

Old Shire Lane Management Plan 2010 - 2015

Produced by Epping Forest Countrycare



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1.0 General Information

1.1 Location

Name: Old Shire Lane **Area:** 0.8ha
Grid reference: TL 404 000 **County:** Essex
District: Epping Forest District **Parish:** Waltham Abbey

Local Planning Authority: Epping Forest District Council.

Conservation Status: None

Nature of Legal Interest: The land is owned by Epping Forest District Council

1.2 Site Description

The site lies to the east of Waltham Abbey at the junction of Old Shire Lane and Honey Lane opposite The Marriot Hotel. It is adjacent on two sides to busy roads and junction 26 of the M25 is 200 yards from the southern boundary. The eastern boundary abuts pasture, grazed by horses.

The site encompasses three main habitats within the site, roughly triangular in shape it contains a mixture of drilled grassland, a plantation of native trees and encroaching bramble and a linear pond to the north of the main gate. There is a main tributary running the length of the site in a south to north direction.

1.3 Owners

Contacts: Epping Forest District Council – Epping Forest Countrycare
Directorate of Planning and Economic Development
Civic Offices
High Street
Epping
CM16 4BZ

Tel: 01992 788203

1.4 Rights of Access

There is unrestricted public access over the whole site. There is a public footpath that crosses the northern end of the site leading from the metalled road down a set of steps and across a land bridge. (PHOTO)

A field gate and a kissing gate are located halfway along the western boundary to encourage access from Waltham Abbey and usage from the adjacent hotel.

1.5 Boundaries

The eastern boundary of the site is demarcated by the stream and drainage ditch which borders onto an overgrown elm (*Ulmus procera*) hedge and open pasture used mainly for grazing horses. A planted hawthorn (*Crataegus monogyna*) hedge between 10-20 years old demarcates the southern boundary. All boundaries have had recent tree planting. Along the western side is a bund that prevents unwanted access onto the site and reduces the problem of fly tipping, but does not totally eradicate it. The northern edge has rubble dumping. During winter 2008 and 2009 hedgelaying has been undertaken along the western boundary.

1.6 Map and Photographic Coverage

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2.0 Environmental Information

2.1 Physical

2.1.1 Climate

Temperature: The average annual temperature for southeast Essex is 9.5-11°C, with slightly lower averages in rural and suburban areas. Mean daily maximum temperatures are in July.

Wind Speed and Direction: The predominant wind direction is from the southwest, but north east winds are frequent in spring when anticyclonic conditions take hold over the UK or Europe.

Sunshine: Average annual sunshine hours for this region are between 1370 and 1600 hours.

Rainfall: The average rainfall for this area is 820mm per year.

2.1.2 Geology, Soils & Hydrology

The site is on a cap of chalky boulder clay overlying the extensive London clay of the area to the southwest. The boulder clay is comparatively nutrient rich. The site is uneven and slopes and drains northwards. It lies at 33m above sea level, and remains well drained through out all seasons. The stream running along the length of the site is main tributary.

2.2 Biological

2.2.1 Flora

2.2.1.1 Grassland

The grassland was created from a wild flower seed mix in 2001. An estimated 50% has taken, but weeds are still a major concern, due to high numbers of rabbits and a limited cutting regime. On the interior to the eastern ditch at the northern end is a ground layer of wild celery (*Apium graveolens*), red campion (*Silene dioica*), greater stitchwort (*Stellaria holostea*), hogweed (*Heracleum sphondylium*) and wild geranium (*Geranium spp*). There is occasional scrub, brambles (*Rubus fruticosus*) and nettles (*Urtica dioica*), sometimes 1.5m tall along the eastern side of the site and the ground layer among the recently planted copses is knee-high nettle. Nettles also surround the central pond, with occasional thistles (*Cirsium spp*), dock (*Rumex spp*), cow parsley (*Anthriscus sylvestris*) and ground ivy (*Glechoma hederacea*). In the southwest corner there is extensive scrub, bramble and low nettles. The southeast corner has a ground layer of cowslip (*Primula veris*), ox-eye daisy (*Chrysanthemum leucanthemum*), wild carrot (*Daucus caota*), groundsel (*Senecio vulgaris*) and plantain (*Plantago spp*). Near the entrance there is an area of longer grass on the west consisting cow parsley (*Anthriscus sylvestris*) and comfrey (*Symphytum officinale*).

2.2.1.2 Hedgerows

On the eastern boundary the hedge consists semi-mature tall trees of elm (*Ulmus procera*) and some willow (*Salix fragilis*) running along the eastern side of the ditch. The southern boundary hedge was planted in 2001 and laid in 2008. The western edge is newly planted natives (mainly hawthorn) with occasional patches of semi-mature trees. The northern edge is a line of recently planted native trees adjacent to an unused grassy scrubland. The only semi-mature trees on the interior of the site are four ashes (*Fraxinus excelsior*) and a wild cherry (*Prunus avium*), all in the southern half. The hedges connect to adjacent hedgerows and complete wildlife corridors in to

the wider countryside. The site is unique in the way it connects an urban space with the wider countryside.

2.2.1.3 Mixed Native Plantation

The area planted in 2001 forms a dense area of mainly understorey native tree species. There is a ground layer of nettles amongst the trees. The trees guards are coming towards the end of their lives. Many of the trees in this area are showing signs of rabbit and deer damage.



2.2.1.4 Stream

The eastern stream flows from south to north. At the northern end it is quite visible but becomes overgrown with willow and scrub towards the south. The southern end ditch is a tributary to the stream. Where they meet the banks are canalised.

2.2.1.5 Pond

The western pond is part of a “Sustainable Urban Drainage Scheme” installed when the Marriot Hotel and road was built. It takes water from road run off and from the car park of the hotel. At the north end the aquatic vegetation is quite dense with sedges (*Carex spp*) and duckweed (*Lemna spp*). Further south is less dense with occasional water plantain (*Alisma plantago-aquatica*). The eastern bank is a shallow slope, dry and sparsely vegetated providing a habitat for amphibians and invertebrates, terrestrial and water dwellers alike. A present/ absent list for fresh water invertebrates would be ideally carried out over several summer months.



2.2.2 Fauna

In 2001 five species of dragonfly (*odonata sp.*) and a grass snake (*Natrix natrix*) were recorded on the site. There is a large population of rabbits on the site and surrounding farmland. The site offers open glades and successional habitat ideal for moths, butterflies and other invertebrates. A fauna survey would be advisable. Fallow deer have also been noted on site particularly during hard winters.

3.0 Cultural Information

3.1 History and Land Use

Epping Forest District Council acquired the land in 1991, under a Section 106 Agreement relating to the development of the then Swallow Hotel. The initial landscaping planting plan drawn up by the developers for the amenity land associated with the hotel failed due to the lack of an aftercare plan being implemented. This resulted in the survival of half a dozen trees and a large area of derelict waste land. The site was then unmanaged until the input of Countrycare in 2000.

3.2 Public Interest

The site is used for recreation, the path along the northern edge extends beyond to the east, but otherwise the site is enclosed.

3.3 Past Management

Up until 2000, management of the site had been unsuccessful. Since then Countrycare and volunteers have been managing the site with the aim of creating a nature reserve and an area for informal recreation.

In 2001 800 native trees were planted creating the copses and western hedge. A pond was excavated, scrub cut back and wildflower meadow area prepared.

In 2002 the area was sprayed with herbicide a native wildflower seed mix was planted. Since then management has consisted of regular grass cutting, clearing around trees, hedge management, willow coppicing and bramble removal. In 2004 a compost bin was built and in 2007 a field gate was installed and steps at the southern end.

Diaries Entries from 2000 – 2010

Date of Task	Description of task
2001	
01/03/2001	Rotovating and planting 37 trees
22/03/2001	Tree planting – 150 trees
29/03/2001	206 trees planted
19/07/2001	Put in kissing gate, pond construction, raked off hay, weeded hedgerow, cut ¾ of thistle
22/07/2001	Installed pond liner
2002	
22/01/2002	Clearing weeds and mulching around trees in large copse
28/01/2002	Tree planting and mulching and path around gate.
16/07/2002	Weeding around trees/hedge plannted in 2001
2003	
02/03/2003	Hedge planting
04/03/2003	Hedge planting
03/04/2003	Mulching small copse and part of large copse area and hedge and tree planting
2004	
29/04/2004	Built compost bin, cut wildflower area and planted 20 trees.
09/09/2004	Hay cut
15/11/2004	Hedgelaying
25/11/2004	Cut 1/3 grassland, put wildflower seed mix around pond, weeded trees and removed guards, coppiced willow in ditch, laid approx 35m of hedge
2005	
23/04/2005	Strimmed banks
07/05/2005	Tree weeding and grass cutting
13/05/2005	Mending pond and raking cut grass
20/10/2005	Removed willow from ditch, removed reed mace from pond, constructed hibernaculum, planted 30 trees in gaps in hedge, weeded hedge.
2006	
20/02/2006	Hedgelaying
20/07/2006	Repaired pond, cut along hedge and littler pick
07/12/2006	Cleared willow along drainage ditch and strimmed around trees.
2007	
14/03/2007	Spread grass seed mix . Widened water ditch and bramble clearance.
31/05/2007	Cut northern half of site. Soil put around pond.
2008	
19/02/2008	Clearing bridge
03/03/2008	Removed concrete by land bridge and replaced. Then covered with soil.
23/06/2008	Cut and rake off grass around land bridge.

30/06/2008	Cutting
07/10/2008	Cutting and removing grass and filled in pond
15/10/2008	Clearing pond liner
2009	
23/01/2009	Hedgelaying approx. 38m
27/02/2009	Ferreting. 6 rabbits killed
23/04/2009	Laid granit on bridge, repositioned kissing gate , cut around kissing gate and cut and raked meadow area.
29/05/2009	Cut and raked paths and cut nettles
30/05/2009	Raked nettles and thistles
12/06/2009	Cut northern section of meadow area
13/06/2009	Raked northern section of meadow area
23/06/2009	Odd jobs with youth offenders
04/07/2009	Hedgelaying and bramble clearance adjacent to roundabout.
2010	
15/03/2010	Hedgelaying – section near compost bin
22/03/2010	Cut hedge
24/03/2010	Burned brash
14/04/2010	Litter pick
08/05/2010	Bramble clearance and moving mulch pile beside pond.

4.0 Threats to the Site

Rubbish disposal in the form of fly tipping is a regular occurrence on the boundary of the site. This has also occurred in the meadow area, but is now discouraged by a soil bund and a locked secure field gate.

There is evidence of recreational use by litter left on site and dog excrement.



There is also a high number of browsing rabbits on the site, and in surrounding fields. The rabbits have damaged young trees and even removed lower regrowth on recently laid hedges. Fallow deer have also been noted holding up in the scrubland areas, although in small numbers, could pose a threat with new coppice growth. The rabbits graze fescue grass species, leaving less favourable species such as nettle and hemlock, promoting the nutrient rich species, thus shading out the smaller herb species.

The grassland areas have invasive species present, such as hemlock and giant hogweed, appropriate cutting regimes and rabbit control will be needed to encourage the fescue grasses and wildflowers.

5.0 Aims and Objectives

5.1 Aims

The main aim is to create a nature reserve and an area for informal recreation.

5.1.1 Maintain and enhance the nature conservation value of Old Shire Lane

5.1.2 Maintain as a public open space for enjoyment of the community and for recreational use

5.1.3. Promote and use Old Shire Lane for education/guided walks

5.2 Objectives

5.2.1 Maintain and enhance the biodiversity of the grassland

5.2.2 Control invasion of scrub into grassland areas

5.2.3 Maintain and enhance biodiversity of hedgerows

5.2.4 Maintain and enhance biodiversity of copses

5.2.5 Maintain and enhance biodiversity of stream and central and western ponds

5.2.6 Maintain and enhance populations of notable species

5.2.7 Promote the educational value of Old Shire Lane

5.2.8 Regular survey and monitoring

6.0 Management Objectives

6.1 Grassland

The grassland will be managed by cutting and collection as this is ideally suited to maintaining the wild flower areas. Cutting annually mid-June to late-July would select early flowering plants. Late flowering plants can be selectively avoided and mowed late August or early September. Arisings should be removed to the compost area, as they



would otherwise kill underlying vegetation and form a mulch layer, discouraging fescue grasses and wildflowers. As the nutrients are so high in the main of the southern grassland, these areas would benefit from having any arisings cut and removed on at least two or three occasions during the summer months for at least the first three to four years. This should be carried out avoiding species rich areas of

the grassland and concentration should be sort in areas of nettles and thistles.

The main desire lines, especially in the northern section through the reserve will be cut to remove vegetation which may discourage access.

6.2 Hedgerows

Monitor success of hedge planting and gap-up when necessary. Remove and replace any unsuccessful whips, making sure individual trees are guarded and staked against rabbits.

During the life span of this plan all boundary hedgerows should be laid. After two to three years the tops of the hedges should be flailed to promote thickening at the base. Particular attention should be given to more vigorous species such as field maple, so that species diversity is kept to a maximum.

Remove encroaching bramble and weeds of newly planted hedgerows, not allowing bramble to compete with the hedge until it is established. Once established the hedge species, mixed with brambles a safe thicket for nesting birds.

6.3 Mixed Native Plantation

Scrub is a much underrated habitat for song birds and invertebrates alike. A subtle edge to the plantation should be achieved by coppicing the trees adjacent to the grassland and allowing to re-establish. This will create a transitional habitat between open grassland and scrub which is ideal for a variety of fauna species. Scrub species that may encroach should be removed from the main open grassland areas.

The plantation also has little age diversity, which is needed to create a varied stand type benefiting a greater variety of wildlife. This can be achieved by either thinning by a third across the whole plantation or creating small open areas within the copse. As there is little cover in the immediate area, the recommended prescription would be the later. This would include coppicing 1 in every 4 trees allowing regeneration and increased canopy width, discouraging trees to compete for light and lose lower limbs, which are all important for invertebrates and creating niche habitats. Allowing more light to the ground would also in the short term increase ground flora. This thinning technique could be applied, monitored and increased depending on overall effects. Logs can be stacked, but brash can be put over cut stumps to discourage browsing.

The main threat to this management is browsing by rabbits and deer. This will result in any new regeneration being grazed off and only allowing high canopy to develop. There will be little new field layer, including death of newly coppiced trees and any woody up growth. The intense grazing of fescue grasses will also promote invasive herbaceous species.

Some grazing on this site would be a healthy balance and add to the sites diversity, and in some cases can be used as a management tool. However the intensity of particularly rabbit grazing on Old Shire Lane will need to be managed. 'Crop protection' is paramount for the future of this sites biodiversity and would be evidence of applied countryside management techniques for EFDC.

Remove guards and stakes once the above has been applied.

6.4 Stream



Monitor and remove dead elms that may fall in to main tributary running south to north. Leave elms on the adjacent bank to regenerate, decline and decay. This gives a contrasting habitat for the site and promotes arboreal dead wood species and creates an area that cannot be accessed easily.

Coppice small sections of willow (2 to 3 stools) along bank every other year. Assess vulnerability of bank if trees were blown over, creating erosion during flash floods. A linear stream should be managed above conservation benefit. Liaise with EFDC land drainage if issues do arise with bank erosion or pinch points. Any large logs that are removed or felled, can be stacked in the plantation, away from culverts or areas that could easily block the flow of the stream.

6.5 Pond

This pond has existed as a ditch in most of the sites recent history; however it has now been widened and creates a swollen pond, which holds water throughout the seasons. The northern section of the pond has a bed of reed mace. 50% of the reed is removed every second to third year by mechanical digger operated by contractors.

The species rich grassland at the front of pond is cut and collected annually. Pyramid orchids (*Anacamptis pyramidalis*) have been noted on the western bank of the pond. This area is to be kept clear of encroaching bramble and species of shading potential. Rye grass species could be removed from this area by the process of soil stripping. Removal of 5cm of turf, reducing competition and promoting orchid species.

EFDC Land Drainage to clear inlets of sediment build up every other year. Countrycare to undertake visual checks and removed any immediate blockages.

There are no records of fresh water invertebrates within the pond. It would be useful to have at least a presents and absence list of species for ongoing records. This may also indicate the effects of surrounding management on pond species.

Investigate and allocate funding for the creation of a new pond, using the stream as a water source. The pond is to be located between plantations in a species poor section of grassland in the southern part of the site. The pond will consist of an inlet and outlet in to the adjacent stream. The plantation will offer an ideal habitat for amphibians. The pond will have steeper banks holding in the water from the stream and a gradual gradient in to the main of the site. This area will promote emergent vegetation, ideal for a variety of fresh water invertebrates and amphibians.

6.6 Litter clearance

Regularly remove litter and fly tipping. Continue regular checks on levels of vandalism and litter. Report to waste disposal department and local Community Support Officers.

6.7 Interpretation boards

Clear sub-soil mound away from main entrance and erect interpretation board.

Create an interpretation panel that gives a broad outline of site management and a few species noted on site. The panel should promote the site to the user, raise awareness of its wildlife value and reduce misuse of the site.

6.8 Fauna

Control rabbit populations by applying the EFDC rabbit control policy. The outlining method used would be to use ferrets and nets over warren holes. The process involves sending ferrets to ground, flushing the rabbits in to nets. The rabbits are then dispatched humanly. Rabbit numbers will need to be reduced on this site, at least in the short term to allow grasslands to recover and invasive species to be controlled.

Monitor deer damage and record effects during the life of this management plan.

Carry out a full survey of fauna species and produce species list to be added to plan and appendices.

6.9 Education

The site has potential to be used as an educational resource. It can be used to promote the work that Countrycare carries out. Organise two field trips with local schools or working party projects.

6.10 Ecological survey

Through the process of prescribing management for Old Shire Lane, it would appear there are few records of any ecological surveys on this site. The plan will need a concise list of species, which will need to be referred to when undertaking any drastic management changes on site. It is also important that photographic records are kept for the continued consistent management of the site.

6.11 Recreation Users

The recreational usage is constantly improving on this site, with interpretation panels, improved access and general public awareness.

To improve and increase usage of this site for local residents in Waltham Abbey Countrycare propose to improve access to this site

- a) Install a hardened area around main gateway, leading to a short hardened path and a area with benches
- b) Install a drop kerb at the main entrance for disabled access and improved access for maintenance.
- c) Improve interpretation and promotion of the sites wildlife value.

7 Operational Objectives

7.1 Grassland

Year	Project	Work schedule	Responsibility	Notes
Annually	Mowing for early flowering species	May - July	Countrycare/ Contractors	
Annually	Mowing for late flowering species	August- September	Countrycare/ Contractors	
Annually	Mowing for desire lines/ pathways	May - September	Countrycare	
2011/12	Soil stripping	April/ May	Countrycare	
Annually	Monitor/ Control invasive species	April/ September	Countrycare	

7.2 Hedgerows

Year	Project	Work schedule	Responsibility	Notes
Annually	Weed around trees & remove competing bramble	July/ August	Countrycare	Conitinue until hedge established.
Annually	Coppice willow	October- February	Countrycare	On rotation
Annually	Tree planting if necessary	October-March	Countrycare	Occasional gaps
2011, 2013, 2015	Flail tops of hedge.	November - February	Countrycare	No more than 50 metres at any one time.
Annually	Lay boundary hedges	October - February	Epping Hedgelaying Group	

7.3 Mixed Native Plantation

Year	Project	Work schedule	Responsibility	Notes
Annually	Weed around trees	May-August	Countrycare	
2011, 2013, 2015	Thinning - taking out every fourth tree	October - March	Countrycare	
2010, 2012, 2014	Coppicing along plantation boundary to grassland	October - March	Countrycare	
Annually	Control rabbit population using ferrets and netting techniques.	November - February	Countrycare/ Volunteer	EFDC Rabbit control policy to be followed
2011	Remove guards and stakes after crop protection has been implemented	February	Countrycare	

7.4 Stream

Year	Project	Work schedule	Responsibility	Notes
Annually	2 to 3 stools per year. Coppice willow	October-February	Countrycare	Monitor effect on stream banks
Annually	Remove any lodged elm fallen in to stream.	October - February	Countrycare	
Annually	Keep access open along stream banks	October - February	Countrycare	

7.5 Ponds

Year	Project	Work schedule	Responsibility	Notes
2011, 2013, 2015	Clear inlets	September	Countrycare/ Contractors	
2011, 2014	Clear reedbed from northern pond	September - March	Land drainage/ Contractors	
2011, 2015	Introduce emergent vegetation to pond area.	September	Countrycare	
2011	Pond creation Project	November	Countrycare/ Contractor	

7.6 Litter clearance

Year	Project	Work schedule	Responsibility	Notes
Annually	Remove litter/ fly tipping	All season	Countrycare	Access to rubbish may depend on location. Maybe more visible during winter months.

7.7 Interpretation boards/ Access

Year	Project	Work schedule	Responsibility	Notes
2010	Erect interpretation board	Any	Countrycare	Soil mound to be removed before erection
2010/11	Access Improvement Project	July - September	Countrycare	To include drop kerb and hardened area with benches.

7.8 Fauna

Year	Project	Work schedule	Responsibility	Notes
2012	Undertake full faunal survey	Summer	Countrycare	
Annually	Control rabbit population	November - February		

7.9 Education potential

Year	Project	Work schedule	Responsibility	Notes
Annually	7.10.1 Ecological Field trips	Any	Countrycare	2 per year

7.10 Ecological Survey

Year	Project	Work schedule	Responsibility	Notes
Annually	7.11.1 Full ecological survey to be undertaken. All findings to be recorded.	Summer	Countrycare	Update regularly
Annually	7.11.2 Take regular photographic evidence of works and habitat change.	Any	Countrycare	At least yearly.

Appendix 1: Old Shire Lane – O/S Location (TL 404 000)



Old Shire Lane

Appendix 2 : Old Shire Lane – Aerial View 2007 (copyright EFDC)



Old Shire Lane

Appendix 3: Present state of Management



Appendix 4 Management Prescriptions

