

CLUSTER

A cluster based approach for identifying farm forest resources to maximise potential markets

PROJECT TEAM

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COMPLETION DATE

August 2009

OBJECTIVES

- Development of methods to quantify the forest resource and produce a timber forecast at a local level.
- Development of cluster groups where forestry operations can be performed together to minimise cost.
- Development of cluster groups to facilitate combined sale of forest products from many farms.
- Scheduling harvesting to coincide with adjacent harvesting in similar locations based on demand for selected products.

PROGRESS

The project is yielding very interesting results. Development and review of the methodology has been completed. Collation of locations of all farm

forests in the study area (size, area planted, location) from the Forest Service database or grant maps is ongoing. Generation of forest clusters has been completed. Evaluation of advanced data captures techniques using aerial photography and Quickbird/IKONOS imagery in the pre-field data capture process is ongoing.

ACTIVITIES PLANNED

Stratification of plantations within clusters for field visit using aerial photography is ongoing. Landowner notification and field data collection will take place. Evaluation of advanced data capture techniques using aerial photography and satellite imagery and LIDAR will also be carried out in 2008.

A workshop to disseminate results is planned for 2008.

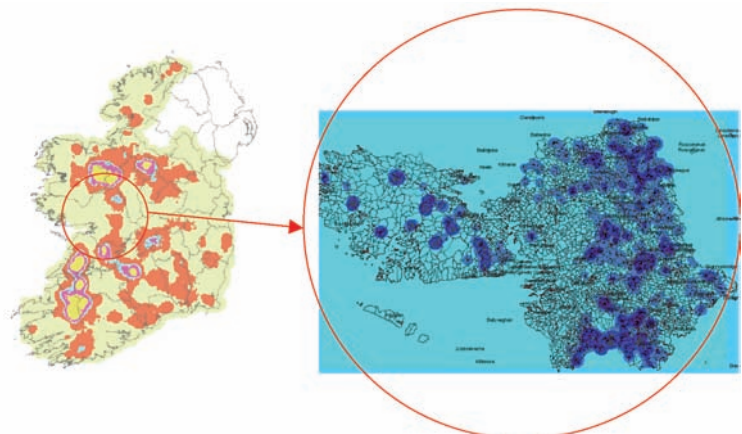
OUTPUTS

Farrelly, N. and Clifford, B. 2007a. *Using cluster analysis to identify forest resources*. Poster presentation, Bioenergy 2007, Teagasc Oak Park, Co Carlow, 30 August 2007.

Farrelly, N., Clifford, B. and Green, S. 2007b. *Identifying forest resources using GIS cluster analysis*. The Irish Scientist Yearbook, Oldberry Publishing, Dublin.



Forest density analysis performed for farm forest plantations in Co Galway is used to identify farm forest concentrations.



GIS cluster analysis used to locate large concentrations of farm forest plantations in Ireland, with more detailed analysis of Co Galway (circled).