

English Nature Research Reports, No. 607

**Proceedings of a Conservation Genetics Workshop held at the Royal Botanic Gardens,
Kew, 27 November 2001**

Edited by Michael F Fay, Jill Sutcliffe, Barbara Jones and Ian Taylor, 2004

Keywords: Conservation genetics research

Introduction

In the summer of 2000, members of the country agency staff who concentrate on botanical issues agreed that it would be useful to hold a genetics and conservation workshop. Initially when genetic techniques were being developed there was scepticism about their relevance to conservation issues. Now that useful results are appearing, it was felt it would be timely to hold a workshop and explore some key issues.

The aim of the meeting was to examine the practical outputs of benefit to the conservation of plants. The conservation staff wanted to find out:

- A basic understanding of the issues raised by genetics research.
- The techniques and their limitations.
- The right questions to be asking.

The genetics researchers wanted to find out:

- What is was that the conservationists wanted to know.
- How their work might be of relevance to conservationists.
- How to tease out issues affecting conservation in their reports having done the work in the lab.

What was done

The workshop was designed to cover these issues in 3 sessions:

- **Background** - in which the current knowledge regarding the genetic knowledge of the British Flora was outlined; and the various genetic tools which can be used for conservation presented.
- **Genetic issues** presented included their relevance to conservation staffs; Taxonomy, hybridisation and process; patterns of genetic variation; Genetics in plant conservation: fitness and gene flow; Local adaptations; The use of spatially explicit and direct gene flow approaches in conservation genetics.
- **Conservation case studies** - the fern *Woodsia ilvensis*; *Euphrasia*s; Military and monkey orchids.
- Summary.

Results and conclusions

The main workshop recommendations included:

- Setting up a **database** of conservation-related genetics research.
Contact Dr Richard Gornall; email: rig@leicester.ac.uk
- **Increasing levels of collaboration** between researchers and conservation agencies. A sub-group of the Plant Conservation Working Group was set up to bring representatives together.
Contact: Ian Taylor, Botanical advisor email: ian.taylor@english-nature.org.uk
- Produce a set of advisory leaflets
- Increase publication in the non-technical journals and publications.

English Nature's viewpoint

English Nature welcomed the attendance by 70 people all day, and the establishment of both the database and the group to work on conservation genetics.

Selected references

The ENRR is composed of a dozen abstracts designed to capture the flavour of the presentations and each has their own references.

Further information

For the full report or other publications on this subject, please contact the Enquiry Service on 01733 455100/101/102 or email enquiries@english-nature.org.uk

For further information about the work of English Nature, please visit our website at: www.english-nature.org.uk