Nazeing Triangle
Local Nature Reserve

Management Plan

2008 – 2013

Compiled by Andrew Vaughan

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1.0 General Information

1.1 Location

Name: Nazeing Triangle LNR
Area: 0.6 ha
Grid Reference: TL 414 065
Warden: Epping Forest Countrycare
County: Essex
District: Epping Forest
Parish: Nazeing
Local Planning Authority: Epping Forest District Council

Conservation Status: Statutory Local Nature Reserve (14/06/2001), Essex Wildlife Trust, Wildlife Site (M5) in Epping Forest District Council Local Plan January 1998.

Nature of legal interest: Nazeing Parish Council owns the site freehold. Managed in partnership with Epping Forest District Council under section 39 of The Wildlife and Countryside Act 1981.

1.2 Site Description

The site is roughly triangular in shape and is enclosed by a hedge consisting mainly of Hawthorn (*Crataegus monogyna*). The south-eastern corner is mainly dry consisting of neutral grassland. The remainder of the site is predominantly wet and is dominated by Common Reedmace (*Typha latifolia*), soft rush (*Juncus effuses*) and Great Willowherb (*Epilobium hirsutum*). Several Grey Willows *(Salix cinerea*) of varying ages also exist in this area.

The main features of the site are its two medium size ponds. The first in the centre of the triangle is relatively shallow, and subject to fluctuating water levels. Levels may vary from completely drying out in hot summers (2003) to a maximum of 1½ metres in wet winters. There is a large amount of emergent vegetation around its perimeter, mainly consisting of Common Reedmace and Soft Rush. Slightly more unusual species include Creeping Jenny (*Lysimachia nummularia*), Lady's Smock (*Cardine pratenis*) and Gipsywort (*Lycopus europaeus*). However the site is probably most valuable for its population of amphibians, reptiles and associated niche habitats. The Great Crested Newt (*Triturus cristatus*), a Biodiversity Action Plan 'Flagship species' is present in this pond in large numbers along with the Smooth Newt (*Triturus vulgaris*) and Grass Snakes (*Natrix natrix*).

A second pond exists in the southwest corner of the triangle. From map evidence it is apparent that this pond has existed for at least 230 years. This pond is of a greater depth and holds water all year-round. It is surrounded by mature vegetation (mainly willow) and receives very little light. Both ponds provide very different habitats and it is important to maintain them as such i.e. one in full sun and the other in deep shade.

There are a few mature/semi-mature trees found on the site, those most notable being a large White Willow (*Salix alba*) on the western boundary, a Grey Willow (Salix cinerea) on the eastern boundary, and a horse chestnut in the south-east corner. There is also an area of mature Hawthorn (*Crataegus monogyna*) coppice stools located on the eastern boundary.

The site is named on past maps as 'School Green' or ‘Church Green’ with only the pond in the south-west corner existing. The area now has a higher water table and undergoes prolonged saturation.

1.3 Owners

Contacts: Paul Hewitt - Countryside Manager
Epping Forest Countrycare
c/o Planning Services
Civic Offices, High Street,
Epping,
Essex, CM16 4BZ
(01992) 788 203
phewitt@eppingforestdc.gov.uk www.eppingforestdc.gov.uk

Chairman
Nazeing Parish Council
Greenleaves
Hoe Lane
Nazeing
Essex
EN9 2RG

1.4 Rights of Access

There is free public access over the whole site. The site is accessed via a gate and hardened pathway, which in turn leads to a boardwalk and viewing platform, over looking central pond area.

1.5 Boundaries

The site has roads running along all its sides, and is buffered by a dense mainly hawthorn hedge which is flailed by Nazeing Parish Council during the winter months.

1.6 Services

There are no services running through the site.

2.0 Environmental Information

2.1 Physical information

2.1.1 Topography

Nazeing Triangle is a low-lying area within the Nazeing catchment. Its highest point is 79.6m Above Ordnance Datum (AOD) on top of the embankment.

2.1.2 Climate

Temperature - The average annual temperature for southeast Essex varies between 9.5 and 11 degrees centigrade, with slightly lower averages found in rural and suburban areas. Mean daily maximum temperatures are experienced in July, with temperatures approaching 22.5 degrees centigrade for central London.

Wind Speed and Direction - The strongest winds that affect the region are associated with the passage of Atlantic depressions that cross or pass close to the UK. A prolonged period of low pressure during winter tends to be the time when the strongest winds are experienced. The predominant wind direction is from the southwest, however, north easterlies are frequent in spring when anticyclonic conditions take hold.

Sunshine - Sunshine hours in any one month reflect the changes in day length throughout the year. On average December is the month with the least and June has the most. Average annual sunshine hours for this region are between 1370 and 1600 hours.

Rainfall - Typically, October and November are the wettest months of the year and the period from February through to April the driest. The average annual rainfall for North Weald is 650 - 700 mm (based on figures from 1960 to 1990), but the summers and winters of 1995, 1996 and 1997 have been amongst the driest on record.

2.1.3 Geology, Soils and Hydrology

The surface geology consists of glacial boulder clay, overlying London clay.

2.2 Biological Information

The following few sections give brief descriptions of the main habitat types and information of rare to common species found.

2.2.1 Flora

There has been no formal survey of flora undertaken. However it is clear that the main flora found onsite are varied, although small this site has many transitional habitat types in various states of succession, making the flora diversity relatively high.

2.2.2 Wetland

The wetland habitats as discussed make this site unique and ideal for its large population of Great Crested Newts. The two ponds on this site vary in several different ways. The central pond is open and thus encroached by reed mace. In contrast the smaller pond found on the western boundary is under dense shade and has a gentle gradient. These contrasts in pond type in a small area offer amphibians both habitats which they will require at different stages in their life cycles.

Activity summary of the Great Crested Newt Year

MONTH	ACTIVITY
January	Hibernation
February	Hibernation and by the middle of the month adults move to the pond
March	Adults are in the pond. By the middle of March is the time to survey in the pond and on land.
April	Adults in pond and egg laying occurs. Time to survey the ponds and on land
May	Adults are in the pond and on the land. Egg laying occurs and tadpoles are visible in the ponds. Time to survey in the ponds and on land.
June	Adults are in pond and on land. Egg laying is still occurring and tadpoles are visible in the ponds. Time to survey the ponds and on land.
July	By mid July adults leave the pond. Tadpoles are still visible in pond. Survey in ponds and on land.
August	Adults on the land and newtlets begin to emerge from the ponds. Some tadpoles remain in the pond. Time to survey in ponds and on land.
September	Adults on land and newtlets emerge from the ponds. Some tadpoles still in the pond. Time to undertake land surveys.
October	Early October adults and newtlets on the land preparing for hibernation by the end of the month depending on the climate.
November	Hibernation
December	Hibernation

The reed mace around the central pond has been pulled by hand since the beginning of the 1990's, this method has proved to be heavy and very time consuming. As a result reeds have been left for several seasons to complete their life cycles including growing up, setting seed, falling over and rotting down. The build up of rotten biomass has created large amounts of silt and thus the size of the central pond has reduced in depth and overall size. The rotting of plant biomass will also make the pond high in nitrogen, phosphorus and potassium, thus promoting plant growth.

However, it is worth taking in to consideration the reeds do act as 'natural filters' so as these plants are dominant on this site they will effect the clarity and pH of the water. The findings of a present and absence invertebrate surveys carried out during summer 2007 highlighted the water, for the moment is suitable to sustain fresh water invertebrates such as water stick insect (Ranatra linearis), diving beetles and various caddis fly larva, indicating that the water quality is very good. If a variety of fresh water invertebrates can be sustained this in turn will offer the Great Crested Newts a constant food source. The points highlighted in this habitat introduction will need to be considered when prescribing management prescriptions.

2.2.1.2 Mixed scrub/ Willow Coppice

The main woody species found are coppiced goat willow and hawthorn, with very few standard trees of no significant age. The goat willow particularly prefers water logged soils and for this reason this site is ideal. The goat willow is found as emergent vegetation, in full sun and shallow waters. This species also has a varied age range within this site and the management in the past has promoted this varied age sward.

The site also has hawthorn, blackthorn, dog rose and elm. The elm is found in the north east corner of the site and mainly consists of elm at variant stages of decay. This area offers a contrast to the rest of the site as standing dead wood would be beneficial for a variety of wildlife. Elm in this situation found so close to a water body is excellent as a decaying biomass as it takes longer to break down when in contact with water, unlike willow which will break up in a few seasons.

Hawthorn is scattered all over the site again at different age ranges. Also the hedge found around the whole site mainly consists of hawthorn, making an excellent thicket between the road and the main body of the site.

2.2.1.3 Grassland

The neutral grassland area is mainly found in the south west corner of the site consisting of nutrient high indicators such as bind weeds, thistle, and rye grasses. Although floristically not very significant it creates an ideal contrasting habitat for newts to use during summer months. Cuckoo flower, uncommon on this site, but not within the region is also found adjacent to the beginning of the board walk, but in no great number. The grassland does have encroaching bramble and scrub species such as hawthorn. The grassland has mainly been managed by a single cut during the month of September, cutting all grassland areas.

2.2.2 Fauna

There are no records of fauna for the site at present. It would be useful to carry out preliminary surveys of birds, butterflies, terrestrial and fresh water invertebrates, reptiles and amphibians. At the very least a species list should be compiled.

Although from observation large numbers of dragon fly species have been noted and countless breeding Great Crested Newts were observed during training days in summer 2007. Great crested newts are becoming increasingly scarce, mainly through habitat loss, not only in the UK, but across the rest of Europe too. It is for this reason they have been afforded special protection under the Wildlife & Countryside Act 1981, the European Union's Habitats & Species Directive and under the Council of Europe's Bern Convention. This means it is illegal to interfere with young or adult newts, their eggs or tadpoles and the places where they live. A licence is required from Natural England for any works which will involve catching or disturbing the newts.

Great crested newts require several different types of habitat during their lives and to breed they must have open water. Generally, Great Crested Newts return to the same pond in which they hatched often alongside other newt species such as the smooth newt. Anywhere within 500 metres of the pond can potentially be regarded as newt habitat. Ideally, the newts require lightly grazed pasture, but they also need areas of woodland and scrub

which contain a variety of vegetation with different management regimes. Piles of logs, stones and compost heaps which provide areas of shelter and frost free hibernation sites are also very important.

2.2.3 Communities

The site contains a number of different plant communities. Communities pass through a whole range from those plants associated with dry, open grassland through to those with plants associated with aquatic habitats. The largest community is that of grassland which may be sub-divided into wet and dry communities. It would be reasonable to assume that these communities are based on a neutral to basic substrate given the nature of the surface geology.

A conclusion can be made from this introduction that there is a clear link between water quality and varied habitat types and success of fresh water invertebrates and Great Crested Newts populations.

3.0 Cultural Information

3.1 Historical & Land Use

The following section is mainly taken from David Pracey book ‘The story of Nazeing : Five miles from everywhere’

Nazeing Triangle at the end of the 1800’s was referred to as the Upper Recreation Ground and records suggest it was used by the church as a school playing field. Although little evidence survives this is probably typical of how these areas were used. These areas were also used by parishioners, allowing them to tender for the right to put their stock on the grounds. In turn giving the parish council a small income, the farmers an extra grazing area, and the fields very effective mobile lawn-mowers in the form of sheep. Humorously David writes “one early decision forbade the use of cattle because they could be dangerous to children”.

In 1906, for example, Ralph Palmer offered to repair the fences and plant willows at the Upper Ground, and for many years afterwards paid £1 5s a year for grazing rights.

Nazeing Triangle then known as Upper Recreation Ground came to the parish under the Enclosure Award of 1861. The New Doomsday noted in 1912 that "the area includes a large Pond from which the villagers used to draw their water". After the First World War the "Dunking Pond" was regarded as dangerous and the parish council decided to fill it in. Archdale Palmer offered at his own expense to "lay out the ground in an attractive manner [as] a place of rest and recreation", provided that one end of it was available for children at the nearby school to play cricket and other games.

Remnants of the willows still onsite today were then sold to cricket bat makers such as W.J. Breeden, whose premises were close to the old Essex County Ground at Leyton. In 1928 eight willows were found to be diseased and the parish council authorised Palmer to arrange for their disposal at his own cost, retaining such timber as would be of use to him. In 1931, when a further sixteen diseased willows were removed, Palmer donated four golden willows and four horse-chestnuts. In 1945 the problem recurred, so he had those diseased trees cut down, this time distributing the timber to neighbouring cottagers.

As the area had deteriorated, in 1946 the parish council dismissed it as "incapable of development". The hedges had become dangerously overgrown and had to be cut back. In 1956 it was described as "very wet and bad...a shallow depression used only for grazing", the rights for which were still let for £1 a year, as they had been fifty years earlier. . Even this may have been rather nominal: in 1934 the parish council could find nobody who wanted the grazing rights at all.

For a while there was even some doubt as to whether the parish council owned the area. Then suddenly, in 1961, councilors awoke to the situation and resolved that the land should "cease forthwith to be used as a sanctuary for Water Rats and be restored to its former recreational use". In 1963 the council decreed that the land would in future be known as Palmer's Green, a name which seems never to have caught on outside council meetings, perhaps because it is far better known as that of a north London suburb. Although it wanted the land to be "left as natural as possible", it rather contradicted that aim by voting for "the hedges to be grubbed out and replaced with a low post and chain fence". There were

objections to these proposals immediately: the hedges stayed.

In 1988 Epping Forest Countrycare, Epping District Councils Countryside Management Service installed a kissing gate, seat, and stile, and in 1990 it took on the management of the Triangle. In 1999, after an estimated 537 hours of work, the Triangle was opened officially as a nature reserve. Countrycare began a redevelopment that included a boardwalk over the pond for wheelchair access and an information panel, which featured artwork by pupils at Nazeing County Primary School. On 12th June 2001Countrycare announced that the area designated by government as a Local Nature Reserve.

At the end of the 1800s Nazeing Triangle was referred to as the Upper Recreation Ground. It was used by the school as a playing field and by parishioners for grazing stock. It came to the parish under the Enclosure Award of 1861. The villagers drew their water from the pond until after WWI when it was filled is as it was deemed to be dangerous. Four decades of deterioration followed: diseased willows and horse chestnuts, overgrown hedges, heavily saturated and overrun with water rats. In 1961 the council decided to restore it to its former use and in 1990 EFDC's Management Service took on its management. It opened as a nature reserve in 1999. In 2001 the site was designated a Local Nature Reserve.

3.2 Public Interest

There is limited public interest in this site, and its linear path doesn't really make it appealing to dog walkers or ramblers. The rare Great Crested Newts do attract people for special events and Epping Forest Countrcare has had a great deal of local interest in relation to management of the site. The Parish Council are happy to keep this reserve as a relatively 'undisturbed' area, which in turn will benefit wildlife and education.

3.3 Past Management (1988 to present)

3.3.1 Summary of Annual Reports

Year	Management Action
1988/89	Work was undertaken to the boundary hedge as gaps were fenced and planted up. The site was cleared of garden refuse and rank vegetation was also mown and removed. A small pond with nearby viewing bench constructed
1989/ 90	Excavation work was carried out to increase the open water. Rank vegetation was cut and removed.
1990/91	Rank vegetation cut and removed
1991/92	Rank vegetation cut and removed. Area of pond cleared of encroaching Reedmace and silt excavated.
1992/93	Nothing specific to site reported in this annual report.
1993/94	Rank grassland adjacent to pond cut and removed and repairs to entrance stile.
1994/95	Rank grassland cut and vegetation removed and stile replaced with a kissing gate at site entrance.
1995/96	Nothing specific to site reported in this annual report
1996/97	Nazeing Common had a site name change to Nazeing triangle. Works included removal of silt and encroaching Reedmace. Also willow was coppiced on pond edge and grassland cut and vegetation. Designated a Site of interest for nature conservation (SINC)
1997/98	Management plan produced for the site. Deepening of the pond, cutting the grassland area and cutting of willow scrub around edges of pond.
1998/99	No works reported this year
1999/2000	Management agreement signed between Countrycare and the Parish council and at the same time the site was designated a Local Nature reserve (LNR). The grassland was cut and coppice programme continued.
2000/01	Grassland cut and coppicing of willow and hawthorn.
2001/02	Annual grass cut and laying of granite pathway, from gateway to pond edge. Designated a Local Nature Reserve.

2002/03	No works reported this year.
2003/04	Annual cutting of the grassland area Installation of a new bench Coppicing of willow beside the central pond and viewing platform
2004/05	2 volunteer days cutting and raking off grass and pulling reed mace.
2005/06	Cutting main grassland areas. Coppice several old hawthorn stools on eastern boundary bank. Repaired hardened pathway by removal of encroaching grass.
2006/07	

3.3.2 Past Management – (Diaries from 1990 to present)

Date	**Management Action**
15 Feb' 1990	Willow Clearance.
1 Jun 1990	Site visit.
17 Jul 1991	Site visit.
19 Sep 1991	"Gunk shifting" (Moving of silt and rubbish from site).
Aug 1992	Grassland clearance and around pond area.
9 Aug 1993	Cut and raked grassland.
15 Sep 1994	Cut grassland area.
Nov 1994	Gate installation.
1 Oct 1995	Volunteer Day (no info given about management carried out)
5 Oct 1995	Volunteer Day (no info given about management carried out)
10 Oct 1996	Digging out of pond and removing some reedmace, coppicing willow and hay cut of the grassland area.
2 Oct 1997	Grassland cut and cuttings removed. Willow coppiced, reed mace cleared from main pond.
Oct 1997	Continued reed and willow clearance.
8 Oct 1998	Volunteers Day, but no management given.

15 Oct 1998	Vol Day, no management given.
18 Oct 1998	Vol Day, No management given.
22 Oct 1998	Vol Day Boardwalk Construction.
9 Oct 1998	Vol Day no management given but presume boardwalk construction.
12 Oct 1998	Vol Day No management given.
17 Oct 1998	Vol Day No management given presume boardwalk construction
24 Oct 1998	Boardwalk Finished
30 Oct 1999	Grass cutting in southeast corner. and coppicing willow
October 1999	Coppiced big hawthorn left of path next to hedge
12 October 2000	Cutting grassland and raking off clippings in south east corner. Coppicing one hawthorn and two willow. Cleared weeds growing over path from main gate way
13 Jun 2001 Oct 2001	PH meets Laura O'Shea on site SS site visit
2002	No works reported
27 Aug 2003 29 Aug 2003 9 Oct 2003	Installing bench and raking up cuttings Raking up cuttings No works given
Jan 2004 28 Oct 2004	Burning cut brash Cut grassland area in southeast corner and coppice 8 hawthorns on eastern boundary
24 Jan 2005 2 Oct 2005	Laid chicken wire on boardwalk Cleared reed and bramble either side of boardwalk 1 hawthorn stool on northern bank coppiced bramble to left of gate cleared. Cutting of grassland in southeast corner and raked off clippings
23 March 2006 5 Oct 2006	Cleared and repaired hardened pathway. Cut and raked off all grassland. Coppiced willow and hawthorn Cut and raked off grassland areas in southeast corner, coppiced willow adjacent to board walk and in front of gate. Cleared reed mace in front of sign board.

30 Aug 2007 9 Oct 2007	Cut and raked of main neutral grassland in south east corner of site. Reedmace pulling at end of boardwalk. Pulling reedmace in central pond and along boardwalk
2008	
2009	
2009	
2010	
2011	

4.0 Management Aims and Objectives

4.1 Management Aims

4.1.1 Maintain Nazeing Triangle LNR as an area of public open space for the enjoyment of all residents of Nazeing.

4.1.2 Maintain and enhance the nature conservation value of Nazeing LNR.

4.1.3 Promote the use of Nazeing Triangle LNR for education and its role within the context of the Essex Biodiversity Action Plan.

4.2 Ideal Management Objectives

4.2.1 To maintain and enhance the biodiversity of the scrub

Scrub is an extremely underrated wildlife habitat. Its not only excellent for nesting birds, but it also provides good habitat for a whole range of invertebrates such as moths and beetles, bugs, flies and butterfly species. To keep scrub as a 'transitional' habitat it does need to be managed. As Nazeing Triangle LNR is a particularly small site it is important to have a varied age range of coppice. It is also important that woody encroachment doesn't occur on the open areas of the site.

Therefore the main aim of scrub management will be to create a diverse age range of mainly willow and hawthorn by coppicing on a rotation, and not returning to the same stool two consecutive years. Predominantly invertebrates need wood at different age ranges during different stages in their life cycles. So the promotion of invertebrates in turn gives a good and varied food source to smaller nesting birds.

Lastly it is important to maintain open areas of the site to allow more light, create 'micro-climates' within the site which are ideal for amphibians, invertebrates and aquatic plants. Equally areas of dense shade are also important for Great Crested Newts and for this reason there should always be areas of shade on site.

4.2.2 To maintain and enhance the diversity of the grassland

The grassland diversity can be enhanced by continuing annual grass cut of terrestrial area during September, leaving areas of grass for invertebrates to take refuge. Also every other year cutting areas of the grassland during the months of late April to early May. All cuttings must be removed to reduce fertility and put in the compost area or preferably taken off site.

4.2.3 To maintain and enhance the biodiversity of the ponds

The central pond should be maintained in a state whereby emergent vegetation such as Common Reedmace and rushes sp. are kept under control. This should be done partly with volunteer labour by hand-pulling the plants and hand digging of silt where the pond is in danger of drying out permanently. A build up of vegetation has encouraged parts of the open water to dry out and promoted the growth of soft rush. A certain percentage of this will need to be removed by mechanical digger leaving mounds of extracted silt beside pond allowing fauna to escape before taking this debris off site.

A build up of silt will need to be removed by mechanical digger during late summer, when access is easier and water level has dropped. Also adult newt activity is mainly on land and juveniles have emerged from the pond.

The levels of the water and gradients need to be kept so that they allow easy access for amphibians, but not so shallow that they become dry during summer months.

Although possibly extending the size of the pond should be carried out, areas of the pond will still become dry during summer months. These dry or ephemeral ponds will prevent fish populations from becoming established, and thereby more suitable for invertebrates, newts and frogs.

4.2.4 To Maintain and enhance the diversity of the Wetland

The reed-bed should be cut on a three-year rotation and the dead reeds removed. This should be done from October to February, and will ensure younger and healthier reeds. However, as the Reed beds make this site a very suitable habitat for fresh water invertebrates and in turn amphibians it is paramount that at least half of the mature reeds remain and that it should never all be completely removed at any one given time. If feasible, cutting will be carried out with a Power Scythe or by pulling and cutting manually. Again mini diggers will be used to remove the build up of biomass. The break down and decay of vegetation has allowed once open areas of water to become terrestrial habitat. These works will need to be implemented during the months December or January having minimal disturbance to wildlife. All fertile biomass taken out of the site should be composted away from neighbouring houses or preferably removed from site.

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4.2.5 To safeguard populations of notable species with appropriate management, monitoring and review of management works.

After any major management works it is important to carry out observational surveys to see the overall affects of these techniques. A complete survey of particularly the aquatic invertebrates would be very useful for future management decisions.

4.2.6 To collect data on the flora and fauna of the site and promote regular recording.

As Nazeing Triangle does not have any extensive species list composed and therefore a main management prescription would be to carry out present and absence suveys on the following:

* Flora surveys (terrestrial & freshwater)
* Amphibians/ reptiles Surveys
* Fresh Water Surveys (e.g.Ph of water and oxygen levels)
* Fresh Water Invertebrate Survey

4.2.7 To promote positive links with the local community and usage of the reserve.

Making sure that the local community is informed in the management of the site and how

important it is expressing particular attention to the notable species.

4.3.8 To maintain and improve access across the site for all the community

Inspect and maintain the pathway, boardwalk, gate and signs. Make sure interpretation and press releases are current and correct.

Install a field gate for increased maintenance access and improve hardened pathway with materials that are sensitive to the site. E.g. hardened grass paving.

4.2.9 To enhance the educational value of the site and increase the number of educational visitors.

Use the site for educational days, such as practical conservation days pond dipping, torching etc. Allowing the public to be involved with the sites practical management and surveys.

4.2.10 To meet legal and health and safety requirements

Tree inspection of the few larger trees and a public safety risk assessment for the LNR will be produced.

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4.3 Projects and Operational Objectives

4.3.1 Scrubland Management Projects

Year	Project	Work Schedule	Responsibility	Notes
Annually	**4.3.1.1** Restrict the succession of particularly willow and hawthorn by removing encroaching vegetation.	Oct/ Nov	Countrycare	Hawthorn may need coppicng less often then willow.
Annually	**4.3.1.2** Coppice willow/ hawthorn scrub to maintain a varied age structure on the south-eastern side of the south-west pond. Additionally vegetation on the remaining sides should be thinned to encourage younger growth and reduce succession in to the wetland areas.	Oct/ Nov	Countrycare	
Annually	**4.3.1.3**. Leave dead elms to the east of the boardwalk as a good standing dead wood source.	Ongoing	Countrycare	Only remove dead elms if they pose a health and safety threat.

4.3.2 Grassland Management Projects

Year	Project	Work Schedule	Responsibility	Notes
Annually	**4.3.2.1** Cutting of grassland and remove of clippings leaving areas uncut as invertebrate refuges. Undertake an early cut to sections of the grassland again leaving areas uncut.	Early Oct Late Feb to early Mar	Countrycare Countrycare	Important that all cuttings are removed, reducing fertility of grassland, thus promoting less vigorous vegetative species.

Annually	**4.3.2.2** Encourage wet grassland either side of hardened path. Making sure that not all emergent vegetation consists of just reedmace.	Early Oct	Countrycare	.
Annually	**4.3.2.3** Pull or dig out invasive species, making sure that there is never a blanket of one species.	Nov – early Feb	Countrycare	

4.3.3 Pond Management Projects

Year	Project	Work Schedule	Responsibility	Notes
Annually	**4.3.3.1** The central pond should be maintained in a state whereby emergent vegetation i.e. Common Reed Mace and soft rush is kept under control.		Countrycare	
Annually	**4.3.3.2** Manage large reed bed by pulling by hand or machine. Only part of large reed bed in northern part of the reserve should be reduced at any one given time. Approx. a third at any given time.	Oct/Nov	Countrycare	Important that not all habitat is removed in one go.
Annually	**4.3.3.3** Monitor water levels of ponds through out the year.	Ongoing	Countrycare	Record when water levels are particularly high and low. If pond becomes ephemeral this should be recorded in the diary.
2008	**4.3.3.4** Dig out parts of central pond removing silt and vegetation build up.	Late summer	Countrycare/ Contractor	

4.3.4 Boundary Hedge

Year	Project	Work Schedule	Responsibility	Notes
2007	**4.3.4.1** Liaise with Nazeing Parish Council to make sure hedge is flailed only during the winter period and not during nesting seasons. Rather then a square shape being flailed, try to encourage the PC to cut the hedge in to an 'A' shape.	Jan	Nazeing PC	Meeting needs to be set up with Parish Council The wide base to the hedge in the shape of an 'A' promotes small mammal activity.
2008	**4.3.4.2** Gap up any open areas in the hedge with hawthorn.	Jan	Countrycare	
2008	**4.3.4.3** Face up hedge on reserve side where possible.	Jan	Countrycare	

4.3.5 Notable Species Projects.

Year	Project	Work Schedule	Responsibility	Notes
2008	**4.3.5.1** Create some refuges for Great Crested Newts. Consisting mainly of damp logs or emergent debris from wetland on to terrestrial habitat. Promote over hanging wet dead wood areas.			
	4.3.5.2 Monitor the effects of management on notable species.			
	4.3.5.3 Carry out regular surveys and observations to determine effects off management			

4.3.6 Flora and fauna recording projects.

Year	Project	Work Schedule	Responsibility	Notes
2007	**4.3.6.1** Great Crested Newt survey to be carried out by John Cranfield. To give indications on population size.	April	Countrycare/ Contractor	

Annually	**4.3.6.2** Take photographic evidence every time any practical work is carried out onsite.	ongoing	Countrycare	
Annually	**4.3.6.3** Collect data/ monitor all flora and fauna. Composing site specific present lists of all fauna and flora.	ongoing	Countrycare/ contractors	
Annually	**4.3.6.4** Monitor invasive species	July	Countrycare	
Summer 2007	**4.2.6.5** Carry out a water quality survey.	July	Countrycare/ Contrator	
Annually	**4.2.6.6** Review the management techniques prescribed			

4.3.7 Local community projects.

Year	Project	Work Schedule	Responsibility	Notes
Annually	**4.3.7.1**Liaise with parish council	Ongoing	Countrycare	
Annually	**4.3.7.2** Liaise with local schools and interest groups	Ongoing		
	4.3.7.3 Set up a public consultation with local residents Send all adjacent land owners a copy of the revised Management plan.	Late 2007		

4.3.8 Access projects.

Year	Project	Work Schedule	Responsibility	Notes
Annually	**4.3.8.1**Maintain all onsite countryside furniture to a high standard. This includes, entrance gate, sign board, bench and board walk.		Countrycare	

2008	**4.3.8.2**Install a field gate to improve access for public, but mainly for ease of access for management of the site and vehicular access		Countrycare	Wooden field gate
2008	**4.3.8.3** Pathway surface improvement.		Countrycare & Nazeing Parish Council	
Annually	**4.3.8.4**Clip back hedge from around gate way area.		Countrycare	
Annually	**4.3.8.5** Check chicken wire on board walk, replace if needed.		Countrycare	Make sure staples have not become trip hazards
Annually	**4.3.8.6** Cut sensitively along main walk way and around bench. Making sure that this work is carried out on a hot dry day.	Early May & July	Countrycare	The GCN's are active on land and in water, but at their highest egg laying stage during this month.

4.3.9 Educational projects.

Year	Project	Work Schedule	Responsibility	Notes
	4.3.9.1.Establish links with local schools and youth groups	Annually	Countrycare	
	4.3.9.2 Look at interpretation panel and see how this could be improved.	2009	Countrycare	
	4.3.9.3 Produce a Nazeing Triangle Leaflet	2010	Countrycare	.

4.3.10 Legal and health and safety requirements.

Year	Project	Work Schedule	Responsibility	Notes
	4.3.10.1 Making sure that all dangerous trees are removed and made safe.	Annually	Countrycare	
	4.3.10.2 Undertake tree inspection	2008	Countrycare/ Leisure	

	4.3.10.3. Produce a public safety risk assessment	2008	Countrycare	

6.0 Recording Sheet

6.1 Flora & Fauna- Recorded Species

WILD LIFE TYPE	NO.	DATE	WHERE FOUND