

**MARTON MERE**  
**LOCAL NATURE RESERVE**  
**MANAGEMENT PLAN**  
**ISSUE 3**



**SPRING 2005 – WINTER 2010**

## Introduction

**Marton Mere Nature Reserve** is both a **Local Nature Reserve** and occupies the greater part of a **Site of Special Scientific Interest (SSSI)**. It is also the focal point of an associated extensive series of **Biological Heritage Sites** in Blackpool.

To the west a further 2.85ha of wet fields, reed swamp and scrub was declared as **Local Nature Reserve** on 8<sup>th</sup> August 1996.

The reserve is of importance to the wildlife, not only of the Fylde, but also of the North West of England.

The Local Nature Reserve is owned and managed by Blackpool Council. The Green Open Spaces/Horticulture Scrutiny Committee of spring 2004 recommended 1½ wardens' posts to effectively manage the reserve and its visitors.

The reserve also makes an important contribution to Blackpool Borough Councils obligations to provide its citizens with access to Local Nature Reserves and Green Space, as recommended by English Nature.

This Plan reappraises the development of the reserve since spring 2000 and proposes prescriptions for management until 2010.

As with the 2000 Management Plan habitat and species reappraisals are given. Targets are set for populations of important and priority species. The habitat prescriptions are tailored towards achieving the species targets.

A timetable of works is given and financial implications identified.

This plan is to be read in conjunction with the Management Plan dated May 1996 and Management Plan Issue 2 dated spring 2000.

# **REVIEW OF CONSTRAINTS, HABITAT, AND STRUCTURAL CHANGES SINCE THE LAST MANAGEMENT PLAN REVIEW IN SPRING 2000**

## **FACTORS INFLUENCING MANAGEMENT**

### **1) Natural Trends.**

- a) The reedbed is increasing. There has been substantial expansion of the reedbed since 2000 due to the enforced drop in water level in 1996. This has been to the benefit of wintering Bitterns (8 in 2002/3, 7 in 2003/4) but has led to maintenance problems in some areas. The channel behind the island is choked as is the small southwest bay. It is possible that the eastern end of the mere may fill with reed as the depth is generally less than 1.5m. Already reed covers a substantial area in front of the concrete slide.  
There has been some landward expansion by Phragmites reed in certain areas.  
Willows are in places invading the reedbed, some are of considerable size. These will act to dry out the reedbed.
- b) Yellow Water Lily patches are still increasing, formerly small patches have coalesced and new areas particularly towards the east end of the mere have developed
- c) Grassland is changing to scrub, which in turn is changing to woodland.

### **2) Man Induced Trends**

- a) Changes to the vegetation in the Wet Fields within the Extension have been brought about by over grazing from horses followed by under grazing due to removal of the fencing by Morris Homes during their redevelopment of the former Pixie House Mushroom Farm site. Some of this area has been de-declared as Biological Site, despite having a similar vegetation composition to adjacent areas. Drainage works undertaken by Morris Homes appear to have changed the hydrology within the nature reserve, causing the wet fields to become drier, although flooding during periods of heavy or prolonged rain still continues. Further developments by Morris Homes include SUDS (Sustainable urban drainage systems) with open ditches and an anti-pollution reedbed.
- b) Drainage works on the Morris Homes site and other areas in Marton have led to larger and faster fluctuations in the water levels in Marton Mere. Greater volumes are arriving at the pumping station in shorter time periods. An upgrade to the pumps due in late 2004 will exacerbate the problem. This has serious implications particularly for nesting waterfowl during the spring.
- c) During 2001/2 3 ponds were dug on the LNR for Great Crested Newts by Landmark as mitigation for habitat loss in the NE of the town. These were singularly unsuccessful in that they despite being clay lined they did not hold water. An attempt was later made to rectify them using better quality clay. This too was not successful. In early 2004 one of the ponds was refurbished by Chelford Homes using a butyl liner. Several hundred amphibians were translocated to the site, but no Great Crested Newts.
- d) A purpose built bird watching hide was provided by Fylde Bird Club in 1999, following that Blackpool Borough Council with grant aid from the Lancashire Tourism Partnership provided a further three in 2002/3.

### 3) **External Factors**

- a) There is no control over quantity or quality of water being pumped into the mere. Water quality is no longer monitored by the Environment Agency, although they do continue to monitor the Main Dyke. The quality of surface water reaching the mere appears to have improved over recent years and the development of a substantial area of reed at the inflow will help to filter the incoming water.

### 4) **Legal Changes**

English Nature, under the Wildlife and Countryside Act 1981 (as incorporated by the Countryside and Rights of Way Act 2000), must be consulted if any Potentially Damaging Operations are to be carried out

## **PRIMARY SITE OBJECTIVE**

**It is the primary objective of Blackpool Council, its Nature Reserve Warden and the voluntary Management Committee to maintain the SSSI in ‘favourable condition’ and maintain or increase the Nature Reserve’s breeding, wintering and migrant bird populations and other important species and their habitats whilst increasing its sympathetic use by naturalists, educational users and casual visitors alike.**

**This is to be achieved by maintaining and enhancing a mosaic of open water, reedbed and reedswamp, scrub and grassland habitats for the benefit of bird, plant and other communities.**

## **MANAGEMENT OBJECTIVES**

- 1. Monitor and record the composition and extent of the flora and numbers of fauna present in the Open Water habitat. Monitor and record water levels and water quality.**
- 2. Monitor and record the composition and extent of the flora and numbers of fauna present in the Marginal habitat. Manage the marginal vegetation.**
- 3. Monitor and record the composition and extent of the flora and numbers of fauna present in the Grassland habitat. Manage the grassland vegetation.**
- 4. Monitor and record the composition and extent of the flora and numbers of fauna present in the Scrub habitat. Manage the scrub vegetation.**
- 5. Improve the island for priority and important species.**
- 6. Maintain and improve the scrapes.**
- 7. Provide educational and interpretive materials for visitors.**
- 8. Encourage, develop and support a network of volunteer wardens, helpers and recorders.**
- 9. To maintain fixtures, fittings and structures and maintain a safe pleasant environment for visitors.**
- 10. Bring into the nature reserve other biologically important areas adjacent to the current reserve.**
- 11. Eradicate mink and thereafter control any recolonisation.**

# **MANAGEMENT OBJECTIVES**

## **1) Monitor and record the composition and extent of the flora and numbers of fauna present in the Open Water habitat. Monitor and record Water Levels and Water Quality.**

### **Discussion**

Marton Mere is a eutrophic water body, a priority BAP habitat

The straw pollution barrier is no longer necessary as there is now a substantial reed bed in front of the inflow. In the event a serious pollution incident the chemical spill matting can still be used.

Waterfowl breeding success is low, with the exception of Mute Swans typically 3 or 4 pairs. Early broods of Great Crested Grebes fail due to water level fluctuations and 'predation' by Mute Swans. Several pairs of Mallards produce in excess of 100 chicks between them of which fewer than 10 will fledge. The incidence of nesting Canada Geese has increased, in some years they are seen off by the Mute Swans. Coot and Moorhens suffer similar rates of loss to Mallards, Herons from the nearby colony in Stanley Park, and possibly Mink along with large Pike, are the main predators. Later broods of Great Crested Grebe and Moorhen are more likely to survive and fledge.

OW1) Monitor plant composition and area of open water using fixed-point photographs in January and June. Support with vegetation maps updated annually.

OW2) Ensure that coordinated, monthly WeBS counts are conducted and results submitted to the BTO

OW3) Record numbers of breeding pairs and success rates for all open water bird species.

OW4) Investigate the possibility of using nesting platforms for Great Crested Grebes to help them overcome the problems of fluctuating water levels and predation. Build platforms and trial in various suitable areas.

OW5) Disrupt any breeding attempts made by any of the feral geese species.

OW6) Take daily readings of the water level and note any apparent changes in the water quality.

OW7) Research practical means of monitoring fish populations and produce a short report proposing actions to achieve this objective. Pay particular attention to the migration of Eels and the relationship of this species to the site.

OW8) Consider the possibilities of lowering the water levels in the early spring and autumn. Produce a written proposal, containing the regime and predicted pros and cons.

OW9) Compile all data collected and incorporate into an annual report.

## **2). Monitor and record the composition and extent of the flora and numbers of fauna present in the Marginal Habitat. Manage the marginal vegetation**

### **Discussion**

The reed beds have two major plant components, Common Reed and Lesser Reedmace. The Reed tends to inhabit the drier areas, whereas the Reedmace colonises the open water, followed, after establishment, by the Reed.

The reed beds are currently the most rapidly expanding habitat at Marton Mere. This is probably in response to the 1996 reduction in water level. There has been continuing colonisation the landward side by Common Reed following the reduction in water level. There is the potential for the reed bed to cover an extensive area of Marton Mere, particularly at the western and eastern ends. At the eastern end Amphibious Bistort may become out competed by Yellow Water Lily on one side and the reed bed from the other.

Much of the reed bed is very wet, growing in deep water, however there are a few areas, which are prone to drying out, particularly the south west bay and the north east channel. In these areas Greater Reedmace may colonise and become dominant.

In other areas, as the rate of spread increases, open water spaces within the reed bed are being reduced with a detrimental effect on dragonflies. It will be important to maintain these.

The planted reeds along the south bank are beginning to establish and spread. The substrate there is very hard and the area exposed to wave action so the rate of spread may be slower than in other areas.

Within the development of the reed bed there has been regular wintering Bittern, up to three (1998/1999), 8 (2002/2003), 7 (2003/2004), and a rapid increase in the number of breeding Reed Warblers.

Important invertebrates include Wainscot Moths, Water Ladybird and some species of Hoverflies that are associated with Yellow Flag.

There has been a notable decline in the breeding success of waterfowl. Some of this is due to predators but loss of habitat has also been an important factor. As the reed bed has developed open wet grassland at the waters edge has been lost, significantly reducing the available foraging area for ducklings etc.

There are problems with reedbed management. Working from a boat is necessary in many areas as is wading. There is always an element of risk when working in water. Reedbed management works requiring the use of the boat are also dependent on the availability of volunteer helpers and is also dependent on fine weather, or at least lack of wind. Management of the reed beds may require specialist equipment as they grow into deeper water.

### **OPERATIONAL OBJECTIVES**

R1) Monitor composition and area of reed beds using fixed-point photographs in January and June.

R2) Monitor spread of Greater Reedmace by marking out patches, and control if necessary

R3) Maintain open areas within the reed bed for dragonflies. Cut areas in September and March

R4) Maintain cut area in north east channel for viewing reed bed birds. Cut in late July/early August

R5) Maintain open viewing areas in front hides. Cut from September to March, with smaller maintenance cuts as necessary during the summer

R6) Maintain healthy young growth reed in the channel by burning out old reed stems and litter in March. Adjacent areas being treated on an annual rotation. Consider the risks posed by fires getting out of control and copy cat fires by youths.

R7) Dredge drying areas as necessary, removing 500mm of clay and restore reed bed at new level, as and when required.

R8) Support R1 and R2 with vegetation maps, updated annually.

R9) Monitor quality of the reedbed habitat. Assess the depth of water within the reedbeds and vegetation structure, with a view to understanding if fish can move freely through the reedbed. The consideration is a key factor in determining the suitability of reedbeds for bitterns.

R10) Cut several loafing areas for waterfowl, in the edges of the reedbeds in autumn

R11) Control natural succession by removing or coppicing invading willows and other trees during the winter. This is essential to prevent reedbed drying out.

R12) Conduct annual breeding bird surveys using Common Bird Census methods. Map passerine territories to determine favoured areas and the effect of habitat management.

R13) Compile all data collected and incorporate into an annual report.

### **3). Monitor and record the composition and extent of the flora and numbers of fauna present in the Scrub Habitat. Manage the scrub vegetation**

#### **Discussion**

The scrub has not spread into adjacent grassland as much as originally anticipated. One component species has spread, brambles. These have filled many of the open spaces between bushes and invaded neighbouring grassland. Within the scrub most of the shrubs and trees have grown resulting in a dense closed canopy in places. This has been detrimental to open scrub species such as Reed Bunting, Sedge Warbler and Whitethroat but has enabled woodland species to invade, particularly Blackcap Robin and Chaffinch.

The principle aims of management are to reverse the natural succession especially where open scrub habitats are being lost. It is expected that management will improve the attraction of the scrub for species such as Whitethroat and Linnet. It is the priority of management to reduce the Bramble where it is invading grassland and smothering bushes. In addition larger Bramble patches should be divided into smaller pockets of around 7m x 2m by cutting 4m swatches through the patches. It is anticipated that by creating more edges that this will allow more territories and allow the expansion of beneficial plant species such as Nettle and Fleabane.

During management works care should be taken not to damage natural barriers along footpaths and boundaries. Cuttings and prunnings can be used to create dead hedging to prevent unnecessary access by people and dogs. Previous management work on Bramble patches has made them grow laterally very vigorously. This has made it necessary to reduce the time between operations. Work should be done between mid October and mid March. All dead and dying trees/bushes should be left in situ.

#### **OPERATIONAL OBJECTIVES**

- S1) Monitor Scrub areas using fixed point photography in January and June. Support with vegetation maps, updated annually.
- S2) Increase diversity where advantageous by allowing natural succession.
- S3) Reduce scrub cover where necessary to increase structural diversity by trimming and removing trees, shrubs and brambles. The cutting should be done during the winter.
- S4) Monitor Japanese Knotweed.
- S5) Control bindweed where it is a particular problem.
- S6) Continue to cover unsightly exposed tipped rubbish with a layer of earth or wood chip etc.
- S7) Conduct annual breeding bird surveys using Common Bird Census techniques. Map Passerine territories to determine favoured areas and the effects of habitat management.
- S8) Compile all data collected and incorporate into an annual report.

#### **Detailed Prescriptions**

South West Alders. Alternate central trees were coppiced in 1996/1997 at the height of the first branch. The effect was to open up the ground flora to light and then to increase the structural diversity of the habitats by increasing the number of branches. The treated trees are well used by small birds entering or leaving the feeding station.

South West Scrub. The bramble thicket at the eastern edge of the elder trees was given a scalloped edge in 1996/1997. By spring 2000 the bramble thicket had regrown to its original size and spread runners some distance

into the grassland. The reserves only patch of Tansy grows in this area, as do several Bee Orchids, grassland management on the edge of the scrub is necessary to maintain these species.

There has also been development of bramble thicket on the western boundary, again at the expense of grassland, which holds Large Skipper butterflies.

West Willows. No treatment necessary, except to remove bindweed from hedgerow and establishing trees. The hedge was laid during winter 2003/04

Office Scrub. There is only limited bramble in this area some clearing of the central area bushes was done in 1996/1997 to open up the closing canopy. This area is well used by Whitethroats.

North West Scrub. The only large bramble patch in this area was trimmed in four blocks by cutting 3m wide crossed swatches in 1997/1998. It has subsequently recovered to its original size. Japanese Knotweed occurs in two strands in this area, these were pegged out to monitor their rate of spread if any in 1999/2000. By 2004/5 spread of less than 1metre was noted. A large number of trees and shrubs may need coppicing particularly where they have, or are soon to, close the canopy with a neighbour. This operation was started in winter 2004/05

North Scrub. Bramble at the west end was severely reduced in 1997/1998 but has regrown to beyond its original limits, although has not yet reached the canopy stage. The eastern end has several bushes removed as well as a large area of brambles in 1999/2000. A large number of trees and shrubs may need coppicing particularly where they have, or are soon to, close the canopy with a neighbour. This operation was started in winter 2004/05

North Bank Bramble. This thicket had swatches cut into it 1996/1997. It has now recovered and extended extensively into neighbouring grassland. Grassland operations will help to contain the required area of bramble.

Central Scrub South. Bramble in this area has only been cut along its waters edge face on both sides of the Container Hide in 1997/1998. It has recovered and spread towards the reed bed. There is a very large thicket of bramble that needs breaking up in the centre of this area.

Central Scrub North. A limited area of bramble was cut in 1998/1999 this has now recovered. There are substantial areas of bramble that require attention, as well as a few trees that need to be removed. There is a regular winter roost of Long eared Owls which operations must not disturb.

Eastern East Planting. Coppice/ Pollard one in three willows to increase Structural Diversity. The Buddleias were pruned in 2004/5

Western East Planting. Coppice/ Pollard one in three willows to increase Structural Diversity

Eastern West Planting. Coppice/ Pollard one in three willows to increase Structural Diversity

Western West Planting. Coppice/ Pollard one in three willows to increase Structural Diversity

Pump House Scrub. No Treatment Necessary.

#### **4) Monitor and record the composition and extent of the flora and numbers of fauna present in the Grassland Habitat. Manage the grassland vegetation**

##### **Discussion**

Grassland is an important habitat at Marton Mere. It contains a diverse mixture of grasses and herbs as well as invertebrates, birds and mammals.

Bee Orchid invaded and colonised in 1997 but has subsequently declined. Other short turf Species are also in decline, such as some of the smaller Leguminosae, Common Centaury and St. Johns Wort.

To maintain diversity of both herbs and grasses it is necessary to mow the grassland areas, removing hay and thatch. This is best done in mid March to maintain cover for small mammals during the winter. Mid March however can be wet making cutting at this time difficult or impossible. By the first week of April it is too late as there may be nesting mammals and birds.

Previous mowing of the paddock resulted in an expansion of Black Knapweed and the dominance of Soft Brome in spring. A new patch of Fleabane has also developed.

Other areas, which were planned to have been mown, have not been due to difficulties of access or, ground conditions.

Ground Elder is no longer regarded as a problem as there has been some invasion of the patches by Polygonum and there has been no spread.

##### **OPERATIONAL OBJECTIVES**

- G1) Monitor grassland using fixed point photography. Support with vegetation maps, updated annually.
- G2) Maintain existing areas of herb-rich grassland by mowing and removal of 'hay' and thatch in March.
- G3) Improve diversity of herbaceous plants in selected areas.
- G4) Prevent invasion of scrub/ brambles into grassland areas.
- G5) Maintain or improve edges of old tip road for butterflies and scarcer Leguminosae and maintain or increase amount of bare ground. The cut should be done in November.
- G6) Conduct annual breeding bird surveys using Common Bird Census techniques. Map Passerine territories to determine favoured areas and the effects of habitat management.
- G7) Compile all data collected and incorporate into an annual report.

##### **Detailed Description**

**Area A.** It is not possible to mow this large area by tractor due to the ground conditions. It will be necessary to identify smaller patches that can be mown with a strimmer.

Bee Orchid and Common Centaury occur in shorter grass areas.

**Area B.** Difficult access for machinery has meant this area has not been cut. It has started to lose some diversity due to an increase of rank grasses.

Important plants include Common Agrimony - the largest area of this species. Meadow Cranesbill, Sneezewort, Yellow Rattle, Birds Foot Trefoil and Self Heal.

**Area C Embankment.** This should be cut annually as part of the dam inspection works. There is some invasion of Common Reed, but in most areas there is a variety of plant species including Ox-eye Daisy, Yellow Rattle, Meadow Vetchling, Tufted Vetch and Common Agrimony.

**Area D Fylde Bird Club Hide.** There is potential to convert this area into a "corn field" with plants attractive to finches and buntings etc. It will require de-stoning then harrowing/ rotovating and seeding with Barley, Oats and Wheat along with 'cornfield' annuals. There is the possibility of obtaining seeds of the Lancashire BAP species Purple Ramping Fumitory from English Nature.

**Area E West Planting.** Here Cowslips rescued from a nearby development site have been planted and are thriving. Snakes Head Fritillary bulbs were planted in 1991 and are slowly spreading. There is a good variety of common wild flowers, which need an annual mow in late summer with the hay removed. If it is left then Reed Canary Grass and Common Reed soon invade.

**Area F.** This area has been invaded by brambles to a considerable degree. It was the first area of the reserve to hold large skipper and requires an annual mow to maintain that population.

**Area G.** Has a diverse flora at its southern end and a patch of spearmint at the northern end. During the summer of 1999 a stolen car was burnt out on the extreme southern tip, Some recovery by spring 2000 is evident although which species which will eventually dominant is not known. The central portion has an increasing stand of hogweed and is being invaded by bindweed and bramble. An annual mow is necessary.

**Area H The Paddock.** A gorse hedge has been planted which will eventually replace the fencing. Bramble has colonised a significant area from the existing bramble thicket, which needs attention. The area has an interesting mix of grasses and herbs, but regular management is necessary to reduce the spread of bramble and increase the population of less competitive grasses and herbs. As this is the most extensive grassland area it must be kept in good condition to support a healthy population of small mammals.

An annual cut and removal of hay is recommended and timed for March. Removal of the hay presents a problem with disposal

**Area I.** This area is vulnerable to invasion by bramble from the top of the bank, an annual mow is recommended.

**Area J.** This area is vulnerable to invasion by bramble and an annual mow is recommended.

**Area K.** This area cannot be mown by machinery and has become invaded by bindweed.

**Area L.** This area is too rough to mow by machinery; some patches have had Bee Orchid and would benefit from annual mow.

### **Other Grassland Areas**

**Between the path and the Old Tip Road.** There is a significant population of toadflax at the western end, which is being out competed by dominant grasses. Along the northern edge Bee Orchids have colonised short turf areas.

**Northern edge of Old Tip Road.** This is the primary site for Small Heath and Common Blue butterflies as well as Bee Orchid. A close cropped scalloped edge will give the necessary variation in microhabitats. Regular harrowing will also maintain the essential bare ground.

**North East Corner.** No Treatment

**Below Embankment.** No Treatment.

**Caravan Site South East Corner.** Reduced frequency of cut and not until wild flowers have set seed.

**Caravan Site South West Corner.** There is a population of Bulbous Buttercup in this area that would benefit from not being cut until after seeding and thereafter a less frequent mowing regime.

**Cornfield.** This experimental has not been a complete success. The soil is too shallow, with tipped material beneath to rotovate / dig effectively. As it is difficult to dig regularly perennial plants have colonised. A shallow scraping with teeth of a digger bucket may help break up the ground and a thin layer of subsoil added annually should help in future years by increasing the cultivatable depth. It has been abandoned in favour of the area adjacent to the Fylde Bird Club Hide.

**Extension West Pasture.** This area is very wet and also over grazed in the summer. Consequently there is a large population of Creeping Buttercup. Lapwing nest annually but the provision of one or more shallow pools and a reduction in grazing pressure would increase their success rate. Access by machinery is very limited. The provision of one or more small scrapes/ ponds would be beneficial. Disturbance during the Morris Homes development of the former mushroom farm may have led to the cessation of Lapwings as a breeding species.

**Extension East Pasture.** Similar in species composition to the west pasture but more seriously overgrazed in recent years and heavily poached. There is more dock whose seeds provide food for dabbling ducks during times of flooding. A reduction in grazing pressure and preventing horse access until the ground is dry would benefit the vegetation and ground nesting mammals and birds. Recent lack of grazing has led to the dominance of substantial areas of Reed Canary Grass.

**Extension Wet Grassland.** This area, on the edge of tip is very wet and subject to seepage of pollution. It is dominated by Reed Canary Grass and Willowherb. In winter it is well used by Snipe and Jack Snipe. In summer a dense population of Sedge Warblers is present and there is regularly a Grasshopper Warbler territory.

**Extension North Grassland.** Subject to much disturbance due to its location between two well- used footpaths, its value for birds is very low. It was seeded with clover and rye grass in 1993 but has started to develop a more diverse flora. Despite the disturbance small mammals are present and are hunted by owls and predatory mammals at night.

An annual cut and harrow is recommended. If harrowing cannot be done then neither should the cut. A mixed hedge could be planted around the perimeter.

## **5). To Improve the Island**

### **Discussion**

The island needs some considerable thought as to how it can be most easily and effectively managed to improve it for nesting birds. Waders, wildfowl, warblers and Reed Buntings are the target species. It may be necessary to reduce the size and/or number of large trees and bushes. Willow and Hawthorn are the main species present. New young Willows are seen frequently as they grow taller than the surrounding vegetation. The grassy bank at the back of the west scrape has been mown in the past to attract a small flock of wintering Wigeon, this operation has had some success.

I1) Monitor island using fixed point photography. Support with vegetation maps, updated annually

I2) Consider topographical remodelling of the island by reducing its height and creating increased scrape areas. Produce a written report detailing options and containing pros, cons and costs.

## **6) To maintain the Scrapes**

### **Discussion**

The scrapes were dug in 1995, and both are fully covered with water when the water level is 160mm over spill way. As they are slightly different levels the eastern scrape dries more quickly than the western. There is now a depth of mud, which holds invertebrates and is attractive to black tailed godwits at passage times. Other waders and ducks also feed and roost on the scrapes.

The bunds protecting the scrapes are subject to severe erosion due to wave action. The eastern scrape has lost a large proportion of its bund. These will need to be replaced/ reinforced with stone breakwaters.

Any vegetation that establishes on the scrapes will need to be controlled, as well as that which grows on the bunds; this material can be used to increase the organic content of the mud. In the long term the scrapes should be extended and the series of channels cut through the Reed Canary Grass area to the north of the west scrape.

### **OPERATIONAL OBJECTIVES**

SP1) Monitor development of scrapes.

SP2) Prevent establishment of vegetation on scrapes. Best done in late summer/early autumn

SP3) Increase organic content of mud.

SP4) Repair and/ or reinstate bunds. Best done in late summer/early autumn

SP5) Protect bunds using stone breakwaters. Best done in late summer/early autumn

## **7). To provide Educational Facilities for visitors**

### **Discussion**

A site name board with map and brief information is required at every entrance point. The bye- laws should also be displayed at these points.

The provision of hides has been well received by visiting naturalists. With the exception of the hide donated by Fylde Bird Club these are small and basic and need to be upgraded to bring them to a standard comparable to other local reserves. A scheme grant aided by the Lancashire Tourism Partnership provided 3 further hides and interpretive material.

The warden's accommodation/ visitor centre would also benefit from enlarging and improving. Funding is being sought.

A series of changeable information signs around the reserve showing what to look for and interpreting the various habitats would stimulate the interest of casual visitors.

Educational visits by school parties should be promoted and Education Authorities informed of the facilities on offer. In addition a site specific education pack with the necessary links to the National Curriculum needs to be produced.

Organise and publicise guided walks for members of the public. Liase with the Friends Group, Tourist Information Service, and local media.

Ensure that up to date interpretive and information leaflets are available at a variety of outlets for potential visitors to pick up.

Update Website daily.

### **OPERATIONAL OBJECTIVES**

V1) Monitor Visitors.

V2) Provide site map and bye- laws at all entrance points.

V3) Provide interpretive signs around reserve.

V4) Provide five improved hides.

V5) Provide an improved visitor centre.

V6) Allow/ encourage controlled study by naturalists.

V7) Encourage use of the warden service by interested groups.

V8) Provide up-to-the minute information about Marton Mere using all available media.

V9) Restrict unsympathetic use by wardening, education and interpretation.

V10) Improve staffing of visitor centre at peak times using seasonal/ part-time staff and/ or volunteers.

V11) Encourage use of reserve by all interested groups.

## **8). To encourage a network of voluntary helpers, wildlife recorder and voluntary wardens**

### **Discussion**

There is much potential for a wide variety of volunteers to be active at Marton Mere.

Volunteers are an integral and important part of the nature reserve and much of the management and maintenance works as well as the recording of wildlife and liaison with the general public depend on the assistance of volunteers.

They range from naturalists investigating one or more groups of flora and fauna, students on work experience, volunteers from “personal development” organisations e.g. Princes trust. The Friends of Marton Mere was set up in September 1997 and now has an annual programme of talks, meetings and events. The voluntary wardens scheme started well but declined and requires a new initiative to help relaunch it.

### **OPERATIONAL OBJECTIVES**

VOL1) Develop Voluntary Warden Service.

VOL2) Extract quarterly programmes of management works from the Management Plan. Identify those projects which are suitable for volunteers. Produce and distribute project sheets detailing required management works with start and finish dates.

VOL3) Ensure all volunteers are fully trained in the work they propose to do.

VOL4) Ensure all jobs given to volunteers are suitable for those volunteers.

VOL5) Encourage and assist The Friends Of Marton Mere.

VOL 6) Ensure all volunteers are treated well and enjoy their experience.

## **9). To Maintain Fixtures, Fittings and structures**

### **Discussion**

From time to time it will be necessary to repair and replace damaged and worn out items.

The path was replaced during 1999 by a New Deal Scheme. This path is free draining but requires the edges maintaining and in places building up. It will also be necessary to spray the paths to prevent growth of vegetation and trim the verges to reduce the seed supply.

Vandalism is a problem in the hides and to interpretive signs. Vandals can be both local and from the neighbouring caravan site.

Fixtures and fittings should be of good quality and design.

### **OPERATIONAL OBJECTIVES**

M1) Maintain a safe and pleasant environment for visitors

M2) Monitor fixtures and fittings for signs of wear and/or damage and repair/ replace as necessary. Cordon off hazards and repair as soon as possible.

M3) Maintain footpaths.

M4) Repair damaged fence lines.

M5) Maintain hides.

M6) Improve fences in vicinity of new hides.

M7) Clear litter daily from the reserve.

M8) Liase with Police to report all incidences of vandalism etc and develop strategies to mitigate the problem.

## **10). Bring into the nature reserve other biologically important areas adjacent to the current reserve.**

### **Discussion**

There are areas around the existing nature reserve that are already declared as SSSI and County Biological Heritage Sites. In addition there are other areas lying between declared areas which it would be advantageous to bring under the control of the reserve. The fields to the north have in the past been cut for hay by the zoo. Staining Nook Marsh is an important wildlife site but is regularly abused by youths and illegal grazing by horses both of which have an adverse affect.

The agricultural fields in the ownership of Blackpool Council to the east would also be an asset to the reserve. Currently they are leased to a farmer and are within the boundary of Fylde Borough Council. The farming practices have a very damaging effect on ground nesting birds, pressure could be brought to bear by Blackpool Council as landlords for a more environmentally friendly farming regime. Grants for various environmental improvements are available, advice would need to be sought from FWAG.

ADDNR 1) Research the benefits of adding adjacent lands, owned by Blackpool Council, to the LNR. Prepare written proposals to make such additions.

ADDNR2) Research benefits of agri-environmental schemes to tenant of fields to east of the reserve owned by Blackpool Council.

## **11). Eradicate Mink and control any further recolonisation**

### **Discussion**

Mink are a persistent problem to the breeding success of the waterfowl. They may also be responsible for the extinction of the local population of Water Voles and prevent any possible recolonisation attempts.

MK1) set traps for mink

MK2) Record all sightings of mink. Request visitors to submit mink sightings and record locations and behaviour.

MK3) Seek advice from managers of other nature reserves where mink control has been necessary.

# REVIEW OF IMPORTANT FEATURES

## Definitions

**a) Local.** The area included by the River Ribble to the A6 road northwards to the River Lune.

**b) Regional.** All the lowland around Liverpool Bay from the River Dee estuary (N. Wales) to St Bees Head, (Cumbria).

	Importance Area	Importance Level	Notes
<b>1) <u>Geomorphology</u></b>			
Kettle Hole with Open water	Regional	High	The largest lake of natural origin in Lancashire.
<b>2) <u>Vegetation Types</u></b>			
Open Water Communities	National	<b>High</b>	Eutrophic standing water is a <b>UK BAP habitat</b>
Reed Bed	Regional	<b>High</b>	Increasing rapidly in area <b>A Lancs BAP habitat</b>
Scrub	Local	<b>High</b>	
Unimproved Grassland	Local	<b>High</b>	Species rich neutral grassland is a <b>Lancs BAP habitat</b>
Hedgerows	<b>National</b>	<b>High</b>	The ancient hedgrows on Kipling Field and the SSSI northern boundary are a <b>UK BAP habitat</b>
Arable Farmland	<b>National</b>	<b>High</b>	<b>A UK BAP habitat</b> – Inclusion here dependant upon ADDNR 1
<b>3) <u>Flora</u></b>			
Tassle Hyacinth	Regional	Medium	
Amphibious Bistort	Local	High	Extensive Patch.
Marsh Stitchwort	Local	High	
Soapwort	Local	High	
Yellow Water Lily	Local	High	Increasing

Bulbous Buttercup	Local	High	Small population in one area.
Agrimony	Local	High	Increasing
Hop Trefoil	Local	High	Limited populations in small area
Hares Foot Clover	Local	High	
Kidney Vetch	Local	High	Limited Population in small area
Square Stemmed St Johns wort	Local	High	Extinct due to shading
Purple Loosestrife	Local	High	Two small Patches
Common Centaury	Local	High	Becoming extinct due to shading.
Common Toadflax	Local	High	Appears to be increasing
Yellow Rattle	Local	High	Increasing in Managed grassland. Extinct due to Shading Expanding slowly but main patch vulnerable to Bramble Shading.
Harebell	Local	High	
Fleabane	Local	High	
Triffid Bur Marigold	Local	High	Sporadic in Occurrence usually on bare mud at waters edge.
Sneezewort	Local	High	Declining due to competition from more aggressive species.
Tansy	Local	High	Extinct due to shading. Scrub clearance revived a small patch
Ox-eye Daisy	Local	Low	Beginning to establish.
Yellow Iris	Local	Medium	Important for some hoverflies.
Bee Orchid	Local	High	Recent colonist but very variable in numbers
Common Reed	Local	High	Expanding range
Lesser Reed Mace	Local	High	

Purple Ramping Fumitory

Regional

Low

Potential for  
introduction through  
English Nature **Lancs**  
**BAP species** –  
Formerly found on the  
Fylde coast

General note – there are no UK or Lancashire BAP plant species.

## 4) Fauna

### Mammals

Water Shrew	Local	High	Very few recent sightings but Mammal Society survey proved presence 2004, at east end of LNR
Pygmy Shrew	Local	Medium	Much less common than Common Shrew.
Common Shrew	Local	Low	
Mole	Local	Low	
Hedgehog	Local	Low	
Pipistrelle	<b>National</b>	High	<b>UK BAP species</b>
Noctule	Regional	High	Very Few Sightings <b>Lancs BAP species</b>
Daubenton's Bat	Regional	High	Recently Discovered <b>Lancs BAP species</b>
Rabbit	Local	Low	
Brown Hare	<b>National</b>	Medium	Declining nationally one or two "pairs" still present on adjacent farmland. <b>UK BAP Species</b>
Long Tailed Field Mouse	Local	Low	Common
Short Tailed Field Vole	Local	Low	Common important food Source for owls and raptors
Water Vole	Regional	High	Huge national decline, extinct but one seen March 2000 <b>Lancs BAP species</b> May return if mink Is eradicated
Bank Vole	Local	Medium	Scarce
Harvest Mouse	Regional	High	One described June 1997 confirmation required

Grey Squirrel	Local	Low	2 <sup>nd</sup> record December 1997, 5 more sightings
Brown Rat	Local	Low	Has caused damage in Centre and bird feeding station
Fox	Local	Low	Common, regularly breed.
Weasel	Local	Low	Common.
Stoat	Local	Low	Common.
Otter	Regional	Low	<b>Lancs BAP species</b> Possible colonist
Mink	Local	Low	Regularly seen. Negative impact Pest species
Roe-Deer	Local	Low	Few records but increasing

## **Birds**

### **Great Crested Grebe**

Importance Area - Local

Importance Level - **High**

Notes - Poor recent breeding success, eggs hatch then young are lost, probably from a combination of predators but male Mute Swans appear to be the main culprit.

Target – A minimum of 3 breeding pairs producing at least one fledging each.

Achievability – reduce predation by Mink.

### **Little Grebe**

Importance Area - Local

Importance Level - **High**

Notes - Lost as a breeding species since 1993.

Target – Recolonisation as a breeding species

Achievability – Subject to excess birds in the local area and exact habitat requirements, reduce predation by Mink.

### **Grey Heron**

Importance Area - Local

Importance Level - Medium - Negative

Notes - Recent establishment of Stanley Park Heronry has increased predation on young waterfowl

### **Bittern**

Importance Area – **National**

Importance level – **High – UK BAP Species**

Notes - Winter visitor since 1989, up to 8 in recent winters.

Target – 1 breeding pair

Achievability – Subject to excess birds in the UK population and there being enough suitable reedbed.

### **Bewick's Swan**

Importance Area - **National**/ Regional

Importance Level - **High**

Notes - Reached **Nationally Important** numbers in January 1998 at roost.

### **Mallard**

Importance Area – Local

Importance Level - Medium

Notes - Low breeding success and apparently declining

Target – Increase numbers of young fledged

Achievability - reduce predation by Mink.

## Teal

Importance Area - Local

Importance Level -Medium

Notes - Numbers depend water levels and weather conditions.

## Shoveler

Importance Area - **National**

Importance Level - **High**

Notes - Reaches **Nationally Important** numbers in autumn. A sporadic breeder, last success in 1992.

Target – Breeding in a minimum of 5 years per decade.

Achievability – Subject to excess birds in the local population and suitable habitat. Reduce predation by Mink.

## Tufted Duck

Importance Area - Local

Importance Level - Medium

## Pochard

Importance area - Local

Importance Level - Medium

Notes - Winter numbers subject to big fluctuations.

## Grey Partridge

Importance Area - **National**

Importance Level – **High – UK BAP Species**

Notes - Still breeds locally on adjacent farm land/or golf course, one or two pairs annually.

Target – 1 breeding pair on the reserve

Achievability – reduction in the amount and density of scrub within the grassland areas. Improved breeding success in the east fields requires cooperation and commitment from the farming tenant and Estates Dept.

## Coot

Importance Area - Regional

Importance Level – Medium

Notes - Large post breeding moulting flock.

Target – More than 10 breeding pairs with greater fledging success

Achievability – Herons appear to be one of the major predators of young chicks

## Lapwing

Importance Area - Regional

Importance Level – **High - Lancs BAP Species**

Notes – Still breeds but numbers severely reduced due to agricultural activities in fields to the east.

Target – At least one breeding pair in the Extension

Achievability – dependent on suitable habitat being recreated and lack of disturbance from neighbouring development. Improved breeding success in the east fields requires cooperation and commitment from the farming tenant and Estates Dept.

## **Snipe**

Importance Area – Local

Importance Level - Medium

Notes – lost as a breeding species, declining as an autumn and winter visitor

## **Jack Snipe**

Importance Area - ?

Importance Level - ?

Notes – Winter visitor in small numbers. Only recorded when disturbed, usually deliberately. However potential exists to allow visitors to view this secretive species without disturbing it. A small hide/screen within the reedbed would be required adjacent to a favoured cut area concealed from disturbance.

## **Cuckoo**

Importance Area – Regional/local

Importance Level – Medium/high

Notes - Potential breeder as Reed Warbler population increases.

## **Barn Owl**

Importance Area - Regional

Importance Level - Medium

Notes - Breeds locally. The breeding site is regularly the subject of planning applications. Our grasslands are important for the small mammals which the owls prey upon. Requires sympathetic management of adjoining lands.

Potential exists for the erection of a shed containing a nest box on the island.

## **Long Eared Owl**

Importance Area – Regional/local

Importance Level – Medium/high

Notes - Regular winter visitor dependant on small mammals in scrub and grassland. Extremely important as a visitor attraction but needs wardening effort to show visitors whilst avoiding disturbance. The species has the potential to breed. There is a need to maintain dense low bushes in undisturbed sites which offer suitable roosting habitat.

## **Short Eared Owl**

Importance Area – Regional

Importance Level - Medium

Notes - Irregular and declining winter visitor to the reserve, dependent on small mammals in grassland.

Appropriate management of grasslands within and adjacent to the LNR would be needed to attract this species back, there is insufficient grassland area within the LNR alone.

## **Skylark**

Importance Area – **National**

Importance Level – Medium – **UK and Lancs BAP species**

Notes – Attempts to nest in fields outside of the reserve to the east but success not known, agricultural activities are the main problem. Lost as a breeding species on Heron's Reach Golf Course, its only known breeding site in Blackpool.

Target – Minimum of One breeding pair in the East Fields, if the fields can be brought under LNR control

Achievability - Improved breeding success in the east fields requires cooperation and commitment from the farming tenant and Estates Dept.

## **Swallow**

Importance Area – Region

Importance Level – Medium

Note – In recent summers the formerly large regular roost has declined severely.

## **Song Thrush**

Importance Area - **National**

Importance Level – **High** – **UK and Lancs BAP species**

Notes - A dense breeding population is dependant upon the large numbers of Banded Snails.

Target – Minimum of 6 breeding pairs

Achievability – Dependent on high population of prey items in open scrub

Monitoring – Census using Common Bird Census techniques and/or Constant Effort Site ringing.

## **Grasshopper Warbler**

Importance Area - Regional

Importance Level –**High**

Notes - Fluctuating population at risk from Bramble invasion of rough grassland.

Target – Minimum of 3 breeding pairs

Achievability – Variable numbers return from the wintering quarters but grassland habitat needs to be in optimum condition for them

Monitoring – Census using Common Bird Census techniques and/or Constant Effort Site ringing

## **Reed Warbler**

Importance Area - Regional

Importance Level - **High**

Notes - Population is increasing as the reedbeds expand.

Target – Minimum of 20 breeding pairs, but no management works intended to achieve this.

Achievability – This target should be easy to maintain or exceed.

Monitoring – Census using Common Bird Census techniques and/or Constant Effort Site ringing.

## **Sedge Warbler**

Importance Area - Regional

Importance Level – **High**

Notes - Fluctuating population at risk from excessive scrub invasion of rough grassland.

Target – Minimum of 20 breeding pairs

Achievability – Manage scrub/grassland mixture to maintain optimum habitat

Monitoring – Census using Common Bird Census techniques and/or Constant Effort Site ringing

## **Whitethroat**

Importance Area - Regional

Importance Level - **High**

Notes - Fluctuating population at risk from excessive scrub invasion of rough grassland.

Target – Minimum of 10 breeding pairs

Achievability – Manage scrub/grassland mixture to maintain optimum habitat

Monitoring – Census using Common Bird Census techniques and/or Constant Effort Site ringing

## **Lesser Whitethroat**

Importance Area - Regional

Importance Level - Medium

Notes - Fluctuating population dependent on scrub invasion of rough grassland. A lower priority species whose habitat requirements are contrary to higher priority species.

Target – Minimum of 2 breeding pairs

Achievability – Manage scrub/grassland mixture to maintain optimum habitat, also breeds in the Ancient Hedgerows on Kipling Fields and the Ancient Hedgerows on Heron's Reach.

Monitoring – Census using Common Bird Census techniques and/or Constant Effort Site ringing

## **Linnet**

Importance Area - **National**

Importance Level – **High – UK BAP species**

Notes - Declining population seemingly dependent on gorse bushes in open scrub.

Target – Minimum of 2 breeding pairs

Achievability – Manage scrub/grassland mixture to maintain optimum habitat.

Monitoring – Census using Common Bird Census techniques and/or Constant Effort Site ringing

## **Reed Bunting**

Importance Area - **National**

Importance Level – **High – UK and Lancs BAP species**

Notes – Nationally declining population, fairly stable at Marton Mere nature reserve.

Target – Minimum of 12 breeding pairs

Achievability – Manage grassland/reedbed mixture to maintain optimum habitat.

Monitoring – Census using Common Bird Census techniques and/or Constant Effort Site ringing

## **Amphibians**

Smooth Newt - numerous

Palmate Newt – only one record

Great Crested Newt – **UK and Lancs BAP species** – present in pond just outside the reserve boundary

Common Toad - numerous

Common Frog - numerous

## **Fish**

Eel – Important prey species for Bitterns, appears to be numerous

Rudd – Important prey species for Bitterns, occurs in large shoals

Pike – Negative importance as a predator of waterfowl chicks – relatively numerous

Other fish species are present but their abundance and importance to other groups is not known.

## **INVERTEBRATES**

### **Molluscs**

Banded Snail - Important prey species for Song Thrushes

### **Odonata**

Blue Tailed Damselfly

Common Blue Damselfly

Azure Damselfly

Large Red Damselfly - extinct probably due to expansion of the reedbed

Emerald Damselfly – Increasing recent colonist but doing better on Heron's Reach golf course ponds

Banded Demoiselle – First record summer 2004

4 - Spotted Chaser – now common

Common Hawker

Brown Hawker

Migrant Hawker – now most numerous dragonfly

Common Darter

Ruddy Darter – Occasional records but no proof of breeding yet

Black Darter – 2 records Autumn 2003 and 2004

Black Tailed Skimmer

## **Lepidoptera**

Apple Leaf - 1<sup>st</sup> Lancashire Record  
Mining Moth

Beautiful China Mark – 1<sup>st</sup> record for VC60 since 1994

Chamomile Shark – 1<sup>st</sup> Lancs sighting for Lancs moth recorder

Small Skipper – 1<sup>st</sup> recorded in 2000, now common

Large Skipper – 1<sup>st</sup> recorded in 1989, not as common as Small Skipper

Small White

Large White

Green Veined White

Orange Tip – uncommon and local, perhaps confined to Kipling Fields as a breeding species

Small Copper - scarce

Common Blue – common along old tip road and localised in Kipling Fields

Red Admiral

Peacock

Small Tortoiseshell

Wall Brown – appears to be declining

Speckled Wood – recent colonist still increasing

Gate Keeper – Increasing rapidly –site record 2004

Meadow Brown – variable in numbers, can be very numerous in good years

Small Heath – Appears to be declining rapidly

### **Dipera (Syrphidae)**

Chrysotoxum festivum

Cheilisia grossa

Dasysyrphus albostrigatus

### **Coleoptera**

Water Ladybird

General note – much more work needs to be done to ascertain the variety and some indication of population sizes of invertebrates present.

# HABITAT WORK PROGRAMME

## All Years

- JAN Take Fixed point photographs  
Cut viewing areas through reedbed at hides  
Scrub management works
- FEB Cut viewing areas through reedbed at hides  
Scrub management works
- MAR Mow Paddock and remove hay  
Cut dragonfly areas in reedbed  
Cut viewing areas through reedbed at hides  
Burn reed bed compartment, subject to review  
Scrub management works
- APR Cut path edges fortnightly
- MAY Cut path edges fortnightly  
Maintain viewing cuts in front of the hides
- JUNE Cut path edges fortnightly.  
Take Fixed point photographs  
Remove bindweed where necessary  
Maintain viewing cuts in front of the hides
- JULY Cut path edges fortnightly.  
Cut and remove hay from W Planting meadow  
Cut reedbed in channel behind island  
Remove bindweed where necessary  
Maintain viewing cuts in front of the hides
- AUG Cut path edges fortnightly.  
Repair bunds on scrape  
Cut reedbed in channel behind island  
Remove bindweed where necessary  
Maintain viewing cuts in front of the hides
- SEPT Cut path edges fortnightly.  
Cut reeds in front of hides  
Cut dragonfly areas in reedbed  
Cut viewing areas through reedbed at hides  
Cut viewing areas through reedbed at hides  
Repair bunds on scrape
- OCT Cut Bramble on rotation  
Final path edge mow  
Cut viewing areas through reedbed at hides  
Scrub management works
- NOV Cut and remove hay from north edge of Old Tip  
Road Cut viewing areas through reedbed at hides  
Scrub management works
- DEC Cut & rotovate cornfield, reseed with oats wheat  
barley and cornfield annuals  
Cut viewing areas through reedbed at hides  
Scrub management works

