

# FORESTRY COMMISSION

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Silv(N) LB

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## SPECIES PROJECT - DRAFT PROJECT PLAN

I attach a copy of a draft project plan for species research within Silv(N) on which I would welcome comments. Please let me have any thoughts by the end of February.

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W L Mason  
Principal Silviculturist (North)  
3 February 1993

Enc

WLM3.WP/LA

FORESTRY AUTHORITY RESEARCH DIVISION

SILVICULTURE (NORTH) BRANCH

DRAFT PROJECT PLAN

Species Research

- Background:
1. There are 2,400 taxa of tree capable of growing in Great Britain; 180 are established or potential forestry species.
  2. Adequate provenance/silvicultural information exists for about 20 species (SS, LP, DF, GF, NF, PSF, ES, NS, CP, SP, JL, EL, RAR, ROB, RAU, Eucalyptus). Information upon native species eg POK, SOK, AH, SCH, SY?, SBI, DBI is generally of recent vintage. A number of other native species are little known eg CAR, Aspen.
  3. Current policy initiatives (eg Farm Woodlands, Native Woodlands) are placing great emphasis upon the use of broadleaved and/or native species.
  4. A survey of the experimental database suggests that there have been c. 350 species 'trials' since the 1920's in the Silv(N). Most date from before 1965, were poorly designed and had few replicates. About 50 are still open. The only exception is the P85 series at 5 sites from Kielder north which contains no broadleaves. Most of the sites planted were marginal and objectives were geared to afforestation. Greater attention needs to be given to potential growth of species on better land, the use of mixtures and the greater role of shrub species.
- Objectives:
1. To provide information upon the appropriate choice of tree and shrub species for different regions of northern and western Britain according to site type.
  2. To maintain a network of well managed and monitored collections and experiments to support 1 above.
- Milestones:
1. To have visited and reviewed all open species experiments/collections by the end of 1993 including preparation of revised protocols for those to be retained.
  2. To have identified experiments worthy of writing up during the review (date as 1).
  3. To identify gaps in our knowledge justifying further field experimentation by spring 1994.
  4. Publication of results from 2 above by spring 1995.
  5. Establishment of any experiments identified in 3 above during 1995-1997.
  6. Review in 1997.

- Strategy:
1. Structure existing species experiments into a few (2-3?) collections of forest plots and useful field experiments. Candidates for the former include Breckfa, Benmore, Shin. (Note that groups of trees ie < 25 trees belong to the Arboreta project of Silv(S).)
  2. Structure existing knowledge about species using a BEC style approach to allow regional consistency.
  3. Use John White's review for Bulletin 30 and other data sources to see where glaring omissions occur in basic knowledge.
  4. Use 2, 3 to see where silvicultural knowledge and/or provenance information is poor.
  5. Screening process should identify where new species experiments could be justified. This should consider wider aspects such as effects upon ground flora and spacing in relation to environmental aspects.

Likely costs  
in 1993:

- 0.1 MY G7
- 1.0 MY FOII/IV
- 1.0 MY Industrial

- Benefits:
1. Better information on species choice to allow correct decisions on increased species diversity in upland forests.
  2. Provision of a network of sites on which effects of different species upon site and other factors can be monitored.

W L Mason  
P Silv(N)  
2 February 1993