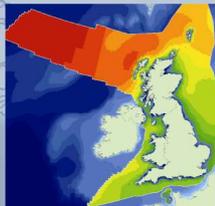


Coastal Habitat Creation Are We Delivering?

CONFERENCE REPORT

Creating sustainable solutions for the marine environment



Sponsors



Conference Background

On 20th November 2013, ABPmer, in partnership with event sponsors the Royal Society for the Protection of Birds (RSPB), Halcrow, the Solent Protection Society and HR Wallingford, ran our second national conference on Coastal Habitat Creation.

The purpose of the event was to bring together regulators, practitioners, land-owners and other stakeholders to talk about how newly created and restored coastal habitats projects are performing against their objectives with a view to moving towards agreeing what delivery means in the future. These were themes and issues that had been identified by delegates at our first conference in November 2010 and the aim of this second conference was to take these forward.

It is clear that in the UK and the rest of Europe we have now amassed a lot of practical experience in the field of coastal habitat creation (over 60 projects in the UK alone since 1991). While we have this extensive experience it is also evident that we still have challenges to face in both evaluating the performance of completed projects and delivering them into the future. These two factors are interrelated because we need to be sure how we have done so far in order to agree how we continue.

One key issue, for instance, is confirming the extent and quality of newly created coastal habitat when most sites accrete with sediment and are changing from the moment of their creation. Therefore, they don't really achieve a distinct 'final' ecological state and it is difficult to create sustainable mudflat or judge objectively when a saltmarsh has reached an appropriate ecological/functional value. This raises questions about what can be achieved (and over what timeframes) in terms of habitat creation when set against a project's objectives.

These and other issues were reviewed and discussed at this one-day conference and a number of key issues emerged following the dynamic discussion sessions. A summary of the day is presented in this delegate feedback report.

Outline of the Day

The day was broken into three separate sessions which covered: key issues; ecological considerations and the way forward. Each session included 3 main 20 minute presentations and culminated with a 30 minute discussion sessions. In summary the content of each of the main sessions was as follows:

- **Session 1: Key issues.** Following an introduction on target setting criteria and key considerations, this session reviewed issues, challenges and lessons associated with delivering habitat creation projects in the UK.
- **Session 2: Ecological Considerations.** This session reviewed how coastal habitat creation sites have performed and what the implications are for: creating sustainable mudflat; delivering and monitoring habitats for birds and the ecological development of new saltmarsh habitats as compared with mature marshes.
- **Session 3: The Way Forward.** This final session provided overviews on what is happening in Europe; the implications of the Habitat Regulations Review by Defra and the future challenges for Habitat Delivery from a Natural England perspective.

The conference programme is at the end of this document and copies of the PowerPoint presentations for all 10 talks are available from our web site at www.abpmer.net/omreg.

Key Points

1. The Key Issues

- A lot of habitat creation work has successfully been undertaken particularly in the Humber Estuary (as well as elsewhere) but many practical challenges are still being faced with respect to scheme implementation.
- It is increasingly difficult to purchase appropriately located large blocks of land or even to identify the multiple owners of a potential site. To address this it has become necessary to purchase land further away from the coast and then engage in swap deals with coastal landowners.
- The issue of food security has become increasingly relevant in recent years as highlighted by the Donna Nook Project notwithstanding that the same scrutiny is not applied to other planning developments.
- Major issues can arise during planning and implementation such as archaeology (e.g. Medmerry) or footpaths (e.g. Devereaux Farm, Essex) which can incur large costs.
- The process of communication can become long and drawn out (e.g. 13 years in the case of the Donna Nook Project) and needs to be faster and more constructive.
- There is also potential for conflicts with local communities when seeking to realise benefits from having increased visitor numbers.
- Set against these challenges there remains an imperative for ongoing habitat creation to address coastal squeeze. In Wales, the target is for 784 ha by 2025 and 7,310ha by 2105 whereas one small project (<1ha) has so far been completed.

2. Ecological Considerations

- The rate of habitat development is relatively quick with rapid colonisation of fauna over the first year (e.g. Trimley, Allfleet's Marsh) and often almost 'instant' use by birds. The mudflat benthos, saltmarsh communities and full bird usage then typically become established over a period of around four years. The intensity of monitoring programmes should recognise this and be designed on this basis.
- Understanding the hydrodynamic conditions is vital to designing appropriate schemes but also ruling out those that are unsuitable. The key should be to achieve sustainable and natural habitats rather than to overdesign them.
- The colonisation by some saltmarsh plant species (e.g. Sea Lavender) can take many decades and could be 'helped along' by early planting to enhance ecological richness.
- A range of factors can be greatly influential in dictating the characteristics of plant colonisation and diversity including the presence of microniches (e.g. subtle variations in elevation), sediment redox potential and compaction.
- When creating new habitat as compensation or mitigation, achieving equivalent habitat functionality in equivalent proportions and close to the site of loss is the ideal and has evidently been achieved at sites like Trimley but this can be difficult to achieve.
- The number of published monitoring reports is relatively limited and they can be difficult to access.

3. The Way Forward

- There are over 100 completed projects in Europe and over 60 in the UK alone. In Europe many sites are treated as if they have been signed off although this has not been formally recognised.
- There have been many relevant policy developments and a lot of consulting in the UK in recent years (e.g the 2011 Habitats Regulations Review, the setting up of the Major Infrastructure Unit (MIEU) and the recent (Sept 2012) Concordat on planning and licensing approaches).
- Several further initiatives are in the pipeline including consideration of Biodiversity Offsetting.
- There is an acceptance that dynamic coastlines will result in changing habitats and that where protected habitats occur landward of potential habitat creation sites protected change is acceptable (e.g. Medmerry).
- When compensating for coastal squeeze the specific objectives are not prescriptive and there is recognition that sites may take a long time to develop (e.g. Tollesbury).
- Sites are already officially treated as designated under the new National Planning Policy Framework (in advance of formal sign off and notification).
- Current reviews are underway to develop sign-off procedures (e.g. on the Humber) and to evaluate the effectiveness of past compensation projects. This work will help to inform project sign off in the future.

In the discussion that followed a range of subjects were covered and points made including:

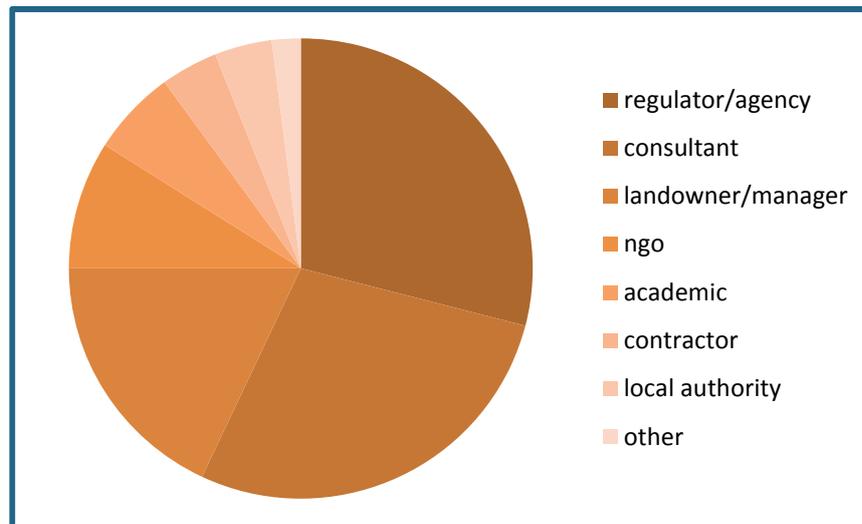
- **Session 1:** the validity of concerns/perceptions about food security; the importance of good design; the role of ratios as part of deriving and communicating compensation targets; the problems of replicating nature precisely; the need to refer back to the monitoring of the original impacts when assessing the effectiveness of compensation measures,
- **Session 2:** the opportunities for recharge (which merited greater consideration as a habitat protection and enhancement measure); the importance of clear communication of the risks of flooding when consulting on schemes; the value of management to maintain/enhance biodiversity.
- **Sessions 3:** the importance of considering the wider benefits of managed realignments (e.g. for fish and fisheries, the opportunities for more imaginative financing of projects; the distinction between UK and the rest of Europe in terms of the number of completed projects and the sign off process, the value of using projects for wider education, the need for pragmatism and flexibility about what can be achieved ecologically, the need to recognise that monetary costs of realignment might seem high but these need to be placed in the perspective of other measures, the need to promote and advertise good practices from projects (e.g. Cley); consideration of pragmatic and less costly approach to offsetting impacts to protected species, the need to think about larger projects that achieve multiple benefits and greater sustainability.

Attendance and Delegate Feedback

The purpose of the event was to bring together regulators and practitioners to talk about how coastal habitat creation schemes are performing against their objectives, especially the requirements of the Habitats Regulations, with a view to moving towards agreeing what delivery means in the future.

Attendance was very high (98/100 attendees) and the event sold out with a waiting list. Delegates represented academic, consultant, land owner/manager, local authority, regulator and NGO interests which

lead to lively cross-sector discussions. The balance of representations among delegates is presented in the pie chart below.



From the feedback that was received, the majority of attendees found the event useful and considered it to be either 'good' or 'excellent'. The following outcomes were cited as beneficial:

- **Learning** who is doing what, what is happening where, what is going on in other EU countries;
- **Networking** and putting faces to names as well as maintaining established relationships; and
- **Opportunities** and potential leads to follow up with several reciprocal visits and possible joint projects identified.

Many of the delegates appreciated the fact that there were consistently energetic and mainly positive, discussion sessions with free exchanges of views on many issues. Learning about how schemes can be better designed/engineered to be more natural (Session 2) was considered the most useful outcome by the majority of responder, whilst the most useful session was the final Way Forward one. Those who completed forms also felt that the day had met their expectations in terms of knowledge exchange and networking.

A number of delegates identified the need for such a conference to be held again because there remained a number of issues relating to habitat creation that required further exploration. Respondents also identified topics for other conferences.

Next Steps

This conference showed that there is a very high level of interest in the field of coastal habitat creation. There are many good lessons to be learned from completed projects but also many issues and questions to be resolved in the future. The process of official sign off and notification are under review as is the issue of how effective past schemes have been in delivering their compensatory targets.

The delegates highlighted many other subjects that needed further consideration both in the discussion sessions and in the feedback forms. One regular message was that the process of exchanging information both in the conference hall and in the break out area was very valuable and that further events were encouraged. Therefore, ABPmer will be producing more events on the main issues of interest. In particular, we will look to organise half day discussions on hot topics and coincide them with site visits (where possible).

ABPmer will also determine a means to enhance knowledge sharing on implemented recharge projects through our web site and LinkedIn Forum and other initiatives.

Coastal Habitat Creation Website <http://www.abpmer.net/omreg/>

LinkedIn Group http://www.linkedin.com/groups?home=&gid=3744666&trk=anet_ug_hm

Overall, it was concluded that the ABPmer Habitat Creation Conference is a valuable event that will be regularly held to bring those interested in coastal habitat creation together to consider pertinent issues.

Acknowledgements

ABPmer would like to thank the event sponsors for supporting this event and the speakers for their time and participation in the event.