



Boughton Fen Management Plan





Executive Summary

Issue 1 of the Boughton Fen management Plan (December 2008) described Boughton Fen as a nationally designated Site of Special Scientific Interest (SSSI), classed as being '**Unfavourable Declining**'. Water loss was described as occurring at an alarming rate and there was a rapid encroachment of scrub that was leading to the site becoming woodland. This was predicted to result in the loss of important wildlife currently existing in this environment. The adverse conditions were fundamentally the result of neglect and the lack of a definitive structure for managing this site.

To execute the management of this site the Boughton Fen Committee (BFC) had been created. Working under the auspices of the Boughton Parish Council and in conjunction with the relevant stakeholders, including the parishioners of Boughton, who collectively own the site, Natural England and other recognised experts, Issue 1 of the Management Plan set out the aims and objectives in returning The Fen to 'favourable condition'.

Natural England use five categories to describe the condition of SSSIs. They are:

- Favourable
- Unfavourable recovering
- Unfavourable no change
- Unfavourable declining
- Area destroyed

In just short of six years (and with the support of NE, EA, NWT, and with considerable support from local residents) the actions taken place on Boughton Fen have resulted in the site being "promoted" two places from **Unfavourable Declining** up to **Unfavourable Recovering**. (Natural England, October 2013)

The aim of this plan is to continue to improve The Fen over and above that which has already been achieved. This is an all-inclusive project; we will consult with the relevant stakeholders on a regular basis and will actively seek out offers of help, support and guidance from anyone interested in the improvement and protection of this site. The time frame of this plan (Issue 2) is 5 years and it will be reviewed on a regular basis to ensure concurrency with our aspirations.



Vision Statement

The Boughton Fen Committee will continue to work under the guidance of Natural England and other recognised experts to improve Boughton Fen to a 'favourable condition' and will strive to develop and enhance The Fen, ensuring its continued status as a nationally recognised SSSI and thus secure its future for the enjoyment of future generations. The Committee will encourage an increasing number of people to enjoy the Fen now, and in the future.

Mark Pogmore

For and on behalf of the Boughton Fen Committee



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Abbreviations

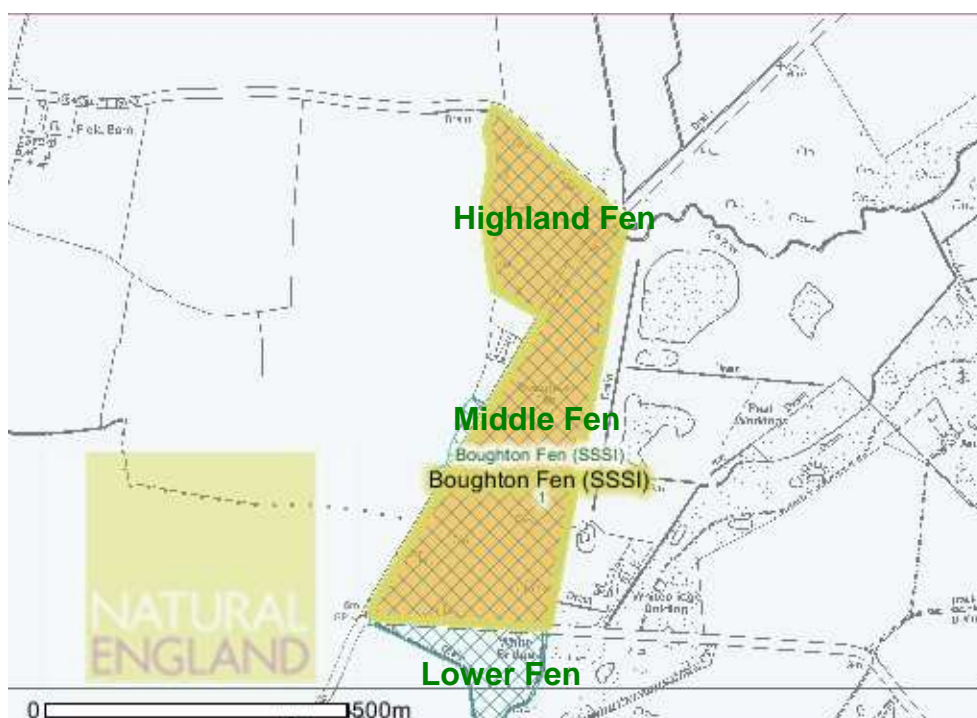
ac	Acre
BFC	Boughton Fen Committee
CWS	County Wildlife Site
CPH	County Parish Holding
EA	Environment Agency
Ha	Hectare
NWT	Norfolk Wildlife Trust
SBI	Single Business Identifier
SSSI	Site of Special Scientific Interest



1 Introduction

Boughton Fen is a nationally designated Site of Special Scientific Interest (SSSI) and is currently classed as being 'unfavourable recovering' (Source: Natural England, SSSI Assessment October 2013). Water loss has been lessened but is still far more than is acceptable. The rapid encroachment of scrub has been stemmed and in many cases reversed by the removal of this scrub. Wildlife has benefited from the resulting more extensive reed bed eg Reed Warbler and Harvest Mouse populations have increased during recent years. Much has been achieved but we must not be complacent since there is still much to do.

Boughton Fen comprises three separate parcels of land at the eastern end of Oxborough Road. For ease of identification the Boughton Fen Committee (BFC) have labelled these parcels of land Highland Fen, Middle Fen and Lower Fen. The total registered area of The Fen is 44 acres and two of these parcels have been designated SSSI status by Natural England, namely Highland Fen and Middle Fen. Lower Fen remains designated as a County Wildlife Site (CWS)



Boughton Fen is situated on shallow fen peats in the valley of a tributary of the River Wissey. A tall fen community covers much of the site and several interesting plants are present. Scrub is over represented but is used by breeding birds. The site is of entomological interest.

Reed *Phragmites australis* forms an almost pure stand where the water-table is highest at the southern end of the site. The remainder of the site is of variable wetness and a more diverse fen community has developed. Reed is again dominant, but Meadowsweet *Filipendula ulmaria* and Greater Willowherb *Epilobium hirsutum* are also present, though probably declining. Other

species present include Common Valerian *Valeriana officinalis*, Hemp Agrimony *Eupatorium cannabinum*, Angelica *Angelica sylvestris*, Purple Small-reed *Calamagrostis canescens* and Reed Sweet-grass *Glyceria maxima*.

On the highest ground, woodland has developed and is dominated by Ash *Fraxinus excelsior*, Alder *Alnus glutinosa*, Willow *Salix sp.* The ground flora consists of Meadowseet, *Filipendula ulmaria* Nettle *Urtica dioica* and Hogweed *Heracleum sphondylium* as well as a wide selection of wild flowers. Several areas of dense Blackthorn *Prunus spinosa* scrub are present on the drier parts of the site.



Nightingale *Luscinia megarhyncho* breeds on the fen as do a selection of warblers including Sedge Warbler *Acrocephalus schoenobaenus*, Reed Warbler *Acrocephalus scirpaceus*, Grasshopper Warbler *Locustella naevia*, Willow Warbler *Phylloscopus trochilus*, Chiffchaff *Phylloscopus collybita*, Blackcap *Sylvia atricapilla*, Garden Warbler *Sylvia borin*, Common Whitethroat *Sylvia communis* and Lesser Whitethroat *Sylvia curruca*. Marsh Harrier *Circus aeruginosus* breeds irregularly and the secretive Water Rail *Rallus aquaticus* has also been proven to breed. Tawny Owls breed annually in

one of the nest boxes provided on The Fen. Recent colonisers have included Cetti's Warbler *Cettia Cetti* (pictured) and Bearded Tit *Panurus biarmicus*.



Mammals include Badger *Meles meles* (a sett is present), Otter *Lutra lutra* and Harvest Mouse *Micromys minutus* (pictured). Voles abound in parts of Highland Fen.

Many uncommon species of moth have been recorded from the site, including the rare Marsh Carpet Moth *Perizoma sagittata*. The larvae of *Perizoma sagittata* has been found on its food plant, Common Meadow-rue *Thalictrum flavum* so after a period of many years without a record, this species is still present. The Common Meadow-rue is currently declining so one of our targets will be to promote further growth.



2 Registration

2.1 SSI Notification

COUNTY: Norfolk
SITE NAME: BOUGHTON FEN
DISTRICT: West Norfolk

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authority: West Norfolk District Council

National Grid Reference: TF 718015 Area: 15 (ha) 36 (ac)
Ordnance Survey Sheet 1:50,000: 143 1:10,000: TF 70 SW

Date Notified (Under 1949 Act): 1973
Date Notified (Under 1981 Act): 1983

2.2 Rural Land Register

The Fen is registered on the Rural Land Register via the Rural Payments Agency

- 1) The Single Business Identifier (SBI Number) is 107980343
- 2) The County Parish Holding (CPH Number) is 28/043/0035
- 3) There are three parcels of land registered with the following field numbers:

TF71018773 - Area 4.5ha (11.12acres) – Highland Fen
TF71018532 - Area 11.07ha (27.35acres) – Middle Fen
TF71018006 - Area 2.26ha (5.58acres) – Lower Fen

This gives a total registered area of 17.83ha (44.05acres).

2.3 Common Land

Boughton Fen is registered as Common Land under the Common Registration Act 1965 and has been assigned the reference number CL234. Grazing rights exist on this land.



3 The Original Problems

The lack of structured management prior to 2008 led to the degradation of The Fen.

Some years ago, Natural England (then English Nature) under their “Biodiversity Action Plans” recognised a problem at Boughton Fen, targeting “the maintenance, and rehabilitation where necessary, of 11 hectares of wet reedbed at Boughton Fen”. This is minuted under their *Reedbeds – National Priority, target 4.1*

Scrub Encroachment was resulting in a rapid transformation from prime reed bed to successional woodland. Prior to 2008, English Nature had funded intermittent scrub removal programmes but these were less than annual, inadequate to cover needs and without any follow-up to ensure that short-term gains were translated into a medium/long-term improvement. Re-growth soon became rampant; in effect we have had the equivalent of rotational coppicing. Without any remedial action, it was “back to square one”, usually within 5 or 6 years.

Water Loss was resulting in The Fen drying out at an alarming rate. There were at least two reasons for this:

- a) The take-up of water by both the trees and the scrub encroachment/succession
- b) Inappropriate drainage in two respects
 - i) Considerable leeching of water from The Fen through the bank and into the Stringside Drain.
 - ii) A badly plugged drain which resulted in water loss from The Fen into a local farmer’s ditch and then into the Stringside Drain.

The Norfolk Fens Assessment (Norfolk Wildlife Trust, July 2006) claimed that peat extraction on neighbouring land has seriously affected water levels. We believe that there is little evidence to support this.

4 Progress 2008-2014

Huge progress has been made. With much help from Natural England, funding was made available via a Higher Level Stewardship agreement (a part of the E.U. Common Agricultural Policy) with monies for rotational reed cutting, scrub removal etc and with further monies for various capital works projects. This has been supplemented by many local community working parties.

The Fen has been transformed and we have received awards from both the Norfolk Biodiversity Partnership and the C.P.R.E. (Campaign to Protect Rural England) to mark our achievements. We have also developed the Boughton Fen Wildlife Walk (with the aid of National Lottery funding) which more or less follows the periphery of The Fen and we have



received a further award for this project which recognises “outstanding access to the countryside”.



The above photographs demonstrate one of our achievements. They show “before” and “after” examples of one of our areas of scrub clearance. The cleared area has since reverted to a healthy reed bed

We have persuaded Norfolk County Council to plug their drain effectively. This has virtually eliminated the leakage from the area north-west of the Stoke Road and south of the Oxborough Road. This leakage had been measured on 22nd November 2007 at approximately 270 litres per hour. The difference is palpable - a more extensive and better quality reed bed has resulted on Highland Fen.

We have installed over 20 nest boxes for birds. Take up, at around 90%, has been excellent with 6 different species raising families within them. These species include Marsh Tit and Tawny Owl.

Along the Stringside Bank, the removal of trees and scrub was followed by bank re-profiling to limit the leakage of water from The Fen. It was remarkably successful but only a small amount of the bank was worked upon as a result of the large costs involved. This work was undertaken as part of the Water Management Plan, funded by E.A.)

Inevitably some of our plans did not come to fruition. We had intended to remove the large trees immediately north-north-west of the bridge (Kingfisher Bridge) on the Oxborough Road, but the very high cost involved was deemed to outweigh the benefits that would result.



5 The Management Plan

After reviewing the requirements of The Fen and the progress to date, we propose the following actions.

5.1 Scrub Management

5.1.1. Highland Fen (centred at grid ref TF719018)

Our original target was to reduce the area of scrub within the reeds to around 15%. This is around 70% complete, but has been hampered by our worst enemy which is re-growth. We aim to complete 90% of the remainder by 2018. Specialised contractors and working parties will be used to achieve this. *100% completion may never be possible since there is a natural tendency for reed beds (especially reed beds that are drier than they should be) to develop into successional woodland. See section 3.1.4. below which covers important changes to our approach regarding re-growth.*

5.1.2. Middle Fen (centred at grid ref TF718014)

Our original target was to reduce the area of scrub within the reeds to somewhere between 5% and 10%. This is around 85% complete and we aim to complete 90% of the remainder by 2018. Specialised contractors and working parties will be used to achieve this. See the italicised paragraph within section 5.1.1. above which also applies to Middle Fen.

5.1.3. Lower Fen (centred at grid ref TF718011)

This was our lowest priority and remains so. Our original target was the removal of scrub and some larger trees in the southernmost part of The Fen, south of the Oxborough Road with the aim of reducing the area of scrub within the reeds to around 15%. This is around 50% complete and we aim to complete 70% of the remainder by 2018. Specialised contractors and working parties will be used to achieve this. See the italicised paragraph within section 5.1.1. above which also applies to Lower Fen.

5.1.4. Re-growth and Waste Disposal

We have been treating all exposed stumps of felled scrub with a herbicide to prevent re-growth. This has been the least successful of all our efforts on The Fen. There will still be a place for this approach on the smaller stumps but a radical re-think is need with regard to the larger exposed stumps.

We shall use a professional stump grinder to remove the larger exposed stumps, and this will be of double benefit. Not only will it eliminate re-growth but it will also facilitate easy reed cutting when the area reverts to a *phragmites* stand.



Our treatment of the cut material will be unchanged. All cut material will be removed from the site, chipped and removed or burnt. In certain circumstances, especially where the area to be cleared is small, material may be stacked to rot down. The location of stacked timber or piles of chips will be agreed with Natural England before work commences.

If material is burnt, fire sites will be no more than one per ¼ ha and will be carried out on tin, where practicable. Fire sites will not exceed 4 m in diameter and where possible be contained to prevent ash contamination of the site and to help facilitate removal of ash.

5.2. Water Level Management

Ideally we would wish to continue with the bank re-profiling work that has been undertaken by the E.A. (Environment Agency) and has been so successful in stemming the water leaching into the Stringside Drain. However, this is a very expensive exercise and will depend on what funding we might be able to gain.

We shall also be looking at the possibility of a Joint Venture with N.E. and/or E.A. to progress work on re-profiling the bank.

5.3 Reedbed Management

We will continue to cut the reed on both Highland and Middle Fens on a four to five year rotation to reduce litter accumulation, maintain botanical diversity and provide a varied age structure for invertebrates and birds. The cut reed will be removed but small quantities may be raked to the edge where they can be piled up to produce habitat for grass snakes and invertebrates.

We will examine the areas of reed to ascertain whether it should all continue to be classed as a stand of *Phragmites* or whether parts should be treated as more of a traditional fen with more emphasis on a varied plant life. The two different classifications would have different cutting regimes and would be of benefit to us in several ways.

We will give special treatment to the part of the Fen where the Marsh Carpet Moth has been located. A different cutting regime should encourage growth of Common Meadow Rue, the food plant. Currently it is being crowded out by other vegetation, particularly Common Reed.

5.4 The Longer Term

We will maintain the Boughton Fen Wildlife Walk to encourage visitors to take an interest in The Fen and flora and fauna. It is our aim to encourage the involvement of children wherever possible to help stimulate environmental awareness and provide educational benefits.