The Future of Lowland Heaths Workshop
Bournemouth University September 2017

Implementing Strengths and Opportunities

Partnership working will be important and some good existing partnerships already exist. Heathlands Reunited runs the Heath Forum (Hampshire & Sussex) - a yearly event at the end August or start of September (Information about Heathlands Reunited is available here: https://www.southdowns.gov.uk/care-for/heathland/heathlands-reunited/). This is a knowledge exchange partnership - bringing in landowners as well as NGOs and larger organisations to share knowledge, with a different central theme each year. Possible involvement of contractors as well as ecologists and archaeologists - including possible field visits with contractors, can be very useful for tailoring management to maximum effect. Different types of equipment can be advised based on appropriateness for situation - and it is better to share knowledge up front, and the forum allows this. Other elements include volunteers within networks, as they are a large part of the conservation effort, videos made available for public engagement (e.g. dogwalkers) and Forestry Commission involvement - forest blocks in key places to use as fire breaks (firefighters also need to know fire management plan).

The Urban Heath Partnership for Dorset (which notably includes the Fire Service and Police to help combat arson) works to address issues across heaths close to urban areas, and shares knowledge across organisations. Further information available here: https://www.dorsetforyou.gov.uk/article/394032/Urban-Heaths-Partnership

The Wild Purbeck Partnership also works in Dorset, but the constituent heaths face different issues compared to the Urban partnership areas. This emphasises that the scale of networks and partnerships are important to addressing right issues and addressing drivers on a site specific basis. More information on Wild Purbeck is available here: http://www.dorsetaonb.org.uk/our-work/wildpurbeck
Local networks focussed on specific similar heaths could use shared staff & skills, better use of volunteers & combined volunteer resources, and on larger sites managed by different organisations, this could involve shared management plans.

There are potential roles for universities to facilitate partnership projects (e.g. Brighton University working with South Downs NP). Students could be involved in restoration, maintenance and monitoring of features on heaths (perhaps through student placements, societies, within taught activities) - but need to ensure continuity as a result of the high turnover of students. Long term monitoring partnerships between universities and stakeholder groups and university staff could allow continuity and students gain new skills. Bournemouth's Student project bank covers a range of disciplines including marketing etc for public engagement. Improved links with research bodies can also enhance evidence based management (climate change etc).

The Institute for Environmental Analytics (Reading University) - is currently fully funded and looking for projects for experts to work in partnership - which could be a near-term opportunity.

Sharing knowledge of how to use available resources (LiDAR, HER etc) could be very useful where organisations share their expertise to help others. Remote sensing data is available through EA website - potentially students could be involved here to turn data into knowledge (placements, research groups, taught work) which can then be passed to relevant organisations.

Thinking regionally (e.g. lowland heaths of S England), a central web resource (run independently by e.g. university could help to serve as a depository for information. There are three tiers/main audiences: students, volunteers and professionals. This could involve collecting together volunteering opportunities, esp useful for cross regional volunteers (e.g. students), records of demonstrations of new kit, calendar of events and could involve a lot of stakeholders (challenge, but impact a lot of people if well advertised). This would also allow mass communication to enthuse people and share outcomes of work (inc to public to show value for money). In particular, academic research needs to be articulated well for political decision makers!

We are aware that we need to reach a wider audience than those who are already interested in wildlife or heaths. Potentially targeting schools for events or guided walks could be useful, and not to be preaching to the converted. This also goes for dissemination of knowledge & surveys of the public. Surveys of public valuable but need to reach wider audience, keep protocols the same over time and space.

Novel funding ideas include making use of increasing recreation - potentially through licensing, car parks etc to provide funding, and potentially using heaths as locations for biomass harvesting. There is a new funding project at Dorset County Council (through a European Grant in excess of £5million), some of which will be allocated to sustainable use of biomass - improving on previous work by learning from practice elsewhere and fixing mistakes. Sustainable biomass harvesting must be flexible enough to deal with heathlands but rigid enough to deal with large volumes which are required to make the practice economically sound. This will require large scale harvesting machinery (has to be clean), which Alaska are investigating. The project could be an opportunity to partially fund management on easier to access sites.

Overcoming Weaknesses and Threats

Lack of Public Interest

The (sometimes) poor public image that heathlands and extensive scrub or tree removal have may be generational, and is seen to be improving. Better coverage of these places in the media may assist with public impressions. Public education about the effects of habitat change, for example the damage trees cause (to archaeology as habitat provision) may also aid public understanding of why management is necessary.

Strategically approach managing heathland visitors - it's important to take a hard line on poor behaviour (such as bad dog-walkers, or local problems including fly tipping or other inappropriate use). But additionally good behaviour could also be rewarded. In terms of visitor pressure, directing the flow of people towards more robust areas of the heath will ease pressure on sensitive areas, as is already being done in many areas.

Funding

Funding gaps can cause problems for maintaining continuity and keeping staff on, and management of funds is often restrictive and deadlines change or may be available in time for seasonal work. Although perhaps a political problem, we need to put pressure on fund managers to make positive changes. Some individuals are starting to hold local councils, for example, to account and as volunteers can't be fired!

An important aspect of funding in the future will be to become more independent. One method is through biomass harvesting to generate funds - perhaps using a commercial company to do work/haulage in partnership across a network of heath sites - which adds more incentives. But this may need improved access to sites to allow rotation. This could allow longevity in keeping heaths open. Other techniques and harvests, such as bracken briquettes may also work, so research is required on what can actually be used. This whole process could also help with reducing fragmentation due to scrub and trees.

It is important to note that there are different threats for urban and rural heaths and also a different funding environment. Rural funding is currently through agri-environment schemes which allow protection and expansion/restoration. There may be a future need to manage heaths without subsidies - future could be tied in with public benefit and good conservation management (which may require extensive lobbying!)

In urban heaths, income streams are from different sources. Development near major urban centres is a funding stream which might continue in the future, despite the negative impacts of this process. Another is the use of 'Natural Capital', and convincing the public and politicians that having 'natural' spaces is important. This could lead to funding for restoration and enhancement and archaeology could be part of this attraction. There is also a possible role for private-public partnerships to make income, such as visitor centres and cafe/car park. Heaths are important to people, but currently we spend to manage without a return from those who use the heath. Although much of the land is open access and will remain so, ideas such as car parking charges to bring in funds directly are one idea here.

Unfortunately, there is still uncertainty over Brexit. EU legislation may be implemented to UK law, so we still need to put pressure on government to ensure this where required. Identifying MPs as species champions (e.g. smooth snakes, ARC w RSPB, Buglife) could help raise the level of the debate in the political sphere.

Lack of communication within and between organisations

There are many different types of heathland habitats and different sets of stakeholders within them, not always working together. Access to data and information can be difficult from some NGOs, and statutory agencies often lack the capacity to respond to all of the information available. In some cases, management doesn't get done because of competing interests, but some of these cases could be solved by better access to information that helps prioritise. Management of large areas - could be more effective with shared resources and volunteers and improved communication. People may not be aware of what the largest issues are on individual sites - research needed on relative impacts and could differ by site.

In some cases, the lack of recorded archaeology doesn't mean there isn't any. When contacting archaeologists directly might be difficult, it is possible to refer to local Historic Environment Records (HERs) which are maintained by each County: Hampshire's is accessible online and up to date:

https://www.hants.gov.uk/landplanningandenvironment/environment/historicenvironment/historicenvironmentrecord/selfsearch

Dorset County Council holds archaeological information on their HER but you have to send in a request for information. Another useful resource here is the Dorset Explorer, which contains information about finds and records in this county:

https://explorer.geowessex.com

Some archaeological features may also have value as ecological features of importance (e.g. reptile basking spots), which are not always recognised. Currently, projects running in the New Forest are an excellent case-study into archaeological research and management being carried out alongside ecology-focused management.

Within organisations, information or data is not necessarily available to people making the decisions. As there is lots of information available from many different sources, it can be hard to get access to full datasets, which are not always available via local records centres. It is also a particular problem with scientific research which is typically hard to access (although there are recent changes here). Records need to be verified and this can be a slow process, for example, if the person responsible has many other duties or is away at a certain time. This could result in permission for work or development being given when it is not appropriate. ARC are working to improve this process within their organisation. One solution could be a central, web-based resource with links or downloads to relevant information, with the caveat that different heaths will face different issues and datasets.

Climate Change

A number of management issues are occurring as a result of climate change, and this will be a challenge in the future. This is likely an area where research will take place. Vegetation management, especially on larger heaths, may be significantly affected by climate change,

as stressful conditions for plants, for which heathland species are adapted, will probably decrease. There is also a smaller window for management due to climate change - from 6 months on and off from 30 years ago to 3 months on 9 off, which also challenges the financial viability of machinery and other high-cost measures. Future management will have to adapt through changes, perhaps restrictions to implementation of burning regimes, and changes in species behaviour (such as the earlier arrival of ground nesting birds) resulting in changing protection of species at different times.

Integrating Archaeology with Ecology

Currently the integration of approaches will be helped with better dialogue. Typically it was seen that advice & support was not available to ecologists at the right time (resulting from a variety of understandable reasons - but ones that can be improved). There is a difference between counties - Hampshire, and particularly the New Forest, being seen as a good example of practice. In general, issues are encountered more with unknown sites (e.g. not Scheduled Ancient Monuments), although it is important to note that there are conflicting approaches to managing SAMs. Baseline data can be lacking or poorly represented (e.g. points for larger areas). Also, the locations of important archaeology are not always known in advance, particularly for smaller scale features.

Sharing information and discussing management plans early can address these issues. Information is important and having one place for documents or other sources that bridge the gap between archaeological and ecological management could be useful. There is a good model from the Forestry Commission - by creating shared datasets between Ecologists and Archaeologists, this resource is then available at all times. Another organisation to learn from is the National Trust who already integrate the two practices to a large extent. The National Trust uses a LinkedIn type network for their conservation forum to obtain a central database of people involved, which could be one way of facilitating discussion with different experts. It will be important to allow discussion of proposed management before it is done, and share information for management plans. *Joint projects* could identify the best areas for management from both perspectives. Some examples where this might help are grazing and footpaths (where diversions are made due to flooding that could affect archaeology), and badgers and rabbit burrowing into monuments (where scrub clearance can alleviate the problem to some extent). Monitoring of ground clearance works to create open ground could involve archaeologists to investigate direct impacts.

Decisions often come down to the knowledge of the person creating the management strategy - with a gap if people move on. Guidelines on good practice could, therefore, help continuity. Educating land managers on archaeology, through simple course or online resources, could also help new staff. An additional way to share expertise could be training and education events for archaeologists and ecologists (perhaps focussing on GIS and each other's disciplines) - but with funding a potential issue. Permissions for data/GIS layers to allow data sharing are a potential issue that would need to be solved. Improving mapping and representation with remote sensing data will also help to inform management. A potential project here could, for example, involve university students who are trained in this technique.

More archaeological interpretation on site and possibly online (signs and education for visitors - cultural value, and why management needed) could be useful to raise public awareness. Events like the Secrets of the Heath Festival (Heathlands Reunited) & History on the Heath (Christchurch County) demonstrate some of the important history present - from the stone age to present day, including reenactment, archaeologists, heathland managers and more. As these events are run regularly, people come back from year to year to learn about the area. The link here: https://www.southdowns.gov.uk/wp-content/uploads/2017/06/Secrets-of-the-Heath-2017-Programme.pdf shows an example programme of Secrets on the Heath. Linked conservation & archaeology events with school groups could also reach new people, as could educational spaces at schools, linking with topics taught there.

Master list of suggestions

Making use of increasing recreation - licensing, car parks etc to provide funding. ST - 8 LT - 13 Feasible - 25 Not -

Independent funding sources e.g. biomass harvesting ST- 0 LT - all, Feasible - 15

Put pressure on funding managers to improve management (better deadlines, more responsive) - ST - 2 LT rest, feasible - 10

Public/private partnerships (e.g. visitor centre with cafe) ST - LT - all Feasible - 23

Encourage politicians to implement relevant EU laws - species champions - ST - 1 LT - rest Feasible - 17

Central web resource (inc signposting to sites with info and database of people involved) - ST - 5 Feasible - all

More use of volunteers/students - ST 25 - F - All

Using remote sensed data - ST - 9 - F - all

Partnership working at appropriate scales (many already exist) - ST - 15 - F - one not

Forums to allow knowledge exchange (regular and involving all key stakeholders, poss including volunteers/contractors etc) - ST - 24 - F - all

Common methods for data collection and archiving (could be shared with volunteers etc to see outcomes/show value of work) - ST - 2 - F - 14

Shared plans for larger sites - ST- 3 - F - all

Shared good practise guidelines to allow continuity when people move posts - ST - 14 - F - all

Joint arch/ecol projects could identify best areas for management from both perspectives - ST - 3 F - all

Training and education for archaeologists/ecologists on each others disciplines/GIS - ST - 1 F - all

Better coverage of heathlands in media - ST - 10 - F - 22

More archaeological interpretation on site and poss online (signs and education for visitors - cultural value, public awareness of history of heathlands and why management needed) - - ST - 13 F - all

Sharing resources for public engagement (e.g. videos for dog walkers) - ST - 20 F - all

Targeting new audiences e.g. working with schools (not preaching to converted) - ST - 13 F - all

Visitor management and education - dog walkers, directing to robust areas etc - ST - 14 F - all

Allow management at other times (lift restrictions) - ST none - F - 8 caveat need intimate knowledge of site to do this properly and depends on relative benefits.