Catherington Pond

Site Management Plan 2015-2025



CAROLE BURNETT

1. POLICY STATEMENT

Horndean Parish Council is committed to managing its countryside and open spaces for the benefit of nature conservation, landscape, educational value, informal recreation and public enjoyment.

2. DESCRIPTION

2.1 General Information

Site. Catherington Pond

Designation. None at Present

(possible inclusion with Parsonage Field as LNR)

Size. 0.125ha

Ranger Carole Burnett

Address Horndean Parish Council, Tyfield House, Blendworth Lane,

Horndean, Hampshire. PO8 0AA

Plan Prepared By. Kevin Cloud (2004), updated by Carole Burnett (2015)

2.1.1 Location

Catherington Pond is situated in the South East of England in East Hampshire District. The site can be found on the eastern side of Catherington Lane opposite Parsonage Field car park lying between Catherington Infant School and the local cemetery.

Primary access to the site lies from the car park, grid reference 695145 (taken from O/S Landranger map, Sheet No 197 (1:50,000)).

See appendix 1 for further details of the location of the site.

2.1.2 Land Tenure

This is not a legal document. If any legal decisions are to be made, please refer to the original Tenure documents before making any decisions.

Land tenure documents are kept in the filing system at Tyfield House.

Owner Horndean Parish Council

Type of Holding Freehold

Date of Acquisition 1986

Total Area 0.125ha

Legal Right of Access

There are various access points to the site.

Common Rights

No rights exist.

Byelaws

At present there are no byelaws on the site

Agreed management policy

Priority will be given to nature conservation management whilst providing a resource for informal recreation and education.

2.1.3 Management Infrastructure

Horndean Parish Council's Countryside Team undertakes day-to-day management of Catherington Pond. This Team consists of the Countryside Ranger, Estate Wardens and various unpaid assistance including work placements, university students, volunteers and youth groups.

Management plans, work programmes and budgets are agreed by the Grounds Committee of the Parish Council. The Countryside Ranger submits a regular report to this committee

No buildings are located on the site. Tools and machinery for the maintenance of Catherington Pond are kept at the Council's industrial unit. Staff office space is provided at Tyfield House.

Catherington Pond is opposite car park provision at Parsonage Field, providing space for vehicles visiting Parsonage Field, Catherington Down SSSI and Catherington Pond.

2.1.4 Map Coverage

Current Maps

1:2500 (located in Waterlooville library)

SU 6814 - SU 6914

1:25000

O/S Explorer Sheet 120 O/S Explorer Sheet 119

1:50000

O/S Landranger Sheet 197

Geological Maps

Geological Survey of Great Britain (England and Wales) reprinted 1971 Sheet 316 (located in Waterlooville Library)

2.1.5 Photographic Coverage

Fixed Point

No fixed point photography established as yet.

Ground

Some slides of ground images are on file in Tyfield House. Black and white images from the last century are available in Stapleton (2000).

Aerial

Aerial photography of the whole parish from the 2000 flyover is on hard copy stored in the Ranger's Office, Tyfield House.

2.2 ENVIRONMENTAL INFORMATION

2.2.1 Physical

2.2.1.1 Climate

A climate estimate for Hazleton Common was prepared by The Met. Office in April 2001. Given the close proximity of Catherington Pond to the common no significant climate differences are likely and therefore figures for this plan have been taken from that estimate. This represents typical values over a flat area of 1 square kilometre centred on grid ref 693124 and is interpolated from values on a 5km grid analysed from station values. A copy of this estimate is held in the Hazleton Common file in the Countryside Ranger's office (hard copy + disk).

Temperature

Ten year average Max temp deg C	13.6
Ten year average Min temp deg C	6.5
Mean deg C	10

Relative humidity

The annual mean is 83%.

Sunshine

The sunniest months are June and July with 6.9 hr/day.

Rainfall

The annual mean rainfall is 839mm. The wettest months are November and December (90mm), the driest month is July (47mm).

Snow

The ten-year average yearly snowfall is 13 days with snow lying, on average, for 5.7 days.

Wind

The prevailing wind is from the southwest. Ten year average windspeed 8.6 knots.

2.2.1.2 Hydrology

The East Hampshire Local Environment Agency Plan (LEAP) states that many stream rise at the southern margin of the chalk where it is overlain by Tertiary sands and clays. The swallow holes in the chalk in the Lovedean, Cowplain, Horndean and Rowlands Castle area are in direct connection with the Havant and Bedhampton springs and need to be protected against contamination, as these springs are used for potable water supply for Portsmouth and the surrounding area (Environment Agency, 2000). The LEAP further adds that these springs are fed from a large catchment in which there is considerable potential for pollution.

2.2.1.3 Geology/Geomorphology/Land form

The site consists of clay cap overlying the primary chalk.

2.2.1.4 Soils/substrates

No information could be found with regard to specific soil types.

2.2.2 Biological

There are many gaps in the species recording for the pond. The species list for the pond has mostly been derived from the many pond-dipping visits by educational groups over the years of Ranger employment by the Parish Council.

Both common newt *Titurus vulgaris* and palmate newt *Triturus helveticus* are present in good numbers as well as common frog *Rana temporaria* and common toad *Bufo bufo*. Invertebrates are well supported with a range of dragonfly and damselfly species, both in larval form and as flying adults, including emperor *Anax imperitor*, common blue damselfly *Enallagma cyathigerum* and common darter *Sympetrum striolatum*. Other aquatic invertebrates include great diving beetle *Dytiscus latissimus*, phantom midge larvae *Charborus spp* and lesser and greater water boatmen *Nepidae spp*.

Plant diversity is somewhat less impressive and the plant list contains some unwelcome additions of non-native invaders such as Canadian pondweed *Elodea Canadensis*, Parrot feather *Myriophyllum aquaticum* and New Zealand Stonecrop *Crassula helmsii*. Native pond and pond side plants include water mint *Mentha aquatica*, yellow flag *Isis pseudocorus* and branched bur reed *Sparganium erectum*.

Despite its selection of non natives Catherington Pond is still a good haven for a thriving selection of native invertebrates, reptiles and amphibians and continues to play a vital role in educating local children about the value of our ponds.

2.2.3 Cultural

2.2.3.1 Archaeological/Past land use

Consultation was made with the Archaeology and Historic Buildings Record section of Hampshire County Council in May 2001. A printout of the record for the parish of Horndean is now stored in the Countryside Ranger's office.

No significant records were found.

2.2.3.2 Present Land use

The Council's Countryside Team uses Catherington Pond for education and interpretation and the site is used by the public for recreation. Pond dipping is the primary site recreational activity.

2.2.3.3 Past management for Nature Conservation

Prior to Horndean Parish Council acquiring Catherington Pond in 1986, the site had not been managed for nature conservation. The set up of a basic ranger service in 1995 saw commencement of some small scale management through volunteers.

2.2.3.4 Past status/interest

None known.

2.2.3.5 Present Conservation Status

None at present. The site could become a Local Nature Reserve if included in the land area with Parsonage Field.

2.2.3.6 Public Interest

The Countryside Team and the Parish Council concentrate on providing for the local community therefore countryside and open space areas do not have high visitor numbers.

Visitors are predominantly local people with children with an interest in the pond and its associated life. The site is well utilised by local schools and guide/brownies/rainbow groups for educational visits.

The Hi Tec Wild Trek trailer visits yearly in August for an afternoon of pond dipping for local children.

2.2.3.7 Educational Use/facilities

The pond-dipping platform is the only structure dedicated to education on the site. The Countryside Team has produced an educational pack for the parish which will include sections relevant to the pond. There are no interpretive or educational leaflets relating to the pond.

Catherington Infant School and the local guide groups are the prime users of the site as an educational resource/outdoor classroom and are regularly provided with Ranger time on site during their visits. Guided walks are provided for any organisation wishing to know more about the pond and surround, it's ecological and historical aspects and the role of the Countryside Team.

The Hi Tech Wild Trek trailer is on site for an afternoon of pond dipping for local children in August each year.

2.2.3.8 Research use

There are no current research projects.

2.2.3.9 Interpretation Use/facilities

An interpretation board was installed in 2005, refurbished in 2015.

2.2.3.10 Recreational Use/facilities

Encouraged Uses

Pond dipping (to a recognised code of practice – available from the Countryside Team), picnics, bird watching/enjoyment of nature, wheelchair access, study of nature, any activity organised by a recognised organisation for educational or recreational purposes.

Tolerated Uses

Dog walking with dogs under control and poop scooping.

Unacceptable Uses

Horses (grazing, led or riding), cycling/mountain biking, barbecues, unauthorised fires, dog walking with dogs not under control and dog fouling, shooting (unless authorised by the Countryside Ranger as a control measure), motor bikes and unauthorised vehicular access, any socially unacceptable behaviour (i.e. drug use, loud music, drinking), fishing, dumping of flora and fauna from household ponds and aquaria, removal of wildlife of any kind.

2.4 Bibliography

Countryside Council for Wales. 1996. A guide for the production of management plans for nature reserves and protected areas. CCW, Bangor.

Environment Agency, 2000. Local Environment Agency Plan, East Hampshire August 2000. Environment Agency.

Hampshire County Council, 2001. *Archaeology List Report.* Archelogy and Historic Buildings Record, Hampshire County Council, Winchester.

Stapleton, B., 1999. *Horndean 2000*. Horndean Parish Council, Horndean.

3. CONFIRMATION OF IMPORTANT FEATURES

3.1 The Site in wider perspective and implications for management

Catherington Pond provides a good resource for pond life and more importantly an easily accessible site upon which to learn about the importance and variety of creatures within our native ponds.

The pond resource in Hampshire has declined by an estimated 75% over the past 100 years (Hampshire Biodiversity Partnership, 1997) so any pond can be considered locally important within the biodiversity framework.

The site possesses a few scarce or rare species but more importantly a good assemblage of common species that are a key to maintaining the integrity of countryside mosaic in and around the parish of Horndean. It has been noted by Oates (2001) that whilst most common species are not declining, the actual habitat area occupied by those species is decreasing rapidly (in some cases 80-90% reduction).

3.2 Provisional list of important features

- Pond open water
 - vegetation
- Bankside pond dipping platform (rebuilt in 2015, a collaboration between HPC, The Conservation Volunteers and a grant from IGas)
- Bankside vegetation
- Roadside grass
- Surrounding trees
- Water level management
- Seat (fitted in 2014 replacing a log seat that was rotten)
- Steps (new built with the new dipping platform in 2015)
- Interpretation panel (added in 2005)
- Bin

3.3 Evaluation

3.3.1 Evaluation for nature conservation

3.3.1.1 Size

The pond and associated habitat area covers approximately 30sq metres. Viability as an ecological unit at this size is questionable however many common species still manage to thrive and numbers of ponds have declined rapidly in Hampshire over the past 100 years.

Research from The National Pond Survey suggest that there is a good correlation between the wildlife value of a pond and the use of the land surrounding it. The less

intensively the land around the pond is used, the more likely the pond is to have a diverse plant and invertebrate community and to support uncommon species (Environment Agency, 1997)

3.3.1.2 Diversity

The pond has a good depth profile and an array of vegetation, although much nonnative, that allows for a variety of micro habitats in the underwater environment. Surrounding bankside vegetation is mostly grass and nettle with some mature trees and a hawthorn hedge adjacent to the graveyard.

3.3.1.3 Naturalness

All of the site features are semi natural, having had profound alteration by human influence over the centuries. The pond was probably created as a drinking point for cattle or sheep or a cart wheel pond for the adjacent village church and would probably have been clay lined.

3.3.1.4 Rarity

No rare species have been recorded to date.

3.3.1.5 Fragility

The site is exposed to high soil nutrient levels on the surrounding bankside probably as a result of graveyard management. The pond is fed by surface water run off from Catherington Lane so is exposed to potential pollution arising from the road. The pond is hemmed in by roads on two sides giving low scope for dynamic management. In 2014 a pipe was found which lead from under the road into the pond. This was reported to Hampshire Highways and the outcome is not yet known

3.3.1.6 Typicalness

The site is typical of a village pond suffering inappropriate dumping of non native pond and aquaria species and closed in by surrounding land use.

3.3.1.7 Recorded history

The majority of historical data is anecdotal. Some biological survey data pre acquisition by Horndean Parish Council exists but is minimal.

3.3.1.8 Position in ecological unit

The site is adjacent to Parsonage Field and should be included in the land area as proposed LNR.

3.3.1.9 Potential for improvement/restoration

Catherington Pond has huge potential for ongoing improvement and restoration. Continued efforts by the Countryside Team and willing volunteers should allow continued improvement over the life of this plan. However nothing can prevent the continued addition of non-native species by the local public with potentially devastating effects on indigenous species

3.3.2 Evaluation for Public Use/access, education and interpretation

Public access to Catherington Pond for passive recreation is available at all times. This is however restricted to the pond dipping platform and the banks adjacent to the roadside.

Predominant use of the site is pond dipping activity either as a formal excursion with the Countryside Team or as ad hoc visits by children with parents. The site holds good visual amenity value for passing walkers and the seat provides a nice place to sit for local people. A large proportion of visitors can therefore be considered both local and regular, visitors from further a field are not uncommon but minimal.

School use of the site is restricted to those schools with easy walking access, predominantly Horndean Infant School. This takes the form of picnics and more structured, national curriculum based activities. Scout and guide groups also use the site for educational activities and badge work.

An interpretation panel was fitted in 2005 after the original management plan was written.

3.3.3 Evaluation for Research/study

Research opportunities will be encouraged but, given the sites restrictions, are unlikely to be forthcoming.

4. FACTORS WHICH INFLUENCE, OR MAY INFLUENCE, THE FEATURES

4.1 Owners objectives

As stated in section 1 - Horndean Parish Council is committed to managing its countryside and open spaces for the benefit of nature conservation, landscape, educational value, informal recreation and public enjoyment.

Several site-specific objectives stem from this statement;

- Continue improvement of the site for nature conservation.
- Provide access for informal recreation.
- Provide interpretive media
- Provide seating
- Provide educational resource

4.2 Internal natural factors

Seral succession

The future of the habitats present depends on the interplay of a number of seral successions.

Grassland to scrub Scrub to woodland Open water to woodland

Water levels

The successional path for the site depends largely on water levels resulting from the balance between water input as precipitation and water loss direct evaporation and evapotranspiration.

Invasive or alien species

A number of problem species occur on the site:

Non-native and highly invasive alien species requiring regular monitoring and control e.g. Parrot feather and New Zealand stonecrop

Undesirable and poor conservation value non-natives e.g. sycamore

Garden escapes and horticultural varieties e.g. water lilies

Weed species e.g. ragwort and creeping thistle.

Natural Regeneration

This can be advantageous in some areas. However this will be a contributory factor in succession in the open grassland areas.

4.3 Internal man induced factors

Visual amenity

There will always be an obligation to keep roadside vegetation clean and tidy i.e. a low amenity cut. This will hamper the life cycles of grassland vertebrates thus reducing the diversity of invertebrate fauna within the bank side vegetation.

4.4 External factors

Graveyard

At present HPC have very little control of adjacent land use within the graveyard or the practices of the management team therein. Dumping of garden waste adjacent to the pond area boundary could have a detrimental effect on nutrient levels.

Roads

The site will always be at threat from pollution incident occurring on the road.

4.5 Factors arising from legislation or tradition

Obligations

The successful management and safeguard of the site will depend upon compliance with the following legal and non legal obligations.

National Parks and Access to the Countryside Act 1949

Should the pond be included under Parsonage Field LNR there will be an obligation to consult with Natural England in exercising functions under section 21 (1949 Act 21(6)).

Wildlife and Countryside Act 1981

There is an obligation to comply with all relevant sections and schedules. This includes the taking or disturbance of wild birds at the nest, the taking of plants and the introduction of alien species.

Countryside and Rights of Way Act 2000

Amends Wildlife and Countryside Act 1981.

Occupiers Liability Act

This Act imposes an obligation to ensure that every reasonable care is taken to remove any risk both to legitimate visitors and to trespassers. To comply with the act it will be necessary to:

- Ensure that all footpaths, stiles, gates, etc are not hazardous, or the hazard is made plain
- Ensure that there are no dead or dangerous trees or timber, including branches, close to footpaths, roads, tracks, houses or other areas frequented by people.
- Ensure that equipment left on site, e.g. tractors, research etc is not hazardous or the hazard made plain.
- Ensure that herbicide treated vegetation (e.g. Rhododendron stool regrowth) does not pose a hazard or the hazard made plain.
- Ensure that the exact location of overhead or underground cables is known to staff, contractors and other parties likely to need to know.
- Ensure that the site safety audit is available to people using the site for any activity involving more than simply walking on public paths.
- Ensure that the hazard plan is updated as necessary and available to people using the site for any activity involving more than simply walking on public paths.

Legal obligations of the Health and Safety at Work Act

All operations carried out on site must be undertaken by trained personnel using methods and equipment approved by the Health and Safety Executive, and also in compliance with both national and local safety procedures. The need for an up to date hazard plan and regular safety inspections applies here.

Accepted practice

There are no items under this heading which refer to National codes of practice for various operations. All are covered under separate headings (e.g. herbicide use, use of chainsaws, etc).

Non legal accepted practice

None

Organisational procedures

The following obligations are placed upon the Grounds Manager

- To prepare and review at intervals the site management plan.
- To maintain site records.

4.6 Physical considerations/constraints

Access to the pond area limits use of large machinery in the event of dredging operations needing to be done on a large scale.

5. OBJECTIVES, LIMITS AND MONITORING

5.1 Identification/selection of attributes

- **5.1.1** In this section each confirmed important feature is discussed individually. Each feature is considered with reference to:
 - 1. The attributes of the feature these may be used as the basis for quantifying the feature. These include the size/extent and quality of the feature.
 - b) Management objectives the management objectives are achievable statements that define the favourable condition of the feature. They must accord with site-specific objectives stem from this statement;
 - Continue improvement of the site for nature conservation.
 - Provide access for informal recreation.
 - Provide interpretive media
 - Provide seating (installed 2014)
 - Provide educational resource
 - c) Limits of Acceptable change (LACs) LACs define the degree to which the value of each attribute of a feature is allowed to fluctuate. The information used to set the LACs is based on the most up to date data available. However these values may change and it may be necessary to re define the values if the situation alters.
 - d) Current condition and status the status of a feature is the difference between the current condition and the favourable condition. The greater the difference, the greater the need for active management.
 - e) Rationale, operational limits and management options the rationale considers the implications of the current state of the feature and identifies the most appropriate management and management options. It also identifies any factors that require operational limits.
 - f) Monitoring the management plan must be monitored in order to ensure its success. This section outlines the monitoring programme specific to the site.
 - g) Works schedule the schedule identifies all the individual tasks of work that require completion in order to meet the objectives. They consider the rationale, operational limits, management options and monitoring. The action plan codes follow the CCW guidelines (1996).

5.2 Pond Area

5.2.1 Feature attributes

Open Water

Whilst open water appears an attractive sight to pond visitors, there is no advantage to pond fauna in creating or maintaining large areas of open water in a small pond (Kirby, 2001 and Langton, Beckett and Foster, 2001).

The open water element of Catherington Pond will thus be a by-product of annual vegetation management to prevent seral succession rather than an intended aim.

Vegetation and associated fauna

The invertebrate interest of a pond is usually concentrated at its margins and amongst more or less dense weed (Kirby, 2001). The pond has limited vegetation diversity and a fair share of invasive, non-native species such as Parrot Feather *Myriophyllum aquaticum*, Canadian Pondweed *Elodea Canadensis* and New Zealand Stonecrop *Crassula helmsii*. However, despite this there is a varied range of aquatic life inhabiting the pond taking good shelter from the dense matt of vegetation.

Vegetation management will need to be an ongoing process to control the dense matt of Parrot Feather and to control invasive native species such as Reedmace *Typha latifolia*.

5.2.2 Management objectives for Pond Area

- Maintain rural landscape character of Catherington Pond
- Continually improve the nature conservation and biodiversity value of Catherington Pond through an appropriate vegetation management regime, mechanical pond digging and positive bankside management and enhancement.
- Manage informal recreation use by local residents
- Encourage educational use at all levels.

5.2.3 Limits of Acceptable Change for Pond Area

Extent of Pond area

Target: current extent

Lower LAC: minimal loss of pond area

Upper LAC: not set as physical land and hydrological constraints prevent

expansion

Water chemistry

Target: Commence water chemistry testing from yr 1 of this plan.

Lower LAC: to be set Upper LAC: to be set

Water depth

Target: 10 cm depth at a point 5 cm out from dipping platform. **Lower LAC**: 5 cm depth at a point 5 cm out from dipping platform.

Upper LAC: not set as little can be done to reduce levels in flood situation.

5.2.4 Current condition and status of Pond Area

Unfavourable, recovering – The pond is home to a good array of pond species however the ongoing problem of alien aquatic plants will need to be constantly addressed through management.

5.2.5 Rationale, operational limits and management options for Pond Area

Ponds are important wildlife habitats which support a wide variety of wetland plants and animals including rare and endangered species. Britain has lost many of its wetland areas through land drainage, river canalisation and the in filling of many ponds. In England 63% of ponds (approximately 500,000) have been lost in the last one hundred years. In Britain as a whole, ponds are still being lost at a rate of 1% (3,000) per year (Sansom, 1998).

5.2.6 Monitoring of Pond Area

Vegetation

Species diversity will be monitored according to Phase 2 National Vegetation Classification methodology and will consist of a number of random quadrats sampled biannually between May and September.

Mollusca

No formal survey of molluscs has been carried out. This group should be targeted in 2016 and the survey repeated every five years.

Odonata

No formal survey of dragonflies and damselflies has been carried out. This group should be targeted in 2016 and the survey repeated every five years.

Amphibians and Reptiles

No formal survey of this group has been done. This group should be targeted in 2016 and the survey repeated every five years.

Wetland invertebrates

No formal survey of this group has been done. This group should be targeted in 2016 and the survey repeated every five years.

Water Chemistry

Commence in 2016 and repeat quarterly – to be done by pond volunteers who are willing to purchase chemistry testing kit from their funds (grant funded by HPC).

Water depth

Commence in 2016 and repeat quarterly – to be done by pond volunteers

NB water chemistry and depth measurement base line data will need to be established during the life of this plan (10 yrs.). After this measurements could be taken every two years and/or when a pollution incident occurs.

5.3 Bank side vegetation

5.3.1 Feature attributes of bank side vegetation

In general the backside vegetation is dominated by amenity grassland sward and dense patches of nettle *Urtica dioica*. Some native tree and shrub planting was undertaken by the previous Countryside Ranger but most of these have failed – replacement of failures has not been carried out as this was a somewhat inappropriate action and the current Countryside Team would much rather carry out enhancement with native wildflowers and grasses. Some nettle area should be retained as this species does provide an excellent caterpillar food resource for many butterfly species.

Some native bank side wildflowers such as water mint *Mentha aquatica* are still present.

The bank side has a pond-dipping platform, last renewed in 2015, that provides an excellent location for the study of pond life and is regularly utilised by local schools and youth groups as well as the general public. A pond-dipping event – The Hi Tech Wild Trek Trailer – is currently held annually in August.

5.3.2 Management objectives for bank side vegetation

- Maintain rural landscape character of Catherington Pond
- Continually improve the nature conservation and biodiversity value of Catherington Pond through an appropriate vegetation management regime, mechanical pond digging and positive bank side management and enhancement.

- Encourage diverse bank side vegetation.
- Manage informal recreation use by local residents
- Encourage educational use at all levels.

5.3.3 Limits of Acceptable Change for bank side vegetation

Extent

No limit set as physical barriers prevent increase in area

Species diversity – bank side vegetation

Target: establish program to increase composition of bank side and marginal

vegetation species

Lower LAC: to be established **Upper LAC:** to be established

Species diversity – increase refugia for amphibians

Target: 3 x log/rubble piles (approx. 2m across) covered with soil and leaf litter.

Lower LAC: 1 Upper LAC: 5

Species diversity – reduce non native species

Target: Reduce number of non-native plantings around pond area **Lower LAC:** reduction of daffodil area to maximum 2 square metres

Upper LAC: reduction of daffodil area to zero (colour and variety will be added to

the sward by turf stripping and reseeding with appropriate bank side seed).

5.3.4 Current condition and status of bank side vegetation

Unfavourable, recovering – the site is still dominated by low diversity grassland sward. However continued re-establishment of native bank side meadow grassland through turf strip and reseed or selective plug planting will afford considerable benefits to flora and invertebrate fauna within the life of this plan.

5.3.5 Rationale, operational limits and management options for bank side vegetation

The associated assemblage of species around the bank of the pond has, in recent years become dominated by low value species. A comprehensive effort to return to a varied sward of meadow and pond edge species will have highly positive results in attracting associated invertebrates.

5.3.6 Monitoring of bank side vegetation

Vegetation

Species diversity will be monitored according to Phase 2 National Vegetation Classification methodology and will consist of a number of random quadrats sampled biannually between May and September.

<u>Mollusca</u>

No formal survey of molluscs has been carried out. This group should be targeted in 2016 and the survey repeated every five years.

Odonata

No formal survey of dragonflies and damselflies has been carried out. This group should be targeted in 2016 and the survey repeated every five years.

Amphibians and Reptiles

No formal survey of this group has been done. This group should be targeted in 2016 and the survey repeated every five years.

Invertebrates

No formal survey of this group has been done. This group should be targeted in 2016 and the survey repeated every five years. Should include Lepidoptera, hymenoptera and orthoptera.

6.0 General Site maintenance and stewardship

6.1 Management objectives

- Engage and inform the local community and general public with regard to management, nature conservation and recreational use of the pond.
- Provide regular patrols of the pond.

- Liaise with relevant local, regional and national wildlife and conservation bodies in order to foster positive relations, gather advice and observe best practise conservation management.
- Liaise with relevant local, regional and national media where necessary and practicable.
- Engage local schools, educational establishments, in active use of the pond for a variety of project related visits.
- Liaise with any body or organisation with a positive interest in the pond, its management, its history and/or any use deemed acceptable by Horndean Parish Council.
- Uphold adopted bye laws and policy of Horndean Parish Council.

6.1.1 Current condition and status

At present the site suffers from occasional vandalism and dumping of rubbish, garden waste and even the misguided addition of goldfish.

Local residents do express positive words of encouragement, praise and thanks to Countryside staff for the positive work seen in the past few years and support the management work of the team.

On the whole the stewardship and management of the pond by Horndean Parish Council Countryside Team is continually improving the wildlife value and biodiversity of the common whilst continuing to provide good public access and amenity.

6.1.2 Monitoring site maintenance and stewardship

Human Impact

Collect data on all unauthorised events, misuse or abuse of any substance including alcohol, cannabis, glue and lighter fluid, criminal damage, unauthorised fires, pollution, dumping and encroachment.

Educational Activity

Collect data on use of site for educational purposes.

Recreational activity

Collect data on use of site for planned recreational events.

Emergency Services

Seek feedback and collect data from emergency services after any event or occurrence which resulted in their attendance

CATHERINGTON POND WORK SCHEDULE 2015-2025

SCHEDULE OF GENERAL SITE MAINTENANCE AND STEWARDSHIP

DESCRIPTION OF WORKS	TIMING AND FREQUENCY OF WORKS	LIMITS OF ACCEPTABLE CHANGE	OTHER COMMENTS	DATE WORK UNDERTAKEN	# HOURS/ PEOPLE	GROUND ORG REF
Protect sites by patrol and liase with any parties with any interest in Catherington pond	Weekly			N/A	0.10 HRS 1 person	284
Litter pick and waste collection	Weekly		Carried out as part of the weekly parks checks	N/A	(INC. IN ABOVE TASK)	284
General site check including infrastructure	Bimonthly		Included in the countryside checks; bench, signs, dipping platform	N/A	0.20 1 person	99
Tree safety work	Bimonthly (internal) Annual (external)		Any high risk trees to be included in the annual external tree report	N/A	(INC. IN ABOVE TASK)	99

SCHEDULE OF GENERAL SITE MAINTENANCE WORK (BANKSIDE AND POND VEGETATION)

DESCRIPTION OF WORKS	TIMING AND FREQUENCY OF WORKS	LIMITS OF ACCEPTABLE CHANGE	OTHER COMMENTS	DATE WORK UNDERTAKEN	# HOURS/ PEOPLE	GROUND ORG REF
Coppice willows in pond. Re coppice when necessary	Winter N.B area TPO		One-two trees every 1-2 years. This will allow the pond to retain water and limit hydroseral succession.	coppiced in 2014	2 hours 2 people	Not yet in
Cut bramble back from around the banks and strim public access paths	In winter to avoid disturbance to wildlife	It should not be left to encroach on the rest of the site.			4 hours 2 people	184
Creation/maintenance of log piles and buffer zones around pond for amphibians	Annually before winter				(INC. IN ABOVE TASK)	184
Remove non-native invasive plant species	Winter				(AS ABOVE)	184
Manage habitat, open water, by clearing vegetation. Clear one third wedge of pond vegetation.	Annually in winter (when required)			1/3 cleared in 2014	(AS ABOVE)	184

SCHEDULE OF SITE SURVEY AND MONITORING WORK

DESCRIPTION OF WORKS	TIMING AND FREQUENCY OF WORKS	LIMITS OF ACCEPTABLE CHANGE	OTHER COMMENTS	DATE WORK UNDERTAKEN	# HOURS/ PEOPLE	GROUND ORG REF
General monitoring of site development and changes	As often as possible throughout the year	General monitoring should not be reduced in frequency and should be consistently carried out by a range of people not least the site manager. Survey and monitoring methods need to be objective, prioritised and able to provide the information required.	Good general monitoring is an invaluable tool in determining and prioritising the day to day management of the site. Members of the public can and should be encouraged to assist. Members of the countryside team can conduct general site checks whilst other work is carried out	N/A		99
Survey of plant communities aiming to classify them according to the NVC	Spring/summer	The plant communities must be identified according to the NVC.	Random quadrats in selected areas. Classification according to the NVC allows long-term changes in plant community types to be better monitored and understood. This survey must be carried out by a competent person or body		2 hours 1 person (Ranger)	Not yet in
Fixed point photography	This on-going photographic record should be updated at least every 4 years	For the site as a whole it should not be done less regularly than every 4 years at the present time	Photographical records of the site should be used as a tool to help monitor the development of the site and therefore assist in management decision making		1 hours 2 people	Not yet in

DESCRIPTION OF WORKS	TIMING AND FREQUENCY OF WORKS	LIMITS OF ACCEPTABLE CHANGE	OTHER COMMENTS	DATE WORK UNDERTAKEN	# HOURS/ PEOPLE	GROUND ORG REF
Monitoring of vegetation communities	This can only occur properly once communities have been classified according to the NVC and thereafter, should occur seasonally and annually	It is possible to allow some change to monitoring of vegetation as long as at least one detailed survey is made annually by the land manager	Changes to plant communities generally occur due to natural succession or if ground conditions greatly change. Quadrats can and should be used to survey plant communities		3 hours 1 person (Ranger)	Not yet in
Pond survey	Spring and august (with Hi- Tek Wild-Trek and local school children)		Vegetation, mollusca, odonata, amphibians and reptiles, water chemistry, water depth, wetland invertebrates		2 hours 2 people	Not yet in
Hydrological survey	Quarterly Quarterly Annually		Water chemistry Water depth Extent of weed free area	CURRENLTY DON'T HAVE WATER TESTING FACILITIES		Not yet in
Human impact/public use	As often as possible throughout the year			N/A		99, 184

REFERENCES

Environment Agency, 1997. Ponds and Conservation: A guide to pond restoration, creation and management. Environment Agency.

DOCUMENT ENDS