

The progress project: the dynamics of involving the public in managing Peri-Urban Forests

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Abstract — The EU Forest Action Plan gives special emphasis to the benefits of Urban and Peri-urban forests for public recreation and as an aid to public understanding of conservation issues. At the same time forest and green recreation is being promoted in national agendas because of perceived therapeutic benefits. This strong promotion of forest recreation has re-kindled the concerns that recreation use would damage the resource and have major detrimental impact on biodiversity. The PROGRESS project, which focussed on two peri-urban forests in England and France, offered the opportunity to review these issues.

Index Terms — Keywords should closely reflect the topic and should optimally characterize the paper. Use about four key words or phrases in alphabetical order, separated by commas.

1 INTRODUCTION

The EU funded project was based on the New Forest (Forestry Commission FC) and Fontainebleau (Office National des Forêts ONF). This work required re-assessment of a number of recreation theories and the development of new data collection and modelling tools. In addition the way data can be presented to the visiting public has also had to be considered.

The project ran from 2003 to 2008, and in addition to the main partners also involved Alterra (who provided the computer based ecological and recreational models to aid decision making), Natural England and Comite Depart de Tourisme.

Both forests have seen a significant in-

crease in visitor numbers over recent decades which have had visible effects on both areas, their wildlife and ecology.

The project aimed to reconcile the needs of conservation and recreation in both forests through detailed environmental and recreation research, on-site management actions based on these findings and the use of innovative modelling and communication tools, to involve and commit the public to management changes.

2 PROGRESS PROJECT METHODOLOGY

The PROGRESS team needed to gain a more up to date and complete understanding of recreation and conservation needs and identify areas where needs of conservation clashed with current recreational pressure. To achieve this the following research tools were used:

- Household and Site Surveys
- Detailed Site Behaviour data through use of GPS
- Collection of environmental data on spe-

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cies and habitat

- Development of new modelling tools to aid understanding of habitat change and changes in visitor behaviour
- Detailed assessment of effective ways to present this data to stakeholders and the public to achieve understanding and agreement to management changes and to provide guidance on “limits of acceptable change”

Surveys

Extensive visitor surveys were carried out in the two forests. In the New Forest, over 3500 interviews were conducted at 70 sites, together with a further 2100 telephone interviews. In Fontainebleau, 1700 visitors were interviewed over eight days, between March and September.

GPS

1700 of those surveyed were issued with GPS equipment, this comprehensive data was used to calibrate the MASOOR model described below, which allowed prediction of use when other parameters were changed. The information generated was also very visual as it allowed many tracks to be overlaid on mapped recreation sites and to show the very different behaviours of different site users. Such behaviour could have been predicted but the ability to show it visually had great impact.

Environmental Data

Ecological data regarding landscape, habitat, vegetation and wildlife populations was collected and codified as the basis for identifying areas where recreation appeared to be having detrimental effect.

Modelling

This recreation and environmental data provided a starting point for understanding the negative impacts of recreation within the two forests. The ability to understand

the interaction between the two and the impact of recreation was strengthened through the use of two computer-based models developed by Alterra (LARCH and MASOOR).

The LARCH model (Landscape ecological Analysis and Rules for the Configuration of Habitat) has been developed to assess the biodiversity potential of fragmented landscapes by analysing the landscape from the perspective of a selection of indicator species.

MASOOR (Multi-Agent Simulation of Outdoor Recreation) focuses on the simulation of recreational movement in natural areas. The tracks taken by visitors can be attributed for their surface type, attraction and other characteristics. The choices made by various visitor types, which is calibrated by the use of GPS data, is what gives the model strength. With this data, changes in the level of use and/or the type of visitor can be used to effectively predict future distribution of visitors across sites and thus their likely impact on biodiversity (Jochem R et al 2005)

Following the input of baseline ecological and recreational data, these enabled the impacts of recreation on different habitats and how different user groups interacted to be assessed. More importantly the models allowed proposed actions to be simulated, to view the possible impacts resulting from the prospective changes, thus providing the FC and ONF with a powerful decision making tool.

Running MASOOR and LARCH together showed the impact that recreation was having on different habitats and also how different groups interacted. Subsequently, the land manager was able to see what effect a pilot action may have on ecology and wildlife, by running the model again under the new scenario and analysing the differences between the two.

3 FORMULATING PILOT ACTION PROPOSALS

Having collected information on the recreational issues affecting each forest,

through surveying, modelling results, ONF/FC expertise, and meetings with local user groups, forest managers then proposed a number of actions to limit the effects of recreation.

In the New Forest these proposed pilot actions were then presented to the public (through site-surgeries, surveys etc.) The FC PROGRESS team also used the Alterra models and its own methods of impact assessment to look at the possible implications and feasibility of the proposed actions. This information was presented to stakeholders and used to make revisions of initial proposals.

The revised pilot actions were presented to the public and discussed by the stakeholder groups in order to produce finalised pilot action proposals.

4 PROBLEMS ENCOUNTERED

To achieve the objectives of PROGRESS the project teams had to overcome some difficult challenges. The immediate response of both stakeholders and the general public was to be suspicious of management changes which were seen as a constraint on existing access rights.

As a result, in both the New Forest and Fontainebleau it took several months to negotiate the actions to be implemented (e.g. in Fontainebleau, it took over a year of negotiating for a local stakeholder group to agree to a road closure). In the New Forest, negotiations and plans were complicated by the presence of strict planning laws and regulations.

5 THE ROLE OF COMMUNICATIONS WITHIN THE PROGRESS PROJECT

Communicating and engaging with the public played a central role in ensuring sustainable recreation. A sizeable element of the communications strategy involved promoting and encouraging the use of

the most robust recreational sites. The message which the FC and ONF wanted to promote through PROGRESS was one of respect rather than restriction. The land managers still wanted to encourage the recreational use of the two forests.

In the New Forest this allowed a cogent presentation of the likely impact of reductions in visitor use in a sequence of different recreation patterns as the closure of car parks was simulated. This successfully demonstrated a number of key sites where conservation needs were being put under pressure from recreational use and to illustrate, to local stakeholders, the options available and the likely outcomes of a chosen action. The Forestry Commission were therefore able to use these models as both a research and decision making tool.

This presentation, at a crucial stakeholders meeting, arguably almost totally obviated opposition to management changes because of the very visual way in which recreation pressure could be illustrated as different management options were simulated.

Though this result was not initially predicted it re-emphasised the benefits of a "Limits to Acceptable Change" process which has been extensively used in natural site management in the United States (McCool *S et al*: 1997)

6 RESULTS AND ACHIEVEMENTS

Unlike the impact of 'on-site' pilot actions on biodiversity, it is more difficult to assess the impact or success of communication actions: they involve changing user perceptions, which are hard to quantify. The change in attitude to proposed car park closures by both the stakeholders and public provided one measure. In addition, the effectiveness of the communications programme is probably best assessed through event feedback from the public, the number of reprints, and the breadth of distribution of leaflets and the publicity message.

7 CONCLUSION

As a result of the project, a large number of pilot measures have been implemented, in both the New Forest and Fontainebleau. These measures have the main objective to improve the recreation facilities in order to channel the visitors and answer public demand. More robust sites have been opened up, and visits to them encouraged through guide maps and easier access. Communication has been enhanced through community workshops, site surgeries, and public opinion surveys. In addition, codes of conduct and information packs have been produced.

8 LESSONS LEARNT

One of the main lessons learnt is to work closely with local groups, tourism providers, and the general public. Keeping them informed, and allowing them to participate in the decision making process, is a key part of sustainable recreation management. The time required for stakeholder consultation is often underestimated and can require a degree of compromise.