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Cronfa Amaethyddol Ewrop ar gyfer Datblygu Gwledig: Ewrop yn Buddsoddi mewn Ardaloedd Gwledig
The European Agricultural Fund for Rural Development: Europe Investing in Rural Areas

[GLASTIR WOODLANDS ELEMENT UP-TAKE SURVEY – FINAL REPORT]

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Acknowledgements

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Glossary of Terms

Common Agricultural Policy (CAP) – The CAP is the agricultural policy for the European Union. In its current form, CAP has two ‘pillars’. Pillar 1 refers to direct farm subsidy support or the ‘Single Farm Payment’. Pillar 2 refers to support for farmers and the rural economy under the Rural Development Programme.

Farming Connect – A Welsh Government funded programme that provides farm businesses with one-on-one support, advice and training.

Farmers’ Union of Wales (FUW) – A membership organisation that was established to protect and advance the interests of those who derive an income from Welsh agriculture.

Glastir – A Welsh Government-funded sustainable land management scheme that offers financial support to farmers and land managers to deliver specific environmental goods and services.

Gwlad – A news service, available online and in a newsletter format, which provides the latest information from the Welsh Government about agriculture and rural affairs.

LFA grazing – LFA stands for ‘Less Favoured Areas’, which is a term used to describe areas in the European Union that are mountainous and/or with natural characteristics that make agriculture challenging (such as a lack of water or a short growing season). ‘LFA Grazing’ is a class of farm type used by the Welsh Government to describe livestock farms in less favoured areas.

National Farmers Union (NFU) Cymru – A membership organisation that was established to represent the interests of farmers and land managers in Wales.

Rural Development Plan (RDP) 2007-2013 for Wales - Rural Development Plan 2007-2013 is the mechanism by which the Welsh Government delivers activities which support the countryside and rural communities. These activities encourage the sustainable management of agriculture and the environment.

Single Farm Payment – The Single Farm Payment is the main agricultural subsidy paid to farmers and landowners in the European Union under the

Common Agricultural Policy. It was replaced by the Basic Payment Scheme in 2015.

Segmentation model - A segmentation model is a division of a population into a number of segments whereby no individual can belong to more than one segment (mutually exclusive) and every individual is assigned to one cluster (collectively exhaustive). The method of creating a segmentation model is called cluster analysis, hence the words ‘segment’ and ‘cluster’ tend to be interchangeable.

Gross Value Added (GVA) – GVA measures the contribution to the economy of each individual producer, industry or sector. Simplistically it is the value of the amount of goods and services that have been produced, less the cost of all inputs and raw materials that are directly attributable to that production.[1]

[1] Source: Rural productivity and Gross Value Added (GVA). Defra. Published: 31 January 2013. Available at: https://www.gov.uk/government/statistics/rural-productivity

Abbreviations

BWW	Better Woodlands for Wales
CAP	Common Agricultural Policy
CMEF	Common Monitoring and Evaluation Framework
CPH	County Parish Holding
FTE	Full-time equivalent (full-time worker)
FWAG	Farming & Wildlife Advisory Group
GWC	Glastir Woodland Creation
GWM	Glastir Woodland Management
GVA	Gross Value Added
LFA	Less Favoured Area
NFU	National Farmers' Union
NRW	Natural Resource Wales
RDP	Rural Development Programme/Plan
RHI	The Renewable Heat Incentive
RPW	Rural Payment Wales
WG	Welsh Government
WGS	Woodland Grant Scheme

Executive Summary

Background to the study

The Glastir Woodlands Element is a constituent part of the wider Glastir programme, a five-year sustainable land management scheme available to land managers across Wales, funded through the Rural Development Plan for Wales 2007-2013 (RDP). This RDP programming period is in its final stages and it is necessary to ensure that robust evidence is available on the interventions that have been undertaken. Against this background, the Welsh Government commissioned ADAS in February 2015 to undertake a broad census survey of farmers with woodland to investigate the reasons behind the uptake or non-uptake of Glastir Woodlands Element grants. The findings from this survey will help inform the Welsh Government Forestry Policy team and provide evidence to feed into the Ex-Post Evaluation of the RDP 2007-2013.

Objectives of the study

The objectives are as follows:

- Identify reasons for the up-take of Glastir Woodlands Element grants;
- Investigate the motives for farmers with woodland on their property but who haven't applied for a grant;
- For farms that received grants through Better Woodland Wales (BWW), but then did not go on to apply for Glastir Woodlands Element, identify reasons why they did not;
- Explore the experiences of farm holdings that received funding through the BWW Scheme and then transitioned to the Glastir Woodlands Element; and
- Collect data on the socio-economic impacts (economic growth, employment creation and labour productivity) of the schemes for all farm holdings that have accessed the BWW scheme and/or Glastir Woodland Management or Glastir Woodland Creation grants.

Methods

The survey collected responses from 1,005 farmers who have woodland on their farms. Of all the respondents, 301 are beneficiaries of Glastir and/or BWW woodland grants, 119 are other grant recipients and 585 are non-beneficiaries. The survey took a census approach to survey beneficiaries rather than using a sample; all beneficiaries of Glastir/BWW grants were contacted and interviewed where the farmer was willing to take part. This is a key strength of this study in terms of its representativeness, although there may be an element of non-response bias. For the non-beneficiary group, a sample was selected on the basis of region and by woodland area, and subsequently weighted for analysis to ensure representativeness.

The survey included a set of questions designed by an earlier farmer segmentation study[2] in order to differentiate responses from different groups to inform policy for better targeting and communication with farmers. The survey data was also linked to the June Farm Survey to strengthen the analysis. Comparisons were made between sub-groups, mainly on the basis of which grants they received and farmer segmentation clusters, supplemented by comparisons between farm woodland area, role of farmer, farmer age group and farm type.

Key findings

- Motives for the uptake of Glastir Woodlands Element Grants

  Glastir/BWW tends to attract more part-time, younger farmers with larger woodland areas.

  Compared to non-beneficiaries, Glastir/BWW grant recipients are driven by a range of motives to plant/manage woodland, which include environmental, economic and lifestyle reasons. This is reflected in the survey responses which suggest a greater emphasis on the following drivers:
    - to help improve the local landscape;
    - to provide a place for personal recreation and relaxation;
    - for water control and flood management purposes;
    - to provide woodfuel for personal use;
    - to provide timber; and
    - to provide woodfuel for sale.

- Motives for non-beneficiary farmers with woodland on their property but who haven't applied for a grant

  Compared to grant recipients, non-beneficiary farmers who planted woodlands or actively managed their woodlands, tend to be less motivated by the environmental or economic drivers, although 'for the benefit of wildlife', 'to help improve the local landscape' and 'to provide shelter or screening' were the most frequently quoted motives for woodland creation/management.

[2] Lee-Woolf, C., Hughes, O., King, G, & Fell, D. (2016). Development of a segmentation model for the Welsh agricultural industry. A report by Brook Lyndhurst for the Welsh Government.

When asked why they did not take up the grant schemes, the top three reasons given were:

- put off by grant application requirements;
- lack of awareness of grants; and
- eligibility issues for both Glastir Woodland Creation and Glastir Woodland Management grants.

Awareness appears to be a key barrier to uptake of woodland scheme grants. Given the popularity of Gwlad magazine, Welsh Government should continue to use of this medium to communicate with woodland owners going forward in combination with other approaches.

- <u>Reasons for not taking up Glastir Woodlands Element grants for farms that received grants through Better Woodland Wales (BWW)</u>

Among the 174 respondents who received BWW grants, 122 (70%) did not take up Glastir Woodlands Element grants. The main reasons given for not taking up grants were:

- planted woodland in the previous schemes and no more spare land;
- the application process of Glastir being too complicated;
- not aware of Glastir Woodlands Grants; and
- not eligible for the Glastir scheme.

Each of these reasons was mentioned by 16-20 farmer respondents, representing 13-16% of the 122 BWW beneficiaries who did not take up Glastir Woodlands grants.

- <u>Experiences of farm holdings that received funding through the BWW Scheme and then transitioned to the Glastir Woodlands Element</u>

Glastir woodlands grant beneficiaries are generally positive about their experiences of the scheme. Respondents were asked to score different aspects of the scheme and the evidence suggests that the application process was scored the highest, followed by level of support and advice at the time of application; complexity of making a claim and on-going support during the scheme were scored the lowest.

A total of 52 respondents received both BWW and Glastir Woodlands grants. Based on the views of these farmers, there is no real difference between the experience of Glastir Woodlands and the previous BWW grants. The Glastir Woodlands scheme beneficiary farmers tend to use more advice than other scheme (BWW or other) beneficiaries and non-beneficiaries.

Evidence from the survey suggests that the additionality of Glastir Woodlands grants is high, with 94% of the 179 Glastir beneficiaries interviewed claiming that they would not have planted the same area or implemented the same management at the same level, same timescale or with the same quality, without the grants.

Evidence also shows that a lower percentage of beneficiaries of Glastir Woodlands (7%) and BWW (9%) planted new woodland on productive land than beneficiaries of other grant schemes (22%).

- Socio-economic impacts of the schemes for all farm holdings that have accessed the BWW scheme and/or Glastir Woodland Management or Glastir Woodland Creation grants

  Woodland grant schemes have positive effects on GVA and employment but have negative impacts on short term labour productivity (expressed as GVA per full-time equivalent). The latter reflects an increased element of labour input in the short term and the long term nature of returns from investment in woodland creation/management.
    - 46 FTE jobs were generated from the 133 beneficiary businesses, representing a 32% increase from the baseline.
    - GVA increased by 24% from the baseline for the 133 beneficiary businesses.
    - Labour productivity (expressed as GVA/FTE) decreased by 7% from the baseline for the grant beneficiaries.

1 Introduction

1.1 Background to the project

The Glastir Woodlands Element is a constituent part of the Glastir programme, a five-year sustainable land management scheme available to land managers across Wales, funded through the Rural Development Plan for Wales 2007-2013 (RDP). The current RDP programming period is in its final stages and it is necessary to ensure that robust evidence is available on the interventions that have been undertaken. Against this background, the Welsh Government commissioned ADAS to undertake a survey of farmers with woodland to investigate the reasons behind the uptake or non-uptake of Glastir Woodlands Element grants. This report summarises the findings of the survey.

These findings will help inform the Welsh Government Forestry Policy team and provide evidence to feed into the Ex-Post Evaluation of the RDP 2007-2013. In particular, one of the objectives of the study is to collect data on the socio-economic impacts (economic growth, employment creation and labour productivity) of woodland grants in order to fulfil Common Monitoring and Evaluation Framework (CMEF) requirements. The timing of the study is appropriate as the current RDP programming period is in its final stages and the Welsh Government is starting to implement the new Glastir woodlands programmes.

Glastir consists of six elements, Glastir Entry; Glastir Advanced; Common Land Element; Glastir Woodlands Element; Glastir Efficiency Grants; and Glastir Organics. This survey investigates the Woodlands Element, which is comprised of two schemes, Glastir Woodland Creation and Glastir Woodland Management. These replaced the Better Woodlands for Wales (BWW) grant scheme which ran from 2006 until 2010/11. Glastir Woodland Creation (previously called Glastir Woodland Creation Grant Scheme) was operational from November 2010 and Glastir Woodland Management from April 2013.

- Glastir Woodland Management (GWM) aims to bring neglected woodland back into productive management. It supports actions on thinning, tree species change (restocking), infrastructure e.g. tracks, stacking areas, boundary work e.g. fencing, conservation of protected and priority species, vegetation management, pest control and public access.
- Glastir Woodland Creation (GWC) aims to provide high-quality woodlands that enhance the landscape, are appropriate to local conditions and have a diverse mixture of species and habitats. It

supports a range of woodland planting options and aims to help fulfil the commitment to an increased area of mixed woodland, as set out in Woodland for Wales, the Welsh Government's woodland strategy.

GWM provides management and capital grants to support the environmental objectives of the Glastir scheme in woodlands, while GWC is designed to help create new woodlands. Both GWM and GWC are stand-alone schemes and together seek to increase rural employment, reverse biodiversity decline, mitigate climate change and increase the economic value of woodlands.

1.2 Aims of the Project

The specific objectives for the survey are as follows:

- Identify reasons for the up-take of Glastir Woodlands Element grants;
- Investigate the motives for farmers with woodland on their property, but who haven't applied for a grant;
- For farms that received grants through Better Woodland Wales (BWW), but then did not go on to apply for Glastir Woodlands Element, identify reasons why they did not;
- Explore the experiences of farm holdings that received funding through the BWW Scheme, and then transitioned to the Glastir Woodlands Element; and
- Collect data on the socio-economic impacts (economic growth, employment creation and labour productivity) of the schemes for all farm holdings that have accessed the BWW scheme and/or Glastir Woodland Management or Glastir Woodland Creation grants.

1.3 Methodology

1.3.1 Survey Design

This study builds on a previous survey undertaken by Wavehill Ltd. in November 2009 which investigated a range of issues related to farmers in Wales with woodland on their land. The Wavehill study had a sample of 264 farm holdings and has provided useful background, informing survey design for this work as well as the analysis.

In addition, a wider range of research was reviewed prior to the start of the survey in order to gain insights on influencing factors of and barriers to the update of woodland grants[3]. A range of factors were identified in the literature

[3] These studies include:

- Forest Research, 2012. Evaluation of Better Woodlands for Wales Grant Scheme
- Lawrence A., Dandy, N. and Urquhart, J. (2010). Landowner attitudes to woodland creation and management in the UK: A review of current evidence. Forest Research, Alice Holt, Farnham [online] available at: http://www.forestry.gov.uk/fr/ownerattitudes

that influence the uptake of woodland grants, including: farm size, proportion of existing woodland, profit levels, type of land, tenure, importance of farm income, etc.

Key barriers to uptake include:

- Farmer/Farm Characteristics: Lack of experience with forestry, lack of facilities, tenure (preventing most tenants from planting trees), lack of land (no spare land), land quality, importance of farm income.
- Internal factors/beliefs/values (farmer segmentation): lack of interest/desire to plant trees or manage woodland, lack of time.
- Lack of adequate incentives: The loss of farm income (although participants sometimes derive private environmental or sporting benefits that provide some compensation for loss of income), grant level (too low), long timescales of investment (to achieve any benefits), uncertainties about regulations regarding felling of trees that they planted, Marketing and engagement mechanisms: Limited sources of information about the woodland grants, difficulties in accessing online materials, unfamiliarity with language and terminology used to explain forestry and woodland management, especially for new entrants and non-specialist land managers.
- Application process: Bureaucracy associated with grant applications, the complexity of required forms, paper-based vs. online application, transparency of rules and criteria.
- Availability and quality of advice: Current advisory systems are dominated by agricultural advisors and agents often with a limited understanding of forestry or interest in promoting it.

All these factors/barriers were considered in the questionnaire design where appropriate with a view to differentiating responsiveness to grant incentives and varying strategies to encourage uptake between different farmer segmentation groups.

- Smith, S. et. al. (2014). Analysis of the potential effects of various influences and interventions on woodland management and creation decisions, using a segmentation model to categorise sub-groups. Defra, London. Available at: http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18470
- Welsh Government (2014). Consultation Analysis Document- Proposals for the Glastir Scheme, Part of The Rural Development Plan For Wales 2014-2020. http://gov.wales/docs/drah/consultation/140617glastir-consultation-analysis-en.pdf
- Moseley D, Dandy N, Edwards D and Valatin G (2014). Behavioural policy ‘nudges’ to encourage woodland creation for climate change mitigation. Forestry Commission Research Report. Forestry Commission, Edinburgh. i–vi + 1–18pp.
- ADAS and AgraCEAS Consulting. Mid Term Evaluation of the Wales Rural Development Plan 2007-13. A Report to Welsh Assembly Government.

1.3.2 Sampling frame and sampling weights

For the beneficiary group, a census approach was taken, as opposed to surveying a sample of the population. All grant recipients in the Glastir and BWW databases were contacted and those that agreed to take part in the survey were interviewed, which is a key strength of this study. As such, the survey data for the beneficiary group of farms was not weighted.

A sample of non-beneficiary farms with woodland (i.e. non-beneficiaries of Glastir woodlands grants or BWW grants, including farmers who received no grants at all and farmers who received some other grants) was interviewed. There are 7,810 farms with a woodland area of more than 0.25ha[4] in the database provided by Rural Payments Wales (RPW). A sample of these farms was selected based on their region and woodland area. We contacted non-beneficiaries until a total of 1,000 responses was reached, which was the pre-agreed limit for the study. We achieved 704 interviews from the non-beneficiary group and had 721 refusals. A more detailed discussion of the sampling framework is presented in Appendix 1.

The selection of non-beneficiary farms by region was proportional to the distribution within the total population. However, for each woodland area group, an equal size sample was selected in order to ensure a sufficient sample size for the farms with larger woodland areas. The rationale for this is that farms with a larger woodland area are more likely to participate in a woodland grant scheme[5].

On this basis, farms with smaller woodland areas were under-sampled and those with larger woodland areas were over-sampled. Therefore, the survey data for the non-beneficiary group was weighted according to the size band of woodland area on farm. This involves weighting the data from each sample farm by the inverse of the probability of the farm being in the sample and gives a rough measure of the number of actual farms that the sample farm represents. The detailed weights that were applied are presented in Table 1.1.

[4] This is the minimum woodland area required to be eligible for a Glastir Woodland Grant.
[5] The Wavehill Study "A survey of farmers with woodland on their land" (November 2009) suggested that farmers who had received grants tended to have more woodland on average (22ha) than those who had not (5ha). This is also supported by a comparison of woodland area between woodland grants beneficiaries (Glastir and BWW) and non-beneficiaries, which shows that a lower percentage of beneficiaries have a small woodland area (less than 2ha) and a higher percentage of farmers have a large woodland area (more than 10ha).

Table 1.1 Sample weights by woodland size band

Woodland Size band	Glastir/BWW grant recipients	Other grant recipients and non-beneficiaries
<=2ha	1	1.7174
2<=5ha	1	0.8462
5<=10ha	1	0.7599
>10ha	1	0.6574

1.4 Data Analysis

1.4.1 Cross Tabulation Analysis

Cross tabulation analysis was carried out to explore the differences between different groups of farms. Specifically, cross breaks were completed for the five different grant beneficiary/non-beneficiary groups:

i. Glastir grant beneficiaries only;
ii. BWW grant recipients only;
iii. beneficiaries of both Glastir and BWW;
iv. beneficiaries of other grants; and
v. non-beneficiaries (no grants)/don't know.

For some of the questions, in order to achieve sufficient number of responses for each sub-group, the first three groups were aggregated into one broader category as 'beneficiary of Glastir and/or BWW grants' and differences were compared between this group and other grant recipients and non-beneficiaries.

The data was also analysed on the basis of farm or farmer characteristics. The key groups for this analysis are listed in Table 1.2.

Table 1.2 Cross-tabulation parameters

		Sub-groups
1	Role on farm	Full-time farmer/farm manager Part-time Other
2	Woodland size	<=2ha 2<=5ha 5<=10ha >10ha
3	Farm type	Dairy Beef and sheep Arable, Mixed and Horticulture Pigs and Poultry & Other
4	Age groups	Under 45 45-64 65 and above
5	Segmentation group	Cluster 1 (C) Cluster 2 (Y) Cluster 3 (M) Cluster 4 (R) Cluster 5 (U)

The differences between different groups were compared and tested for statistical significance at a confidence level of 95%. Where findings are statistically significant, these are highlighted in the report. Statistically significant findings for each question have been included as * in the result tables and annex numbers/codes were added after * to show which group the results were compared to.

1.4.2 Inclusion of Farmer Segmentation for analysis

The survey questionnaire included the segmentation questions[6] from the farmer segmentation study. Responses to these questions were used to segment both participants and non-participants of woodland grants. The aim is to allocate farmers to different behavioural groups and identify patterns in scheme entry and/or scheme impact. Based on the 'segment calculator/algorithm' from the segmentation study and responses to segmentation questions, each of the respondents of the woodland survey was classified into one of the 'C-Y-M-R-U' segmentation groups defined by the segmentation model. Differences between farm segmentation groups were compared in terms of farmers' behaviour (motivations, barriers, etc.) linked to the scheme entry decision and the impact of schemes.

[6] These include questions around four themes: Networks & Support; Adaptability & Innovation; Business & Finance and Government & Policy. See Annex 3 for details.

1.4.3 Linking with June Farm Survey

As part of the study, the woodland survey data was also linked through County Parish Holding (CPH) numbers with the June Agricultural Census Database 2014. The key parameters included in this data linking exercise included land area, woodland area, woodland management activities and farm type. As the first three elements were included in the woodland survey, this linked data was only used for verification of responses.

Data on farm type from the June Farm Survey was linked to the survey data to demonstrate the representativeness of the survey sample in this study and for identifying locations of farms (LFA beef and sheep farms in particular), where they claimed to have access issues of woodland planting/management.

The differences between farms by size group were not been explored explicitly in this analysis. Instead, a more holistic representation of farm/farmer characteristics by farm segmentation groups was used to explore the differences between farms within the sample.

2 Profile of the survey sample

Summary:

- In total, 1,005 responses were collected from farmers with woodland on their land. Of these, 420 had received a woodland grant.
- The majority of the 119 farms reporting that they received grants from other schemes are in legacy schemes, with Tir Gofal being mentioned most frequently.
- The sample largely reflected the national distribution of farms by age of principle farmer and by farm type.
- Glastir woodlands grant scheme participants are more likely to be part-time farmers (29%), compared to non-beneficiaries (21%).
- A higher proportion of grant recipients have a large area of woodland (>10ha) than non-beneficiaries, while the latter are more likely to have a small area of woodland.
- Farms with a large woodland area tend to stay in woodland grant schemes, while farms with very small area of woodland tend not to participant in the grant schemes.
- Grant recipients are on average younger than non-beneficiaries.
- In terms of the farmer segmentation model, a higher percentage of Glastir/BWW grant recipients are Cluster C and Cluster Y farmers. These groups are more open to new skills, knowledge and technologies and concerned more about the environment over the agricultural production.

In total, 1,005 responses were collected from farmers with woodland on their farms. This included 420 farms that had received a woodland grant with the remainder being non-beneficiaries of grant schemes. This large non-beneficiary element reflects the census approach adopted, ensuring the survey is as representative as is possible.

Based on the survey responses from grant beneficiaries, five categories or groups were evident, as follows:

i. Glastir Woodlands Grants but no previous schemes;
ii. BWW but not Glastir;
iii. both Glastir and BWW grants;
iv. grants from other schemes; and
v. did not receive/did not recall receiving any grants.

The number of respondents in each of the five groups is presented in Table 2.1, along with population of farm beneficiaries of Glastir and/or BWW grants.

Table 2.1 Survey sample details

Total responses	**1005**	**Population**	**% of population surveyed**
Glastir Woodlands Element Grants, but no previous schemes	127	209	61%
Better Woodlands Wales (BWW), but not Glastir	122	331	37%
Both Glastir Woodlands and BWW grant schemes	52	100	52%
Yes, other scheme(s)	119	NA	NA
None/Don't know	585	NA	NA

Some 119 respondents mentioned that they received woodland grants other than Glastir Woodlands Grants and BWW. A detailed list of these grants are presented in Table 2.2.

Table 2.2 Details of other schemes*

Total responses	**119**	
Tir Gofal	33	28%
Farm Woodland Premium Scheme	22	18%
Not Specified	16	13%
Woodland Grant Scheme (WGS)	15	13%
Forestry Commission Grant (not specified)	10	8%
Glastir Entry and/or Advanced	7	6%
Bracken Challenge Fund	6	5%
Coed Cymru	5	4%
Woodland Trust Grants	4	3%
Environmental Sensitive Area (ESA) scheme	3	3%
County Council Grants	3	3%
Applied for Glastir Woodlands Grants, awaiting results	2	2%
Habitat Scheme	2	2%
Tir Cymen	2	2%
Tir Cynnal	2	2%
Grant for hedging from the Wye & Usk Foundation	1	1%
Rhaglen Tir Eryri (Snowdonia Land Programme)	1	1%

*: Some of the respondents mentioned multiple grants from different sources.

2.1 Farm/Farmer characteristics

2.1.1 Role on farm

Overall, 68% of the respondents are full-time farmers or farm managers and 24% are part-time farmers (see Table 2.3). A higher percentage (29%) of grant recipients (Glastir and/or BWW) are part-time farmers, compared to non-beneficiaries (21%). This suggests that the Glastir and BWW schemes tend to attract more part-time farmers who may be less focused on agricultural production. A possible reason for this might be that part-time farmers may have more time available for managing woodland and/or need for another source of income.

Table 2.3 Responses by role on farm

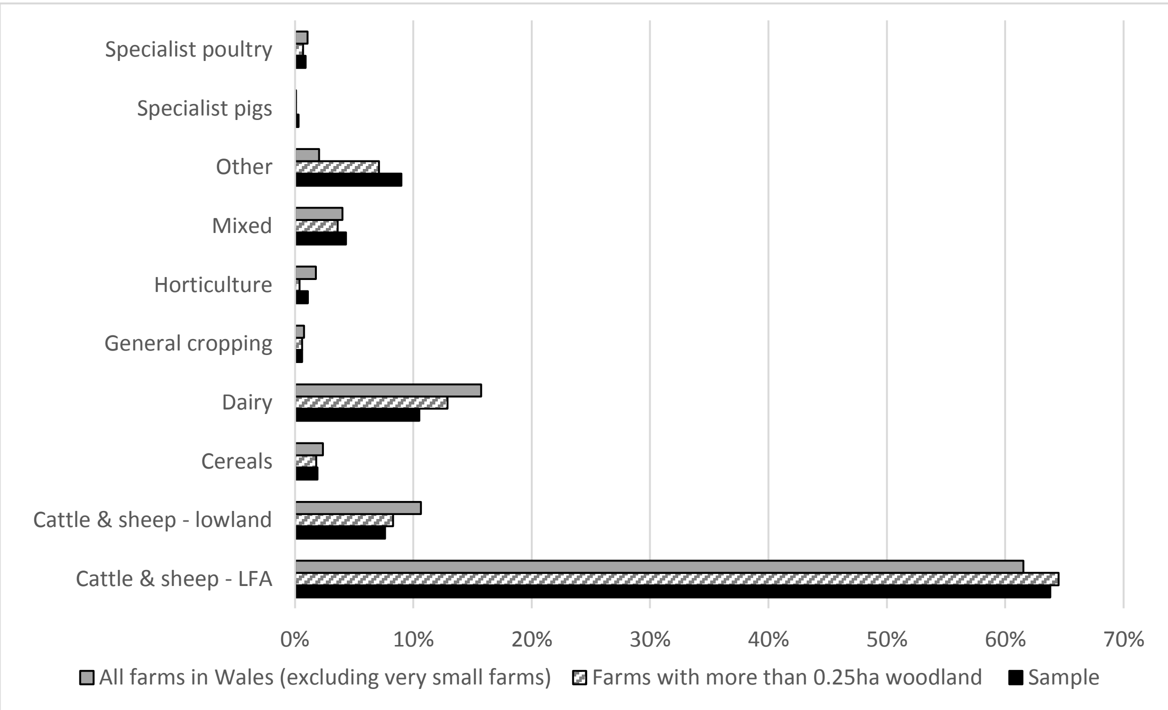
	Total		Glastir/ BWW (G/B)	Other grants (O)	Non-beneficiaries (N)
Base	**1005**	**100%**			
Full-time farmer or Farm Manager	679	68%	64%	63%	70%*G/B
Part-time farmer	240	24%	29%*N	27%	21%
Other (Please Specify)	86	9%	7%	10%	9%

*Significantly higher than –N (non-beneficiaries/don’t know);-G/B (Glastir/BWW beneficiaries).

2.1.2 Farm types

The data highlights some variance between beneficiary and non-beneficiary groups in terms of farm type (see Figure 2.1). The majority (74%) of farms interviewed are beef and sheep farms (including both LFA and lowland farms). Dairy farms account for just 8% of the respondents, while 13% are arable, mixed or horticulture farms and 5% are pigs, poultry and other farm types.

Figure 2.1: Distribution of respondents by farm type (sample vs. Wales)



Note: Robust Farm Type data from data-linking with June Census 2013.

Higher proportions of non-beneficiaries are dairy farms (10%) or beef and sheep farms (76%), compared to Glastir/BWW grants recipients (of whom 2% are dairy and 67% are beef and sheep farms). A higher percentage (9%) of Glastir/BWW grant recipients are pigs and poultry and other farm types, compared to other grants recipients (4%) and non-beneficiaries (4%). Among Glastir/BWW grant recipients, 16% are arable, mixed or horticulture farms which is higher than that (11%) of non-beneficiaries.

Table 2.4 highlights a more detailed distribution by farm type and scheme participation.

Table 2.4 Responses by farm type and scheme participation

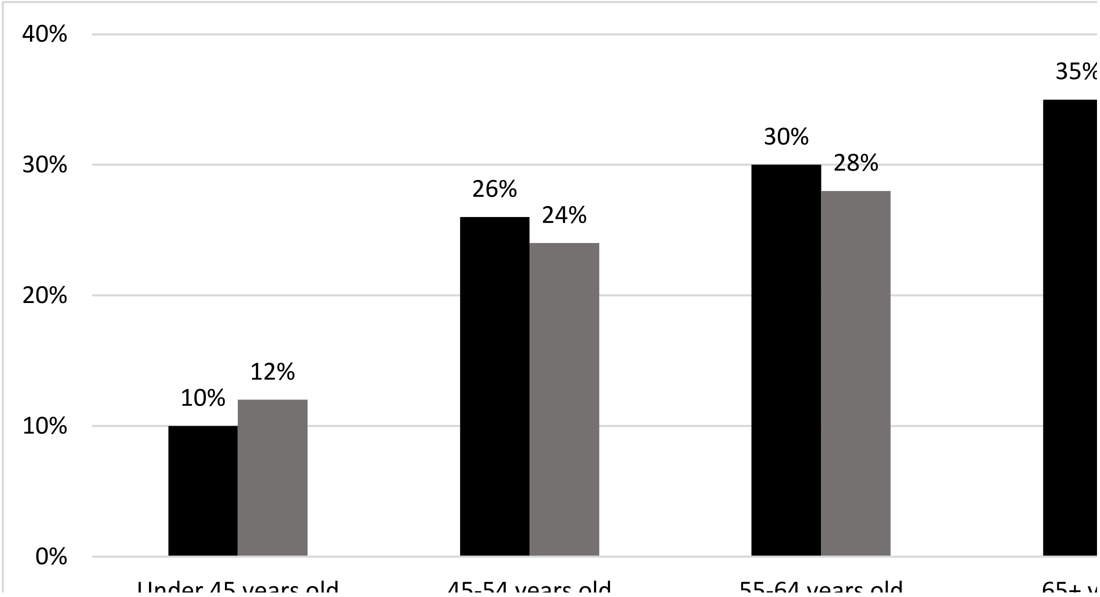
	All	**Glastir (G)**	**BWW (Bw)**	**Both (Bo)**	**Other (O)**	**None/DK (N)**
Base	**1005**	**127**	**122**	**52**	**112**	**592**
Dairy	8%	2%	7%	8%	6%	10%*^{G}
Beef and sheep	74%	67%	76%	63%	76%	76%*^{G}
Arable, mixed and horticulture	13%	17%	12%	19%	14%	11%
Pigs, Poultry and other	5%	13%*^{BwON}	4%	10%	4%	4%

* Significantly higher than
-N (non-beneficiaries/Don't know);
-O (other grant recipients);
-G (Glastir woodlands grants);
-Bw (BWW recipients); and
-Bo (recipients of both BWW and Glastir Woodlands grants).

2.1.3 Age group

Figure 2.2 shows the distribution of survey respondents by the age of principle farmer against the national statistics for Wales. This suggests that the sample largely reflected national distribution.

Figure 2.2: Distribution of respondents by age group (sample vs. Wales)



* Source: Principal farmer by age. EU farm structure survey 2013. Available at: http://gov.wales/statistics-and-research/welsh-agricultural-statistics/?lang=en

There are differences between beneficiaries and non-beneficiaries in terms of age, as follows:

- a higher percentage of Glastir/BWW grant beneficiaries are under 45 (13%) compared to non-beneficiaries (8%); and
- a higher percentage (39%) of non-beneficiaries are 65 years old and above, compared to 30% of Glastir/BWW beneficiaries and 27% of other grant beneficiaries.

The data is detailed in Table 2.5.

Table 2.5: Responses by the age of principle farmer

	Sample	Glastir/BWW (G/B)	Other Grants (O)	None-beneficiaries (N)
Base	**1005**	**301**	**112**	**592**
Under 45	**10%**	**13%*[N]**	7%	8%
45-54	**26%**	26%	30%	25%
55-64	**30%**	32%	36%	28%
65+	**35%**	30%	27%	**39%*[G/B,O]**

* Significantly higher than -N (non-beneficiaries);
-O (other grant recipients);
-G/B (Glastir woodlands grants and/or BWW);

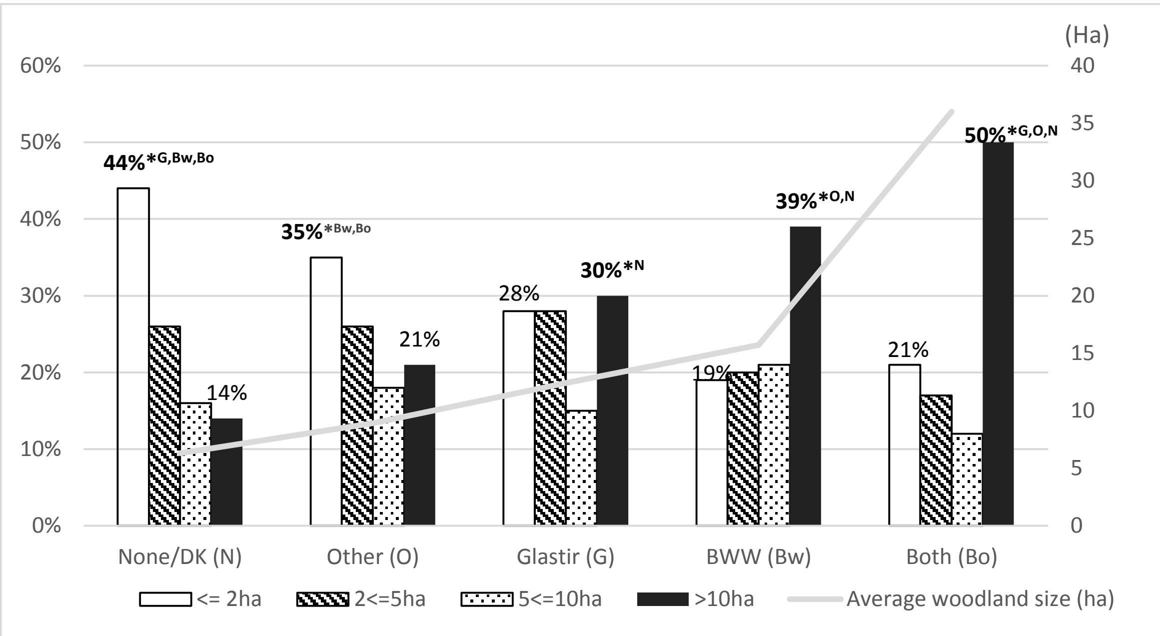
2.1.4 Woodland size

From the sample of 1,005 farms, a higher percentage of non-beneficiaries have a small area of woodland (less than 2ha), while beneficiaries tend to have a larger area of woodland.

Respondents were asked how much woodland they have on farm and the responses were grouped into four size bands: <=2ha; 2<=5ha, 5<=10ha and more than 10ha. Significant differences were seen in the smallest and largest size bands between beneficiaries and non-beneficiaries. Figure 2.3 shows the distribution by woodland size band for each of the beneficiary and non-beneficiary groups, which suggests:

- A higher percentage of beneficiaries of BWW, Glastir or both have a large woodland area of more than 10ha, of which farms that were in BWW then transferred into Glastir Woodlands scheme is the highest (50%), followed by those that were in BWW but did not enter Glastir (39%) and those that are Glastir only (30%); and
- A higher proportion of non-beneficiaries (44%) and other grant recipients (35%) tend to have smaller woodland areas of less than 2ha, compared to Glastir and/or BWW beneficiaries.

Figure 2.3: Woodland area for grant recipients and non-beneficiaries



Note: The line is the average woodland size for each of the scheme participation groups (none, other, Glastir, BWW and Both).

* Significantly higher than	-N (non-beneficiaries/Don't know);
	-O (other grant recipients);
	-G (Glastir woodlands grants);
	-Bw (BWW recipients); and
	-Bo (recipients of both BWW and Glastir Woodlands grants).

BWW beneficiaries who transferred to Glastir have the largest average area of woodland at 36.0ha, followed by BWW beneficiaries at 15.7ha and Glastir beneficiaries at 12.4ha. The average woodland size for other grant beneficiaries is 8.9ha, and 6.3ha for non-beneficiaries. This finding is consistent with the evidence presented in the Wavehill (2009) survey of farmers with woodland on their land, which suggested that farmers who had received grants tended to have more woodland on average (22ha) than those who had not (5ha).

2.2 Farmer segmentation

As part of this study, the primary survey data was linked to the Segmentation Study[7]. The latter developed a farmer segmentation model as a tool for Welsh Government policy teams and other stakeholders to better understand those they are seeking to work with, in order to effect change. The aim is to use the model to help design policies or interventions to suit the needs of particular segments, for example, or when seeking to maximise the effectiveness of communications strategies to address specific issues.

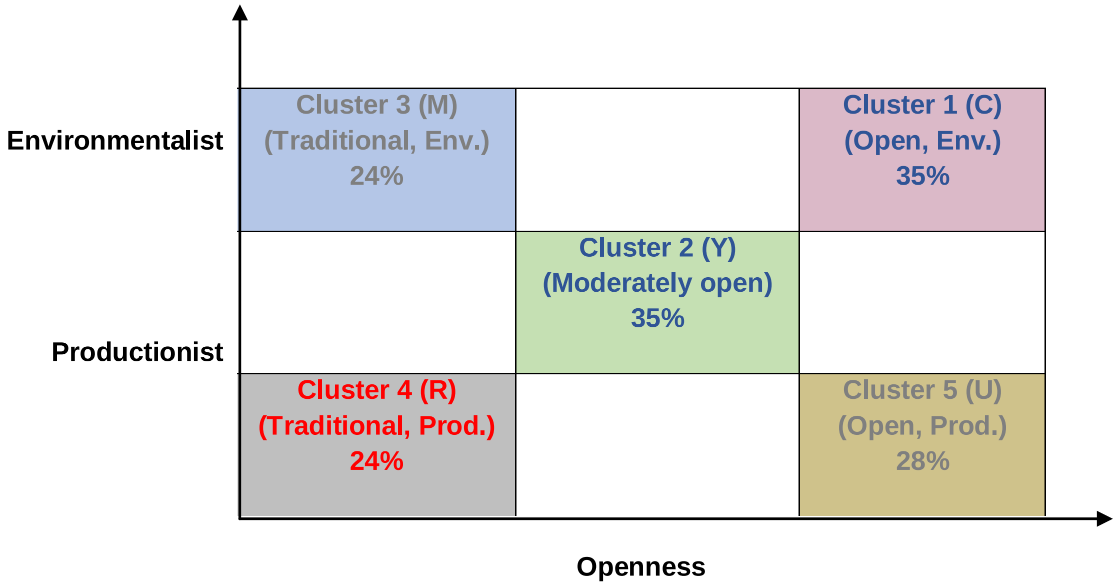
Five farmer segmentation groups were defined in the segmentation study. A neutral naming scheme 'C-Y-M-R-U' has presently been applied to represent the segments i.e. the names of the clusters were deliberately designed to be neutral, with no bearing on the characteristics of corresponding segmentation groups.

The woodland survey included the nine segmentation questions from the segmentation study in the questionnaire (see Appendix 3). Based on responses to these nine questions, respondents were classified into different segmentation groups calculated by a segment calculator/algorithm designed by the segmentation study.

For the benefit of demonstrating behavioural differences between different segmentation groups in this report, the five clusters were broadly categorised into the 3x3 matrix illustrated in Figure 2.4. This is based on the extent to which they are open to new ideas and technologies and the extent to which they are more driven by agricultural production, or improving the environment. Within each Cluster, the percentage of farmers that are Glastir and/or BWW beneficiaries is also presented in Figure 2.4 which shows that higher percentage of Cluster 1 and 2 farmers are (35% of each) Glastir and/or BWW beneficiaries.

[7] Lee-Woolf, C., Hughes, O., King, G, & Fell, D. (2016) Development of a segmentation model for the Welsh agricultural industry. A report by Brook Lyndhurst for the Welsh Government.

Figure 2.4: Categorisation of segmentation clusters



It is also evident from the survey data that a significantly higher percentage of Glastir and/or BWW grant beneficiaries are Cluster 1 (C) (29%) and Cluster 2 (Y) (26%) farmers, relative to the non-beneficiaries group (23% in Cluster 1 (C) and 20% in Cluster 2 (Y)). Cluster 1 (C) and 2 (Y) are characterised as more concerned about the environment and more open towards new technology, knowledge and skills. They are also likely to hold strong positive attitudes towards the environment and think quality of life is more important than income maximisation. Cluster 1 (C) farmers are more open-minded and more inclined to collaborate with other farmers than those in Cluster 2 (Y).

A higher percentage (22%) of non-beneficiaries are Cluster 4 (R) farmers who are traditional agricultural productionists and less open to new technologies and skills (see Table 2.6). This group tend to prioritise maximising the income of the holding over a good quality of life and they are less inclined to collaborate with others. They are unlikely to hold strong positive attitudes towards the environment and tend not to seek out new information, skills and technologies. Just 16% of Glastir/BWW grant recipients are in this segmentation cluster.

Table 2.6 Responses by farmer segmentation group

	Sample	Glastir/BWW (G/B)	Other Grant (O)	No grants (N)
Base	**1005**	**301**	**112**	**592**
Cluster 1 (C)	25%	**29%*[N]**	23%	23%
Cluster 2 (Y)	22%	**26%*[N]**	25%	20%
Cluster 3 (M)	15%	12%	19%	16%
Cluster 4 (R)	20%	16%	17%	**22%*[G/B]**
Cluster 5 (U)	19%	18%	16%	20%

3 Woodland Creation in Wales

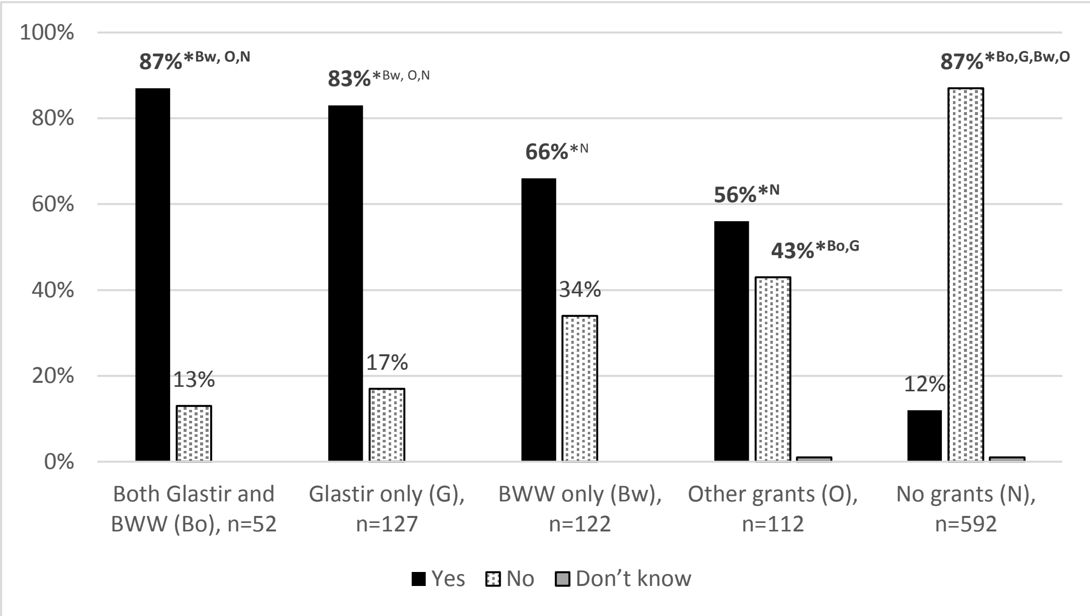
Summary:

- Of the 1,005 respondents, 365 (36%) planted new woodland in the past 10 years.
- Of the 365 farmers who planted new woodland, 312 (85%) used grants and 53 (15%) did not.
- Planting woodland is largely a grant-reliant behaviour given the fact that 85% (312) of the 365 farmers surveyed claimed to have planted new woodland.
- For the 53 respondents who did not use grants, lack of awareness or being put off by grant requirements and eligibility issues were most frequently mentioned reasons for not taking up grants. Lack of awareness was not an issue for the majority (73%) of this group.
- In terms of previous land use, rough grazing was the most common response, mentioned by over 60% of the 365 respondents who planted new woodland.
- Compared to non-beneficiaries, woodland grant beneficiaries are more likely to plant new woodland and they tend to use contractors (rather than farm labour) for the work.
- The most frequently mentioned motivations reported by all respondents who planted new woodland include: for the benefit of wildlife (95%); to help improve the local landscape (82%); and to provide shelter or screening (71%).
- In terms of the farmer segmentation groups, the majority of differences were seen between Cluster 1 farmers (open, environmentally focused) and the other groups. This suggests that Cluster 1 farmers are more likely to be motivated by a combination of environmental and economic reasons, as well as lifestyle preferences.

Of all the 1,005 respondents, just over a third (36%) planted new woodland in the past 10 years. The survey responses suggest that woodland grants (especially Glastir woodlands grants) tend to encourage farmers to plant new woodland.

Figure 3.1 illustrates the proportion of farmers who planted new woodland in the past 10 years by different grant beneficiary/non-beneficiary group. A higher percentage of Glastir/BWW beneficiaries claimed that they planted new woodland, compared to other grant recipients (56%) and non-beneficiaries (12%). The highest rate of planting (87%) was seen in the group of farms that were in BWW then transferred to Glastir (although this is a small group of 52 farmers), followed by those in Glastir only (83%) and those that received BWW grants only (66%).

Figure 3.1: Woodland planted in the past 10 years



Small numbers of respondents from the non-beneficiary group claimed to have planted woodland in the last 10 years, accounting for 12% of the 592 non-beneficiaries; this is significantly less than for other groups.

3.1 Motivations for planting woodland

The most frequently mentioned motivations for planting new woodland reported by respondents include:

- for the benefit of wildlife (95%);
- to help improve the local landscape (82%); and
- to provide shelter or screening (71%).

Providing woodfuel for personal use or a place for personal recreation and relaxation were also mentioned by over half of the respondents.

Table 3.1 illustrates the differences between the grant beneficiary and non-beneficiary groups in relation to motivations to plant new woodland (headings in bold represent significant differences between groups).

Table 3.1 Motivations for planting woodland

Motivation	To some or great extent	Glastir/BWW (G/B)	Other grants (O)	No Grants (N)
Base	365	230	63	73
For the benefit of wildlife	95%	95%	97%	91%
To help improve the local landscape	82%	**86%*^{N}**	76%	74%
To provide shelter or screening	71%	70%	76%	72%
To provide wood fuel for personal use	55%	**64%*^{O,N}**	42%	37%
To provide a place for personal recreation and relaxation	54%	**57%*^{N}**	**53%*^{N}**	42%
To provide timber	46%	**52%*^{O,N}**	34%	38%
For water control and flood management purposes	25%	**38%*^{N}**	29%	15%
To provide public access/recreation	20%	22%	14%	19%
For game shooting	16%	15%	**25%*$^{N,G/B}$**	14%
To provide wood fuel for sale	13%	**17%*^{N}**	10%	5%

*significantly higher than –N non-beneficiary group; -O beneficiaries of other grants; - G/B beneficiaries of Glastir and/or BWW

Compared to non-beneficiaries, Glastir/BWW grant recipients are driven by a range of motives to plant woodland, which include not only environmental, but also economic and lifestyle reasons. This is reflected in the survey responses which suggest a greater emphasis on the following drivers (also highlighted in bold in Table 3.1):

- to help improve the local landscape;
- to provide a place for personal recreation and relaxation;
- for water control and flood management purposes;
- to provide woodfuel for personal use;
- to provide timber; and
- to provide woodfuel for sale.

Among grant recipients, a higher proportion of Glastir/BWW beneficiaries are motivated to plant woodland to generate economic benefits from wood-based products, including the provision of timber or woodfuel for personal use. The survey results also show that a higher percentage (25%) of other grant recipients mentioned game shooting as one of their motivations for planting woodland than Glastir/BWW recipients (15%) and non-beneficiaries (14%).

Differences between different segmentation groups were also examined and the results are shown in Table 3.2. The majority of differences were seen between Cluster 1 (C) farmers and at least of one of the other segmentation groups, which suggests Cluster 1 (open, more environmentally driven) farmers are more likely to be motivated to plant woodland by a combination of environmental and economic reasons, as well as lifestyle preferences.

Table 3.2 Motivations for planting woodland by segmentation group

Motivation	To some or great extent	Cluster 1 (C)	Cluster 2 (Y)	Cluster 3 (M)	Cluster 4 (R)	Cluster 5 (U)
Base	365	103	109	45	54	55
To provide a place for personal recreation and relaxation	54%	**54%*** ^{C5}	**56%*** ^{C5}	**71%*** ^{C4,5}	49%	37%
For the benefit of wildlife (to great extent)	67%	**69%*** ^{C4,5}	**73%*** ^{C4,5}	**79%*** ^{C4,5}	49%	59%
To help improve the local landscape (to great extent)	43%	**50%*** ^{C2,5}	36%	**56%*** ^{C2,5}	45%	30%
To provide shelter or screening	71%	**80%*** ^{C2,5}	65%	70%	79%	65%
To provide wood fuel for personal use	55%	**61%*** ^{C3,4,5}	56%	50%	45%	50%
To provide timber	46%	**51%*** ^{C3}	45%	36%	48%	46%
For game shooting	16%	**20%*** ^{C2,3}	8%	6%	**35%*** ^{C1,2,3,5}	14%

*significantly higher than …

Broadly speaking, the main differences are:

- More environmentally focused farmers (Cluster 1, 3 and the middle group Cluster 2) are more likely to be motivated by lifestyle and environmental reasons such as ‘to provide a place for personal recreation and relaxation’ and ‘for the benefit of wildlife’ than more agricultural production focused farmers (Cluster 4 and 5);
- Cluster 1 farmers are more likely to be motivated by ‘to help improve the local landscape’ and ‘to provide shelter or screening’, compared to the middle group (Cluster 2) and the more open agricultural production focused group (Cluster 5); However, no significant differences were found when compared to the traditional agriculturally focused group (Cluster 4);
- Cluster 1 farmers are also more likely to be driven by the more economically focused reasons (‘to provide woodfuel for personal use’, ‘to provide timber’ and ‘for game shooting purposes’), compared to the more traditional environmentally focused group (Cluster 3) and sometimes other groups (Cluster 2, 4 or 5); and

- A higher percentage of Cluster 4 farmers (traditional, agricultural production focused) planted new woodland for game shooting, compared to other groups.

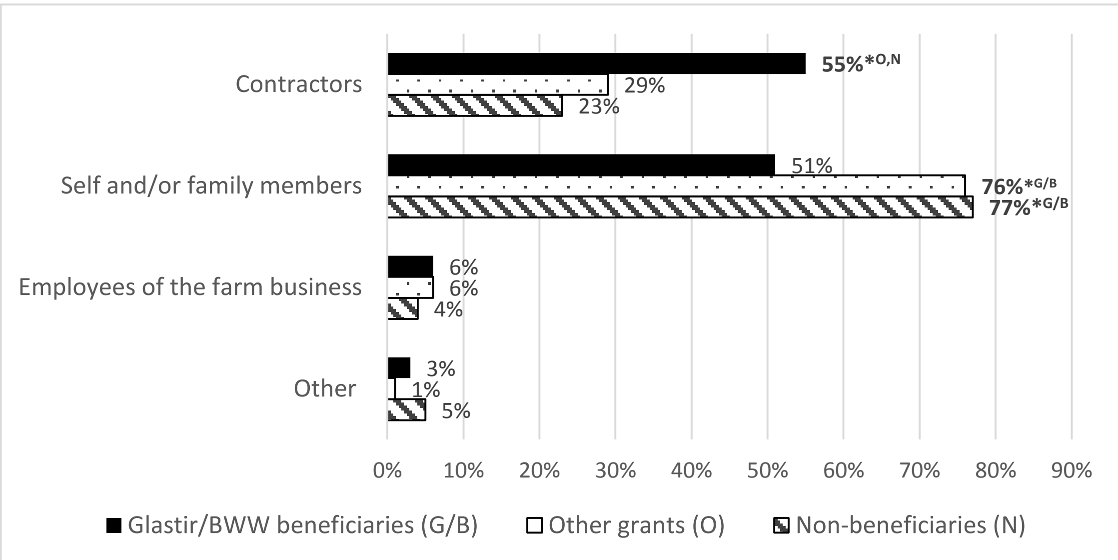
3.2 Resources for planting woodland

Respondents were asked to specify who planted the new woodland. The survey results are shown in Figure 3.2, which suggests the following:

- A higher percentage (55%) of Glastir/BWW beneficiaries used contractors to plant new woodland, compared to other grant recipients (29%) and non-beneficiaries (23%).
- A higher percentage (77%) of non-beneficiaries and other grant recipients (76%) planted by self and/or family members, compared to Glastir/BWW beneficiaries (51%).

This may reflect the availability of funds to grant recipients to pay contractors, or a concern to evidence that grant rules (in general) have been fully applied. In any case, the use of contractors to plant woodland is more likely to generate benefits for the wider (local) economy.

Figure 3.2: Who planted the new woodland?



3.3 Previous land use

Respondents were asked about the previous land use of the newly planted woodland to highlight any land use change impacts. The survey responses by grant recipient groups are presented in Table 3.3.

Over 60% mentioned that the land was previously used for rough grazing. The next most frequently mentioned land use was productive grassland (by 12% of respondents). Compared to BWW grant recipients, a higher percentage of Glastir beneficiaries (including those who were in BWW then transferred into Glastir) planted woodland on land previously used for rough grazing.

The planting of productive grassland was mentioned by a higher percentage (22%) of other grant recipients than by Glastir Woodlands grants (7%) and BWW beneficiaries (9%). This suggests that woodland supported by Glastir Woodlands or BWW did not take up more productive land than by other schemes. These other grant recipients (14 respondents) used a range of schemes including Forestry Commission grants, Tir Gofal (4), Farm Woodland Premium Scheme (3) and Glastir entry (1).

Bracken covered slopes, woodland, and field corners or margins were mentioned by 7-9% of respondents.

Table 3.3 Previous land use

	All	**Glastir (G)**	**BWW (Bw)**	**Both (Bo)**	**Other grants (O)**	**None (N)**
Base	**365**	**105**	**80**	**45**	**63**	**73**
Rough grazing	**63%**	**71%*^{Bw}**	48%	**78%*^{Bw,O}**	58%	65%
Productive grassland	**12%**	7%	9%	16%	**22%*^{G,Bw}**	10%
Bracken covered slopes	**9%**	10%	5%	9%	12%	8%
Already woodland	**8%**	2%	21%	2%	8%	8%
Field corners or margins	**7%**	4%	8%	4%	9%	9%
Grassland e.g. improved or for silage	**4%**	7%	6%		7%	-
Arable crops	**2%**	1%	5%	7%	-	1%
Felled or cleared woodland	**2%**	1%	6%		-	3%
Scrub land	**2%**	4%	3%	4%	-	
Land otherwise unfit for farming, such as wetland	**2%**	3%			2%	5%
Other	**2%**	2%	1%		4%	3%
No relevant answer	**0%**				-	1%

*significantly higher than –G Glastir; -Bw BWW grants; -Bo Both; -O Other grants; -N None beneficiaries.

3.4 Use of woodland creation grants

Respondents were asked if they had received a grant for planting woodland, and responses are presented in Table 3.4. The data shows that 85% (312) out of the 365 respondents who planted woodland received some grants and suggests that they are an important driver.

Table 3.4 Have you received any grants for planting woodland?

	All	
Base	**365**	**100%**
Yes	312	85%
No	51	14%
Don't know	2	1%

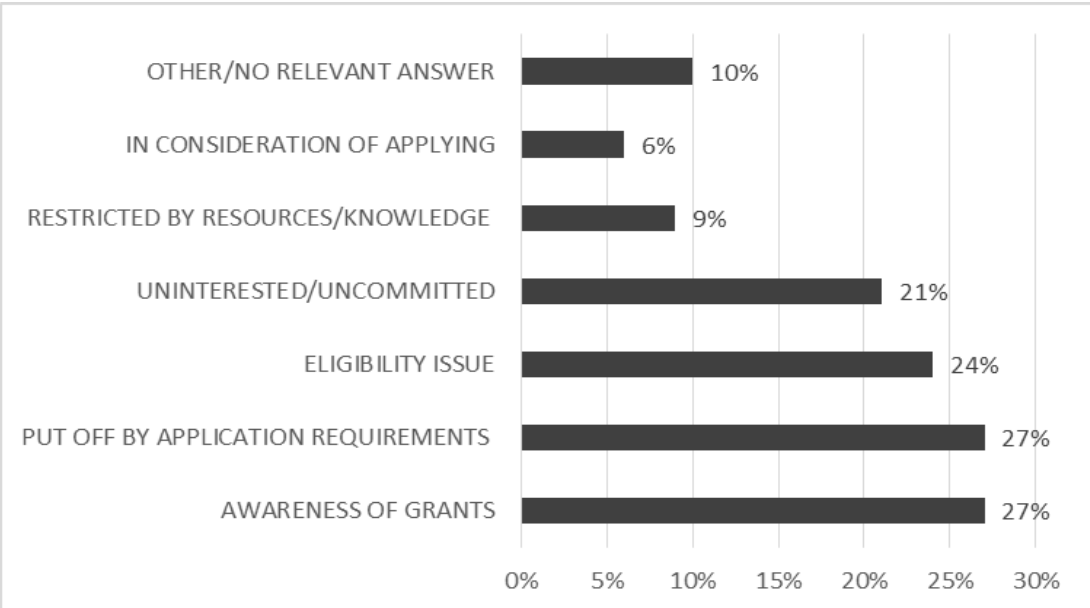
Respondents who did not take up any grants for planting the woodland were asked why that was the case. Responses are summarised in Figure 3.3.

Among the 53 respondents who did not take up any grants (including those who said ‘don’t know’), the following reasons were given:

- 27% mentioned that they were not aware of the grants;
- 27% were put off by grant application requirements;
- 24% claimed that they were not eligible or no spare land to apply for grants;
- 21% mentioned various reasons that why they do not like to plant/manage woodland; and
- 9% claimed they were restricted by lack of experience or resources.

It should be noted that only 1% farmers mentioned that they were put off by the online application process. This is very low and either reflects a lack of perceived problems or, more likely, that few have used this option.

Figure 3.3: Reasons for not taking up any grants for planting woodland



The 15 respondents who were not aware of any grants were evenly spread across the segmentation groups apart from Cluster 3, with four being in

Cluster 1, five in Cluster 2, two in Cluster 4 and four in Cluster 5. This should be treated with caution due to small number of responses. Perhaps more importantly, it suggests that lack of awareness of grants was not an issue for over 73% of those that planted woodland.

4 Woodland Management in Wales

Summary:

- Of all the 1,005 respondents, 471 (47%) are actively managing some or all of their woodland.
- Although evidence suggests that woodland grants are an important driver of woodland management, a sizable minority (29%) of non-beneficiaries are managing their woodland without any grant support.
- The main reason (mentioned by over 50% of the 534 farmers) for not managing their woodland actively was a lack of priority for this task (such as 'limited time', 'low priority', 'area too small', 'not economic'), or a view that woodland should be left in its natural state.
- In terms of barriers to the uptake of woodland management grants, the most frequently mentioned reasons by the 221 respondents who did not take up a grant include: issues related to grant application requirements (53%); lack of awareness of grants or grant application process (43%); eligibility issues (29%); 'Not aware of the grants' and 'not allowed to use woodlands for grazing all year round[8]' are the single most frequently mentioned reasons, mentioned by 26% (58) of the respondents respectively.
- In terms of motivations for managing woodlands, the most frequently mentioned purposes include: for the benefit of wildlife (92%); to improve the local landscape (76%); to provide shelter or screening (68%); to provide timber (55%); and to provide a place for personal recreation and relaxation (47%). These percentages are consistent with the results in JFS 2014. However, when compared to the Wavehill survey (where only around 16%-20% farmers mentioned environmental or wildlife related factors as their motivations), a higher percentage of respondents now appear to be motivated by environmental factors than economic or practical reasons.
- In terms of farmer segmentation groups, more environmentally focused farmers (Cluster 1, 3 and the middle group Cluster 2) are more likely to be motivated by lifestyle and environmental reasons such as 'to provide a place for personal recreation and relaxation', 'to help improve the local landscape', and 'for the benefit of wildlife', 'for water control/flood management', and 'to provide public access/recreation than more agricultural production focused farmers i.e. Cluster 4 and sometimes Cluster 5 as well.

[8] Most management plans in GWM will require the woodlands concerned to be stock excluded. (Source: Glastir Woodland Management: frequently asked questions. http://gov.wales/topics/environmentcountryside/farmingandcountryside/farming/schemes/glastir/glastir-woodland/documents/woodlandmanagementfaqs/?lang=en)

Among the 1,005 respondents, 47% are actively managing some or all of their woodland (see Table 4.1). This percentage is significantly higher (80%) for Glastir/BWW beneficiaries when compared to other grant recipients (52%) and non-beneficiaries (29%). Although this suggests that grants are an important driver to manage woodland actively, a sizable minority of non-beneficiaries (170) are managing their woodland without any grant support. These respondents cut across all five segmentation groups, but tend to be farmers who have established woodland through natural regeneration.

Table 4.1 Is some or all of your woodland actively managed?

	All	Glastir/BWW (G/B)	Other grants (O)	Non-beneficiaries (N)
Base	**1005**	**301**	**112**	**592**
Yes	**47%**	80%*[O,N]	52%*[N]	29%
No	**53%**	20%	48%*[G/B]	71%*[G/B,O]

*Significantly higher than –G/B Glastir/BWW beneficiaries; -O Other grant recipients; -N non-beneficiaries;

In terms of the differences between segmentation groups, a higher percentage of farmers in Cluster 1 tend to manage their woodland actively than Clusters 3, 4 and 5 who are more traditional or production focused. Reasons for not managing woodland actively are presented in Table 4.2.

Table 4.2 Reasons for not managing woodland actively?

	All	Glastir/BWW grants	Other grants	Non-beneficiaries
Base	**534**	**59**	**54**	**422**
The amount of time the owner, myself or a third party can manage the woodland is limited	**71%**	64%	66%	72%
Managing the woodland is low on the owner's list of priorities	**70%**	58%	61%	**73%****
The woodland is too small to warrant active management	**60%**	46%	40%	**64%****
It is not managed because the owner believes it should be left in its natural state	**56%**	28%	39%	**63%****
The economic returns from woodland management do not justify the costs involved	**54%**	52%	50%	55%
The woodland is too inaccessible to allow active management	**34%**	20%	32%	**36%^**
It is difficult to find people with the right skills to manage the woodland	**32%**	36%	35%	31%

** Significantly higher than the other groups; ^ significantly higher than Glastir/BWW beneficiaries

Among the 534 respondents who were not managing their woodland actively, the main reason (for over half of them) was a lack of priority for this task (such as ‘limited time’, ‘low priority’, ‘area too small’, ‘not economic’) or a view that woodland should be left in its natural state. This view is more prevalent among non-beneficiaries compared to Glastir/BWW and other grant recipients. A higher percentage (36%) of non-beneficiaries also reported that woodland was too inaccessible to allow active management, compared to Glastir/BWW beneficiaries (20%). Further comparisons between subgroups suggest that higher percentages of full-time farmers, LFA beef and sheep farmers, dairy farmers, older farmers (45 and above) and Cluster 1 or 2 farmers (compared to Cluster 5 farmers) tend to quote this reason for not managing their woodland actively. This suggests that location (LFA in particular) may be one of the reasons that farmers have accessibility issues, but there are also other factors (for example, farmer age, farm type-dairy farmers who are normally very busy, and whether they are more focused on environment – Cluster 1 and 2 farmers – or on agricultural production – Cluster 5 farmers).

Other reasons for not actively managing the woodland are listed in Table 4.3. The most frequently mentioned reason is that the woodland is too young to allow active management (mentioned by 14 farmers, representing 34% of the 40 farmers who mentioned other reasons). However, the percentages should be treated with caution as the number of responses is small.

Table 4.3 Other reasons for not managing the woodland actively

	Total	
Base	**40**	**100%**
The woodland is too young to allow active management	**14**	**34%**
The woodland is not managed for ecological reasons	**6**	**15%**
There is too much paperwork or licensing issues to allow active management	**6**	**14%**
The woodland is managed sufficiently by livestock grazing	**5**	**12%**
The woodland is on protected land	**5**	**12%**
Other	**7**	**16%**

4.1 Motivations for managing woodland

Respondents that did manage their woodland were asked about the objectives for doing so (Table 4.4).

The most frequently mentioned purposes include:

- for the benefit of wildlife (92%);
- to improve the local landscape (76%);
- to provide shelter or screening (68%);

- to provide timber (55%); and
- to provide a place for personal recreation and relaxation (47%).

Compared to the previous woodland survey by Wavehill, a higher percentage of respondents now appear to be motivated by environmental factors than economic or practical reasons.

Table 4.4 To what extent is your woodland actively managed for the following purposes?

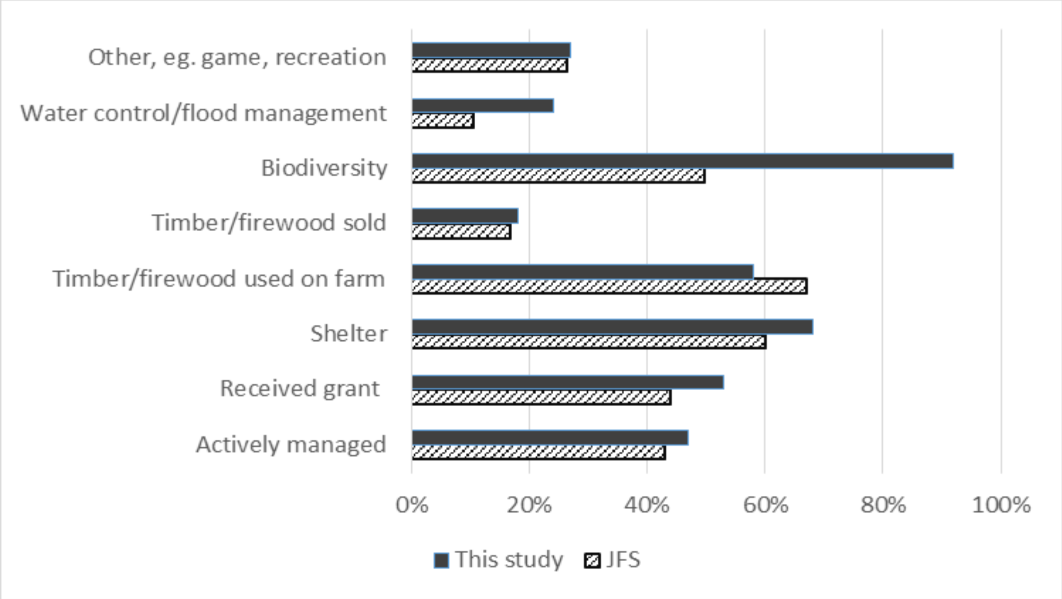
Purpose of management	To some or a great extent	Glastir/BWW beneficiaries (G/B)	Other grants (O)	Non-beneficiaries (N)
Base	**471**	**242**	**58**	**171**
For the benefit of wildlife	92%	92%	97%	89%
To help improve the local landscape	76%	**82%*N**	77%	65%
To provide shelter or screening	68%	66%	70%	69%
To provide wood fuel for personal use	66%	67%	63%	65%
To provide timber	55%	**58%*N**	53%	50%
To provide a place for personal recreation and relaxation	47%	**53%*N**	56%	36%
For water control and flood management purposes	24%	26%	28%	20%
To provide public access/recreation	23%	26%	15%	19%
To provide grazing land	20%	15%	13%	**30%*G/B,O**
To provide wood fuel for sale	18%	**23%*N**	18%	10%
For game shooting	18%	**23%*O**	12%	14%
Other	9%	8%	11%	7%

*N: significantly higher than non-beneficiary group; *G/B, O significantly higher than grant recipients (Glastir/BWW and other grants); *O: significantly higher than other grant recipients.

The responses were also compared to the June Farm Survey (JFS) for the respondents to this study and the comparison results were illustrated in Figure 4.1. The relevant survey questions in the JFS include:

- Is any of the woodland managed?
- Have you received a capital grant or annual payment for woodlands?
- Is the woodland managed for: Shelter; Timber/firewood used on farm; Timber/firewood sold; Timber/firewood given away; Biodiversity; Water control/flood management; Non-timber products; Other, e.g. game, recreation.

Figure 4.1 Comparisons of survey results and JFS



The results suggest that the responses are relatively consistent between this survey and the JFS, apart from the proportion of farmers who claimed to manage their woodland for the benefit of biodiversity. A much higher percentage (92%) cited biodiversity in this study than that (50%) in the JFS. This was perhaps mainly due to the different wording of the questions; in this survey the wording was 'for the benefit of wildlife' (which was possibly more widely understood by farmers) while the JFS referred to 'biodiversity'.

Within this study sample, the following differences were evident:

- Compared to non-beneficiaries, a higher percentage of Glastir/BWW beneficiaries cite environmental and economic reasons as well as personal preferences, including: to improve the local landscape; to provide timber; for personal recreation and relaxation; to provide fuel for sale.
- Compared to farmers who are only in Glastir and non-beneficiaries, a higher percentage of farmers who are both in BWW and Glastir schemes were motivated by providing a place for personal recreation and relaxation.
- Compared to other grant recipients (12%), a higher percentage (23%) of Glastir/BWW beneficiaries manage their woodland for game shooting purposes.
- A higher percentage (30%) of non-beneficiaries mentioned 'to provide grazing land' as the motivation to manage woodland, compared to Glastir/BWW beneficiaries (15%) and other grant recipients (13%).

Differences between different segmentation groups were also examined and the results are shown in Table 4.5 where variance is statistically significant.

Table 4.5 Motivations for managing woodland by segmentation group

Motivation	To some or great extent	Cluster 1 (C)	Cluster 2 (Y)	Cluster 3 (M)	Cluster 4 (R)	Cluster 5 (U)
Base	471	134	110	64	82	81
To provide a place for personal recreation and relaxation	47%	**55%*C4,5**	**57%*C4,5**	**52%*C4,5**	36%	30%
To help improve the local landscape (to great extent)	38%	**42%*C4,5**	**41%*C4,5**	**51%*C4,5**	25%	28%
For the benefit of wildlife	92%	**96%*C4**	**93%*C4**	**96%*C4**	84%	90%
For water control/flood management	24%	**29%*C4**	**30%*C4**	16%	15%	21%
To provide public access/recreation	23%	**28%*C4**	**26%*C4**	21%	14%	21%
To provide wood fuel for personal use (to great extent)	66%	**63%*C4**	**68%*C4**	**73%*C4**	54%	**72%*C4**
To provide timber (to great extent)	18%	14%	**25%*C1,3**	12%	16%	22%
For game shooting	18%	19%	15%	14%	**27%*C2**	17%

*significantly higher than C1-Cluster 1. C5-Cluster 5.

The main differences are:

- More environmentally focused farmers (Cluster 1, 3 and the middle group, Cluster 2) are more likely to be motivated by lifestyle and environmental reasons, such as ‘to provide a place for personal recreation and relaxation’, ‘to help improve local landscape’, and ‘for the benefit of wildlife’, ‘for water control/flood management’, and ‘to provide public access/recreation than more agricultural production focused farmers i.e. Cluster 4 and sometimes Cluster 5 as well;
- There are variations between groups for more economically focused motivations:
    - To provide woodfuel for personal use - a significantly lower percentage of Cluster 4 farmers (traditional, agricultural production focused) report this as a reason to manage their woodland;
    - To provide timber - a higher percentage of Cluster 2 farmers are motivated by this, compared to the more environmentally focused groups (Cluster 1 and 3); and
    - For game shooting - a higher percentage of farmers in Cluster 4 (traditional, agricultural production focused) claimed that this was one of their reasons for managing woodland, compared to Cluster 2

farmers (the ‘middle group’ who are reasonably open and consider both agricultural production and the environment).

4.2 Management activities undertaken

Respondents were asked to specify the activities undertaken as part of managing woodland. Detailed responses are presented in Table 4.6.

Table 4.6 Woodland management activities undertaken

Purpose of management	**To some or a great extent**	**Glastir/BWW (G/B)**	**Other grants (O)**	**Non-beneficiaries (N)**
Base	**471**	**242**	**58**	**171**
Boundary work e.g. fencing	91%	91%	89%	91%
Vegetation management	66%	**75%*^{O,N}**	66%	54%
Thinning	62%	56%	**74%*$^{G/B}$**	**66%*$^{G/B}$**
Work to conserve protected and priority species	49%	48%	59%	47%
Pest control	45%	47%	45%	42%
Tree species change (restocking)	42%	**50%*^{N}**	44%	31%
Infrastructure-e.g. tracks, stacking areas	39%	**44%*^{N}**	40%	32%
Public access	26%	28%	29%	24%
Other	2%	2%	-	1%

*significantly higher than –G/B Glastir/BWW beneficiaries; -O Other grant recipients; -N None-beneficiaries.

Boundary work was most frequently mentioned (91%), followed by vegetation management (66%) and thinning (62%).

A higher percentage of Glastir/BWW beneficiaries mentioned vegetation management, restocking and infrastructure work, compared to non-beneficiaries. This reflects the nature of Glastir woodlands payments, which aim to support infrastructure work and activities which are less likely to be undertaken in the absence of grants.

A higher percentage (66%) of non-beneficiaries and other grant recipients (74%) mentioned thinning as one of the activities undertaken, compared to Glastir/BWW beneficiaries (56%). One possible explanation for this is that much of the woodland is newly established under Glastir/BWW grants and there is no need to do any thinning at this early stage.

4.3 Resources used for managing woodland

When asked about who carried out the woodland management work on farm, over 80% of respondents did the vegetation management and work to conserve protected and priority species by themselves or using family members (see Table 4.7). They are more likely to use contractors for infrastructure work or thinning. Compared with grant recipients, non-beneficiaries tend to do the work themselves or using family members, especially for boundary work, thinning, pest control and restocking.

Table 4.7 Work undertaken by farmers themselves/family members

Purpose of management	Total	By self/family members	Glastir/BWW (G/B)	Other grants (O)	Non-beneficiaries (N)
Boundary work e.g. fencing	426	64%	63%	46%	**72%***$^{G/B,O}$
Vegetation management	312	81%	76%	87%	87%
Thinning	291	67%	63%	56%	**75%***$^{G/B,O}$
Work to conserve protected and priority species	231	82%	81%	71%	88%
Pest control	212	77%	73%	73%	**85%***$^{G/B,O}$
Tree species change (restocking)	199	70%	67%	51%	**86%***$^{G/B,O}$
Infrastructure-e.g. tracks, stacking areas	184	60%	57%	51%	69%
Public access	123	78%	75%	57%	91%
Other	7	91%	100%	-	71%

*significantly higher than –G/B Glastir/BWW beneficiaries; -O Other grant recipients; -N None-beneficiaries.

4.4 Use of grants for managing woodland

Respondents were asked if they had received a grant for managing the woodland (see Table 4.8). Over 50% (250) out of the 471 respondents who are actively managing the woodland received some grants. This rate is lower than that (85%) for woodland creation.

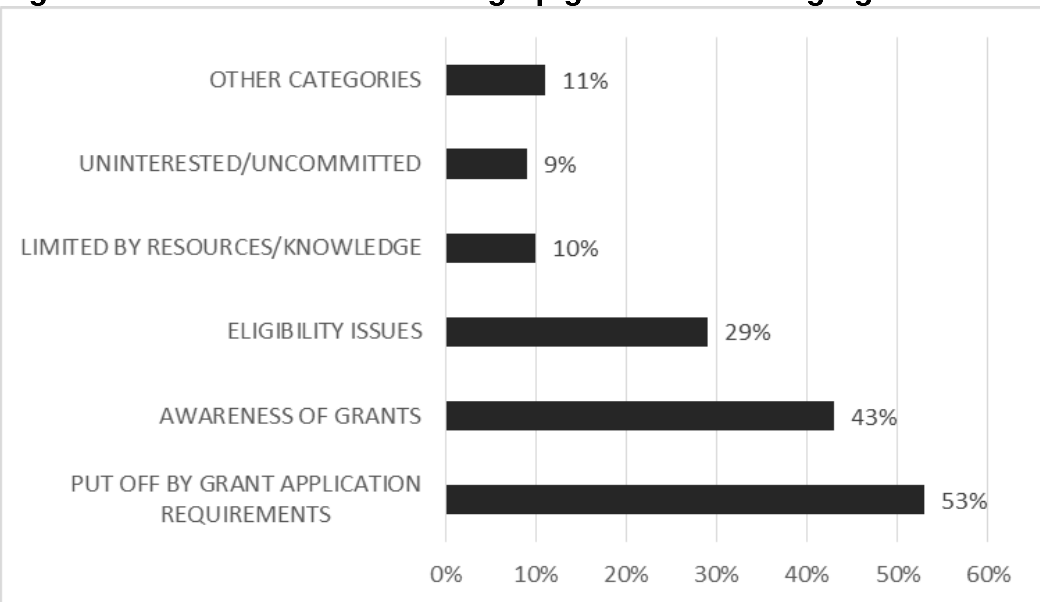
Table 4.8 Have you received any grants for managing farm woodland?

	All	
Base	**471**	**100%**
Yes	250	53%
No	219	46%
Don't know	2	1%

Respondents (221) who did not take up any grants to manage woodland were asked about the reasons for this. Detailed responses are presented in Figure 4.2 and are summarised below:

- Over 50% mentioned reasons that related to grant application requirements;
- More than 40% mentioned reasons that related to the awareness of grants or grant application process;
- Eligibility issues were mentioned by 29% of the respondents;
- 10% did not take up grants because they were limited by resources, such as time, equipment or experience;
- 9% did not apply for grants because they were not willing to apply (generally uninterested in grants; prefer doing things themselves etc.);
- ‘Not aware of the grants’ and ‘they were concerned that they were not allowed to use woodlands for grazing all year round’ are the single most frequently mentioned reasons, mentioned by 26% (58) of the respondents.

Figure 4.2 Reasons for not taking up grants for managing woodland



5 Supporting conditions for woodland creation/management

Summary:

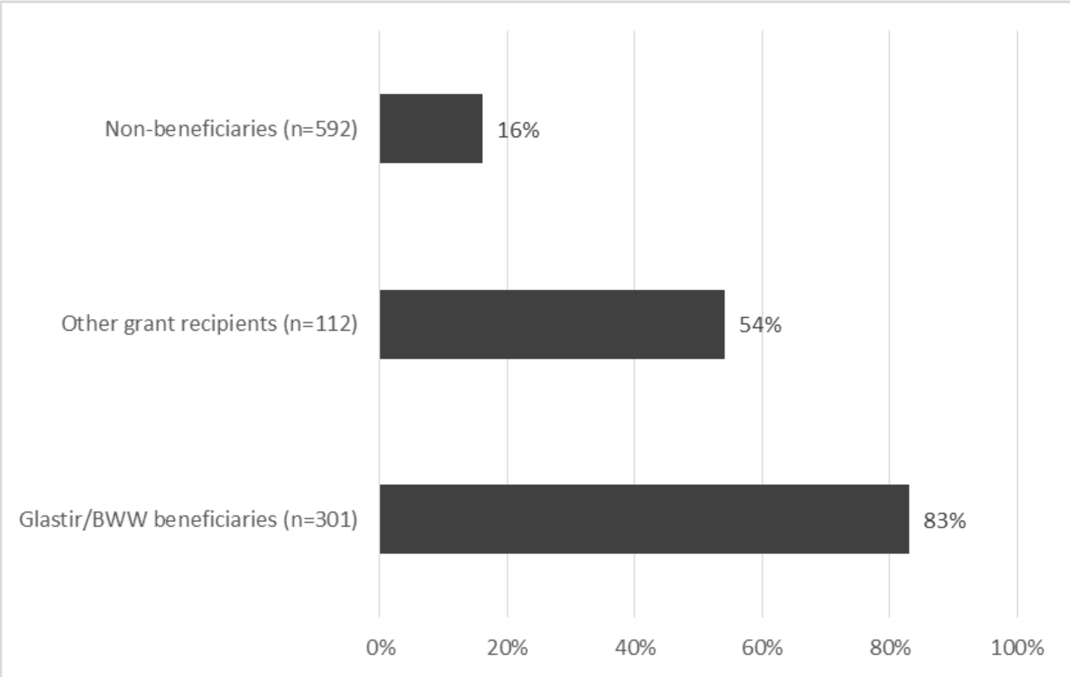
- Of the 1,005 responses collected, 40% (406) had received advice on woodland from a professional and 60% (599) had not.
- A higher percentage (83%) of Glastir/BWW recipients tend to use advice than other grant beneficiaries (56%) and non-beneficiaries (16%).
- In terms of the farmer segmentation groups, a lower percentage of the more traditional farmer groups (Cluster 3 and 4) received advice, compared to other Clusters (Cluster 1, 2 and 5) who are more open to new knowledge and technologies.
- Advisor/agronomist was the most frequently mentioned source of advice (25% of the 406 respondents who received advice), followed by Coed Cymru (24%), commercial forestry organisations (15%) and Glastir Woodlands advisors (15%).
- In terms of additional advice needed, the most frequently mentioned need was to have more ongoing information about what grants and professional support are available (mentioned by 55 (13%) of the 406 respondents who received advice).
- In terms of incentives to encourage farmers to plant new or a larger area of woodland, over 40% said nothing would make them change. This percentage is higher (47%) for non-beneficiaries than for Glastir/BWW beneficiaries (36%).

5.1 Use of professional advice

Of the 1,005 responses collected, 40% (406) of respondents received advice on woodland from a professional and 60% (599) did not.

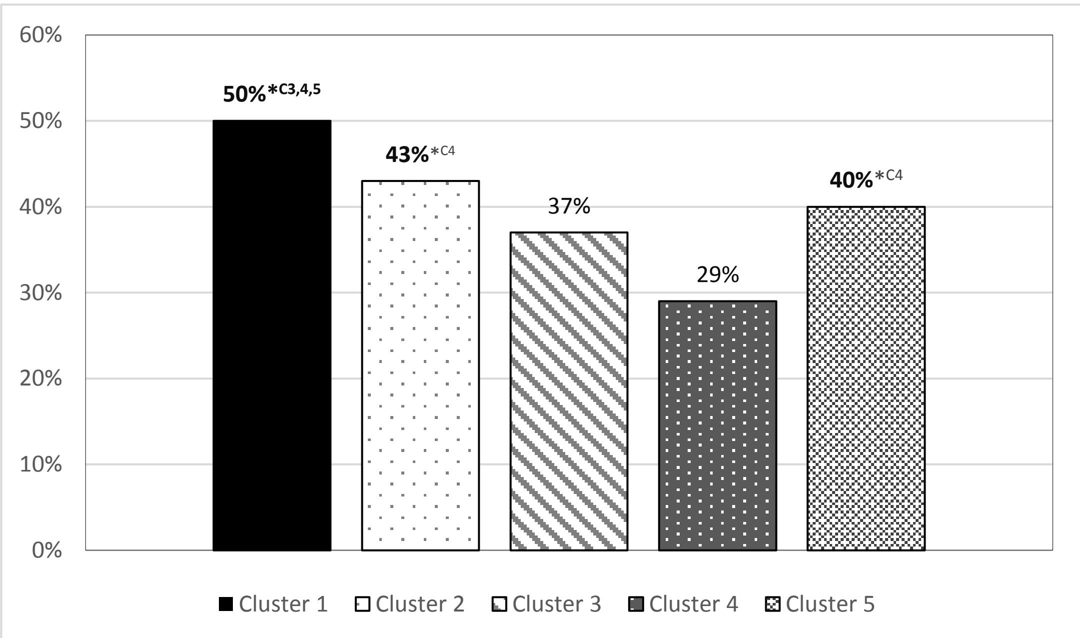
The distribution by grant recipient group is illustrated in Figure 5.1, which suggests that the percentage who received advice is significantly higher (83%) for Glastir/BWW beneficiaries than for other grant recipients (54%) and non-beneficiaries (16%).

Figure 5.1 Farmers who received advice by beneficiary group



In terms of farmer segmentation groups, a lower percentage of farmers in the more traditional farmers in Cluster 3 and 4 received advice, compared to other Clusters (see Figure 5.2). Farmers in Cluster 1 (open, environmental driven) are most actively seeking advice and farmers in Cluster 4 (traditional, agricultural production focused) are least active.

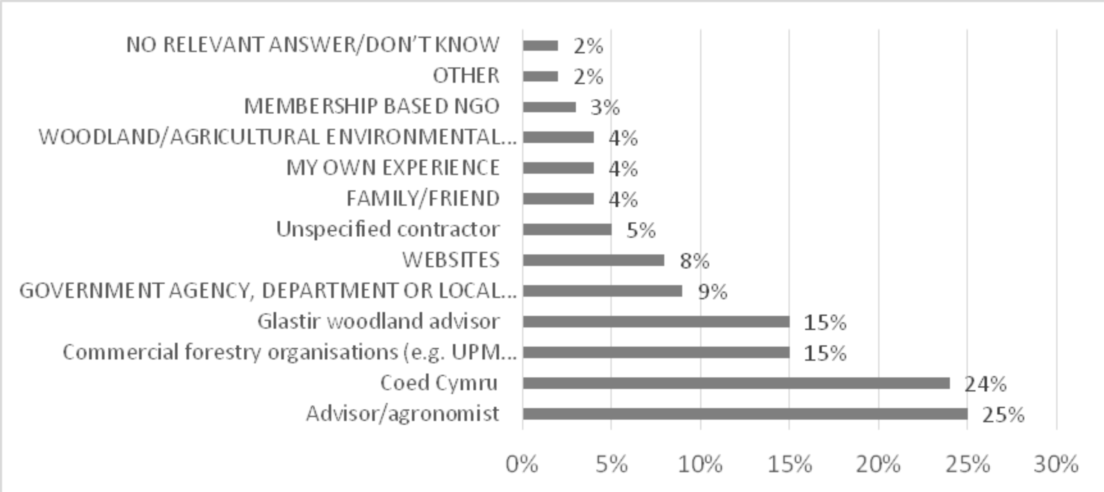
Figure 5.2 Farmers who received advice by segmentation group



* Significantly higher than C3,4,5-Cluster 3, 4 and 5; C4-Cluster 4.

Respondents were asked to specify the source(s) of advice they received. Survey responses are presented in Figure 5.3.

Figure 5.3 Source of woodland advice



Advisor/agronomist was the most frequently mentioned source (25% of the 406 respondents who received advice), followed by Coed Cymru (24%), commercial forestry organisations (15%) and Glastir Woodlands advisor (15%). Respondents were asked how useful the advice had been. The survey responses for the top four most frequently mentioned sources are presented in Table 5.1.

Table 5.1 Usefulness of advice received

N=406	N	%	Not useful (score=0)	Useful (score=1)	very useful (score=2)	Mean score
Advisor (agronomist)	102	25%	10%	29%	61%	1.5
Coed Cymru	98	24%	6%	24%	70%	1.6
Commercial forestry organisations (e.g. UPM Tilhill, etc.)	60	15%	3%	28%	69%	1.7
Glastir Woodlands advisor	60	15%	6%	45%	49%	1.4

The advice from commercial forestry organisations was thought highly of by farmers in terms of its usefulness with 97% of farmer users rating the advice as useful or very useful with a usefulness score at 1.7 (score 2=very useful), the highest among the four sources.

Of the 60 farmers who received advice from Glastir Woodlands advisors, 94% thought it was useful or very useful with a usefulness score at 1.4 (with 1 being useful and 2 being very useful). However, the percentage (49%) of farmers who thought the advice was very useful was slightly lower than that for commercial forestry organisations (69%), Coed Cymru (70%) and advisor/agronomist (61%). This might reflect the commercial orientation of some farmers to make use of paid advice, which may be perceived to deliver more independent perspectives than free advice. Respondents were also asked what additional advice they would like to have. The majority (52%) were satisfied with the advice currently provided and thought no additional advice was needed. The survey responses are presented in Table 5.2.

The most frequently mentioned need was to have more ongoing information about what grants and professional support are available (mentioned by 55 (13%) of the 406 respondents who received advice). Other additional advice needs include:

- more practical, expert advice on specific tasks, delivered by experienced advisors (mentioned by 25 respondents, 6%); and
- to have expert advice on different tree species and their planting (mentioned by 21 respondents, 5%).

A range of other needs for advice were also mentioned.

Table 5.2 Additional advice needed

N=406	No. of responses	%
Nothing, all was fine	213	52%
More on-going information about what grants and professional support is available	55	13%
More practical, expert advice on specific tasks delivered by experienced advisors	25	6%
Expert advice on different trees species and their planting	21	5%
Less complexity in the conditions, documentation etc attached to the schemes*	16	4%
Scientific advice on complex issues e.g. soil type and disease control such as ash dieback	15	4%
More overall help from the Welsh government	13	3%
On-going visits and follow-up support from organisations such as the Forestry Commission	13	3%
Simpler grants being made available for more specific tasks e.g. boundary control*	7	2%
Better advice on the changes that are made to schemes	8	2%
Higher financial incentives*	10	2%
Help with aspects of business development, such as finance and marketing	7	2%
Expert advice on the management of animal and pest control	6	1%
Better information to access online	5	1%
Don't know	4	1%
Other	8	2%
No relevant /no answer	13	3%

* These responses relate to views on how the grants could potentially work better rather than advice needed.

5.2 Establishing woodland through natural regeneration

Almost half (45%) of respondents have established some woodland through natural regeneration (see Table 5.3). There are no significant differences between grant recipients and non-recipients.

Table 5.3 Have you established woodland through natural regeneration?

	All	Glastir/BWW beneficiaries	Other scheme(s)	Non-beneficiaries
Base	1005	301	112	592
Yes	**45%**	47%	50%	43%
No	**55%**	53%	55%	57%

5.3 Renewable Heat Incentive (RHI)

The Renewable Heat Incentive (RHI) is a UK Government scheme set up to encourage uptake of renewable heat technologies amongst householders, communities and businesses through financial incentives. Increasingly, farm woodlands are also being seen as a renewable energy source, producing logs, charcoal, woodchip and wood pellets. The introduction of RHI has focused attention on the potential for farm woodlands to provide a supply of wood fuel, either for sale or home supply.

Farmers were asked if they were aware of RHI and whether that has influenced a decision to manage woodland. Of all respondents, 66% are aware of RHI (see Table 5.4). This percentage is higher in the Glastir/BWW beneficiary group (74%), compared to non-beneficiary group (61%).

Table 5.4 Are you aware of the Renewable Heat Incentive (RHI)?

	All	**Glastir/BWW (G/W)**	**Other grants (O)**	**Non-beneficiaries (N)**
Base	1005	301	112	592
Yes	**66%**	74%*[N]	70%	61%
No	**34%**	26%	30%	33%*[G/B]

* Significantly higher than –N none-beneficiaries; G/B-Glastir/BWW grants

Of the respondents who were aware of RHI, 132 (13%) mentioned that it influenced their decision to manage their woodland (see Table 5.5). This is higher (17%) for the Glastir/BWW beneficiaries than non-beneficiaries (11%).

Table 5.5 Has RHI influenced your decision?

	All	Glastir/BWW (G/W)	Other grants (O)	Non-beneficiaries (N)
Base	1005	301	112	592
Yes	**13%**	17%*[N]	13%	11%
No	**87%**	83%	87%	89%*[G/B]

* Significantly higher than –N none-beneficiaries; G/B-Glastir/BWW grants

5.4 Incentives to plant/manage woodland

5.4.1 Incentives to plant woodland

Respondents were asked about incentives to encourage them to plant new woodland, or a larger area of woodland. The detailed survey responses are shown in Table 5.6. Over 40% said nothing would make them change. This percentage is higher (47%) for non-beneficiaries than for Glastir/BWW beneficiaries (36%).

The most frequently mentioned incentive was higher grant payments, mentioned by 37% of respondents. Better market prices for timber or woodfuel was mentioned by 5% of the respondents. More suitable land and greater flexibility in spending grants were also mentioned by 4% of respondents respectively, with a higher percentage of Glastir/BWW beneficiaries mentioning these than the non-beneficiary group. Although only 7% of the 301 Glastir/BWW beneficiaries mentioned that more land that is suitable for this use would encourage them to plant new or a large area of woodland, this is higher than other groups and may suggest for some beneficiaries there is a point of ‘saturation’ where they feel they cannot spare any further land for the scheme.

Table 5.6 What would encourage you to plant new or a larger area of woodland?

	N	All	Glastir/BWW (G/B)	Other grants (O)	Non-beneficiaries (N)
Base		1005	301	112	592
Nothing	439	44%	36%	45%	**47%** *G/B
Higher grant payments	371	37%	39%	37%	37%
Higher price for timber or woodfuel	57	5%	4%	6%	5%
Higher and quicker returns on investment	48	5%	4%	3%	4%
More spare time	43	4%	6%	2%	4%
More free advice or training	40	4%	3%	5%	4%
More land that is suitable for this use	36	4%	**7%** *N	2%	2%
Greater flexibility in spending grants	18	2%	**3%** *N	3%	1%
Better ongoing support	16	2%	2%	3%	1%
A guarantee to not lose other payments, such as a Single Farm Payment	15	1%	3%	1%	1%
Higher need for woodland or timber on the farm e.g. for shelter or fuel	14	1%	2%	1%	1%
Reducing complexity of grant application	13	1%	1%	2%	1%
Removal of any restrictions to planting woodland	11	1%	1%	2%	1%
A sustainable impact on the environment e.g. beneficial to wildlife	11	1%	1%		1%
More support for disease/pest control	9	1%	2%		1%
Opportunity to use woodlands for grazing at certain times	7	1%	1%		1%
Greater funding received over longer periods	6	1%	1%	1%	0%
More support for online application	5	1%	0%	2%	0%
Other	16	2%	2%	2%	1%
No relevant answer/don't know	6	1%		1%	0%

* Significantly higher than –N none-beneficiaries; -G/B Glastir/BWW beneficiaries

There are some differences between segmentation groups in terms of which incentives would encourage them to plant woodland. The results are presented in Table 5.7. The data suggests that the more traditional, agricultural production-focused farmers (Cluster 4) may be less difficult to encourage to plant new/more woodland, compared to the more traditional, environmentally-focused farmers (Cluster 3). A higher percentage (59%) of farms in Cluster 3 than other Clusters said that there was nothing that would encourage them and they seem to be least motivated by higher grant payments (with only 26% of farmers in this Cluster thought higher grant payments would encourage them to plant new/more woodland).

In terms of the differences between groups of farmer/farms with different characteristics, the results show that significantly higher percentages of farmers who are over 65 years old (65%), LFA beef and sheep non-beneficiary farms (49%) and farms in the north regions (57%) within the non-beneficiary group stated that there was nothing that would encourage them to plant new or a larger area of woodland.

Table 5.7 Incentives to plant woodland by segmentation group

	All	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Base	1005	247	220	150	200	187
Nothing	44%	39%	39%	**59%**[*C1,2,4,5]	48%	39%
Higher grant payments	37%	**38%**[*C3]	**39%**[*C3]	26%	**38%**[C3]	**42%**[*C3]
Higher price for timber or woodfuel	5%	5%	3%	2%	5%	**8%**[*C2,3]

5.4.2 Incentives to manage woodland

Respondents were asked about incentives to encourage them to invest more time in managing woodland and the survey responses are summarised in Table 5.8.

As with woodland creation, over 40% said nothing would make them change their view on investing more time in managing woodland. This percentage is higher (47%) for non-beneficiaries than Glastir/BWW beneficiaries (39%). The most frequently mentioned incentive was again, higher grant payments, mentioned by 37% of the respondents. Higher prices for timber or woodfuel and higher and quicker returns on investment were also mentioned by 5-6% of the respondents respectively.

In terms of the different grant beneficiary groups, a higher (41%) percentage of Glastir/BWW beneficiaries said that higher grant payments would encourage them to invest more time in managing woodland and a higher percentage (47%) of non-beneficiaries claimed that there was nothing that would encourage them to invest more time.

Table 5.8 What would encourage you to invest more time in woodland management?

	All	Glastir/BWW (G/B)	Other grants (O)	Non-beneficiaries (N)
Base	1005	301	112	592
Nothing	44%	39%	39%	**47%*$^{G/B}$**
Higher grant payments	37%	**41%*^{N}**	43%	34%
Higher price for timber or woodfuel	6%	6%	9%	5%
Higher and quicker returns on investment	5%	5%	6%	4%
More free advice/training	4%	5%	2%	4%
More spare time	4%	6%	2%	4%
Greater flexibility in spending grants	2%	2%	3%	1%
Reducing complexity of grant application	1%	1%	3%	1%
More support for disease/ pest control	1%	2%	1%	1%
Opportunity to use woodlands for grazing at certain times	1%	1%	2%	1%
Better ongoing support	1%	2%	2%	0%
More land that is suitable for this use	1%	1%	1%	2%
Higher need for woodland or timber on the farm e.g. for shelter or fuel	1%	1%	1%	1%
A sustainable impact on the environment e.g. wildlife	1%	1%		1%
Other	1%	1%	2%	1%
More support for online application	1%	0%	2%	0%
Grants received over longer periods	1%	0%	1%	
A guarantee to not lose other payments, such Single Farm Payment	1%			1%
Removal of any restrictions to planting woodland	1%			0%
Don't know	1%			1%
No relevant answer	1%	1%		0%

There were also differences between segmentation groups (see Table 5.9). The more traditional farmers in Cluster 3 (environmentally focused) and Cluster 4 (agricultural production focused) are the least likely to change, with more than 50% of them stating that nothing would encourage them to invest more time in woodland management. Higher grant payments are more attractive to farmers in Cluster 1, 2 and 5 who are more open to new knowledge and skills, compared to Cluster 3 and 4. Better markets/prices for timber or woodfuel would attract more production focused farmers in Cluster 4 and 5 to invest more time in woodland management.

Table 5.9 Incentives to manage woodland by segmentation group

	All	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5
Base	1005	247	220	150	200	187
Nothing	44%	40%	36%	**59%**[*C1,2,5]	**51%**[*C1,2,5]	38%
Higher grant payments	37%	**40%**[*C3]	**40%**[*C3]	26%	33%	**43%**[*C3,4]
Higher price for timber or woodfuel	6%	6%	3%	2%	**9%**[*C2,3]	**7%**[*C3]

6 Experience of Glastir Woodlands Grant Schemes

Summary:

- Of the sample of 1,005 respondents, 127 respondents received Glastir woodlands grants with no previous scheme participation; 122 respondents received BWW grants but not Glastir woodlands grants; 52 respondents participated in BWW woodland grants and went into a Glastir woodlands grant scheme as well; 112 respondents received woodland grants from other schemes; and 592 respondents did not receive any grants.
- For the 52 respondents who were both in BWW and Glastir Woodlands Elements, the evidence suggests that there is no real difference between the two schemes; the majority (30) thought they were the same.
- For the 112 respondents who participated in BWW but not in a Glastir woodlands scheme, the most frequently mentioned reason was that no more spare land was available (16%), but a more substantive issue appears to be around scheme access/design.
- Glastir woodlands grant beneficiaries (179) are generally positive about the experience with the grants. They were asked to score different aspects of the scheme and the evidence suggests that the application process was scored the highest, followed by level of support and advice at the time of application, while the complexity of making a claim and on-going support during the scheme were scored the lowest.
- In terms of communication channels for Glastir Woodlands Elements, more traditional forms of media are popular e.g. Gwlad magazine, newspapers, as well as word of mouth.
- The majority (63%) of the Glastir woodlands grant beneficiaries reported that they made the decision to apply entirely by themselves. For those who cited an external influence, the top three most frequently mentioned (although only by a small number of respondents) are: Glastir Woodlands advisors (18 respondents, 10%) family/friends (10 respondents, 7%) and Coed Cymru (10 respondents, 6%).
- The additionality of Glastir Woodlands grants is high, with 94% of the 179 Glastir beneficiaries interviewed claiming that they would not have planted the same area or implemented the same management at the same level, same timescale or with the same quality without the grants.
- In terms of future improvement, 37% of the 143 respondents who made recommendations would like to see improvements in advice provision, among which ‘more on-going support/advice’ was most frequently mentioned (by 17 respondents, 12%).

Of the sample of 1,005 respondents, 127 respondents received Glastir woodlands grants with no previous scheme participation; 122 respondents received BWW grants but not Glastir woodlands grants; 52 respondents participated in BWW woodland grants and went into Glastir Woodlands grants as well; 112 respondents received woodland grants from other schemes; and 592 respondents did not receive any grants (see Table 6.1).

Table 6.1 Which woodland grants that have you received?

Total	**1005**	**100%**
Glastir Woodlands Grants, but no previous schemes	127	13%
Better Woodlands Wales (BWW), but not Glastir	122	12%
Both Glastir Woodlands and BWW grant schemes	52	5%
Yes, other scheme(s)	112	11%
None/Don't know	592	59%

Respondents who were only in BWW were asked about why they participated in BWW but not Glastir Woodlands. The most frequently mentioned reason was that no more spare land was available (16%), but a more substantive issue appears to be around scheme access/design. In particular, 15% reported that the application process of Glastir is too complicated, 14% were not aware of the Glastir Woodlands Grants, while 13% considered they were not eligible for Glastir woodlands scheme. Detailed comments are recorded in Table 6.2.

Table 6.2 Why did you participate in BWW but not Glastir Woodlands?

Base	**122**	**100%**
Have planted woodland in the previous schemes and no more spare land	20	16%
Not aware of Glastir Woodlands Grants	17	14%
Not eligible for the Glastir scheme	16	13%
Change of circumstances, e.g. less time available, retirement, etc.	8	7%
Other	6	5%
When I applied Glastir wasn't available	5	4%
The other grant scheme(s) aligned with the farm better	5	4%
Enquired or applied to the scheme but not heard anything back yet	5	4%
Still in the process of deciding	4	3%
Don't know	4	3%
Negative perceptions/views of Glastir	54	46%
The application process of Glastir is too complicated	18	15%
Glastir has too many restrictions and regulations	7	6%
I don't need or want the Glastir scheme	7	6%
Grant level of Glastir is too low	6	5%
Not getting sufficient support	5	4%
I have heard negative things about the scheme	5	4%
I don't feel incentivised to take up Glastir	4	3%
Glastir is inflexible	2	2%
The commitment required is too long term	1	1%

When grouped together, the majority of BWW participants cited negative perceptions/views of Glastir as reasons for not participating in Glastir Woodlands Element.

6.1 How does BWW compare to Glastir Woodlands Scheme?

Respondents who were in the BWW grant scheme and also participated in the Glastir Woodlands schemes were asked about how the BWW scheme compares to the Glastir Woodlands Schemes. Overall, the evidence suggests that there is no real difference between the Glastir Woodlands and BWW. The majority (30 out of the 52 respondents) thought they were about the same, while 11 respondents thought Glastir Woodlands is better than BWW in some areas and 19 thought Glastir is worse than BWW in some areas. Details of these views are set out below.

Glastir was thought better than BWW (nine out of the 11 respondents):

- Glastir is administratively better (two respondents);
- More funding received through Glastir (two respondents);
- Glastir has a simpler application process (one respondent);
- Had more help when planting from Glastir (one respondent); and
- Glastir has worked well (one respondent).

Glastir was thought worse than BWW (16 out of the 19 respondents):

- Glastir are less supportive than BWW (five respondents);
- Glastir is worse for management than BWW (four respondents);
- Glastir is too bureaucratic (four respondents);
- Glastir is not as simple or easy as BWW (two respondents); and
- Glastir is financially not as beneficial (one respondent).

Respondents who claimed to have participated in the Glastir Woodlands Grant Schemes with no previous scheme participation were asked how they found out about the scheme. Survey responses are summarised in Table 6.3.

The most important media for finding out about Glastir Woodlands grant schemes was Gwlad Magazine (20%), word of mouth (15%) and through newspapers (9%). Intermediaries were also important notably, through Coed Cymru, advisor/agronomist and Forest Commission Wales, which altogether accounts for 22% of the 179 Glastir beneficiaries. This might indicate that these organisations/intermediaries play a ‘trusted intermediary’ role with farmers, which is important in changing farmers' behaviours and attitudes[9]. The internet and other media were less significant.

Table 6.3 How did you find about the Glastir Woodlands?

Total	179	100%
Gwlad Magazine	36	20%
Word of mouth	26	15%
Newspaper	17	9%
Coed Cymru	15	8%
Agricultural shows/ markets/ conferences/ workshops etc.	14	8%
Internet	13	7%
Advisor (Agronomist)	10	6%
Forestry Commission Wales (FCW) / Natural Resources Wales (NRW)	12	6%
Glastir	11	6%
Welsh Government	7	3%
The Woodland Trust	6	3%
Commercial forestry organizations (e.g. UPM Tilhill, etc.)	3	2%
Farming Connect publications/ e-bulletin	3	2%
Forestry agent	4	2%
Gwlad online	3	2%
Tir Gofal	3	2%
Other	23	13%
No relevant answer/Can't remember	6	3%

As the total number of responses for each communication channel was relatively small, the analysis by segmentation group did not show any significant differences between groups.

6.2 Influences on the decision to apply for Glastir woodlands grants

In terms of influence on the decision to apply for the Glastir Woodlands grant, the majority (63%) of the respondents reported that no one influenced their decision and they made the decision by themselves (see Table 6.4.) Some 18 respondents (10%) said they were influenced by Glastir Woodlands advisors, 13 respondents (7%) by family/friends and 10 (6%) by Coed Cymru. There were no significant differences between the segmentation groups.

[9] Knowledge Transfer and Innovation Relating to the Wales Rural Development Plan & European Innovation Partnership 2014-2020. A report to Welsh Government by University of Aberystwyth and University of Cardiff. October 2013. Available online at: http://www.walesruralobservatory.org.uk/sites/default/files/KT%20Full%20Report%20November%202013_0.pdf

Table 6.4 Who influenced your decision to apply for Glastir Woodlands grants?

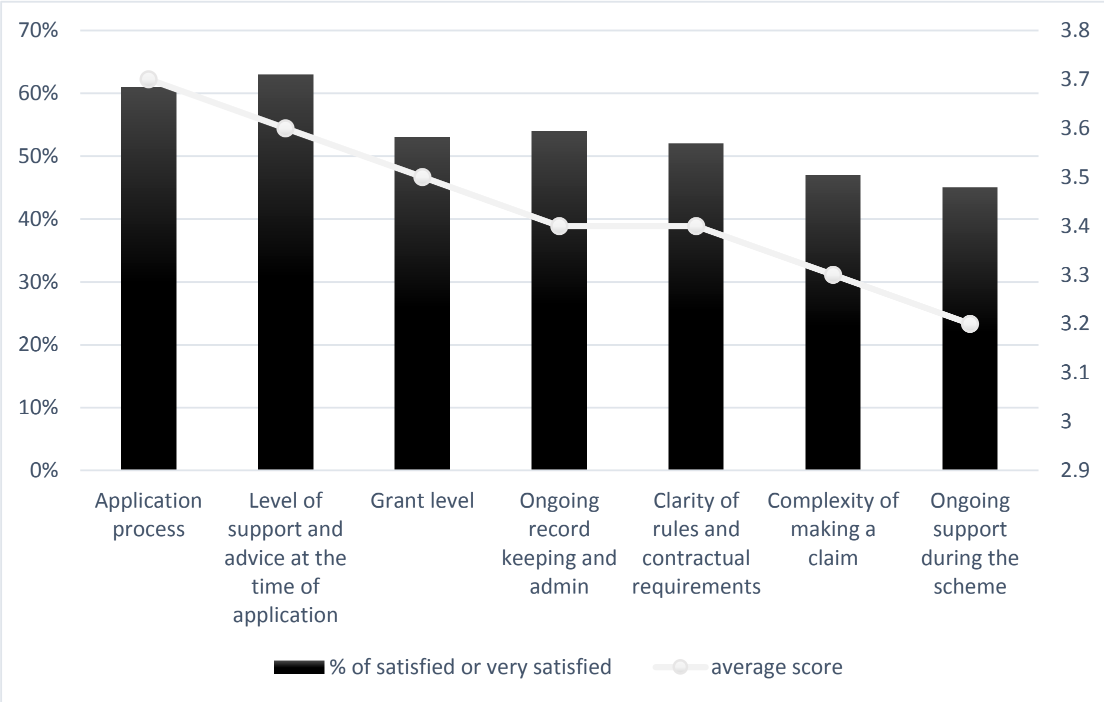
Total	179	100%
No one, I made the decision myself	112	63%
Glastir Woodlands advisor	18	10%
Family/Friend	13	7%
Coed Cymru	10	6%
Commercial Forestry Organisations (e.g. UPM Tilhill, etc.)	7	4%
Forestry Commission Wales (FCW)/ Natural Resource Wales (NRW)	5	3%
Land agent	3	2%
Other professionals	3	2%
Confor	1	1%
Farmers' Union of Wales (FUW)	2	1%
Farming Connect	2	1%
Welsh Government advisor	1	1%
The Woodland Trust	1	1%
Gwent Wildlife Trust	1	1%
FWAG	1	1%
Tir Gofal	1	1%
Tywi centre	1	1%
Contractors	2	1%
No relevant answer	2	1%

6.3 Experience with Glastir Woodlands Grants

The 179 Glastir Woodlands grants recipients were asked to score how satisfied they were with a range of aspects of the scheme on a scale of 1-5 (where 1 being very unsatisfied and 5 being very satisfied). The average score and the percentage of those who were satisfied and very satisfied with each of the aspects are presented in Figure 6.1, which indicates the following:

- The application process scored the highest, with more than 60% of recipients satisfied or very satisfied with the application process;
- Level of support and advice at the time of application scored the second highest, with an average score of 3.6 and a satisfaction rate of 63%;
- Grant level scored the third, with average score of 3.5 and a satisfaction rate of 53%;
- Complexity of making a claim and on-going support during the scheme were scored the lowest, with a satisfaction rate of less than 50%; and
- Overall, each of the aspects was scored above satisfactory (>3.0).

Figure 6.1: Satisfaction rate and score for the experience with Glastir Woodlands Grants (n=179)



Scheme experience was also compared on the basis of advice input. The results (see Table 6.5) suggest that on average, farmers who received advice from a professional body scored the experience of Glastir Woodlands Element higher than those who had no advice. In particular, the scores from farmers who received advice are significantly higher in three categories: application process, level of support or advice at the time of application, and clarity of rules and contractual requirements.

Table 6.5 Differences in scores of scheme experience between farmers who received advice and those who did not

Total	Average Score from Farmers who received advice (N=126)	Average Score from Farmers who did not receive advice (N=27)
Application process	**3.7***	3.2
Ongoing record keeping or admin	3.5	3.0
Level of support or advice at the time of application	**3.7***	3.3
Ongoing support during the scheme	3.3	2.9
Grant level	3.5	3.3
Clarity of management prescriptions	3.5	3.1
Clarity of rules and contractual requirements	**3.6***	2.9
Complexity of making a claim	3.4	3.3

* Significantly higher than that of farmers who did not receive advice at 95% confidence level.

6.4 Progress with capital works

The 179 Glastir Woodlands grant recipients were asked about progress with capital works related to woodland creation and woodland management (asked separately). For woodland management, capital grants are made available for operations including: thinning; restocking; infrastructure; boundary work; protected and priority species; vegetation management; pest control; and public access. For woodland creation, grants are in the form of establishment payments and fencing payments.

Capital works related to woodland creation were more fully completed compared to those related to woodland management (see Table 6.6). For woodland creation, 80% of respondents mentioned the capital works were 100% completed, compared to 43% of woodland management grant recipients. This may reflect the ongoing nature of management work.

Table 6.6 Progress with Capital Works

	Woodland Creation	Woodland Management
Base	168	142
<50% completed	11%	26%
>50% but not fully completed	10%	31%
100% completed	80%	43%

Respondents were asked if they have experienced any difficulties in the completion of the capital works and the detailed responses are presented in Table 6.7.

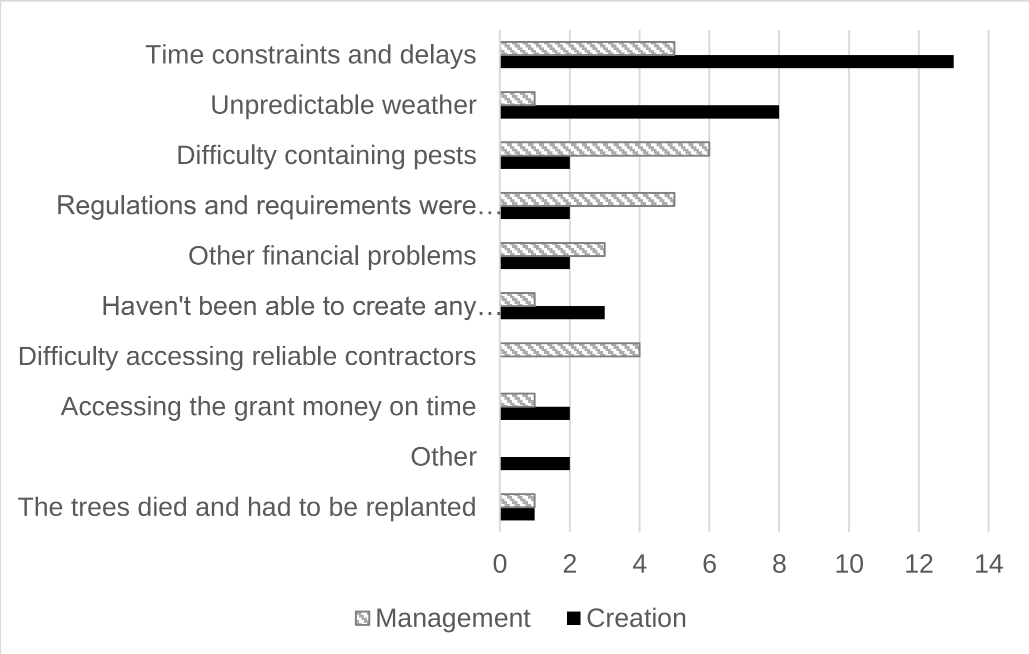
Table 6.7 Progress with Capital Works

	Woodland Creation	Woodland Management
Base	168	142
Without any difficulties	80%	77%
Some difficulties in completion	11%	14%
Major difficulties in completion	7%	4%
Cannot comment	2%	4%

The majority did not have any difficulties (80% of respondents who had capital works related to woodland creation and 77% of those who had capital works related to woodland management).

Respondents were also asked to specify the difficulties that they have encountered in completing the capital works for woodland creation and management. The combined responses to ‘some difficulties’ and ‘major difficulties’ experienced in woodland creation and management are presented in Figure 6.2.

Figure 6.2 Difficulties encountered in completing capital works



The top four most frequently mentioned difficulties are:

- Time constrains and delays;
- Unpredictable weather;
- Difficulty containing pests; and
- Regulations and requirements were difficult to comply with.

6.5 Additionality of the scheme

The 179 Glastir Woodlands grant recipients were asked if they would have established and/or managed their woodland in the absence of the scheme (see details in Table 6.8). Only 6% answered that they would have planted the same area and implemented the same management without the grants, while 60% stated that they would not have established and/or managed their woodland at all in the absence of grant support from the Glastir Woodlands scheme. This suggests that the additionality of the scheme is high.

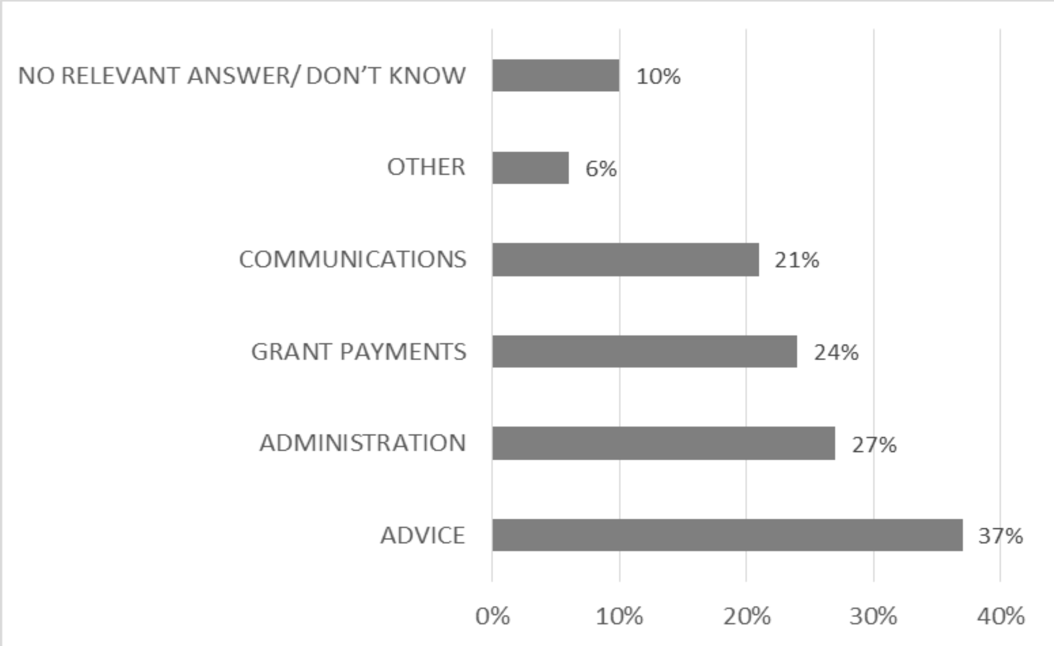
Table 6.8 Additionality of Glastir Woodlands

Total (n=179)	No. of respondents	%
Yes, same area and management	10	6%
Yes, but on smaller scale	40	22%
Yes, but with reduced management input	4	2%
Yes, but at a later date	18	10%
Yes, but of a lower quality	8	4%
No	107	60%
Other /Don’t know	7	4%

6.6 Ideas for improvement of Glastir Woodlands scheme

The 179 Glastir Woodlands grant recipients were asked what element(s) of the scheme could be improved. One fifth of them reported that nothing needs to be changed, but 80% (143) suggested that there is scope for the scheme to improve. Detailed areas for improvement are summarised in Figure 6.3.

Figure 6.3 Improvements suggested for Glastir Woodlands scheme (n=143)



Of the 143 responses, the key suggestions are as follows:

- 37% would like to see improvements in advice provision, among which 'more on-going support/advice' was most frequently mentioned (by 12% of the 143 respondents);
- 27% would like to see improvement in the administration of the grant scheme, among which 'simplification of the process' was most frequently mentioned (by 17% of the 143 respondents), followed by general improvement and 'to make payments on time';
- 24% would like to see improvement of the scheme itself (to have access to larger grants; to be more flexible to reflect the nature of farming, for example, scope for a variety of woodland species); and
- 21% suggested that the communication of the scheme needs improving in areas including: greater frequency and more effective follow up, improved marketing of the scheme to increase awareness, wider variety of communication channels and some other general improvement.

7 Socio-Economic Impacts

Summary:

- Overall, 413 respondents had received grant support for woodland creation and/or woodland management. Of these, 32% (113) reported changes in employment, turnover/sales, costs or profitability of their businesses as a result of receiving woodland grants.
- A significantly higher percentage of farmers who were in the BWW grant scheme and then transferred into Glastir Woodlands indicated that they have experienced business changes, compared to other grant recipient groups. This suggests that continuation in scheme participation may lead to sustained changes to farm businesses and/or reflects the timescale for any long term benefits to be realised.
- The estimated GVA and labour productivity figures suggest that the woodland grant schemes contributed to economic growth, increasing GVA by 24% from the baseline.
- Labour productivity (expressed as GVA/FTE) however, is negatively affected, with a decrease of 7% for the grant beneficiaries, with Glastir recipients seeing the largest negative changes in productivity. This reflects limited impacts on job creation, and the long term nature of the expected return from investment in woodland creation/management.
- In terms of wider impacts, the majority (73%) of the respondents (413) thought there were no socioeconomic impacts but 24% reported positive impact and only 1% thought it had negative impact. As with the direct economic impacts, a higher percentage of farmers who participated in both BWW and Glastir woodlands grant schemes reported a positive impact on the local economy, compared to other grant recipient groups.

7.1 Summary of socio-economic impact

One of the objectives of this study is to collect data on the socio-economic impacts (economic growth, employment creation and labour productivity) of woodland grants in order to fulfil CMEF requirements and feed into the Ex Post Evaluation of the 2007-2013 Rural Development Plan for Wales, by which Glastir and BWW are supported. Therefore, respondents who have had grant support were asked if there has been any impact on the number of people employed, the business turnover/sales, business costs or profitability due to woodland creation and/or woodland management activities, as a result of receiving woodland grants. Beneficiaries of Glastir Woodlands grants, BWW grants and other grants were all asked to give an indication of changes. The survey results are presented in Table 7.1.

Table 7.1 Changes in employment, turnover/sales, costs or profitability by grant recipient group

	All	Glastir (G)	BWW (Bw)	Both (Bo)	Other (O)
Base	**413**	**127**	**122**	**52**	**112**
Yes, there have been changes	32%	**35%*[O]**	28%	**56%*[G,Bw,O]**	23%
No, none has changed	66%	**63%*[Bo]**	**70%*[Bo]**	42%	**75%*[G,Bo]**
Don't know	2%	2%	2%	2%	1%

* Significantly higher than
-O (other grant recipients);
-G (Glastir woodlands grants);
-Bw (BWW recipients);
-Bo (recipients of both BWW and Glastir Woodlands grants)

Overall, 413 respondents had received grant support for woodland creation and/or woodland management. Of these, 32% (113) reported changes in employment, turnover/sales, costs or profitability of their businesses as a result of receiving woodland grants.

A significantly higher percentage of farmers who were in the BWW grant scheme and then transferred into Glastir Woodlands indicated that they have experienced change, compared to other grant recipient groups. This might suggest that continuation in scheme participation may lead to sustained changes to farm businesses and/or reflects the timescale for socioeconomic benefits to be realised.

A higher percentage of farmers who are supported by Glastir woodlands grants (with no previous scheme participation) claimed to have seen changes in their business, compared to BWW beneficiaries and other grant recipients.

Further analysis on the basis of other parameters such as farm type, woodland size groups etc. provided a number of findings:

- A higher percentage of beef and sheep farms and farms with some cropping (arable, mixed and horticulture) reported changes as a result of receiving woodland grants, compared to pigs, poultry and other farm types;
- A higher percentage of farms with a larger woodland area (5<=10 ha and >10ha) reported changes as a result of receiving grants, compared to farms with a smaller woodland area (<=2ha or 2<=5ha); this suggests some scale effect; and
- A higher percentage of farms that have established woodland through natural regeneration report changes as a result of receiving grants, compared to those that have not.

7.2 Contribution to Employment

When grant beneficiaries were asked if they have experienced changes in employment as a result of receiving woodland grants, 45 (34%) of the 133 respondents who had experienced some changes in their businesses answered ‘Yes’. Detailed responses by grant recipient group are presented in Table 7.2. This indicates that a higher percentage of farmers who were in BWW and transferred into Glastir woodlands schemes have experienced changes in employment, compared to farmers who were in BWW but did not participate in Glastir Woodlands.

Table 7.2 Changes in employment by grant recipient group

	All	**Glastir (G)**	**BWW (Bw)**	**Both (Bo)**	**Other (O)**
Base	**133**	**44**	**34**	**29**	**26**
Yes, there have been changes	34%	30%	24%	**52%*** [Bw]	35%
No, none has changed	65%	68%	76%	48%	65%
Prefer not to say	1%	2%	0%	0%	0%

*Bw- significantly higher than BWW recipients).

Respondents were also asked about how many additional workers they have employed as a result of the woodland grants. They gave estimates on how many additional full-time, part-time and seasonal workers they have taken on, as well as the number of employees in the last year. The survey results are presented in Table 7.3.

Table 7.3 Additional employment per business by grant recipient group

	All	**Glastir (G)**	**BWW (Bw)**	**Both (Bo)**	**Other (O)**
Base	**133**	**44**	**34**	**29**	**26**
Additional Employment:					
Full-time worker (additional)	15	2	1	9	3
Part-time worker (additional)	32	10	6	9	7
Seasonal worker (additional)	74	16	17	33	8
Contractors (days)/woodland creation	1,640	672	548	277	143
Contractors (days)/woodland management	1,318	272	478	482	86
Additional Employment (FTEs)*-Total	**46**	**11**	**8**	**18**	**8**
Last Year’s Employment:					
Full-time worker	104	13	30	37	24
Part-time worker	107	23	43	19	22
Seasonal worker	128	27	48	28	25
Last Year’s Employment (FTEs)*-Total	**190**	**31**	**64**	**54**	**41**
Baseline Employment (FTEs)	**144**	**20**	**56**	**36**	**33**
% Change Relative to Baseline	32%	55%	14%	50%	24%

* Calculated with the assumptions that 1 full-time worker=1FTE; 1 part-time worker=0.5 FTE; Seasonal worker works for 3 months during the year=0.25 FTE; days of contractors were also converted into FTEs assuming there are 340 working days in a year.

Overall, 46 FTE jobs were generated from the 133 beneficiaries businesses, representing a 32% increase from the baseline. Although the percentage increase is relatively high, it should be interpreted in the context that the baseline number of employees is small and it did not take into account family labour.

7.3 Contribution to Economic Growth and Labour Productivity

Respondents were asked if there has been any impact on business turnover as a result of receiving woodland grants (see survey results in Table 7.4). Half of the respondents reported a change, and of these 72% indicated an increase and 28% a decrease. A higher percentage of beneficiaries of the Glastir scheme and those who are in both Glastir and BWW schemes experienced changes in turnover.

Table 7.4 Changes in turnover by grant recipient group

	All	**Glastir (G)**	**BWW (Bw)**	**Both (Bo)**	**Other (O)**
Base	**133**	**44**	**34**	**29**	**26**
Yes, there have been changes	50%	**59%*O**	47%	**59%*O**	31%
No change	46%	41%	50%	34%	**62%*Bo**
Prefer not to say	4%	0%	3%	7%	6%

*O- significantly higher than other grant recipients. Bo-significantly higher than beneficiaries in both Glastir and BWW schemes.

A similar question was asked about changes in business profit and 51% reported to have experienced changes due to receiving woodland grants (see Table 7.5). However, there were no significant differences between the different grant recipient groups.

Table 7.5 Changes in business profit by grant recipient group

	All	**Glastir (G)**	**BWW (Bw)**	**Both (Bo)**	**Other (O)**
Base	**133**	**44**	**34**	**29**	**26**
Yes, there have been changes	51%	61%	47%	48%	44%
No change	45%	39%	50%	45%	50%
Prefer not to say	4%	0%	3%	7%	6%

Table 7.6 sets out the calculations of change in GVA and labour productivity (expressed as GVA/FTE) as a result of receiving woodland grants. It should be noted that this calculation is based on a relatively small number of responses (48) where a complete set of estimates on their employment level, profit level and labour cost was provided. As such, the figures presented should be treated as indicative rather than representative.

The estimated GVA and labour productivity figures suggest that the woodland grant schemes contributed to economic growth by increasing GVA level by 24% from the baseline.

Labour productivity (expressed as GVA/FTE) however, is negatively affected, with a decrease of 7% for the grant beneficiaries, and Glastir recipients seeing the largest negative changes in productivity. This reflects the relative impacts on job creation (limited) and profitability (moderate), so that the ratio of GVA to FTE is reduced. There is perhaps also an issue of timescales, given the long term nature of returns from investment in woodland creation/management.

Table 7.6 Changes in £ in business profit, labour cost and labour productivity by grant recipient group

Base	All 48	Glastir (G) 15	BWW (Bw) 14	Both (Bo) 10	Other (O) 9
PROFIT*					
Changes in profit	157,000	48,500	51,500	44,500	12,500
Last year's profit	967,499	317,499	242,500	222,500	185,000
Baseline profit	810,499	268,999	191,000	178,000	172,500
% change relative to baseline	19%	18%	27%	25%	7%
LABOUR COST*					
Last year's Labour Cost	573,183	65,194	192,996	139,4597	175,497
Baseline Labour Cost	434,413	42,061	168,872	92,998	141,254
GVA**					
Last year's GVA	1,540,683	382,693	435,496	361,997	360,497
Baseline GVA	1,244,912	311,060	359,872	270,998	313,754
% change relative to baseline	**24%**	**23%**	**21%**	**34%**	**15%**
LABOUR PRODUCTIVITY					
GVA/FTEs last year	8,109	12,345	6,805	6,704	8,793
GVA/FTEs baseline	8,645	15,553	6,426	7,528	9,508
% change	**-7%**	**-26%**	**6%**	**-12%**	**-8%**

* Farmer respondents were asked to select a profit band to indicate their profit level. The mid value of each individual band is used as a proxy of the actual profit.
**Farmer respondents gave estimates on labour cost of last year. The labour cost for the baseline is then derived pro-rata the employment level of the base year relative to last year
***GVA = Profit + Labour Cost

7.4 Wider Impacts on Local Economy

Respondents were asked if they expect the woodland that they have established or managed under woodland grant schemes to have any economic impacts on their local economy. Of the 413 grant recipients, the majority (73%) thought there were no impacts, although 24% reported positive impacts and only 1% thought it had negative impact (see Table 7.7).

As with the direct economic impacts, a higher percentage of farmers who participated in both BWW and Glastir woodlands grant schemes reported a positive impact on the local economy, compared to other grant recipient groups. In contrast, a lower percentage of beneficiaries of other grant schemes reported a positive impact and a higher percentage reported no impact, compared to other grant recipient groups.

Table 7.7 Wider impacts of woodland grants on the local economy

	All	Glastir (G)	BWW (Bw)	Both (Bo)	Other (O)
Base	**413**	**127**	**122**	**52**	**112**
Yes, positive impact	24%	**23%*^{O}**	**25%*^{O}**	**50%*^{G,Bw,O}**	11%
Yes, negative impact	1%	1%	0%	2%	1%
No impacts	73%	**73%*^{Bo}**	**72%*^{Bo}**	48%	**86%*^{G,Bw,Bo}**
Don't know	2%	3%	2%	0%	2%

* Significantly higher than O- other grant recipients. Bo-significantly higher than beneficiaries in both Glastir and BWW schemes; G-Glastir woodlands grant recipients; Bw-BWW grant recipients.

In terms of the nature of the impacts, over two fifths reported an employment impact on the local economy (see Table 7.8)

Table 7.8 Nature of the impacts on the local economy during establishment

	N	%
Base	**102**	**100%**
Employment e.g. for planters	43	42%
Encouraging tourism e.g. by improving scenery	8	8%
None or little	24	24%
Other	2	2%
Don't know/No answer	27	26%

Recipients were also asked if there would be any impacts on the local economy from on-going management of woodland and the survey results are presented in Table 7.9. The most frequently mentioned impact was employment (mentioned by 39% of the respondents). Nearly a quarter of the respondents reported there would be economic benefits to the local economy through selling wood locally. Unlike the establishment of woodland, a much lower percentage of grant recipients thought there would be no impact on local economies. This reflects the ongoing nature of woodland management in contrast to the one-off impact of woodland establishment which is concentrated on planting.

Table 7.9 Nature of the impacts on the local economy – ongoing woodland management

	N	%
Base	**102**	**100%**
Employment	40	39%
Encouraging tourism, e.g. by improving scenery and encouraging wildlife	29	29%
Selling wood locally	24	24%
None	4	4%
Other	7	7%
Don’t know/No answer	9	9%

7.5 Unintended Impacts

Respondents were asked if there have been any unexpected impacts (positive or negative) as a result of entering the woodland grant schemes. Survey responses are shown in Table 7.10.

Table 7.10 Have there been any unexpected impacts

	N	%
Base	**413**	**100%**
Yes, positive impacts	87	21%
Yes, negative impacts	31	8%
No unexpected impacts	287	69%
Don't know	10	2%

Nearly 70% of the 413 grant recipients reported no unexpected impacts, 21% reported positive impacts and only 8% reported negative impacts. Respondents also provided details on the unexpected impacts they have reported (see Table 7.11).

The majority (88) of respondents reported positive impacts, mainly environmental benefits, but a small number (9) reported extra financial benefits as one the unintended impacts. Some 31 farmers reported negative impacts, including financial loss.

Table 7.11 Details of unintended impacts reported

Unexpected Impacts	**88**	
POSITIVE IMPACTS		
Benefitted wild animal and plant life	36	41%
Improved, more aesthetic environment	24	27%
Extra financial benefits	9	10%
Improved biodiversity	9	10%
Has improved accessibility e.g. for maintenance and walking	7	8%
Greater awareness of the diverse uses for wood e.g. fuel, fencing etc	6	7%
Improved protection from or for animals through better fencing	6	7%
Has helped spread awareness of the grant and the benefits for woodland	4	5%
Other	9	10%
No answer	2	2%
None	1	1%
NEGATIVE IMPACTS	**31**	
Financial loss e.g. decrease in single farm payments or a clash with other grant schemes	12	39%
Encourages animal pests like rabbit and foxes	5	16%
Bureaucratic complications	4	13%
Loss of land and the freedom as to what can be done with it	4	13%
Increase in paperwork	3	10%
Other	5	16%

8 Farmer response to future changes

Respondents were asked if they are more or less likely to invest in woodland creation/management in light of changes to Single Farm Payment, which will be linked to the area farmed (rather than historical production) from 2015 and ongoing reduction in payment levels. Detailed responses are presented in Table 8.1.

Table 8.1 Motivations for planting woodland by segmentation group

Motivation	All	Cluster 1 (C)	Cluster 2 (Y)	Cluster 3 (M)	Cluster 4 (R)	Cluster 5 (U)
Base	1,005	247	220	150	200	187
More likely to invest	18%	**23%*C4**	19%	16%	15%	13%
Less likely to invest	30%	**33%*C3**	26%	18%	**36%*C2,3**	**35%*C3**
No difference	37%	29%	34%	**53%*C3,4,5**	36%	**40%*C1**
Don’t know/No view	15%	16%	**21%*C3,4,5**	13%	13%	12%

*significantly higher than C1-Cluster 1, C2-Cluster 2…C5-Cluster 5.

Of the 1,005 survey respondents, 18% stated that they are more likely to invest in woodland, 30% are less likely to invest, 37% said no difference and 15% don’t know what they would do.

There are differences between farmer segmentation groups, which might inform the target group to encourage uptake of woodland grant schemes in responses to future policy changes. These are:

- Cluster 1 (open, environmentally focused) is the most dynamic group, with a higher percentage (23%) of farmers who are more likely to invest compared to other Clusters and significantly higher than Cluster 4 farmers (traditional, agricultural production focused).
- Cluster 3 (traditional, environmentally focused) has the highest percentage of farmers who are indifferent to the changes. This is consistent with other evidence in the survey, which suggests that this group is generally insensitive to financial incentives and may be the hardest group to engage with.
- Cluster 4 and 5, who are more agricultural production focused, may also prove to be hard to win over as they have more farmers who are less likely to invest or indifferent to future changes.
- Cluster 2 farmers (who are fairly open with a balanced view of agriculture and environment), however, offer some potential to work with in order to encourage uptake. This group has the highest percentage of farmers who are unsure what they would do in response to future changes.

9 Conclusions

This study has collected a range of evidence on motivations for the up-take of Glastir Woodlands Element grants, scheme experience and impacts as well as barriers to (further) uptake. Respondents cite environmental motives for planting and managing woodland as well as economic and lifestyle reasons. The beneficiaries are generally positive about the Glastir Woodlands Element grants and they tend to use more advice compared to beneficiaries of other grant schemes. The additionality of Glastir Woodlands Element grants is high, which suggests that the economic impact of these grants would not have been achieved in absence of the support.

More specifically, the following key findings in relation to the objectives of the study are evidenced from the survey results.

- Reasons for the uptake of Glastir Wood Element Grants

  Glastir/BWW tends to attract more part-time, younger farmers with larger woodland areas.

  Compared to non-beneficiaries, Glastir/BWW grant recipients are driven by a range of motives to plant/manage woodland, which include environmental, economic and lifestyle reasons. This is reflected in the survey responses which suggest a greater emphasis on the following drivers:

  - to help improve the local landscape;
  - to provide a place for personal recreation and relaxation;
  - for water control and flood management purposes;
  - to provide woodfuel for personal use;
  - to provide timber; and
  - to provide woodfuel for sale.

- Motives for non-beneficiary farmers with woodland on their property but who haven't applied for a grant

  In terms of the reasons why they did not take up the Glastir Woodland Creation or Management grants, the most frequently mentioned reasons were: put off by grant application requirements; awareness of grants; and eligibility issues.

  Compared to grant recipients, non-beneficiary farmers who planted woodlands or actively managed their woodlands tend to place less emphasis on various environmental and economic drivers. Awareness is a key barrier to uptake of woodland schemes.

- Reasons for not taking up Glastir Woodlands Element grants for farms that received grants through Better Woodland Wales (BWW)

  Among the 174 respondents who received BWW grants, 122 did not take up Glastir Woodlands Element grants. The main reasons for not taking up Glastir Woodlands grants were: having planted woodland in the previous schemes and no more spare land; the application process of Glastir being too complicated; not aware of Glastir Woodlands Grants; and not eligible for the Glastir scheme. Each of these reasons were mentioned by 16-20 farmer respondents, representing 13-16% of the total.

- Experiences of farm holdings that received funding through the BWW Scheme and then transitioned to the Glastir Woodlands Elements

  Glastir woodlands grant beneficiaries are generally positive about their experience of BWW and Glastir grants. Respondents were asked to score different aspects of the scheme and the evidence indicates that the application process was scored highest, followed by level of support and advice at the time of application, while complexity of making a claim and on-going support during the scheme were scored the lowest.

  There were 52 respondents who received both BWW and Glastir Woodlands grants. Based on views of these farmers, there is no real perceived difference between Glastir Woodlands and the previous BWW grants.

  The Glastir Woodlands Scheme beneficiary farmers tend to use more advice than other scheme (BWW or other) beneficiaries and non-beneficiaries.

  Evidence from the survey suggests that the additionality of Glastir Woodlands grants is high, with 94% of the 179 Glastir beneficiaries interviewed claiming that they would not have planted the same area or implemented the same management at the same level, same timescale or with the same quality without the grants.

  Evidence also shows that only 7-9% of woodland grant beneficiaries planted new woodland on productive land (compared to 22% of other grant recipients) which suggests that woodland plantation supported by Glastir Woodlands Element or BWW did not take up more productive land.

- Socio-economic impacts of the schemes for all farm holdings that have accessed the BWW scheme and/or Glastir Woodland Management or Glastir Woodland Creation grants

  Woodland grant schemes have positive effects on GVA and employment but have negative impacts on short term labour productivity (expressed as GVA per full-time equivalent). This reflects the long term nature of the return from investment in woodland creation/management.

  - 46 FTE jobs were generated from the 133 beneficiary businesses, representing a 32% increase from the baseline.
  - GVA increased by 24% from the baseline for the 133 beneficiary businesses.
  - Labour productivity (expressed as GVA/FTE) decreased by 7% from the baseline for the grant beneficiaries.

- Findings related to differences between farmer segmentation groups
  The survey responses were analysed across different farm segmentation groups to explore coherence with farmer characteristics. Key findings include the fact that Cluster 1 and 2 farmers (more open) are the easiest to persuade to participate in woodland grant schemes, while Cluster 3 (traditional, environmentally focused) are the hardest group to be persuaded into scheme participation. Detailed findings include:

  - A higher percentage (35%) of Cluster 1 and 2 farmers are Glastir and/or BWW beneficiaries, compared to other segmentation groups.
  - In terms of motivations for planting new woodland, Cluster 1 farmers are more likely to be motivated by a combination of environmental and economic reasons, as well as lifestyle preferences.
  - In terms of motivations for managing woodland, more environmentally focused farmers (Clusters 1, 3 and the middle group Cluster 2) are more likely to be motivated by lifestyle and environmental reasons than more agricultural production focused farmers i.e. Cluster 4 and sometimes Cluster 5 farmers.
  - Specifically, Cluster 4 farmers (traditional, agricultural production focused) are less attracted by woodfuel provision for personal use by managing their woodland but more attracted by game shooting purposes; Cluster 2 farmers are more attracted by timber provision through woodland management, compared to the more environmentally focused groups (Cluster 1 and 3).
  - A higher percentage of farmers in Cluster 1 tend to manage their woodland actively than Clusters 3, 4 and 5 who are more traditional or production focused.

- Lower percentages of more traditional farmers in Clusters 3 and 4 received advice, compared to other Clusters; with farmers in Cluster 1 (open, environmental driven) being most active in seeking advice and farmers in Cluster 4 (traditional, agricultural production focused) being least active.
- More traditional, agricultural production-focused farmers (Cluster 4) may be less difficult to encourage to plant new/more woodland than more traditional, environmentally-focused farmers (Cluster 3).

In terms of responses to future policy changes, the segmentation groups can be considered as follows in terms of woodland grants:

- Cluster 1 (open, environmentally focused) is the most dynamic group, with a higher percentage (23%) of farmers who are more likely to invest compared to other Clusters.
- Cluster 3 farmers (traditional, environmentally focused) tend to be generally insensitive to financial incentives and this may be the hardest group to engage with.
- Cluster 4 and 5 (more agricultural production focused) may also prove to be hard to win over as they tend to have higher percentages of farmers less likely to invest or indifferent to future changes.
- Cluster 2 farmers (fairly open with a balanced view of agriculture and environment), are less certain and offer some potential to work with in order to encourage uptake.

10 Appendices

10.1 Appendix 1 Sampling Framework

For grant recipients, we took a census approach, i.e. every farm beneficiary of GWC, GWM or BWW was interviewed as long as they agreed to take part in the survey. The contact databases for beneficiaries were provided by Rural Payment Wales (RPW) and Natural Resource Wales (NRW).

For non-beneficiaries, a sample was selected based on the RPW database of all farms with woodlands. From this database, we took out farms with a woodland area of less than 0.25 ha and those who had received grants from GWC, GWM or BWW to derive the non-beneficiary group. Within this, we stratified the sample for region and area of woodland as follows:

Region: We grouped the addresses into three main regions: Mid, North and South Wales. The definition we used is: Ceredigion and Powys are classified as Mid Wales; any regions north to the two areas are classified as North Wales; and any regions south to the two areas are South Wales.

Area of woodland: We also classified the wooded area into four size groups: less than 2ha, 2-5ha, 5-10ha and over 10ha.

A total of 7,992 contacts in the RPW database were identified as non-beneficiaries. However, a total of 182 records have a registered farm address in England, some in bordering counties (Cheshire, Shropshire, and Herefordshire) but some are in other English regions (Kent, Buckinghamshire, London, etc.) - see Table 10.1.

Table 10.1 Distribution by region and wooded area size band for non-beneficiaries

Regions	*<=2ha*	*2<=5ha*	*5<=10ha*	*>10ha*	*Grand Total*
Mid Wales	1199	748	506	367	2820
North Wales	999	419	246	238	1902
South Wales	1303	861	494	430	3088
Cheshire	6		1		7
Shropshire	31	17	9	1	58
Herefordshire	39	29	10	6	84
Other England Regions	16	7	6	4	33
Grand Total	**3593**	**2081**	**1272**	**1046**	**7992**

We excluded these farms with an English address on the basis that it only represents 2% of the total records and it may be difficult to collect responses from these farms given the uncertainty about whether the contact is actively managing land in Wales. After taking out these records, there are 7,810 records left in the database and this is the total population we used for the non-beneficiary survey. A detailed breakdown of contacts by region and woodland area is presented in Table 10.2.

Table 10.2 Distribution of contacts by region and wooded area size band for non-beneficiaries (excluding farmers with an English address)

	<=2ha	*2<=5ha*	*5<=10ha*	*>10ha*	*Grand Total*
Mid Wales	1199	748	506	367	2820
North Wales	999	419	246	238	1902
South Wales	1303	861	494	430	3088
Grand Total	**3501**	**1035**	**2028**	**1246**	**7810**

Table 10.3 shows the woodland size distribution by percentage within each region and for the whole population of non-beneficiaries. Overall, there are large number of farms with less than 2ha of woodland accounting for 45% of the population.

Table 10.3 Distribution by wooded area size band, expressed as % for each region.

	<=2ha	*2<=5ha*	*5<=10ha*	*>10ha*	*Grand Total*
Mid Wales	43%	18%	13%	27%	100%
North Wales	53%	13%	13%	22%	100%
South Wales	42%	16%	14%	28%	100%
	45%	**16%**	**13%**	**26%**	**100%**

We also looked at the distribution by woodland size for woodland grant beneficiaries (see Table 10.4). It is apparent that a higher proportion of farms with a larger woodland area tend to take up the woodland schemes: 37% of GWC beneficiaries vs. 27% for non-beneficiaries; 59% of GWM vs. 22% of non-beneficiaries; and 50% of BWW vs. 28% of non-beneficiaries have more than 10ha woodland. Equally, a lower percentage of farms with small woodland area (less than 2ha) have participated in the woodland grant schemes.

Table 10.4 Distribution by wooded area size band for woodland grant recipients (GWC, GWM and BWW).

	<=2ha	***2<=5ha***	***5<=10ha***	***>10ha***	***Grand Total***
GWC	18%	24%	21%	37%	N=233
GWM	11%	12%	18%	59%	N=89
BWW	10%	18%	22%	50%	N=431

There were two options for sample selection:

a. Select a proportional sample stratified by region and woodland area. This will be a representative sample but there is a risk that we are interviewing large number of farms with a small woodland area (may also reflect farm size) who may give similar responses in terms of barriers and may often be hard to win over into the woodland grant schemes due to availability of land, off-farm work etc. The quotas based on this approach are set out in Table 10.5, assuming 600 interviews with non-beneficiaries.

b. Select a proportional sample stratified by region but with an equal sample by woodland size. The farms with a small wooded area (<=2ha in particular) will be under-sampled and those with a large wooded area will be over-represented. Although the survey results will need to be adjusted by weighting in order to be representative of the total population, we may get more insight into the barriers and motivations of farms with large woodland area, who may be more likely to be persuaded to join the woodland grant schemes. The quotas based on this approach are set out in Table 10.6, assuming 600 interviews with non-beneficiaries.

Table 10.5 Sampling Scenario 1- Stratified sample by region and wooded area (proportional)

	<=2ha	***2<=5ha***	***5<=10ha***	***>10ha***	***Grand Total***
Mid Wales	*92*	*57*	*39*	*28*	*217 (36%)*
North Wales	77	32	19	18	146 (24%)
South Wales	100	66	38	33	237 (40%)
Grand Total					**600**

Table 10.6 Sampling Scenario 2-Stratified sample by region (proportional) with an equal sample by wooded area

	<=2ha	***2<=5ha***	***5<=10ha***	***>10ha***	***Grand Total***
Mid Wales	54	54	54	54	217 (36%)
North Wales	37	37	37	37	146 (24%)
South Wales	59	59	59	59	237 (40%)
Grand Total					**600**

In order to ensure a reasonable sample size for farm with a larger woodland area to get more insight into the barriers and motivations of these farms (who are more likely to be persuaded to join the woodland grant schemes), we opted for option b for the sample selection.

10.2 Appendix 2- Survey Questionnaire

Introduction

Good morning/afternoon/evening. My name is…… calling from Qa Research, an independent market research company. We are conducting a survey of farmers in Wales on behalf of Welsh Government. We would like to understand attitudes to and experience of woodland grants.

Your contact details were provided to us by Welsh Government as someone who has some woodland on your farm. All interviews are being conducted in line with the Market Research Society Code of Conduct and all answers you give will be treated in the strictest confidence and any views will remain anonymous. The findings of this survey will help inform the way in which Welsh Government and Natural Resources Wales support farmers on woodland creation and management in the future.

[NOTE TO THE INTERVIEWER: IF THE INTERVIEWEE REQUESTED FURTHER INFORMATION AT THIS STAGE, PLEASE SEND THEM THE LETTER DRAFTED BY WG.]

The survey is voluntary and should take no more than 15 minutes.

Before we start can I confirm that your business is a farm?

Yes	☐1
No	☐2

IF No - thank and close

Can you confirm that you are willing to take part and that this is a convenient time?

Yes	☐1
No	☐2

IF NO - book a time to call back (Could I arrange a time that would be more convenient for you?) or **thank and close.**

We would like to talk with the person who makes the decisions with regards to woodland or general business decisions. Can you please confirm that you are right person to speak to?

Yes	☐1
No	☐2

IF NO – arrange to speak to the person who is responsible for woodland planting and management.

Would you prefer to carry out the interview in English or Welsh?

English	☐1
Welsh	☐2

If WELSH, I can arrange for another member of our team to call you back on another occasion to arrange a date & time to carry out the interview in Welsh.

Just to reassure you this interview will be carried out according to the Market Research Society's Code of Conduct. Your answers will be treated in confidence and the findings of the survey will be reported anonymously. If there are any questions that you do not wish to answer, then please let me know.

SECTION 1: FARM DETAILS

I have a few background questions about yourself and your farm to start with.

1. Please can you confirm your role on the farm?

READ OUT

Full-time farmer	☐1	
Part-time farmer	☐2	
Farm Manager	☐3	
Other (specify)	☐4	Please write in……

2. Please could you tell me how much land you have in each of the following categories?

READ OUT

	Acres	Hectares	Details
Land owned			
Rented land			
Land rent out			
Land under partnership agreement			
Common land			
Other			Please write in…

3. How much woodland do you have on the farm and how much is on owned, rented or other land?

[NOTE TO INTERVIEWER: PLEASE REFER TO THE INFORMATION PROVIDED BY WG ON WHEN 'ISOLATED TREES' FINISH AND 'WOODS' STARTS, IF THE INTERVIEWEES REQURE CLARITY]

	Acres	Hectares	Details
Total area			
Owned			
Rented			
Other (specify)			Please write in…

4. Which of the following best describes your farming system?

READ OUT

	Please tick one
Dairy farming	☐
Cattle and sheep (Less Favoured Area-LFA)	☐
Lowland cattle and sheep (Non-LFA)	☐
Arable cropping	☐

Mixed farming (arable and livestock)	☐
Pig production	☐
Poultry (meat or eggs)	☐
Horticulture	☐
Other (specify……………..)	☐

5. Can you please tell me which age group are you in?

Under 35	☐1
35-44	☐2
45-54	☐3
54-64	☐4
65+	☐5

6. Have you participated in any of the following public support for your farm business?

READ OUT

Yes, Glastir Entry	☐1	
Yes, Glastir Advanced	☐2	
Yes, Glastir Organic	☐3	
Yes, Farming Connect	☐4	
Yes, other (specify)	☐5	Please write in:
No	☐6	

SECTION 2: FARMER SEGMENTATION

Now I would like to ask you a few questions about your views on information and advice and general farm business.

7. On a scale of 1-5 (where 1 is 'not at all important' and 5 is 'very important'), how important is talking to other farmers as a source of information and advice for you personally?

Not at all important	☐1
Somewhat important	☐2
Moderately important	☐3
Important	☐4
Very important	☐5

8. On a scale of 1 to 5 (where 1 is 'not at all interested' and 5 is 'extremely interested'), how interested are you in accessing information or advice about farming on the internet?

Not at all interested	☐1
Somewhat interested	☐2
Moderately interested	☐3
Interested	☐4
Very interested	☐5

9. To what extent do you agree or disagree with the following statements?

	1=strongly disagree	2=disagree	3=Neither agree nor disagree	4=agree	5=Strongly agree
Achieving a good quality of life is more important to me than maximising income from my farm	☐	☐	☐	☐	☐
All farms should strive to be as environmentally sustainable as possible	☐	☐	☐	☐	☐
Collaborating with other farmers improves the running of a farm	☐	☐	☐	☐	☐
I always make time to socialise with other farmers	☐	☐	☐	☐	☐
I am always looking to learn new skills and knowledge that I can apply to my farm	☐	☐	☐	☐	☐
I am keen to apply new	☐	☐	☐	☐	☐

technology on my holding					
I am happy to take advice about managing the natural environment on my farm	☐	☐	☐	☐	☐

SECTION 3: WOODLAND MANAGEMENT & SCHEME PARTICIPATION

Now I would like to ask you a few questions about woodland creation and management on your farm.

WOODLAND CREATION

10. Have you planted new woodland on your farm in the last 10 years?

Yes	☐2	GO TO Q11
No	☐3	GO TO Q0
Don't know	☐4	GO TO Q0

11. How much woodland have you planted and what is the mix between conifers and broadleaf species?

[PLEASE RECORD THE UNIT WHICHEVER EASIEST FOR THE FARMERS]

Acres___________________

Hectares_________________

And what is the mix between conifers and broadleaf species? [Please record the unit whichever is easiest for the farmers and let them choose either area or share (%) to describe the split between types]

	Acres	**Hectares**	**Percentage**
Broadleaf species			
Conifers			

12. To what extent was each of the following a motivation for planting new woodland?

PROMPT LIST (CODE ALL THAT APPLY)

	Not at all	*To some extent*	*To a great extent*
To provide timber	☐	☐	☐
To provide woodfuel for personal use	☐	☐	☐

To provide woodfuel for sale	☐	☐	☐
To provide a place for personal recreation and relaxation	☐	☐	☐
For game shooting	☐	☐	☐
To provide shelter or screening	☐	☐	☐
For the benefits of wildlife	☐	☐	☐
To help improve the local landscape	☐	☐	☐
To provide public access/recreation	☐	☐	☐
For water control/ flood management purposes	☐	☐	☐
To provide grazing land	☐	☐	☐
Other (specify)	☐	☐	☐

13. Who was responsible for planting the woodland?

Self and/or family member	☐1	
Employees of the farm business	☐2	
Contractors	☐3	
Don't know	☐4	
Other	☐5	Please write in…

14. What was the previous land use of the areas of newly established woodland?

PROMPT LIST (Tick all that apply)

Arable crops	☐1	
Productive grassland	☐2	
Rough grazing	☐3	
Bracken covered slopes	☐4	
Field corners or margins	☐5	
Other (please specify)	☐6	Please write in……

15. Have you received any grants for planting the woodland on your farm??

SINGLE CODE RESPONSE

Yes	☐1	GO TO Q0
No	☐2	GO TO Q0
Don't know	☐3	GO TO Q0

16. What are the main reasons for not taking up any grants for planting new woodlands?

PLEASE TICK ALL THAT APPLY

Not aware that the grants are available	☐1
Long timescales involved in obtaining benefits from a woodland created	☐2

No interest to plant woodland	☐3
Lack of experience to manage/plant woodland	☐4
Don't have time	☐5
Don't have the necessary equipment	☐6
The quality of land is too good to plant woodland on	☐7
Agriculture is more profitable than forestry	☐8
Concerned about not being able to fell a tree when I want to due to regulations	☐9
No spare land	☐10
Application process is too complicated	☐11
Put off by online application system	☐12
Grant rates are too low	☐13
Not allowed to use woodlands for grazing all year round	☐14
Farmland should be used for agricultural production not forestry	☐15
I do not have access to contractors to plant the woodland	☐16
I'm concerned that even if I plant a woodland there is no guarantee of a market for wood products	☐17
I'm concerned about the impacts of creating a woodland on grants payments I receive	☐18
I'm concerned that planting a woodland would reduce my land value	☐19
Other (specify……………………………………………………………………………..)	☐20

WOODLAND MANAGEMENT

17. Is some or all of your woodland actively managed e.g. thinned, felled, replanted or managed for wildlife or access?

Yes	☐1	GO TO Q0
No	☐2	GO TO Q0

18. How strongly would you agree or disagree with the following statements about the reasons for not managing the woodland actively. If the statement is not applicable please state 'neither agree nor disagree'. If the there are other reasons please specify.

	1=strongly disagree	2=disagree	3=Neither agree nor disagree	4=agree	5=Strongly agree
The economic returns from woodland management do not justify the costs involved	☐	☐	☐	☐	☐
The amount of time the owner, myself or a third party can manage the woodland is limited	☐	☐	☐	☐	☐

Managing the woodland is low on the owner's list of priorities	☐	☐	☐	☐	☐
It's difficult to find people with the right skills to manage the woodland	☐	☐	☐	☐	☐
The woodland is not managed because the owner believes it should be left in its natural state	☐	☐	☐	☐	☐
The woodland is too small to warrant active management	☐	☐	☐	☐	☐
The woodland is too inaccessible to allow active management	☐	☐	☐	☐	☐
Other reasons (Specify…………………………………………………………..)					

GO TO Q0

19. Please indicate the extent to which your woodland is actively managed for the following:

PROMPT LIST (CODE ALL THAT APPLY)

	Not at all	*To some extent*	*To a great extent*
To provide timber	☐	☐	☐
To provide woodfuel for personal use	☐	☐	☐
To provide woodfuel for sale	☐	☐	☐
To provide a place for personal recreation and relaxation	☐	☐	☐
For game shooting	☐	☐	☐
To provide shelter or screening	☐	☐	☐
For the benefits of wildlife	☐	☐	☐
To help improve the local landscape	☐	☐	☐
To provide public access/recreation	☐	☐	☐
For water control/ flood management purposes	☐	☐	☐
To provide grazing land	☐	☐	☐
Other (specify)	☐	☐	☐

20. To what extent do you undertake the following woodland management tasks and who does the work?

	Not at all	*To some extent*	*To a great extent*	*Who does the work (only applies to responses 'to some extent' and 'to a great extent')*
Thinning	☐	☐	☐	☐By self and/or family members ☐By employees of the farm business ☐By contractors
Boundary work- e.g. fencing	☐	☐	☐	☐By self and/or family members ☐By employees of the farm business ☐By contractors
Tree species change (restocking)	☐	☐	☐	☐By self and/or family members ☐By employees of the farm business ☐By contractors
Infrastructure-e.g. tracks, stacking areas	☐	☐	☐	☐By self and/or family members ☐By employees of the farm business ☐By contractors
Work to conserve protected and priority species	☐	☐	☐	☐By self and/or family members ☐By employees of the farm business ☐By contractors
Vegetation management	☐	☐	☐	☐By self and/or family members ☐By employees of the farm business ☐By contractors
Pest control	☐	☐	☐	☐By self and/or family members ☐By employees of the farm business ☐By contractors
Public access	☐	☐	☐	☐By self and/or family members ☐By employees of the farm business ☐By contractors
Other (please specify)	☐	☐	☐	☐By self and/or family members ☐By employees of the farm business ☐By contractors

21. Have you received any grants for managing the woodland on your farm?

Yes	☐1	GO TO Q0
No	☐2	GO TO Q0
Don't know	☐3	GO TO Q0

22. What are the main reasons for not taking up woodland grant schemes?

NOT PROMPTED, CODE ALL THAT APPLY

Not aware that the grants are available	☐1
I don't know enough about the grants for management	☐2
I don't know how to apply for the grants	☐3
Lack of experience to manage the woodland	☐4
Don't have time	☐5
Don't have the necessary equipment	☐6
The commitment required is too long-term	☐7
Grant rates are too changeable	☐8
Grants restrict the activities that can be undertaken in the woodland	☐9
Grant rates are too low to justify applying	☐10
Application process is just too complicated	☐11
The conditions attached to grants are too changeable	☐12
Put off by online application system	☐13
I'm concerned that I am not allowed to use woodlands for grazing all year round	☐14
Other (please specify……….)	☐15

INCENTIVES FOR WOODLAND CREATION AND MANAGEMENT

23. Have you received advice from a professional about planting or managing your woodland in the last 10 years?

Yes	☐1	GO TO Q0
No	☐2	GO TO Q0

24. What sources of information and advice have you used for planting or managing the woodland and how useful have they been?

NOT PROMPTED, CODE ALL THAT APPLY

	Used	Not useful	Useful	Very useful
Advisor (agronomist)	☐	☐	☐	☐
CLA Cymru (Country Land and Business Association)	☐	☐	☐	☐
Coed Cymru	☐	☐	☐	☐
Commercial forestry organisations (e.g. UPM Tilhill,	☐	☐	☐	☐

etc.)				
Confor	☐	☐	☐	☐
Family/Friend	☐	☐	☐	☐
Farming Connect	☐	☐	☐	☐
Forestry Commission Website	☐	☐	☐	☐
Glastir Woodlands advisor	☐	☐	☐	☐
Welsh Government websites	☐	☐	☐	☐
My own experience	☐	☐	☐	☐
Other, please specify (….)	☐	☐	☐	☐

25. What kind of information and support would you have liked above and beyond what is available currently to help your decision making for planting a new woodland and/or ongoing management of woodland?

____
_____

26. Have you established woodland through natural regeneration?

Yes	☐1	GO TO Q0
No	☐2	GO TO Q0

27. How much woodland is established through natural regeneration?

Acres___________________

Hectares_________________

28. Are you aware of the Renewable Heat Incentive (RHI) and/or commercial opportunities to manage woodland to produce woodfuel?

NOTE FOR INTERVIEWERS: THE RHI IS A PAYMENT SYSTEM FOR THE GENERATION OF HEAT FROM RENEWABLE ENERGY SOURCES INTRODUCED IN 2011. IT ENCOURAGES BUSINESSES OR INDIVIDUALS TO INSTALL WOODFUEL BOILERS IN RETURN FOR PAYMENTS FOR HEAT GENERATED.

Yes	☐1	
No	☐2	

29. Has that influenced your decision to manage your woodland?

Yes	☐1

No	☐2

30. What would encourage you to plant new or a larger area of new woodland?

NOT PROMPTED, CODE ALL THAT APPLY

Higher grant payments	☐1	
More free advice/training	☐2	
Reducing complexity of grant application	☐3	
Higher price for timber or woodfuel	☐4	
More support for disease/pest control	☐5	
More support for online application	☐6	
Opportunity to use woodlands for grazing at certain times	☐7	
Others, please specify	☐8	Please write in…
Nothing	☐9	

31. What would encourage you to invest more time in woodland management?

NOT PROMPTED, CODE ALL THAT APPLY

Higher grant payments	☐1	
More free advice/training	☐2	
Reducing complexity of grant application	☐3	
Higher price for timber or woodfuel	☐4	
More support for disease/pest control	☐5	
More support for online application	☐6	
Opportunity to use woodlands for grazing at certain times	☐7	
Others, please specify	☐8	Please write in…
Nothing	☐9	

SECTION 4: EXPERIENCE OF WOODLAND GRANT SCHEMES

32. Please could you confirm which woodland grants that you have received for planting and/or managing the woodland on your farm?

SINGLE CODE RESPONSE

Glastir Woodlands Grants, but no previous schemes	☐1	GO TO Q0
Better Woodlands Wales (BWW), but not Glastir	☐2	GO TO Q0
Both **Glastir** Woodlands and **BWW grant schemes**	☐3	GO TO Q0
Yes, other scheme(s)	☐4	Specify……………………….. then GO TO Q0
None	☐5	GO TO Q0
Don't know	☐6	GO TO Q0

33. Please can you tell me why you participated in the previous woodland grant scheme(s) but did not take up the Glastir Woodlands Scheme?

NOT PROMPTED, CODE ALL THAT APPLY and ASK FOR SPECIFICS FOR CATEGORY 3, 4, 8, 9 AND 10.

Have planted woodland in the previous schemes and no more spare land	☐1	
Not aware of Glastir Woodlands Grants	☐2	
Bad experience with previous schemes (RECORD SPECIFICS)	☐3	Please detail…
Not getting sufficient support (RECORD SPECIFICS)	☐4	Please detail…
Grant level of Glastir is too low	☐5	
The application process of Glastir is too complicated	☐6	
The commitment required is too long term	☐7	
Impact on other grant payments (RECORD SPECIFICS)	☐8	Please detail…
Change of circumstances, e.g. less time available, approaching retirement, etc. (RECORD SPECIFICS)	☐9	Please detail…
Other, specify (….)	☐ 10	Please detail…

GO TO Section 5, Q42

34. Since you are in a Glastir Woodlands Scheme and were also in Better Woodlands for Wales (BWW) scheme, please can I ask you how the Glastir scheme compares to the earlier scheme?

They are about the same	☐1	
Glastir is better than BWW in….(detail)	☐2	Please detail:
Glastir is worse than BWW in……(detail)	☐3	Please detail:

35. How did you find out about the Glastir woodlands schemes that you have received grants from?

NOT PROMPTED (CODE ALL THAT APPLY)

Advisor (agronomist)	☐1	
Agricultural shows/ markets/conferences/workshops etc.	☐2	
Coed Cymru	☐3	
Commercial forestry organisations (e.g. UPM Tilhill, etc.)	☐4	
Confor	☐5	
Farmers' Union of Wales (FUW)	☐6	
Farming Connect publications/e-bulletin	☐7	
Forestry agent	☐8	
Forestry Commission Wales (FCW)	☐9	
Gwlad Magazine	☐ 10	
Gwlad online	☐ 11	
Internet	☐ 12	
Newspaper	☐ 13	
Word of mouth	☐ 14	
Other, please specify	☐ 15	Please write in:

36. Who influenced your decision to apply for the Glastir woodlands grants?

NOT PROMPTED (CODE ALL THAT APPLY)

Coed Cymru	☐1	
Commercial forestry organisations (e.g. UPM Tilhill, etc.)	☐2	
Confor	☐3	
Family/Friend	☐4	
Farmers' Union of Wales (FUW)	☐5	
Farming Connect	☐6	
Farming media (specify)	☐7	Please write in:
Forestry Commission Wales (FCW)	☐8	
Glastir Woodlands advisor	☐9	
No one, I made the decision myself	☐10	
Other (please specify)	☐11	Please write in:

37. On a scale of 1-5 (where 1 is very dissatisfied and 5 is very satisfied) how satisfied are you with the following aspects of the Glastir woodlands schemes:

	0=Don't know	1=Very dissatisfied	2=Dissatisfied	3=Neither dissatisfied nor satisfied	4=Satisfied	5=very satisfied
Application process	☐	☐	☐	☐	☐	☐
Ongoing record keeping/admin	☐	☐	☐	☐	☐	☐
Level of support/advice at the time of application	☐	☐	☐	☐	☐	☐
Ongoing support during the scheme	☐	☐	☐	☐	☐	☐
Grant level	☐	☐	☐	☐	☐	☐
Clarity of management prescriptions	☐	☐	☐	☐	☐	☐
Clarity of rules and contractual requirements	☐	☐	☐	☐	☐	☐
Complexity of making a claim	☐	☐	☐	☐	☐	☐

38a. What progress has been made in the completion of the capital works under your Glastir woodland creation scheme?

< 50% completed	☐1	
> 50% but not fully completed	☐2	
100% completed	☐3	
Cannot comment (please detail reason)	☐4	Please write in…………..

38b. What progress has been made in the completion of the capital works under your Glastir woodland management scheme?

< 50% completed	☐1	
> 50% but not fully completed	☐2	
100% completed	☐3	
Cannot comment (please detail reason)	☐4	Please write in……. GO TO Q0

39a. Have you experienced any difficulties in the completion of the capital works under your Glastir woodland creation scheme?

Without any difficulties	☐1	
Some difficulties in completion (please detail)	☐2	Please write in…….
Major difficulties in completion (please detail)	☐3	Please write in…….
Cannot comment (please detail reason)	☐4	Please write in…….

39b. Have you experienced any difficulties in the completion of the capital works under your Glastir woodland management scheme?

Without any difficulties	☐1	
Some difficulties in completion (please detail)	☐2	Please write in…….
Major difficulties in completion (please detail)	☐3	Please write in…….

Cannot comment (please detail reason)	☐4	Please write in…….

40. What element(s) of the schemes do you think could be improved and how could they be improved?

____

____

41. Would you have established and/or managed this area of woodland if the grant had not been available? If yes, would you have done so in the same way had the grant not been available?

Yes, same area and management	☐	
Yes, but on smaller scale	☐	
Yes, but with reduced management input	☐	
Yes, but at a later date	☐	
Yes, but of a lower quality	☐	
No	☐	
Don’t know	☐	
Other (Please specify)	☐	Please write in…

SECTION 5: IMPACTS OF WOODLAND GRANT SCHEMES

THIS SECTION IS INTENDED FOR THE FOLLOWING GROUPS OF FARMERS WHO HAVE ACCESSED BWW AND/OR GLASTIR WOODLANDS GRANTS

Glastir only	SELECTED 1 AT Q0
BWW only	SELECTED 2 AT Q0
Glastir & BWW	SELECTED 3 AT Q0
Other grant schemes	SELECTED 4 AT Q0

Now we would like to explore how your investment in woodland and the support of woodland grants has impacted on your business. The aim is to estimate what has changed as a direct result of woodland activities, excluding changes due to other factors. This information is important to help us estimate the value of woodland grant schemes in supporting farm businesses and the rural economy and requires us to gather data on profitability and employment. All the information that you give will be treated in the strictest confidence.

ECONOMIC IMPACT

42. Please can you tell me if there has been any impact on the number of people you employed, your business turnover/sales, business costs or profitability due to woodland creation and/or management activities as a result of receiving woodland grants?

Yes, there have been changes in employment, turnover/sales, costs or profitability	☐1	GO TO Q0
No, none of the employment, turnover, costs or profitability levels has changed	☐2	GO TO Q0
Don't know	☐3	GO TO Q0

43. Firstly, please can you tell me if there has been any impact on the number of people you employ directly as a result of receiving woodland grants (creation and/or management)?

Yes	☐1	GO TO Q0
No	☐2	GO TO Q0
Prefer not to say	☐3	GO TO Q0

44. Please can you tell me how many additional workers are employed for woodland creation and/or management and whether they are full-time, part-time or seasonal workers? How many additional hours does that represent each year?

	No. of employees	No. of hours worked
Full-time workers		
Part-time workers		
Seasonal workers		

COMMENTS BOX FOR SEASONAL WORKERS

45. Have you used contractors to carry out the work related to woodland creation and/or management as a result of receiving the woodland grants?

Yes	☐1	GO TO Q0
No	☐2	GO TO Q0
Prefer not to say	☐3	GO TO Q0

46. Please can you tell me how many additional days do the contractors work for you each year on woodland establishment and/or woodland management?

	No. of days worked
Woodland establishment	
Woodland management	

47. Please can you tell me many full-time, part-time and seasonal workers you employed in your business last financial year?

		No. of employees	No. of hours worked
Yes	Full-time workers		
	Part-time workers		
	Seasonal workers		
Don't know / Prefer not to say	GO TO Q0		

COMMENTS BOX FOR SEASONAL WORKERS

48. Please can you tell me how much your labour costs were for the last financial year?

Yes	
Don't know/Prefer not to say	GO TO Q0

49. Please can you tell me if there has been any impact on business turnover as a result of receiving woodland grants (creation and/or management)? If yes, could you tell me how much has the turnover changed?

Yes	☐1	Please detail: Increase £ _______________| decrease £ _______________|
No	☐2	GO TO Q0
Don't know	☐3	GO TO Q0

50. Please can you tell me what your business turnover was in the last financial year?

Yes	☐1	Please detail: £ _______________|
Don't know/Prefer not to say	☐2	GO TO Q0

51. Please can you tell me if there has been any impact on business profitability as a result of receiving woodland grants (creation and/or management)?

Yes	☐1	GO TO Q52
No	☐2	GO TO Q550
Don't know	☐3	GO TO Q55

52a. Is that an increase or decrease?

Increase	☐1	
Decrease	☐2	

52b. Can you estimate how much the change in profit represents annually in £?

Greater than £0 but less than £1000	☐1	
Greater than £1000 but less than £2000	☐2	
Greater than £2000 but less than £3000	☐3	
Greater than £3000 but less than £4000	☐4	
Greater than £4000 but less than £5000	☐5	
Greater than £5000	☐6	
Don't know/prefer not to say	☐7	

53. Please can you tell me the profit level of your business in the last financial year?

READ OUT

Less than zero	☐1	
Zero to £5,000	☐2	
Greater than £5,000 but less than £10,000	☐3	
Greater than £10,000 but less than £20,000	☐4	
Greater than £20,000 but less than £50,000	☐5	
Greater than £50,000	☐6	
Don't know / Prefer not to say	☐7	GO TO Q0

54. How much do you receive for your single payment?

£____________________

55. Do you expect the woodland that you have established or managed under woodland grant schemes to have any economic impacts on your local community?

Yes, positive impacts	☐	GO TO Q0
Yes, negative impacts	☐	GO TO Q0
No impacts	☐	GO TO Q0
Don't know	☐	GO TO Q0

56. What do you think the nature of these local economic benefits will be? (For example employment in planting, woodland maintenance, harvesting, local tourism, etc.)

a) During establishment ____

b) Ongoing ____

OTHER IMPACTS

57. Have there been any unexpected impacts (positive or negative) as a result of entering the woodland grant schemes? If yes, what has been the nature of these impacts?

	Tick	Detail (please describe briefly)
Yes, positive impacts	☐	
Yes, negative impacts	☐	
No unexpected impacts	☐	
Don't know	☐	

SECTION 6: FUTURE CHANGES AND COMMENTS

58. In light of changes to Single Farm Payment, are you more or less likely to invest in woodland management and/or creation?

More likely to invest in woodland	☐1
Less likely to invest in woodland	☐2
No difference	☐3
Don't know / no view	☐4

59. Do have any further comments about the woodland creation and/or management that we have not covered in the questionnaire?

____

____

____

____

____

____

SECTION 7: PERMISSIONS FOR FUTURE USE OF DATA

ASK ALL

60. If the Welsh government and its agencies wish to undertake further work on related issues in the future would it be ok for them or their appointed contractors to contact you on these issues?

PROBE & CODE ONE OF FOLLOWING:

Yes – both client & / or their contractors may re-contact	☐1
Only client may re-contact	☐2
No – neither client nor contractor may re-contact	☐3

61. It is sometimes possible to link the data we have collected from you with other surveys or datasets, to which the Welsh Government has authorised access. Would you be content for this to be done, as it can provide the potential for further analysis? In doing this, we assure you that your confidentiality will be respected and the linked data will be anonymised and used for statistical and analytical purposes only, with only authorised researchers having access to the linked data.

Yes	☐1
No	☐2
Don't know	☐3

THANKS & CLOSE

10.3 Appendix 3 – Development of a Segmentation Model for the Welsh Agricultural Industry ("Farmer Segmentation")

A segmentation model was developed of Welsh Farm holdings, based on the attitudes of, values and beliefs of those managing them. The aim of the model is to enable Welsh Government to determine the impact of CAP reform on different types of farm holdings; understand decision making; and to target communications and policy measures more effectively, following Recommendation 62 of the Working Smarter report.

The woodland survey included the nine segmentation questions from the segmentation study in the questionnaire. These include questions around nine themes:

i. Networks & Support (On a scale of 1-5 (where 1 is 'not at all important' and 5 is 'very important'), how important is talking to other farmers as a source of information and advice for you personally?);

ii. Adaptability & Innovation (On a scale of 1 to 5 (where 1 is 'not at all interested' and 5 is 'extremely interested'), how interested are you in accessing information or advice about farming on the internet?);

iii. Business & Finance (To what extent do you agree or disagree with the statement 'achieving a good quality of life is more important to me than maximising income from my farm'?);

iv. Government & Policy (To what extent do you agree or disagree with the statement 'All farms should strive to be as environmentally sustainable as possible'?);

v. Business & Finance (To what extent do you agree or disagree with the statement 'Collaborating with other farmers improves the running of a farm'?);

vi. Networks & Support (To what extent do you agree or disagree with the statement 'I always make time to socialise with other farmers'?);

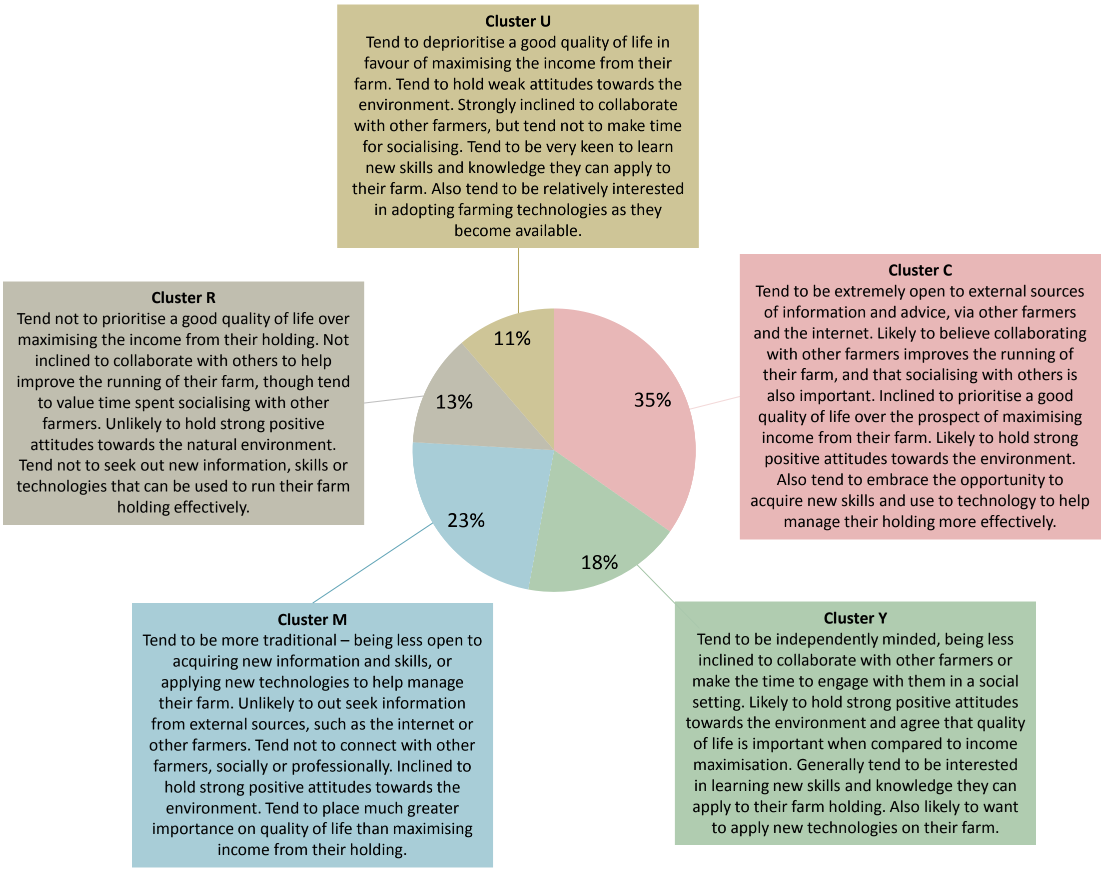
vii. Adaptability & Innovation (To what extent do you agree or disagree with the statement 'I am always looking to learn new skills and knowledge that I can apply to my farm'?);

viii. Adaptability & Innovation (To what extent do you agree or disagree with the statement 'I am keen to apply new technology on my farm as it becomes available'?);

ix. Government & Policy (To what extent do you agree or disagree with the statement 'I am happy to take advice about managing the natural environment on my farm'?).

Based on responses to the nine questions, respondents were classified into different segmentation groups calculated by a segment calculator/algorithm designed by the segmentation study. Five farmer segmentation groups were defined in the segmentation study (see Figure 2.4).

Table 10.7 Welsh Government Segmentation Model



Source: Lee-Woolf, C., Hughes, O., King, G, & Fell, D. (2016) Development of a segmentation model for the Welsh agricultural industry.

A neutral naming scheme ‘C-Y-M-R-U’ has presently been applied to represent the segments; i.e. the names of the clusters were deliberately designed to be neutral with no bearing on the characteristics of corresponding segmentation groups.