

Low Impact Silvicultural Systems (LISS) in upland conifer forests in Britain

by

Bill Mason, Forest Research

The greater use of LISS is encouraged in a number of recent policy documents (e.g. UKWAS guidance, Welsh and Scottish forestry strategies). LISS (aka 'Continuous Cover Forestry' or 'Alternatives to Clear Felling') encompasses a range of classical silvicultural methods including shelterwood or selection systems. Despite interest in LISS in earlier decades such as the trials instigated by Professor M. L. Anderson in the 1950s (Glentress, Corrour, Faskally, Cawdor) experience of these systems in Britain is limited. At the present time, we estimate that less than 5% of Scottish forests have been designated for LISS although possibly 20-25% of the forest area could be suitable on the basis of soils and wind exposure.

Over the last 10 years we have been carrying out research to identify some of the key factors that managers need to address if they wish to introduce LISS in parts of their forests. Guidance is provided through Information Notes 29, 40, 45 and 63 which highlight the importance of thinning to develop an appropriate stand structure and, among other aspects, provide a microclimate to favour natural regeneration. More recent studies are showing how conventional harvesting methods can be used to implement LISS and are providing suggestions that irregular stands may be more resilient to wind damage, under certain conditions. Regular monitoring of stands under transformation to LISS and a clear set of objectives and prescriptions for such stands are also important. Much of the information presented can be accessed via the website www.forestresearch.gov.uk/fr/INFD-63CCQB.