Royal Tern (a first sighting for Scotland) and Western Sandpiper (sixth for Britain).

In 2009, 149 species were observed with highlights including Little-ringed Plover, Little Egret, Wood Sandpiper, Pomarine Skua, Water Pipit, Marsh Harrier and Wilson's Phalarope – the latter a vagrant from America.

UK BAP breeding species include Grey Partridge, Skylark, Dunnock,



■ Grasshopper Warblers have nested

Song Thrush, Grasshopper Warbler, House Sparrow, Linnet, Bullfinch, Yellowhammer and Reed Bunting.

Nestboxes are being put in place in 2010 to encourage breeding by Tree Sparrow – another UK BAP species – which are now nesting nearby.

Growing conditions are challenging but redundant lagoons have been planted with native trees and shrubs including Alder, Willow, Birch, Rowan, Ash, White Poplar and Whitebeam, Gorse, Broom and Hawthorn.

Management of the now-maturing woodland was carried out in 2009 by East Lothian Council's Forestry Department.

The woodlands and meadows, with 177 species of plants, sustain a large population of invertebrates and offer food and cover for nesting birds and small mammals.

Around a dozen butterfly species are recorded annually while, in 2006, the site recorded one of the first Scottish records of a new colonist, the Comma.



■ A Sand Martin chick peers out of its nesting tunnel in a bank of station ash

SAND MARTIN NESTS

Sand Martins were given a new home by Cockenzie staff and contractors in 2009 – an artificial nesting bank at Levenhall Links.

Almost 30 pairs of the Swallow-like birds excavated nesting holes in the bank of power station ash.

The summer visitors have bred in operational areas of the lagoons for several years.

This potentially affected the removal of ash, which is reused to make sustainable construction products.

Therefore, prior to the birds' return in spring 2009, the artificial bank was constructed to give the martins an alternative nest site away from active areas of the lagoons.

Station staff and contractors from the Geddes Group transported pulverised fuel ash from the lagoons and profiled a nesting 'cliff' on the eastern side of the bird reserve.

A total of 29 pairs dug out tunnels in the new face – with just three pairs elsewhere on the lagoons compared with 70 at Lagoon No.6 in 2008.

Levenhall Links Ranger Nick Aitken said: "The positive outcomes of the trial included attracting the birds to a new face in an area previously not used for nesting. Birders could watch the spectacle of the martins from the comfort of the bird reserve's hides without disturbing the nesting birds."

OUR BIODIVERSITY ACTION PLAN

Community involvement is at the core of Cockenzie's biodiversity action plan (BAP) – with the power station linking up with local people and organisations to improve the environment.

The station launched its BAP in 2004 to preserve and enhance habitats and wildlife on its sites. The document sets out a list of ecological enhancement objectives and presents a timescale for their implementation.

A key feature of Cockenzie's BAP is creating new habitats for wildlife that can also be enjoyed by local people.

The station has supported the Battlefield Project, handing over 10 hectares of land around its coal plant to local people who make up the Prestonlinks Woodland Group.

The project has been designed to enhance the site of the 1745 Battle of Prestonpans.

The group has created new areas of woodland, two orchards and a large wildflower meadow, creating habitats for biodiversity and green spaces that local people can enjoy. Further wildflower planting was carried out in 2009 to further enhance the area.

Countryside Ranger Nick Aitken said: "The project is involving people from the two communities, who have planted native species and traditional Scottish varieties of fruit trees.

COUNTRYSIDE RANGER

ScottishPower has co-sponsored a Countryside Ranger for Musselburgh Lagoons since 1992, helping to promote biodiversity in the wider community.

Nick Aitken (right) is employed by East Lothian Council to assist the public and enhance their enjoyment and understanding of Levenhall Links. He also monitors the wildlife that uses the wader scrapes and lagoons.

Nick is in close contact with staff at Cockenzie Power Station and is using his experience to advise on delivery of the site's biodiversity action plan.



■ Pupils from Campie Primary clean up litter at Levenhall Links (pic: Nick Aitken)

"The aim is to bring the villages closer and create a community green space that everyone can enjoy."

The station works closely with Nick and his colleagues at East Lothian Countryside Ranger Service to maintain habitats at Levenhall Links, as far as operations will allow.

Good water management is vital to the management of the wader scrapes.



A PLACE FOR PEOPLE

Cockenzie further enhanced facilities in 2009 for the birdwatchers who flock to Musselburgh Lagoons.

The lagoons and Levenhall Links are acclaimed as being one of the best places to watch birds in Scotland.

Three public birdwatching hides have already been built at the wader scrapes, with the help of Landfill Tax funds from ScottishPower.

Now three further hides have been built on the site of the former outfalls along the lagoons' seawall.

This enables visitors to watch the Forth Estuary in comfort and without disturbing seabirds and wildfowl.

A network of paths and open spaces at Levenhall is used by walkers, cyclists, golfers and footballers.

A boating pond near the wader scrapes has its own wildlife interest and is used for outdoor education, canoeing, sailing and windsurfing.

In July, the lagoons are the venue for the "Honest Toun Race" – a running race held as part of Musselburgh Festival Week.



■ One of the new seawatching hides built on the seawall (pic: Nick Aitken)

CONTACT US

Cockenzie Power Station
Prestonpans,
East Lothian, EH32 9SD
telephone: 01875 810075
web: www.spenergywholesale.com