

Nursery Survey

2015 Edition

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Nursery Survey 2015

Introduction

This publication provides estimates of sales of improved nursery stock by nurseries in Great Britain for the planting year October 2013 to September 2014. The figures cover sales of Sitka spruce and Scots pine to Scotland. Total sales of these species are also reported.

“Improved nursery stock” refers to nursery plants that have been genetically improved to enhance timber quality. A more detailed definition is provided on page 4 of this release

Figures for the planting year October 2013 to September 2014 are published for the first time in this release. Figures for earlier years are unchanged from those previously released. For further details, see the Revisions section of the Annex.

Key findings

The main findings are that, of sales of Sitka spruce and Scots pine by nurseries in Great Britain:

- 31.0 million plants sold to Scotland in 2013/14 (85%) were derived from improved basic material. This represents a slight increase from the previous year, when 83% of plants sold to Scotland were from improved stock.
- Of all sales in 2013/14, 39.5 million plants (88%) were derived from improved basic material, a slight increase from the 87% of plants sold from improved stock in 2012/13.

Sales of nursery stock

The figures in this release have been obtained from a voluntary survey of nursery businesses in Great Britain, run on behalf of Forestry Commission Scotland.

The survey was set up to monitor the level of use of improved nursery stock in Scotland annually, as part of the system for reporting progress over the intended 10 year life of the current Scottish Forestry Strategy 2006 (SFS).

Improved nursery stock is defined as follows:

Species	Definition
Sitka spruce: Seedlings	Seed orchard material that falls in the tested category under the UK Forest Reproductive Material Regulations. This material will have superior performance for growth rate and stem form relative to untested material.
Sitka spruce: VP	Vegetatively propagated tested 'family mixture' material (either half or full sib families). This material is derived from controlled cross-pollination and then multiplied using vegetative propagation. This stock has significant genetic gains for both quality and quantity traits.
Scots pine	Seed orchard material that falls in the tested category under the EU Forest Reproductive Material Regulations. This material will have superior performance for growth rate and stem form relative to untested material.

Tested' means material derived from the selection of individual trees or stands that have undergone evaluation for genetic quality and have been shown to be superior, in comparison to accepted standards.

Sales of nursery stock to Scotland

An estimated total of 36.3 million Sitka spruce and Scots pine plants were sold to Scotland in 2013/14 (Table 1). This comprised 30.4 million Sitka spruce plants and 5.9 million Scots pine plants, the highest levels recorded by the survey for both species.

31.0 million plants sold to Scotland in 2013/14 (85%) were derived from improved basic material. This represents a slight increase from the previous year, when 83% of plants sold to Scotland were from improved stock.

Table 1: Sales of nursery stock¹ to Scotland, 2005/06 to 2013/14

	million plants				
	Seedlings	Sitka spruce VP ²	Total	Scots Pine	Total
Total stock					
2005/06	21.1	3.5	24.5	2.9	27.4
2006/07	18.4	3.7	22.1	4.2	26.3
2007/08	19.9	5.3	25.2	3.5	28.7
2008/09	20.5	6.1	26.6	3.8	30.4
2009/10	14.8	5.2	20.0	2.5	22.5
2010/11	18.3	6.5	24.8	3.1	27.9
2011/12	16.4	6.7	23.1	4.6	27.7
2012/13	19.9	5.8	25.7	4.2	29.9
2013/14	23.6	6.8	30.4	5.9	36.3
Improved stock					
2005/06	17.2	3.5	20.6	1.7	22.3
2006/07	15.7	3.7	19.4	2.6	22.0
2007/08	18.0	5.3	23.4	1.7	25.0
2008/09	20.0	6.1	26.1	1.5	27.6
2009/10	14.7	5.2	19.8	1.5	21.4
2010/11	17.9	6.5	24.4	2.3	26.7
2011/12	15.5	6.7	22.2	2.3	24.6
2012/13	17.8	5.8	23.5	1.4	24.9
2013/14	21.7	6.8	28.5	2.5	31.0
% Improved					
2005/06	81%	100%	84%	57%	81%
2006/07	85%	100%	88%	62%	84%
2007/08	91%	100%	93%	47%	87%
2008/09	98%	100%	98%	41%	91%
2009/10	99%	100%	99%	61%	95%
2010/11	98%	99%	98%	76%	96%
2011/12	95%	100%	96%	51%	89%
2012/13	89%	100%	92%	33%	83%
2013/14	92%	100%	94%	43%	85%

Source: Forestry Commission.

Note:

(1) Results for respondents only. This is estimated to account for around 90-95% of all sales of Sitka spruce and Scots pine.

(2) VP = vegetative propagation.

(3) Years are planting years, running from October¹ to September.

Total sales of nursery stock

Total sales (covering all GB) accounted for an estimated 45.1 million Sitka spruce and Scots pine plants in 2013/14 (Table 2). This comprised 37.9 million Sitka spruce plants and 7.2 million Scots pine plants, the highest levels recorded by the survey for both species.

39.5 million plants (88% of all sales) in 2013/14 were derived from improved basic material, a slight increase from the 87% of plants sold from improved stock in 2012/13.

Table 2: Total sales (all GB) of nursery stock¹, 2005/06 to 2013/14

	Sitka spruce			Scots Pine	million plants
	Seedlings	VP ²	Total		
Total stock					
2005/06	26.9	5.7	32.6	4.0	36.7
2006/07	25.7	6.3	32.0	5.9	37.9
2007/08	29.8	7.3	37.1	5.1	42.2
2008/09	26.0	8.1	34.1	5.5	39.6
2009/10	20.0	7.7	27.7	3.9	31.6
2010/11	23.4	10.1	33.5	4.2	37.7
2011/12	22.2	9.8	32.0	5.8	37.9
2012/13	24.5	9.2	33.7	5.2	38.9
2013/14	27.8	10.2	37.9	7.2	45.1
Improved stock					
2005/06	20.4	5.7	26.2	2.4	28.5
2006/07	20.7	6.3	27.0	3.9	30.9
2007/08	26.3	7.3	33.5	2.7	36.2
2008/09	24.9	8.1	33.0	3.1	36.2
2009/10	19.3	7.7	26.9	2.3	29.2
2010/11	23.0	10.0	33.0	3.3	36.3
2011/12	21.3	9.8	31.2	3.2	34.4
2012/13	22.5	9.2	31.7	2.3	34.0
2013/14	25.6	10.2	35.7	3.7	39.5
% Improved					
2005/06	76%	100%	80%	58%	78%
2006/07	80%	100%	84%	66%	82%
2007/08	88%	100%	90%	53%	86%
2008/09	96%	100%	97%	57%	91%
2009/10	96%	100%	97%	58%	92%
2010/11	98%	99%	99%	80%	96%
2011/12	96%	100%	97%	56%	91%
2012/13	92%	100%	94%	45%	87%
2013/14	92%	100%	94%	52%	88%

Source: Forestry Commission.

Note:

- (1) Results for respondents only. This is estimated to account for around 90-95% of all sales of Sitka spruce and Scots pine.
- (2) VP = vegetative propagation.
- (3) Years are planting years, running from October to September.

Annex

Introduction

This annex provides background information on the nursery survey statistics presented in this release. It covers the data sources and methodology used to produce the statistics, information on quality measures and on any revisions to historic data and links to further information.

Glossary

Conifers Trees with needles and cones, such as spruce, pine and larch.

Great Britain (GB) England, Wales and Scotland.

Improved stock Nursery plants that have been genetically improved to enhance timber quality. A more detailed definition is provided on page 4 of this release.

Planting year Twelve month period running from October to September.

Scots pine Species of coniferous tree, native to Great Britain.

Seed orchard Orchard where trees are grown for seed production rather than timber.

Seedling Young tree grown from seed, prior to being transplanted or planted out in the forest.

Sitka spruce Species of coniferous tree, not native to Great Britain.

Vegetative propagation (VP) Reproduction by cuttings, layering or grafting and not involving fertilisation.

Data Sources and Methodology

The figures in this release have been obtained from a voluntary survey of nursery businesses in Great Britain, run on behalf of Forestry Commission Scotland.

The results relate to respondents only; no estimates have been made for non-respondents to the survey. It is estimated that the respondents in 2012-13 have accounted for around 90% of all sales of Sitka spruce and Scots pine, whilst respondents in other years have accounted for around 95% of total sales.

Nursery Survey 2015

The survey was set up to monitor the level of use of improved nursery stock in Scotland annually, as part of the system for reporting progress over the intended 10 year life of the current Scottish Forestry Strategy 2006 (SFS). The Scottish Forestry Strategy is available at <http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/forestry-strategy>

Quality

For the 2013/14 survey, questionnaires were issued to a total of 13 nurseries (including the 3 Forestry Commission nurseries). A total of 13 responses (including nil responses) were received, giving a response rate of 100%.

Further quality information on FC Official Statistics is available at:

www.forestry.gov.uk/forestry/infd-7zhk85

Revisions

Figures for the planting year 2013/14 are published for the first time in this release. Figures for earlier years have not been revised.

The Forestry Commission's revisions policy sets out how revisions and errors to these statistics are dealt with, and can be found at:

[www.forestry.gov.uk/pdf/FCrevisions.pdf/\\$FILE/FCrevisions.pdf](http://www.forestry.gov.uk/pdf/FCrevisions.pdf/$FILE/FCrevisions.pdf)

Further information

The assistance of the Confederation of Forest Industries (Confor) and the nursery trade in the running of this survey and the provision of data are gratefully acknowledged.

Figures in tables have been independently rounded, so may not add to the totals shown.

Release schedule

Results for the planting year 2014/15 are expected to be published in September 2016.

Official Statistics

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