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The objectives and harvesting plans of Irelands forest owners



Key external stakeholders:

Teagasc Forestry Clients
Forest Service, Department of Agriculture, Food and Marine
Teagasc Producer Groups
Forestry Commercial Companies

Practical implications for stakeholders:

The factors shown to increase the likelihood of a forest owner thinning their forests were (1) they had previously thinned his/her stand;
(2) having availed of extension activities; and
(3) having a management plan for the forest.

Measures to promote increased Knowledge transfer of silvicultural information to growers will promote good forest management in the private sector.

Main results:

A recent survey of 120 private forest owners indicated that almost three-quarters (72%) of all forest owners surveyed planned to thin their forests in the future. The suitability of the area they planned to thin was assessed taking account of access, ground conditions and windthrow risk. Only one-half of this area was found to be suitable for thinning with poor ground conditions and/or excessive roading requirements the main constraints. The study found that while most forest owners hoped to produce timber from their woods many of them either planned to use the timber themselves or were unsure as to whether they would put it on the market. Availing of extension activities significantly increased the likelihood that an owner would thin their plantations. However, the study raised concerns as to whether owners were making the correct silvicultural decision regarding thinning.

Opportunity / Benefit:

Growers who availed of extension services are more likely to thin their plantations. Targeted extension which assists in silvicultural decision making process will ensure correct decisions are made regarding thinning and forest management.

Collaborating Institutions:

UCD Forestry, Dr Aine Ni Dhubhain

Teagasc project team:

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External collaborators:

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1. Project background:

Since 1980, an estimated 16,000 Irish landowners, mostly farmers have afforested 212,200 ha of new forests. Government projections for timber supply from Irish forests assume that private forests will be managed and harvested in a similar way to State forests. In order to understand more about the harvesting intentions of private forest owners and the suitability of their stands for thinning, a study was conducted to gather information from a sample of 120 forest owners and their forests.

2. Questions addressed by the project:

- The study characterised the private forest resource, in relation to growth rates and plantation details
- The study quantified the area of forest that has already been thinned
- The study determined the primary objectives of private forest owners
- The study determine the factors influencing a private forest owner's decision to thin/or not thin their forest
- The study assessed whether the stands that owners plan to thin are "suitable" for thinning.
- The study assessed the role of training and extension in influencing the owner to consider thinning

3. The experimental studies:

A survey of a 120 private forest owners was conducted during the summer of 2007. A detailed questionnaire was completed by each owner during face-to-face interviews. It included questions regarding the owner's objectives, harvesting plans, and involvement in extension activities as well their awareness of silvicultural processes involved in forest management. A silvicultural audit of the forests owned by those surveyed was also conducted, and logistic regression analysis was used to determine which characteristics of the owners and their forests influenced whether an owner planned to thin his/her stand. An assessment of the area that owners planned to thin, based on ground conditions and access to the site, along with a consideration of windthrow risk was used to assess the area that was suitable for thinning.

4. Main results:

Three-quarters of those surveyed were farmers (full-time, part time or retired). Less than one-fifth were younger than 45 years. Only seven percent of stands visited (i.e. 31 ha), had been previously thinned. All thinning performed was for merchantable purpose, including firewood production. The primary objective of most forest owners was to produce timber from their woods. Landscape enhancement was an objective for 20% of respondents. Forty nine percent of forest owners had multiple objectives.

While most (79%) of the forest owners surveyed had employed a management company or contractor to establish their forest, most were now managing their forests themselves and planned to continue to do so in the future. Almost three-quarters of all forest owners surveyed planned to thin their forests in the future. Almost half of those planning to thin did not know how many thinning operations would be carried out.

Over one-half of respondents had attended training courses or demonstration days relating to forestry, while one-quarter attended more than one training event. Sixty-nine percent of all respondents believed that private forest owners need training in aspects of forestry, with training in thinning and harvesting most commonly suggested.

Logistic regression identified the key factors that influence the probability that a forest owner planned to thin his/her stand forest:. Forest owners who had attended forestry extension activities were 2.55 times more likely to have decided to thin their stands than those that had not. Those who had the production of timber as an objective were 2.7 times more likely to plan to thin their forests than those that did not have this objective. All owners who had a management plan planned to thin.

5. Opportunity/Benefit:

Training courses on forestry and attendance at extension events such as those run by Teagasc and the completion of management plans are key factors in motivating thinning in the private sector, these events should continue to be promoted and encouraged.

6. Dissemination:

Ní Dhubháin, A., Maguire, K., and Farrelly, N. 2010. The harvesting behaviour of Irish private forest owners and the suitability of the private estate for thinning. Proceedings from IUFRO Conference: 3.08. Small scale forestry. Bled, Slovakia 06-12 June 2010. pp 117-127.

Main publications:

Ní Dhubháin, A., Maguire, K., and Farrelly, N. 2010. The suitability of the private estate for thinning. Irish Forestry 2010: 21-37.

Ní Dhubháin, A., Maguire, K., and Farrelly, N. 2010. The harvesting behaviour of Irish private forest owners. Forest Policy and Economics (12). 513-517.

Farrelly, N. 2006. The farm forest resource and its potential contribution to rural development in Ireland. In: Wall, S. (ed.). Small-scale forestry and rural development, the intersection of ecosystems, economics and society. Proceedings Iufro 3.08 conference, Galway, Ireland. June 2006, Coford and Gmit, Ireland, pgs 41-50.

Thesis:

Maguire, K. 2008. The objectives and harvesting intentions of Ireland's private forest owners. MSc Thesis, University College Dublin. 128 pp.

7. Compiled by: Niall Farrelly
