

APPENDIX E Ecological Strategy



Woods Round Nettleham

AN ECOLOGICAL VIEW OF NETTLEHAM

Background

Nettleham Woodland Trust (NWT) is a charity founded in 2006. As suggested by the name its prime focus is matters relating to trees and woodland in the Nettleham area. Our priority is to develop woodland areas for the benefit of flora, fauna and the human community. As such we are also interested in woodland edges, meadows, wetlands, water courses, relevant heritage and public access.

In the last eight years NWT has been involved in a number of community-centred, open access projects in the Nettleham area. These have included:

- PC Wood, widening the woodland belt to the east and south of the County Police Headquarters;
- Monks Wood and Co-opB Wood, extending the Ashing Lane Nature Reserve in Dunholme with 25,000 trees, a lake, two ponds and wetland as well as a footpath network;
- Bishops Meadow with a small woodland and wildflower meadow between the burial ground and the ancient monument;

In 2013 NWT's achievements were recognised by winning the overall trophy in the Lincolnshire Environmental Awards, as well as the Community section, repeating its 2009 success.

Its long term interest in the Nettleham Neighbourhood Plan is to support changes in the village which add to its amenity value for its residents and wildlife by increasing well-being, encouraging healthy living and developing more sustainable transport

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Introduction

NWT has considered what features make the landscape of Nettleham special and how it could be protected and enhanced. The natural landscape, flora and fauna are in themselves unremarkable, but over the centuries good decisions and historical accident have combined to create a most desirable place to live, convenient for Lincoln, but also distinct from it. Today the best characteristics of the local countryside and commuter village are closely aligned, a juxtaposition which residents wish to continue

1. The Nettleham Bowl

People visiting the village for the first time often express their surprise at its size and population of several thousand. The views from the A46 and A158 simply do not convey this most attractive feature, which is enabled by the general slope from west to east and also important screening. Unlike Capability Brown, we cannot alter the slopes, but we can ensure that their integrity is maintained by keeping new developments off the skyline and developing existing screening to the west and south in particular. Green Lane, PC Wood, Bishops Meadow, the burial ground extension and the Rugby Club all contribute to this. There is potential to do more, especially in a northern arc from Deepdale Lane as far as Sudbrooke Lane. Some of these ideas will be explored in Section 3 on land corridors.

Creating planting screens is only one side of the coin. There is also the opposite requirement to maintain broad vistas and panoramas such as the one towards Lincoln from FP144 (Riseholme Field) and the magnificent 360 degrees seen from FP142 (Danby Hill). Lincolnshire has 'big skies' and residents need to be able to see them, both at day and also by night. While it is not difficult to find a dark place for viewing the stars such as FP166 (The Heath), some pleasant daytime angles could be lost by insensitive development. The writer particularly likes the views back into the village from the slightly higher ground from FP166 at the gate by the first hedge, the north-west corner of the field designated as A4 in the current planning discussions. There are other examples. While the height differences are small, they are significant in our gently undulating landscape, important elements in maintaining the special character of our village.

2. The water corridor

Nettleham Beck has been the central spine of the village for over one thousand years and has the potential to become even more significant in the decades ahead for different but complementary reasons:

a. Walking by the water

The development of the pedestrian route along the Beck at both ends of the village would allow residents and visitors to benefit from this feature even more.

From west to east enhancements could include:

- i. A new footbridge from FP143 (The Meadows) across the Beck and then a new footpath winding up the hill across land owned by Enterprise Inns. This would connect to FP144 (The Gitty) via the pedestrian refuge on the A46. There would also be possibilities for walkers to use both the bus stop and The Brown Cow. The pub's sloping field could itself be developed further, perhaps with shrubs nearer the road and willow nearer the Beck. NWT did approach the owners in 2007, but they had plans for a caravan site, later rejected;
- ii. A new footpath at the east side of the field immediately south of the Police Headquarters along the Beck opposite Kingsway. This would be a branch of FP145 (The Scotches) allowing access directly onto Washdyke Lane through the opening used by agricultural machinery. The land next to the Beck is often water-logged and would probably benefit from a five metre wide band of path and shrubs. A belt of taller trees might not be so attractive here because it would restrict the views from Kingsway;

- iii. new footbridge at the end of Kerrison View and a new path on the south side of the Beck in an easterly direction as part of a more general opening of this area towards the water treatment plant. The area closest to the water is unsuitable for arable farming;

b. Water management.

Although the Beck appears to be small, it has a wide catchment starting from points on the Ermine and near Riseholme Hall. In recent years there have been at least two floods near the village green, worsened by surface water flowing down from the Scothern Road area.

Improved management of the Beck west of the village would reduce the speed of the water when it reaches the canalized area, effectively from the confluence of the two sections near the Old Lincoln Road. There is an area of low-lying land here which has not been tilled for several decades. This has the potential to become a wetland which would both slow down the movement of water and provide a habitat not found elsewhere in Nettleham. A smaller overspill area may be possible near the ford at Watermill Cottage.

To the east of the village there is less concern about slowing the flow. However, as part of the much wider national concern to retain inland water for longer and reduce flooding, there would be no harm in creating another wetland area adjacent to the Beck in areas where arable farming is uneconomic. This would soon be populated by local flora and fauna.

c. A wildlife corridor

The Police Headquarters lake provides a habitat for coots and moorhens in particular while the Beck is popular, arguably over-popular, with mallards especially at the weirs. Tiny fish can be seen in the shallow stretch adjacent to the White Hart. With more sections of slower water, there would be a greater variety of species

Any mini-flood-plain, enlarged over-spill area or wetland would be rapidly populated with flora and invertebrates conveyed by the Beck. With the addition of some willows, shrubs and perhaps reeds, the confluence site would attract a variety of birds and amphibians, and provide an interesting new asset for the village close to FP142 (Danby Hill) and FP143 (The Meadows).

3. Land corridors

The road network has provided six routes into the village since the 1778 enclosure. It is not within the remit or expertise of NWT to consider whether there should be more. However, we do observe that the current layout does not encourage cycling by not enabling an effective separation of vehicles from more sustainable transport. One relatively simple change, all parties willing, would be to create a proper cycle path from the north end of Green Lane along Deepdale Lane to the A46, parallel to the existing road but to the south of the Police Headquarters hedge

Aspirations for improving footpaths along the south-west to north-east line of the Beck have been mentioned in a previous section of this paper (2.a.ii)

There is significant potential for enhancing existing footpaths and developing new ones, both as attractive direct lines from A to B, recreational routes and wildlife corridors. In addition to the Deepdale Lane cycle-path and the riparian ones mentioned in Section 2, there are other possibilities which would be a significant development:

a. **The Nettleham Ring:** the long-term vision is of a footpath and bridleway encircling the village using existing routes where possible and new ones where necessary. To use the term 'green belt' raises other issues, but the concept of developing this rather irregular circle is a highly desirable aspiration over the long-term. For this report we will go clockwise, from the oldest section, where we can see both the impact of the past and potential for the future:

- i. Green Lane (BW219): it probably evolved at the time of the enclosure in 1778, possibly as a dividing line between individual farms. Today it divides the All Saints Lane development from the Lincolnshire Police Headquarters. There are mature trees on either side of the bridleway, but the corridor is enriched by the gardens of the residents to the east and PC Wood to the west. At the south end there is a junction with The Scotches (FP145), another wooded route. This leads past the Police Headquarters lake developed in the 1960's and 1970's.
There is a mixed treescape along Green Lane itself with ash, silver birch, hazel and hawthorn amongst the dominant species, the range considerably widened by the diversity of trees in PC Wood and private gardens. Consequently the area has also become significant for the diversity of wildlife. There is the full range of smaller garden birds, woodpeckers, the occasional pheasant and at least one busy sparrow-hawk. Larger species such as heron have been sighted following the tree line. Owls are heard at night. Small mammals are common and larger ones such as foxes and muntjac deer are occasional visitors. Grass snakes and amphibians frequent some gardens.
The long-term vision would be that this model should be developed around the village, although there are places where open-ness and lower growth such as brambles rather than trees should be developed so that the panoramic views are not blocked out.
- ii. North of Deepdale Lane: as I write this (29th October 2014), I have not seen any specific proposal for the development of sites A3 and A4. From the environmental, recreational and sustainable transport perspectives it would be very desirable to have an extension of Green Lane north of Deepdale Lane enclosing the A3 and A4 developments to the north and west, and linking up with FP166 (The Heath) where there is an excellent thorn hedge currently full of berries stretching much of the way to Nettleham Heath Farm. The north edge of the site would be a good location for some taller trees. This site will be reviewed further in Section 6. Linking FP166 and Shaw Way is most desirable
- iii. The next section, largely the west edge of the Shaw Way / Cotton Smith Way development round to Scothern Road, would benefit from a new route, either along the back of the houses or perhaps a permissive footpath between FP166 and Scothern Road. At the present time, it is unclear how this area might develop so a long-term planting scheme is not currently feasible;
- iv. more will be written about the north-east segment between Scothern Road, the water treatment plant and Sudbrooke Lane in Section 6 on individual locations;
- v. The southern half of the village will be considered in Section 4.

b. Other footpaths

There are opportunities to improve the environmental characteristics of a number of footpaths with minimal planting, often to restore lines where well-established trees have fallen or been felled. Sites to consider include:

- FP142 - Danby Hill
- FP144 – The Gitty, the eastern section

4. Habitat to the south

Much has been written about the importance of this space as a mechanism for keeping Lincoln and Nettleham apart. The writer shares this point of view. The open landscape is pleasant and when approached along Greetwell Lane the rural character of the area is clear. Lodge Lane has a similar aspect until the main residential area has been reached, its trees and hedges being real assets.

In terms of managing and developing the landscape in the future, there has been a rapid increase in the amount of tree coverage and environmental gain in this southern area in the last decade. From west-east, highlights include the Bishops Meadow development with a restored, south-facing stone wall which might offer a sunny habitat for reptiles and amphibians, woodland and a wildflower meadow, the extension to the burial ground now known as The Swathe and the Lincoln RFC planting, especially on the north edge of their Lodge Lane site adjacent to BW147 (The Park) from Mill Hill to Lodge Lane.

There is plenty of open land here, a growing number of mature trees and plenty of woodland edges, so there is the beginning of the development of a good hunting area for raptors. However, there is potential for two improvements i.e.

- a. modest planting at junctions and corners on BW147 (The Park) and BW520 (The Greetwell) where land is unsuitable for agriculture. It might be possible to develop a useful copse or maybe a lone tree site in places without damaging the 'open skies' aspect;
- b. a new permissive footpath between the BW147 / BW520 junction across to Greetwell Lane. This would facilitate the east-west link because it would presumably connect very easily with FP142 (Danby Hill) and basically complete the circle. There would be no planting implications here

5. Importance of trees in the character of the existing landscape

One of the great attractions of Nettleham is that it already has plenty of trees both inside and screening the village, softening the lines of the built-up area and providing pleasant areas for recreation.

a. Principles and practice: These should be considered in any new development:

- i. Each area of development for housing, recreation, roads, cycle-ways and footpaths will have different potential depending on location, size, width of the road and verge, drainage, neighbouring land etc., and so each one will require a different approach;

- ii. It is important to put the right tree in the right place. Planners and planters must have a 50 year vision of the future size of any tree for height, spread, roots and shadow. Tiny acorns do have a habit of growing into mighty oaks;
- iii. It is important to consider long-term questions of access and maintenance, including health and safety and also cost implications;
- iv. There should be variety in the planting;
- v. Potential for wildlife and nesting boxes should be considered;
- vi. Trees and shrubs planted in public spaces should always be native English species, as in PC Wood and the Bishops' Meadow;
- vii. There should be consultation with the authorities responsible for the maintenance of street trees, as well as the developers;
- viii. Verge trees should be protected from mechanical trimmers;
- ix. Keep it simple

b. Practicalities:

This is not an exhaustive list, but different locations in Nettleham will require different solutions:

- i. Roadside verges – small, neat trees e.g. rowan, individual thorns, wild cherry. Golden ash (*Jaspidea*) might be suitable on wider verges;
- ii. Paths and cycleways of a more rural nature, perhaps adjacent to open land – wild berries and hazel. The latter is easy to coppice;
- iii. Various hedge lines – hawthorn and blackthorn. Perhaps holly;
- iv. Along the Beck – willow, easy to coppice; alder (*alnus glutinosa*) can also be coppiced;
- v. Bigger spaces. Depending on the shape and size of the plot, as well as potential for shadows, these could be taller and/or have a wider spread e.g. oak, aspen (*populus tremula*), birch, silver birch, small-leaved lime. Alternatively a wildflower mix might be possible;
- vi. Specimen trees e.g. the centre of a roundabout or the equivalent – oak, rowan. The eastern-most point of FP149 (The Scothern) near its junction with the permissive footpath at the bridge would be ideal being at the end of an interesting tree and ditch line north of the path

Further reference: 'Trees in towns' –

http://www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_trees-in-the-townscape_november2012.pdf

6. Individual locations – strategic evaluation of three sites

In the preparation of this paper, three specific sites were considered:

a. Site A - prospective planning sites A3 and A4

These two fields are north of Deepdale Lane. The fields are divided by FP166 (The Heath) which has an excellent, colourful hedge on its west side. Without a full survey, the writer would be confident that the shelter and supply of berries would mean that there is a resident population of both birds and small mammals. There is a power line above the hedge.

-A4 is regularly cultivated. It has no distinguishing features;

- A3 has not been tilled in the writer's memory and remains rough grassland with its ridge and furrow system in evidence. There is a significant thicket on the northern side extending from the hedge.

Comments:

- i. from the ecological perspective it is important to maintain as much of the hedge adjacent to FP166 as possible although the continuity of the wildlife corridor will be broken with any new roadway. This is a strong justification for the development of a green lane to the north and west of A3 as part of the Nettleham Ring (3.a.i);
- ii. a 10m wide strip of planting on the western boundary of A3 is highly desirable;
- iii. the northern boundaries of A3 and A4 should be maintained as hedge with the thicket preserved for diversity and interest as part of a buffer of green space;
- iv. the idea of a 10m buffer of green space and footpath around the perimeter of A4 is sound. The path should meander a little among pockets of trees;
- v. a link between FP166 and Shaw Way is highly desirable for connectivity;
- vi. a woodland area at the east end of A4 is sound, but most of the trees would have to be suitable for a suburban environment rather than parkland because of the proximity of the housing. A wildflower meadow or maybe planting for butterflies could be considered;
- vii. the ridge and furrow will be lost with any development. This is unfortunate but unavoidable. The site might offer an archaeology club or detectorists some opportunities before the builders move in;
- viii. In the same spirit the name 'ridge and furrow' might be preserved in the name of the development as a whole, its roads or its new footpath

b. Site B - prospective planning sites D1, D2 and D3

These three adjacent sites are behind existing housing to the east of Scothern Road. The fields are divided by hedgerows with some significant trees, mostly mature ash, much hawthorn and currently dry ditches. The land slopes down towards the water treatment plant and the Beck. The three fields currently have a root crop, possibly sugar-beet

The elliptical uncultivated shape in the middle of D2 appears to be nothing unusual. The remnants of stone and brick in the ground conform with the suggestion that there might once have been a cottage here. From a modern drawing by Rex Russell from the 1778 tithe map, it would seem that the land was owned by either George Spencer or John Juitt. Neither man had other land in the village and so they might have chosen to live on this south facing slope in the middle of their property

Comments:

- i. the site of the 'cottage' is likely to be of minor interest only. However, it might offer an archaeology club or detectorists some opportunities for excavation before the builders move in;
- ii. the old hawthorn hedges do not compare well to the one on FP166 (The Heath) e.g. in thickness and berry-count. However, overall they provide a good line, but they are in need of some attention in places to fill the gaps. Perhaps some traditional hedge laying would be possible. However, this situation means that there is the potential to make an opening for a developer's road without damaging the line further and

- then reinforce the line elsewhere with appropriate trees – Section 5.b.v;
- iii. FP149 (The Scothern) starts at the Highfields / High Leas junction. It runs north-east along the north side of plots D2 and D3. The north edge of D2 has housing and individual fencing. There is little scope for change here.
However, the north edge of D3 has both FP149, a line of hedging and also a (currently) dry ditch. The latter might be a useful destination for surface water in any development, especially as it connects at the east end with another (currently) dry ditch which heads down the slope to the Beck;
 - iv. the hedge on the north side of D1 and D3 is similar to the one adjoining FP166. The section north of the footbridge is flanked by the permissive footpath which leads up to Scothern Road. It does need some attention but there is the basis of a decent wildlife corridor;
 - v. the central hedge separating D2 and D3 has gaps through which a road could be developed and then the hedging reinforced elsewhere with hawthorn, blackthorn, holly and some individual trees e.g. birch;
 - vi. the area by the footbridge between D1 and D3 is currently an untidy thicket which would be a good location for a small copse of something distinctive e.g. silver birch or a specimen tree such as an oak;
 - vii. most of the mature trees appear to be ash and do not seem to have any signs of *chalara fraxinea*;
 - viii. a new 5m buffer of planting including hedgerow, native shrubs and trees on the southern boundary is desirable
 - ix. the land slopes to the east towards the Beck. There is a strong case for some screening at the edge of any development but at the same time it is important to retain the panoramas from key points e.g. the bridge looking north and east;
 - x. the area within 25m of the Beck has potential to be a permanent green corridor, and perhaps with some rudimentary earthworks could become a wetland for water management
 - xi. future planning could and should create a new route from the junction of the permissive footpath and FP166 east-south-east down the existing hedge line to the water treatment works and then south-south-east to Sudbrooke Lane;

c. Site C - prospective planning sites: E1 and E2

These two adjacent sites are situated behind existing housing on Brookfield Avenue, Ridgeway and The Hawthorns. The two fields are divided by a hedgerow. The land slopes down towards the Beck. There are many parallels with Site B, hence some repetition.

Comments:

- i. There are no significant vegetation features apart from the north-south hedgerow from the Beck up to a point close to Ridgeway and The Hawthorns;
- ii. However, despite its apparent lack of significance the hedgerow is also a linear water feature and so has potential for enrichment with more hawthorn and blackthorn, and trees such as birch. The wildlife would follow. Indeed, with selective planting, there is potential to create a special area e.g. a butterfly garden;

- iii. The northern end of the hedgerow connects with the Beck. This confluence has potential to be developed as a wetland in those areas where arable farming is unlikely to be successful;
- iv. The hedgerow also has potential to provide the line of a new walking and cycling route from The Hawthorns and Ridgeway down to the Beck and any new riparian footpath. This corner of the village is currently rather isolated. Footpath connectivity could be enhanced in a number of ways;

7. Well-being, health and sustainable transport

The overall assessment is that there are plenty of opportunities to enrich the Nettleham landscape further for the overall well-being and health of its inhabitants, and also its wildlife. This can be achieved by providing an increased network of sustainable transport routes, new connectivity, enhanced woodland and additional points of interest to encourage residents to enjoy the fresh air and be more active

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