

Nettleton Closed Landfill  
Proposed Local Nature Reserve  
5 year Conservation and Visitor Management Plan  
2018-2023



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## BACKGROUND

### Location

Nettleton closed landfill site is located off Normanby Road to the south of the village of Nettleton, Lincolnshire – Grid reference TF109990. It extends to 8.5 ha.

### Ownership

The site is owned by Lincolnshire County Council and managed by Environmental Services. Due to its ex-landfill status both Waste Services and Countryside are involved with its management.

### Designations

The site has no formal designation, but is under consideration as a Local Wildlife Site and will hopefully become a Local Nature Reserve in due course. Nettleton closed landfill is located at the Northern end of the Lincolnshire Wolds Area of Outstanding Natural Beauty.

### Site History

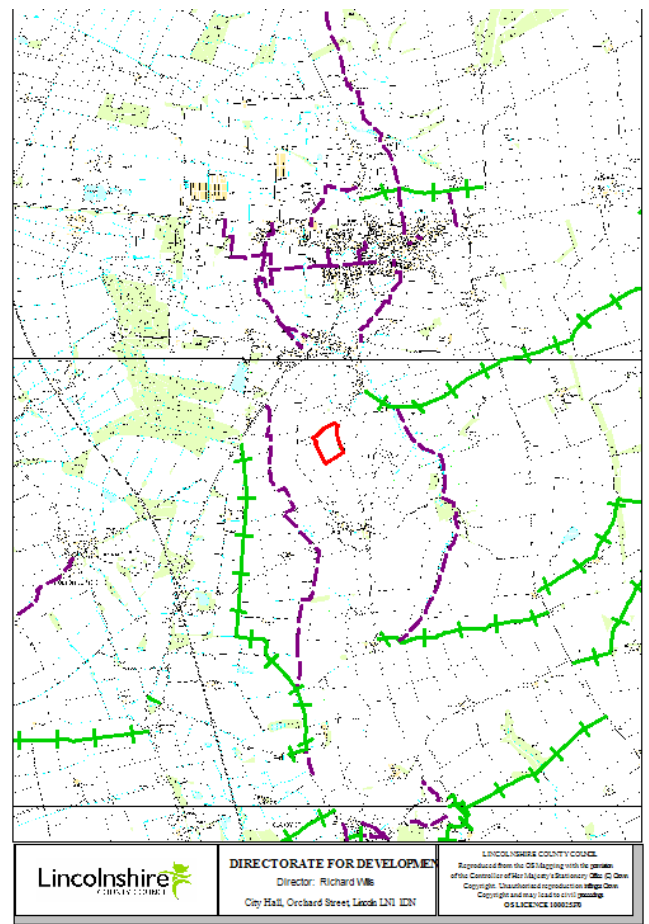
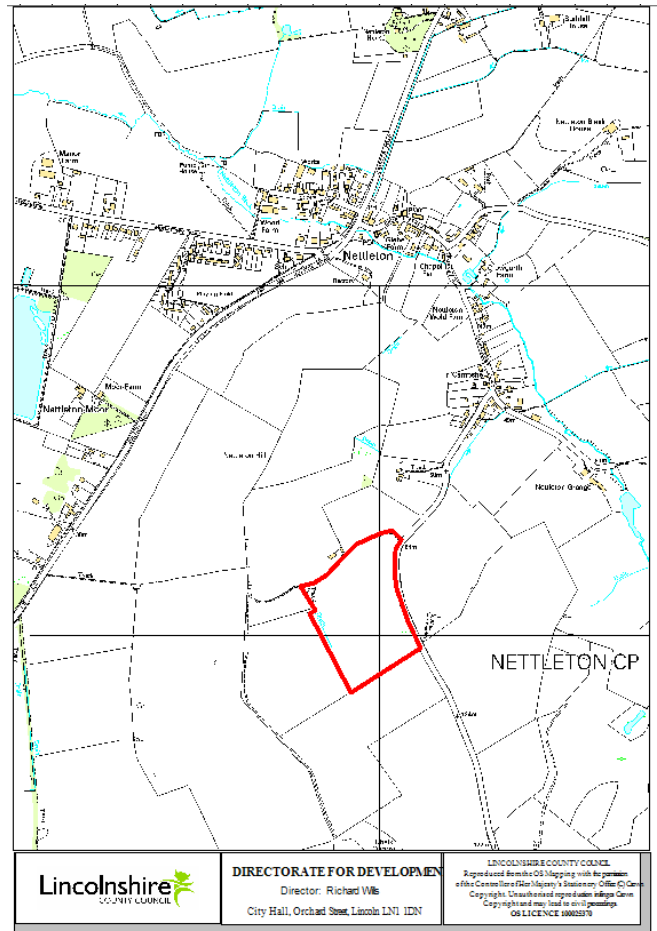
Like the surrounding land it would have once been mosaic of chalk and neutral grassland. The site was then quarried and municipal landfilling started in the 1940's (prior to the establishment of Lincolnshire County Council) and was completed in the early 1990's. Once landfilling was completed the site was capped off and allowed to naturally regenerate.

### Surrounding land use

Unusually for Lincolnshire the site lies in a predominantly grassland area, largely the result of steep gradients which are unsuitable for arable farming. The neighbouring land is grazed by both beef cattle and sheep. A tributary of the Nettleton Beck flows along the Northern boundary.

### Rights of way network

No public rights of way cross or join the site; however there was permissive access on neighbouring farmland for nearly 20 years through agri-environmental schemes. This terminated on 31 October 2017 but has been informal since. The Ramblers Car Park was constructed on this site in



2000 in conjunction with Nettleton Parish Council, to help alleviate the problem of walkers parking in the village. It was part funded by landfill tax credits.

## Waste

Lincolnshire County Council Waste Services have an ongoing interest in the site due to its ex landfill status and have risk assessed the site. There are several gas monitoring points and a shallow lagoon (approximately 40cm) all of which are extremely secure. The lagoon is used to catch site runoff which is monitored as it then flows into the Nettleton Brook.

## SITE DESCRIPTION

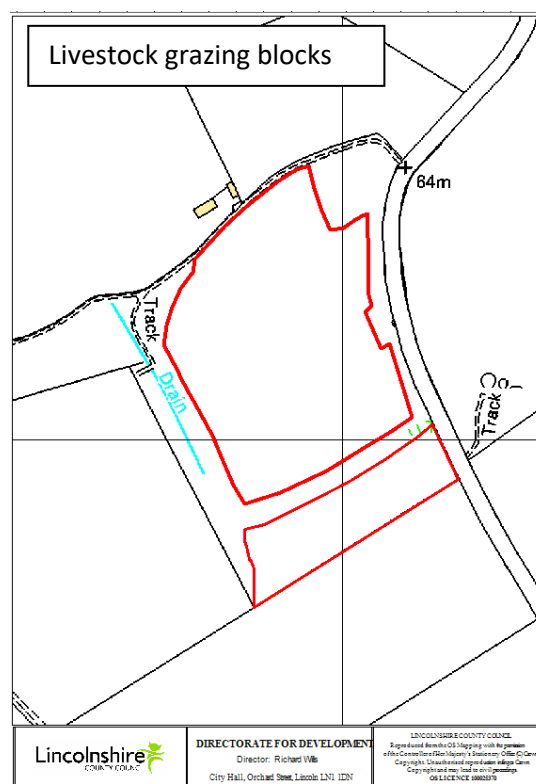
The bulk of area comprises species rich rough grassland with occasional wet flushes and seasonally wet ponds and ditches. The plant assemblage includes Yorkshire-fog, false oat grass, fescue species, crested dog's-tail, cock's-foot, perennial rye grass, creeping bent, tufted hair grass, hedge woundwort, hedge bedstraw, common spotted orchid, hairy sedge, black knapweed, silverweed, square stalked St John's wort, dock species, white clover, oxeye daisy, common vetch, black medick, creeping buttercup, rough hawkbit, common ragwort, colt's-foot, bird's-foot trefoil, meadow buttercup, lesser celandine, teasel, common centaury, lady's bedstraw, meadow vetchling, field horsetail, common sorrel, yellow oat grass, sweet vernal grass, bent species, red fescue, hogweed, cowslip, soft rush, bee orchid, ragged robin, compact rush, stitchwort species, common reed, bulrush and sedge species. The wet flushes, small pond and ditches support a flora which includes floating sweet grass, rush species, ragged robin, common reed, marsh thistle, tufted hair grass, false fox sedge and creeping buttercup.

Areas of the site are very species rich with large swathes of cowslips and orchids at certain times of year; however areas towards the edges of the site are dominated by tall ruderals and some scrub invasion, including hawthorn, elder, bramble and blackthorn.

In January 2015 the site was divided into two and stock fenced. This was to enable livestock grazing as an ecological management tool and to reduce pressure caused by walkers, especially by dogs on ground nesting birds. The southern botanically less interesting block is grazed quite hard by a neighbour's hebridean sheep. The northern higher quality grassland will be grazed between late August and November by the neighbouring farms beef cattle at a relatively low stocking density.

There are small areas of woodland to the north-west and north-east corners the latter contains a small security fenced lagoon. These areas are comprised of oak, birch, sycamore, hawthorn and elder over ivy, herb robert, wood avens, thistle species, cleavers and common nettle. Dense bramble grows along the northern end of the eastern boundary.

At the southern end of the site there is an incline with a species poor assemblage along the southern and eastern edges of the site comprising predominantly common nettle, common reed, hogweed and rosebay willowherb.



A footpath follows a circular route within the site which is accessed from a car park on the eastern edge adjacent to Normanby Road.



### Protected species

No bats or signs of use by bats have recorded on the site and all trees were considered too young to offer potential for roosting bats. A bat survey in 2013 recorded common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, a myotis species *Myotis sp* (probably whiskered/Brandt's) and noctule *Nyctalus noctula* passing over and feeding on the site. The majority of activity was recorded along the western side of the site.

In 2013 a badger set comprising three disused holes is located along the northern end of the eastern boundary and one latrine was noted at the northern end of the site close to the boundary. In addition four disused holes are located at the southern end of the site along the boundary hedgerow. There are numerous large mammal runs and snuffle holes throughout the site.

The site has potential to support the common reptile species including common lizard, slow worm and grass snake due to the presence of rough grassland, refugia and shelter opportunities.

## Common bird species

A typical assemblage of common birds has been recorded on or adjacent to the site during general walkover surveys and also during an early morning bird survey undertaken on the 30th April 2013 these are listed below:

red-legged partridge	<i>Alectoris rufa</i>
buzzard	<i>Buteo buteo</i>
kestrel	<i>Falco tinnunculus</i>
moorhen	<i>Gallinula chloropus</i>
woodpigeon	<i>Columba palumbus</i>
barn owl	<i>Tyto alba</i>
skylark	<i>Alauda arvensis</i>
meadow pipit	<i>Anthus pratensis</i>
wren	<i>Troglodytes troglodytes</i>
robin	<i>Erithacus rubecula</i>
blackbird	<i>Turdus merula</i>
blackcap	<i>Sylvia atricapilla</i>
common whitethroat	<i>Sylvia communis</i>
willow warbler	<i>Phylloscopus trochilus</i>
blue tit	<i>Cyanistes caeruleus</i>
rook	<i>Corvus frugilegus</i>
chaffinch	<i>Fringilla coelebs</i>
yellowhammer	<i>Emberiza citrinella</i>
reed bunting	<i>Emberiza schoeniclus</i>

The hedges, scrub and boundary trees on the site are likely to be used by the following birds for breeding: common whitethroat, blackcap, blue tit, robin, blackbird, wren and yellowhammer whilst the grassland and reedbeds are likely to be used by skylark, meadow pipit and reed bunting. Three of the species noted are National BAP species (skylark, yellowhammer and reed bunting).

## Invertebrate assemblages

A number of common and widespread invertebrate species were recorded on the site. These are listed below:

kentish snail	<i>Monacha cantiana</i>
common garden snail	<i>Cornu aspersum</i>
brown lipped snail	<i>Cepaea nemoralis</i>
copse snail	<i>Arianta arbustorum</i>
wrinkled snail	<i>Candidula intersecta</i>
strawberry snail	<i>Trochulus striolatus</i>
black slug	<i>Arion ater</i>
common carder bee	<i>Bombus pascuorum</i>
red tailed bumblebee	<i>Bombus lapidarius</i>
forest cuckoo bumblebee	<i>Bombus sylvestris</i>
tawny mining bee	<i>Andrena fulva</i>
cinnabar moth	
red-breasted carrion beetle	<i>Oiceoptoma thoracicum</i>

None of the above species are nationally rare; however such an assemblage has local value and significance and future management must aim to maintain, and if possible increase, the invertebrate assemblage on site.



## Habitats and plant species

The site meets the criteria to qualify as a local wildlife site for both neutral (NG1) and calcareous grassland (CG1) and is currently under consideration for this status. For both categories, eight scoring species are required. The area supports fifteen species for NG1 and ten species for CG1. The scoring species are listed below (note: some species occur in both categories).

- meadow foxtail
- sweet vernal grass
- common (or black) knapweed
- crested dog's tail
- common spotted orchid
- cowslip
- lady's bedstraw
- meadow vetchling
- bird's foot trefoil
- ox-eye daisy
- ragged robin
- great bird's foot trefoil
- meadow fescue
- yellow oat grass
- bee orchid
- rough hawkbit
- perforate St. Johns wort
- common centaury

## Public access and interpretation

In 2014 the Ramblers car park was refurbished with a new surface, timber edging and a post and rail fence and an oak bench installed with good view overlooking the site. At the same time a circular path was created and way marked. A visitor information board has been produced by the Lincolnshire Wolds Countryside Service and Down Your Wold community heritage project.

## Importance of neutral and chalk grassland

Up until the Second World War, traditional grazing practices ensured that grasslands were grazed in a low intensity, wildlife friendly manner, resulting in habitats which were botanically very diverse – as many as 40 plant species per square metre could build up in the sward over many years or even decades. From the 1940s onwards, more efficient farming techniques such as better drainage and chemical inputs, together with farming subsidies, all contributed to change the way our grasslands were used: many areas were either 'improved', ploughed up for crops, or left ungrazed and gradually taken over by scrub and woodland. Other areas were lost to development, quarrying, road construction and tree planting. Since then, traditionally managed wildflower rich grasslands such as neutral, acid and chalk grasslands have declined nationally by 97%; their disappearance is thought to have led to the drastic decline of many species including bumblebees, butterflies, farmland birds and wildflowers. Grassland falls into three categories:

- improved grassland (contains very few species and is generally dominated by rye-grass and white clover, buttercups, dandelions and cock's-foot)
- semi-improved grassland (contains a wider array of species, generally between 8 to 15 per square metre)
- species-rich grassland contains over 15 species per square metre

## **SITE MANAGEMENT**

### **Grassland Management**

To ensure long-term sustainability, neutral and chalk grassland must be managed. Without it a species poor sward dominated by coarse grasses will develop and left unchecked natural succession will occur with a shift towards scrub and woodland. Grazing with livestock is the preferred management technique aiming to produce a mosaic of grassland of varying lengths and small patches (no more than 25%) of scrub. Livestock have a random effect on the growth and distribution of plant species. Different types of grazing animals are selective in the plants that they eat and can be used to create the mosaic. Cattle consume coarser herbage and trample more heavily than sheep. The trampled patches create gaps for new plants to establish. As grazing has only recently started exact stocking density will vary from year to year to respond to the needs of the site.

The aim is to ecologically maintain and ideally improve the existing species rich grassland. To achieve this, the northern block will be grazed by cattle from September to November achieving an average sward height in January of 5cm. The southern block which comprises of much coarser vegetation will be grazed hard by sheep initially and as the grassland develops reduced to September to February with a 5cm sward height.

Care must be taken to ensure that scrub is retained but does not dominate, that no excessive poaching occurs or problem weeds take over.

### **Hedges and woodland**

If funds allow the boundary hedge will be coppiced in rotation and a new mix native species hedge planted along the western side. There is no planned work in the woodland area beyond ensure there is access for walkers.

### **Visitor management and health and safety**

The car park will be signed and a visitor information board produced that explains about the area, who manages it and why. The site will also be promoted on the internet and subject to funding will have a visitor leaflet.

A 2m wide path will be cut monthly between April and October around the walker's route and the car park litter picked.

Annual site safety assessment and monthly safety checks will be undertaken and appropriate action taken.

At present there are no plans to create byelaws for the site as there is no need, however should specific issues arise this will be reviewed.

### **Barn owls**

A pair of barn owl boxes on poles will be installed during September 2015 along the western boundary which is rough un-grazed grassland. They will be purchased from the Hawk and owl trust and follow their prescribed siting guidelines. It is intended that one of the bird clubs will monitor the boxes.

## **COST AND ANNUAL WORK PROGRAMME**



The vast majority of capital works will have been completed by the time this plan becomes active and the ongoing spend is likely to be maintenance and monitoring.

#### Annual programme of works

	Timing	Undertaken by	Cost
Undertake annual site risk assessment implement recommendations	January	Environment and Community Projects Officer	1/2 day - staff time
Implement recommendations of annual site risk assessment	January	Environment and Community Projects Officer	1/2 day - staff time
Undertake monthly site safety checks and address any issues	Monthly	Environment and Community Projects Officer	12 x 30 mins - staff time
Mow circular path and car park verges and litter pick car park	April, May, June, July, August, September and October.	Contractor or Environment and Community Projects Officer	7 x £80 – contractor 7 x 2 hrs - staff time
Cut path to monitoring station next to pond	May, July and September	Contractor or Environment and Community Projects Officer	3 x £10 – contractor 3 x 15 mins - Staff time
Issue grazing licences	June	Environment and Community Projects Officer	30 mins staff time
Monitor grassland condition prior to and during grazing	July – November	Environment and Community Projects Officer	30 mins staff time
Ongoing ecological assessment of grassland	Resurvey every 3 years		£400 - Contractor

*N.B - Many of the items above can be undertaken during the same visit to reduce cost.*