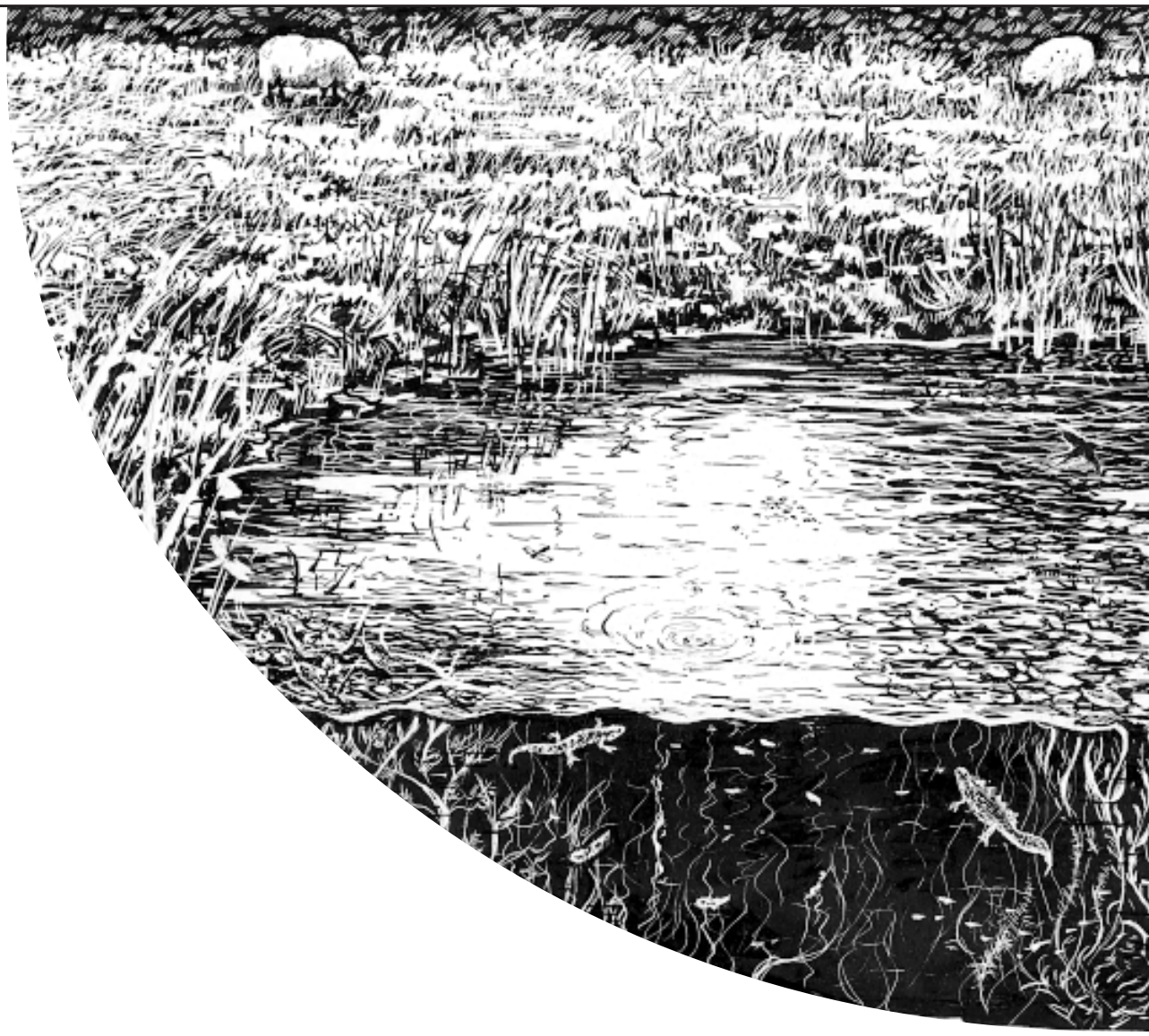
PONDS



TREND IN THE PEAK DISTRICT:

Significant and continuing decline thought to be in the order of 33 - 50% since the 1960s.

ESTIMATED EXTENT IN THE PEAK DISTRICT:

2000 – 2700 extant ponds.

NATIONAL BAP HABITATS:

Standing Open Water (broad habitat type).

ASSOCIATED NATIONAL BAP PRIORITY SPECIES:

Water vole, great crested newt, otter.

ASSOCIATED PEAK DISTRICT AUDITS:

Ponds.

INTRODUCTION

Of the 2000 - 2700 ponds in the Peak District (excluding garden ponds) approximately 75 % are to be found in the White Peak where the vast majority are dewponds dating from the 19th century, principally occuring on the limestone plateau but with smaller numbers in the dales. Village ponds, fish ponds, millponds and ponds associated with old mineral workings (e.g. silica sand pits, limestone quarries) are also found locally. In the Dark Peak and South West Peak ponds are far fewer and occur in a variety of situations including millponds, coal bell pits, ornamental parkland ponds and farm ponds excavated in natural low-lying wet areas. Garden ponds add significantly to the overall resource and are of importance to individual species including frogs and newts, though they seldom support relatively natural communities.

Surveys in sample areas of the White Peak suggest that there were significant losses of dewponds in the 1970s and early 1980s, with perhaps as much as a 50 % loss of ponds over a 15 year period. More recent surveys suggest that losses have continued since then but perhaps at a slower rate. The dewponds of the White Peak have been particularly vulnerable not just to in-filling but also to neglect, leading to cracking of the clay (or more recent concrete) linings and consequent loss of the pond. More intensive management of surrounding farmland has also lead to puncturing of clay linings by heavy livestock, eutrophication and contamination of ponds through fertiliser, slurry and herbicide application, and loss of surrounding habitat on which some of the important pondlife (such as newts) may depend. In the Dark Peak and South West Peak the number and condition of ponds has probably remained more stable, and may even have increased slightly due to pond creation through conservation schemes.

Perhaps the single most important feature of ponds in the Peak District is the great crested newt, a protected species for which Britain may hold up to 50 % of the world population. Although few individual ponds support particularly large numbers, the total population across the network of White Peak dewponds is considered to be of high national importance. As a protected species, licences are needed for anything which might result in their disturbance. In addition dewponds collectively represent a substantial habitat resource for aquatic invertebrates (particularly beetles and bugs, including a few nationally scarce water beetles), commoner amphibians such as frogs, toads and other newt species, and locally scarce aquatic plants such as common water-crowfoot and pond water-crowfoot. Water voles also utilise a few ponds.

Evidence suggests that the wildlife interest of dewponds tends to be very dependent on the management of the pond at the time (e.g. when it was last de-silted). There are therefore probably relatively few ponds which are of particular importance compared to others. It is the maintenance of a network of ponds relatively close together, allowing movement of plants and animals between ponds, which is probably of the greatest conservation importance.

In addition to their wildlife interest, dewponds are a characteristic landscape feature of the White Peak plateau, associated with the historical enclosure of this area during the 18th and 19th centuries.

ADVERSE IMPACTS	Historic	Current
Agricultural Management		
Neglect of dewponds as a result of increased availability of mains water.	✓	✓✓
Increase in livestock numbers and size, leading to puncturing of dewpond lining, eutrophication, loss of emergent vegetation cover and structure.		✓✓
Intensive use of surrounding land leading to loss of associated habitat such as hedges, walls and semi-natural vegetation.	✓	✓✓
Pollution		
Agricultural improvement of surrounding grasslands, resulting in eutrophication and herbicide pollution.	✓	✓✓
Run-off from sheep-dip disposal, causing damage to invertebrate communities.		✓
Pollution through slurry/silage run-off.		✓
Direct Damage		
Drying-out and consequent cracking of dewpond linings due to drought which may increase with climate change.	✓	✓✓

Cracking of dewpond linings by quarry blasting in the vicinity.	✓	✓
In-filling.	✓	✓✓
Excessive clearance of pond vegetation.	✓	✓
Dumping of waste.		✓
Invasive Species		
Invasive non-native species, notably New Zealand pigmyweed and Canadian pondweed.		✓
Stocking with fish.		✓
Others		
'Ornamentalisation' of ponds.		✓
Natural succession (in-filling/siltation).	✓	✓✓

An impact ✓ *Significant impact* ✓✓

CURRENT ACTION

Designated Sites

- A number of ponds exist within SSSIs, including several of the dales SSSIs which fall within the Peak District Dales cSAC. However they do not form part of the reason for designation.
- A number of ponds have been identified as 'Wildlife Sites'.

Sites Owned and Managed by Conservation Organisations

- A number of ponds are safeguarded through ownership by conservation bodies including EN, WTs, NT and PDNPA.

Sites Within Conservation Agreements

- 64 ponds have been safeguarded or created under the PDNPA's Farm Conservation Scheme (FCS) since 1988.
- Landowners and managers in the Bonsall Moor and Tissington areas are currently entering some 60 ponds into conservation scheme agreements, encouraged through the PDNPA's Pond Project. 40 of these have had de-silting work done.
- A number of ponds have been restored or created within the Countryside Stewardship Scheme (CSS). A larger number are protected by the cross compliance element of this scheme but although this should ensure they are not destroyed it is unlikely to result in positive management.
- The PDNPA's Landscape Service has been involved in the creation and management of various ponds and gives advice and grant aid for pond creation, restoration and management.

Research and Survey

- The county amphibian recorder for Derbyshire has surveyed some 1200 ponds in the White Peak for amphibians since 1985. Results of his work suggest a 50 % loss of ponds in some areas.
- In 1990 EN commissioned a report on the status of great crested newts in the Peak District and Derbyshire, highlighting important sites and pond clusters.
- Pond surveys were carried out by the DWT throughout the Derbyshire White Peak, and by the PDNPA Ranger Service in 1994 - 95.
- 242 ponds in the Bonsall Moor and Tissington areas were surveyed through the PDNPA's Pond Project from 1998 - 2000. Of these, 67 % still held water, 33 % were dry.
- Four different dewpond re-creation techniques are being trialed by EN in the NNR (2 ponds), through the PDNPA's Pond Project (5 clay and stone sett, 3 'Rawmat', 2 concrete re-lining and 2 mastic lining repairs) and on land owned by the PDNPA. Previous restoration work has been trialed by the DWT.
- A pond database has been established by the PDNPA.

ACTION PLAN OBJECTIVES AND TARGETS

National Targets

Ponds are not a national key habitat and so no targets have been set. However within Derbyshire the National Action Plan for great crested newts aims at 15 great crested newt re-colonisations by 2003 – as a net gain. This will necessitate both the creation and restoration of ponds in the Peak District.

A Vision for the Peak District

To be a credible nature conservation target and to safeguard the integrity of the pond network, the aim must be to maintain a substantial proportion of the existing pond resource with an emphasis on the maintenance of networks of linked pond clusters, and in an ideal world to create new ponds. In this way ponds will continue to contribute to a rich and diverse wetland flora and fauna in all three Natural Areas of the Peak District. Objectives and targets have therefore been set at a level which is considered very ambitious but, with concerted effort, may be achievable.

OBJECTIVES AND TARGETS

Objective 1

Maintain a coherent pond network, particularly in the White Peak, by ensuring pond clusters and links between them are maintained.

Target

Ensure 20 % of all existing ponds are under a management regime to safeguard their existing interest by 2005, and that 50 % are under such a management regime by 2010. At least 75 % of such ponds should be important in safeguarding, reinforcing or linking pond clusters.

Objective 2

Maintain, as a priority, ponds considered to be of the highest importance in their own right.

Target

Ensure 50 % of ponds of the highest importance are under a management regime to safeguard their existing interest by 2005, and that 100 % are under such a management regime by 2010.

Objective 3

Maintain or enhance the quality of the terrestrial habitat surrounding ponds.

Target

Ensure at least 25 % of ponds under conservation management regimes, and at least 75% of such ponds of the highest quality, include management to maintain or enhance the surrounding terrestrial habitat, by 2010.

Objective 4

Restore ponds currently in poor condition to favourable condition.

Target

Ensure 20 % of all ponds in poor condition are under a management regime, by 2005, to restore them to favourable condition, and that 50 % are under such a management regime by 2010. At least 75 % of such ponds should be important in safeguarding, reinforcing or linking pond clusters.

Objective 5

Enhance the pond network by repairing defunct dewponds and creating new ponds, concentrating particularly on sites with surrounding high quality habitat and/or locations which safeguard, reinforce or link existing pond clusters.

Target

Re-create 20 ponds by 2003 and 100 ponds by 2010, of which at least 50 % should reinforce or link important pond clusters (this should help meet the national action plan target for great crested newt re-colonisation sites).

Main Factors Likely to Affect the Achievement of Targets

Land Management

Implementation of the Rural Development Regulation and reform of the Common Agricultural Policy.

Effectiveness of agri-environment and conservation scheme prescriptions.

The perception of ponds as a priority habitat and their inclusion as such in the whole holding approach to negotiation of agri-environment and conservation scheme agreements.

Effectiveness of agri-environment and conservation scheme cross compliance.

Planning and Regulation

Planning and licensing policies.

Planning permission requirements.

Lack of planning controls for agricultural operations – Permitted Development Rights (PDR) allow in-filling of ponds within a farm holding.

Resources and Financial Incentives

Lack of availability of adequate financial incentives for dewpond management and restoration.

Pollution and Climate Change

Climate change (particularly the loss of dewponds in drought years).

Practical Difficulties and Gaps in Knowledge

A clear definition of favourable condition.

Others

Opportunities for pond creation through quarry restoration.

Desires and interests of landowners in wanting to create/restore ponds.

ACTIONS

Key to the achievement of the proposed targets are the actions relating to:

- negotiations to secure appropriate pond management (Actions P24 - 27);
- a consideration of a review of agri-environment schemes in relation to the options and payments for pond safeguard, restoration and creation (P23);
- research and monitoring of restoration techniques (P8, P9, P15 and P16), and
- direct management of village, community and garden ponds (P28 - 30).

Only if consideration of the conservation management of this habitat becomes an integral part of the management of every holding can we hope to retain ponds as a vital part of our heritage.

	ACTIONS	TIMESCALE	LEAD AGENCY & Partners
DATA COLLATION AND SURVEY			
	Data Collation		
P1	Compile a register of ponds including level of importance (including 'Wildlife Site' status), Natural Area, condition, important species, cluster links and conservation status, and initiate a programme for regular updating. (All objectives)	2001	**PDNPA**
P2	Ensure that the pond register is easily available for use and updating by relevant organisations. (All objectives)	2001 onwards	**PDNPA**
	Survey		
P3	Encourage local schools to carry out a survey of garden ponds including key species and basic habitat information where possible. (Objectives 1, 2 and 3)	2001 onwards	**WTs/PDNPA** (joint leads)

EVALUATING THE IMPORTANCE AND CONDITION OF SITES

Evaluating Importance and Identifying Key Sites

P4	Agree a methodology for the evaluation of ponds, including definition of key sites (incorporating the importance of linkages and pond clusters, and the requirements of key species), priorities for conservation action and identification of 'Wildlife Sites'. (Objectives 1, 2, 3 and 4)	2001	**ABAPG**

Defining favourable condition

P5	Agree definition of favourable condition for the complete range of ponds in the Peak District including consideration of early, mid and late vegetation successions and with consideration of the guidance available from 'Pondlife'. (Objectives 1, 2, 3 and 4)	2001	**ABAPG**
P6	Agree guidelines for the range of appropriate management needed to achieve favourable condition. (Objectives 1, 2, 3 and 4)	2001	**ABAPG**

RESOURCES

P7	Seek resources for pond restoration. (Objectives 3 and 4)	2001 onwards	**ABAPG**

RESEARCH

P8	Research restoration of cracked concrete ponds using cheap and quick techniques such as mastic repair. (Objective 4)	2001 onwards	**EN/PDNPA** (joint leads)
P9	Trial mastic repairs on ponds in the Derbyshire Dales NNR. (Objective 4)	2001	**EN**
P10	Investigate the perceived and actual health risks of ponds to farm stock, by collation of research results and by landowner survey. (All Objectives)	2002	**ABAPG**

INVASIVE SPECIES

P11	Establish a database of locations of invasive plant species including Canadian pond-weed and New Zealand pigmyweed. (All Objectives)	2001	**PDNPA**/EA
P12	Develop a strategy for the control of invasive plant species and implement where necessary. (All Objectives)	2001 onwards	**ABAPG**
P13	Discourage transfer of garden pond species to those in the wider countryside. (All Objectives)	2001 onwards	**ABAPG**

MONITORING

P14	Agree methodology for, and implement effective monitoring of ponds. Ensure that the results of the process are collated and used to update the pond register. (All Objectives)	2001 onwards	PDNPA/MAFF/EN WTs/NT
P15	Monitor the physical success of different dewpond restoration/re-creation techniques. (Objectives 4 and 5)	2001 onwards	**PDNPA**/EN/WTs
P16	Set up a programme to monitor the fauna and flora of differently created/restored dewponds. (Objectives 4 and 5)	2003	**ABAPG**

AWARENESS RAISING

P17	Share information on the importance and management needs of key conservation, restoration and re-creation sites with landowners/managers, including feed-back from surveys. (All Objectives)	2001 onwards	EN/PDNPA/NT/WTs FWAG/MAFF
P18	Following dewpond restoration/creation trials make guidelines available on the technical and economic feasibility of the different techniques. (Objectives 4 and 5)	2003	**PDNPA/EN** (joint leads)
P19	Organise a demonstration day for landowners and managers on pond maintenance and creation. (All Objectives)	2002	**PDNPA/EN** (joint leads)
P20	Make guidelines available to landowners on pond management, including grants and sources of advice. (All Objectives)	2002	**ABAPG**
P21	Make guidance on pond creation in existing wetland areas available to conservation organisation staff and landowners/managers, in order to ensure pond conservation measures are balanced against existing wetland interest. (Objective 5)	2002	**WEG**

CONSERVATION ACTION AND INCENTIVES

Designations

P22	Consider pond key sites in any programme of acquisition/lease/management of nature reserves including NNRs and LNRs. (Objective 4)	2001 onwards	**EN/LAs** (joint leads) PDNPA/WTs/RSPB/ NT

Grant Schemes

P23	Consider recommending review of all grant schemes to ensure that: *Targeting gives adequate priority to dewponds in the White Peak *Payments are introduced for annual maintenance and are increased for clearance and re-lining *Payments for buffers and wildlife headlands are introduced/reviewed (All Objectives)	2001 onwards	MAFF/EN/PDNPA WEG/ABAPG

Negotiation and Review of Agreements

P24	Review management of all sites within SSSIs. Where necessary agree revised management regimes with owners/managers using appropriate mechanisms, to ensure maintenance or restoration of favourable condition. (Objectives 1, 2, 3 and 4)	2005	**EN**
P25	Ensure that negotiations on holdings outside of SSSIs and existing agreements consider the pond resource on the whole holding, including: *The potential for pond repair/creation in key locations *The safeguard of all existing ponds on the holding *The establishment of management to bring all existing ponds into favourable condition *Bringing land surrounding ponds under favourable management where possible (All Objectives)	2001 onwards	PDNPA/WTs/FWAG MAFF
P26	Review management of ponds in existing agreements, outside of SSSIs. Where necessary agree revised management regimes with owners/managers to ensure that favourable condition is being maintained or restored. (All Objectives)	2001 onwards	MAFF/PDNPA/NT WTs/FWAG

P27	Review whole holding agreements which include unprotected ponds or sites for restoration. Consider the opportunities for amending the agreement to incorporate their safeguard and enhancement or restoration. (Objectives 1, 2, 3 and 4)	2001-2005	MAFF/NT/WTs/PDNPA FWAG
	Direct Action		
P28	On land owned by public or conservation bodies, ensure that: *Management maintains and where possible enhances the value of ponds *Options for the restoration of ponds are reviewed *Opportunities for pond creation are taken *The importance of pond linkages, clusters and the management of the surrounding land is taken into consideration (All Objectives)	2001 onwards	PDNPA/EN/LAs/NT WTs/Parish Councils
P29	Encourage the creation of ponds in built-up areas such as gardens and school grounds, and their appropriate design and management to benefit wildlife, taking due regard for health and safety issues. (Objective 4)	2001 onwards	**WTs/PDNPA** (joint leads)
P30	Encourage maintenance and, where appropriate, the creation of village and community ponds. (Objective 4)	2001 onwards	**WTs/PDNPA** (joint leads)
REGULATION			
	Planning		
P31	Ensure all planning applications and General Development Orders are adequately assessed in relation to their impact on ponds, that loss or damage to them is avoided and opportunities for enhancement are taken. (Objectives 1, 2, 3 and 4)	2001 onwards	**LAs/PDNPA**/WTs/EN
P32	Consider the opportunities for appropriate pond creation in relevant planning decisions including quarry restoration schemes. (Objective 5)	2001 onwards	**LAs/PDNPA** (joint leads)/Minerals Companies
P33	Clarify the planning permission needs for pond creation and seek to ensure that the planning regulations are simple. (Objective 5)	2001	**ABAPG**/PDNPA/LAs
P34	Ensure that the impact of quarry blast vibrations on nearby dewponds is addressed in the planning process. (All Objectives)	2001 onwards	**LAs/PDNPA** (joint leads)/Minerals Companies
	Pollution Control and Waste Management		
P35	Ensure good practice is followed in disposing of sheep dip, avoiding the vicinity of ponds. Implement by continuing with an awareness raising strategy amongst land managers; continuing the programme of licensing; extending consultation procedures for disposal applications to the whole of the Peak District and, where necessary, by enforcement action. (Objectives 1, 2, 3 and 4)	2001	**EA**/LAs/PDNPA/NFU
	Other Regulatory Mechanisms		
P36	Explore the possibility of a notification system for in-filling of existing ponds. (Objective 4)	2002	**PDNPA**

RESOURCES

It is envisaged that the majority of actions proposed will be carried out by the relevant organisations using current resources. However, this will necessitate careful targeting and re-prioritisation. These include:

- continuing investment by landowners and managers managing their land sympathetically for wildlife;
- EN's programme of reviewing SSSI management and its grant and management agreement schemes;
- MAFF's Countryside Stewardship and Environmentally Sensitive Area Schemes;
- the PDNPA's advisory and grants service for landowners/managers;
- FWAG and the WTs' advisory services;
- County Recorder surveys;
- continuing management of ponds owned by conservation organisations and public bodies (NT, PDNPA, EN, WTs, LAs), WCs and BW.

Additional resources are likely to be required:

- to aid in the production of the proposed registers (2001 onwards);
- to provide advice on pond management (2001 onwards);
- to implement effective monitoring (2001 onwards);
- to provide financial incentives for the conservation and restoration management of existing ponds, and for pond creation (2001 onwards).