

07 April 2011

Our ref:

Your ref:

NATURAL

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Environment Planning Team Leader  
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Management Team  
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Dear Jonathan

Catfield Fen, Units 3 and 11, Ant Broads and Marshes SSSI  
The Broads Special Area of Conservation (SAC)

Please find enclosed a copy of a Compendium of Ecological and eco-hydrological evidence from Catfield Fen.

In light of concerns raised regarding the potential drying out of Catfield Fen, Natural England has been reviewing its own evidence, and evidence supplied by Mr & Mrs Harris. This Compendium is a statement of the factual evidence arising from the various sources of evidence and has been prepared between Natural England and Mr and Mrs Harris representing an agreed understanding of the information available.

The evidence presented demonstrates a long-term trend of drying on this site which appears to be accelerating. There is evidence of vegetation change consistent with drying of the wetland habitat.

It is possible that local abstraction may be contributing to this drying. Whilst the scale of this impact is unclear, Natural England considers that it is not possible to conclude that water abstraction does not have a significant effect either alone or in combination with other factors as would be required under the Habitats Regulations tests when considering any new application for water abstraction. Further, based on the information available to Natural England, we consider that the Appropriate Assessment would not be able to conclude that there would be no adverse effect on the integrity of the Broads SAC.

Natural England is aware of other factors contributing to the current unfavourable condition of Catfield Fen. We are in discussion with landowners and managers to resolve these land management issues.

Yours faithfully



Sarah Dawkins  
Team Leader  
Norfolk Land Management Team

cc Mr & Mrs Harris

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[www.naturalengland.org.uk](http://www.naturalengland.org.uk)

**A compendium of ecological and eco-hydrological evidence from Catfield Fen,  
Norfolk, at 31<sup>st</sup> January 2011.**

The following compendium has been prepared jointly by Natural England and TC  
and AM Harris.

**1.0 Scope and aim of the Compendium**

1.1 This document aims to collate recent ecological and eco hydrological evidence from Catfield Fen. It does not contain nor express views on the aspects of hydrology and hydro-geology.

1.2 The report will form the basis of the advice Natural England will provide to the Environment Agency when consulted on future water abstraction proposals close to Catfield Fen.

**2.0 Scope of the evidence.**

2.1 'A Natural History of the Catfield Hall Estate' prepared by the Norfolk and Norwich Naturalists Society.

2.2 Report prepared by Ecology Land and People entitled 'Ecological impacts of groundwater abstraction on Catfield Fen – Some initial considerations.' (The Harding Report).

2.3 Report prepared by Natural England entitled 'Comparison of the results of two vegetation surveys for Catfield Fen to identify changes in the vegetation consistent with drying'.

2.4 Historic photographic evidence, both aerial and ground based.

2.5 Letters from Mr Alec Bull, Vice County Recorder for the Botanical Society of the British Isles since 1984 for East Norfolk VC27, and past chairman of the Norfolk and Norwich Naturalists Society Research Committee, dated 30<sup>th</sup> May 2010 and 7<sup>th</sup> November 2010, and the report entitled 'An ecological assessment of the effect of water extraction for irrigation purposes on the flora and fauna of the fens at Catfield Hall'.

**3.0 Interim conclusions that can be drawn from the presented evidence**

3.1 It can be concluded from 'A Natural History of the Catfield Hall Estate':

- It is one of the most intensively studied areas of fen vegetation on the Broads and indeed the United Kingdom.
- Catfield Fen is of exceptional ecological interest on account of the fauna and flora it supports.
- Catfield Fen supports a range of wet fen communities with a range of uncommon and rare

species.

- Catfield Fen is a wetland of International and European importance, being designated a Special Area of Conservation (SAC), Special Protection Area (SPA) and Wetland of International Importance (Ramsar site).

3.2 It can be concluded from 'Ecological impacts of groundwater abstraction on Catfield Fen - Some initial considerations' (The Harding Report):

- Catfield Fen supports a suite of important species that are obligate upon high water tables, often associated with shallow pools and acid lenses.
- Fens such as Catfield are very sensitive to even small changes in the hydrological regime, both in terms of quality and quantity.
- Some of the most valued features in conservation terms are the most vulnerable to changes in hydrology.
- It is difficult to accurately detect changes in vegetation and, even where change is occurring, there may be a time lag between the hydrological impact and detectable species change.

3.3 It can be concluded from 'Comparison of the results of two vegetation surveys for Catfield Fen to identify changes in the vegetation consistent with drying':

- *(b) (lag)* There is no evidence of major shifts in the NVC community within Catfield Fen to suggest that irreversible damage had already occurred. We cannot, however, conclude that damaging shifts in the vegetation quality are not occurring on account of the lag time between adverse environmental conditions and its manifestation in NVC communities present on site.
- There is evidence to show an increase in woody species within the open herbaceous fen communities that have remained in continuous cutting and clearing management.

3.4 It can be concluded from historic photographic evidence, both aerial and ground based:

- There has been a significant reduction in the stature of the reed within the reedbed areas in the Catfield Hall Fen. Such a reduction is consistent with a reduction in water supply during the growing season. *any evidence of litter accum?*
- The aerial photography shows the scrubbing up of large parts of the fen, a process that appears to have accelerated since the early 1980s. There also appears to be evidence of a reduction in the area of shallow open water. *quackies*

3.5 It can be concluded from letters from Mr Alec Bull, and the report entitled 'An ecological assessment of the effect of water extraction for irrigation purposes on the flora and fauna of the fens at Catfield Hall':

- There is evidence of changes in the moss community with wetland sphagnum species being replaced by common heathland species.
- There is evidence of a reduction in the Sphagnum associated fungi which may not be

reversible in the short-term.

- A number of sensitive plant populations are declining. These include aquatic species and species obligate on high water tables.

Signed: C. Douglas.

For & on Behalf of Natural England

Dated: 10<sup>th</sup> March 2011

Signed: T.C. Harris

TC & AM Harris

Dated: 7<sup>th</sup> March 2011