Tree hole nesters

Chair and Rapporteur: Tony Mitchell-Jones (English Nature)

1. Research needs

What is a tree hole/cavity? A definition must be broad enough to include "under bark" (used by tree creepers, barbastelle bats etc) and hollow boles (used by a wide variety of organisms including humans).

Are there differences between live and dead trees in terms of cavities?

To record and evaluate their use, we need to know how many of each type of cavity is available.

The group found it useful to categorise parklands into three types:

- arable landscape (an island of parkland now surrounded by arable land),
- woodland or adjacent to woodland,
- "traditional" farming (small field systems, mixed farming, copses etc).

The value of cavities and the extent to which they are used by vertebrates and invertebrates will, in part, be determined by which category a parkland fits into. For arable landscapes, parklands may be the only source of tree cavities and as such they become refugia or sinks. For the other two, parklands may be marginal habitat.

Are there characteristic communities of birds and bats using cavities in old trees in parkland or other habitats? The group noted that most birds that are typical of parklands require tree cavities for nesting or roosting, and the same probably applies to bats but as yet we do not know.

2. Public perception

The public/owners/managers need to be made aware that trees with cavities (hollow, or clearly showing smaller cavities) are not necessarily dying and may be increasingly good for wildlife.

3. Recording and evaluation

See "Research needs". The most pressing need is development of non-destructive technology that can survey the wildlife within tree cavities.

4. Site and tree management

Cavity resource: How do we manage for it? Should we create cavities (explode off limbs or provide bat and bird boxes for example) where the resource is scarce?

5. Conclusions

The group recognised an urgent need to find out more about the natural history of cavities within parkland and other trees. These were major challenges. At present we do not have the technology to survey for the occupants of cavities; or, as in the case of fibre optic scopes, the equipment is impractical to use in many circumstances.

Presentations from main workshops

Research needs

Presenter: David Bullock, The National Trust

1. Introduction

'Research Needs' and 'Recording and Evaluation' are closely linked and difficult to separate.

Research often needs recording and may be part of evaluation. Here it is assumed that research involves studying interactions between variables or disciplines in a way that increases our understanding of the **history** or **natural history** of parkland.

For example, in Dunham Massey Park, Greater Manchester, a greater understanding of the area of ancient parkland was achieved by comparing the results of a recent archaeological survey with entomological surveys. The former revealed the presence of an Anglo-Norman park in what is now partly a golf course. Here the saproxylic beetle fauna was interesting but apparently not as exciting as in the present park where survey has revealed the rare cobweb beetle *Trinodes hirtus* which is a relict "old forest" species found in sites of long ecological continuity. Was this species found in the wider estate including the old and more recent parklands or has it jumped from one to the other? How do we find out?

2. Research needs

To have presented all the research needs identified by the workshop groups, and kindly passed on by their rapporteurs and others, would result in a long and varied list. To avoid repetition, only research themes identified by more than one group are included. These are compared with research needs as listed in the Habitat Action Plan (HAP). Finally, some detailed research needs identified by experts which, for a variety of reasons, were not included in the HAP are listed.

Two broad research needs were identified by more than one group:

- Research into perceptions and knowledge of parklands.
- The natural history, significance and management of interactions between parkland trees, fungi (via mycorrhizal associations) and pasture quality.

These are dealt with in turn.

2.1 Research into perceptions and knowledge of parklands.

Biologists, historians, landscape designers and restorers, and the general public do not share the same knowledge about parklands. Some of these interest groups do not even speak the same language. Biologists use scientific names for species (which, confusingly, change from time to time) and their definitions of "conservation" and "restoration" differ (and may conflict) with those of restorers of historic landscapes. In some cases the result is a battle between nature conservationists whose concept of an agreement that some standing dead wood will remain *in situ* is that it is "saved" or "rescued". To the restorer of the historic landscape the same action is a "compromise".

The root of the problem is misunderstanding and the ignorance of the values other stakeholders place on parklands.

There is a clear research need to find out how to bridge the gaps between interest groups, and to do it!

The interactive nature of this symposium presents a good model of the way forward. What we need is more of them where a substantial proportion of the delegates have interests and expertise in the archaeology, design and the restoration of historic parkland landscapes.

The "Public Perceptions" workshop identified a need to find out what people "see" in parklands and how an increase in perception can be achieved, if at all possible. However, it is also clear that parkland experts do not talk to people outside their discipline or expertise. It would be useful to find out more about what we do not know about parklands, perhaps before promoting them to the public. The Veteran Trees Initiative has been good at raising the profile of nature conservation and tree management in parklands. How much effort is being put into determining owners' views? Can the designers' interpretations of the owners' visions of parklands be carried forward into the next millennium, with the new environmental features that have been added? The "Current Economic Use" workshop suggested research into ways of bringing landowners to consider new interpretations/uses.

2.2 The natural history, significance and management of interactions between parkland trees, fungi (via mycorrhizal associations) and pasture quality

The suite of projects here centres around nutrient cycling. Trees - the key feature of Lowland Wood-pasture and Parkland - capture nutrients and water from the surrounding land in a variety of ways: dung from cavity-using animals and herbivores accumulates within and at the bases of trees; fungi assist in capturing nutrients and water from the pasture around trees, and through the processes of decay provide habitats (cavities) and food (via mycorrhizae, partly digested wood and the fungal tissue). Many aspects of the location (local climate, access to water, aspect, local density of trees etc) of study trees is important. In order to understand the relative importance of the various organisms and their interactions to tree health and longevity, this study needs the skills of tree biologists/dendrologists, plant physiologists, vertebrate ecologists, grazing specialists, landscape historians (why is the tree where it is?), land owners (history of land use and present uses), archaeologists and perhaps even dowsers (to find where the roots go).

Those of you familiar with the HAP will realise that the multifaceted research needed to understand this topic is not well represented. Yet funding for research is most likely if there is a strong multidisciplinary approach with an applied outcome. Can the organisms that inhabit parklands - and especially veteran trees in parklands - inform us about the ability of genotypes, local varieties of species, communities and landscapes to cope with climate change? Trees that are centuries old, and in landscapes that are much older than that, have experienced wide climatic changes several times in their lives. We need to find out if they have special qualities/adaptations to cope with climatic extremes. If climate change brings longer and deeper droughts we would be wise to compare parklands with equivalent savanna-like landscapes in different climates, but with the same kinds of trees (oak, *Quercus*, species for example), such as around the Mediterranean.

Without a greater understanding of these processes nature conservationists will remain wedded to applying the precautionary principle whenever individual trees or bits of trees

are threatened. This approach is not sustainable and engenders suspicion amongst those who have other uses for parklands and their trees, that nature conservationists are being over-precious and elitist in their demands.

3. Habitat action plan

The HAP has two sections where research is in the title:

3.1 Management, research & guidance (3.2)

This section identified the need for datasets, inventories, grant-aid, advice but not research!

3.2 Monitoring and research (5.5)

This section includes survey, evaluation, development of monitoring programmes and encouragement of research. For the latter, tree and pasture management, interactions between fungi, soils, hydrology and grazing animals and population ecology were identified as priorities.

4. Other research needs

Detailed research needs were listed in a document entitled Further Action for Wood-pasture and parkland which summarised action points that were not included in the HAP but were nevertheless considered relevant. They are given below:

4.1 Ecological

- Establish research to link tree characteristics (species, dbh etc) to importance for characteristic species of fungi and invertebrates. Indicator species could be determined.
- Importance of canopies in old pollarded woodland, effect of canopy removal on invertebrates, effect of age on canopy.
- Dispersal in saproxylic invertebrates; effects of isolation.
- Ecology and population genetics of saproxylic invertebrates, in spreading species like *Agrilus pannonicus* and common species like *Rhagium mordax.*
- Historical studies on parkland regeneration and planting patterns. Determine former extent of parkland.
- Promote analysis of tree rings when veteran trees collapse and set up a database. There particularly needs to be more work on limbs.
- Research into the physiology of veteran trees, starch storage, effects of cutting, bud dormancy.
- Effects of frost and defoliation on veteran trees at Staverton Park.

4.2 Management

- Set up monitoring studies on the effects of inorganic fertilisers on mycorrhiza, both of grassland and tree species.

- Research into the processes leading to the development of glades and open habitats in wood-pasture.

- Research into the use of grazing versus mowing in maintaining wood-pasture sites.

- Research into the behaviour of ancient trees in relation to the North American compartmentation theory of damage limitation.

- Research into veteran tree management techniques, including timing of cutting and tree surgery methods e.g. crown reduction.

Finally, to reiterate, the view of delegates at this symposium was that, in addition to these detailed research needs, a greater understanding of the values placed on parklands by all stakeholders, rather than just the biologists, will be crucial if we are to conserve this key habitat for the next 1000 years.

Recording and Evaluation

Roger Key, English Nature

1. *What* to record/survey/evaluate?

The management of the modern landscape needs to reflect and build upon the historical continuity of: landscape design and management, its historical context, the presence of very old trees and dependent flora and fauna. Therefore, each of these needs to be recorded.

2. The context

Some contributors felt that there is currently focus only on recording and evaluation within the site itself rather than its position within the wider context. There is a need also to put more effort into recording:

- the park's landscape context
- its position in the ecological landscape
- the possible use of trees in the surrounding countryside by the park's flora/fauna
- historical and sub-fossil evidence of changes in fauna
- historical changes in land-use
- the position of the park in a social context - its relationship to the nearby village or other settlement.

There is thus a need to be able to record/evaluate the site as part of a landscape complex or matrix. The whole is likely to be more highly valued and sustainable than the sum of its parts.

It is also important that recording is carried out using subunits of sites in order to identify, for example, individual areas that are important C16 landscape features, particularly important trees or areas for lichens/beetles, or areas of park most valued by visitors.

Historical and current ethno-botanical uses of parkland sites such as use of wood or vegetable dyes by local village craftspeople should be recorded. This point was made by Sue Ellis in the presentation about public perceptions - an ethno-botanical flora of parklands and pasture woodlands... ?

3. Species

A reassessment of the use of rarity and the statuses ascribed to species is needed, together with an analysis of species' habitat fidelity, and the identification of indicator species or species groups (not necessarily all from the same taxon) is needed.

There is currently too much emphasis on recording rarities. Better recording of more widespread species, especially those that have wide ecological significance and that influence processes (especially among the fungi) should be given equal priority with the recording of rarities.

Assessment using the Saproxylic Quality Index[2] requires recording of widespread species as well as rarities.

4. Opinions/feelings/values

Subjective evaluation/recording of the feelings/values of stakeholders (owners, managers, visitors, specialists/enthusiasts, locals) will reveal discrepancies and conflicts in the 'vision' of the site. These need to be revealed before they can be tackled and fed into management, education and publicity.

5. Events in time - natural events - events planned by people

There is a need to analyse the causes of events and hence the need to record (for example):

When did an ancient tree fail?
Under what circumstances?
Associations with presence/absence of potential stressors?

What events were/are held in the parkland?
How well are they attended?
What variables influence attendance?

6. How to record/survey/evaluate

6.1 Methodologies & media

There is already an existing "capital" of anecdotal recording which is of value only if the data is collated. The results may be used, for example, to identify gaps in knowledge or sometimes species' trends.

In the workshops and informal discussions it was emphasised that for parklands and other pasture-woodlands we still need to develop simple and effective survey, sampling, recording and monitoring methods.

Systematic methods are very difficult to develop for some taxa. For example, repeatable, quantitative methods are lacking for sampling, recording or monitoring saproxylic invertebrates. Often the only quantitative description available may be the number of days effort devoted to survey.

We should also be documenting cultural/heritage values using artistic media (via paintings, sculpture, poetry, prose) - consider how valuable Kilvert's diary entry of 22 April 1876 about Moccas Park has been.

6.2 Recording environmental attributes

In addition to conventional recording of species, recording of other variables in parklands and their landscapes should be given greater prominence. For example, we should be monitoring the pollution that is causing lichen decline, the weather causing the beetle boom, and also features of importance to the flora and fauna: for example the

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2 FOWLES, A. P. 1997. The saproxylic quality index: an evaluation of dead wood habitats based on rarity scores, with examples from Wales. *Coleopterist*, **6**, 61-66.

abundance of tree cavities and other tree decay features as given by Elton[33] could be used. Such methods need verifying to determine if there is a real relationship between the attributes recorded and the quality of the flora and fauna and to determine if habitat management in parkland (such as enhancing the dead and dying wood resource) really enhances the populations of saproxylic species. If it does, then cheaper monitoring of features may in part replace the need to monitor the species themselves.

Simple techniques, especially photography, will in the long term be as valuable in detecting change and evaluating the success or otherwise of management as more sophisticated methods, and are more likely to be financially sustainable.

6.3 Evaluation

Use of widely disparate methodologies (even within animal and plant taxa) is seen as a barrier to integrating evaluations of the overall value of a site and to identifying gaps and trends. This may be particularly confusing for site owners and managers. There is a need for convergence of approach between different disciplines.

There may be scope to integrate landscape/wildlife/historical value in evaluation - this should be investigated.

6.4 Accessing the results of recording/survey/evaluation

One problem repeatedly noted was the disparate sources of information. All groups identified the need for a "one-stop-shop" for information (several people used precisely this phrase and noted that it was a key need in terms of advice and financial support for the "Current economic use" workshop).

7. The role of recording and evaluation in the resolution of conflict

Currently different 'stakeholders' don't know of each others interests, evaluations, objectives and visions for parkland sites. Partly as a result of this, the owner/manager may be a "piggie-in-the-middle" between conflicting objectives while also having an agenda of their own. For owners/managers it would be useful if surveys/evaluations /recommendations took into account all other stakeholders' interests beforehand rather than leaving them to sort out conflicting priorities

The National Trust's Statements of Significance for every property (in which the reasons why the property was acquired, its present importance and a vision for the future) was seen as a potentially good model for other sites.

8. Recording and evaluation in parklands: A suggested way forward

1. A "Meta-database" comprising pointers to data, opinion, objectives, survey results, management plans, gradings and so on.

2. An agreed management structure for the database (and funding)

3. Meta-data - summaries and pointers - not data itself, quizzable geographically.
   Links (preferably active electronic) to actual data with the ability automatically to summarise information.

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[3] ELTON, C. 1966. *The pattern of animal communities*. London: Methuen.

4. Compatibility with existing databases, especially English Heritage's Register of Historic Parks & Gardens and the planned National Biodiversity Network, and others holding environmental data (weather, land-use, geology/soils for example) so that trends and contexts can be better understood.

5. There is a need for common, unambiguous standards. For example, site name can be ambiguous. EN's NNR "Moccas Park" is not the same as English Heritage's site, which is larger and includes Moccas Court.

6. Need to explain/interpret results of survey and evaluation. If sites are being re-interpreted it is vital to communicate this to the owner/manager in a language that they can understand. Many stakeholders experience difficulties with species lists or landscape/heritage terms. There is sometimes a mutually unintelligible terminology. Simple English or Welsh summaries/interpretations of results, implications and (new) values is needed.

7. Localise recording within site. Which are the most important bits? Where can the car park be put without upsetting anyone?

8. Group species' habitat requirements: Provide summaries with evaluation.

9. Nomenclature and jargon. The English name debate for species! Pleas for stability of nomenclature in scientific circles (not within the remit/realm of what is possible from this forum!)

10. Need for stakeholders to explain why they feel various aspects of parklands are important. Need for common terminology between stakeholders. At present, the word 'restore' can profoundly affect how objectives are interpreted (see introduction and section 2.1).

11. We need to prepare good case studies. Examples of good surveys/evaluations should be made available so that best practice can be copied and built upon.

Finally

Some specialists of all persuasions have decades of experience derived from recording (sometimes on a totally 'ad hoc' basis). The next generation is producing fewer of these 'amateurs' (using the true sense of the word).

Site and tree management

Presenter: John White, Consultant Dendrologist

1. Terms of Reference

We must properly define what we want to manage. What is a 'park'? What is 'lowland wood-pasture'? What is 'grazed high forest'?

Do we want to preserve something from the past? Are there wide local variations in this? Or do we want to be innovative and create something different? Research and decisions are needed.

Can we, or should we, persuade owners of private parks to change their land in any way. Many owners must have strong views about what they want to do with their property and are unlikely to be persuaded to do otherwise by grant aid. For those who wish to, or can be persuaded to, manage their parkland according to an action plan there are three separate issues to be addressed:

- Real site management
- People and access management
- Funding.

1.1 Real site management

For this we need:

- Information
- A vision of the future
- A set of objectives for different park/pasture-woodland types.

The latter may be to do with conservation of history or the natural environment, or more sensibly a combination of both.

Be aware of managing veteran tree sites primarily for something other than veteran trees (a site issue).

Think about what surviving veteran trees have lived through. Factors to include here: air quality, use for any commercial purpose, soil water availability, value for sport or amenity, disturbance, heritage, privilege, religious use, nutrition, survival by design or by default, protection (tree issues).

To support conservation, a simplified grant aid system is needed which has been described as the "one-stop-shop" for advice and grants.

There has been much discussion of site and people management in this symposium, and the following were the most common themes:

- Different objectives for different types of pasture-woodland - local variations.
- The need for decision support systems for managers, and feedback about subsequent progress.

- The need to think holistically and integrate key parkland sites into landscape and/or management units.

- Identification of targets that can be realistically met whilst at the same time not losing sight of vision for the site.

- Generic descriptions of showcase sites may be highlighted.

- Valid planting techniques, planting densities and planting intervals are required.

- Sward management advice is required (including stocking density and type).

- Thorn trees as a pollen and nectar source should be encouraged.

- Over-tidiness should be avoided unless safety would otherwise be compromised.

- Loss of anecdotal evidence - ways to record it and an overview of how use it.

1.2 People and access management

For this we need:

- To be aware that in law safety takes precedence over amenity. This has implications for tree health. Tree safety models might be written to help owners to assess their own risk factors. Tree failure data is needed. Possible changes to Occupiers Liability Act (as proposed in a forthcoming CLA Report).

- To choose and target particular audiences. Effects of visitors. Disturbance of stock/game/wildlife; soil compaction (visitors and other animals); vandalism; inappropriate recreational activities; collecting/destruction (fungi, kindling etc).

- Advice on how to handle adverse public reactions to management work.

- To identify and assess the impact of public admissions and the "Right to Roam" philosophy.

- To assess the impact of change of ownership and use, particularly the effects of fragmentation of holdings. The effects of the availability of an "overdose" of money to develop a site may not be in the best interests of veteran trees.

- To be aware of the effects of providing public facilities; toilet blocks, car parks, visitor centres and theme parks. Problems of litter, rubbish, foul water disposal.

1.3 Funding

- Grant aid may need to be 100% to induce some owners to act. WIG and other similar grants are possibilities here.

- A statutory definition may increase the likelihood of funding.

2. Management of veteran trees in parklands into the future

2.1 General principles

Veteran trees may be senescent, geriatric, ancient, unsafe or hazardous. Nevertheless they should not be removed. How then do we manage them? How do we manage the ground they stand on? Here are a few recommendations:

Recommendations for an Action Plan (5 - 20 years) must be robust enough to last (say) 400 years (vision plan). Note that only the very simple recommendations made 400 years ago are still apparent today but 400 year old trees are still extant.

For the wellbeing of veteran trees we should reiterate the recommendations (or rather the prevailing circumstances) of the past, ie *none of the following*:

- "artificial" fertilizer (only recycled dead leaves of native trees, bird or native animal droppings and the occasional carcase);
- herbicides, especially hormone weedkillers;
- un-natural compaction;
- neglect (keep pollards and coppice working);
- drainage or excessive abstraction of water;
- suppression (graze or harvest unwanted saplings);
- ploughing to cut into mycorrhiza zone;
- dense or tight grass swards (root with pigs?).

Remedial work has been neglected this century, during which time we have gorged ourselves on coal, plastic, oil and imported wood. This has left many surviving veterans in a dubious state.

There is a need to restore threatened veterans to a more stable condition by:

- re-working pollards;
- reducing crown weight (jagged cutting?);
- encouraging replacements (these may already be several hundred years old).

2.2 Disease

This is a fact of life with veterans, but how can they be protected from modern diseases and damage?

Phytophthora - beech especially; *Micropshaera alphitoides* oak mildew - a longer period of infestation due to climatic change; drought and other climatic extremes; honey fungus; grey squirrel; wind damage; bacterial cankers - ash especially.

In managing these fragile ancient habitats and organisms it seems to me essential that we do not take rushed short term decisions - perhaps for short term gain - like the trees themselves we must be patient.

Publicity, awareness and education

Presenter: Sue Ellis, English Nature

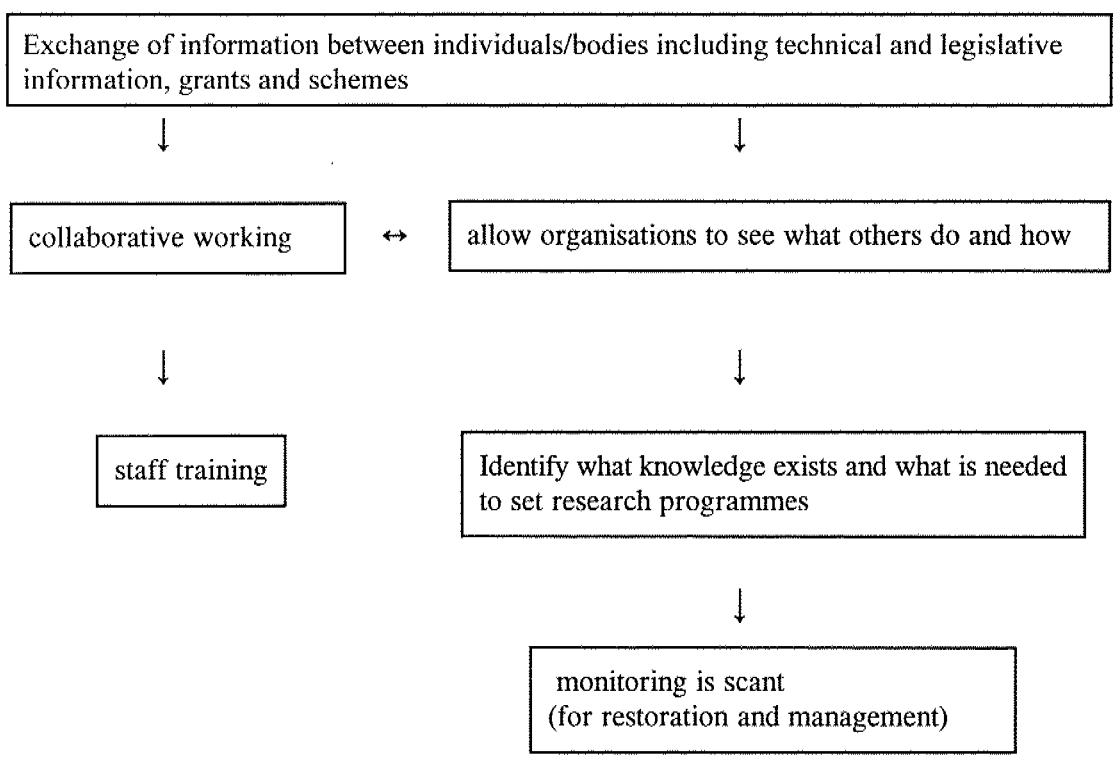
In this report, I will try to summarise and pull together points and recommendations arising from the workshops with respect to information needs, including the sort of information we need to gather as well as what we need to communicate in terms of publicity, awareness and education.

I was reliably informed by my colleagues at English Nature that today was the Eve of St Rita's Day and that she is the Patron Saint of impossible causes. I am sure this is no reflection on the Veteran Trees Initiative but more on my skills as a presenter. However, I will endeavour to do my best.

1. Design and management in historic parkland

The group considered the information needs for three separate target groups: specialists/professionals, owners/managers of parkland and finally, the public.

Specialists/Professionals



Owners/land managers

Need information on good practice, design and ecology which is readily available as good, understandable advice and also in well-presented publications.

The public

The group felt that there were two main information requirements for the public. Firstly the need to research what the public want from parkland sites, why they use them and what value they place on them. This would help to tailor information to their needs. For particular sites information boards and leaflets would be useful.

2. Cultural value and public appreciation of parkland

This group opened the discussion by talking about what parklands meant to them as individuals. Ideas ranged from the history - how they were developed and managed; the idea of the ideal landscape, from art history appreciation; the biology; tranquillity/peace; to marvel at the vision of original owners/planners; the smells; dung; dust; accident and design; creativity.

After a wide ranging discussion the group focussed down onto information needs and acknowledged that information should be targeted at various groups.

A priority group were owners/managers of parkland. The group identified that a database of owners/occupiers/managers could be developed which could be used to target individuals with appropriate leaflets or a special flyer that acknowledged 'the specialness' of their individual sites. There could be a 'parkland' award to acknowledge and recognise the management of parkland owners on particularly good sites. Primary schools could be invited to record data on parklands for the owner, fostering good community relations and local ownership as well as gathering information.

Another group to target were the general public. As with the previous workshop, the group identified that more information was required on public perception of parkland. Targeted information could include interpretive panels in appropriate places on site and targeted leaflets. What was needed was an 'awareness' campaign on parklands to let the public know about these unique habitats and their cultural and historical value and history.

Parklands could be given the 'Richard Mabey treatment'. As in his *Flora Britannica*, we need an "ethno botanical" book on parks, with human interest stories as well as the biology.

'Cultural access' rather than real access to parklands may be what is needed in most cases. A TV programme/series on parklands could cover all aspects of parks. Gardening programmes are very popular and have revealed a possible target audience for this sort of programme.

3. Implementation and integration of species and habitat action plans in parklands

Again, this workshop group focussed on targeting and acquiring specific information needs for appropriate audiences.

The group identified that any research under the Habitat Action Plan needs to be interpreted and used as a basis for PR activity for the public as well as to managers of sites.

The profile of Habitat Action Plan interests would need to be raised with the public to raise their awareness and create the political will to allow the plan to move forward.

PR could also raise owners/occupiers awareness of the importance of parklands. This would mean educating the advisors to help them put across the importance of parklands to owners. There was a need to identify parklands, where they are and who is owning/managing them.

The group felt that there needed to be a general awareness and appreciation of parkland habitat with all the target audiences before the Action Plan could be promoted.

Target audiences would then need to be clearly identified and we would need to consider exactly what could be achieved through each target group.

PR messages would need to be defined, especially for the general public. We would need to co-ordinate PR activity across all our organisations to get a concerted 'drip drip' effect.

In conclusion, the group decided that what was needed was an 'influencing strategy' which identified: who to go for, what the message would be, and how it would be co-ordinated.

The group also discussed the need for a new generation of 'specialists' and the point that we needed to inspire young people to become fungi, invertebrate, epiphyte specialists or landscape historians, or parkland managers - so that the future of parklands is sustainable.

4. Conclusions

All of the workshops identified the need for targeting appropriate information to the right groups of people. You can call this a PR programme, a marketing plan or influencing strategy, but it essentially means the same thing. To secure the long-term future of parklands and raise awareness of the need for care and management, we need to have a co-ordinated and targeted approach to gathering and using information. A 'drip drip campaign' was needed to raise awareness of parklands with the public, so they value these special places.

Finally, I would like to say as well as helping people to value and appreciate parklands, let us not forget enjoyment! All of you obviously enjoy what you do and it is your enthusiasm which will help to sell our message about parklands. If people enjoy things, they learn to value and care - so let's make things fun!

I would like to finish with a quote, because I am an English Literature student, and you should always start or finish with a quote.....

'Where'er you walk, cool gales shall fan the glade,
Trees, where you sit, shall crowd into a shade:
where'er you tread, the blushing flow'rs shall rise,
And all things flourish where you turn your eyes.'

Alexander Pope - Pastorals (1709), Summer

Setting an agenda for parkland conservation

Presenter: Keith Kirby, English Nature

At Moccas we saw the real problems of managing a park and reconciling different interests. These have been developed through presentations and discussion. The Habitat Action Plan provides a framework on which at least some of our aspirations can be based even if a particular research issue is not there.

The plan as such is the first stage in the process. The Steering Group will be looking to others at local and national level for what needs to be done to move forward. Some of the elements of an agenda for parklands are as follows:

Current status:

Different types of parklands and wood-pasture - definitions - terminology - different features of interest.

Lack of knowledge about where things are, their significance - relationship to other habitats, species in the landscape - links to survey/recording.

- **Current factors**:

  Many are picked as items for research. We do need more information and research, but we have got to be careful of wish-lists. "The best may be the enemy of the good."

- **Realistically can the work be done?**

  Research costing less than £30,000 over 1-3 years perhaps with 50/50 funding and through postgraduate research may be feasible.

  Projects that might cost £300,000 + and lasting five or more years are much less likely to be achievable.

  Can some of the research be done by collation of anecdotal information and best practice?

  Vision plans spanning 400 years are a lovely idea but are impractical. Twenty year plans are workable, and are likely to span the next change of owner/manager/grant scheme which are often the times when sites come under threat.

Communication is vital.

How many people were aware of the meeting on Local Provenances of Trees on 16/17 June?

Connections between interest groups are not yet sufficiently strong to be used for integration of parkland management and visions. Looking at the list of delegates and contributors, it is clear that landscape designers and other experts in the conservation of historic designed landscaped are outnumbered. We have been paying lip service to greater communication but are we actually making enough links?

We have heard much about educating owners but how far have we gone in finding out their views, their uses of parklands?

Setting an agenda for parklands. We need:

1. Networks of specialists to take forward and develop the difficult issues of what needs to be done for both the biological and non-biological elements of parks and wood-pasture.

2. Networks of practitioners and ways of capturing their experience in how to do things, as is done to some degree already in the Corporation of London's *Pollard and Veteran Tree Management* books.

3. Networks of owners - their support is vital for without them all else fails. Can we encourage the formation of a "parkland owners" group within CLA in the same way that some of the early pinewood conservation was driven by a native pinewood owners group"?

4. Agencies - to look at schemes and redirect resources/legislation; in particular to make sure that the TPO/Felling Licence rules are applied in ways appropriate for veterans in parklands. These must not be abused or fall victim to loopholes in the law.

5. Publicity - everyone is responsible for making sure that today's veterans are there tomorrow.

Lowland wood-pasture and parkland HAP

The Lowland wood-pasture and parkland Habitat Action Plan, part of the UK Biodiversity Action Plan, will be published in October 1998. The attached front page is from the latest draft version.

LOWLAND WOOD-PASTURE AND PARKLAND – A HABITAT ACTION PLAN

1. Current status

1.1. Biological status

Lowland wood-pastures and parkland are the products of historic land management systems, and represent a vegetation structure rather than being a particular plant community. Typically this structure consists of large, open-grown or high forest trees (often pollards) at various densities, in a matrix of grazed grassland, heathland and/ or woodland floras.

There are no reliable statistics on the extent of the overall resource, nor on historical and current rates of loss or degradation of this type of habitat. The figure of 10-20,000 ha "currently in a working condition" given in the 'habitat statement' of the UK Biodiversity Steering Group report, is the current best estimate.

This habitat is most common in southern Britain, but scattered examples occur throughout the country for example Hamilton High Parks and Dalkeith Oakwood in Scotland. Outgrown wood-pasture and mature high forest remnants ('virgin forests') occur in northern and central Europe, but ancient (veteran) trees with their associated distinctive saproxylic fauna and epiphytic flora may be more abundant in Britain than elsewhere.

These sites are frequently of national historic, cultural and landscape importance. Some, but not all, of the individual habitat components (beech woodland, lowland heath, unimproved acidic grassland etc.) may be biodiversity action plan priority habitats in their own right, so cross references to these plans will be needed.

Included in this plan are:

- Lowland wood-pastures and parklands derived from medieval Forests and emparkments, wooded commons, parks and pastures with trees in them. Some have subsequently had a designed landscape superimposed in the 16th to 19th centuries. A range of native species usually predominates amongst the old trees but there may be non-native species which have been planted or regenerated naturally.

- Parklands with their origins in the 19th century or later where they contain much older trees derived from an earlier landscape.

- Under-managed and unmanaged wood-pastures with veteran trees, in a matrix of secondary woodland or scrub that has developed by regeneration and/or planting.

- Parkland or wood-pasture that has been converted to other land uses such as arable fields, forestry and amenity land, but where surviving veteran trees are of nature conservation interest. Some of the characteristic wood-pasture and parkland species may have survived this change in state.

Not included in this plan are:

- Upland sheep-grazed closed-canopy oak woodland or Caledonian pine forest (see the respective plans for these habitats).

- Parklands with 19th century origins or later with none of the above characteristics.

- In terms of the National Vegetation Classification of plant communities lowland wood-pastures and parkland are most commonly associated with W10 *Quercus robur - Pteridium aquilinum - Rubus fruticosus* woodland, W14 *Fagus sylvatica - Rubus fruticosus* woodland, W15 *Fagus sylvatica - Deschampsia flexuosa* woodland and W16 *Quercus* spp. - *Betula* spp.- *Deschampsia flexuosa* woodland, although others may occur. In addition the more open wood-pastures and parkland may include various scrub, heathland, improved and unimproved grassland NVC communities.

- Parkland and wood-pasture habitats are particularly of value for the fungi, lichens, bryophytes and invertebrates associated with veteran trees and decaying timber. There may also be interest for bats, birds and a number of grassland, heathland and woodland plant communities. The old trees and dead wood components of wood-pasture have some similarities to the original "wildwood". The great number and continuity of veteran trees and associated dead wood habitats within these areas are outstanding on a European level. Parklands and wood-pasture may also preserve indigenous tree genotypes.

1.2. Links with species action plans

Lowland wood-pasture and parkland is an important habitat for a number of priority species including violet click beetle *Limoniscus violaceus,* the stag beetle *Lucanus cervus*, a bark beetle *Emoporus tiliae,* a wood boring beetle *Gastrallus immarginatus*, orange-fruited elm lichen *Caloplaca luteoalba*, the lichens *Bacidia incompata, Enterographa sorediata* and *Schismatomma graphidioides,* the royal bolete fungi

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