

BLACK SLUICE

INTERNAL DRAINAGE BOARD



Grass Snake, *Natrix helvetica*

Environment Committee Meeting

Wednesday, 15th May 2019 at 2pm

Station Road, Swineshead, Lincolnshire. PE20 3PW



Black Sluice Internal Drainage Board

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Our Ref: IMW/DPW/B10

Your Ref:

Date: 8th May 2019

To all Members of the Environment Committee and Invited Guests

Notice is hereby given that a Meeting of the Environment Committee will be held at the Offices of the Board on Wednesday 15th May 2019 at 2pm at which your attendance is requested.

Ian Warsap
Chief Executive

AGENDA

1. To welcome guests and receive apologies for absence.
2. Declarations of interest.
3. To receive and if correct sign the Minutes of the last meeting of the Committee held on 27th June 2018 (**pages 1 - 20**)
4. Matters arising.
5. To review the Environment Committee Terms of Reference (**page 21**)
6. To receive a report on Environmental Work completed in 2018/19 and recommendations for proposed works for 2019/20 (**pages 22 - 31**)
 - (i) Research and Development of Fish and Eel Entrainment Mitigation at Pumping Stations (**page 32**)
 - (ii) The Wash & North Norfolk Marine Partnership Wild Seas March 2019 (**pages 33 - 36**)
7. To receive the 2018 Black Sluice IDB and Catchment Barn Owl Box Report (**pages 37 - 39**)
8. To receive a report on the 2018 butterfly records from Windmill Lodge Butterfly Conservation and Wildlife Area, Amber Hill (**page 40**)
9. To receive a verbal presentation from Lincolnshire Wildlife Trust (LWT)
10. To receive a verbal presentation from the Greater Lincolnshire Nature Partnership (GLNP)
11. To receive a verbal presentation from Inspired Ecology
12. To receive the Tongue End and Wyberton Marsh 2019 Bird Survey Reports (**pages 41 - 74**)
13. To receive an update on the possible introduction of conservation covenants in the forthcoming environmental bill (**pages 75 & 76**)
14. To receive the following minutes from the ADA Lincolnshire Branch Environment Committee:
 - (a) Draft minutes dated 12th December 2018 (**pages 77 - 83**)
 - (b) Minutes dated 20th March 2019 (**pages 84 - 90**)
15. Any other business.

BLACK SLUICE INTERNAL DRAINAGE BOARD

MINUTES

of the proceedings of a meeting of the Environment Committee

held at the offices of the Board on
27th June 2018 at 2pm

Members

Chairman - * Mr P Holmes

Mr W Ash	* Mr J Atkinson
* Mr V Barker	Cllr C Brotherton
* Mr K C Casswell	* Mr R Leggott
* Mr P Robinson	* Mr R Welberry
* Mr J R Wray	

* Member Present

In attendance: Mr I Warsap (Chief Executive)
Mr P Nicholson (Operations Manager)
Celia Commowick (Scarborough Nixon Associates)
Amanda Jenkins (South Lincolnshire Fenlands Partnership)
Mr & Mrs P Bowler (Butterfly & Wildlife Conservation Garden)

The Chairman welcomed Celia Commowick from Scarborough Nixon and Amanda Jenkins from South Lincolnshire Fenlands Partnership.

1306 **APOLOGIES FOR ABSENCE - Agenda Item 1**

Apologies were received from Cllr C Brotherton, Mr W Ash was a non attendee.

1307 **DECLARATIONS OF INTEREST - Agenda Item 2**

There were no declarations of interest.

1308 **MINUTES OF THE ENVIRONMENT COMMITTEE MEETING - Agenda Item 3**

The Minutes of the last meeting of the Environment Committee held on the 10th May 2017, copies of which had been circulated, were considered. It was agreed that they should be signed as a true record with the following amendment;

Control of Mink - Minute 1114(d)

In the third paragraph, second line it should read 'Lincolnshire Rivers Trust and the Chalk Stream Project' – amendment from 'Calk' to 'Chalk'.

1309 MATTERS ARISING - Agenda Item 4

(a) Syndicate Proposal Update - Minute 1112

The Chief Executive reported that because of the Lincolnshire Wildlife Trust intension to purchase the 50 hectares of land around the pond this will be reported on in another agenda item.

He has spoken to the Syndicate Members and all have agreed that at this moment in time they will withdraw their intension to lease the fishing rights because of the Nature Partnership involvement with regards to enhancement of that area. At the moment it has been agreed to suspend negotiations until such time that land is purchased and that area becomes a nature reserve. In the future the Board will probably not be involved with any fishing rights with the Syndicate regarding that pond. It will become controlled, following the Boards agreement, by Lincolnshire Wildlife Trust.

(b) 100 metres of Reed Bed - Minute 1114(w)(i)

Amanda Jenkins asked has the new reed bed area been identified? The Chief Executive responded that this BAP target was identified as a new 100/200 metres section of reed bed to develop within a watercourse which is Board maintained. Due to the proposed nature reserve at Bourne North Fen this has not been pursued because we then want to negotiate with Lincolnshire Wildlife Trust about the reed beds that they are going to plant and we could incorporate into the Boards BAP.

1310 TO REVIEW THE ENVIRONMENT COMMITTEE TERMS OF REFERENCE - Agenda Item 5

The Chairman presented the Committees terms of reference on page 13. The Chief Executive stated that this complies with all the terms, it has been brought to this Committee because it only sits once a year, it will be for the Board to resolve that this Committee retains the existing terms or change them, he clarified that he sees no reason to change these terms of reference. The Chairman asked Members for any comments and if they were happy with these, all AGREED.

1311 TO RECEIVE A REPORT ON ENVIRONMENTAL WORK COMPLETED IN 2017/18 AND RECOMMENDATIONS FOR PROPOSED WORKS FOR 2018/19 - Agenda Item 6

The Chief Executive presented the report on Environmental works completed in 2017/18 on pages 14 to 22 including the recommendations for 2018/19 and seeking approval for the budgetary recommendations. The Chief Executive stated that the key focus of today's meeting are the proposals at the end of this report for this year.

Completed Works 2017/18

(a) Owl Boxes

The Chief Executive presented on screen a photograph showing a typical owl box repair and/or replacement which has been carried out throughout the year.

(b) Early Flailing Works

The Chief Executive reported that these have been carried out within the Public Sector Co-operation Agreement on the main rivers.

(c) Water Vole Monitoring Surveys

The Chief Executive stated that Scarborough Nixon will give some information later in the agenda. He presented on screen a photograph of a water vole swimming which was taken by one of the machine operators.

Amanda asked if the Board send reports from the GPS devices to the Environmental Records Centre? The Chief Executive responded that all the GPS recorded data is collated in the Office. There maybe a delay this year because the Board has employed a new GIS Technician and he may not be caught up with all data entry since the last Technician left. He confirmed that we may not have sent the information off to the Lincolnshire Environmental Recording Centre (LERC) but we are recording it and have it to send.

(d) Control of Mink

The Chief Executive stated that liaison between agricultural landowners and Board Members informing them about trapping and the importance of frequent inspection and humanly despatching. Although as previously noted the Boards initial thoughts are that there are lower numbers being caught this year.

(e) Environmental surveys of larger hedge rows in our bushing programme

The Chief Executive stated that the Board does inspect ourselves and have in the past employed Scarborough Nixon to inspect some of the large bushes and hedgerows – we did carry out daily inspections on the South Forty Foot when we were in the bird nesting season prior to actively removing bushes and trees from the banks.

(f) South Forty Foot Drain Environmental Works associated with the de-silting works

The Chief Executive stated this was a complete success story and the Spined Loach scenario was catered for. He presented on screen some photographs showing a year ago and today at Sempringham silt lagoon, that shows how it has dried out, and another view which shows where a tractor has worked over an area. He added that we are now in negotiations about whether to start spreading the silt – the last course of work is to put a machine in there, no more than once. The land have been rented for 5 years so we are well on course for those to dry out within that 5 year period.

(g) RSPB Water Abstraction for Frampton Marsh

The Chief Executive reported the water abstraction from Frampton Marsh is an ongoing permission which is granted in line with the EA and the Board for water abstraction and flushing Frampton Marsh nature reserve that water then comes back into the systems in front of Wyberton Marsh pumping station.

(h) Big Boston Clean Up

The Chief Executive referred Members to the screen which showed a number of slides picturing rubbish dumped, one at the back of Joy Paine Close, this typifies some of the rubbish which is tipped into watercourses around Boston. This shows some of the problems the Board has, we use the Boston Clean up crew to help clear and remove this rubbish.

(i) Fly Swat Team

The Chief Executive stated the photograph onscreen shows Dowsby Fen where some tyres and wheels had been dumped. Thankfully a lot of this type of rubbish can be taken up by the Fly Swat Team and disposed of at no additional cost to the Board.

Mr V Barker asked if this crew just work around Boston, the Chief Executive responded he could not today answer that question but they have now spread south into the South Holland area.

(j) Invasive Species

The Chief Executive informed Committee Members that the GLNP produce some excellent documents on invasive species - which can be handed out.

The Chief Executive then referred Members to the screen photograph of 'yellow flower – bastard cabbage' this is a problem which was discussed at the last Board meeting. Whatever decisions are made by this Committee will have to go back to the Board and the next Board Meeting is 7th November 2018. Whatever is agreed or implemented today will not be implemented until the next growing season which is early spring of 2019.

He reintroduced a paper that Lindsey Marsh IDB have produced on "oil seed rape and wild brassica rapa" this is a detailed investigation and basically quite simply what funding do you have available to do additional cutting or spraying. Lindsey Marsh IDB decided they could not afford the additional £138,000 it would cost to remove the 'yellow flower weed' from 20% of their lineal watercourse maintenance regime off three cuts per bankside.

Mr P Robinson asked how does that compare with chemical spraying and how does the cost stack-up? The Chief Executive responded you can only spray with herbicides which are not going to harm the watercourse. The Chairman added that this problem has been over a couple of years now, at Floodex we looked at spraying from a boat because you cannot spray off the top of the bank or it is more difficult to spray from the top of the bank. He then asked his agronomist and he said there are no chemicals on the market that are suitable on a dyke bank adjacent to a watercourse. The Chairman added over the discussions we've had that flailing is probably the answer but if we do flail we would need to go in early enough ie March before the vegetation gets too high as it will deter any ground nesting birds from starting to nest. Therefore it would also need 3/4 cuts and detailed costings would need to be looked at which could be c£11,000 per kilometre per season to do four separate cuts, March, April, May and June and start as the cutting programme would do in July.

An estimate of what area the Board would need to cut, if the Board were to take this responsibility on which they are not of a mind to do, it would cost the Board £350,000 per year just to tackle this yellow flower weed. This will be charged out at cost without the 5% surcharge.

Mr V Barker referred to the chemicals he has heard this year that double spraying with Fox has controlled it, there used to be an aquatic roundup it must be suitable for spraying next to watercourses.

The Chairman responded he did not think there was a suitable applicator, there are situations where it is easier done by boat and there are situations where it is easier done on the bankside but there is not a 'one size fits all' application for the operation.

Mr Barker responded that you could soon find a suitable applicator, he remembers they put applicators on trains there may not be an applicator machine at the moment but chemical versus distance travelled by flail it may work out more cost effective. The Chairman responded that this would need to be done at a certain time of the year when probably crops would be in the adjacent fields therefore, there would be compensation to the farmers to consider unless the farmer wanted to waiver that compensation to get his banks sprayed.

The Chairman pointed out that the Board do not see it as their responsibility. Mr J Atkinson believes the Board is over compensating the scenario, about mowing it off, his experience is that in private dykes he has mowed it in the middle of May. You might say that nests have been destroyed but he assured the Committee that birds will not nest in this yellow flower weed. The first year it is quite an operation to mow it but the second year you get about half the amount growing and the third year it is more or less gone and grass is growing naturally in its place and birds are nesting again. He suggested they don't tackle minor ditches but the South Forty Foot is the important one and I think it would really be the Boards duty to do that to get rid of it because it is bad in the South Forty Foot. He believes there is no worries about birds nesting and the costs being quoted extraordinary.

The Chairman clarified that the costing is for four cuts and the South Forty Foot is not the Boards responsibility or the highland carriers, Mr Atkinson then added that he is talking about only doing the one cut at the right time of year. The Chairman asked if the main concern was for cross contamination with existing rape crops, by using farm machinery reaching two thirds down the side creating an 8 metre buffer in the bottom of the drain, is that a big enough buffer to stop the cross contamination. Mr J Atkinson responded that every bit helps, we are not going to wipe it out. He believes there should be a prescribed trial – he knows it is bad in his area, not sure about other areas.

Mr K C Casswell asked do we have this yellow flower weed on Board maintained drains.

Mr P Robinson mentioned that you have completed cutting around the cricket ground and that grass is growing back. The Operations Manager responded that we have to go with the environmental remit, if we want to mow banks we have to start late March early April before nesting birds think about nesting, if the Boards machines go within the environmental policy we would have to mow those banks early and frequently. We could not cut that bank in May.

Celia Commowick responded, that it might be cheaper, rather than do several cuts, to send someone out to do a quick walk through to check for nesting birds, you will flush any birds if there aren't any then you can cut – then you could do that at any time of year. That is what Scarborough Nixon would do as a standard bird check and quite often we look at wild scrub and hedgerows because its not always obvious immediately, but when you walk along, you will hear the territorial bird calling and you will know if there are birds nesting there or not, if they are there then you just leave a buffer zone around the nest and carry on with the rest of it.

Mr P Robinson added that a farmer near Holland Fen, grows seed as in turnip seed and he has liaised where we are going to put rape because of the cross contamination, because it has to be so many metres away from his crop therefore he is restricted on what fields he can grow seed on. This 'yellow flower' continues to grow and expanding its area.

Mr R Leggott confirmed that when he used to grow swede seed, he would ring his neighbours also. Mechanical mowers could do this job which might not be palatable for some people, have we looked into if there is research into competing plants species, he is not aware of any research. The Chairman expressed that Mr Atkinson in some respects has completed an experiment and by letting the light back into the bank sides encourages grass to regrow, and it offers stability to the banks. Amanda Jenkins responded that this 'yellow flower' is very vigorously growing you would have a struggle to find a native species that was as vigorous as that 'yellow flower'.

The Chairman believes we should establish who's responsibility it is. Mr P Robinson's concern would be whether the 'yellow flower', where there is no grass growing, whether or not it destabilises the bank.

Mr R Wray asked if the fact machines cannot mow in March is this a legal thing? The Operations Manager responded we do up to 70 kms when we start flailing early, so you can maintain those watercourses if we go to do them and we don't walk the banks previous to cutting them we have to start in March before the birds think about nesting in the long grass. The Chief Executive added that this is a directive from the Boards Biodiversity Action Plan we write this ourselves for the environmental benefit within the Boards catchment. Mr Wray then clarified that if you wanted to cut it in full flower in May you cannot do it, the Chief Executive responded that we can change those rules and liaise with the experts because of this introduction we should be cutting early or later.

The Chairman clarified this is why this has come to this Committee because this is an environmental problem.

Mr K C Casswell asked could we write an exception for something like this bank on the North Forty Foot and see what happens if we mow this 2/3 times as Mr J Atkinson stated because if we could reintroduce the grass we would have something to go to the Environment Agency and say that their banks are bad we need to do something about them as well. We control this ourselves which would be a good starting point, Mr Welberry agreed.

The Chairman asked about the cross contamination, he asked Mr Atkinson if May is the right time to go? Mr J Atkinson responded that you are looking at another year ahead now, its reducing it by 50% each year and by year three you might only have 10% left. Mr J Atkinson reiterated that when the yellow flower is present on the bank side he has not found any birds nesting in that weed material.

The Chairman added that this would need to be put to the Board and ask that funding be found from the Board. The Chief Executive responded that this Committee has £20,000 environmental budget to control, he has recommended budgetary spending for the next year but there is nothing to say that an element of that budget can be put towards an experimental cutting of different lengths of this problem area.

He is very conscious that once we start current sections of particular banks, that other landowners are going to ask why are we not cutting their bank sides.

Mr R Leggott asked if we are going to do this route of experimental banks this will be done over a three year period we would have to entail that part of bank with whoever to the landowner neighbours in order for them to plan their cropping accordingly to some extent. If the Board is going to do it then let's involve landowners in order for them to know and plan in advance.

The Chairman agreed that liaison with all landowners is essential and in certain situations where if we approach them they might have an appetite for mowing the bank sides themselves. Mr J Atkinson felt it should be put on the website and communicated to landowners that they can do this to encourage farmers if it was agreed to take it upon themselves to mow.

Mr P Robinson asked who paid for the cutting around the cricket ground, the Operations Manager responded the Board, it comes out of the early season flailing budget as are the public areas that we flail early around Tesco on the Hammond Beck.

Celia added that it is not just within the Board's BAP regarding cutting season around nesting birds, it's a legality that if you are going to flail and there is potential for nesting birds, then you would need to get it checked first.

The Chairman asked the Members, that it is proposed to the Board as a cost to the Board a trial area(s) and also encourage landowners to approach the Board to seek approval to take the flailing upon themselves with all the right directions pre checks.

The Chief Executive clarified that if we identify fairly immediately, what we are going to identify for any experimental lengths for next year, we approach the landowners that this maintained watercourse will be used as an experimental area and do a half kilometre how much funding do we want to allocate and do we want to allocate it out of the environmental budget or put it to the Board for them to fund from the Boards own maintenance budget these works.

The Chairman asked is there £5,000 that could be allocated from the environmental budget to do this. He understands that Mr Atkinson has already done his own experiment on it and do think we could probably do half kilometre in a May cut and we also do a March, April cut and different cuts and see which is best from an economical point of view. Mr Atkinson reiterated that once is enough. The Chairman acknowledged that if Mr Atkinson is happy that the experiments he has done over the last three years. Mr Atkinson explained that he might have got rid of it in three years instead of four if he had done it more than once a year but to save his own costs he did it once a year when the yellow flower was in full flower.

Mr P Robinson interjected that the experiment has already been completed, around the cricket ground because you have been flailing it the last three years. The Operations Manager confirmed yes. Mr J Atkinson added that about the cost you do have the machines and if you did it in May it's a time of year which is not the Boards busiest time of year, and you are paying the work force anyway, so how do you allocate a cost.

The Chief Executive explained that the funding for those works has to be found, he has allocated all the environmental budget in the proposed environmental works. How much does this Committee want to allocate to this experiment and deducting from one of the proposed environmental projects.

Mr R Leggott believes that there is a good case for this experiment to be funded from other budgets and not come out of the environmental budget because in the end it will be the results that matter and the Board will make a decision on how this should be dealt with in the future. He really thinks it is a Board matter rather than an environmental. The Chairman agreed and Members also agreed.

Celia asked if Lindsey Marsh IDB had tried any flailing scenario, is it worth asking Chris Manning. The Chief Executive responded that they have produced a detailed document but there is no indication that there is a conclusion.

Mr R Wray, pointed out that if we do not do anything and this 'yellow flower' weed takes over all the banks then surely that is an environmental catastrophe so we have to do something.

Mr K C Casswell agreed that we have to do something as it's only going to get worse.

The Chief Executive clarified that this Committee have agreed that this will go back to the Board and will implement and design an experimental brief for next spring and request a £5,000 allocation from the main drain maintenance budget. All AGREED.

Mr R Leggott added that we should also look at the important thing about competing species, any research to be found for the Board.

(k) Bat Boxes and Surveys

The Chief Executive stated that there are bat boxes on every pumping station and he showed a photograph on screen of what they look like. It can take 2 or 3 years before bats use them as nesting boxes.

(l) Environmental Scheme – Eel Passability at Boards 'Category A' Pumping Stations

The Chief Executive stated to go back to the agenda papers on page 23, there is an update regarding eel passage. This was only produced on the 20th June 2018.

(m) Environmental Scheme - Bird Survey

The Chief Executive stated that this may be introduced in the agenda later.

Proposed Works and Environmental Involvement in 2018/19

(n) South Lincolnshire Water Partnership (SLWP) Official Launch

The Chief Executive stated the details regarding the official launch are on pages 24 – 27.

This is the Water Resource East and SLWP have had a meeting on the 27th June 2018 it was very well received at the Lincolnshire Show and had numerous landowners visit their marquee. The future of water concept (SLWP) headed by the WRE is having their official launch at the Epic Centre, Lincolnshire Showground on the 9th July 2018, there are still invitations available if anybody wants to attend. You have to apply yourselves by reserving a place on the website <https://futureofwater.eventbrite.co.uk>

(o) Bourne North Fen Ponds

The Chief Executive stated that he has mentioned this earlier in the meeting. The SLWP and Lincolnshire Wildlife Trust vision is for a c50 hectare wet fenland wildlife site.

(p) Water Vole Surveys

The Chief Executive stated that with Scarborough Nixon involvement these water vole surveys proposed estimated cost of c£3,500 contribution to continue with the monitoring for the sites we have been monitoring in the past and any possible major desilting schemes to carry out water vole environmental mitigation inspection works required.

Mr R Welberry asked if the water voles are still having issues with mink, Amanda Jenkins responded that water voles are generally having issues with mink if there are still mink in the catchment. He reported that he has sighted two mink near the Holland Fen and Hammond Beck near Kirkstead Bridge.

(q) Winter Bushing and Cleansing

The Chief Executive stated this will be continued, this is a request for c£1,000 when we complete deep water desilting and we dam up and pump down we electrode fish and relocate.

(r) Summer Cutting and Vegetation Clearance

The Chief Executive referred Members to the agenda.

(s) Owl Boxes

The Chief Executive explained that the owl boxes have reached sufficient numbers therefore this is a request of £1,500 for repair and replacing broken boxes. The boxes are now being cleaned, cleansed and redressed by the Board Pumping Station Grounds Person which has reduced the costs.

(t) Recording by Machine Drivers

The Chief Executive reported this has continued, and we will continue to send our records to the GLNP/VERC.

Mr R Leggott asked have we had any report examples of the results for the Committee, the Chief Executive responded yes, we have at previous meetings and can show an overlay GIS layer to the next Board meeting.

(u) High Profile Watercourse Assets

The Chief Executive stated that the Operations Manager has eluded to this already regarding the seasonal flailing on the important watercourses.

(v) Water Levels

The Chief Executive reported the water levels are controlled in line to assist any environmental impacts within the catchment.

(w) Invasive Non-Native Species (INNS)

The Chief Executive stated this is now becoming quite relevant there is the invasive species we are all aware of ie Japanese Knotweed, Giant Hogweed etc. He reported that a new problem signal crayfish, he referred Members to pages 39 – 42 and presented on screen the difference between the native species 'v' invasive species. He asked do we, or should we be carrying out a Board investigation?

Amanda Jenkins added that they are very rarely found together because usually the invasive crayfish carries a disease which wipes out the natives, and where it does not wipe them out it competes because the invasive crayfish is so much bigger it does not kill it just out competes it. Amanda was not aware that it had reached this catchment – they only have them in the Upper Witham around Belton.

The Chief Executive responded that he is not aware, as we have never carried out any investigative work, he did not believe they were in ordinary watercourses. Amanda added that the EA have done some surveys.

The Chief Executive requested a £2,000 budget to identify do we have this type of invasive species or not.

Mr V Barker asked with the desilting works was there any sign of any of the lagoons. The Chief Executive responded that the only signs were interest from the local birds at the lagoons, there was nothing being removed from silt if there was crayfish in there he was not aware.

Mr V Barker suggested that possible for consideration of the next lagoon which is done netting it or something so that the birds cannot get to it and we can view it first.

The Chief Executive stated from the outset of the desilting works there will be an Environmental Clerk of Works which in all probability will be someone from Scarborough Nixon and we can incorporate this into their remit.

Mr R Welberry asked once the invasive species colonise an area do they stay or move around, Amanda Jenkins responded they move up and down, they can be wiped out themselves ie if a pollution event which may reduce them, but usually they wipe out only native species there would not be both there, its still a reportable species you need to report sightings to the Environment Agency.

(x) Fens for the Future

The Chief Executive referred to the agenda which is an update.

(y) Fly Swat Partner

The Chief Executive stated the Board has contributed to the Fly Swat project for 2018/19 which is £2,641. He reminded the Committee that there was a time when the Board was spending £14,000 a year removing items from the watercourses, this is a significant reduction on what the Board was paying.

(z) Big Boston Clean up

The Chief Executive stated that generally a couple of workmen and a vehicle are provided which costs c£600. The Big Boston clean up generally takes place in April of each year.

(aa) Sand Martin Nesting Site

The Chief Executive referred members to a screen photograph of a suggested design someone who has built their own artificial Sand Martin breeding site, we don't know if this is an approved or what type of nesting site we would use we would probably go to Scarborough Nixon to obtain some advice. Mr R Welberry stated there is a very successful one at Frampton Marsh, Mr Robinson added there is one at the South Forty Foot.

The Chief Executive suggested that one is built using Scarborough Nixon as the experts and use some of the material we have in Gosberton dump to build it inside the dump, we would need to look and decide as it is close to the South Forty Foot but again its really seeking the approval for c£3,000 request.

(bb) South Lincolnshire Fenland Partnership

The Chief Executive explained this is a general update.

(cc) Grass Snake Nesting Sites

The Chief Executive referred Members to a picture on screen of two dump areas. He recommended a budget of £300 per site to put a post rail fence around the sites once identified to cordon off the site to stop anyone walking around if such persons ever got in the area.

(dd) Wildflower Meadow

The Chief Executive referred Members to a picture of a site on screen which has wildflowers at Cooks Lock alongside the North Forty Foot, it might have an environmental advantage without introducing further wildflower seed. Its 100 metres long by 16/20 metres wide, it is not used and its gated off so again its really just the budget allocation and then to talk to the experts about possible development and introduction of seed.

Mr V Barker asked if Scarborough Nixon would be able to tell us when that particular site would need mowing. Celia added that if it is a wildflower to cut it once in late summer and remove the arising's. There are many invertebrates who would love that there is wildlife value in it remaining like that.

(ee) Water Framework Directive

The Chief Executive stated he has had meetings with the Water Framework Directive including Mr D Hitchinson (EA) the WFD Officers, this is is an important continuous approach to water management. He concluded we want to continue to develop this.

(ff) Bug Hotel

The Chief Executive referred Members to a picture on screen taken on the recent trip to the Netherlands, of two bug hotels requesting c£500 to build one or two of these actually near the pond at the front of the office. He believes that we could scavenge those materials in the yard to make it up.

Mr R Welberry suggested that it might be a good kids project from the local primary school.

Amanda Jenkins added that the South Lincolnshire Fenlands Partnership are going to suggest a pollination project because the EA are doing one at the pumping station and alongside some banks.

We suggest ADA do the same thing perhaps working with Scarborough Nixon, building pollination palaces is one of the things we would like to do in the villages and project areas, and I think this is an excellent idea, and you can get some cracking structures, there is one at Ferry Meadows.

(gg) The Wash and North Norfolk Marine Partnership

The Chief Executive reported this was previously known as the 'the Wash and North Norfolk Coast European Marine Site (WNNC EMS)' we are a partner for c£400 per year there is a Wild Sea Week coming up on 3rd to 12th August 2018 - this information was emailed to all Board Members. He invited Members to get involved, there is a website <http://wnnmp.co.uk> further updates on page 21.

He stated that part of the budget is for a skip to be placed at Kirton Marsh as they are going to do a beach litter pick, which the Board has said they will pay for.

(hh) Heckington Show 28-29 July 2018

The Chief Executive presented a photograph of last year's stand at Lincolnshire showground when the Association of Lincolnshire Drainage Boards won the Game Keepers Trophy for the best stand in the relevant sector in the Countryside Section. He was pleased to announce that Lincolnshire ADA had retained the trophy this year. A similar type of show will be attending the Heckington Show from the Southern Boards of Lincolnshire, at this moment in time we do not know if any machinery will be there.

(ii) Gulf Wedged Clam (Rangia)

The Chief Executive presented a couple of photographs of the Gulf Wedged Clam, he referred Members to his report on page 22. He believes it has only been identified in the South Forty Foot in the entire Country – we see it as quite a serious problem there are various studies being undertaken and they are still investigating the possibility of using bio-bullets.

He added that for the Board there could be a problem if they start congregating around pumping stations and collectively building inside some of the pipe work although we have some very high pressure water moving through those pipes, when it does move through. We can see possibilities of failures in the future.

Mr R Welberry asked if they can live in fresh water or salt water or both. The Chief Executive answered yes the theory is that they have come out of ships balancing tanks and come to the South Forty Foot.

(jj) Operation Galileo

The Chief Executive stated this is an update on page 43 – 46 on the operation galileo. It is starting to be a success and there seems to be a down turn in the hare coursing but it is an operation that the Lincolnshire Police along with NFU will continue to support.

(kk) Biodiversity Action Plan (BAP) Target Works

The Chief Executive stated the Biodiversity Action Plan which runs alongside national plans is up for review. He stated that it is continually reviewed but its next major review is in May 2019 so that will be ongoing work this coming year.

The Chief Executive asked that this Committee agree to the proposed works above with the budgetary figures allocated. The Chairman asked Members if they had any questions, then asked Members approval for these recommended works and their associated costs.

Mr V Barker asked about the Risegate bank environment project, the Chief executive responded – he believes we have failed on that bank, we have tried different seed mixtures, we looked at holding water back and implementing different vegetation at the bottom of the watercourse. It is still open to discussion and debate, we have not given-up on it but it is something we seem to struggle with that length of bank because of the high quality of the soils and that seems to be the issue. The Chairman added that it's very difficult because of the competition and just getting wildflowers established in high fertile areas. Mr V Barker added that the Operations Manager did come down and take pictures of what does grow on high quality soil. The Chief Executive added if we have spare capacity in the budget then as a reserve proposal that we look at the new seed mixtures in theory for the Risegate bank.

Amanda Jenkins asked if there was any room in the budget to fit in some local Wildlife Site surveys as well as the water voles surveys or at the same time because you probably have loads of really good species particularly in the watercourses there are lots of fantastic species in the fens that we don't know about. She wondered if local Wildlife Surveys particularly on the de-maining sites but also building up a picture while you are having a certain type of survey carried out look including a wildlife survey as well and see what type of botanicals there are. Celia responded that they would note this as a matter of course.

The Chief Executive responded that yes if we could understand the costs involved and have this as a reserve scheme. Although we budget for all these proposals in some instances it's not always the case we can fulfil them all. If we have some reserve schemes in place we can bring them in to the budget.

Mr R Leggott added that often this is recorded by Officers and Workmen on machines have we not done this survey already. The Chairman agreed it is arguably that we are already doing ongoing surveys of wildlife. Amanda Jenkins responded that it is not by experts and its not a botanical survey and if you get to know what's in your watercourses then you can record and manage a little bit better or differently then what you have in your rivers and drains in terms of plants will then encourage insects, water voles and otters the basic is a botanical survey then everything else builds upon the structure of the drains in terms of environment.

Celia responded that it would not cost anything extra to get that data, it might cost a little bit extra if you had to write a report to present to you where we think you might qualify for local wildlife sites then you can maybe look at those biodiversity hot spots and manage those sections differently. That is an option.

The Chairman clarified that whilst you are doing the water vole and bat surveys you are also looking at others.

Celia answered yes, we generally take a botanical list of every drain we go to. It's an ongoing thing.

The Chairman asked to seek approval for all of those budgeted allocations, all AGREED.

1312 TO RECEIVE A REPORT ON BARN OWL NESTING BOXES FOR 2017/18 - Agenda Item 7

The Chief Executive referred Members to pages 47 - 49 which is the annual check of Black Sluice IDB barn owl nest boxes.

This report has been prepared by the Hawk and Owl Trust – Alan Ball email:

Firstly I have not checked all the boxes there are only a few boxes have been checked. Barn Owls are not doing very well this year, possibly due to the late Spring cold weather and hence I have not yet checked all the boxes. However certainly your northern boxes seem to be bucking the trend and are fairly productive with Barn Owls and Kestrels.

I have been approached by a film company who are keen to try and get some footage of piracy by Kestrels taking food off Barn Owls and have only found one box in the county that has both kestrel and barn owl chicks at the same time - which is the box at Barry Halls. The film company have, with agreement from Barry, set up a hide here and hopefully will get the footage to be shown at a later series of Springwatch.

He presented on screen the kingfisher nesting site which was built following approval from this Committee 3/4 years ago. Unfortunately we have not had any kingfishers nesting in it yet, but we do have a couple of swans nesting on the bank side.

Mr R Welberry asked about the volume of jackdaws, the Chief Executive replied there does not seem to be any clear indication of them, every year all the jackdaws nests are removed from the owl boxes during our general maintenance routine.

1313 TO RECEIVE A VERBAL PRESENTATION BY SCARBOROUGH NIXON ASSOCIATES - Agenda Item 8

Celia Commowick from Scarborough Nixon Associates reported firstly about the otter cam survey which have been going on for sometime now but unfortunately they have not had any sightings of otters. We have had various species, ie Newts, Swan, Mallard, Moorhen, Fox, Deer, Little Grebe. The surveys will carry on it would help if anyone has any recent sightings of otters to let them know.

She stated that reports have been received of Otters sighted Kyme Eau so we are going to try putting the webcam out at Damford grounds, South Kyme.

The Chief Executive reported that the Operations Manager along with two EA Officers, whilst walking a watercourse in Pointon spotted an Otter which swam out into the watercourse, unfortunately no one took a photograph.

Mr R Welberry reported that he had seen a dead Dog Otter towards the end of Station Road, the Chief Executive responded by asking Members if you do see a dead otter please let the office know because Mr C Manning the Environmental Officer at Lindsey Marsh is the Lincolnshire Mammals Recorder.

She continued her report stating that the Water Vole surveys, the latrines have only just started to be put out, some of them will need setting using a boat. This will be in the Great Hale and Little Hale catchments once all the rafts are all set we will leave them for a couple of weeks, we will return and do bank top surveys and we should be able to see any droppings on the rafts and from the number of droppings and where they are we can extrapolate what kind of water vole populations are in those sections of drains.

The Operations Manager asked will you give locations of these rafts because the machines could damage them, Celia responded that she has a map and she will let the Board know where they are placed.

Celia reported on the bird surveys being carried out in the Boards catchment having just been completed therefore the full results have not yet been compiled. Celia confirmed sighting of a breeding pair of Marsh Harriers and can only confirm one chick at the moment. Common Tern have been seen every survey they have not been breeding there but obviously fishing there therefore one of the suggestions would be perhaps in future years, a Tern raft on the pond these can be fairly inexpensive if you build them yourselves and that would encourage them for breeding.

Celia then mentioned the bat boxes monitoring now these bat boxes have been up for two years, if there is any scope either this year or next year to do some bat box checks and confirm whether you have roosting bats then you can increase the provision for roosting bats and that can be confirmed and can then contribute towards your BAP targets. In the same instance if we are visiting all the pumping stations we can also do checks for Otter spray while we are onsite at no additional cost which will also help build up a more recent picture and try to identify where the Otters might be.

At Holland Fen pumping station where there was a potential maternity roost of Daubentons bats in 2016 we could possibly look to carry out an internal inspection of the pumping station if we can get access in order to get an idea where they are roosting which may be in the pumping station or under one of the bridges near by. We could set up an infra red camera to try and capture where they are then you could use this information to enhance the surrounding area for that species. Which will also contribute to your BAP targets.

Celia suggested perhaps some grass snakes surveys, but did not know if you have had any of these carried out, as it is in the BAP. The Chief Executive responded that he has no surveys but has frequent sightings in the southern fens. Celia added that if you are doing all this work building grass snake nesting sites in it might be a nice idea to put some tin sheets out and then have somebody check them to see if we have anything there which would give you a monitoring system in place.

1314 TO RECEIVE A VERBAL PRESENTATION BY SOUTH LINCOLNSHIRE FENLANDS PARTNERSHIP AND GREATER LINCOLNSHIRE NATURE PARTNERSHIP - Agenda Item 9

Amanda Jenkins from South Lincolnshire Fenlands Partnership, stated that she works two days a week as a Conservation Officer for Lincolnshire Wildlife Trust covering Boston and South Holland this is a fairly new role, plus two days a week as the South Fenlands Partnership Project Officer which really just branches into the Black Sluice catchment just north of the River Glen.

She presented a map showing the Baston & Thurlby Fen Project, with South Lincolnshire Fenland Partnership which was built up in 2004. We try and work with our 22 partners and the Black Sluice is one of them the lead partner is Lincolnshire Wildlife Trust. Local farmers are involved, Waterside Garden Centre is on the Steering Group, all parish councils are represented on the group.

County and District Councillors and local representatives from Natural England and the Environment Agency. Part of the project is Willow Tree Fen which was purchased in 2009 the aim of the project is to create more wetland and fenland in that area and beyond. Baston & Thurlby Fen is very small and very narrow, we have lost a lot of iconic old fashioned fenland species like bittern and crane and a lot of the old plants and butterflies things that you used to find in the fens have gone and those two areas by themselves are very small. So the idea of the partnership is to work with people to grow a bit more wetland and fenland where it's appropriate. We are working with communities to bring them on board with what we are doing and we recently held a minerals workshop where Lincolnshire County Council were working on a minerals plan.

Amanda stated that currently they are looking at the area up to the A52 in making that a nature improvement area, we had 70 members of the local community that came to the meeting and wanted to improve nature improvement areas. We provide events at Willow Tree Fen and we have things like pond building, heron nest building, mud workshops, kids and garden workshops. Any funding that can be given to help the aim of the partnership is always well received. We are working with farmers through a countryside stewardship facilitation fund and we have been invited through Defra to see if we can help to shape the environmental land management scheme which might come next and the idea of this countryside stewardship scheme is that all farmers work together to put in schemes across the landscape and they join up across an area. In addition farmers are working on owl boxes, Tree Sparrow project etc.

Amanda stated that Sarah Barker GLNP – is working on a pollinator project, these are a quick and easy way and a low cost approaches to improving pollination. This brochure has been printed and is available to Members whom would like one.

Amanda explained that Sarah was unable to come to the meeting but would be very willing to come and speak to Members on the pollination project and asked if these brochures could be sent out to some of your Members.

We are hoping to purchase a portion of land in the area called Glebelands in the minerals area and hoping to put a sculpture up at Willow Tree Fen. She again mentioned the local wildlife surveys, alongside drain sides – you survey a river and drain, you look at the plant life and species and you match them up to a list. Ten off this list of important species will designate you as an area of local wildlife site and there is up to 30 different species in some of the rivers and drains. The drainage board work by cutting the bottom of a watercourse is doing it some good.

The best watercourses regarding wildlife are the ones that are the most heavily maintained/managed. Going forward with the Black Sluice if you are thinking of changing your management lots of people think less management is a good thing for wildlife but is not always the case most certainly not in the aquatic environment. The drainage boards are producing a fantastic diverse wildlife environment.

Amanda then made reference to the Environment Agency pollinator project whereby they are working with their operatives and Steven Falk (Entomologist) and what they are doing by looking at easy ways around pumping stations and along assets ie river banks to improve the plight of pollinators. Amanda stated they will be contacting ADA and suggesting running some trials with the IDBs across the county this will be interesting to work with the Black Sluice area.

Amanda asked Members if they need any help where might there be areas they can help or any information needed please let her know.

The Chief Executive concluded that the GLNP brochure on pollinators is available, and a GLNP updated printed if anyone would like a copy. He referred to the possible interest by ADA and also on the ADA website regarding those pollinator sites, they will await to hear and believe it could be something the Board will be interested on in the future.

The Chairman thanked Amanda and asked Members if they had any questions. There were none so he moved on.

1315 TO RECEIVE A VERBAL PRESENTATION BY MR & MRS P BOWLER ON THE AMBER HILL BUTTERFLY AND WILDLIFE CONSERVATION AREA - Agenda Item 10

The Chairman presented Mr & Mrs Bowler to the Committee.

Mrs Bowler read from her notes they live along the claydyke and they have a meadow, pond and woodland garden. She outlined the history of the garden, stating that her husband Phil has been interested in butterflies since his childhood which has developed into a passion that by understanding the butterfly lifecycles and characteristics of each specie. As a boy he dreamed of having his own butterfly wild garden and since 1985 his wish has been fulfilled. The first butterfly garden was in Derbyshire and it became an award winning garden receiving major recognition and featured on television and in the Independent newspaper. However it eventually proved too inaccessible and increasingly difficult to work with the garden being on a slope of 45 degrees. Following on we moved to Lincolnshire before moving we submitted records of sightings in the local area to the Lincolnshire Branch of Butterfly Conservation <https://butterfly-conservation.org/in-your-area/lincolnshire-branch> and they were amazed at the findings they had written off this area as being not being suitable for butterflies due to the massive expanse of arable farm land.

Mrs Bowler continued that what they had overlooked was the enormous linear habitat of dyke banks rich in wild flora and largely protected from the wind, these natural corridors allow the creation of many colonies of butterflies and other wildlife allowing them to spread into other areas. Mr & Mrs Bowler's garden impacts on this and creates a permanent nucleus and breeding ground for them this is not just the place to attract passing butterflies around to refuel with nectar it is a purposely designed mini habitat to breed and thrive in.

This garden started as a clean slate other than the already created large pond so all the other glades etc the meadow have been totally designed and created by Mr & Mrs Bowler, it is one acre in size and benefits from having the dyke running along the west side boundary and a large field adjacent which is not arable. The larva food plants are particularly important in creating the correct environment which varies from species to species some of the food plants are trees such as buckthorn, holly, oak and elm. The White Letter Hairstreak butterfly which uses elm as a larval food plant has suffered nationally from dutch-elm disease. Many of the butterflies are woodland species the planting of native trees was one of the major tasks at the beginning, and now that they have matured is proving very locative. Even the rare White Admiral very much a woodland butterfly that uses honeysuckle as its larval plant has shown up. Few colonies are found in Lincolnshire the nearest one is Woodhall Spa in this region. Most butterflies do not have the wondering capabilities of the White Admiral particularly the Green Hairstreaks which are not seen in this area but to Mr & Mrs Bowler extremely surprised to find them in the garden in 2014 it could only have been that somewhere along the drain system a mini colony exist as yet unrecorded proof that the drainage boards are doing the right thing when it comes to conservation work and habitat management.

Mr Bowler added very few actually travel far at all, if it had hatched from its chrysalis it would not move from outside that immediate area, they just don't do it only the fast flying the minority that do. When you get a Green Hairstreak arrive where could it have come from, these wonderful dyke banks are linking little mini colonies together.

Mrs Bowler continued, some species will use the dyke networks to expand their territories, but the dyke banks themselves are not suitable as a permanent breeding habitat for them as their habitat requires a higher specific. This is where the garden comes into its own with its purpose design and habitat types for all the various species, and this is the point which needs emphasising. Everything which is planted in the garden is for wildlife butterflies in particular and its now 21 years in the making and wildly recognised as a successful conservation exercise especially regarding butterfly conservation and wildlife trust. Despite setting out to create a mini habitat for butterflies we were pleasantly surprised when the project became so successful we have had a tremendous achievement in attracting 27 species of butterfly – 20 of them breeding successfully onsite. We first knew we were on the right tracks when we sighted the Speckled Wood a shade loving butterfly moved in soon followed by the Brown Argos the butterfly that can no way be classed as a garden species and currently regarded as a flagship species especially as the three worst butterfly years were 2007, 2012 and 2016 it has bounced back with a vengeance in the following years.

Mrs Bowler mentioned some other species which are in decline, Wall Browns, Small Heath, Small Copper are declining rapidly. We have been nominated to become a special wildlife site and Boston Borough Council are commissioning a year long ecological study of the garden which will take place within 2019 and will look at all wildlife.

Mr R Welberry asked about moths, Mr Bowler responded that yes there are numerous other species of moths including night flying moths, but we have not been able to net catch them due to time and record them.

The Chairman thanked Mr & Mrs Bowler, he hoped that by attending this meeting they gain an insight into what the Board does for the environment.

1316 TO REVIEW THE ENVIRONMENT AGENCY INITIAL PRIORITY CATCHMENT – IMPROVING THE WAY WE MANAGE WATER MAY 2018 - Agenda Item 11

The Chief Executive referred Members to pages 50 & 51 stating the Environment Agency Initial Priority Catchments (IPC) he has attended a meeting reference this part of the interaction with the South Lincolnshire Water Partnership. This could be a completely new approach and re write the abstraction plan he can only see this from an environmental impact assessment and from the Boards prospective by increasing the recognition of drainage boards in the UK. We are going to re write the abstraction policy and reform the abstraction process and the main abstraction policing is to involve drainage boards in a lot more detail including interaction. This process has only been realised in May 2018. This Board is one of only four IDBs Initial Priority Catchments running alongside the Rationalising of Main River Network which the Board is one of five. It is very interesting times, he will regularly update the Board on these matters.

1317 TO RECEIVE MINUTES OF THE ADA LINCOLNSHIRE BRANCH ENVIRONMENT COMMITTEE - Agenda Item 12

The Chief Executive referred Members to pages 52 – 67 stating these are minutes from the various ADA Lincolnshire Branch Environment Committee meeting. He asked for any questions or comments. There were none.

1318 ANY OTHER BUSINESS - Agenda Item 13

(a) ADA Gazette

The Chief Executive informed Members the Board visit to the Netherlands is in the ADA Gazette a full report of the tour will be produced and published on the ADA website.

There being no further business the meeting ended at 4:15pm.

BLACK SLUICE INTERNAL DRAINAGE BOARD

ENVIRONMENT COMMITTEE MEETING - 15 MAY 2019

AGENDA ITEM 05

ENVIRONMENT COMMITTEE – TERMS OF REFERENCE

1. GENERAL

The Committee shall have TEN members who will be appointed by the Board, five members from each of the Works Committee.

The Membership shall include:

- Chairman of the Board
- Vice Chairman of the Board

The Committee Chairman shall be appointed by the **Committee** at the tri-annual meeting being the first meeting following an election.

2. MEETINGS OF THE COMMITTEE

The Committee shall meet at least once in every 12-month period and a quorum shall be five members.

No one other than the Committee members shall be entitled to attend Committee Meetings, but any other persons may attend meetings if invited by the Committee.

3. POWERS OF THE COMMITTEE

The Committee has the authority to utilise a budgetary amount as agreed by the Board at the beginning of each financial year on Environmental Projects and Works.

4. RESPONSIBILITIES OF THE COMMITTEE

The responsibilities of the Committee shall be:

1. To monitor the Board's performance in relation to the Lincolnshire Biodiversity Action Plan and Government's Environmental Targets.
2. To promote best practice through employee training and awareness.
3. To inform the public of the Board's commitment to Environmental issues.
4. To promote initiatives, within watercourses maintained by the Board under statutory powers, that result in a meaningful environmental gain.

BLACK SLUICE INTERNAL DRAINAGE BOARD

ENVIRONMENT COMMITTEE MEETING - 15 MAY 2019

AGENDA ITEM 06

REPORT ON ENVIRONMENTAL WORKS

Completed Works in 2018/19

1. Owl Boxes

Repairs were completed where required and all boxes fixed to pumping station buildings were internally cleared, cleaned and suitably 're-dressed'. Three old non-repairable boxes were replaced at Trinity College, Dyke Fen and Rippingale pumping stations.

The completed 2018 Barn Owl Box Report is included in Agenda Item 7. It was not a good year for breeding Barn Owls nationally and in particular within low-lying fenland areas due to the lack of field voles following the very cold spring. Early indications are that this year should be a better breeding year.

2. Early Flailing Works

Early season bank flailing on our high profile watercourses (approximately 67km) has been completed along with the early health and safety bank top cuts on the main river highland carriers for the Environment Agency (EA) through our Public Sector Co-Operation Agreement (PSCA). Our pumping station grounds maintenance cuts commenced in March this year.

3. Water Vole Monitoring Surveys

Scarborough Nixon Associates (SNA) and now Inspired Ecology have carried out monitoring surveys for water vole evidence on the pre-agreed watercourses.

4. Control of Mink

The Board have continued to liaise with agricultural landowners with regards to the correct setting up and inspection frequencies of the Boards traps and the dispatching of mink throughout the year. More information on mink control/eradication will be given by the Greater Lincolnshire Nature Partnership (GLNP) in Agenda Item 10.

5. Environmental Surveys of Larger Hedge Rows in our Bushing Programme

Surveys were carried out by the Boards officers on any significant hedgerows that were felt could offer a form of environmental enhancement prior to any bushing works. No environmental enhancements or protected species were identified during the 2018/19 surveys or works. The extensive bushing works undertaken on the raised banks of the South Forty Foot Drain were pre-walked/inspected on a daily basis prior to each day's work. No active nests were located therefore all works have been completed.

6. South Forty Foot Drain Environmental Works Associated with the De-Silting Works

The 2018 de-silting works have been successfully completed, various environmental considerations were undertaken throughout the works which assisted in various levels of protection/enhancement: -

- Suspending the works for protective species (Spined Loach) habitat identification.
- Inspection of bushing for nesting birds.
- Completion of works before a predicted Elver run.
- Identification of land for new/enhanced wetland scrapes as mitigation following tree/bush removal works.
- Daily monitoring of dissolved oxygen, water and air temperatures with agreed guideline to suspend works at pre-agreed trigger levels.
- To record and photograph the process of suction cutting and pumping into open lagoons.
- To continually assess the impact upon aquatic vegetation.
- To create reports and advise on impacts and evidence that will offer data for future works of this nature.
- Offer advice on further mitigation.
- Liaison with a DIDSON fish survey team.
- Monitor the works and maintain vigilance for any potential ecological impacts and potential impacts on protected species (badgers, nesting birds, water vole, otter, kingfisher nesting etc.).
- Monitor the works and assess silt movements etc. within the channel.
- Assess impacts on riparian vegetation and banksides.
- Assess spreading and levelling of dried out silt lagoons.

7. RSPB Water Abstraction for Frampton Marsh

Permission has again been granted by the EA and the Board for the RSPB to abstract 500,000m³ of water per annum from the Wyberton Marsh pump drain to assist with water management levels in the nearby Frampton Marsh Nature Reserve.

8. Big Boston Clean Up

The Board's workforce were once again involved with the Big Boston Clean Up.

9. Operation Fly Swat

The Board remains a partner within the Operation Fly Swat team and contributes towards its running costs, which in turn offers financial benefits to the Board in relation to the amount the Board previously spent on fly tipping clearance, collection and disposal.

The Lincolnshire Police & Crime Commissioner held a 'Fly-Tipping Roundtable' in February 2019 where many relevant authorities attended in order to identify the key issues and possible desired outcomes.

Operation Fly Swat, with its partners, was identified as a leading initiative by attendees.

10. Invasive Species

Invasive species identification guides produced by the Greater Lincolnshire Nature Partnership (GLNP) for Himalayan Balsam, Japanese Knotweed, Giant Hogweed, New Zealand Pigmyweed and Floating Pennywort are handed out to the operational workforce at each year's pre-cutting brief.

The continuous spread of Wild Yellow Flowering Brassica Rapa, a non-native species growing on Board maintained and Riparian banks has been brought to our attention and addressed at Board level. Continuous flailing trials on selected areas are being undertaken, the results will be published on completion.

11. Bat Boxes and Surveys

Bat boxes erected on all pumping stations are being carefully monitored for occupancy, to date we have no confirmed sightings of occupancy.

12. Environmental Schemes

(a) Eel Passability at the Boards 'Category A' Pumping Stations

As previously reported the eleven pumping stations in the initial EA Category A classification (Chain Bridge, Black Hole Drove, Cooks Lock, Donington Wykes, Donington North Ings, Gosberton, Great Hale, Holland Fen, South Kyme, Swineshead and Wyberton Marsh) have all been assessed by the EA consultants resulting in detailed Eel passage mitigation and proposals being produced. These have all been evaluated with costs ranging from Donington Wykes £300k to Black Hole Drove £3.4m.

A December 2018 Eels Update is included at the end of this report.

(b) Bird Survey

Bird surveys were completed at Wyberton Marsh and Bourne North Fen (Tongue End) ponds, the full reports are included within Agenda Item 12.

13. Grass Snake Nesting Sites

Five nesting/hibernation sites have been constructed adjacent to pumping stations that historically had weed screen debris (reeds, weed etc.) dumped in the general area.

14. Wild Flower Meadow

The established area alongside the North Forty Foot Drain north of Cooks Lock Pumping Station totalling approximately 2,000m² is being managed as a Wildflower Meadow.

15. Bug Hotel

The Bug Hotel(s) have been constructed to the side of our Swineshead office/depot near the pond. All materials being sourced from within the depot.

16. Badger Setts

From a conveyancing point of view Badger setts within banks continue to be a problem, especially so in raised main river banks where high fluvial flows could wash through the setts resulting in bank failures and breaches.

We continue to follow Natural England guidelines when working adjacent to Badger setts with all our site based employees maintaining Natural England licenses to work within the proximity of Badgers.

17. Pollution Incidents

The Board have attended site(s) where potential pollution incidents could have a detrimental effect on water quality and/or the general environment in order to reduce any potential pollution/contamination issues.

We involve the Environment Agency and seek recovery of costs for all resources employed on such sites.

18. Eel Passage Research

The Board contributed £500 towards the research currently being undertaken by the Environment Agency, Hull International Fisheries Institute (HIFI) and Zoological Society of London (ZSL) to minimise any impact of pumping stations on fish and eel populations and find cost effective solutions for compliance with eel legislation.

Our (and others) contributions helped in demonstrating our support for this research, and has enabled them to obtain additional funding from the Environment Agency and a grant from the European Marine Fisheries Fund to continue the research this year.

The status of the eel is critical. The aim is to reduce the impact of pumping stations in ways that are affordable and resources are targeted where they have the most benefit. The aim of this research is to assess the current impact of pumping stations, make recommendations for operational changes, develop and assess solutions for eel protection as pumping stations are refurbished or replaced. This will inform guidance for FCRM and IDB engineers currently in preparation.

19. Greater Lincolnshire Nature Partnership (GLNP)

As in previous years the Board (as do all Lincolnshire IDB's) continued with our Service Level Agreement (SLA) with the GLNP at an annual cost of £258.

The Lincolnshire Environment Records Centre (LERC) data is included within our SLA, this enables us to check the ecological data from within and around our catchment. The complete LERC data collection holds over 5 million sightings.

Proposed Works and Environmental Involvement in 2019/20

1. Bourne North Fen (Tongue End) Ponds

As a partner within the South Lincolnshire Water Partnership (SLWP) the Lincolnshire Wildlife Trust (LWT) are trying to raise the funds required to purchase some land (c50 Hectares) around the Boards pond in order to develop a new wet fenland wildlife site and water storage area.

This area if constructed would assist with a Board BAP target of increasing reed bed area within our catchment.

2. Water Vole Surveys

Committee approval is requested to continue to employ Inspired Ecology to undertake further surveys for water vole evidence at the monitoring sites and on relevant sites prior to desilting and any significant capital works. In addition, post desilting surveys will be carried out following the works where water vole activity has been found to confirm whether or not our works have had any effect on these populations. Environmental mitigation works may be required should results give evidence of disturbance. Estimates at c£3,000.

3. Winter Bushing and Cleansing

Bushing works will commence in November along with the cleansing works, all bushes will be chipped onsite, all excavated silt will be deposited on adjacent fields, left to dry then spread and levelled across the adjacent land.

Where required water levels will be lowered by damming lengths of the water course and the water over-pumped, if fish are evident they will be carefully removed whilst the water is being lowered and transferred over the dams.

We have our own bushing budget outside of the Environment budget, fish relocation whilst cleansing is budgeted at £1,500.

4. Summer Cutting and Vegetation Clearance

The Boards summer cutting programme will commence on or around the 8th July, the mechanical flails will go out a few days beforehand in order to 'get in front' of the excavators using the weed cutting baskets. The workforce will be presented with a 'Summer Cutting Brief' which will cover channel management in relation to balancing the benefits of flood risk management, agriculture and the biodiversity values.

Where birds' nests are encountered a minimum 10m length of bank will be left un-cut (5m each side of the nest).

5. Owl Boxes

Approval is sought for a budget of c£2,200 for repairing/replacing existing boxes during 2019/20.

6. **Recording by Machine Drivers**

The eight machine drivers will continue to record sightings on the Tom-Tom units; environmental sightings such as badger or fox holes in banks, water vole, mink and other specialist environmental sighting will be recorded. All sighting information is passed onto the GLNP and in turn to the Lincolnshire Environmental Records Centre (LERC).

Budget request of £1,500 for Tom-Tom repairs/updates.

7. **High Profile Watercourse Banks**

Early season flailing of Wyberton Marsh Drain, Washdyke Lane, NFF (Cooks Lock to Punchbowl Lane) and New Hammond Beck (Chain Bridge to Tesco) will continue to be carried out.

Other notable watercourses that have enhanced maintenance are Endeavour Park (12/4&5), Kirton Drainside North (5/30), Frampton Towns Drain from London Road to weir (5/1), Gosberton Risegate Eau (22/14), Bicker Eau through the village (4/67), and the Drain alongside the IDEA park at Donington (2/26).

Budget request for c£1,000 for environmental flailing.

A total of c67Km of high profile watercourse banks (generally our larger watercourses) have been identified that require additional late summer inspections to determine whether a second flail and/or cut is required.

8. **Water Levels**

Water levels will continue to be controlled via the Boards 34 pumping station and/or the gravity channels associated with them. The South Forty Foot Drain (SFF) water levels were raised to their summer levels by the EA in late March and will be lowered back to winter levels in November, this obviously affects the gravity flows from the catchments into the SFF. Water levels within the catchments will be held back where requested, this will help to enhance the biodiversity associated with the watercourses.

9. **Invasive Non- Native Species (INNS)**

The identification and eradication of INNS is important for the protection of our native species. INNS are expanding their population and geographical area, often to the detriment of native species. Early identification of INNS is critical in the control of their spread, we propose to implement identification training for our workforce (budget c£1,000) to help achieve early identification and assist with removal.

INNS locations will be reported to the GLNP to help determine population trends and distribution.

10. **Fens for the Future/South Lincolnshire Fenlands Partnership**

The Fens for the Future Vision is to see sustainable wetlands restored, re-created and reconnected across the Fens for the benefit of people, our natural and historic heritage and the rural economy.

Sustainable wetlands will help reduce storm effects, make available clean water and retain peat land soils so helping mitigate the effects of climate change, while at the same time offering a haven for wildlife, protecting our historic heritage and providing exciting areas for people to visit. Recreational access and tourism increases with more people taking exercise in the countryside. The diversity of the local economy widens and opportunities for employment in local communities are created.

The Fens for the Future Partnership Mission Statement is to make the Fens one of the main UK landscape scale wetland complexes by 2020, within a matrix of sustainable agriculture.

The Fens remain nationally important for modern productive farming. The provision for wildlife in the farmed landscape increases significantly with the uptake of environmentally friendly farming practices and sensitive ditch and drain management, thus creating a network of wildlife habitats extending throughout Fenland. The variety and abundance of farmland wildlife increases and iconic Fenland species thrive.

We will continue to undertake sensitive watercourse maintenance by cutting alternative banks on an annual basis wherever this is the most practicable practice.

11. **Operation Fly Swat Partner**

Approval is sought to continue being a partner with this scheme into 2019/20 using monies from the Environment budget (£3,052 for 2019/20 already paid).

The c£3,000 partner contribution far outweighs the collection, removal and tipping fees the Board would have to find if carried out this work ourselves.

12. **Big Boston Clean-Up**

Approval is sought to offer manual/vehicular assistance with the annual Big Boston Clean-Up organised by Boston Borough Council c£600

13. **Sand Martin Nesting Site**

Create a vertical sand bank that is soft enough for Sand Martins to burrow in, approximately 5m in length as a minimum and 1.5m in height as a minimum. Budget request of £2,000, this work was not completed during 2018 and requested to roll over into this year.

14. **Grass Snake Nesting Sites**

Fence off areas at pumping station sites to create Grass Snake nesting/hibernation sites, create heaps of vegetation from the weed from the watercourse, reeds, leaves, grass etc. (budget £600 i.e. 2 x £300 per site).

15. **Wildflower Meadow**

To continue to maintain and develop the wildflower meadow area at Cooks Lock Pumping Station and also investigate other suitable areas around pumping stations. (budget £1,000).

16. **Water Framework Directive (WFD)**

Discussions take place with the WFD Officers to regularly review the following: -

- What actions do we undertake within our maintenance regime that can affect the water quality within our catchments?
- What levels of water quality information do the EA hold?
- What longer term plans can we start to jointly investigate to further enhance our catchments working within the WFD guidelines?
- What records do the WFD hold on the EA main rivers?
- What funding is there available to assist with future enhancements works?

General Environmental enhancement works to our maintenance regime, budget request of £1,000.

17. **The Wash and North Norfolk Marine Partnership (WNNMP)**

Being a partner (£400 per annum) we have a statutory duty under the UK Habitats Regulations to report on progress against the management actions on an annual basis, and the information is presented in the Action Plan.

We report on subjects such as land drainage, shoreline management (if applicable), coastal oil spills, water framework directives, chemical weed control, non-native invasive species and water abstraction.

The recently published and first volume of 'Wild Seas' – the quarterly e-newsletter for The Wash and North Norfolk Marine Partnership is attached to the back of this report.

'Wild Seas' aims to give a quick overview of the most recent work of The WNNMP.

18. **Gulf Wedged Clam (Rangia)**

The comments below have been received from Emma Holden, Environmental Monitoring Officer, Analysis and Reporting (Lincolnshire and Northamptonshire Area)

From our surveying thus far we believe Rangia is only currently present in the South Forty Foot Drain (SFFD) from the Skerth Drain confluence to the Black Sluice Lock where the SFFD joins the River Haven. We have surveyed locations in the neighbouring rivers/drains as well as looking in a few locations in the Welland and Nene but have not seen any evidence that Rangia are currently anywhere else.

We had a meeting to discuss the possibility of using BioBullets to eradicate Rangia within the SFFD and are awaiting a response to costs involved with setting up a trial to see if BioBullets would be successful in doing this. It was also highlighted that extra monitoring may be needed around the country to ensure Rangia is not present elsewhere, as if Rangia is present in other areas then it may not be plausible to spend money on eradication in the SFFD. If this monitoring can be done and does demonstrate Rangia is only known to be in the SFFD then it would be likely that eradication using BioBullets would take place, presuming BioBullets are successful in the trial lab tests and obviously taking into account costs (both monetary and environmental).

19. **Operation Galileo**

The Chief Executive has attended various Operation Galileo update meetings held by the Lincolnshire Police and the National Farmers Union (NFU), BSIDB support and assist the police with their action plans.

20. **GLNP**

After holding the same charges since 2015 the GLNP have requested a 3% increase this coming financial year, this increases our SLA to £265.23. The Chief Executive has confirmed acceptance of this increase.

21. **Pollinators**

The Boards GIS Officer and Pumping Station Grounds Maintenance Operator attended a Pollinator Workshop and we have been able to adapt some of our Pumping Station ground maintenance activities to better cater for pollinators. For example as a result of early vegetation maintenance on the Kingfisher nesting site at Chainbridge Pumping Station there is evidence of various species of bees using the earth bank as a refuge/home.

We will continue to deliver the training and advice received at as many sites around our catchment as possible.

22. **Changes to Eel Passage Regs Process (ChERP)**

ChERP:

- Project manager appointed
- Expected conclusion later in 2020 with new Regulatory position statement
- Project in response to feedback across all sectors, including FCERM staff who operate similar pumping stations
- ADA/EA Eel liaison group project partners

REDEEM: Research and Development of Fish and Eel Entrainment Mitigation

- Understanding the timing and drivers of European eel seaward spawning migration
- The effectiveness of fish-friendly pumping stations.
- The attractiveness and effectiveness of safe downstream passage routes at pumping stations.
- Mapping and modelling flows upstream of pumping stations to minimise fish and eel entrainment.

- The distribution of eels and coarse fish in pumped catchments using eDNA based monitoring.
- Project manager appointed
- Expected conclusion later in 2020 with new Regulatory position statement
- Project in response to feedback across all sectors, including FCERM staff who operate similar pumping stations
- ADA/EA Eel liaison group project partners

More information can be found on this on page 32.

Funding

- Internal Drainage Boards, Association of Drainage Authorities £20,000 pa for 2 years
- Environment Agency (FCRM and Fisheries)
- EU European Marine and Fisheries Fund
- University of Hull

Technical & Environmental Committee

- Health Safety and Welfare Survey 2018
- Biosecurity Policy
- Water Transfer Licensing
- Data & evidence - GIS Mapping
- Key Statistics Questioner
- Charges: Flood Risk Activity Permitting
- Biodiversity 2020
- EA Charges - Environmental improvements/Free!
 - Re-naturalisation of watercourses
 - Backwater creation
 - Construction of bankside refuge structures
 - Restoration of a canalised or culverted watercourse to a more natural profile
 - Creation of wetlands and ponds to enhance biodiversity

22. Biodiversity Action Plan (BAP)

Our BAP is a public statement by the Board of its biodiversity objectives and the methods by which it intends to achieve them.

Our original BAP was prepared in January 2010 with the last (third) review taking place in May 2014, the Board has adopted the BAP as one of its policies and is committed to its implementation.

Albeit the BAP is a flexible document a full review is anticipated after 5 years, therefore our BAP will undertake a full review during 2019 and be presented to the 2020 Environment Committee meeting for approval. We welcome appropriate involvement in the delivery of the Plan from interested organisations, companies and individuals.

Officers will involve Inspired Ecology with our BAP review at a budgeted cost of £1,750.

REDEEM: Research and Development of fish and Eel Entrainment Mitigation at pumping stations (6 MSc / PhD scholarships)

The European eel, *Anguilla anguilla*, is widely distributed throughout European estuarine and inland waters, but concern over their decline is so great that the European Union has a regulation for their recovery (The EC Eel Regulation (1100/2007)) and the UK has specific legislation (Eels (England and Wales) Regulations 2009) for screening intakes, including pumping stations. Water is frequently pumped from or into rivers for flood protection, water level management, domestic supply, agriculture, industry and hydropower generation. Fish and eels can be entrained in pumps and water intakes, especially adult silver eels during downstream migration; providing flood protection and safe eel passage is a particular problem. However, the extent of the problem is not fully understood and gaps in our knowledge prevent identification of adequate, cost-effective mitigation measures.

This research cluster will focus on understanding fish and eel behaviour to assess the effectiveness of existing and new technologies for minimising entrainment at pumping stations and develop innovative measures to provide applied outcomes. Specifically, the research will focus on understanding the spatial distribution of fish and eels in pumped catchments, the processes that lead to entrainment and the effectiveness of altered operating regimes, fish-friendly pumps and novel downstream bypass channels for minimising entrainment.



Funding has been provided by Environment Agency (EA) (FCRM and Fisheries), EU European Marine and Fisheries Fund (ENG2130), Internal Drainage Boards, Association of Drainage Authorities and the University of Hull (UoH). The cluster will bring together knowledge and expertise in state-of-the-art acoustic telemetry (under Home Office Licence), multi-beam imaging sonar, eDNA and flow modelling techniques performed by staff and researchers across the EA, UoH and the Institute of Zoology (ZSL), to make major advances in the field and maximise research quality. The size and scope of the cluster will also enable it to be agile and reactive to new developments and opportunities. The knowledge arising from this strategic, inter-disciplinary and international applied research investigation is anticipated to inform and revise guidance for mitigating fish and eel entrainment at pumping stations and water intakes at national, European and global levels.

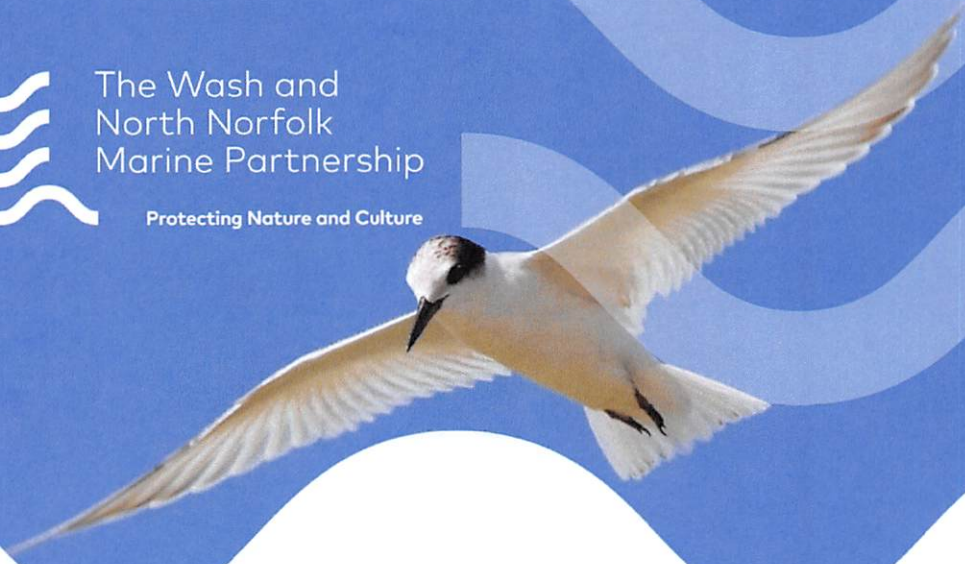
For more information about the project, study site suggestions and research opportunities, please contact Jon Bolland (UoH research lead; J.Bolland@hull.ac.uk) or Ros Wright (EA research lead; ros.wright@environment-agency.gov.uk)



The Wash and
North Norfolk
Marine Partnership

Protecting Nature and Culture

© Chris Knights



Wild Seas

Welcome to the very first edition of Wild Seas: the quarterly e-newsletter produced by The Wash and North Norfolk Marine Partnership to keep you updated on all the happenings and going's on, at a glance.

Protecting nature and culture

Relevant Authority Support

Our Management Plan is currently under review to ensure it meets the requirements of all partners. This document supports Relevant Authorities in meeting statutory duties to the site, enables coordinated and collaborative management, and provides a central reference point for other areas of coastal management. The WNNMP Manager will be meeting all Relevant Authority representatives and environmental charities over the next two months as part of the review, which is due for publication in June 2019.

The Condition Assessment for The Wash and North Norfolk coast Special Area of Conservation is now complete and available to view on the Natural England Designated Sites System website by clicking [here](#).

Advisory Group Support

Our three Advisory Groups based in [Boston](#), [King's Lynn](#) and [Wells-next-the-Sea](#) provide a forum for information sharing between Relevant Authorities, environmental charities, land owners, business and the local community to ensure effective and supported protection of maritime nature and culture.

All agendas, minutes and summaries can be found on the Partnership website using the links above.

March 2019. Volume 1.

Here are a couple of key Advisory Group updates for this year so far...

Friskney Sea Lane and the old bombing range, Lincolnshire: unrestricted vehicle access to the saltmarsh has led to multiple issues including safety concerns, conservation threats and regular fly-tipping. The WNNMP formed a focus group that brought a range of organisations together to jointly agree solutions. A gate has now been installed on the Sea Lane to control vehicle access, and concrete blocks have been put in place to restrict vehicle access to the marsh. [Please see our website for a more detailed update.](#)



Sediment Working Group, Norfolk: The SWG formed in 2018 as a research forum to gain an understanding of the drivers of intertidal sediment change on the North Norfolk coast, specifically increased sand. The SWG is currently cataloguing literature that may support investigations into the causes of these changes. The SWG will also feed into a new Natural England research project due to start this year that will investigate the potential impact of human activity on sandbank habitats in Special Areas of Conservation.



Tourism and Recreation

Recreation guide: The fourth version of the recreational best practise guide is almost complete and ready for public review. Keep an eye out for the 6 week consultation that will land in your inbox at the beginning of April. The new guide will be found online and in shops, cafés and visitors centres along the coast.

Disturbance monitoring: A recreational disturbance reporting tool is being built to automate the input, processing and output of all recorded incidents along this coastline. The tool will be complete in April and training sessions will be held soon after with each Advisory Group.

Dog walking: Dog walking is the most popular recreational pursuit on this coastline with many benefits for people’s health and well-being. However, dog walking is also the most common type of recreational disturbance reported. In response, the WNNMP is working with Lincolnshire Wildlife Trust, Holkham Estate and the Norfolk Coast Partnership to launch a proactive campaign to help manage the demand for dog walking at Gibraltar Point and Holkham National Nature Reserves, with the long-term aim to go coast-wide.



Aviation: Low flying by civil and military aviation are the second most frequently reported recreational disturbance along this coastline. The newly formed ‘Aviation, Nature and Safety Group’, led by the WNNMP will work collaboratively to build positive relationships between the conservation and aviation community. Group membership includes The Civil Aviation Authority, Royal Air force, Norwich City Airport, various flying clubs, Natural England, RSPB, Holkham Estate, Norfolk Wildlife Trust and the Advisory Group Chairs.

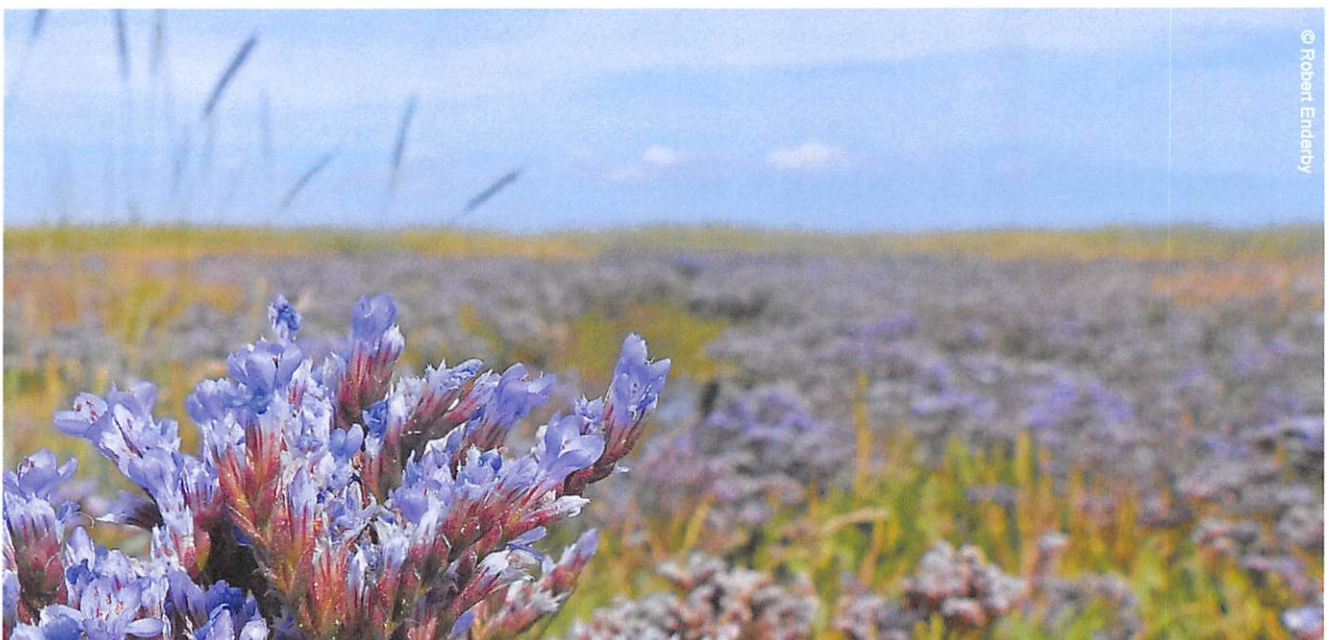


Litter Free Coast and Sea: LFCS is a community project to help reduce the social, economic and environmental impacts of marine litter at the point of source. It will also act as the central coordinating body for all litter related work along this coast. The WNNMP is leading on a bid in collaboration with the Norfolk Coast Partnership and Natural England to raise funds to employ a LFCS Volunteer Coordinator. Our Expression of Interest has been successful, and we are currently writing the full application.

PROWAD: This project aims to unlock the potential of natural areas as a driver for jobs and sustainable growth. PROWAD will support the sustainable development of tourism based small to medium sized enterprises, whilst securing protection for the natural world. This project will work transnationally with two other protected sites bordering Germany, Holland, Denmark and Norway. The third site being The Wash and North Norfolk coast European Marine Site. The WNNMP are working closely with the UK lead partner, Norfolk County Council for project delivery, which will focus on the gastronomy, nature tour and nature experience sectors.

Outreach

Wild Seas Week: WSW is a week long series of events during the summer that celebrates the remarkable nature and rich culture of The Wash and North Norfolk coast. Building on the success of the last two years the WNNMP are working with Lincolnshire Wildlife Trust to raise funds to employ a WSW Marketing and Communications Officer. This year WSW will be scaled down due to limited resources but with the aim of increased promotion in 2020 with the employment of a support officer if bids are successful.



Research and Education

Valuing nature placement: This project aimed to develop tools to enhance the balanced protection of marine nature and culture, with research techniques piloted at The Wash and North Norfolk coast. Satellite tools were used to map regions of saltmarsh and its sub-features and a workshop was held with local community saltmarsh specialists to identify saltmarsh sub-features and the benefits provide to society. This project formed a collaboration between the WNNMP and Institute of Estuarine and Coastal Studies at the University of Hull, funded by NERC, and an article combining several research projects has been submitted to the journal Ecosystem Services.

[Please see our website for more the full report.](#)

The WNNMP is the coordinating body the regions network of European protected areas in the sea. Feel free to get in touch with us to find out a little more about what we do...
info@wnnmp.co.uk 01553772020

Why not take a look at our website to learn about the protected areas, local culture, partnership projects and much more... www.wnnmp.co.uk

Annual Check of Black Sluice IDB nest boxes –2018

Boxes checked by Alan Ball and/or Bob Sheppard and dates shown

Wildlife
Conservation
Partnership



Box	IPMR	Grid Ref	Location	Type	Date		Con
3290		TF154188	Richardson's Borrow Pit, Twenty	Pole		Not checked	
3291		TF173211	Gandy's Borrow Pit, Twenty	Pole		Not checked	
3292		TF138195	Cook's Borrow Pit, Bourne N.Fen	Pole		Not checked	
1365	DYF	TF152227	Dyke Fen Pump	Pump	26/06	Jackdaw - fledged	B
1366	RSI	TF167251	West Pinchbeck (Black Hole Dr)	Pump	26/06	Jackdaw - fledged	A
1367	RSI	TF166257	Haconby Fen Pump	Pump	25/08	Jackdaw - fledged	
1368	RSI	TF166266	West Pinchbeck (Starlode Drove)	Pump	26/06	KESTREL – 2 chicks EA13301 & 02	B
1369	RSJ	TF165271	Dunsby Fen Pump	Pump	24/05	TAWNY OWL – failed on 1 egg, female = GV74061 Top – Jackdaw – 1 chick EZ65953	B
1370	RSJ	TF164275	Rippingale Fen Pump	Pump	15/06	Jackdaw - fledged	
1371	BFF	TF162284	Dowsby Fen Pump	Pump		Not checked	
1293	BFF	TF162284	Dowsby Fen pole	Mk 7		Not checked	
1372	DOF	TF167294	Gosberton Pump	Pump	26/06	Jackdaw – fledged, now Barn Owl roost	A
1373	RSQ	TF164318	Neslam Fen Pump	Pump	11/08	Jackdaw - fledged – now Stock Dove – adult EA13429	A
1374	RSV	TF168331	Quadring Fen Pump	Pump	26/06	Jackdaw - fledged	A

1375	RSV	TF168333	Billingborough Fen Pump	Pump	06/06	Jackdaw – 1 chick EA13097	A
1376	RSG	TF170346	Horbling Fen Pump	Pump	05/06	Jackdaw – 4 chicks EA13076 - 79	A
1377	RST	TF174364	Swaton Fen Pump	Pump	04/06	Jackdaw – 4 ch EA13063 – 66, top Jackdaw 1 ch EA13062	B
1378	RST	TF176370	Donington Ing Pump	Pump		Not checked	B
1379	RST	TF177375	Helpringham Fen Pump	Pump	05/06	Jackdaw – 1 chick EA13075	A
1380	RSH	TF186397	Bicker Fen Pump	Pump	10/06	Barn Owl roost m = GV74083, top Stock Dove – 2 eggs	A
1381	RSU	TF206425	Great Hale Pump	Pump	26/06	Jackdaw, now Barn Owl pair m=r/GV24755, f= GV74136	A
1383	HKF	TF185466	Heckington Pump	Pump	01/06 14/07	BARN OWL – 6 eggs, male = GV74071, fem = r/GV64014 1 chick ringed GV74336	B-
1384	SKF	TF207469	South Kyme Pump	Pump	01/06	KESTREL – 5 eggs (failed 01/07)	B
1385	EWV	TF159484	Ewerby Pump	Pump	01/06	Feral Pigeons – box and top	B
1386	SKG	TF194507	Damford Grounds Pump	Pump	03/06	Barn Owl pair – male = GV74072, fem = r/GV64016 KESTREL – top – 5 eggs, 01/07 (2 ringed EA13346 & 47)	B
2802	BSG	TF236477	Gill Bridge (Barry Hall)	Pole	03/06 14/07 03/06 21/06	BARN OWL – 1 chick+4 eggs, fem = r/GV45507 3 chicks ringed GV74332 – 34 KESTREL – in top – 5 small chicks 3 chicks ringed EA13277 – 79	A
2803	BSH	TF205529	Hart's Grounds (Andrew Means)	Pole	03/06	KESTREL – in top – 3 eggs (failed 01/07)	A
2804	BSM	TF204484	Maryland (Pocklington Bros)	Pole	03/06	Jackdaw – 2 chicks EZ65994 & 95	A
3169		TF341370	Kirton Skeldyke	Pole	29/06	Jackdaw - fledged	A
3165	BFK	TF340359	Kirton Bucklegate	Pole	29/06	BARN OWL – 2 of 3 chicks ringed GV74150 & GV74251	A

						Stock Dove – 2 adults in entrance EA13329 & 30	
3170	KME	TF281388	Kirton Meeres - Pick's Barn	Pole	10/06	BARN OWL – failed on 3 eggs, male = GV74084	A
2969	BST	TF248464	Holland Fen (Two Hundred Fm)	Pole	03/06	KESTREL – top – 4 eggs (01/07 - 4 ringed EA13342 – 45) Jackdaw – in box – 2 chicks EZ65992 & 93	A
2971		TF199521	Chapel House (ex Bridge House)	Pole		Not checked – no nearby access	
2973	PAH	TF192484	South Kyme (Pattingden House)	Pole	01/06	Jackdaw – 3 chicks – EZ65989 - 91	A
1387	WYB	TF359400	Wyberton Marsh Pump	Pump	29/06	KESTREL – 4 chicks – EA13325 - 28	A
1388	KIR	TF343350	Kirton Marsh Pump	Pump	29/06	Stock Dove – ad – EA13332, top Stock Dove 1 chick EA-33	A

BLACK SLUICE INTERNAL DRAINAGE BOARD

ENVIRONMENT COMMITTEE MEETING - 15 MAY 2019

AGENDA ITEM 08

AMBER HILL BUTTERFLY GARDEN 2018 SUMMARY

We are submitting our 2018 butterfly records from Windmill Lodge butterfly conservation and wildlife area, Amber Hill. Hopefully, these records will assist with your overall ecological records.

Despite the hot 1976 style summer, and unlike during that record breaking summer, butterfly numbers overall were a mixed bag nationwide. The species that did well did exceedingly well and this was more than repeated in our butterfly conservation and wildlife area. Likewise, the ones that performed poorly were surprisingly down in numbers. This is a bit of a mystery, although many fingers were pointing to the 'Beast from the East' in March, when extreme weather conditions seriously affected certain butterflies during their development stages as larvae or pupae.

Hot weather alone will not bring about excellent butterfly numbers: correct habitat management is critical, so together with yourselves, we are obviously doing something right. Indeed, 2018 saw the addition of yet another species to our list of butterflies: the Silver-washed Fritillary. This magnificent butterfly has been slowly expanding its range through woodlands in Lincolnshire over the last few years, and this summer really helped. We had been hopefully creating the right conditions for this species by the planting of violets beneath the trees in the wooded parts of the garden. Violets are its larval food plant and it obviously regarded our land as suitable woodland habitat, with three being sighted. It looks as if it could well become a resident species here on our land. Yet more proof of the remarkable conservation work we are being regularly rewarded with.

Numbers of butterflies on our land largely mirrored those in the wider countryside, but the ones that performed well performed incredibly well, with two species in particular showing in phenomenal numbers. These were the Brown Argus and Common Blue (misnomer, it is not common but more widespread than the other Blues). These species recorded high counts at one time of 58 and 85 respectively, far outnumbering the same counts in local nature reserves and even from the South Downs when 'high' counts of around 18 were being recorded, and in one instance only the one Brown Argus! It is worth mentioning here that these two grassland species were in their peak numbers on the stretch of meadow that we have created at the top of the dyke bank. To stand in the meadow and be surrounded by dozens of these gorgeous tiny butterflies is mesmerising and the memory will stay with us forever.

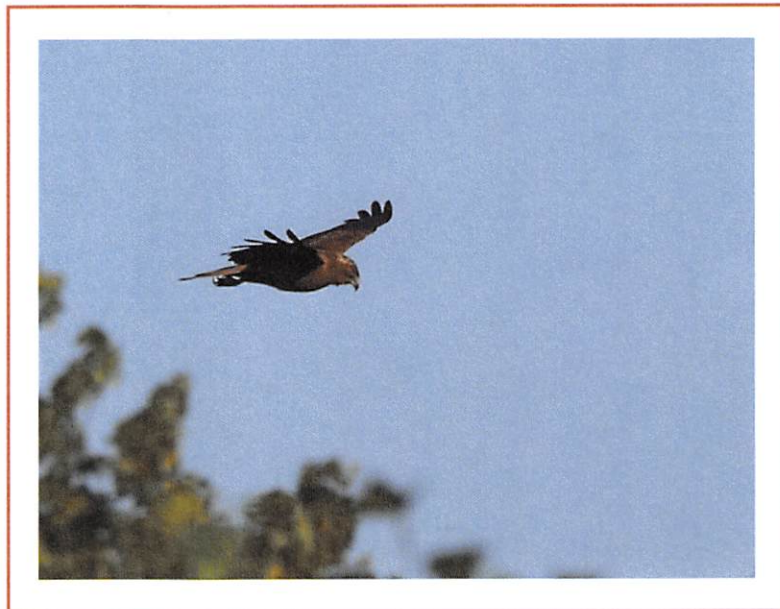
Other species that did very well are the Speckled Wood (a true woodland butterfly); the Small White; Green-veined White; Orange Tip; and Small Copper. The following did well but not in phenomenal numbers: Essex Skipper; Holly Blue; Gatekeeper; Ringlet.

2018 was a memorable butterfly season, with no less than six species having their best year in the garden to date: Brown Argus, Common Blue, Small Copper, Speckled Wood, Green-veined White, Orange Tip. Working together, we can only get better.

Phil and Ros Bowler.

BREEDING BIRD SURVEY
TONGUE END, BOURNE, LINCOLNSHIRE

MARCH 2019



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BREEDING BIRD SURVEY, TONGUE END, BOURNE, LINCOLNSHIRE

Report to: Black Sluice Internal Drainage Board
Station Road
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Lincolnshire
PE20 3PW

Report title: Breeding Bird Survey
Tongue End, Bourne, Lincolnshire

Revision: Final

Original issue date: March 2019

Amended: N/A

Originated by: Ian Nixon
Director
Date: 28th March 2019

Reviewed by: Andrew Malkinson
Associate
Date: 28th March 2019

Approved by: Ian Nixon
Director
Date: 28th March 2019

The findings of these surveys will remain valid for a period of 12 months.

BREEDING BIRD SURVEY, TONGUE END, BOURNE, LINCOLNSHIRE

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BREEDING BIRD SURVEY, TONGUE END, BOURNE, LINCOLNSHIRE

1 INTRODUCTION

Scarborough Nixon Associates Ltd was commissioned by Black Sluice Internal Drainage Board to undertake a breeding bird survey of Tongue End, Bourne, Lincolnshire.

2 METHODS

To determine which species breed on the site, or are present and potentially breeding on the site, initially a restricted Common Bird Census (CBC) survey was proposed. A full CBC survey involves 10 survey visits being made to a site. For the purposes of the bird survey at Tongue End it was decided that four survey visits in the early morning would be sufficient. The design and nature of the surveys were not, therefore, intended to be exhaustive and they were not species specific. No attempts were made to find any nests.

Using 1:25,000 Ordnance Survey maps a route was devised that enabled the whole site to be covered. The site is walked at a constant steady pace and all bird registrations are noted on a suitable scale map using standard BTO species and activity codes (such as alarm calls, singing and carrying food) along with details of observer, date, weather and visit number.

The collected data from all the completed surveys is then transferred to species maps where they are analysed, and likely territories identified. Actual determination of territories can be open to interpretation, but generally a cluster of registrations will centre on singing males and or nest activity.

The order of the species listed in the tables presented in this report follow the latest British List as recognised by the British Ornithological Union. The full British List, as of the 6th December 2017, is available on the BTO website: <https://www.bto.org/about-birds/birdfacts/british-list>

However, during the first visit it was apparent that there was a likelihood that marsh harrier *Circus aeruginosus* could be breeding at the site. As this species is included on Schedule 1 of the Wildlife and Countryside Act (1981) then care needed to be exercised to avoid disturbance. Thus the methodology changed to that recommended in *Raptors: a field guide to survey and*

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monitoring (Jon Hardy et al, 2006) with vantage point watches of four hours each being undertaken for the three remaining surveys. The purpose of these surveys is to monitor all movements of marsh harrier from a distance that does not disturb the birds. In this case the bank adjacent to the pumping station was chosen as its elevated position provided a view of the reedbed whilst also being somewhat separated by the trees around the site. During these surveys all other birds were noted including territorial behaviour.

2.1 Surveys

Four survey visits were conducted by Ian Nixon between the end of April and the end of June 2018. The surveys were undertaken during the time when birds would be most active i.e. early morning between 5:00am and 11:00am. All surveys were carried out in good weather with no precipitation, light or no wind and warm temperatures. The surveys were spaced so as to provide the most relevant information as regards the marsh harrier activity.

Surveys were carried out on the following dates:

- Survey 1: 25th April 2018
- Survey 2: 5th May 2018
- Survey 3: 7th June 2018
- Survey 4: 22nd June 2018

3 SITE ASSESSMENT

3.1 Location and grid reference

The survey site comprises a series of flooded borrow pits at Tongue End adjacent to a Pumping Station - central grid reference TF154188. The site includes areas of grazed bank, woodland, reedbed and scrub with adjacent land having scrapes and wet grazed grassland.

An aerial view of the site is given in Figure 1.

4 RESULTS

4.1 Birds

Appendix 1 contains a list of all the 41 bird species recorded during the surveys as well as the status according to Birds of Conservation Concern 4 (BoCC4), (Eaton, M.A. *et al*, 2015).

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4.1.1 Number of breeding species

A total of 44 species were recorded during the surveys that were undertaken in 2018. Of these 3 species are confirmed as breeding with a further 7 as likely to have bred as they were showing territorial behaviour or breeding activity. The status of the number of species includes 4 species which are Red listed and 11 species which are Amber listed in the Birds of Conservation Concern 4 (BoCC4), (Eaton, M.A. *et al*, 2015). This number seems low but is indicative of the change in methodology so that for three visits birds (with the exception of marsh harrier) were only recorded as being present.

The complete list of species recorded during the surveys is given in Appendix 1.

5 DISCUSSION AND RECOMMENDATIONS

5.1 Birds

5.1.1 Legal protection

All common wild birds are protected under The Wildlife and Countryside Act 1981 (and as amended). Under this legislation it is an offence to:

- Kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird while it is in use or being built
- Take or destroy the egg of any wild bird

Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

5.1.2 Birds of Conservation Concern

Farmland

It is well documented that populations of farmland birds have declined dramatically although for a few species this decline has now slowed (Eaton, M.A. *et al* 2015). 12 species of farmland bird are still, however, on the Red list (Eaton, M.A. *et al* 2015). It is therefore encouraging that five farmland species were noted on site. Of particular note are lapwing *Vanellus vanellus*, starling *Sturnus vulgaris* and linnet *Carduelis cannabina* which are all Red listed species in the BoCC4 (Eaton, M.A. *et al*. 2015) and are priority species in both the UK and Lincolnshire Biodiversity

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Action Plans (UKBAP and LBAP, respectively). In addition, two Amber listed farmland species in the BoCC4 were also noted on site - snipe *Gallinago gallinago* and reed bunting *Emberiza schoeniclus*.

Lapwing have suffered rapid declines in the UK since the mid-1980s, which, as with many farmland birds, is thought largely to be due to habitat loss and degradation from changes in agricultural practice, as well as decreased breeding success and chick survival. It is thought that the ecological and demographic factors of their decline are linked, as lapwing are ground-nesting birds, so changes in agricultural practices affect the availability of breeding sites. Lapwings breed between mid-March and July and both adults and young feed on invertebrates from the ground.

Starling are not exclusively farmland birds, but are also found in towns and woodland. They use cavity nest sites and begin breeding in March, and prefer to feed on soil-dwelling invertebrates during summer months, but will also consume fruit and seeds. Despite a summer population of 1.8million pairs in 2009, recent declines in this species have been more severe, causing starling to be upgraded from Amber to the Red list in the BoCC4. The causes of the more recent declines are not fully understood, however starling populations have been contracting since the early 1980s. It is thought that, as with other species, changes in agricultural practices have affected this species, as has reduced overwinter survival of juvenile birds.

Linnet tend to nest in areas of scrub, brambles, thick thorny bushes and thick hedges. Both adults and nestlings feed entirely on seed. Consequently, in order to support linnet as a breeding species, it is essential to have a mosaic of habitat types available with a plentiful supply of seed. Between 1966 and the 1990s, there was a very rapid decline in the population of linnets in the UK, the most likely ecological driver which was habitat impoverishment due to agricultural intensification. The linnet population has been comparatively stable since then, however. In recent years, the population of linnets varied regionally in the UK, with an increase in the west but decrease in the east, to approximately 430,000 territories in 2009.

Snipe are found on wet grassland, often on farmland. This species is Amber listed in the BoCC4 and is also an LBAP priority species. There has been a rapid decline in numbers of snipe in the UK since the 1970s, which is largely due to loss of habitat as farmland has been drained. This trend is consistent with mainland Europe, where there has been a steady decline in snipe since 1980. Snipe feed on invertebrates in wet ground or shallow water, hence the importance of wet grassland habitat for this species; low water levels cause the ground to become more solid and less penetrable, so snipe are unable to effectively feed.

As well as being listed in the Amber list of BoCC4, reed bunting is also an LBAP priority species.

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A partial success story, **reed bunting** were downgraded from the Red list after a period of population recovery, however these birds are still threatened by agricultural intensification. As this species is able to utilise oilseed rape fields for nesting, the increase in cultivation of this crop had aided the recovery of this species in recent years.

The causes of historic sharp declines in **barn owl** populations are largely uncertain, though loss of habitat and increased disturbance are thought to be major factors. Since around 2014 however, barn owl populations have been increasing due to increased numbers of fledglings per breeding attempt and a decreased number of nesting failures. This has been helped by widespread erection of barn owl nest boxes in the UK. As a result, barn owl have been downgraded from the Amber list to the Green list in 2015, however they are still protected as Schedule 1 species.

Other Red list species

The last Red list species observed on site is **cuckoo** *Cuculus canorus*, which is also a UKBAP and LBAP priority species, whose population size in 2009 was thought to be around 14,000 breeding pairs. Its inclusion on the Red list is mainly due to a breeding population decline, with recent Breeding Bird Surveys (BBS) showing a decline in populations in England, but a small increase in Scotland. Overall populations have been declining since the early 1980s however, with recent work suggesting that this is due the low survival of migrant birds, which in turn reduced the breeding population of cuckoos. Famously cuckoos lay their eggs in the nests of other bird species, with females typically choosing nests of the bird species that raised them, with the most popular current host nests belonging to dunnock *Prunella modularis*, reed warbler *Acrocephalus scirpaceus* and meadow pipit *Anthus pratensis*.

The following birds are listed on the Amber list in the BoCC4:

Greylag goose *Anser anser* populations have increased rapidly in the UK since 1992. These geese are a mostly re-established species in the UK and averaged an increase in re-established individuals of 9.4% each year until the year 2000. They are listed on the Amber list due to a non-breeding localisation, with 50-60% of these birds present at less than 10 Important Bird Areas (IBAs) for this species (Eaton, M.A. et al 2015).

Common on lakes, rivers and ponds throughout the UK, **mute swan** *Cygnus olor* are also an Amber listed species. Though this species was included on the Green list for a time due to a steady increase in population size since the 1980s, mute swans are currently included on the Amber list of the BoCC4 due to their international importance; the UK holds 20-30% of the wintering population of mute swans in Europe (Eaton, M.A. et al 2015).

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Common Bird Census (CBC)/BBS results suggest that the breeding population of **mallard** *Anas platyrhynchos* has steadily increased since 1966, however surveys have shown that the winter population of this species has declined since the 1980s. This is thought to be largely due to an increase in birds migrating to the continent, though there is little evidence regarding any further drivers of changes in population of mallard in the UK. Mallard are ubiquitous throughout the UK, with an estimated 100,000 breeding pairs in the UK in 2009.

Like with the mute swan, **gadwall** *Mareca strepera* are listed on the Amber list of the BoCC4 due to the international importance of the wintering population. 20-30% of the European population of this species winters in the UK (Eaton, M.A. et al 2015), with around 1,200 pairs here in summer. Although this species' European and global population sizes have been increasing, pollution and destruction of freshwater wetlands may have caused population decreases in some areas.

After almost becoming extinct in the UK in the 1960s, the Schedule 1 species **marsh harrier** *Circus aeruginosus* has since recovered somewhat, with around 400 pairs in summer. Marsh harrier is still listed in the Amber list of BoCC4 as 50-60% of this species are localised at less than ten Special Protection Areas (SPAs) (Eaton, M.A. et al 2015). Marsh harrier suffer from persecution, like many birds of prey, and also from wetland drainage and damage.

The survey noted early on that there was a presence of marsh harrier in the area and that an adult pair were faithful to the site. The change in survey methodology then showed that the female was likely to be incubating as the male was bringing food back to her, later observations showed at least one juvenile bird that was flying around the site but remaining faithful to the site and nest.

The UK population of **black-headed gull** *Chroicocephalus ridibundus* has fluctuated since 1986 but has increased overall. Data collected by the Seabird Monitoring Programme (SMP) suggest that in the last few years, numbers of breeding birds have declined however, hence black-headed gull are included on the Amber list.

Large declines in breeding pairs of **common tern** *Sterna hirundo* have also been noted in the UK, with colonies of this species breeding along coasts and at inland waters. This species was upgraded from Green to the Amber list in BoCC4 because of this, as well as recent winter populations declines, and a reduction in the range of breeding and wintering populations.

20-30% of the European breeding population of **stock dove** *Columba oenas* are present in the UK (Eaton, M.A. et al 2015), hence their international importance and resultant inclusion in the

Amber list of the BoCC4. In the UK and in Europe, this species had shown a long-term trend of population increase in the 1960s, largely due to an increase in breeding success, to 260,000 territories in 2009.

The LBAP species of **swift** *Apus apus* was recently upgraded to the Amber list, largely due to breeding population declines in the UK. There have been steep declines in breeding bird numbers since the 1990s, thought to be largely due to a decrease in available spaces for nesting and modern building design and refurbishment of old buildings exclude swifts from nesting in buildings.

6 SUMMARY

The site supports a complex of habitats and is relatively undisturbed so there is no surprise that there is a good number of bird species present. The mixture of nearby arable, wet grassland and water features including the River Glen and Bourne Eau is of great benefit to the bird interest of the site. Of the 44 species recorded during the survey there were two Schedule 1 species and 15 that are either Amber or Red listed (Eaton, M.A. et al 2015).

The survey has resulted in proving that the site is important for marsh harrier and that it is used as a breeding site for this species.

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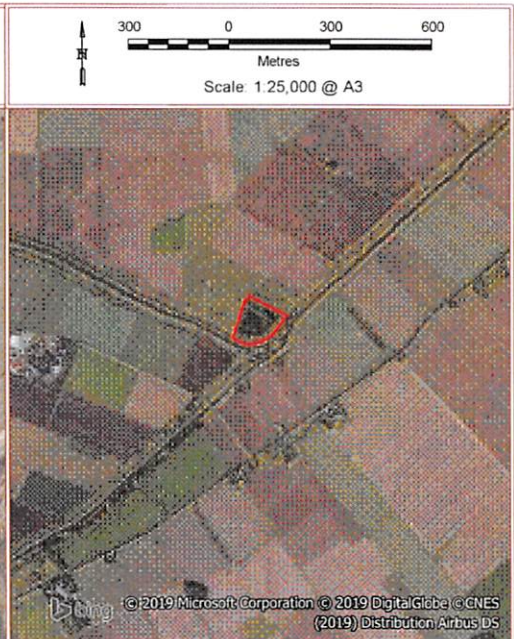
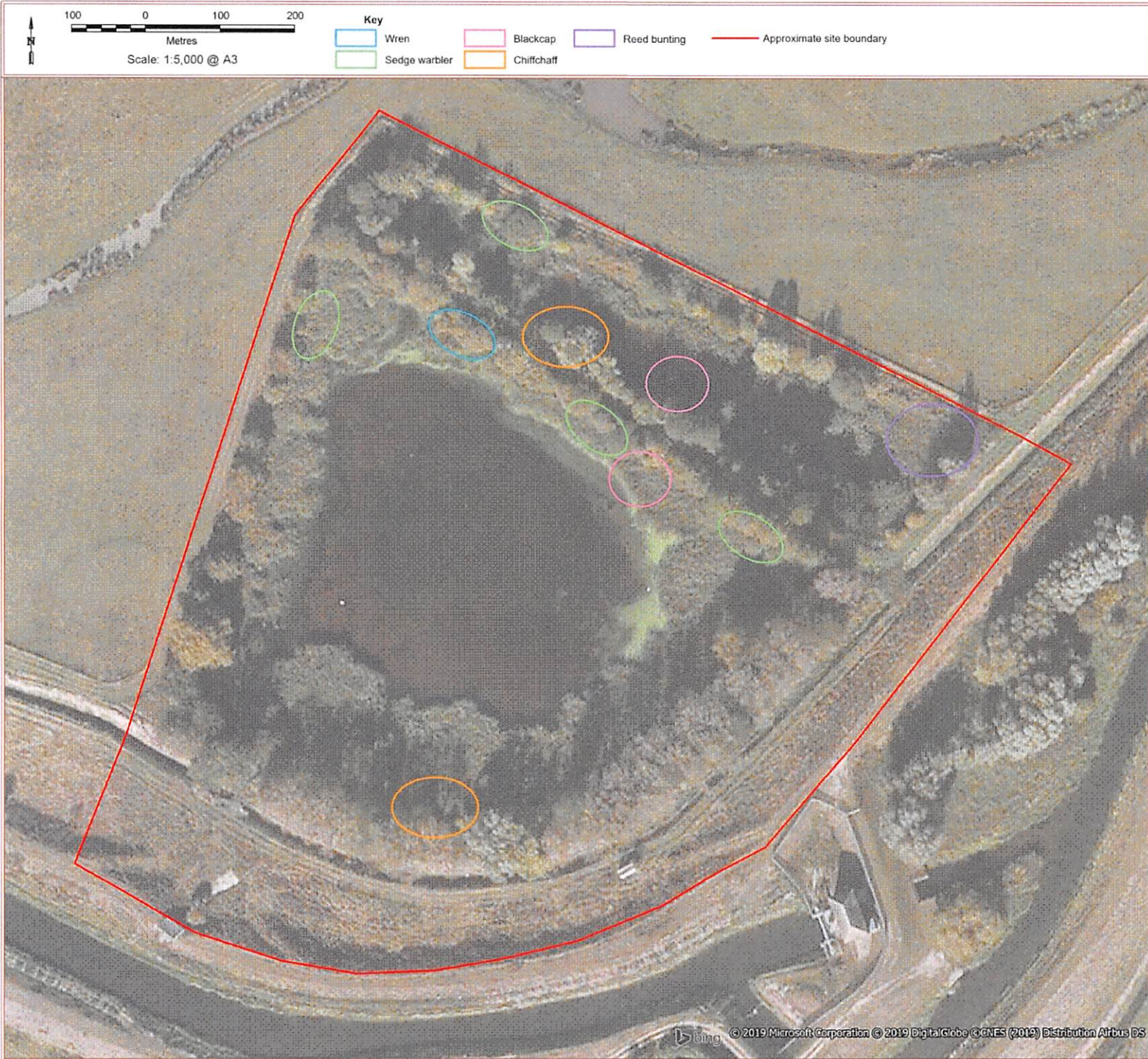
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**BREEDING BIRD SURVEY
TONGUE END, BOURNE, LINCOLNSHIRE**

**FIGURE 1
Survey Results**



Client:	Project:
Black Sluice Internal Drainage Board	Bird surveys of Tongue End

Title:
Survey results Territory mapping

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25th March 2019

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**BREEDING BIRD SURVEY
TONGUE END, BOURNE, LINCOLNSHIRE**

APPENDIX 1

List of all bird species recorded during breeding bird survey

BREEDING BIRD SURVEY, TONGUE END, BOURNE, LINCOLNSHIRE

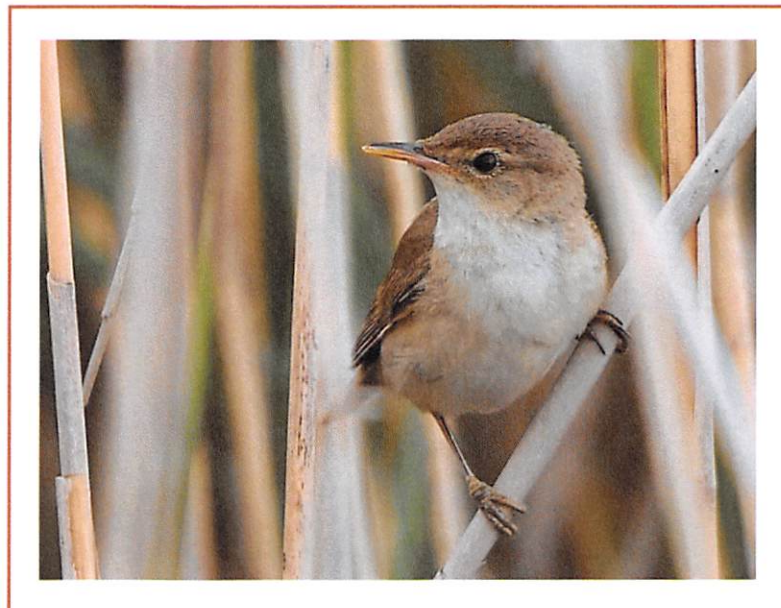
English name	Scientific name	Schedule 1	BAP	BoCC4	1	2	3	4	Breeding	
									Confirmed	Likely
greylag goose	<i>Anser anser</i>			Amber	Y	Y				
mute swan	<i>Cygnus olor</i>			Amber	Y	Y	Y	Y	Y	
mallard	<i>Anas platyrhynchos</i>			Amber	Y	Y	Y		Y	
gadwall	<i>Mareca strepera</i>			Amber			Y			
tufted duck	<i>Aythya fuligula</i>			Green				Y		
little grebe	<i>Tachybaptus ruficollis</i>			Green	Y	Y	Y	Y		Y
grey heron	<i>Ardea cinerea</i>			Green	Y	Y	Y	Y		
little egret	<i>Egretta garzetta</i>			Green	Y					
cormorant	<i>Phalacrocorax carbo</i>			Green	Y	Y	Y	Y		
sparrowhawk	<i>Accipiter nisus</i>			Green				Y		
marsh harrier	<i>Circus aeruginosus</i>	Y		Amber	Y	Y	Y	Y	Y	
buzzard	<i>Buteo buteo</i>			Green				Y		
moorhen	<i>Gallinula chloropus</i>			Green		Y		Y		
coot	<i>Fulica atra</i>			Green	Y	Y	Y	Y		
lapwing	<i>Vanellus vanellus</i>		Y	Red		Y				
snipe	<i>Gallinago gallinago</i>			Amber	Y					
black-headed gull	<i>Chroicocephalus ridibundus</i>			Amber		Y	Y	Y		
common tern	<i>Sterna hirundo</i>			Amber	Y	Y	Y	Y		
stock dove	<i>Columba oenas</i>			Amber	Y	Y	Y	Y		

English name	Scientific name	Schedule 1	BAP	BoCC4	1	2	3	4	Breeding	
									Confirmed	Likely
woodpigeon	<i>Columba palumbus</i>			Green	Y		Y	Y		Y
cuckoo	<i>Cuculus canorus</i>			Red	Y	Y	Y	Y		Y
barn owl	<i>Tyto alba</i>	Y		Green		Y				
swift	<i>Apus apus</i>			Amber				Y		
green woodpecker	<i>Picus viridis</i>			Green			Y			
magpie	<i>Pica pica</i>			Green	Y			Y		
jackdaw	<i>Coloeus monedula</i>			Green		Y				
carrion crow	<i>Corvus corone</i>			Green		Y	Y	Y		
blue tit	<i>Cyanistes caeruleus</i>			Green	Y	Y	Y			
great tit	<i>Parus major</i>			Green		Y		Y		
swallow	<i>Hirundo rustica</i>			Green		Y		Y		
chiffchaff	<i>Phylloscopus collybita</i>			Green	Y	Y	Y	Y		
sedge warbler	<i>Acrocephalus schoenobaenus</i>			Green	Y	Y				Y
reed warbler	<i>Acrocephalus scirpaceus</i>			Green			Y			Y
blackcap	<i>Sylvia atricapilla</i>			Green	Y	Y	Y	Y		Y
whitethroat	<i>Sylvia communis</i>			Green			Y	Y		Y
wren	<i>Troglodytes troglodytes</i>			Green	Y					Y
starling	<i>Sturnus vulgaris</i>		Y	Red			Y	Y		Y
blackbird	<i>Turdus merula</i>			Green	Y	Y	Y	Y		Y
robin	<i>Erithacus rubecula</i>			Green		Y				Y
chaffinch	<i>Fringilla coelebs</i>			Green	Y	Y	Y	Y		Y
greenfinch	<i>Chloris chloris</i>			Green		Y				

English name	Scientific name	Schedule 1	BAP	BoCC4	1	2	3	4	Breeding	
									Confirmed	Likely
linnet	<i>Linaria cannabina</i>			Red		Y				
goldfinch	<i>Carduelis carduelis</i>			Green				Y		
reed bunting	<i>Emberiza schoeniclus</i>		Y	Amber	Y					Y

BREEDING BIRD SURVEY
WYBERTON MARSH, BOSTON, LINCOLNSHIRE

MARCH 2019



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BREEDING BIRD SURVEY, WYBERTON MARSH, BOSTON, LINCOLNSHIRE

Report to: Black Sluice Internal Drainage Board
Station Road
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Boston
Lincolnshire
PE20 3PW

Report title: Breeding Bird Survey
Wyberton Marsh, Boston, Lincolnshire

Revision: Final

Original issue date: March 2019

Amended: N/A

Originated by: Ian Nixon
Director
Date: 28th March 2019

Reviewed by: Andrew Malkinson
Associate
Date: 28th March 2019

Approved by: Ian Nixon
Director
Date: 28th March 2019

The findings of these surveys will remain valid for a period of 12 months.

BREEDING BIRD SURVEY, WYBERTON MARSH, BOSTON, LINCOLNSHIRE

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BREEDING BIRD SURVEY, WYBERTON MARSH, BOSTON, LINCOLNSHIRE

1 INTRODUCTION

Scarborough Nixon Associates Ltd was commissioned by Black Sluice Internal Drainage Board to undertake a breeding bird survey of Wyberton Marsh, Boston, Lincolnshire.

2 METHODS

To determine which species breed on the site, or are present and potentially breeding on the site, a restricted Common Bird Census (CBC) survey was carried out. A full CBC survey involves 10 survey visits being made to a site. For the purposes of the bird survey at Wyberton Marsh it was decided that four survey visits in the early morning would be sufficient. The design and nature of the surveys were not, therefore, intended to be exhaustive and they were not species specific. No attempts were made to find any nests.

Using 1:25,000 Ordnance Survey maps a route is devised that will enable the whole site to be covered; in practice it is usually the river bank that is walked. The site is walked at a constant steady pace and all bird registrations are noted on a suitable scale map using standard BTO species and activity codes (such as alarm calls, singing and carrying food) along with details of observer, date, weather and visit number.

The collected data from all the completed surveys is then transferred to species maps where they are analysed, and likely territories identified. Actual determination of territories can be open to interpretation, but generally a cluster of registrations will centre on singing males and or nest activity.

The order of the species listed in the tables presented in this report follow the latest British List as recognised by the British Ornithological Union. The full British List, as of the 6th December 2017, is available on the BTO website: <https://www.bto.org/about-birds/birdfacts/british-list>

2.1 Surveys

Four survey visits were undertaken by Jenny Boatwright between the beginning of May and the

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end of June 2018. The surveys were undertaken during the time when birds would be most active i.e. early morning between 5:00am and 10:00am. All surveys were carried out in good weather with no precipitation, light or no wind and warm temperatures. The period between each survey was at least two weeks.

Surveys were carried out on the following dates:

- Survey 1: 3rd May 2018
- Survey 2: 18th May 2018
- Survey 3: 4th June 2018
- Survey 4: 18th June 2018

3 SITE ASSESSMENT

3.1 Location and grid reference

The survey site comprises the south bank of the River Haven at Wyberton to the west of the Black Sluice Pumping Station - central grid reference TF355405. The site includes areas of grazed sea bank, salt marsh, grassland and arable land with hedgerows, ditches and waterbodies.

An aerial view of the site is given in Figure 1.

4 RESULTS

4.1 Birds

Appendix 1 contains a list of all the 41 bird species recorded during the surveys as well as the status according to Birds of Conservation Concern 4 (BoCC4), (Eaton, M.A. *et al*, 2015).

4.1.1 Number of breeding species

A total of 41 species were recorded during the surveys that were undertaken in 2018. Of these 10 species are either known to have bred or showed signs of breeding activity. This number includes 2 species which are Red listed and 2 species which are Amber listed in the Birds of Conservation Concern 4 (BoCC4), (Eaton, M.A. *et al*, 2015).

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The complete list of species recorded during the surveys is given in Appendix 1.

5 DISCUSSION AND RECOMMENDATIONS

5.1 Birds

5.1.1 Legal protection

All common wild birds are protected under The Wildlife and Countryside Act 1981 (and as amended). Under this legislation it is an offence to:

- Kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird while it is in use or being built
- Take or destroy the egg of any wild bird

Certain rare breeding birds are listed on Schedule 1 of The Wildlife and Countryside Act 1981 (and as amended). Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs/unfledged young.

5.1.2 Birds of Conservation Concern

Farmland

It is well documented that populations of farmland birds have declined dramatically although for a few species this decline has now slowed (Eaton, M.A. et al 2015). 12 species of farmland bird are still, however, on the Red list (Eaton, M.A. et al 2015). It is therefore encouraging that several farmland species were noted on site. Of particular note are lapwing *Vanellus vanellus*, skylark *Alauda arvensis*, starling *Sturnus vulgaris*, linnet *Carduelis cannabina* and yellowhammer *Emberiza citronella* which are all Red listed species in the BoCC4 (Eaton, M.A. et al. 2015) and are priority species in both the UK and Lincolnshire Biodiversity Action Plans (UKBAP and LBAP, respectively). In addition, two Amber listed farmland species from the BoCC4 were also noted on site - redshank *Tringa tetanus* and reed bunting *Emberiza schoeniclus*.

Lapwing have suffered rapid declines in the UK since the mid-1980s, which, as with many farmland birds, is thought largely to be due to habitat loss and degradation from changes in agricultural practice, as well as decreased breeding success and chick survival. It is thought that the ecological and demographic factors of their decline are linked, as lapwing are ground-nesting birds, so changes in agricultural practices affect the availability of breeding sites.

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Lapwings breed between mid-March and July and both adults and young feed on invertebrates from the ground.

Although the rates of decline have slowed since the 1980s, **skylark** have been declining in the UK since the 1970s. Changing agricultural practices are thought to be the ultimate cause, with the later sowing of crops reducing opportunities for late-season nesting and the availability cereal stubbles for feeding in winter. In addition, there has been a reduction in the cultivation of spring-cereals, which are preferred by skylark, with more winter cereals and oilseed rape farmed. Skylark diets comprise mainly insects during summer, with cereal grain and weed seeds making up the rest of their diet.

Starling are not exclusively farmland birds but are also found in towns and woodland. They use cavity nest sites and begin breeding in March and prefer to feed on soil-dwelling invertebrates during summer months but will also consume fruit and seeds. Despite a summer population of 1.8million pairs in 2009, recent declines in this species have been more severe, causing starling to be upgraded from Amber to the Red list in the BoCC4. The causes of the more recent declines are not fully understood; however, starling populations have been contracting since the early 1980s. It is thought that, as with other species, changes in agricultural practices have affected this species, as has reduced overwinter survival of juvenile birds.

Linnet tend to nest in areas of scrub, brambles, thick thorny bushes and thick hedges. Both adults and nestlings feed entirely on seed. Consequently, in order to support linnet as a breeding species, it is essential to have a mosaic of habitat types available with a plentiful supply of seed. Between 1966 and the 1990s, there was a very rapid decline in the population of linnets in the UK, the most likely ecological driver which was habitat impoverishment due to agricultural intensification. The linnet population has been comparatively stable since then, however. In recent years, the population of linnets varied regionally in the UK, with an increase in the west but decrease in the east, to approximately 430,000 territories in 2009.

Another bird suffering a recent rapid decline in the UK is the **yellowhammer**, which suffered a sharp decline between the late-1980s and late-1990s and has continued to decline at a slightly lower rate since then. Yellowhammer are often found in transitional habitats between woodland and farmland, and they nest on or close to the ground amongst vegetation in the bases of thick hedges, scrub, bushes and brambles. Intensification of agricultural practices is again thought to have been a factor in this species' decline, with modern farmland unable to provide a good balance of seeds for adults and invertebrate prey for juveniles. This is also likely to have affected the survival of yellowhammer, whose overwinter survival rates have decreased, further reducing this species' population in the UK.

Redshank were recorded on site and are an Amber list species. This species has declined in the UK since the 1970s due to changes in habitat management through agricultural intensification and drainage of farmland. It is estimated that in 2009 there were just 29,000 pairs of redshank in the UK. Redshank feed on a variety of invertebrate prey, such as insects, spiders, annelid worms, molluscs, crustaceans, and occasionally small fish and tadpoles.

As well as being listed in the Amber list of BoCC4, reed bunting is an LBAP priority species. A partial success story, **reed bunting** were downgraded from the Red list after a period of population recovery, however these birds are still threatened by agricultural intensification. As this species is able to utilise oilseed rape fields for nesting, the increase in cultivation of this crop had aided the recovery of this species in recent years.

The causes of historic sharp declines in **barn owl** populations are largely uncertain, though loss of habitat and increased disturbance are thought to be major factors. Since around 2014 however, barn owl populations have been increasing due to increased numbers of fledglings per breeding attempt and a decreased number of nesting failures. This has been helped by widespread erection of barn owl nest boxes in the UK. As a result, barn owl have been downgraded from the Amber list to the Green list in 2015, however they are still protected as Schedule 1 species.

Other Red list species

Recent winter and breeding population declines along with range declines have resulted in **herring gull** *Larus argentatus* being included in the Red list of the BoCC4, as well as being a UKBAP and LBAP priority species. At Seabird 2000 census, this species was recorded as having 130,230 pairs in the UK, down 14% from 1985-1988 census, which in turn was 48% lower than in 1969-1970. A population estimate derives from previous census data put the population at around 80,743 pairs in 2014, down a total of 72% since 1969. Herring gull are opportunistic feeders and will scavenge a variety of different foods. Although there have been fluctuations in herring gull productivity over the years, it is thought that this decline is more likely to be due to reduced availability of food waste, and possible disease transmission from waste in refuse tips.

The last Red list species observed on site is the **cuckoo** *Cuculus canorus*, which is also an LBAP priority species, whose population size in 2009 was thought to be around 14,000 breeding pairs. Its inclusion on the Red list is mainly due to a breeding population decline, with recent Breeding Bird Surveys (BBS) showing a decline in populations in England, but a small increase in Scotland. Overall populations have been declining since the early 1980s however, with recent work suggesting that this is due the low survival of migrant birds, which in turn reduced the breeding population of cuckoos. Famously cuckoos lay their eggs in the nests of other bird

species, with females typically choosing nests of the bird species that raised them, with the most popular current host nests belonging to dunnock *Prunella modularis*, reed warbler *Acrocephalus scirpaceus* and meadow pipit *Anthus pratensis*.

The following birds are listed on the Amber list of the BoCC4:

Shelduck *Tadorna tadorna* are listed on the Amber list due to a decline in breeding population and their international importance. Despite this, they are thought to have benefitted from a range expansion in the UK in recent years, which may have contributed to an overall population increase in this species, however Common Bird Census (CBC) results do not show a clear overall trend in shelduck populations. The population estimate in 2009 was at around 15,000 pairs. Shelduck diets consist mostly of invertebrates, particularly insects, molluscs and crustaceans.

Recent breeding and winter population declines as well as a reduction in available breeding and wintering habitat have threatened **shoveler** *Spatula clypeata* in the UK. This species prefers habitat which comprises shallow lakes, marsh, reedbed or wet meadow, with approximately 20% of the north-west European population in the UK. There are thought to be around 700 breeding pairs in the UK with around 18,000 birds overwintering here. As with many species, habitat loss is the most significant current threat to shoveler populations in the UK.

Wigeon *Mareca Penelope* populations in the UK are thought to be around 400 breeding pairs with 440,000 birds wintering here. Marshes, lakes and open moor habitats are preferred by this species, though they will also use estuaries on migration. Wigeons breed in central and northern Scotland and also in northern England, however breeding population declines are one reason for the Amber classification of this species. Reduced habitat for breeding and wintering, as well as decreases in wintering populations are also thought to have negatively impacted this species.

CBC/BBSs suggest that the breeding population of **mallard** *Anas platyrhynchos* has steadily increased since 1966, however surveys have shown that the winter population of this species has declined since the 1980s. This is thought to be largely due to an increase in birds migrating to the continent, though there is little evidence regarding any further drivers of changes in population of mallard in the UK. Mallard are ubiquitous throughout the UK, with an estimated 100,000 breeding pairs in the UK in 2009.

Oystercatcher *Haematopus ostralegus* are predominantly found along sandy, muddy or rocky beaches as their diet is mainly comprised of bivalve molluscs such as cockles and mussels. Since the 1990s, there has been an overall decline in oystercatcher numbers in the UK, however there has been a small increase since 2015. The decline is thought to be partially due to nest

failures that result from use of less favourable habitats, especially in Scotland. This species is Amber listed due to their overall decline in breeding and wintering populations, as well as because they are of international importance; they have suffered from a widespread decline across Europe since the 1980s.

Listed on the Amber list because of breeding and wintering population and habitat declines, **avocet** *Recurvirostra avosetta* prefer mudflats, lagoons and sandy beaches. At the last count, there were approximately 1500 pairs recorded during the summer in the UK (Musgrove et al., 2013). This species breeds in large colonies of 10-70 pairs. Avocet primarily feed on invertebrates, especially insects, crustaceans and worms, but will also take small fish.

The UK population of **black-headed gull** *Chroicocephalus ridibundus* has fluctuated since 1986 but has increased overall. Data collected by the Seabird Monitoring Programme (SMP) suggest that in the last few years, numbers of breeding birds have declined however, hence black-headed gull are included on the Amber list.

Great black-backed gull *Larus marinus* populations have also fluctuated since 1986, but current numbers are very similar to those recorded in 1986. This species was upgraded from the Green list to Amber in BoCC4 after fluctuations in breeding pairs remained below the 1986 level for several years suggesting a decline in breeding populations. These birds are found in coastal areas and lakes and will scavenge a variety of different foods.

Lesser black-backed gull *Larus fuscus* populations are internationally important, as the UK recently held 38.4% of the world population of this species, with 112,000 apparently occupied nests. At times since 1986, the SMP has noted an increase in the numbers of breeding pairs, but recently there have been fewer than in 1986. There has also been a fall in wintering populations of this species and of ranges for breeding and wintering. This species use coastal habitats as well as lakes and rivers and are opportunistic feeders like many other gull species.

Large declines in breeding pairs of **common tern** *Sterna hirundo* have also been noted in the UK, with colonies of this species breeding along coasts and at inland waters. This species was upgraded from Green to the Amber list in BoCC4 because of this, as well as recent winter populations declines, and a reduction in the range of breeding and wintering populations.

The LBAP species of **swift** *Apus apus* was recently upgraded to the Amber list, largely due to breeding population declines in the UK. There have been steep declines in breeding bird numbers since the 1990s, thought to be largely due to a decrease in available spaces for nesting and modern building design and refurbishment of old buildings exclude swifts from nesting in buildings.

Kestrel *Falco tinnunculus* populations in the UK show no long-term trend, rather tending to fluctuate. In recent years, this fluctuation has mainly been on the negative side however, with a reduction in breeding populations and wintering populations. Kestrel have also suffered from range declines. This species has also suffered from a widespread decline in Europe since the 1980s. The reasons behind falling population sizes are not fully understood, however reduced survival of birds and a reduction of habitat suitable for kestrel prey are thought to have contributed to this species' decline.

Dunnock *Prunella modularis* is another LBAP species which has suffered from population decline in the UK (and in Europe), particularly of their breeding population. Agricultural intensification has affected this species, with research suggesting that this has reduced the availability of winter food sources, which in turn has reduced the survival of wintering birds who rely on seeds when insects are not available. Changes in woodlands have been shown to affect the availability of habitat for dunnock, with increased canopy closure resulting in less understorey vegetation and therefore reduced habitat for this species.

6 SUMMARY

The site supports a variety of habitats and as it is also close to the RSPB Frampton Marsh reserve, there is no surprise that there is a good number of bird species present. The mixture of arable, salt marsh and grassland combined with wet ditches is of great benefit to the bird interest of the site. Of the 41 species recorded during the survey there were two Schedule 1 species and 22 that are either Amber or Red listed (Eaton, M.A. et al 2015).

A total of ten species were considered to either have bred on the site in 2018 or were likely to have bred. A lot of the other species noted are likely to breed on the RSPB Frampton Marsh reserve or in close proximity to it.

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Scarborough Nixon Associates Ltd

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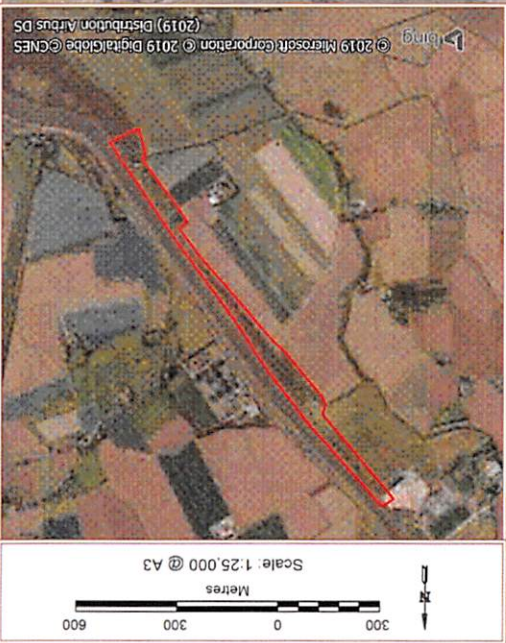
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**BREEDING BIRD SURVEY
WYBERTON MARSH, BOSTON, LINCOLNSHIRE**

**FIGURE 1
Survey Results**



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25th March 2019

01528 344726
PE22 7SP
BOSTON
Turney Woodside
Chapel Road
The Old School House
www.scarboroughmixonassociates.co.uk
Mixon Associates Limited

Scarborough Mixon Associates Limited

Survey results
Territory mapping

Title:

Client:
Black Sluice Board
Internal Drainage Board

Project:
Bird surveys
of
Wyberton Marsh

Scale: 1:5,000 @ A3
Metres
100 0 100 200

Key

- Blue tit
- Skylark
- Sedge warbler
- Reed warbler
- Whitethroat
- Blackbird
- Chaffinch
- Yellowhammer
- Reed bunting
- Approximate site boundary

**BREEDING BIRD SURVEY
WYBERTON MARSH, BOSTON, LINCOLNSHIRE**

APPENDIX 1

List of all bird species recorded during breeding bird survey

BREEDING BIRD SURVEY, WYBERTON MARSH, BOSTON, LINCOLNSHIRE

English name	Latin name	Schedule 1	BAP	BoCC4	1	2	3	4	Breeding	
									Confirmed	Likely
shelduck	<i>Tadorna tadorna</i>			Amber	Y	Y	Y	Y		
shoveler	<i>Spatula clypeata</i>			Amber			Y			
wigeon	<i>Mareca penelope</i>			Amber		Y				
mallard	<i>Anas platyrhynchos</i>			Amber	Y	Y	Y	Y		
red-legged partridge	<i>Alectoris rufa</i>			Green	Y	Y				
pheasant	<i>Phasianus colchicus</i>			Green	Y	Y	Y	Y		
grey heron	<i>Ardea cinerea</i>			Green	Y	Y				
little egret	<i>Egretta garzetta</i>			Green			Y	Y		
oystercatcher	<i>Haematopus ostralegus</i>			Amber	Y	Y	Y	Y		
avocet	<i>Recurvirostra avosetta</i>	Y		Amber	Y	Y	Y	Y		
lapwing	<i>Vanellus vanellus</i>		Y	Red				Y		
redshank	<i>Tringa totanus</i>			Amber	Y	Y	Y			
black-headed gull	<i>Chroicocephalus ridibundus</i>			Amber	Y	Y	Y	Y		
great black-backed gull	<i>Larus marinus</i>			Amber		Y	Y			
herring gull	<i>Larus argentatus</i>		Y	Red	Y	Y	Y	Y		
lesser black-backed gull	<i>Larus fuscus</i>			Amber		Y	Y	Y		
common tern	<i>Sterna hirundo</i>			Amber			Y	Y		
woodpigeon	<i>Columba palumbus</i>			Green	Y					
cuckoo	<i>Cuculus canorus</i>			Red				Y(H)		
barn owl	<i>Tyto alba</i>	Y		Green		Y		Y		

English name	Latin name	Schedule 1	BAP	BoCC4	1	2	3	4	Breeding	
									Confirmed	Likely
swift	<i>Apus apus</i>			Amber				Y		
great spotted woodpecker	<i>Dendrocopos major</i>			Green			Y			
kestrel	<i>Falco tinnunculus</i>			Amber	Y	Y		Y		
magpie	<i>Pica pica</i>			Green		Y	Y	Y		
blue tit	<i>Cyanistes caeruleus</i>			Green	Y		Y	Y	Y	
skylark	<i>Alauda arvensis</i>		Y	Red	Y	Y	Y	Y	Y	
swallow	<i>Hirundo rustica</i>			Green	Y					
sedge warbler	<i>Acrocephalus schoenobaenus</i>			Green				Y	Y	
reed warbler	<i>Acrocephalus scirpaceus</i>			Green	Y		Y	Y	Y	
blackcap	<i>Sylvia atricapilla</i>			Green	Y					
whitethroat	<i>Sylvia communis</i>			Green	Y	Y	Y	Y	Y	
starling	<i>Sturnus vulgaris</i>		Y	Red	Y	Y	Y			
blackbird	<i>Turdus merula</i>			Green	Y	Y	Y	Y	Y	
wheatear	<i>Oenanthe oenanthe</i>			Green	Y					
dunnock	<i>Prunella modularis</i>		Y	Amber	Y					Y
pied wagtail	<i>Motacilla alba</i>			Green		Y				
chaffinch	<i>Fringilla coelebs</i>			Green	Y	Y	Y	Y	Y	
linnet	<i>Carduelis cannabina</i>		Y	Red	Y		Y	Y		
goldfinch	<i>Carduelis carduelis</i>			Green			Y	Y		
yellowhammer	<i>Emberiza citrinella</i>		Y	Red	Y	Y	Y	Y	Y	
reed bunting	<i>Emberiza schoeniclus</i>		Y	Amber	Y	Y	Y	Y	Y	

BLACK SLUICE INTERNAL DRAINAGE BOARD

ENVIRONMENT COMMITTEE MEETING - 15 MAY 2019

AGENDA ITEM 13

INTRODUCTION OF CONSERVATION COVENANTS TO THE FORTHCOMING ENVIRONMENTAL BILL

The following email was sent to the Board from William Egan, Policy Briefing Manager Westminster Briefing, on 30 April 2019:

'Dear Colleague,

The Introduction of 'Conservation Covenants' to the Government's forthcoming Environment Bill is the next considered action to improve the environment through environmental land management. Conservation Covenants are private, legally binding agreements that deliver lasting conservation benefits for public good.

Join Westminster Briefing in Central London on the 26th of June for your chance to receive an up-to-date brief from DEFRA and Natural England on the Government's consideration to introduce Conservation Covenants in the forthcoming Environment Bill. We will examine the current Government plans and Law Commission proposals in this area, future developments and how to work with conservation covenants in practice.

[Register here](#)

Confirmed speakers include:

- **Policy Representative, DEFRA**
- **Richard Broadbent, Head of Legal Services, Natural England**
- **Policy Representative, DEFRA**
- **Further speakers confirmed**

[Review the agenda here](#)

I look forward to welcoming you,

Kind regards,

*William Egan
Policy Briefing Manager
Westminster Briefing'*

Navigating Conservation Covenants: Safeguarding England's Wildlife and Natural Environment

Taking place in Central London (Zone 1, Venue To Be Announced) | 26th June 2019

10.15 Registration & Morning Refreshments

11.00 Chair's Introduction

11.05 **Government timescales, actions and next steps**

- Overview of the Government's consideration of conservation covenants proposals for the Environment Bill
 - Understanding and Defining Conservation Covenants
 - The Law Commission's proposals in this area
 - Ensuring the legacy of sustainable developments
 - The Conservation Covenant consultation and further developments
 - The planned statutory scheme and future reforms
 - Delivering lasting conservation outcomes now and in the future
- ⇒ ***To be announced DEFRA policy representative***
- ⇒ ***Richard Broadbent, Head of Legal Services, Natural England***

13.15 Networking Lunch

14.00 **Working with conservation covenants in practice**

- Entering into arrangements that conserve the natural environment
 - Working with legal specialists, landowners, conservation specialists, responsible bodies and local authorities
 - Securing and managing permanent land-management obligations
 - Safeguards to ensure covenants are not abused
 - Conservation covenants and biodiversity net-gain
 - Different usage of covenants: Public access, heritage sites, ensuring future conservation work
- ⇒ ***To be announced DEFRA policy representative***

15.30 Chair's Summary & Event Close

[Event Page](#) | [Register Online](#)

For more information contact Customer.Services@westminster-briefing.com | 020 7593 5657



Association of Drainage Authorities Lincolnshire Branch Environment Committee Minutes 12.12.18

Deeping House, Welland Terrace, Spalding, Lincs, PE11 2TD

Present:

Peter Lundgren (PL)	Committee Chairman Witham First District IDB (<i>Ratepayer</i>)
Nicholas Watts (NW)	Committee V. Chairman Welland & Deepings IDB (<i>Board Member</i>)
Jane Picking (JP)	Committee Secretary Welland & Deepings IDB (<i>Secretary</i>)
Peter Beckenham (PB)	Middle Level Commissioners IDB (<i>Conservation Officer</i>)
Richard Chadd (RC)	Environment Agency (<i>Biologist</i>)
Karen Daft (KD)	Welland & Deepings IDB (<i>Chief Executive</i>)
Christopher Duku (CD)	Black Sluice IDB (<i>GIS & Environmental Technician</i>)
Abigail Jackson (AJn)	Environment Agency (<i>Effectiveness Initiative Lead, Lincolnshire & Northamptonshire Area</i>)
Amanda Jenkins (AJ)	Lincolnshire Wildlife Trust (<i>South Lincolnshire Fenlands Project Officer</i>)
Chris Manning (CM)	Water Management Consortium (<i>Environmental Officer</i>)
Nick Morris (NM)	Welland & Deepings IDB (<i>Operations Engineer</i>)
William Naylor (WN)	Welland & Deepings IDB (<i>Junior Engineer</i>)
Trevor Purllant (TP)	Welland & Deepings IDB (<i>Board Chairman</i>)
Andy Sadler (AS)	Environment Agency (<i>Catchment Coordinator</i>)
Fiona Scott (FS)	Witham & Humber IDBs (<i>Environment Technician</i>)
Huw Sharman (HS)	Witham 4 th IDB (<i>Engineer</i>)
Paul Sharman (PS)	North Level IDB (<i>Chief Executive</i>)
Brian Tidswell (BT)	Welland & Deepings IDB (<i>Board Member</i>)
Karl Vines (KV)	South Holland IDB (<i>Catchment Engineer</i>)

1.	Apologies for absence	Sarah Baker (SB), Greater Lincolnshire Nature Partnership Julian Boden (JB), Welland & Deepings IDB Alison Briggs (AB), Shire Group of IDBs Paul Green (PG), Black Sluice IDB David Hutchinson (DH), Environment Agency Sam Lew (SL), The Wash & North Norfolk Marine Partnership Caroline Tero (CT), EA Ian Warsap (IW), Black Sluice IDB	
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Association of Drainage Authorities Lincolnshire Branch Environment Committee Minutes 12.12.18



Deeping House, Welland Terrace, Spalding, Lincs, PE11 2TD

			ACTION
2.	Chairman's announcements and welcome	After around the table introductions took place, PL welcomed attendees and thanked Welland & Deepings IDB for hosting the meeting.	
3.	To approve the minutes of the meeting held 7 th March 2018	Minutes approved and signed by PL as a true record.	
4.	Matters arising and actions	<p>NW's paper, "Drain management with wildlife in mind": suitability for inclusion into ADA Lincs Branch 'Quick Wins' Biodiversity Manual.</p> <p>PS commented that he did not disagree with the contents but that, particularly in his Board's area, there were some drains that could only be cut once and that there were some channels that needed to be double cut. PS further mentioned that it was belief that the information within the Biodiversity Manual was aimed at larger Boards.</p> <p>After lengthy discussion, PL proposed that the paper be included in the 'Quick Wins' Biodiversity Manual but that it needed to follow the same format, i.e. 'Why?', 'What?', 'What can we do?' and 'Who can help?'.</p> <p>NW to rewrite the paper to follow format of the 'Quick Wins' Biodiversity Manual and resubmit to the Committee.</p>	NW
5.	Environment measures put in place for the South Forty Foot De-maining Pilot	<p>AJn, EA lead for the South Forty Foot Catchment de-maining pilot project, gave an overview of 'Rationalising Main River Networks' (RMRN).</p> <p>In brief, a proposal had been put forward by the EA, supported by Defra, to re-designate stretches of low flood risk watercourses by enabling local decision-making for communities, IDBs, lead local flood authorities and district councils to take responsibility for their local flood risk.</p> <p>Originally, there had been five areas selected as pilots but this had now been whittled down to four areas.</p> <p>South Forty Foot Drain – approximately 16.8km – designated to Black Sluice IDB</p> <p>Isle of Axholme (Snow Sewer)</p> <p>Suffolk Rivers</p> <p>Stour Marshes Rivers</p>	



Deeping House, Welland Terrace, Spalding, Lincs, PE11 2TD

		<p>One point that had been highlighted was the environmental aspect and to ensure that the correct measures were put in place. These measures include:</p> <ul style="list-style-type: none"> • A decision monitoring form was completed for the key stages of the pilot. A significant proportion of this was understanding (and mapping) all protected areas, designation sites and sensitive receptors. It also looked at the WFD and, where there was a risk, required mitigation measures to be put in place. • A due diligence check, including environmental credentials. Black Sluice IDB have a dedicated environment committee, a strong BAP and an 'on the ground' programme. • Detailed walkover carried out of all the watercourses with the IDB, not only noting the asset locations and condition of watercourse but any species, habitats etc of value or importance. • Natural England were involved with the project both nationally and locally, as were the EA's internal biodiversity teams. • Following the formal consultation, LWT were invited to feed into the handover pack. This pack was split into two sections: one half on the operational aspect of the watercourses and the other on the environmental aspect. Information included maps of designated areas and habitats (including details from walkovers), LWT officer knowledge, recommendations for appropriate management techniques and areas for potential habitat improvement and reinstatement. • To ensure future operation is compliant with Fish & Eel regulations. 	
6.	"Pollinator Projects" – a brief overview	<p>CT had been invited to the meeting but was unable to attend. However, she had very kindly provided a selection of draft documents (although had requested that the details not be shared further as they had yet to be finalised).</p> <p>AJ gave an update on CT's behalf and slides of the provided information were shown. In brief, the project seeks to create more habitat for bees, butterflies and other pollinators. AJ reported that there were over 6,000 pollinator species.</p> <p>Members agreed that this project was worthwhile, and it was suggested that one of the pollinator demonstration sites could be visited for our summer field trip.</p>	



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			ACTION
7.	GLNP Update	<p>In SB's absence, AJ gave an update:</p> <ul style="list-style-type: none"> • <u>LERC Search</u> As previously recorded, LERC Search is a new web-based system which enables ecological consultants and local authorities to access the data held by Lincolnshire Environmental Records Centre (LERC) 24 hours a day, seven days a week. Once an account has been registered, LERC Search provides access to more than five million species' records together with habitat and site information. A fee of £100 per search within any area radius is payable, although this charge is waived for non-commercial and research use. A proportion of the fee is made available to local naturalists for specific projects through the Local Recording Fund. The data is returned in a matter of minutes in a standard format and for a single fixed price which aims to ensure ecological data is better considered within the planning system. The system was officially launched at the GLNP's annual conference on the 31st October, and in its first month has received 64 data requests with 56 people signed up to access the system. Website: https://search.glnp.org.uk/ • <u>Pollinator Project – latest</u> The GLNP has published a new resource to help farmers support wild pollinators. A leaflet giving details of different low budget options is now available online (https://glnp.org.uk/your-land/pollinators/increasing-wild-pollinators-on-your-farm.php), together with a simple survey form to help farmers identify habitats for wild pollinators on their land and potential areas for enhancements. The project, part funded by Defra, has worked with a number of farms over the last two years to develop the resource and a number of trials have taken place. The next step is to undertake case studies of the trials to determine exact costs and benefits and continue wider rollout across Lincolnshire. 	

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		<ul style="list-style-type: none"> • <u>Mink Control</u> The Rivers & Wetlands BAP is trying to raise awareness of the need for a strategic national approach to mink control. CM was of the belief that control of mink needs to be pushed for a national approach. 	
8.	EA Update	<p>AS reported on the following project work:</p> <ul style="list-style-type: none"> • <u>Papermill Weir</u> Weir bypass project just upstream of Grantham on the River Witham. Design work being undertaken at present (completed March 2019) for Lincs Rivers Trust leading with EA and Wild Trout Trust support. Options appraisal for engineered bypass. • <u>Cringle Brook</u> Large-scale restoration project to reconnect the Cringle, an Upper Witham tributary near Stoke Rochford, with its flood plain over 1km. Being designed at present. LRT project with EA support. Seeking to lower flood plain to encourage more regular inundation. • <u>Branston Beck</u> Community habitat project complete upstream of village November 2018. Small section of over-wide/deep channel, looking to narrow channel and undertake tree works. Proposals for additional work between Branston and Heighington in WEG bid to include flood plain reconnection. LRT project with EA support. • <u>Nettleham Beck</u> Projects at Sudbrooke Village Hall (flood plain reconnection) and on Kingsways in Nettleham village (channel narrowing) to be completed by 19th March. Sudbrooke Village Hall stretch is an IDB section – could be good habitat improvement case study for ADA Environment Group. Discussed with Upper Witham IDB. LRT projects with EA and Wild Trout Trust support. • <u>Belton Weir</u> Weir bypass project on River Witham at National Trust Belton Estate. Design work being undertaken at present (to be completed March 2019) for weir bypass project. LRT project leading, with EA and NT support. 	

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		<ul style="list-style-type: none"> • <u>Dunston Project</u> Natural flood management project upstream of village. Designs being finalised and some modelling work being undertaken. Aiming for delivery back end of summer 2019. • <u>Waterside Garden Centre Project</u> Project on River Glen completed in summer 2017 as reference site for flood plain inundation to pond and swales. Site inundating as designed and drone footage of project can be viewed at https://www.youtube.com/watch?v=hdb_Q8P2vBk 	
9.	Update on Fish & Eel Regulations	<p>CM gave an update:</p> <ul style="list-style-type: none"> • <u>Changes to the Eels Regs Process (ChERP)</u> <ul style="list-style-type: none"> * Project manager appointed. * Expected conclusion later in 2020 with new regulatory position statement. * Project in response to feedback across all sectors, including FCERM staff who operate similar pumping stations. * ADA/EA Eel Liaison Group project partners. • <u>REDEEM (Research and Development of Fish and Eel Entrainment Mitigation at pumping stations)</u> <ul style="list-style-type: none"> * Understanding the timing and drivers of European eel seaward spawning migration * The effectiveness of fish-friendly pumping stations. * The attractiveness and effectiveness of safe downstream passage routes at pumping stations. * Mapping and modelling flows upstream of pumping stations to minimise fish and eel entrainment. * The distribution of eels and coarse fish in pumped catchments using eDNA-based monitoring. Project manager appointed. * Expected conclusion later in 2020 with new regulatory position statement. * Project in response to feedback across all sectors, including FCERM staff who operate similar pumping stations. * ADA/EA Eel Liaison Group project partners. 	

Deeping House, Welland Terrace, Spalding, Lincs, PE11 2TD

9.	Update on Fish & Eel Regulations (continued)	<ul style="list-style-type: none"> • <u>Funding</u> <ul style="list-style-type: none"> * IDBs, ADA £20,000 p.a. for two years. * EA (FCRM and Fisheries). * EU European Marine and Fisheries Fund. * University of Hull. 	
10.	ADA Update	<ul style="list-style-type: none"> • David Sisson, previously the Engineer at Lindsey Marsh Drainage Board until his retirement, is now contracted one day a week for ADA. Mr Sisson also sits on the Policy & Finance Committee. • GIS mapping is being rolled out. 	
11.	Proposal to align future meetings with ADA branch meetings/member organisations	General consensus was that this would be beneficial to all parties, and hopefully would increase attendance.	
12.	Meeting dates for 2019 – 1:30 p.m. start, unless otherwise stated	<p>Dates for 2019 meetings:</p> <ul style="list-style-type: none"> • 1:45 pm 20th March – GLNP Offices, Banovallum House, Horncastle (Rivers & Wetlands BAP Group meeting in morning). NB: Election of Chairman and Vice Chairman. • 26th June - Summer Field Trip – three suggestions so far: Boston Barrier Community Hub / a pollinator demonstration site / Riseholme – diffuse pollution. Can members please have some other suggestions to discuss at next meeting in March? • 17th October – Woodhall Spa TBC (ADA Board meeting in morning). 	All
13.	AOB	None.	

There being no further business, the meeting concluded at 3:45 p.m.

Chairman

Association of Drainage Authorities Lincolnshire Branch Environment Committee Minutes 20.03.19

Banovallum House, Manor House Street, Horncastle, Lincs, LN9 5HF

Present:

Peter Lundgren (PL)

Paul Skinner (PSk)

Nicholas Watts (NW)

Chris Manning (CM)

Karen Daft (KD)

Fiona Scott (FS)

Roger Welberry (RW)

Sarah Baker (SB)

David Hutchinson (DH)

Karl Vines (KV)

Brian Tidswell (BS)

Amanda Jenkins (AJ)

Brian Bowles (BB)

Huw Sharman (HS)

Paul Sharman (PSh)

Richard Thompson (RT)

Tammy Smalley (TS)

Committee Chairman (Outgoing) Witham First District IDB (Ratepayer)

Committee Chairman (Incoming) Boston Borough Council, Witham Fourth District IDB (Board Member)

Committee Vice Chairman (Outgoing) Welland & Deepings IDB (Board Member)

Committee Vice Chairman (Incoming), Water Management Consortium (Environment Officer)

Welland & Deepings IDB (Chief Executive)

Witham & Humber IDBs (Environment & GIS Technician)

Black Sluice IDB (Board Member)

Greater Lincolnshire Nature Partnership (Senior Policy Officer)

Environment Agency (Catchment Co-ordinator, Witham and Ancholme)

South Holland IDB (Catchment Engineer)

Welland & Deepings IDB (Board Member)

Lincolnshire Wildlife Trust (South Lincolnshire Fenlands Project Officer)

Witham Fourth District IDB (Board Member)

Witham Fourth District IDB (Engineer)

North Level District IDB (Chief Executive)

South Holland IDB (Board Member)

Lincolnshire Wildlife Trust (Head of Conservation)

			Action
1.	Apologies for absence	Lionel Grooby (LG), North East Lindsey IDB Ian Warsap (IW), CEO, Black Sluice IDB Alison Briggs (AB), Environment Officer, Shire Group of IDBs Richard Chadd (RC), Biologist, Environment Agency Peter Beckenham (PB), Conservation Officer, Middle Level Commissioners Jane Froggatt (JF), CEO, Witham & Humber IDBs Jane Picking (JP), Secretary Nicola Craven (NC), Project Officer, Lincolnshire Rivers Trust	
2.	Chairman's announcements and welcome	Introductions took place and PL welcomed attendees to the meeting	
3.	To approve the minutes of the meeting held 12 th December 2018	Minute approved and signed by PL as a true record	
4.	Matters arising and actions	NW not yet had opportunity to rewrite paper in 'Quick Wins' format. NW will rewrite and bring back to the Committee and resubmit at the next meeting.	NW
5.	Election of Chairman and Vice-Chairman for a three-year term	Paul Skinner was nominated and elected as Chairman for a three-year term. Chris Manning was nominated and elected as Chairman for a three-year term.	
6.	GB-wide Mink Eradication update	CM noted that any national scheme on mink eradication is in the early stages. SB reported that the River and Wetlands BAP group agreed at their meeting in the morning that something needs to be done to control the population of mink, for the benefit of water vole conservation and the need for a trial period, which would need to be at least of a 3-year duration. Boards were encouraged to put	

		<p>forward trial locations and these pilots would provide evidence for use by future trials. KD noted that Welland & Deepings IDB have operatives trained to dispatch mink.</p> <p>CM notes that offering financial incentive to landowners and farmers to assist with mink eradication appears to be effective, and that one way to determine mink presence in a watercourse is the use of eDNA.</p> <p>CM also met with mink control project members in East Anglia (Norfolk, Suffolk and Essex) who used rafts with soft clay to capture footprints and allows observer to confirm mink presence with footprints. Eradication of mink would only be sustained if the same occurs in adjacent counties.</p> <p>PL enquired as to whether use of catchment boundaries would be more effective as opposed to county/district boundaries. Some catchments have large shooting estates who may be willing and be readily available to dispatch mink should one become trapped.</p> <p>CM asked whether any IDB Board members present believed that IDB's would be willing to provide 'an amount' of funding to a pilot programme and help with dispatch of mink. There was an agreement from Board members that they believed their respective Board would be willing to contribute.</p>	
7.	Water Vole Survey and Handling Training Course	The Committee showed a clear interest in having members of their staff licensed for handling water voles, who would need to be in site when any bank work was being completed. CM said that those interested should group together and contact him and he will organise a course.	ALL, CM
8.	Cutting only one side of IDB drains	NW appealed to IDBs to cut only one side of watercourses during maintenance and pointed out that not lowering water levels in winter would help young fry. PSh noted that North Level IDB already commit to cutting one side only on larger drains and stated that it is more difficult to undertake on small drains which are more liable to blockages. CM spoke of excess vegetation backing up water and making the surrounding ground more susceptible to flooding. TS asked for circulation of a presentation given by Martin Redding (North Level District IDB) about watercourse	

		<p>levels. PSh added that he will request Martin Redding attend the next meeting to give the presentation.</p> <p>PL noted at the end that all IDBs should consider cutting one side of their drains as a matter of course.</p>	
9.	GLNP update	<p>SB updated on the following:</p> <p><u>BAP reporting</u></p> <p>BAP Partners are asked each year to submit to the GLNP any actions that they have taken that contributes towards habitat and species targets within the nature strategy. This information is collated and used to inform conservation priorities for the forthcoming year.</p> <p>All reports for 2018/19 should be submitted by Friday, 29th March to sarah.baker@glnp.org.uk</p> <p><u>Position statements</u></p> <p>Documents are being drafted to set out the GLNP's agreed position on tourism, health and wellbeing. Agriculture and planning position statements were produced in 2014 and have enabled the team to respond to consultations and feed into policy discussions on behalf of the Partnership. Partners will be consulted on the Enjoying nature and Being well with nature statements before being asked to give formal support to principles, enabling them to become a GLNP position.</p> <p><u>LERC Search</u></p> <p>The new system for providing environmental data has been in operation for three months. Launched at the end of last year, initial feedback has been positive. There has been an increase in requests and comments have noted how easy the system is to use. CM and FS have used the system and noted how positive their experience of it was.</p>	

		<p>A marketing plan for LERC Search is in the process of being agreed by the GLNP Steering Group which sets out the next steps for both measuring its success and looking at how best to promote its use in the future.</p> <p><u>Staff changes</u></p> <p>Margaret Haggerty has joined as part-time Information Officer (Local Sites) and will oversee coordination of the Local Wildlife Sites and Local Geological Sites system.</p>	
10.	Witham Partnership & EA update	<p>NC sent apologies for not being able to attend – DH provided updates for Witham Partnership and EA.</p> <p>Lincolnshire Limestone Becks projects</p> <ul style="list-style-type: none"> • Sudbrooke Beck – have had to apply for planning permission so a start on this project has been slightly delayed but is still due to go ahead pending planning permission. • Scopwick Beck • Branston Beck – has been completed. PL lives in the area and commented on the success of the scheme. <p>River Restoration is planned in the Upper Witham area.</p> <p>River improvement projects with councils in Grantham totalling £1.3 million are planned, as well as improvement projects at the Brayford pool in Lincoln and the River Freshney, upstream of Grimsby.</p> <p>A natural flood management project is being developed in the Waring catchment on the Upper Rase.</p>	

11.	Update on Fish and Eel Regulations	CM welcomes responses in terms of fish friendly pumps. IDBs will continue to have indefinite high priority exemptions from fish friendly pumps until the pumps need to be replaced.	
12.	IDB updates on any environmental issues	<p>FS asked if any IDBs had thought about applying for the new Defra trial Environment and Land Management scheme which is set to eventually replace current Agri-environment schemes. KD pointed out that Welland & Deepings, Middle Level and York have all considered it and will be submitting for the trial.</p> <p>TS and PL commented that the schemes should be a good investment for the long term from an environmental perspective.</p>	
13.	Update on remaining groups	<p><u>Fens for the Future</u></p> <ul style="list-style-type: none"> • Wickham Fen now has a 'hands-off' management approach with a view to increase land mass by 2025. • Cambridgeshire Fens is a UNESCO biosphere and has been given £1m for 'paludiculture' (sustainable management of peatlands through wet agriculture) • <p><u>ADA Technical Committee</u></p> <p>IDB BAP guidance from ADA will be available from November 2019 after the Annual Conference. This guidance will aid IDBs in re-writing their BAPs to suit the government's 25-Year Environment Plan.</p>	

