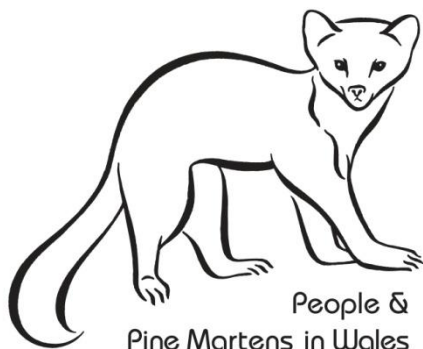


Awareness Survey

People and Pine Martens in Wales Project



People &
Pine Martens in Wales

Bele'r Coed a Broydd Cymru

The **co-operative** membership
Cymru/Wales

The
Vincent Wildlife
Trust

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1.0 Executive Summary

Context

1. The 'People & Pine Martens in Wales' project, funded by The Co-operative, was designed to understand the distribution of the pine marten in Wales and improve habitat connectivity helping the restoration of the species in this country. To aid recovery, it may be appropriate to restock the pine marten population in Wales.
2. The project aims to raise awareness of the plight of the pine marten and opinion surveys about pine martens were conducted to establish a base level of awareness of pine martens; these surveys included questions about restocking to boost recovery.

Research Methodology

3. Three public surveys were carried out through the Spring and Summer of 2013 by project staff and the marketing research consultant working on behalf of The Vincent Wildlife Trust (VWT):
 - The **Mailing survey** was dispatched in April;
 - The **Web-link survey** simultaneously went live in April, remained active until 30th August and targeted specific stakeholder organisations memberships;
 - Survey responses were also collected from **Roadshow Events** undertaken between the 6th April and 7th May 2013 which visited key town centres and major Welsh events, as well as the foyers/car park areas of appropriate Co-op stores.
4. Given the scarcity of pine marten populations in Wales today, it was important to build on the existing database of records and sightings, consequently, part of the mailing was targeted to areas where there had been recent pine marten sightings or other evidence. The areas with recent evidence were termed "Hotspots".
5. CACI provided a total of 7,500 named addresses across Wales for the survey mailing, 500 addresses for each of the eight VWT defined "Hotspot" locations, plus an additional 3,500 across the rest of rural Wales with similar population and landscape characteristics. Each address had the Acorn classification appended to enable VWT to identify demographic patterns and trends amongst the responses. To access the Acorn user guide and clear descriptions of each Acorn Type visit: <http://www.caci.co.uk/images/documents/776.pdf>
6. There are three caveats - members of stakeholder organisations asked to complete the survey via the web-links were likely to exhibit *self-selection bias*; similarly, it is also reasonable to assume that the majority of people attending the Roadshow Events already had an interest in the subject and may also exhibit *response bias*¹; whilst the mailing findings may be subject to *non-response bias* (i.e. respondents have a particular interest in the survey topic, whether for or against, not shared by the majority of non respondents). An incentive was included to reduce the risk of this.

¹ Where face-to-face respondents answered a question in way they think VWT wanted them to.

- 7 Survey Questions addressed: attitudes to biodiversity, pine martens and potential restocking; if and where, respondents had heard about pine martens; and collected more information about sightings for VWT to investigate. Questions were included to establish if respondents' interests or work influenced their responses.
- 8 Literature was reviewed (scientific papers along with other reports and articles) on the reintroduction of carnivores to incorporate any relevant methodology, questions and lessons that could be applied regarding researching public attitudes to carnivores and past reintroductions, including research on contingent valuation and willingness-to-pay (WTP) and an eco-system services approach (see p20-25). **NB. It is recognised that people find it difficult to put monetary values on things that are not traded in markets like goods and services, so respondents' WTP should only be taken as one indicator along with their other answers to questions about whether they would support pine marten restocking per se and their reasoning behind the latter. In particular, refusals to answer this question, zero bids, and high bids regarding WTP, are open to a variety of interpretations. Consequently, the first two have been omitted from analyses and bids of *more than £100* have been treated as £100, to enable comparison with Bright & Halliwell (1999) findings. In the future, it may be preferable to calculate what a re-introduction of pine martens would cost in public expenditure and then ask whether the public would support this.**

Survey Findings

- 9 **The three surveys yielded 871 viable responses in total.** These comprised:
 - 372 viable mailing responses, an overall response rate of almost 5% (4.96%). 372 responses provided a margin of error of +/- 4.95% at the 95% confidence level. There were 26 Welsh language mailing respondents, around 7% of all mailing respondents.
 - 245 completed responses to the Web-link survey and ten of these were Welsh language respondents.
 - 254 surveys completed during the ten Roadshow Events, all in English.
- 10 **Overall around 42% of survey respondents had given a great deal of thought to the loss of biodiversity in the UK and 36% a fair amount.** By comparison, less than one quarter of respondents to the Defra survey in England (2011) had given either “a great deal” or “a fair amount” of thought to this issue.
 - **Almost 60% of Web-link survey** respondents had given a great deal of thought to the loss of biodiversity in the UK, significantly higher than Roadshow (circa 42%) and the Mailing respondents overall (31%).
 - Eight of the ten Welsh responses from Web-link survey had given A great deal of thought to the loss of biodiversity in the UK; and two a fair amount; so they appeared more concerned than all other survey respondents, perhaps because of their Welsh origins. This supposition is reinforced by the **Welsh language Mailing**

respondent's finding, as half of these respondents indicated that they had also given it a great deal of thought.

- **Consequently, Web-link and Welsh language respondents who had given a great deal of thought to the loss of biodiversity could be invited by The Vincent Wildlife Trust to promote awareness of the pine marten and good domestic and wildfowl husbandry to avoid conflicts with the pine marten, as the project develops.**

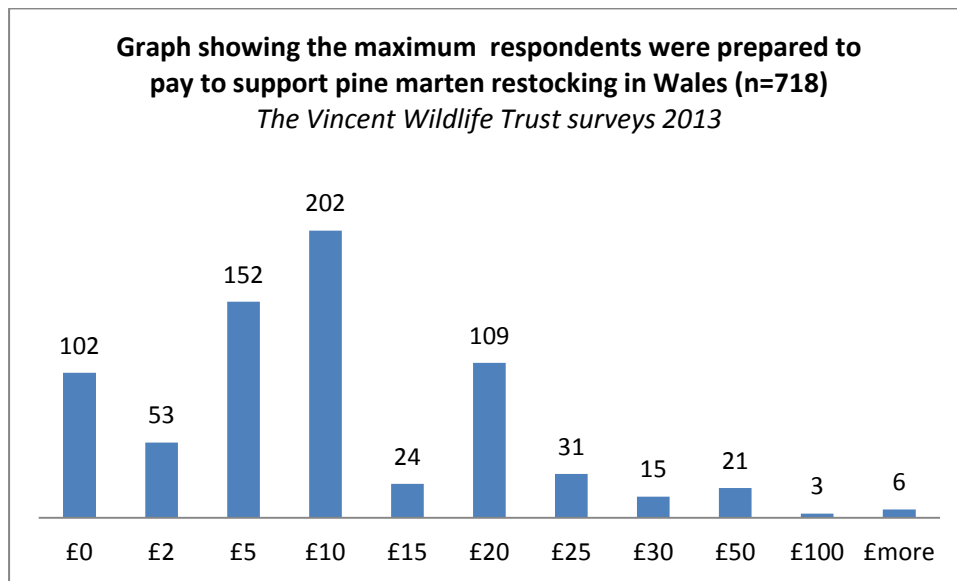
- 11 More than nine out of every ten survey respondents, 795 in all, had heard of the pine marten.** Of the **36 Welsh language respondents**: Around eight out of ten *mailing survey respondents* and *all ten Web-link Survey respondents* had heard of the pine marten.²
- 12 46.6% of respondents overall, indicated that the most frequent way that they had heard about pine martens was from watching TV programmes, 9.5% of all respondents (83) skipped this question.** Breaking down these respondents by survey method they comprised: 51.1% of Mailing respondents; 45.1% of Roadshow attendees; and 43.7% of Web-link respondents. The second most frequent method mentioned by Mailing and Web-link respondents was through education, just over 20% of these respondents in each case. Magazines and/or newsletters were the third most often identified means, but the Internet and social media was almost as frequently mentioned by Web-link respondents (circa 18%).
- 13 Overall 75% of respondents indicated that it was *very important* to them that the pine marten did not become extinct, and an additional 20% of respondents felt that it was *important*. The overall rating average was 2.67 where: 3 = *very important*; and 1= *not important*.**
- 14 In total 113 survey respondents claimed to have seen a live pine marten, out of 871 who completed the surveys, circa 13%.** The data describing when and where respondents had seen evidence of pine martens in Wales was collected and passed on to The Vincent Wildlife Trust to verify (as polecats and other species are often mistaken for pine martens by the untrained eye); and added to the existing sightings database.

Restocking

- 15 90.9% of all respondents indicated that they would support restocking.** 85% of **Mailing Survey** respondents said that they would support restocking. A higher proportion, just over nine out of every ten Web-link respondents and all but two Roadshow Event respondents indicated that they would support restocking; self-selection bias might be a factor here. **The ten Welsh language Web-link respondents all wished to support the recovery of pine martens in Wales; and similarly, a higher proportion of Welsh language mailing respondents indicated that they**

² This may be an anomaly due to the small sample size.

would support restocking compared with mailing respondents overall (24 out of 26).



- 16 Selecting from a range of £0 to more than £100, in total 202 respondents (23.2%) overall indicated that they would pay £10 to support pine marten restocking in Wales and a further 152 (17.5%) would pay £5, the next most frequently mentioned amount. 109 respondents were prepared to pay £20, whilst 102 indicated that they either could not, or would not, pay anything; overall 153 respondents skipped this question (17.6%).
- 17 **Overall, two thirds of all survey respondents (616 out of 871) average Willingness to Pay (WTP) was at least £13.96** (bids of more than £100 were treated as £100 for this analysis). **This is broadly consistent with Bright & Halliwell (1999) findings with the caveat that the £1 bid was excluded from VWT's surveys: Bright & Halliwell's mean WTP for the public (n=413) was £8.35 (£12.50 at today's prices), but for farmers (n=408) their mean WTP was actually higher, at £10.26 (equivalent to £15.40 today)³; the VWT surveys included the public and farmers.** The latter were prepared to pay an average WTP of £16.18 (n=96). Those involved in Wildlife Conservation (as one would expect), were prepared to pay the most to support restocking, an average WTP of £19 (n=124); and the Leisure/Tourism segment the least, an average WTP of £15.60 (n=67). **VWT should promote the opportunities and benefits presented by a thriving pine marten population to the Lesiure/Tourism sector.**
- 18 The most frequent amount **Mailing respondents** were prepared to pay to support pine marten restocking in Wales was £10 (around one quarter of those that answered this question, 73 respondents); the next most popular amount was £5 indicated by 67 respondents. 216 Mailing respondents were prepared to pay at least £5, some 58.1% of Mailing respondents. The one mailing respondent who was prepared to pay more

³ Prices have risen by about half since the Millennium (RPI = 150, where January 2000=100, Institute of Economic Affairs 15th July 2013) [Data Source: ONS]³

than £50 was a Welsh language respondent who indicated that they were prepared to pay £100.

- 19 Similarly, the most frequent amount **Web-link respondents** were prepared to pay to support pine marten restocking in Wales was £10 (just over one third of those that answered this question, 70 respondents); the next most popular amount was £5 indicated by 38 respondents. Five **Roadshow Events respondents** indicated that they were prepared to pay more than £100, this may be the result of *response bias*, as this was the only survey methodology providing a face-to-face opportunity, consequently people may have been inclined to be more generous.
- 20 Discounting the zero bids and those who did not answer this question, around 64% of **Mailing survey respondents'** average Willingness To Pay (WTP) was £13.06. Applying the same criteria to just the **Welsh language mailing respondents**, the latter's average WTP was more, at £14.42 (n=19). 73% of **Web-link respondents** indicated that they were prepared to pay an average one-off payment of £14.15, treating the one bid of *more than £100* as £100. The **Welsh language weblink respondents'** average WTP was considerably higher at £26.25, but this is likely to be an anomaly due to the small sample size (n=9). Combining Welsh language Weblink and Mailing respondents, the WTP average was £14.22 (n=27). The average WTP for 73% of **Roadshow Events respondents** was at least £14.90, higher than the other two survey methods probably caused by response bias.
- 21 745 respondents gave reasons why they were in favour of restocking pine marten (85.5% of all respondents that completed surveys). Nearly one quarter of respondents to this question (168), constituting 22.6% of responses alluded to the importance of the pine marten being a *native species*, while 94 (12.6%) mentioned "Wales" specifically. 129 survey respondents stressed the importance of *increasing biodiversity* (17.3%); whilst 111 respondents thought it was important to *prevent extinction* (14.9%). Almost 10% of respondents emphasised *restoring the natural balance*.
- 22 **Only nine respondents overall were prepared to pay anything to prevent pine marten restocking, although 62 respondents answered this question altogether.** 42 Mailing respondents answered this question about paying into a fund to prevent restocking (11.3% of all Mailing respondents), but only six mailing respondents were prepared to pay to prevent restocking pine martens in Wales. Just two Web-link and one Roadshow Event respondents were prepared to pay to prevent restocking.⁴
- 23 **Overall 64 respondents gave reasons why they were against restocking pine marten in Wales, 40 of these were Mailing respondents.** Predation on other mammals, birds and their eggs were frequently given as reasons; as was the need for further research before any action is taken to prevent damage to existing habitats and ecosystems; and to ensure that money is not wasted. **NB. The Vincent Wildlife Trust**

⁴ Mailing - one in Countryside management and ex RSPB £25; Water Bailiff £10 (*eat woodland songbird eggs*); Farmer, BASC £2; Weblink - Farming, Forestry & RSPB £5 (*wouldn't be Welsh*).

will need to address these factors if restocking is subsequently planned. 20 *Web-link respondents* indicated why they were against restocking pine martens in Wales. These respondents seemed better informed about the pine marten than the Mailing respondents in general, perhaps another indication of self-selection bias. Web-link respondents were particularly concerned about affecting the local gene-pool through re-introductions and the fragmentation of habitats adversely affecting re-introductions. Only two Roadshow Event respondents provided reasons. The one Welsh language mailing respondent who gave a reason why they were against restocking commented: *“Lack of natural habitat and the danger of upsetting the balance in our present habitats.”*

24 **Overall just over one third of respondents (298) indicated which organizations they were members of.** 99 Mailing respondents indicated which organisations they were members of (26.4% of all mailing respondents); just 73 Roadshow Events respondents (28.7%); compared to half of all Web-link respondents 121 (49.4%) (and five Welsh Weblink respondents). The Weblink segment is likely to exhibit self-selection bias as illustrated by their high membership of Wildlife conservation charities.⁵ Membership of the RSPB was similar across all three survey segments - around 60% of respondents that had answered this question from each segment were members. However, there were significant differences elsewhere:

- In contrast to the other two segments, Web-link respondents were most frequently members of the Wildlife Trusts Wales 62% (n=75), compared with circa 40% of Roadshow Events respondents and just around 20% of Mailing respondents. However, this is very likely skewed because The Gwent Wildlife Trust and the Brecknock Wildlife Trust promoted the survey on their websites and Facebook pages, respectively.
- The second most frequent membership indicated by the Mailing segment was the National Farmers Union (NFU) Wales with circa 23% (n=23), the other segments NFU memberships were less than 10% (Roadshow Events) and 5% (Web-link).
- Mailing respondents were more likely than the other two segments to be members of BASC and the Country Land & Business Association, but membership numbers were only in single figures.

25 **Mailing survey respondents who were members of either the RSPB or the Wildlife Trusts Wales were most likely to support restocking. Members of the Country Land and Business Association and/or members of the Game and Wildlife Conservation Trust, BASC or NFU Wales were least likely to support restocking, indicating the need for VWT to work at addressing these respondents' concerns about restocking. Nevertheless, in all cases, significantly more respondents were in favour of restocking than against it.**

26 Overall three out of every four **Mailing respondents** were in favour of restocking. **The Mailing survey respondents least likely to support restocking worked in**

⁵ The weblink for the survey was promoted by two Welsh Wildlife Trusts to their respective memberships.

countryside management; followed by those that worked in farming or game keeping. These findings highlight that VWT need to address their concerns when implementing any restocking strategy. In particular, VWT should consult with stakeholders like Gamekeepers to establish whether, for example, compensation would be necessary to offset any loss of income directly resulting from the introduction of pine martens. Mailing respondents that worked in leisure/tourism were most likely to support restocking, six out of every seven of these respondents.

Comparison of Hotspot and Rural Wales responses

- 27 There were 196 completed surveys returned by **Mailing respondents** living in designated “Hotspot” areas” from the 3,929 packs that were successfully delivered, constituting a response rate of almost 5%. The response rate differed significantly between the Hotspot areas. 3,431 mailing packs were successfully delivered to Rural Wales addressees, and 176 completed responses were returned, a response rate of 5.13%. The difference between the response rates of the two samples was not significant at 95% confidence level. 14 of the 26 Welsh language respondents from the mailing, were located in Hotspots and 12 lived in other areas of Rural Wales.
- 28 A greater percentage of respondents from the **Hotspots** (74%) had given either *A great deal* or *a fair amount* of thought to the loss of Biodiversity in the UK, than Rural Wales respondents (68.4%). Whilst, around nine out of every ten respondents located in identified Hotspots had heard of the pine marten. A slightly smaller proportion of Rural Wales respondents had heard about pine martens. Hotspot respondents and Rural Wales respondents gave similar importance to preventing the pine marten becoming extinct, with average rating scores of around 2.6, (where 3 = *very important*, 1 = *not important*). Two thirds of both segments thought that it was *very important* to prevent this happening.
- 29 Around four out of every five respondents had not seen any evidence of pine martens at all, comprising 77% of Hotspot respondents and 82.4% of respondents from Rural Wales. A larger percentage of **Hotspot survey respondents** (17.9%) claimed to have seen a live pine marten than Rural Wales respondents (13.1%), 35 and 23 respondents respectively.
- 30 More than nine out of every ten **Rural Wales survey respondents** (161) indicated that they would support the recovery of pine martens in Wales by restocking. This was a higher proportion than Hotspot survey respondents, where almost eight out of ten respondents would support restocking (154 Hotspot survey respondents overall). The reason for the difference might be because of the real or perceived potential damage to game and poultry in the Hotspot areas. Further secondary analysis to explore any causal link could be subsequently undertaken if required.
- 31 The average WTP was £11.77 for 58% of **Hotspot survey respondents**, i.e. excluding £0 bids and those that declined to answer this question. The average WTP was £14.25 for 70% of **Rural Wales respondents**, i.e. excluding £0 bids and those

that declined to answer this question. ***This is a significantly higher WTP than Hotspot respondents, around 21% more.*** Further investigation would be needed to see if this mirrors the findings of Williams *et al* (2002) i.e. where people had had more direct experience of wolves their attitudes tended to be more negative, in this case towards the pine marten. ***This reinforces other survey findings highlighting the need for VWT to consult with stakeholders in these Hotspot areas to address any concerns.***

- 32 Only five respondents from Hotspot areas were prepared to pay to *prevent re-stocking* pine martens in Wales and the maximum amount was £25, (compared with 114 Hotspot respondents who were prepared to pay to *support restocking*). A further 25 answered this question but were not prepared to pay anything (making 15.3% of all Hotspot respondents). The two Welsh language Mailing respondents that were against restocking were both located in a Hotspot - Aberystwyth, (Capel Bangor and Goginan) - but neither was prepared to pay anything into a fund to prevent restocking. 12 Rural Wales respondents answered this question (6.8% of Rural Wales respondents), but only one was prepared to pay anything to prevent restocking, and then just £5. **This was in stark contrast to the 124 Rural Wales respondents (circa 70% of these respondents) who were prepared to pay something to support restocking pine martens in Wales.**
- 33 **A larger number of Hotspot respondents were members of the National Farming Union Wales (n=16, 32%) around one third compared with Rural Wales respondents (n=7, 14.3%). The higher proportion of NFU Wales' members might account for the smaller proportion of Hotspot respondents who were prepared to support the recovery of pine martens in Wales compared with Rural Wales respondents (see Q7). Subsequent secondary research could be undertaken to test if there is a causal link.** 146 Hotspot respondents and 127 Rural Wales respondents skipped this question.
- 34 **A breakdown of Hotspot respondents by ACORN classification (CACI), indicated that ACORN Types 4-8 were most frequently found among these respondents. These are all classified within ACORN Group B Executive Wealth. The latter are high income people, successfully combining jobs and families. These findings appear to endorse Williams *et al* (2002) conclusion, i.e. a favourable attitude to carnivores had a positive correlation with income.** The classification breakdown of Rural Wales respondents by ACORN (CACI), whilst similar to Hotspot respondents, appears to support Williams *et al* (2002) findings, that attitudes to carnivores also had a positive correlation with education.
- 35 **Hotspot respondents** had an older age profile with almost one half (49.5%) being aged 55 or older, compared with just over one third (36.7%) of the Rural Wales respondents. In particular, there were significantly more Rural Wales respondents in the 18-24 and 25-34 categories - circa 50% more in each of these age categories. Regarding gender there were slightly more male respondents from Hotspot areas just over one half of these respondents (51%). However, there was more of a gender bias

among **Rural Wales** where nearly 57% of respondents were female. *VWT will need to take this into account when devising marketing support strategies for the project.*

Comparison of Roadshow responses from Hotspot and Rural Wales events

- 36 There were 254 surveys completed during the ten **Roadshow Events**: A slightly higher percentage of respondents had already heard of the pine marten at events in Hotspot areas (92.8%) compared with respondents attending events held outside Hotspot areas (86.3%). 84.3% of respondents at events held away from Hotspot areas, thought it was very important to prevent the pine marten becoming extinct, compared with 78.9% in Hotspot areas.
- 37 **14.5% of respondents attending events in Hotspot areas claimed to have seen a live pine marten, significantly more than those at events outside Hotspot areas (circa 6.9%). Twenty nine attendees at Hotspot events versus seven attendees at non-Hotspot events indicated where they had seen evidence of pine martens.** This appears to reinforce the proposition that pine marten populations were more prevalent in the identified Hotspots; however VWT will need to analyse the sighting locations to substantiate this, as the sightings were not necessarily local to the events.
- 38 **All but one respondent in each event grouping indicated that they would support restocking pine martens.**
- 39 The main differences between event respondents from either category were:
- Four events attendees in the **Hotspot areas** were prepared to pay more than £100 in support of the restocking; only one respondent from events in non-Hotspot areas was prepared to do this.
 - 46.7% of attendees at **non-Hotspot events** were members of the Wildlife Trusts compared with around one third of Hotspot event attendees (34.9%).
 - A greater proportion of **Hotspot attendees** were members of the RSPB (65.1%) versus one half of those who attended events outside the Hotspot areas.
 - **More than one third (36.4%) of respondents to events in Hotspot areas had worked in Leisure and Tourism a significantly larger proportion than respondents who attended events outside Hotspot areas (11.8%).** *The Vincent Wildlife Trusts' marketing communications strategy should take this into account when developing future plans.*
 - Similarly, 18.2% had been employed in Forestry at Hotspot events compared with 5.9% at non-Hotspot events.

2.0 Research Background

2.1 Research Context

2.1.1 Project background

2.1.1.1 The Vincent Wildlife Trust (VWT) has a long history of pine marten conservation and research and undertook the first ever national survey of the species in 1980-1982. During the period 1995-2007 the VWT focused on pine marten survey and detection work in Wales. Subsequently, the Trust ran a project between 2008-2011 to investigate the distribution and status of pine martens in England and Wales. This employed a full-time Project Manager.

2.1.1.2 The **People and Pine Martens in Wales project** was developed from the recent England and Wales pine marten conservation strategy which key stakeholders contributed to including: the Countryside Council for Wales, Forestry Commission Wales (the latter two subsequently part of Natural Resources Wales) and Snowdonia National Park. It was felt important to understand the effect an increasing or reintroduced pine marten population might have on humans and to understand if there might be any anthropogenic factors that could either slow down or increase pine marten recovery.

2.1.1.3 This project progresses elements of the strategy within Wales. Pine martens are one of the rarest mammals in Wales, following a dramatic decline due to persecution and habitat loss. The Vincent Wildlife Trust's (VWT) goal is to restore pine martens throughout Wales, working with Welsh Government bodies, conservation organisations and landowners. VWT's vision is to see this species become a symbol of a healthy, thriving natural environment. A cost-effective combination of activities has been designed to progress pine marten conservation in the Principality.

2.1.1.4 The 'People and Pine Martens in Wales' project, funded by The Co-operative, was designed to understand the distribution of the pine marten in Wales and improve habitat connectivity. This work will inform future conservation decisions, aimed at the restoration of the species here. The project could subsequently be extended to England, if appropriate, in the future.

2.1.1.5 As predators, pine martens play an important role in regulating potential pest species, and conservation action on their behalf will directly benefit other woodland animals by improving habitat. Pine martens may predate poultry, but this is usually a rare occurrence and can be prevented using simple and effective husbandry techniques.

2.1.1.6 The recovery of the pine marten in Wales has the potential to benefit the economy, with people visiting Wales to see pine martens and bringing revenue to local hoteliers and businesses.

2.1.1.7 To aid recovery, it may be appropriate to restock the pine marten population in Wales, by moving a small number of animals from other areas, such as Scotland or Ireland, where populations are healthy. Data collected from the project survey will inform future planning and decision making about this.

2.2 Project aims and objectives

The project has four elements:

- (i) **raising awareness of the plight of the pine marten through various publicity activities and engaging the public in an opinion survey about pine martens, including questions about reintroduction/restocking to boost recovery;**
- (ii) identifying areas of good woodland connectivity for the pine marten for the location of specially designed pine marten den boxes erected in woodlands with the help of volunteers, as a temporary measure for enhancing habitat;
- (iii) undertaking a thorough habitat and other environmental factor assessment to ascertain where habitat in Wales is suitable for a potential pine marten reintroduction/ restocking plan;
- (iv) carrying out intensive, all year round detection activities at sites in mid Wales, where the last unequivocal evidence of pine martens in Wales in the form of a positively tested scat sample was recorded in 2007, and where a number of good quality sightings have been recorded in the last three years.

2.3 Research aims and objectives

- 2.3.1 The *People and Pine Martens in Wales* project included a full public survey using a representative sample of key sections of the population to ascertain opinions on the need for pine marten recovery, including potential reintroduction or restocking plans.
- 2.3.2 The survey had multiple elements including:
 - postal and on-line questionnaires targeted at specific sectors such as countryside workers and interest groups;
 - a publicity road-show visiting key town centres and major Welsh events, as well as the foyers/car park areas of appropriate Co-op stores.
- 2.3.3 This research was designed to raise awareness of the pine marten and the project in a fun, engaging way, whilst providing opportunities to ask the public for feedback on a set number of questions.
- 2.3.4 It was perceived that conflict issues could arise, so publicity materials used at the road-show and in other publicity activities, were produced to inform the public about how these issues may be overcome; and indeed how a healthy population of pine martens could benefit Wales.
- 2.3.5 The research strategy was designed to engage the public in an opinion survey about pine martens and to assess awareness of the pine marten, and in particular, to:
 - collect public sightings for VWT to follow-up, evaluate and determine future fieldwork areas;
 - elicit attitudes to pine marten restocking in Wales to boost recovery;
 - compare attitudes to pine martens among identified stakeholder groups.

2.4 Research Methodology

The Vincent Wildlife Trust distributed questionnaires across rural Wales to gain a better understanding about attitudes towards pine martens. After:

- Tokar *et al* (2010), the survey was made available in paper (distributed via mail) and by hand at shows;
- Worthington *et al* (2010), the survey was made available online, using SurveyMonkey via a web-link supplied to stakeholder group membership databases and e-newsletter recipients, and those linked via social media;
- ADAS *Polecats study* (1996), Welsh language versions of all materials were produced.

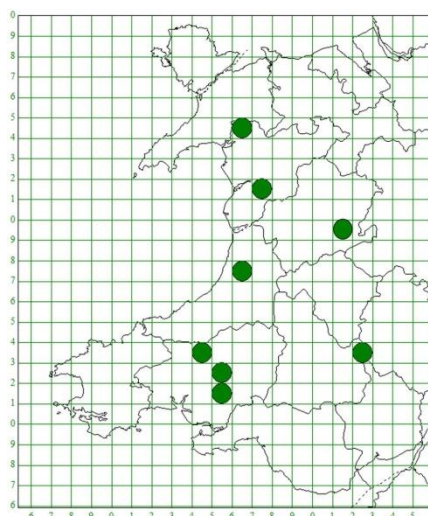
Three public surveys were carried out through the Spring and Summer of 2013 by project staff and the marketing research consultant working on behalf of The Vincent Wildlife Trust (VWT):

- The mailing survey was dispatched in April;
- The Web-link went live in April and remained active until 30th August;
- Survey responses were also collected from Roadshow Events undertaken between the 6th April and 7th May 2013.

2.4.1 Determining the geographical distribution of the mailing survey

2.4.1.1 Given the scarcity of pine marten populations in Wales today it was important to build on the current database of sightings and other records. Consequently, part of the mailing was targeted at areas where there had been recent pine marten evidence. This evidence comprised physical evidence including live sightings, dead sightings and/or field signs of pine martens. The latter included: scats and tracks. The areas with previous recent sightings were termed “Hotspots” (see hectad map below).

2.4.1.2 The map shows the location of hectads (10x10km squares) with the highest pine marten occupancy (based on high-scoring sightings reports and other evidence, such as scats) in Wales at the beginning of 2013.



The eight identified areas were:

Snowdonia (Geological National Grid Sheet) SH64-
Blaenau Ffestiniog, Beddgelert,

SH71- Dolgellau;

Central Wales: SN67- east of Aberystwyth (Devil's
Bridge, Llanafn, Capel Bangor)

Mid Wales: Newtown (Powys)

Carmarthenshire: SN51- Cefneithin, Ammanford;

SN43- Llandysul, Pencader, Gwyddrug;

SN52- Brechfa, Llangathen, Llanfynydd.

SO23 - Black Mountains

- 2.4.1.3 In terms of the areas defined on the grid, the company CACI was commissioned, (a socio-economic mapping specialist), to use the map grid squares to define six of the eight areas. The exceptions were Newtown (where the four grids which cover Newtown were taken) and the Black Mountains (which straddle two very sparsely populated grids).
- 2.4.1.4 Sightings in the Brecon area applied roughly to a triangular area north of Crickhowell, east of Talgarth and south of Hay-on-Wye, but most recent sighting records came from the Talybont-on-Usk area. Where the selected grids straddled the border with England, only addresses located within Wales were used.
- 2.4.1.5 Only one questionnaire was sent per household, which reduced the total number of available addresses in each defined area and each hotspot area needed to derive 500 viable addresses (see following table summarising available populations). Consequently, in an area like the Black Mountains, a decision was taken to extend the defined area to ensure 500 households were included.

CACI Table of Population Counts in eight identified Hotspot areas:

Area	Households	Population 18+
Blaenau Ffestiniog	719	1,161
Dolgellau	938	1,596
Cefneithin	4,713	8,153
Brechfa	562	1,031
Llandysul	705	1,233
Llanafn	694	1,230
Newtown	5,398	8,781
Black Mountains	203	382

- 2.4.1.6 To help ensure VWT met their objective to receive 30 responses per catchment, CACI recommended using the following strategy in selecting and targeting VWT's required locations.
- 2.4.1.7 CACI selected 500 addresses for each of the eight VWT defined locations, plus an additional 3,500 across the rest of rural Wales. CACI provided a total of 7,500 named addresses across Wales. The households selected in each of the eight VWT defined locations represented the underlying population of those areas in terms of age, gender and life stage (measured using ACORN – CACI's geo-demographic segmentation tool). Whilst the data were not robust enough to specifically identify the working status and ethnicity of a resident, this is effectively addressed by using ACORN.

- Taking the eight defined areas CACI ensured each study area had at least 1,000 households within it. In most cases (6 out of 8) this meant extending the definition beyond a single grid square.
- Within each of the defined areas, CACI selected 500 names and addresses representative of the area's age, gender and ACORN breakdown.
- For the rest of Wales top-up, 3,500 names and addresses representative of the eight defined areas' age, gender, ACORN and urban / rural breakdowns were selected – to make sure these named addressees were as similar to the defined area residents as possible.

2.4.1.8 The extra addresses were to help VWT to accumulate the 210 responses required if in any instance there was a lack of participation from one of the areas. The remaining 3,500 named addresses from the rest of Wales were selected from areas similar to the “Hotspot” areas in terms of their rural setting, and selected based upon the age, gender and ACORN breakdown of those areas. Rural areas were targeted over urban areas, as residents in rural areas are more likely to have opinions on and be affected by a pine marten restocking programme.

2.4.1.9 Each address had the Acorn classification appended to enable VWT to identify demographic patterns and trends amongst the responses. To access the Acorn user guide and clear descriptions of each Acorn Type visit:

<http://www.caci.co.uk/images/documents/776.pdf>

2.4.2 Survey trialling

The questionnaire was initially trialed and then refined to take pilot respondents' feedback into account: e.g. Q7 it was deemed necessary to clarify what was meant by “restocking” and the word “concerns” was removed from the leaflet in relation to eliciting feedback, to avoid bias and any negative connotations. The questionnaire pilot covered these topics:

1. How long the questionnaire took to complete;
2. The clarity of the instructions;
3. If any questions were unclear or ambiguous (and if the questions meant the same thing to different respondents);
4. If they felt uneasy about answering any of the questions;
5. If there were any important/critical topic omissions;
6. Whether the layout was clear and attractive;
7. Any other comments.

2.4.3 Survey design and logistics

2.4.3.1 An A4 self completion questionnaire, along with a covering letter, an informative leaflet to raise awareness and a Freepost response envelope, were mailed to 7,500 households in Wales. The latter comprising 4,000 households located in the eight hotspot areas (500 to each) and a further 3,500 households in rural Wales exhibiting the same demographic profiles as the hotspot areas. All materials were printed in

English on one side and in Welsh language on the other, to encourage the maximum number of responses.

2.4.3.2 Simultaneously, online versions of the survey, again in both English and Welsh languages went live (these had the content of the letter embedded in their introduction page); and the web-link address and electronic versions of the accompanying leaflet were sent to relevant organisations for them to disseminate to their members (see following summary table).

How various stakeholder organisations made their members aware of the survey		
Organisations	Communication Tool	Est. audience
Vincent Wildlife Trust	Shared on Facebook page and Twitter (several times)	2,837 Twitter followers & 636 Facebook 'likes'
People's Trust for Endangered Species (PTES)	Shared with Welsh volunteers	117
Federation of City Farms and Community Gardens	Shared in newsletter & on Facebook page	280 'likes'
The Mammal Society	Shared on Facebook page	2,053 'likes'
Denmark Farm	Sent to >200 people in 12 Ceredigion communities who have been involved with the 'Wildlife Where you Live' project	200
Gwent Wildlife Trust	Shared on their website	78 website hits in one month
Brecknock Wildlife Trust	Shared on Facebook page	447 'likes'
	TOTAL	6,648

2.4.3.3 Participants at ten Roadshow Events during April and the beginning of May were either given or picked up printed copies of the questionnaire to complete. These were collected in at the various event venues.

2.4.3.4 Measures were taken to counteract the potential disadvantages of surveys:

- a potential low response rate was countered by including an incentive – participants responding *by 30th June 2013 were to be entered into a prize draw to win a two night stay (including dinner), at the Hafod Hotel, near Devil's Bridge, Aberystwyth* - as an appropriate incentive can lift response by 18%.
- The mailing covering letter and accompanying colour leaflet explained what the survey was about and gave background information to encourage responses.
- A Freepost envelope was included to facilitate postal replies. Research indicates that this may improve responses by 8%.⁶
- In addition, social media was used to promote the online survey including VWT's Twitter and Facebook accounts.

⁶ [Birn, R, Hague, P, Vangelder, P, \(1990\) *A handbook of market research techniques*, Kogan page, London p101, 172.](#)

2.4.4 Reliability and validity

2.4.4.1 Reliability – *reflects whether asking the same question of the same person on a subsequent occasion will elicit the same response* – respondents were able to fill in questionnaires at their own convenience either on-line or on paper, i.e. decide when and where, so the setting was neutral avoiding subject-error except at the Roadshow Events.

2.4.4.2 Validity – *reflects whether the question measures what it is supposed to be measuring* – questions that had been used by external sources for similar measurements were included e.g. Defra and English Nature (previous pine marten survey questions). In addition, to minimise validity concerns and enable triangulation, multi survey techniques were employed.

2.4.4.3 Self-selection bias – It is acknowledged that because members of various stakeholder organisations were asked to complete the survey via the web-links that their organisations provided, their responses were likely to indicate *self-selection bias*. It is reasonable to assume that those that completed the survey are more interested in wildlife per se, than the project population overall and by implication, have greater knowledge about wildlife issues. Similarly, it is reasonable to assume that the majority of people attending the Roadshow Events, already had an interest in the subject and may be prone to *response bias* as this was the only survey methodology providing a face-to-face experience.

2.4.5 Survey Questions Summary

Survey Questions included:

Q 1, Q4, Q7-Q11 addressed attitudes to biodiversity, pine martens and potential restocking, in particular.

Q2 & Q3 were included to establish, if and where, respondents had heard about pine martens.

Q5 & Q6 were included to elicit more information about sightings for VWT to investigate and add to the database for follow-up population range fieldwork.

Q12 & Q13 were included to establish if respondents' interests or work influenced their responses.

The survey follows a tradition of VWT surveys by Dr Johnny Birks (1994), for example, on polecats.

2.4.6 Detailed discussion of why particular questions were employed (Nos. 1-14)

2.4.6.1 Biodiversity and population estimates

- 1 To establish the survey context it was felt important to include a question addressing biodiversity. However, as Spash & Hanley (1994) noted, most people have little or no understanding of what biodiversity means, consequently it was decided to reprise the question on biodiversity that had been included in the DEFRA Survey of Public Attitudes and Behaviours towards the Environment (2009) which gave a definition of biodiversity. Whilst the Defra survey pertained to England originally, the question format was readily transferable to Wales.
- 2 A decision was taken to omit asking respondents to estimate the current population of pine martens in Wales (after Balciuskas *et al* 2010),⁷ as VWT felt that there was insufficient data to enable a population estimate in Wales. Previous published estimates were likely to have been inaccurate and since most people were unlikely to know that there were pine martens in Wales, the question would be spurious.

2.4.6.2 Carnivore reintroductions and previous pine marten research

- 3 English Nature's feasibility study about the reintroduction of the pine marten (Bright & Harris, 1994) canvassed the views of key countryside and conservation organisations. They also reviewed more than 160 pieces of literature (scientific papers, reports and articles) on the reintroduction of carnivores to identify any lessons that could be learned from public attitudes to carnivores and past reintroductions. Reading & Kellert (1993) found that attitudes toward carnivores in North America such as the Black-footed ferret depended on knowledge about them. Bright and Harris (1994) surmised that there would be little knowledge about pine martens in many communities, as the species had vanished from most areas over 150 years ago.
- 4 Bright and Harris (1994) concluded that attitudes to carnivores depended not only on their real impact, but also on their *perceived* impact. Consequently, the inclusion of questions to find out what people already knew or thought that they knew about pine marten behaviour, was considered with a view to dispelling any misconceptions about pine marten behaviour during the project's early development. For example, asking people what they thought was acceptable behaviour from pine martens, to see whether people would be happy with pine martens living in close proximity to them (e.g. in their gardens) and whether they would be worried about threats to poultry and pets. However, it was rejected at this stage of the project as it was felt it might generate a wave of negative reaction, influencing the subsequent success of any reintroduction plans in the future. Especially, as Bright and Harris noted that the attitudes of a minority with vested interests can have a disproportionate effect on the success or otherwise of conservation schemes. In the past pine martens had been widely exterminated as vermin by game rearing interests (Langley & Yalden, 1977).

⁷ Also The Roy Morgan Research Centre's questionnaire on people's attitudes and knowledge about Whales and Whaling, 1992)

- 5 Reading & Kellert (1993) surmised that “*endangered species reintroduction and recovery programmes will rarely succeed if they do not actively consider and incorporate the values, attitudes, behaviours and desires of the local public.*” The Bright & Halliwell (1999) questionnaire results indicated strong support for pine marten reintroductions from the general public albeit tempered by potential non-response bias (20% response rate); however, most farmers and gamekeepers were also in favour. Bright & Harris (1994) noted that “*appropriate public awareness campaigns would be an important requisite for pine marten reintroductions*”...and could be a “*key to their success*”. Consequently, an informative leaflet was included with the mailing and electronic communications. The purpose of this was both to raise awareness about the pine marten and the project, and to provide accurate information about the pine marten to prevent harmful speculation and to correct misinformation. Bright & Halliwell (1999) noted that the inclusion of additional information like this can lead to bias in responses (Hanley & Spash 1993), but they conceded that few people knew anything about pine martens. Consequently, the information leaflet was deemed vital to explain why pine marten reintroduction was being considered in Wales, and to provide factual information about pine martens.
- 6 After Bright & Halliwell (1999) and Worthington *et al* (2010) a question was included at the front end on the survey to determine whether a respondent had prior knowledge of pine martens (Q2) and also highlighted that recipients needed to read the enclosed information leaflet (to help with awareness raising). Tokar *et al* (2010) found that better factual knowledge correlated with positive attitudes towards the Eurasian Otter in Slovenia and its conservation. **Whilst Williams *et al* (2002) found that attitudes toward wolves had a positive correlation with education and income.** Williams *et al* (2002) also revealed a negative correlation with age, rural residence, and ranching and farming occupations. Where people had had more direct experience of wolves their attitudes tended to be more negative. It would be interesting to discover if this was also true with small carnivores like the pine marten.
- 7 Bright & Halliwell’s (1999) question about whether respondents were in favour of reintroduction of the pine marten in specific regions was adapted to apply to restocking in general for this survey Q7. Whilst assessing rural and urban attitudes to wolf reintroductions Nielsen *et al* (2007) used a 5-point Likert scale with 9 attitudinal questions based on Kellert’s typologies of attitudes to wolf reintroductions (Kellert, 1986). However, as in this study, the questionnaire was restricted to two pages by logistics (it was important to produce the questionnaire and all accompanying materials in dual language, English and Welsh, to ensure public accessibility), and so this would not be possible. Many people with little or no knowledge of pine martens would not have been able to contribute much to the survey. Similarly, Reading and Kellert (1993) used a 121 question survey to establish knowledge, values, attitudes, and perceptions towards a proposed reintroduction of Black-Footed Ferrets. They also included an incentive, which VWT also provided. VWT were able to include a total of 13 questions to elicit valuable data.

2.4.6.3 Collecting evidence of the distribution of pine martens in Wales

- 8 The Institute of Terrestrial Ecology (ITE) undertook a survey on behalf of Scottish Natural Heritage to see if the pine marten had increased its range in Scotland (Balharry *et al* 1996). In addition to the field survey work and other evidence gathering of sightings by VWT, Question 5 of the *People and Pine Martens in Wales* survey addressed what evidence of pine martens respondents had seen. The question was adapted from Q4 of the ITE survey, which included: live animal, dead animal, young animal, den, scats and tracks and, an *Other*, category. In this survey it was felt that many people would not be able to distinguish between mature or adolescent animals, so the *young animal* category was omitted; whilst the field signs and sightings were simplified into a single category, which was deemed sufficient for VWT's subsequent follow-up activity.

2.4.6.4 Respondents' potential interest and influence

- 9 A Web-link was sent to various potential stakeholders and special interest groups after Bright & Halliwell (1999) who canvassed farmers, gamekeepers and members of the public's attitudes towards pine marten reintroductions in potential release regions. Jones (1992) had similarly targeted Gamekeepers and County Wildlife Trusts about polecats. They had concluded that failure to gain the support of local residents, in particular where their livelihood is dependent on the countryside, can derail reintroductions e.g. by illegal killing of released animals and indeed effect other conservation projects adversely. Balharry *et al* (1996) had most responses from their survey from Farmers, Foresters, Game Keepers, Ranger/Warden, and *leisure*, so these were included as separate categories. In addition, it was thought pertinent to add Estate Management and Wildlife Conservation. Consequently, Q12 and Q13 were included to establish respondents' allegiances to the countryside and the nature of their work, if indeed they worked in the countryside, as any restocking could have an impact on this.

2.4.6.5 Employing appropriate methodology – Contingent Valuation and Willingness-to-Pay; Eco-system services

- 10 As reintroductions have a financial cost and it is advantageous to assess peoples' receptiveness to this cost, Bright & Halliwell (1999) used contingent valuation methods in their questionnaires by assessing respondent's willingness-to-pay (WTP) (Hanley & Spash, 1993). The amount people are willing to pay, also gives an indication of how strongly they feel about this issue. Moran & Hanley Nickolls (2012) noted that valuation methods use either revealed or stated preference approaches to identify values. In the past contingent valuation has been used in the UK for evaluating support or otherwise for action plans for threatened species and about conservation policy (Garrod & Willis, 1994, White *et al.* 1997, respectively). Consequently, it was decided to include:
- a question asking respondents if they would support the recovery of pine martens in Wales by restocking to increase their numbers (Q7);

- whether and how much respondents would be prepared to pay towards the cost of doing this (Q8)
- a single, most important reason why they were in favour of doing this.

Similarly, respondents who had indicated that they were against restocking pine martens in Wales were asked what they would contribute to a fund set up specifically to prevent restocking (Q10); and the reason why they were against restocking (Q11).

- 11 However, whereas in Bright & Halliwell's (1999) analysis of WTP, zero amounts were counted as a protest; in VWT's survey "£0 bid" was still counted as a positive statement in favour of restocking, but after Hanley & Spash (1993) this was interpreted as either that "*they cannot afford any extra expenditure*" or "*they think biodiversity should be protected by law and we should not have to pay money to protect it*". Similarly, where respondents indicated that they opposed reintroduction, a "£0" bid was still counted as support for this position, but again that respondents either did not wish to pay towards a fund set up to prevent this or indeed that they could not afford to pay towards it. The amount £1 was omitted from the money scale as inflation since the Millennium (post Bright & Halliwell, 1999), had significantly reduced its value. Prices have risen by about half since the Millennium (RPI = 150, where January 2000=100, Institute of Economic Affairs 15th July 2013) [Data Source: ONS)]⁸ and space for the scale was limited. The lowest bid of £2 should have been affordable to most of the population.
- 12 A decision was also taken that it would be informative to know if any respondents felt strongly enough and/or were prepared to pay more than Bright & Halliwell's (1999) upper limit of £100 either for or against the hypothetical reintroduction, consequently an additional category of "*more than £100*" was included even though it was recognised that this may prevent the accurate calculation of an average WTP. Nevertheless, an indicative average WTP could be deduced, but with caveats about validity and reliability.
- 13 It is acknowledged that people find it difficult to put monetary values on things that are not traded in markets like goods and services, so respondents' WTP should only be taken as one indicator along with their other answers to questions about whether they would support pine marten restocking per se and their reasoning behind the latter. In particular, zero bids, high bids and refusals to answer are open to a variety of interpretations. In the future it may be preferable to calculate what a re-introduction of pine martens would cost in public expenditure and then ask whether the public would support this. A footnote regarding the future development of the project: Moran & Hanley Nickolls (2012) concluded that there is a gap in literature addressing the total economic value of a reintroduction and its cost effectiveness. However, it is worth noting that a net economic benefit is not necessarily distributed evenly among a population, there may be winners and losers. Moran & Hanley Nickolls (2012) commented that: "*Typically individuals living within an area into which a species has*

⁸ <http://www.iea.org.uk/blog/inflation-is-still-a-major-problem>.

been reintroduced can suffer tangible economic losses, whilst the more distant general public benefits from the non-use values of the project.” The latter scenario could tend to lead to conflict between the local community and the project, which VWT would need to address to encourage positive outcomes. In particular, VWT should consult with stakeholders like Gamekeepers to establish whether, for example, compensation would be necessary to offset any loss of income directly resulting from the introduction of pine martens.

- 14 In addition to the ecological impacts that reintroductions can have, there are also direct and indirect economic impacts on the local population, including both residents and businesses in the area, as noted by Moran & Hanley Nickolls (2012). As well as valuations that have market value, such as captured actual behaviour of visitors travelling to a site and their subsequent impact on the businesses in the area, or cost of damage to gamekeepers and/or lost revenue (Jones, 1992), for example, there is also “existence value”. That is, the value for knowing that the species exists in its habitat or the value put on preserving the option to see a species in the wild one day. This could perhaps be summed up as “feel-good” factor engendered by the project. In order to take this into account the survey included a question about how important respondents thought that it was to prevent the pine marten, a native species of Wales, becoming extinct (Q4).
- 15 An ecosystem service approach was not considered appropriate at this stage because it tends to involve large scale, complex evaluation, requiring considerable cost and time to complete and it would be difficult to quantify the specific ‘service benefits’ that communities could derive that are attributable to the pine marten. Natural England is currently funding pilots and new studies⁹ which could help VWT in the future to identify particular costs and benefits relevant to the interested stakeholder groups. What ecosystem services do pine martens as a predator in a functioning ecosystem deliver? Managing the habitat for pine martens could mean planting more woodland which would lead to more *carbon sequestration* and an increase in the timber value of the woodland. Since the woodland acts as a sponge saving rainwater from going into the rivers, there would also be a *flood risk management value*, but flood risk avoidance is likely to be difficult to quantify. Additional woodland may also lead to an increase in other woodland species, *biodiversity conservation* which could benefit local farmers, for instance. There is also the direct benefit to the economy through *tourism* from wildlife viewing, although unlike red kites for example, pine martens can be notoriously difficult to see and may be confused with polecats. However, as recorded on BBC’s Springwatch (2008, episode 6), “*pine martens love a free meal, especially if it is peanut butter*”¹⁰, so these apparently shy creatures can be tempted to a feeding station viewing location, usually with peanuts.¹¹

⁹ <http://www.naturalengland.org.uk/ourwork/evidence/ecosystemapproach.aspx>

¹⁰ http://www.bbc.co.uk/nature/life/European_Pine_Marten

¹¹ There are several hides set up in Scotland where you can view pine martens e.g. Speyside Wildlife Centre. Circa £20 pp to visit suggesting business potential that could be transferable to Wales.

3.0 Findings from the Mailing, Web-link & Roadshow Events

3.1 Response rates

3.1.1 The three surveys yielded **871 viable responses** in total comprising:

- 372 Mailing responses (including 26 Welsh language responses);
- 245 completed Weblink forms (including 10 in the Welsh language);
- 254 surveys filled in during the ten Roadshow Events (all in English).

3.1.2 In all 7,500 packs were mailed out, 140 were returned as undeliverable. There were 380 survey responses, however eight were incomplete. Consequently there were 372 viable responses, an overall response rate of almost 5% (4.96%). 372 responses provided a margin of error of +/- 4.95% at the 95% confidence level.

Table 1a - Showing the breakdown of English and Welsh language respondents (Q1) (Mailing Survey - Spring 2013, 372 respondents)		
Answer Options	Response Percent	Response Count
English/Saesneg	93.0%	346
Welsh/Cymraeg	7.0%	26
<i>answered question</i>		372
<i>skipped question</i>		0

3.1.3 Mailing respondents' data were entered online using the SurveyMonkey tool to undertake a comparative analysis of responses, with data collected by other means. The latter included Web-link respondents, who entered data directly via SurveyMonkey, and also data collected at Roadshow Events held in support of the project. The Mailing Survey elicited 26 Welsh language respondents.

3.1.4 There were 315 responses to the Web-link survey, 70 of these were partial responses leaving 245 complete survey responses in total. It is recommended that The Vincent Wildlife Trust browse the partial responses to collate further sightings data where it has been submitted.

Table 1b - Showing the breakdown of English and Welsh language respondents (Web-link Survey - Spring 2013, 245 respondents)		
Answer Options	Response Percent	Response Count
English/Saesneg	95.9%	235
Welsh/Cymraeg	4.1%	10
<i>answered question</i>		245
<i>skipped question</i>		0

3.1.5 There were ten Welsh language respondents to the Web-link Survey which have been analysed separately where appropriate.

3.1.6 There were 254 surveys completed during the ten Roadshow Events held at a variety of venues in Wales.

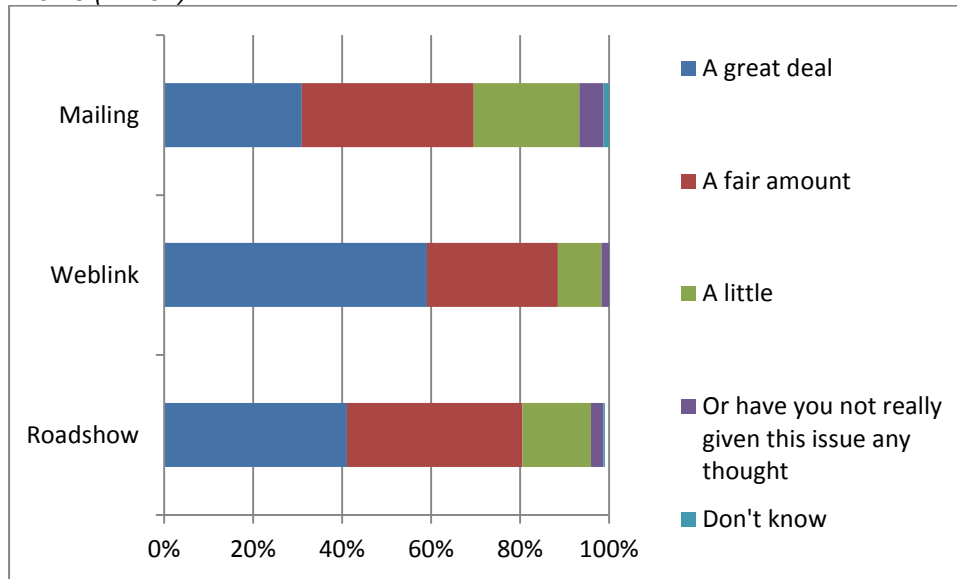
3.2 Biodiversity

- 3.2.1 **Overall around 42% of survey respondents had given a great deal of thought to the loss of biodiversity in the UK and 36% a fair amount.** Respondents to this survey by all means (i.e. Mailing, Web-link and Roadshow event respondents) indicated that they had given a lot more thought to the *Loss of Biodiversity in the UK* than respondents to the Defra survey in England, “2011 Survey of public attitudes and behaviours towards the environment” (see Table 2b below). This could possibly be because the mailing respondents live in rural areas compared to the Defra survey’s representative sample of the English population, which included major conurbations. Less than one quarter of respondents to the Defra survey in England had given either “a great deal” or “a fair amount” of thought to this issue.

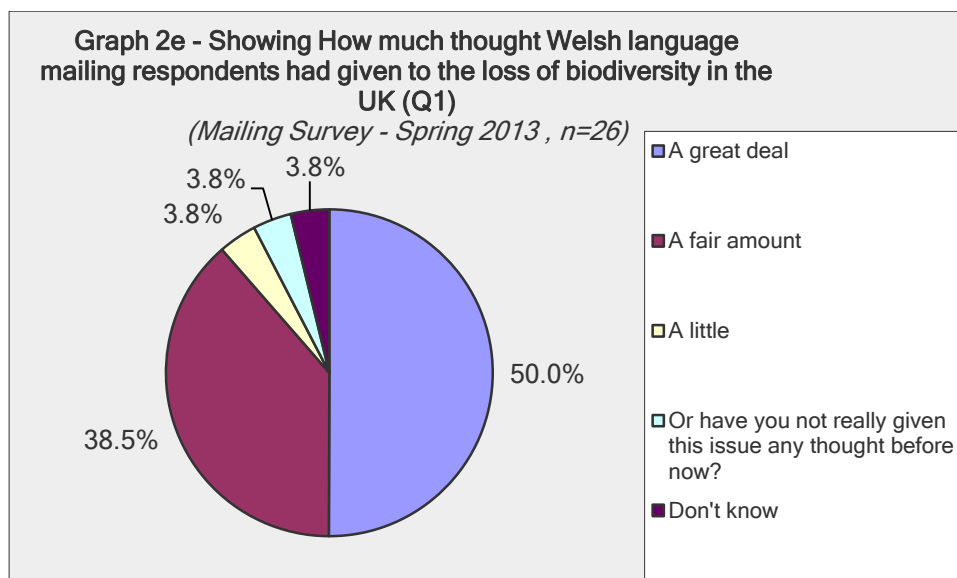
Table 2b. Level of thought given to loss of biodiversity in the UK, 2007, 2009 and 2011			
	2007	2009	2011
<i>A great deal</i>	6%	7%	6%
<i>A fair amount</i>	25%	14%	17%
<i>A little</i>	36%	25%	40%
<i>None at all</i>	32%	49%	33%
<i>Don't Know</i>	n.a.	6%	5%
Source: ATTITUDES AND KNOWLEDGE RELATING TO BIODIVERSITY AND THE NATURAL ENVIRONMENT, 2007–2011, FROM THE SURVEY OF PUBLIC ATTITUDES AND BEHAVIOUR TOWARDS THE ENVIRONMENT; 13 April 2011, Department for Environment, Food and Rural Affairs (©Crown copyright 2011)			

- 3.2.2 The graph below illustrates that nearly 60% of Web-link survey respondents had given a *great deal* of thought to the loss of biodiversity in the UK, significantly higher than Roadshow (circa 42%) and the Mailing respondents (31%). Similarly, if the respondents who indicated that they had given a *fair amount* of thought to the loss of biodiversity in the UK are added to those that had given it a *great deal* of thought to it, then the combined totals for each segment are: Web-link respondents (88.5%); Roadshow respondents (81.5%); and Mailing respondents (69.6%). (Appendix 7)
- 3.2.3 Web-link respondents, in particular, and Roadshow respondents to a lesser degree, are both likely to exhibit self-selection bias i.e. those that completed the survey were more interested in wildlife per se, than the population in general. This is apparent where Roadshow participants, for instance, have chosen to attend the event and complete the survey.

Graph 2a - Showing how much thought respondents had given to the loss of biodiversity in the UK (Q1) Source: Spring 2013 Surveys: Mailing (n=372), Web-link (n=235), Roadshow Events (n=254).

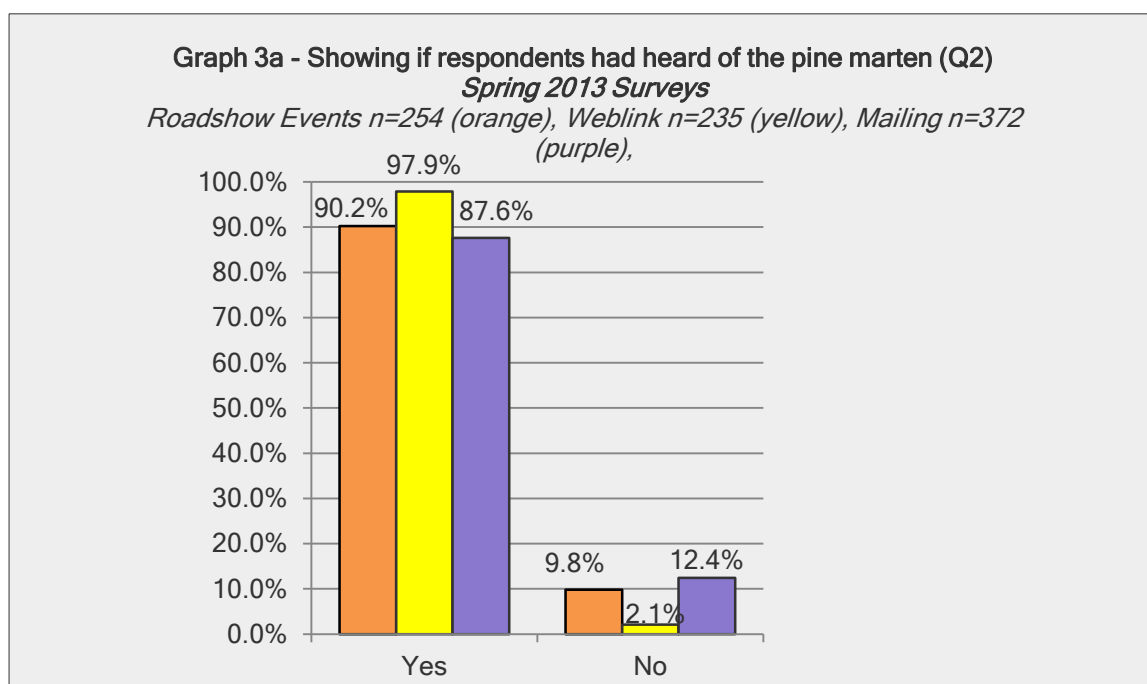


3.2.4 Out of the 10 Welsh responses from Web-link survey: eight had given *A great deal* of thought to *the loss of biodiversity in the UK*; and two *a fair amount*; so they appeared more concerned than all other survey respondents, perhaps because of their Welsh origins. This supposition is reinforced by the Welsh language Mailing respondents' finding, as one half of these respondents indicated that they had also given it *a great deal* of thought (Graph 2e).



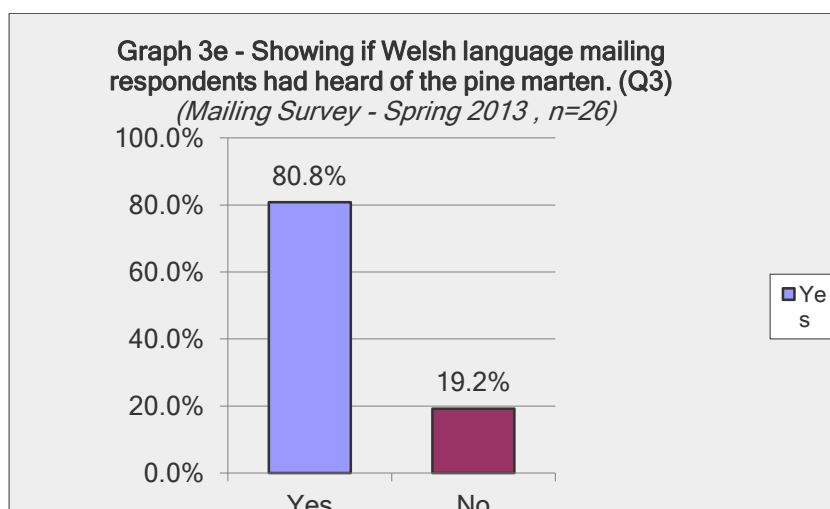
3.2.5 Consequently, some of the Web-link and Welsh language respondents could be approached by The Vincent Wildlife Trust to promote awareness of the pine marten and champion animal husbandry as the project develops.

3.3 Heard of Pine martens

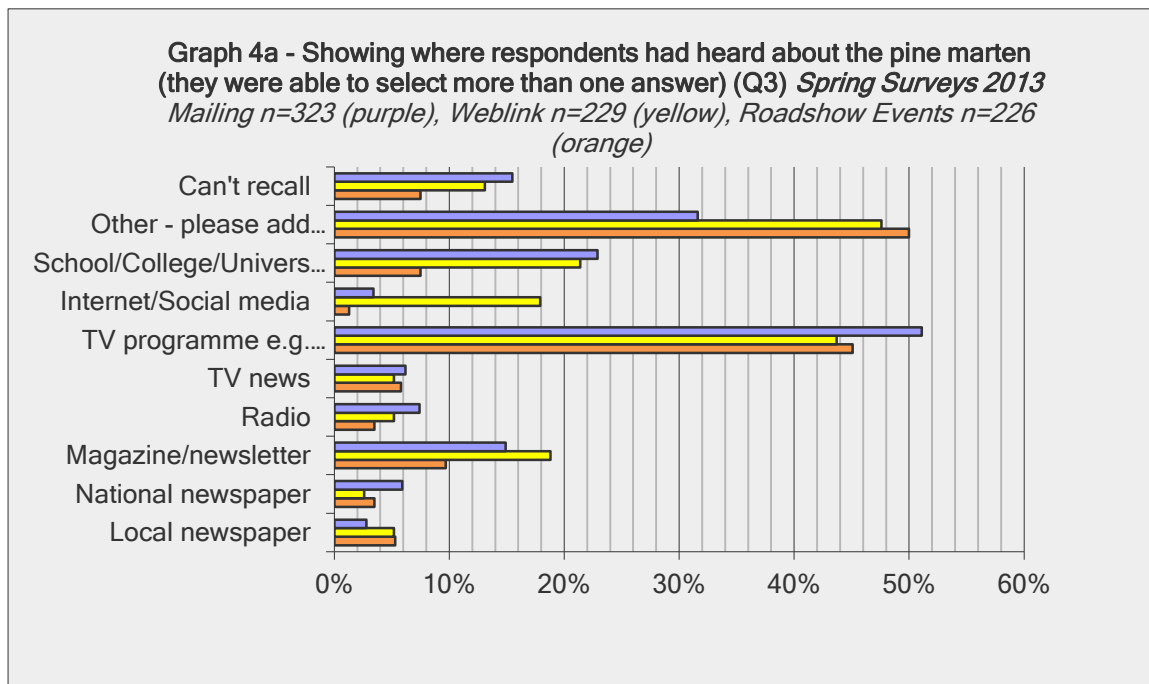


3.3.1 **More than nine out of every ten survey respondents, 795 in all, had heard of the pine marten and nearly all of the Web-link respondents.** However, more than one respondent thought that the pine marten was a species of bird. All respondents answered this question. This compares favourably with Bright & Halliwell (1999) findings where 86.5% of farmers surveyed had heard of the pine marten, but just 81.6% of the public surveyed. This indicates that general awareness appears to have increased over the intervening decade or so, with the caveat that these were different populations that were surveyed.

3.3.2 Of the 36 Welsh language respondents: The ten Web-link Survey Welsh language respondents had *all* heard of the pine marten; whilst around eight out of ten of the 26 welsh language mailing survey respondents had heard.



3.4 Media



3.4.1 **46.6% of respondents overall indicated that the most frequent way that they had heard about pine martens was from watching TV programmes, 9.5% of all respondents (83) skipped this question.** Breaking down these respondents by survey method they comprised: 51.1% of Mailing respondents; 45.1% of Roadshow attendees; and 43.7% of Web-link respondents.

3.4.2 The second most frequent method mentioned by Mailing and Web-link respondents was through education, just over 20% of these respondents in each case. Magazines and/or newsletters were the third most often identified means, but the Internet and social media were almost as frequently mentioned by Web-link respondents (18%).

3.4.3 288 mailing respondents claimed to have heard of pine martens through *other* means, but these largely duplicated the existing choice categories e.g. Books (n=48) & Reading (n=10); General Knowledge (n=35); Scotland (15 mentions); Countryfile (TV) (n=14); Radio (n=14) comprising predominantly Radio Wales and Radio 4.

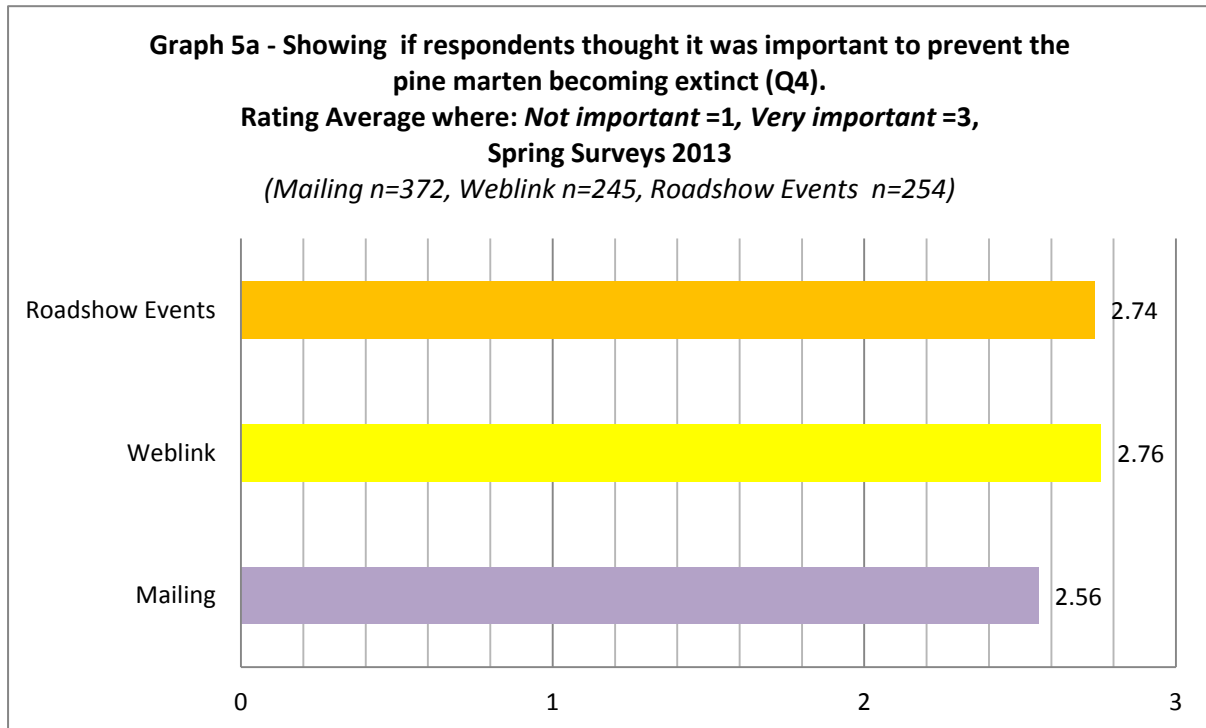
3.4.4 49 Mailing respondents, 16 Web-link respondents and 28 Roadshow respondents skipped this question.

3.4.5 Out of the ten Welsh language web-link respondents:

- three had heard about Pine martens via TV programmes;
- two through School/college or university;
- one in a Magazine/newsletter; one couldn't recall;
- and three by other means, which included Springwatch (TV) twice;
- one of these respondents knew of pine martens from reading the Western Mail.

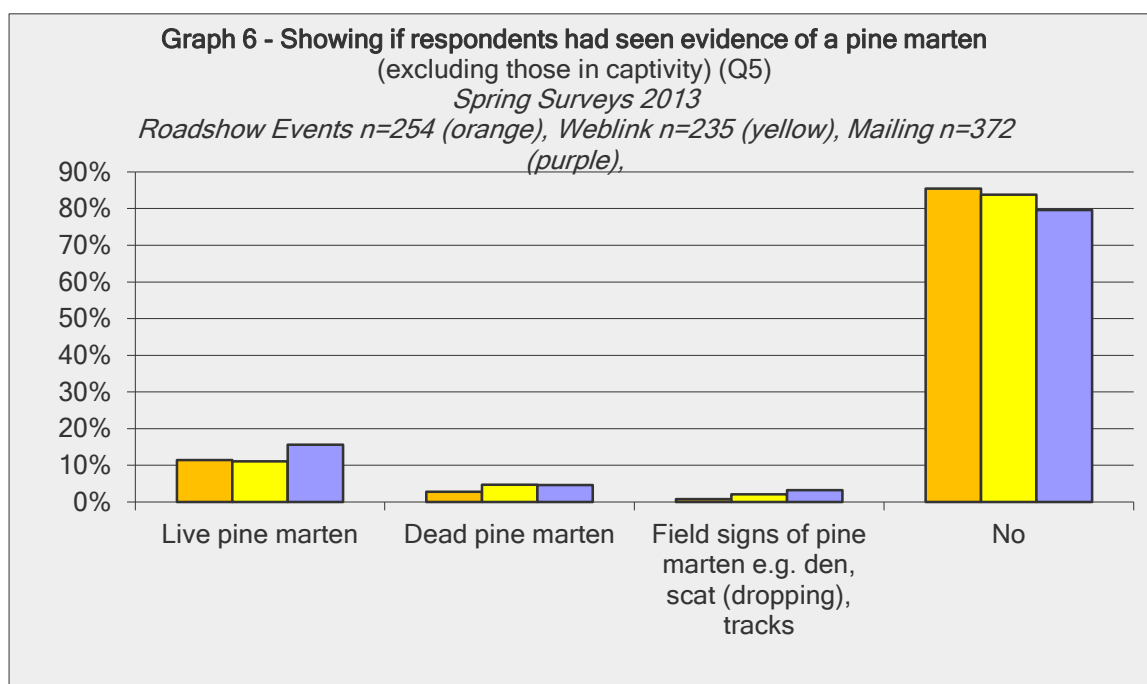
3.4.6 12 of the 21 Welsh language mailing respondents that answered this question, had heard through the TV (the most frequent method), and six via education.

3.5 Pine martens and extinction



- 3.5.1 **Overall 75% of respondents indicated that it was *very important* to them that the pine marten did not become extinct, and an additional 20% of respondents felt that it was *important*. The overall rating average was 2.67 where: 3 = *very important*; and 1= *not important*.**
- 3.5.2 The average rating indicating how important Mailing respondents thought it was to prevent the Pine Marten becoming extinct was 2.56. Two thirds of these respondents thought that it was *Very important*. Only nine mailing respondents thought that it was *not important* and eighteen respondents answered *don't know*.
- 3.5.3 The Web-link rating average was higher than the mailing rating average at 2.76; just two Web-link respondents answered *not important*; and another two, *don't know*. 78.7% of these respondents thought that it was *Very important*.
- 3.5.4 Similarly a rating average of 2.74 achieved by Roadshow Event survey respondents (four out of five of these respondents thought that it was *very important*). None of the Roadshow respondents chose, *not important*, and 81.1% of these respondents thought that it was *Very important*. Both Roadshow and Web-link respondents' findings are likely to be in part the result of self-selection bias.
- 3.5.5 Of the ten Welsh language Web-link respondents: One thought it was *important* to prevent the pine marten becoming extinct and nine thought that it was *very important*, so they felt most strongly of all respondents with a rating average of 2.9.
- 3.5.6 18 of the 26 Welsh language mailing respondents thought that it was *very important* to prevent the extinction of pine martens in Wales, the rating average was 2.54 for this segment.

3.6 Evidence of pine martens



- 3.6.1 **In total 113 survey respondents claimed to have seen a live pine marten out of 871 who completed the surveys, circa 13%.** The graph illustrates that there were broadly similar findings from this question for all the segments analysed. Around four fifths of Mailing respondents had not seen any evidence of pine martens in Wales.
- 3.6.2 However, around double the number of Mailing respondents compared with the other segments, had seen a live pine marten (n=58).
- 3.6.3 Slightly more than four out of every five Web-link and Roadshow Event respondents had not seen any evidence of pine martens; which was consistent with the mailing respondents who answered this question.
- 3.6.4 Considerably less, 26 (Web-link) and 29 (Roadshow Events) respondents compared with the Mailing respondents indicated that they had seen a live pine marten.
- 3.6.5 Only one of the ten Welsh language Web-link respondents and one of the twenty six Welsh language mailing respondents had seen evidence of a pine marten in Wales.

Table 6 - Showing if respondents had seen evidence of a pine marten in Wales (excluding those in captivity) (Q5) (<i>Mailing Survey - Spring 2013, 372 respondents</i>)		
Answer Options	Response %	Response n
Live pine marten	15.6%	58
Dead pine marten	4.6%	17
Field signs of pine marten e.g. den, scat (dropping), tracks	3.2%	12
No	79.6%	296
Other (please specify)		10
	<i>answered question</i>	372
	<i>skipped question</i>	0

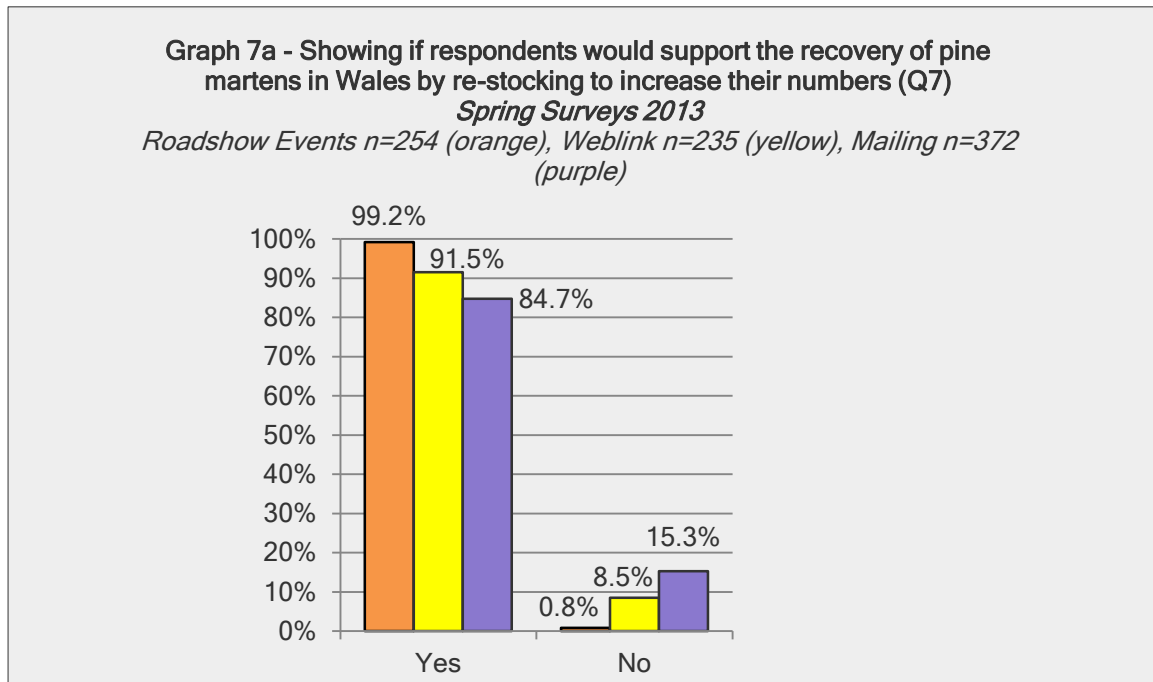
Table 6b - Showing if respondents had seen evidence of a pine marten in Wales (excluding those in captivity) (Q5) (Web-link Survey - Spring 2013, 245 respondents)		
Answer Options	Response Percent	Response Count
Live pine marten	11.1%	26
Dead pine marten	4.7%	11
Field signs of pine marten e.g. den, scat (dropping), tracks	2.1%	5
No	83.8%	197
Other (please specify)		21
<i>answered question</i>		235
<i>skipped question</i>		10

6. Ydych chi wedi gweld rhyw dystiolaeth fod bele'r coed yn bresennol yng Nghymru (ac eithrio rhai mewn caethiwed)? (Web-link Welsh Language n=10, Spring 2013)		
Answer Options	Response Percent	Response Count
Bele'r coed byw	0.0%	0
Bele'r coed marw	0.0%	0
Olion bele'r coed allan yn y maes (e.e. gwâl, baw, olion traed)	0.0%	0
Naddo	90.0%	9
Arall (nodwch os gwelwch yn dda)	10.0%	1
Arall		3
<i>answered question</i>		10
<i>skipped question</i>		235

Table 6d - Showing if respondents had seen evidence of a pine marten in Wales (excluding those in captivity) (Q5) (Roadshow Events Survey - Spring 2013, 254 respondents)		
Answer Options	Response Percent	Response Count
Live pine marten	11.4%	29
Dead pine marten	2.8%	7
Field signs of pine marten e.g. den, scat (dropping), tracks	0.8%	2
No	85.4%	217
Other (please specify)		1
<i>answered question</i>		254
<i>skipped question</i>		0

3.6.6 The data describing when and where respondents had seen evidence of pine martens in Wales was taken by The Vincent Wildlife Trust to investigate further and add to the existing sightings database if verified. However, it may be that some of the 113 live pine marten sightings could have been mistaken for a polecat or other species. To the untrained eye a brief glimpse can easily be mistaken as The VWT have found in many pine marten sightings subsequent interviews. This tendency is also anecdotally reinforced by informal interviews with stakeholder organisations.

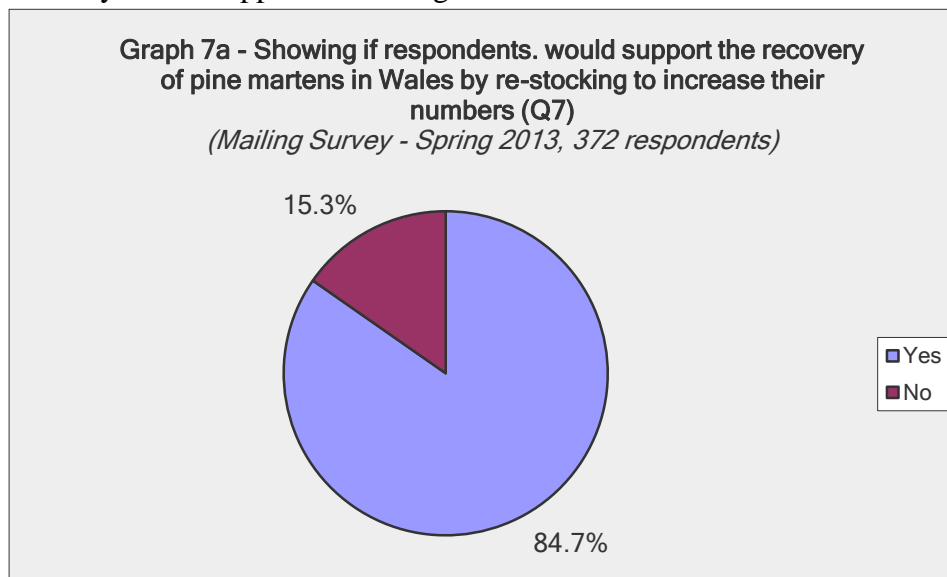
3.7 Restocking Pine martens



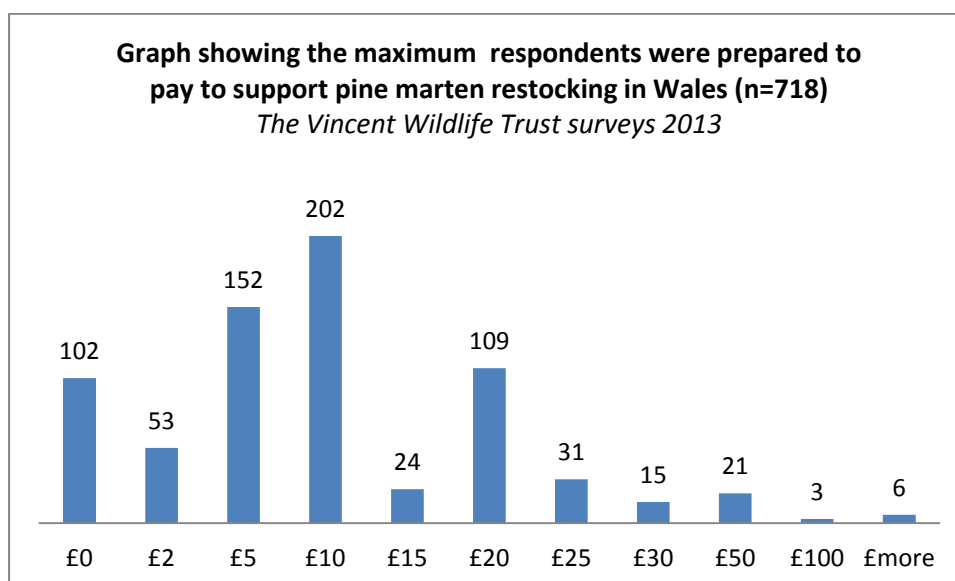
3.7.1 **90.9% of all respondents indicated that they would support restocking.**

3.7.2 All but two Roadshow Event respondents indicated that they would support the recovery of pine martens in Wales by restocking to increase their numbers. Just over nine out of every ten Web-link respondents indicated that they would also support restocking, 20 would not. Again self-selection bias might be a factor here, as they were both higher than the percentage of Mailing respondents who said that they would support restocking, which was lower at around 85%. 57 Mailing respondents indicated they would not support restocking.

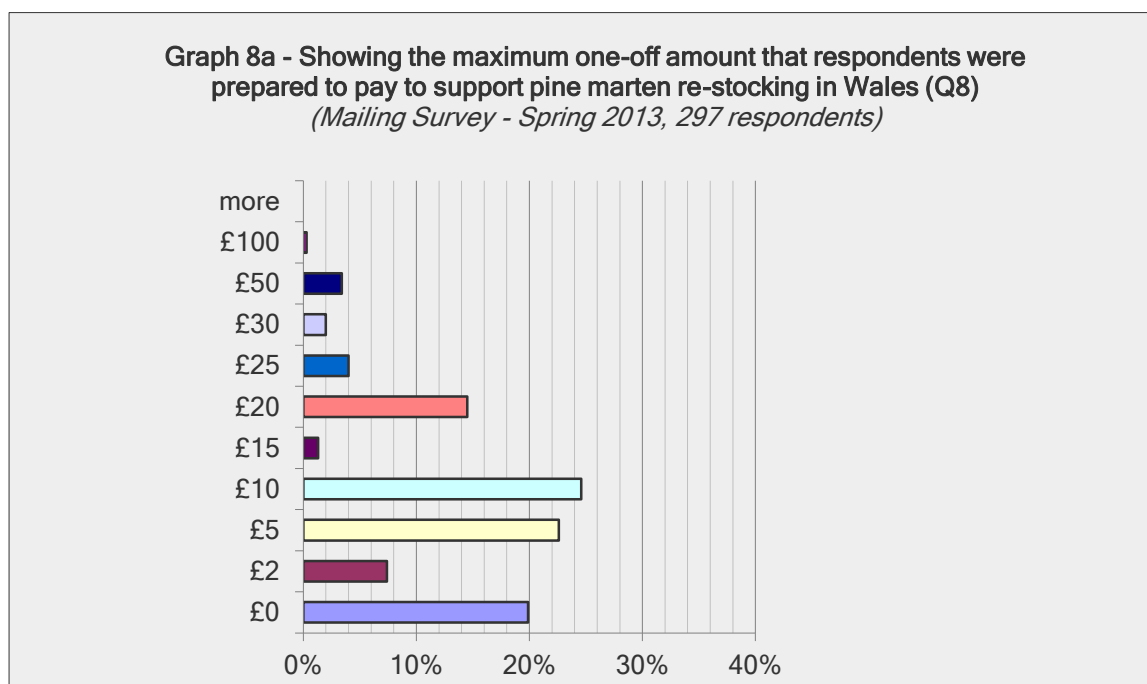
3.7.3 The ten **Welsh language Web-link** respondents *all* wished to support the recovery of pine martens in Wales. 24 out of 26 **Welsh language Mailing** respondents indicated that they would support restocking.



3.8 Contribution to restocking



- 3.8.1 Selecting from a range of £0 to more than £100, in total 202 respondents (23.2%) overall indicated that they would pay £10 to support pine marten restocking in Wales and a further 152 (17.5%) would pay £5, the next most frequently mentioned amount. 109 respondents were prepared to pay £20, whilst 102 indicated that they either could not, or would not, pay anything; overall 153 respondents skipped this question (17.6%).

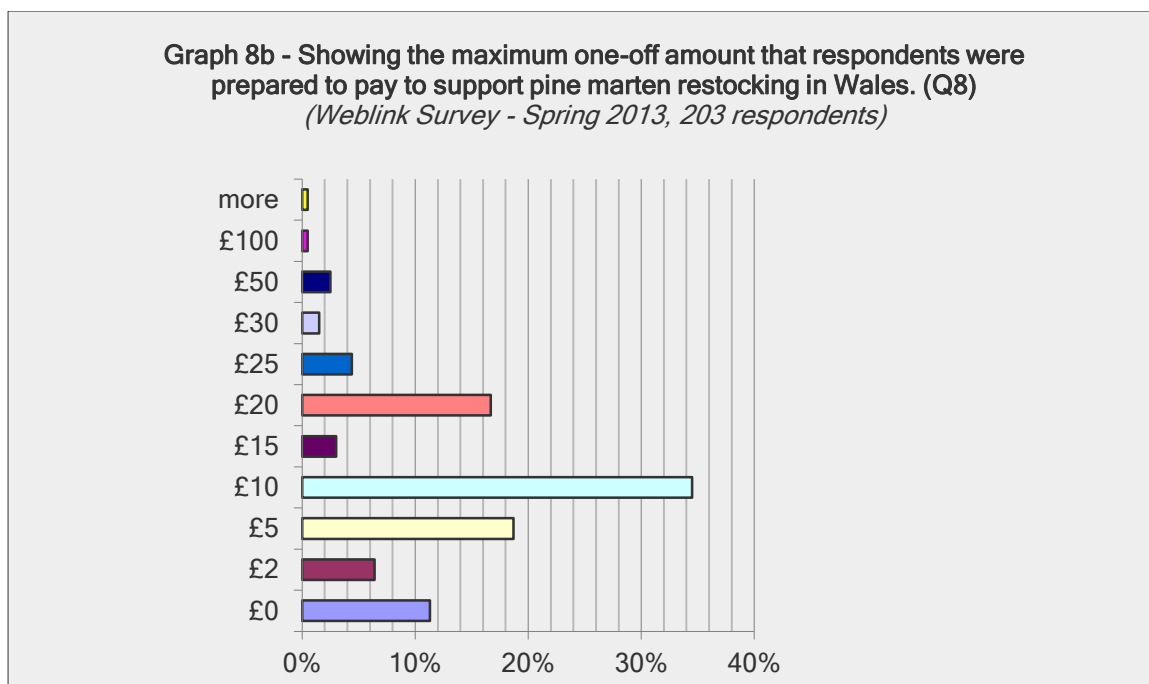


- 3.8.2 One in five Mailing respondents skipped this question (despite there being a category of £0), so although 315 had said that they were in favour of restocking (Q7), only 297 qualified this by indicating the maximum amount that they were prepared to pay (leaving 18 who did not). The question logic shows that these 18 respondents have been inconsistent and their answers to Question 7 may have to be disregarded.

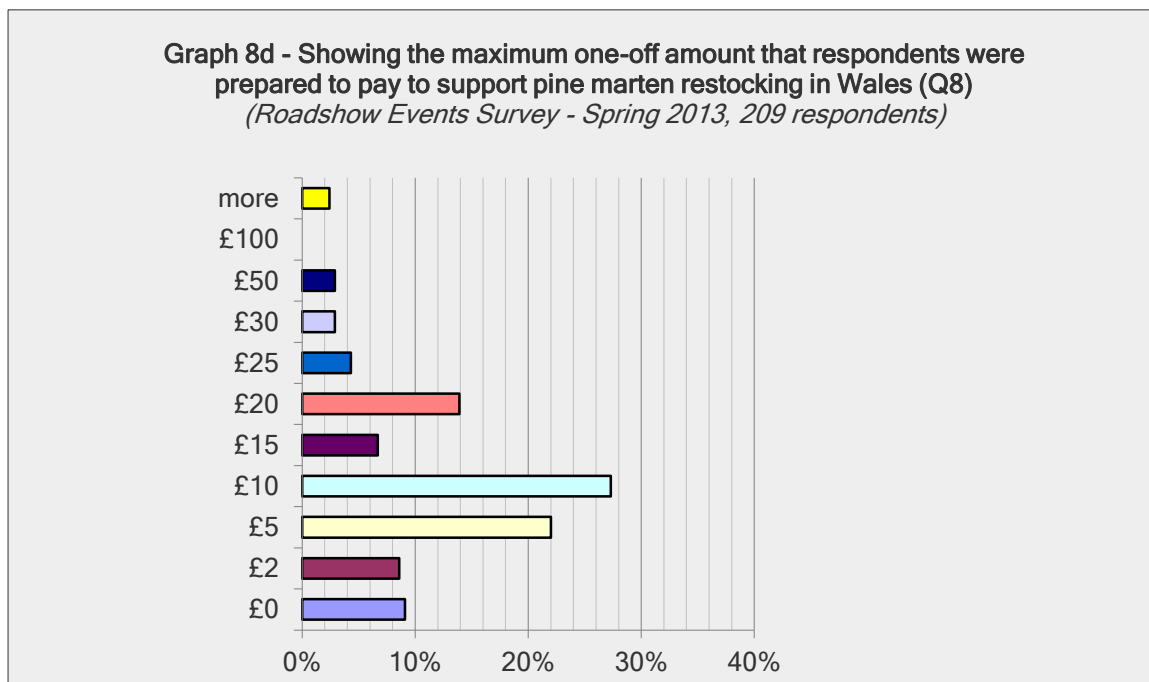
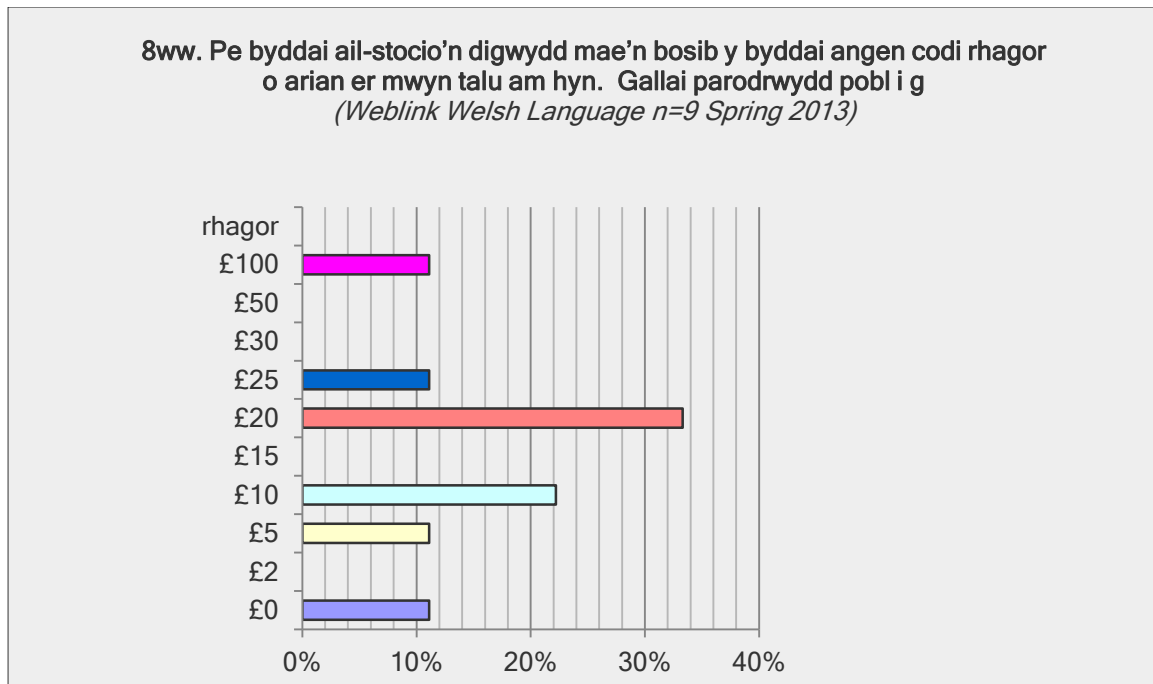
- 3.8.3 The most frequent amount mailing respondents were prepared to pay to support pine marten restocking in Wales was £10 (around one quarter of those that answered this question, 73 respondents); the next most popular amount was £5 indicated by 67 respondents.
- 3.8.4 59 survey respondents appeared to indicate support by choosing the category of £0. After Spash & Hanley (1993) this zero financial contribution may be because “*they cannot afford any extra expenditure*” (some survey respondents indicated this); or “*they think biodiversity should be protected by law and we should not have to pay money to protect it*”; or may be because of another reason. However, because their reasoning is not known, they have been omitted from the average WTP calculation to lessen the risk of these respondents distorting results. No Mailing respondents were prepared to pay more than £100 to support restocking. The one Mailing respondent who was prepared to pay £100, that is more than £50, was a Welsh language mailing respondent.
- 3.8.5 216 Mailing respondents were prepared to pay at least £5, some 58.1% of Mailing respondents.
- 3.8.6 **Overall just over 70% of all survey respondents’ average Willingness to Pay (WTP) was at least £13.96 (616 out of 871)¹². This is broadly consistent with Bright & Halliwell’s findings with the caveat that the £1 bid was excluded from VWT’s surveys. Bright & Halliwell’s mean WTP for the public (n=413) was £8.35 (£12.50 at today’s prices), but for farmers (n=408) their mean WTP was actually higher, at £10.26 (equivalent to £15.40 today); the VWT surveys included the public and farmers.¹³**
- 3.8.7 Discounting the zero bids and those who did not answer this question, around 64% of Mailing survey respondents’ average Willingness To Pay (WTP) was £13.06. Similarly, almost 73% of Web-link respondents indicated that they were prepared to pay an average one-off payment of at least £14.15. Five Roadshow Events respondents indicated that they were prepared to pay more than £100. Treating the latter bids as £100 and discounting the zero bids, the average WTP for 73% of Roadshow Events respondents was at least £14.90, consistent with the other WTP findings. So for just over two thirds of all survey respondents their average WTP ranged from £13.06 to at least £14.90.

¹² For comparison with Bright & Halliwell (1999) bids of more than £100 were treated as £100 for this analysis.

¹³ Prices have risen by about half since the Millennium (RPI = 150, where January 2000=100, Institute of Economic Affairs 15th July 2013) [Data Source: ONS]¹³



- 3.8.8 Almost one in six Web-link respondents (n=42) skipped this question (despite there being a category of £0), so although 215 had said that they were in favour of restocking only 203 qualified this by indicating the maximum amount that they were prepared to pay (leaving 12 who did not, undermining their answers to Q7).
- 3.8.9 The most frequent amount Web-link respondents were prepared to pay to support pine marten restocking in Wales was £10 (just over one third of those that answered this question, 70 respondents); the next most popular amount was £5 indicated by 38 respondents.
- 3.8.10 A further 23 appeared to indicate support by choosing the category of £0 and one respondent was prepared to pay more than £100 to support restocking.
- 3.8.11 In total 167 respondents were prepared to pay at least £5, more than two thirds of all Web-link respondents.
- 3.8.12 Out of the nine Welsh language Web-link respondents who answered this question: Three were prepared to pay £20; two to pay £10; one each to pay £0, £5, £25 and £100. (Sample numbers were insufficient for further analysis).
- 3.8.13 One Welsh language mailing respondent was prepared to pay £100 to support restocking, but £5 was most frequently mentioned (7) followed by £10 (5). The average Willingness-To-Pay of the 19 Welsh language mailing respondents that answered this question, i.e. omitting zero bids, was £14.42, higher than the overall mailing respondents' average (£13.06), but this may be an anomaly caused by the small sample. Combining Welsh language Weblink and Mailing respondents the WTP average was £14.22 (n=27).



3.8.14 45 Roadshow Events respondents skipped this question. Although 252 had said that they were in favour of restocking (Q7) only 209 qualified this (Q8) by indicating the maximum amount that they were prepared to pay, leaving 43 who did not, undermining the validity of their answers to Q7.

3.8.15 The most frequent amount Roadshow Events respondents were prepared to pay to support pine marten restocking in Wales was £10 (27.3% of those that answered this question, 57 respondents); like the other segments the next most popular amount was £5 indicated by 46 respondents.

3.8.16 19 appeared to indicate support by choosing the category of £0; but five respondents, unlike the other segments, were prepared to pay more than £100 to support

restocking. This may be the result of response bias, as this was the only survey methodology providing a face-to-face opportunity, consequently people may have been inclined to be more generous.

3.8.17 172 respondents were prepared to pay at least £5, more than two thirds of all Roadshow Events respondents.

Table 8 Showing average willingness to pay from VWT surveys broken down by current and/or past occupation									
	Mailing	n	Weblink	n	Roadshow	n	Other	n	Overall
Estate management	£20.00	4	£15.31	13	£55.00	2	£0	0	£20.47
Farming	£15.44	43	£18.00	29	£15.29	24	£0	0	£16.18
Forestry	£21.60	15	£12.17	24	£16.11	9	£20	1	£16.35
Game Keeping	£16.75	4	£25.00	1	£15.00	2	£0	0	£17.43
Leisure/Tourism	£15.00	23	£13.65	23	£18.38	21	£0	0	£15.60
Countryside management	£17.25	12	£14.76	29	£31.00	5	£0	0	£17.17
Wildlife Conservation	£25.00	17	£16.55	76	£22.23	30	£5	1	£19.00
		118		195		93		2	408
	NB								
Of weblink sub-groups only Wildlife Conservation has more than 30 responses									
Of Roadshow sub-groups Wildlife Conservation has 30 responses									
The Other were Welsh weblinks so weblink overall for Forestry was £12.50 from 25 respondents									
The Other were Welsh weblinks so weblink overall for Wildlife conservation was £16.40 from 77 respondents									

3.8.18 Average WTP has been broken down by occupation segments where respondents had answered both questions. Overall, taking only segments that had 30 or more respondents, those involved in Wildlife Conservation (as one would expect), were prepared to pay the most to support restocking, an average WTP of £19 (n=124); and the Leisure/Tourism segment the least, an average WTP of £15.60 (n=67). The second largest segment in this sample Farmers (n=96), were prepared to pay an average WTP of £16.18. **VWT should promote the opportunities and benefits presented by a thriving pine marten population to the Leisure/Tourism sector.**

3.8.19 Only one Mailing segment by occupation had more than 30 respondents, that was the Farming segment with an average WTP of £15.44 (n=43).

3.8.20 Similarly, only one occupational Weblink segment had more than 30 respondents, this was the Wildlife Conservation segment with an average WTP of £16.55 (n=76). However, both the Weblink Farming segment and the Countryside management segment comprised 29 respondents with average WTPs of £18.00 and £14.76, respectively.

3.8.21 Just one of the Roadshow Event segments by occupation included 30 respondents, those either with past experience or currently employed within Wildlife Conservation, with an average WTP of £22.23.

3.9 Reasons in favour of restocking

Table 9 showing why respondents were in favour of restocking pine martens in Wales (Q9) VWT Surveys Spring 2013		
Reasons for restocking	Count	Percent
They are a native species	168	22.6%
Increase biodiversity	129	17.3%
Prevent extinction	111	14.9%
Restore natural balance	72	9.7%
General support for wildlife/conservation	60	8.1%
Duty/moral obligation	41	5.5%
For the next generation	23	3.1%
Grey squirrel/pest control	22	3.0%
Wish to see them in the wild	20	2.7%
Economic benefits	14	1.9%
Other	85	11.4%
Sub-total	745	100.0%

3.9.1 745 respondents answered this question overall (85.5% of all respondents that completed surveys). The numbers of respondents answering this question broken down by segment were as follows:

- 292 Mailing respondents (78.5%), 80 skipped the question;
- 212 Web-link respondents (86.5%), 33 skipped the question;
- 241 Roadshow Events respondents (94.9%), only 13 respondents skipped the question.

3.9.2 Nearly one quarter of respondents to this question (168), constituting 22.6% of responses alluded to the importance of the pine marten being a “native” species, while 94 (12.6%) mentioned “Wales” specifically.

3.9.3 129 survey respondents stressed the importance of increasing biodiversity (17.3%).

3.9.4 A further 111 were concerned with preventing extinction (14.9%).

3.9.5 72 emphasised the importance of maintaining the natural balance (9.7%).

3.9.6 One respondent commented:

“If the reason for their decline has been identified and is no longer a threat, then reintroduction as with red kites should be a positive move.”

3.9.7 All of the Welsh language Web-link respondents answered this question and made the following comments:

Biodiversity in Wales is declining, and one of the reasons for this is because we’ve lost some animals such as the pine marten, beaver and wolf. By re-populating Wales with species that we have lost we can help our other species.

I see restocking pine martens as a positive step to restore the damage done by Man to our Welsh natural heritage, which is disappearing at a dreadful rate.

Professional interest in wildlife, especially mammals. A way to create work for young specialists to gain experience of wildlife.

As it is native, scarce and is disappearing, like the red squirrel and many other species. As the habitat and the associated animals are important for maintaining Wales as a vibrant and interesting place. They are as much part of our nation as the people are.

Economic potential for wildlife tourism.

I like wildlife and animals very much and believe strongly we should protect and defend UK wildlife for future generations.

I don't want it to disappear!

To attempt to repair some of the damage caused by humanity to the natural world.

I think it's brilliant to have all sorts of wild animals in Wales.

There's a need to protect all sorts of biodiversity for the sake of the planet.

3.9.8 18 of the Welsh language mailing respondents commented:

It is important to have wildlife

Natural ecosystem

Biodiversity

Important to keep them here.

Maintaining natural world for the future

Natural and cultural heritage preservation of Wales and to teach our children.

Biodiversity and protection of native mammals

To increase the native stock and improve the genetic health

It is important to increase the number of pine martens so that they do not die out

Important to maintain native animals as alive and healthy in Wales.

in order to get martens back to a sustainable position

It is important that our children know about them.

Losing a native animal is sure to effect the natural cycle in some way - and it could mean that non-native animals will have more of an opportunity to disrupt the seasonal natural cycle.

So that the numbers increase.

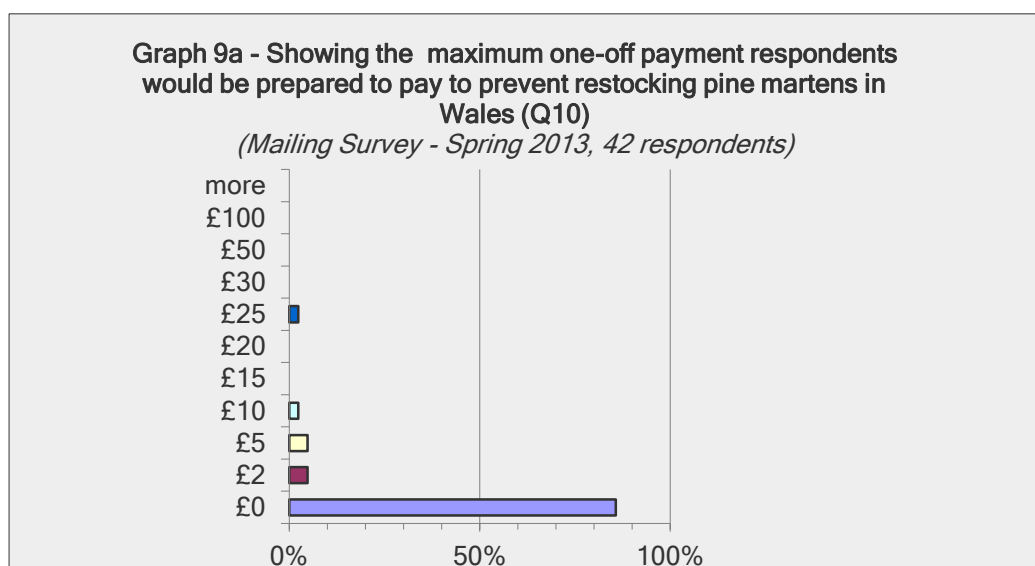
I don't want to lose it because it was fairly common throughout Wales and to get red squirrels to thrive.

Don't want to see the disappearance of a living creature.

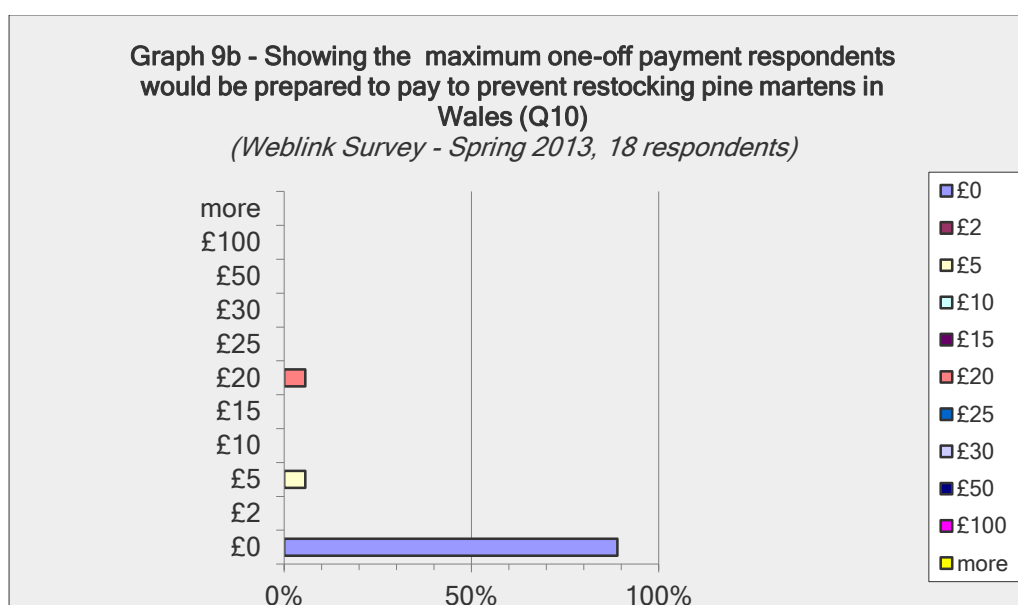
Maintain the diversity of wildlife

Wales should not lose the presence of such a beautiful and dignified animal and it would be an asset to the economy on the grounds of tourism.

3.10 Contribution to prevent restocking



- 3.10.1 Only nine respondents overall were prepared to pay anything to prevent pine marten restocking, although 62 respondents answered this question altogether.**
42 of these respondents were Mailing respondents (11.3% of all Mailing respondents). Since 297 answered Question 8, it is implicit that 33 of the 372 Mailing respondents (8.9%), were undecided or don't know.
- 3.10.2 Only six Mailing respondents were prepared to pay to prevent restocking pine martens in Wales and the maximum amount was £25.**
- 3.10.3 Since 57 Mailing respondents had stated in Q7 that they would not support restocking and only 42 answered this question, the other 15 respondents may have been undecided.**



- 3.10.4 18 Web-link respondents answered this question, (7.3% of all Web-link respondents) and 16 of these were not prepared to pay anything to prevent restocking. Of the**

remaining two respondents, one was prepared to pay £20 and the other £5 to prevent restocking.

- 3.10.5 Since 203 answered Question 8, it is implicit that 24 of the 245 Web-link respondents, or one in every ten (8.9%) were undecided or don't know.
- 3.10.6 Since 20 respondents had indicated that they would not support restocking in Q7 and 18 responded here, a further two respondents' answers might be invalid.
- 3.10.7 No Welsh language Web-link respondents answered this question as they were all in favour of restocking. Although two Welsh language mailing respondents answered this question, neither was prepared to pay to prevent restocking.
- 3.10.8 Consistent with their responses to Question 7, two Roadshow Events respondents answered this question: One was prepared to pay £2; the other was not prepared to pay anything.
- 3.10.9 Since 209 Roadshow Events respondents answered Q8, this indicates that a further 43 Roadshow Events respondents could be undecided (16.9% of this segment).

3.11 Reasons against restocking

Table showing the reason why respondents were against restocking pine martens in Wales (Q11) VWT Surveys Spring 2013		
<i>Reason against restocking</i>	<i>Count</i>	<i>Percent</i>
Predation of wildlife	15	23.4%
Encouragement of native stock	9	14.1%
Lack of sustainable habitat/fragmentation	8	12.5%
Lack of knowledge about existing population	8	12.5%
Economic costs	6	9.4%
Let nature take its course	4	6.3%
Effect on native gene-pool	4	6.3%
Other	10	15.6%
Sub-total	64	100.0%

3.11.1 Overall 64 respondents gave reasons why they were against restocking pine martens in Wales, nearly one quarter of these were concerned that the pine martens would predate on other wildlife including mammals, birds and their eggs. 40 of these respondents were Mailing respondents.

3.11.2 Other reasons given included: the necessity for further research before any action is taken to prevent damage to existing habitat and ecosystems, and ensure that money is not wasted. **NB. The Vincent Wildlife Trust will need to address these factors if any restocking plans are subsequently developed.**

Mailing respondents - Strongly against restocking

Lack of natural habitat and the danger of upsetting the balance in our present habitats – (The only Welsh language Mailing respondent who gave a reason why they were against restocking)

Waste of time and money - let nature take its course.

Destroying existing wildlife

There are too many predators in Wales, killing our wildlife already and I don't think we need any more.

If the environment is unable to sustain a natural population then artificial increase of their numbers could be to the detriment of the stock. The environment should be improved.

Interference with natural biodiversity of the habitat and the effect on other species.

Not important to the economy.

They eat birds eggs in the Spring. there are far too many foxes, jays, magpies and hawks killing the small birds also badgers.

Develop local population not import. Look at red squirrel.

Until we work out why they are in decline we are just condemning new animals to the same fate (Scotland is not over stocked)

Birds and eggs form a sizeable part of pine martens' diet and small birds have enough trouble with grey squirrels.

On good authority. I have heard pine martens are a danger to red squirrels. At the moment I would rather concentrate on them especially by spending money on trying to limit grey squirrels which are decimating our woodlands and not helping the 'reds' either.

The pine marten is a viscous killer of birds and mammals. Pine martens reintroduced to Brechfa Forest would be a threat to the red squirrel population.

Eat birds eggs

Financial. The money could be better spent in a 100 different ways.

We shouldn't mess around with nature

Changing local genetic make-up/ spread of disease

Nature should be allowed to restock. There are too many schemes trying to protect and regenerate or restock, many have failed.

Shortage of song birds in woodlands. Pine martens, like polecat, eat birds & eggs etc

Measures to conserve and a breeding programme with existing stock first.

By eating eggs they will damage bird populations.

Predation on other species, water voles, rare birds, all birds young and eggs.

Waste of time and money - you're not going to just see them walking about all the time. At least with restocking red kites you can see them flying about and see where the money went.

I think it is important to increase the native species.

Neutral

Not aware that anything has been done to make conditions suitable to support larger pine marten population in Wales.

I would require more information to make an informed choice. Why not just encourage and support the small isolated populations that we already have.

Unless work is done to improve habitat and food sources introduced communities may still fail.

Perhaps the Welsh pine marten is of a distinct genetic make-up to that of other colonies. This should be determined before other groups are introduced.

Would a captive breeding programme from Welsh native pine martens be more preferable?

Not against restocking. I just do charity contributions elsewhere.

I'm not, I'm an in debt student and can afford nothing, let alone contributing to restock pine martens in Wales. I also have a genetic disorder called NF2 and any spare money I had would go to the Neuro Association to find a cure for my condition.

More research into pine marten numbers and ecology in Wales required first. If at all possible natural growth and numbers should be encouraged through habitat protection.

I don't think my farm would be suitable

Don't really know what they are

Uncertainty about present pine marten numbers.

Unclear

I am not against it - I just have no interest in it..

My thoughts are more towards humanity who are struggling and give to mission work. Being a single parent my budget cannot stretch enough, although I am not opposed to giving to this cause.

I'm not for or against as such but introducing or reintroducing a species to an area requires a careful analysis of the current state of the ecosystem.

Don't know anything about pine martens

If I'm honest I can't see how this would benefit me and people in general

3.11.3 20 Web-link respondents indicated why they were against restocking pine martens in Wales.

3.11.4 These respondents seemed better informed about the pine marten than the Mailing respondents in general, perhaps another indication of self-selection bias.

3.11.5 Web-link respondents were particularly concerned about affecting the local gene pool through restocking and the fragmentation of habitats adversely affecting restocking.

Web-link respondents - Strongly against restocking

I think funds are better spent on a habitat restoration, than re-introductions which are notoriously difficult. This is of course unless the pine marten population in Wales has reached a point where it is not viable anymore and re-introduction would bring in fresh genes. I also think finding the reason for their low numbers? and spending money increase this factor is more important than re-introduction which may not lead to a large enough benefit,

If they are still there they will recover! Most reintroductions are at best unnecessary and at worst a disaster!

Surely we should protect what we've got and improve habitat to support them

Wouldn't be Welsh

Avoid genetic contamination of local stock

Could cause defects or disease in natives

It seems pointless unless the reasons for their decline are tackled, e.g. deforestation, disturbance, ...

If they've died out in Wales, then so it goes!

They should be protected and aided but allowed to regenerate naturally as the polecat has

Don't believe in engineering nature

Whole ecosystem in jeopardy through climate change & other pressures, need to save what we have not worry about what has already gone at this point. Another predator will put extra pressure on birds, red squirrels, dormice etc.

Fragmented habitat, probably unsuitable to sustain a viable breeding population.

Predation of other threatened species

Potential predation of eggs of perilous populations of ground nesting birds

There are very few Pine Martens in Scotland and thus it is difficult to envisage how this could be achieved without damaging the Scottish population's viability. Also, the residual ancient pine forest around Abernethy provides as ideal a habitat as can be imagined - rich in 'biodiversity and therefore with a viable food-chain. Also, the number of foxes in the Scottish pine forest is remarkably low. This is not the case in Wales. There is a significant likelihood, in my opinion, that foxes would target the Pine Marten as a rival and would seek to eliminate it. It would seem far more logical, to me, to invest in protecting and enhancing the more viable, extant populations of Pine Marten in Scotland rather than trying to introduce them more widely to Wales.

Neutral

What they would mean to the wildlife already in Wales.

I would need to know more about the pine martens' habits before being able to respond to the idea of restocking with more confidence. I think a "maybe" option on the question about restocking would have been useful for me...But, I think it is always better to provide suitable habitat and corridors for movement to encourage natural population growth as there can be problems relating to competition, genetics and over-population.

Suitable habitat / denning opportunities seems to be the limiting factor

Unless you are clear about why the population is so low and not able to increase without restocking, you do not have a clear justification for restocking. I need to see more evidence. What is preventing the existing remnant population expanding? We must understand this first. I also think there are many more vital things to spend conservation cash on given the decline in biodiversity across the countryside as a whole, than on charismatic mammals like pine marten, red squirrel or beaver. The general decline in, for example, many birds and insects is a more fundamental problem.

I should like to be convinced that there was enough linked suitable habitat in Wales for there not to be fragmented populations and that red squirrels would be conserved alongside pine martens and not adversely affected.

3.11.6 All Welsh language Web-link respondents were in favour of restocking, consequently none answered this question.

Roadshow Event respondents

3.11.7 Just three Roadshow Event respondents answered this question, but only two gave a specific reason why they were against restocking.

Roadshow Event respondents – strongly against restocking

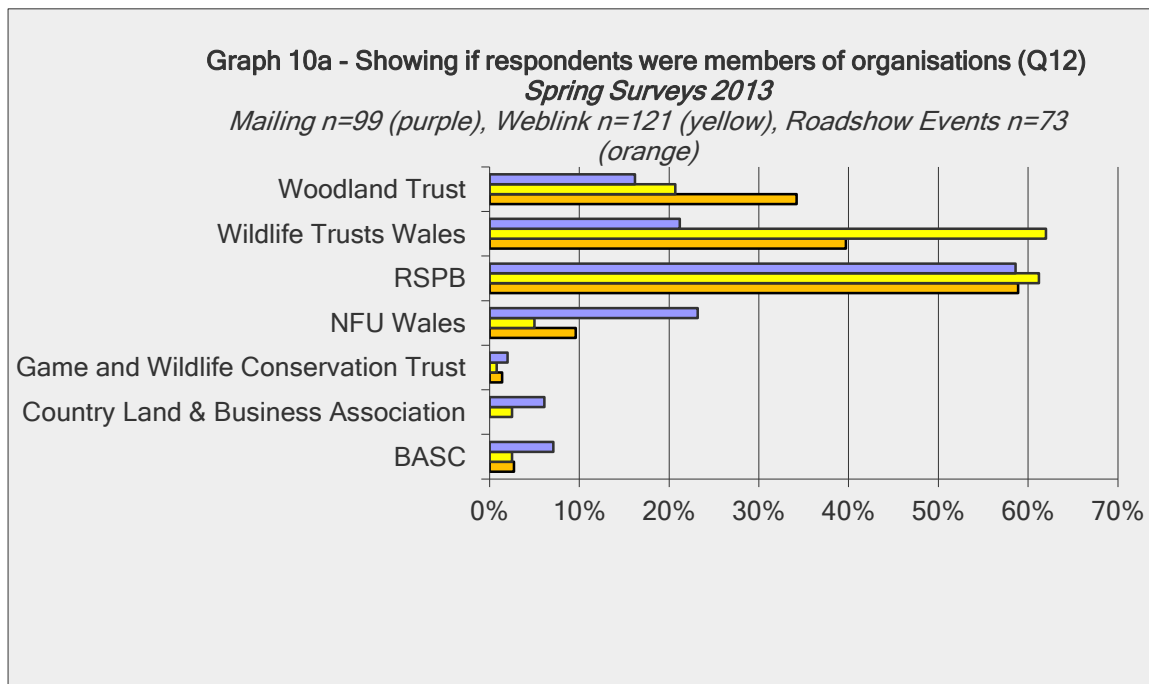
I think they should have suitable habitat to breed naturally- Welsh martens in Wales- if wildflowers and trees vary county by county then only local populations in one area.

Help in recovery.

Neutral

I don't know about them, so difficult to comment

3.12 Organisation membership



3.12.1 Overall just over one third of respondents (298) indicated which organisations they were members of. 99 Mailing respondents answered this question (26.4% of all mailing respondents); 73 Roadshow Events respondents (28.7%); but around one half of Web-link respondents 121 (49.4%) submitted answers and five Welsh language Weblink respondents. Membership of the RSPB was similar across all three survey segments - around 60% of respondents that had answered this question from each segment were members.

3.12.2 However, there were significant differences elsewhere in responses to this question among the three main survey segments.

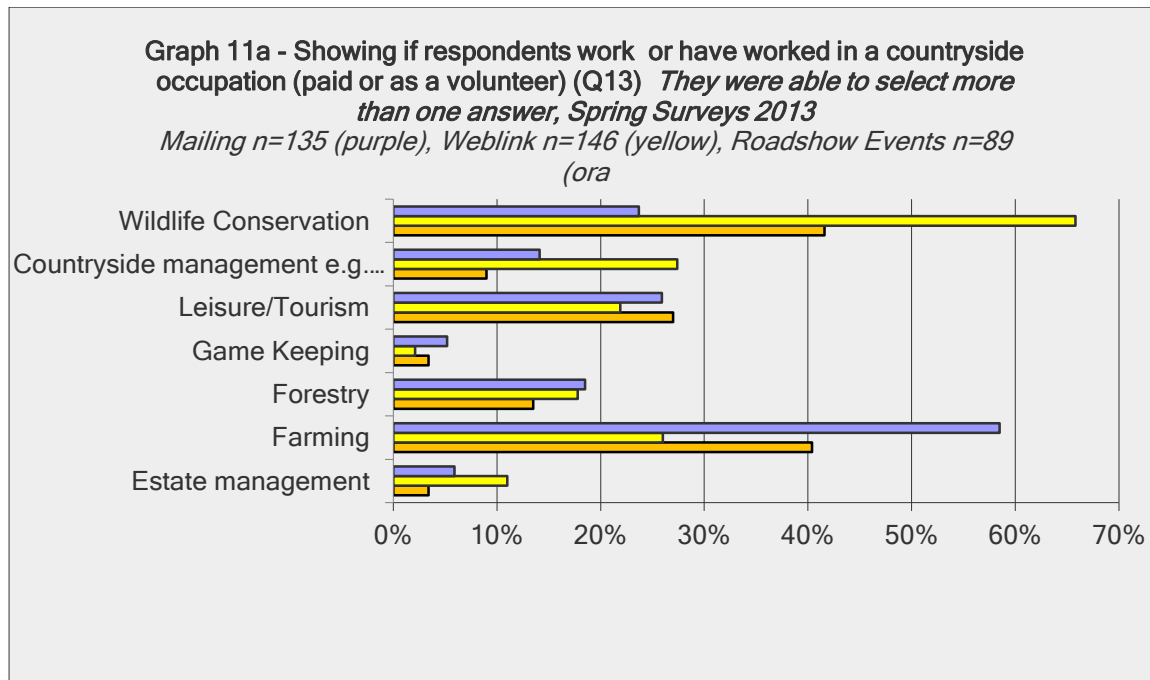
- In contrast to the other two segments, Web-link respondents were most frequently members of the Wildlife Trusts Wales 62% (n=75), compared with circa 40% of Roadshow Events respondents and just around 20% of Mailing respondents. This is not surprising as the survey weblink was promoted by two Welsh Wildlife Trusts to their respective memberships.
- The second most frequent membership indicated by the Mailing segment was the National Farmers Union (NFU) Wales with circa 23% (n=23), the other segments NFU memberships were less than 10% (Roadshow Events) and 5% (Web-link).
- Mailing respondents were more likely than the other two segments to be members of BASC and the Country Land & Business Association, but membership numbers were only in single figures.

- 3.12.3 As noted five Welsh language Web-link respondents answered this question: Three were members of RSPB, two were members of the Wildlife Trusts Wales, one was a member of the Woodland Trust.
- 3.12.4 77 Mailing respondents indicated they had other memberships: Fifteen were members of the National Trust; seven were members of WWF and similarly seven were members of the Farmers Union Wales.
- 3.12.5 63 Web-link respondents were also members of a variety of other organisations. Eighteen were members of the British Trust for Ornithology (BTO), seven were members of the National Trust.
- 3.12.6 Although 73 Roadshow Events respondents answered the question about other memberships, only 42 indicated any other organisations. Nine of these respondents indicated that they were members of WWF, four were members of the National Trust and one was a member of National Trust Scotland.

Table 8 - Showing whether mailing survey respondents would support restocking (Q7) broken down by which organisations they were members of (Q12). (n=99 including "other" responses)			
Answer Options	Yes	No	Ratio
BASC	5	2	2.5:1
Country Land & Business Association	4	2	2:1
Game and Wildlife Conservation Trust	2	0	
NFU Wales	17	6	2.83:1
RSPB	53	5	10.6:1
Wildlife Trusts Wales	19	2	9.5:1
Woodland Trust	14	2	7:1
Total	114	19	

- 3.12.7 Mailing survey respondents who were members of either the RSPB or the Wildlife Trusts Wales were most likely to support restocking.
- 3.12.8 Members of the Country Land and Business Association and/or members of the Game and Wildlife Consultancy Trust, BASC or NFU Wales were least likely to support restocking indicating the need for VWT to work at addressing these respondents' concerns about restocking. ***Nevertheless, in all cases, significantly more respondents were in favour of restocking than against it.***
- 3.12.9 Ninety-nine mailing respondents answered both of these questions including "other" responses; just over one quarter of all mailing respondents (26.6%). Some respondents were a member of more than one of the organisations listed.

3.13 Countryside Occupations



3.13.1 Almost 60% of Web-link respondents answered this question and around two thirds of these (n=96) had worked in Wildlife Conservation. This was significantly more than in the other segments, where under one quarter of Mailing respondents (n=32) that answered the question (36.3%) had worked in this sector. 37 (41.6%) out of the 89 Roadshow Event respondents (35%) that answered this question had worked in Wildlife Conservation.

3.13.2 Similarly, more Web-link respondents had worked in Countryside management (n=40) and Estate management (n=16) than other survey respondents; for comparison, Mailing respondents (n=19 & 8 respectively) and Roadshow Events respondents (n=8 & 3 respectively).

3.13.3 In contrast, 58.5% of Mailing respondents that answered the question had worked in Farming (n=79), compared with 36 Roadshow Events respondents (40.4%); and 38 Web-link respondents (26%).

3.13.4 Similar proportions had worked in Leisure and Tourism across all three segments ranging from 21.9% to 27%: Web-link (n=32); Mailing (n=35); and Roadshow Events (n=24).

3.13.5 There were 32 other responses by Mailing respondents e.g. three lecturers, two of which were in the field of countryside management; and two National Trust volunteers.

3.13.6 In addition there were six Welsh language respondents who worked/or had worked in: Forestry, Leisure/tourism, Wildlife conservation; and three in other occupations.

3.13.7 35 Web-link respondents indicated additional countryside paid or volunteer connections.

3.13.8 17 Roadshow Event respondents had worked as countryside professionals or volunteers and one other indicated that they owned woodland.

Table 9 - Showing whether respondents would support restocking broken down by which country occupations they had worked in (n=367 including "other" answers).				
Answer Options	Yes	No	Ratio	Response Count
Estate management	25	2	12.5:1	27
Farming	121	31	3.9:1	152
Forestry	56	7	8:1	63
Game Keeping	9	4	2.25:1	13
Leisure/Tourism	82	8	10.25:1	90
Countryside management e.g. Ranger/Warden	52	13	4:1	65
Wildlife Conservation	148	16	9.25:1	164
Other (please specify)				91
<i>answered question</i>				367

3.13.9 Breaking down respondents who said that they would support restocking by current or past occupations (they were able to choose more than one): **Estate management¹⁴, Leisure/Tourism, Wildlife Conservation and Forestry professions had the highest ratios of respondents in favour of restocking. Countryside management, Farming and Game Keeping¹⁵ had the lowest ratios, although the former two were still four to one in favour of restocking.**

Table 9a - Showing whether mailing respondents would support restocking broken down by which country occupations they had worked in (n=135 including "other" answers).			
Answer Options	Yes	No	Ratio
Estate management	6	2	3:1
Farming	56	23	2.4:1
Forestry	20	5	4:1
Game Keeping	5	2	2.5:1
Leisure/Tourism	30	5	6:1
Countryside management e.g. Ranger/Warden	13	6	2.17:1
Wildlife Conservation	25	7	3.6:1
Total	155	50	3:1

¹⁴ Less than 30 respondents so may be subject to non response bias..

¹⁵ Only 9 respondents so subject to non response bias.

- 3.13.10 Overall three out of every four mailing respondents were in favour of restocking when broken down by their countryside occupations. 135 mailing respondents answered both these questions including “other” responses, just over one third of all mailing respondents (36.3%).
- 3.13.11 The Mailing survey respondents least likely to support restocking worked in countryside management; followed by those that worked in farming or game keeping. These findings highlight that VWT need to address their concerns when implementing any restocking strategy.
- 3.13.12 **Mailing respondents that worked in leisure/tourism were most likely to support restocking, six out of every seven of these respondents.**

3.14 Additional Comments made by survey respondents:

Mailing respondents

“Very good for such a high standard translation and thanks for the effort (for the translation).” (A Welsh language mailing respondent)

Good luck!

Newly discovering the amazing world of wildlife, I really would love to learn more, and an introduction to wildlife, if such a course was available in Aber, as extra-mural class or FE class, I, and I'm sure many others would flock to it

Unsure about reintroductions- not sure whether habitat would be suitable

For restocking if restocking from within Wales. Concern over genetics.

Just like all animals!

I believe in conservation as long as people are able to enjoy the countryside as well.

Would prefer to see pine martens recover naturally.

changed address from Tywyn, Nantmor

Slightly concerned about impact of martens on other species/prey.

Bring them back - give me a job as well!

Best wishes for a re-introduction.

Heard name, thought they were birds.

Changed address from Crown Inn Restaurant, Monmouth

I was working for Forestry Commission in South Wales in 1961 when a tree branch swung down and I was face to face with a pine marten.

I thought it was a bird

Need to see a photo of pine martens as I am not sure what these birds look like.

I wish you all the luck and hope I may help in the future.

We could make a collection on the bar (for fundraising).

Have always loved and enjoyed the countryside and its wildlife.

Numbers must be controlled otherwise if the balance of the life circle is not right, then problems might occur.

Sorry- I am not financially able to support you- or them. I would if I could

Hope it all goes well,

Need to protect ecosystems not individual species- can have unintended consequences.

I am not prepared to pay towards this as it should be a government subsidy. However I do think that it is important.

I have always had a love of animals, as has my daughter. Would consider volunteer days if required (if available of course).

I'm a freelance photographer and I am more than happy to provide my services to The Vincent Wildlife Trust if ever needed.

Farmers/pheasant breeders shoot pine martens probably, along with everything else.

Please note- simply retaining the "status quo" at our home in "the wilds"- all wildlife.

You need to find out the real reasons for the decline. When otters were reintroduced in East Anglia it was said persecution and disturbance were the reasons for loss, we have now found out with the arrival urban otters, disturbance was not an issue, pollution and the lack of food was.

I would fear for my barn owl population but hope predation would be minimal (bound to be less than loss to goshawks).

Wouldn't give any money towards restocking as on a very low income.

I would be greatly excited to hear about your work in future. Good luck!

We have 8 acres of land here which I try to look after as well as possible (all organically!)

I do not want to belong to anything but spend time wandering remote places just looking.

I think more people would come to Wales to see red kites than pine martens. Pine martens will surely eat their eggs and young so I think you're going to ruin tourism in Wales. They died out once, what makes you think they can live here now.

To be honest in the middle of a recession where money is scarce, I couldn't care less about pine martens and if I saw one where I live I would capture it and eat it, as I cannot afford to buy meat in the supermarket (probably because they waste money funding wildlife projects).

I'm sure your organisations means well, and you all love pine martens, but the reality is the average person doesn't care!

I'm a walker/rambler and enjoy wildlife.

Reason against restocking - Impact of introducing 'foreign' animals.

We are currently in the process of purchasing a 3 acre smallholding, so if we can help in any way other than financially with restocking, please contact us as we would be more than willing to help.

The three Welsh language respondents did not leave any additional comments.

Web-link Comments:

Good luck!

It is difficult to answer some of your questions: I can't remember where I first heard about pine martens as wildlife issues have been part of my own life since childhood.

Heard about the Pine Martin being found just down the road at Aberhafesp and I am therefore interested in there likely existence in the hills around this part of Montgomeryshire

Keep up the good work!

Wish you every success and if there's anything I can do to help record and publicise your work please let me know

I would love to see pine martens running free, just as I supported the reintroduction of the red kite. You are doing a good job however, please DO NOT send me any mail, it is a waste of paper, I am a member of mailing preference service. I cannot make a donation both my husband and I are unemployed.

GOOD LUCK

I would love to see Pine Martins. This could be like Otters and Red Kites - another success story.

Pine Martens are a key species as they are a top predator. Removal of top predators removes an important check on prey species and reduces the fitness of the prey species

overall.

Do pine martins eat hens?

If not you could release them in my 10 year old deciduous wood (16 acres) in Elan Valley, if local folk agreed!

Thanks for all your work in this area

Do not wish to enter prize draw

There are pine martens in Llanwrthwl already

Keep up the effort!!

it would be nice to see them .

Yes. Interested in the pine martin issue but not in covert fundraising surveys and risking my inbox being bombarded as a result. Tell us the problem, break down the cost of a replacement animal and offer to put contributors into a prize drawer so it is all straightforward. You would probably have got a contribution out of me today that way. As it is i am now reluctant to get involved at all because i now cannot trust you not to bombard my inbox!

we should not let dwindle away, nor any of our animals. its just so sad.

Thankyou

On my many rambles through the hills and forests around here , I've only seen live stoats high up (800 feet +) in the hills near bilberries I was picking on the edge of forestry, but no pine martins !

I have some concern about the effect a top predator such as the pine martin would have on wildlife in view of the length of time they have been absent and the fact that other predators such as mink have probably partly filled the niche they once held. I don't know how this could be assessed or even if it is possible.

I have a reliable friend who is certain he has seed a pine marten locally. My only concern about restocking is, what effect will it have on the dormouse population in East Carmarthenshire?

I hope that we will see the statistical results of this survey.

Please dont give email address to 3rd parties

Keep up the good work. To see wildlife like pine martens in the wild would be wonderful.

Keep up the good work! :)

Keen to speak to someone from VWT who is willing to pay me a site visit and give me specific advice on siting a Pine Marten den box I've recently had made by Pip Amos at Gilfach!

I was once concerned that the huge success in the reintroduction of red kites would be a big problem to the buzzards. The opposite has proved true. This may be because one kills and the other scavengers (though I've watched red kites following the plough and stooping on live mice). More likely, that we are all that bit better educated and don't murder everything as we used to.

Good luck in your survey and in helping preserve the future thriving of the pine marten.

good luck with the project

I feel that this questionnaire could have posed other questions !

We have often commented on the fact that there are no pine martens where we live

Although I would support the idea of restocking I would like this to be a last resort. I think we should continue to seek out any existing animals and, if any are found, their territories should be closely monitored and dens guarded so that breeding might be more successful. I think this should be a slow recovery campaign.

I wish you well with your project, which I think is interesting, even though it would not be my top priority for spend biodiversity funding.

I hope that the current project is successful

I am in touch with David Bevan. Please contact me to be involved. Some people say that the Pine Martin was extinct in Wales in the 1990s. I do not believe this. It went down to very low numbers and it is very shy and generally nocturnal I believe.

It would be lovely to see them back. I have polecats now on our land and water voles; can't wait for a pine marten!

The pine marten that was seen was never confirmed and we didn't notice until it was a day or so old. I am about 80% convinced it was but I have seen no other signs of them.

Think VWT a great organisation but obsession with pine martens a distraction from more important work on bats or squirrels

We have 150 acres of woodland of an ideal type for Pine Martens which we would be happy to manage specifically for their benefit if you were looking for any privately owned release sites.

My only reservation about pine martens inhabiting the area in which we live (The Llynant Valley) would be if they predated any dormice that may be living on our land!

Just to wish you good luck with the survey. Hope you obtain very good response.

I believe that as a community we should try to bring back if required, or otherwise foster, all species native to ones' locality. Clearly many would see practical limits to this (e.g. wolves and bears); but other people manage to live safely alongside large predators, so no species should be excluded from consideration. That said I hope many people will agree that pine martens definitely warrant effort to keep them amongst us.

Good luck.

I hope the project goes ahead and is a success

Please note that if you try and find my address on a computer it will probably come up as Pendle Cottage and in Shropshire. This is TOTALLY wrong. The computer has taken it upon itself to change the spelling of my house and alter the border !! I actually live in Powys and hence am eligible to participate in the survey as a Welsh resident.

It's a wonderful goal to restore the pine marten to Wales but I can't give support in this survey as am too ignorant of what the outcomes for viable pine marten populations and other wildlife species are likely to be.

I suggested trying to improve the populations of red squirrel in Mid Wales by setting up a visitor attraction as for the red squirrels at Formby and was told that the Forestry Commission just would not do it! Hope pine martens fair better!

My elder son, some years ago, saw an animal in the early hours, sitting upright at the side

of the A483 above the RWAS Showground in Builth Wells. He had seen a number of dead polecats in the area - we had a young one playing hide and seek right outside our back door. He is still convinced that it was a pine marten.

The body of a pine marten was found not far from where I live, although saddened that the animal was dead it was heartening to think that this wonderful creature was active so close by. I think that it would be fantastic to bring in some martens to Wales and fresh blood to the local gene pool. I think that it would be more effective to try to reinvigorate the local pine marten population rather than have to restock if Welsh pine marten died out completely. Good luck and keep up the good work Vincent Wildlife Trust!

Any re-introductions need to be done in consultation with all interested parties to enable co-operation. Often there is a lack of balance. Nothing must be "conserved at all costs", just as a weed is only ever a plant in the wrong place. There must always be an exit strategy in place and the ability of individuals to exert control where other interests are at stake.

Good luck with the project

great conservation project , will increase people s knowledge about the importance of biodiversity and threatened species and habitats in Wales

I fully understand the desire to bring Pine Marten numbers back to a sustainable level in Wales. In fact, as a component of a healthy functioning ecosystem they have their obvious place. My concern lies with the dire situation in which we find our upland bird populations and the existing pressures on their survival. Coupled to this is the relationship between upland forestry plantations, and their obvious potential (however small) as a habitat for predators, and moorlands.

Currently we don't have stable populations of many ground nesting birds including black and red grouse, curlew and golden plover to name but a few; so the reintroduction of another potential predator on these species would be negligent. Obviously if ground nesting bird populations were in a better shape, things might be different.

There is so much more to do in relation to upland forestry policy, the integration of wildlife and forestry policies, and fostering a healthy debate on species population management before we should even consider re-introducing Pine Marten. This does not, however, mean that we shouldn't instigate appropriate management to retain existing populations.

Good luck with the Pine Marten project. I would love to see the Welsh Pine Marten population restored.

Do whatever you can to save the Pine Marten! I have taken part in one of your Pine Marten surveys, back in the summer of 2012 - I believe it was around June time, from Cwm Rheidol.

I think it's a really good idea- I hope you get the necessary support!

I thought pine martens were birds before this

Good luck with the project!

Web-link Welsh language respondents "any other comments":

Work as an environmental consultant for a building company

Formerly ADAS and more recently the Welsh Office Agricultural Department Artist

Roadshow comments:

Good luck!

Newly discovering the amazing world of wildlife, I really would love to learn more, and an introduction to wildlife, if such a course was available in Aber, as extra-mural class or FE class, I, and I'm sure many others would flock to it

Unsure about reintroductions- not sure whether habitat would be suitable

For restocking if restocking from within Wales. Concern over genetics.

Just like all animals!

I believe in conservation as long as people are able to enjoy the countryside as well.

Would prefer to see pine martens recover naturally.

Slightly concerned about impact of martens on other species/prey.

Bring them back - give me a job as well!

Best wishes for a re-introduction

4.0 VWT Mailing - Hotspot & Rural Wales Findings

4.1 Response Rates

Table 10 - Showing a breakdown of completed responses and response rates by “Hotspot” Areas (Mailing Survey Spring 2013)				
Areas with sightings	Responses n	% Response	Mailed	Undeliverable
Black Mountains	18	3.67	500	9
Blaenau Ffestiniog	24	4.90	500	10
Brechfa	35	7.06	500	4
Capel Bangor	36	7.20	500	7
Cefneithin	15	3.04	500	6
Dolgellau	31	6.20	500	10
Llandysul	18	3.71	500	15
Newtown	19	3.88	500	10
Total	196	4.99	4,000	71

- 4.1.1 Although 4,000 were mailed in total, 71 of these addressed mail packs were returned as undeliverable from the Hotspot areas, consequently the net number delivered was 3,929.
- 4.1.2 There were 202 responses, but 6 of these were only partially completed forms (3 from Newtown, 2 from Capel Bangor, and 1 from Llandysul); the remaining 196 completed surveys returned by mailing respondents living in designated “Hotspot” areas” constituted a response rate of almost 5%. The margin of error at the 95% confidence level equals 6.8%.
- 4.1.3 The response rate differed significantly between the Hotspot areas. Ranging from Capel Bangor which had a response rate of 7.2% (36 viable responses), whereas Cefneithin only had a response rate just over 3% (comprising 15 responses in total).
- 4.1.4 In three of the identified “Hotspot” areas the number of respondents was more than 30 allowing further segmentation analysis to be undertaken if subsequently required. The three areas: Capel Bangor, Brechfa and Dolegellau had response rates of 7.20, 7.06 and 6.20 per cent respectively; substantially higher than the overall Hotspot mailing response rate.
- 4.1.5 There were 178 responses from Rural Wales addressees, but two forms were only partially completed, leaving a total of 176 completed responses from the Mailing to Rural Wales areas. Since 3,500 packs were mailed and 69 returned as undeliverable

(net 3,431) this constitutes a response rate of 5.13%. At the 95% confidence level the margin of error equals 7.2%.

4.1.6 The difference between the response rates of the two samples was not significant at 95% confidence level (z-score= -0.2554161; P-value= 0.3992).

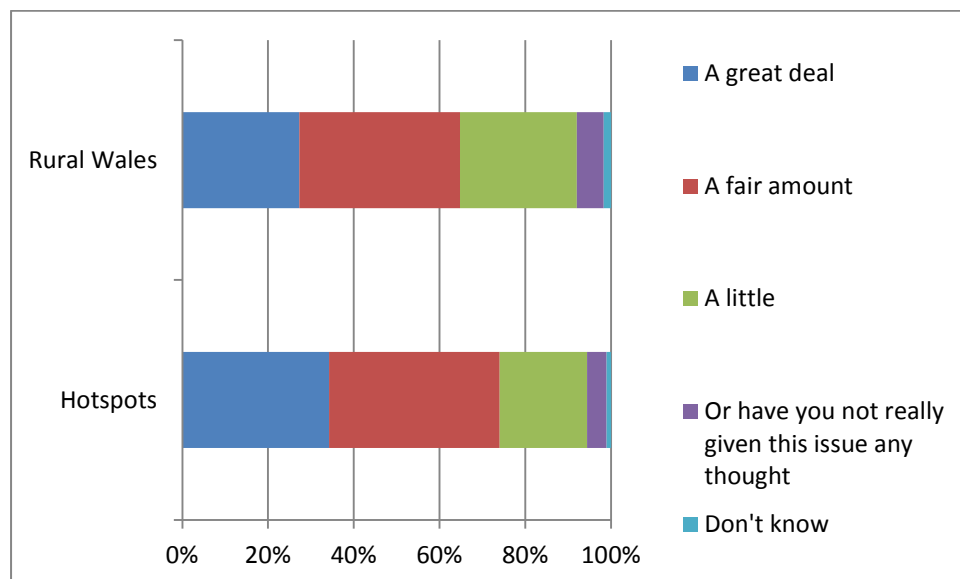
4.1.7 There were fourteen Welsh language mailing respondents from Hotspot locations compared with twelve from the rest of Rural Wales.

Table 1c - Showing the breakdown of English and Welsh language respondents (Mailing Survey, "Hotspots" - Spring 2013, 196 respondents)		
Answer Options	Response Percent	Response Count
English/Saesneg	92.9%	182
Welsh/Cymraeg	7.1%	14
<i>answered question</i>		196
<i>skipped question</i>		0

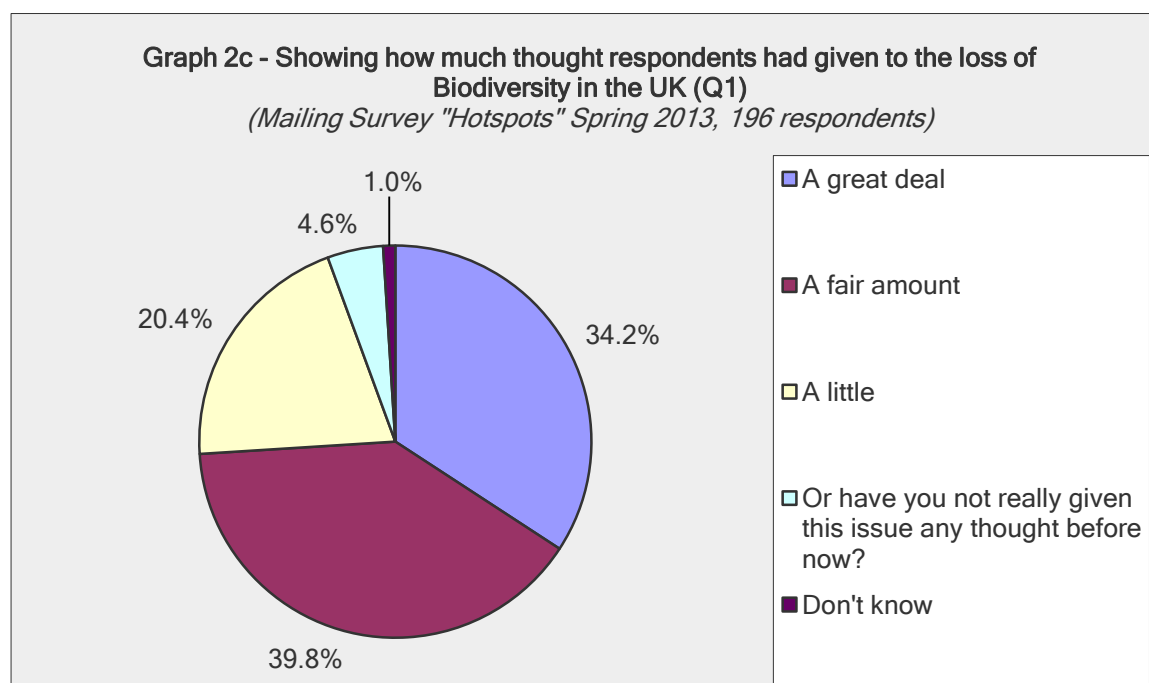
Table 1d - Showing the breakdown of English and Welsh language respondents (Mailing Survey, "Rural Wales" - Spring 2013, 176 respondents)		
Answer Options	Response Percent	Response Count
English/Saesneg	93.2%	164
Welsh/Cymraeg	6.8%	12
<i>answered question</i>		176
<i>skipped question</i>		0

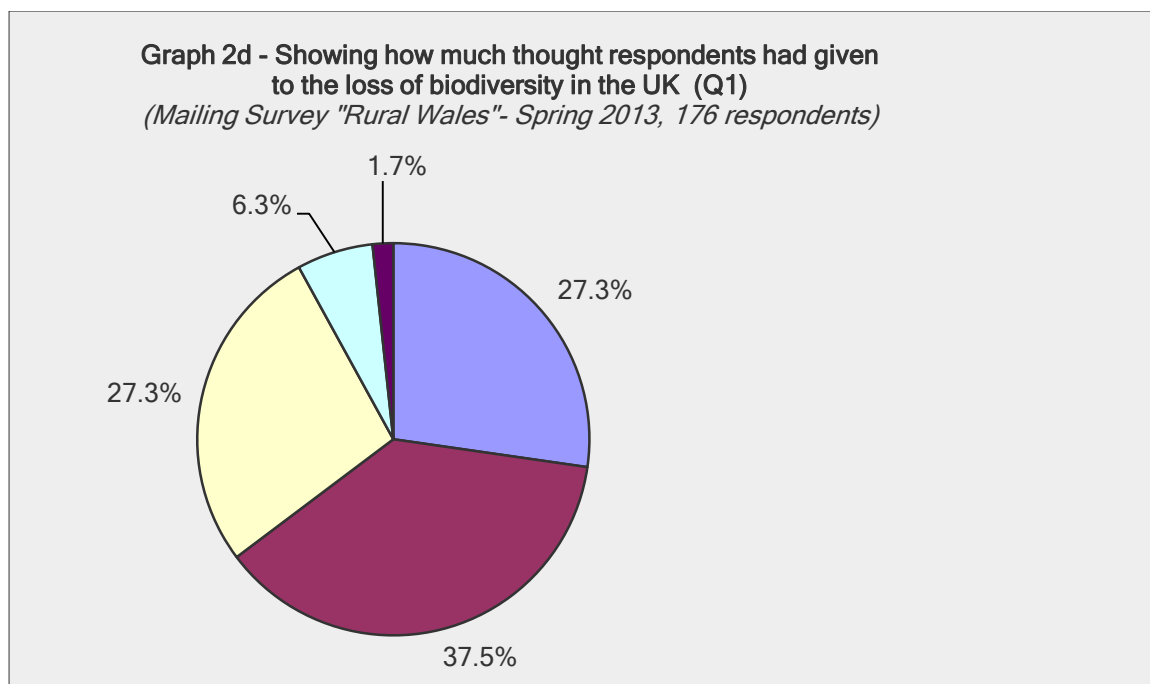
4.2 Biodiversity

Graph 2c - Showing how much thought respondents had given to the loss of biodiversity in the UK (Q1) Source: Mailing Survey Spring 2013: Rural Wales (n=176), Hotspots (n=196).

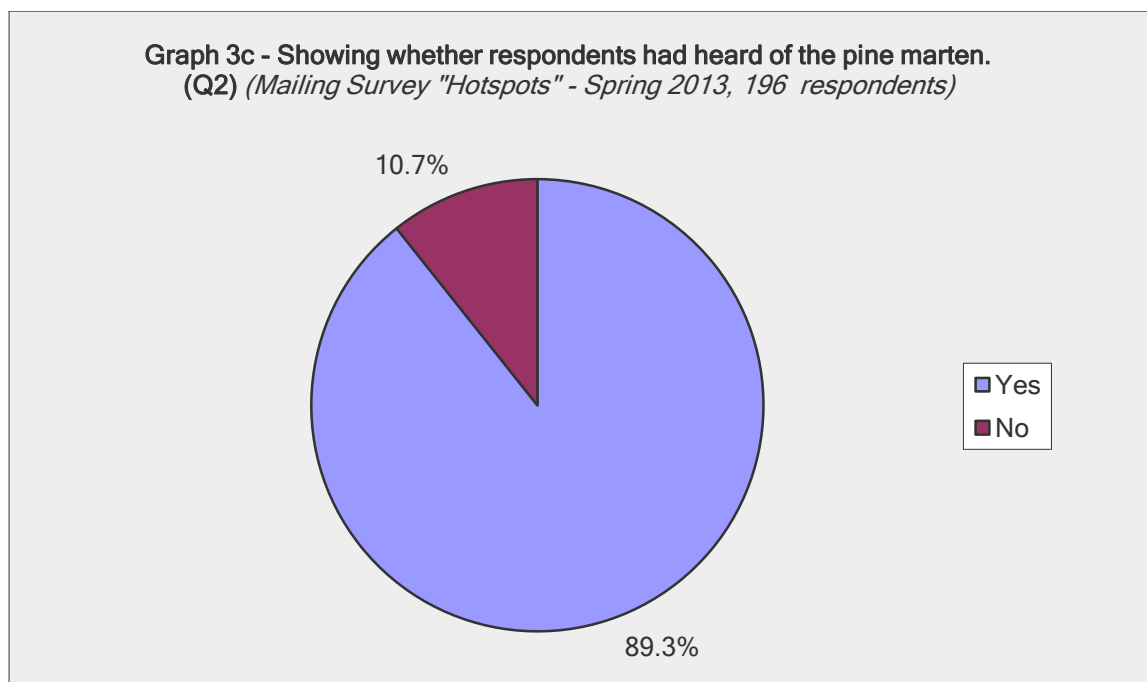


4.2.1 A greater proportion of respondents from the Hotspots (74%) had given either *A great deal* or *a fair amount* of thought to the loss of Biodiversity in the UK, than Rural Wales respondents (68.4%).

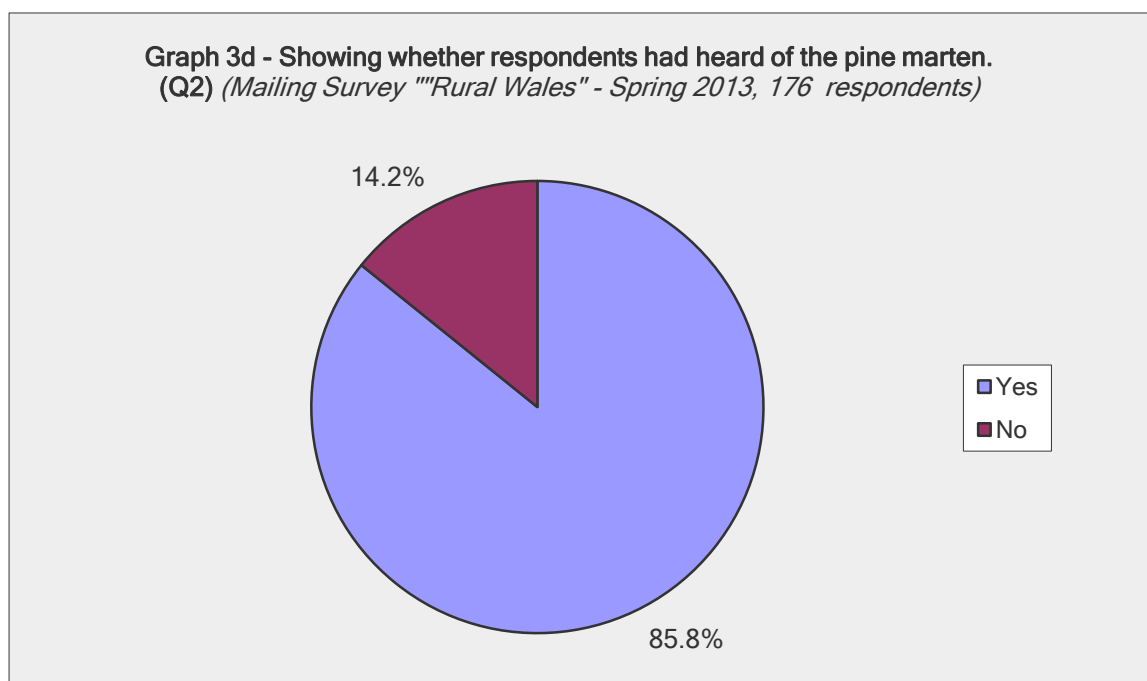




4.3 Heard of Pine martens

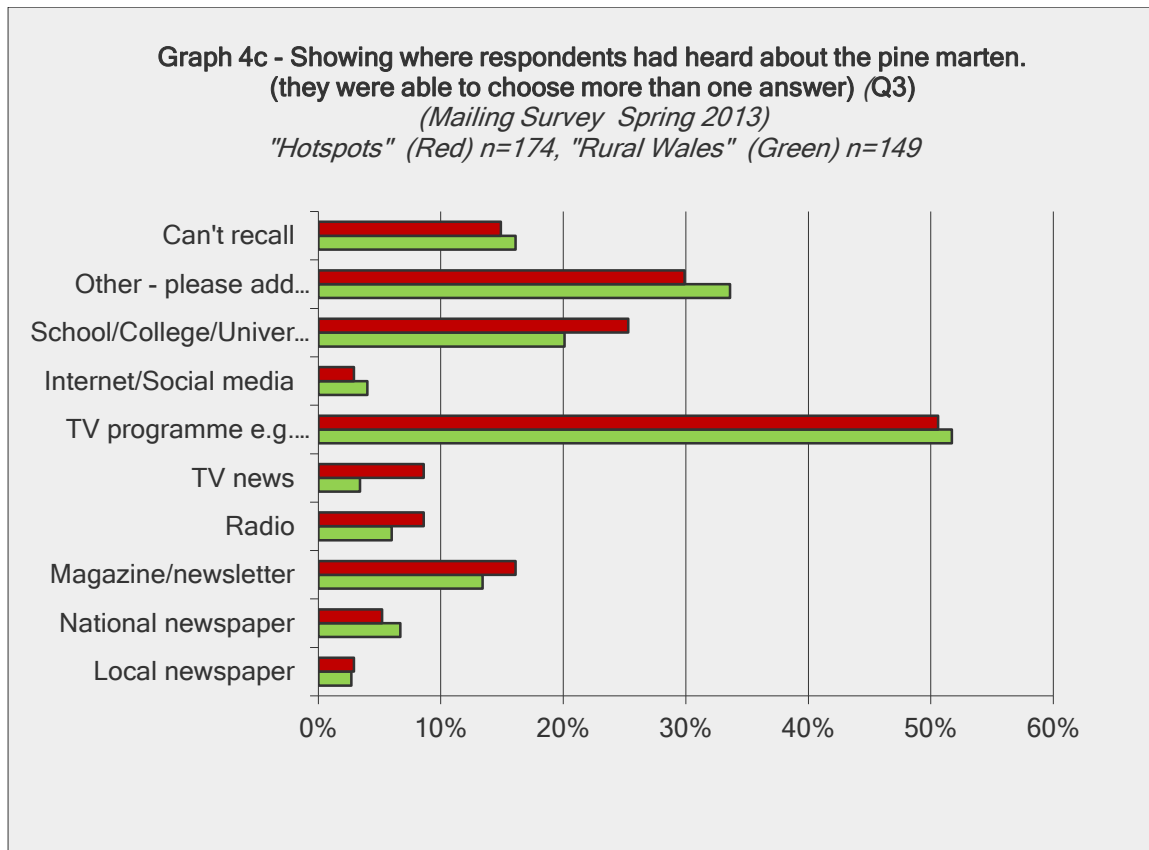


- 4.3.1 Around nine out of every ten respondents located in identified hotspots had heard of the pine marten. A slightly smaller proportion of Rural Wales respondents had heard about pine martens.



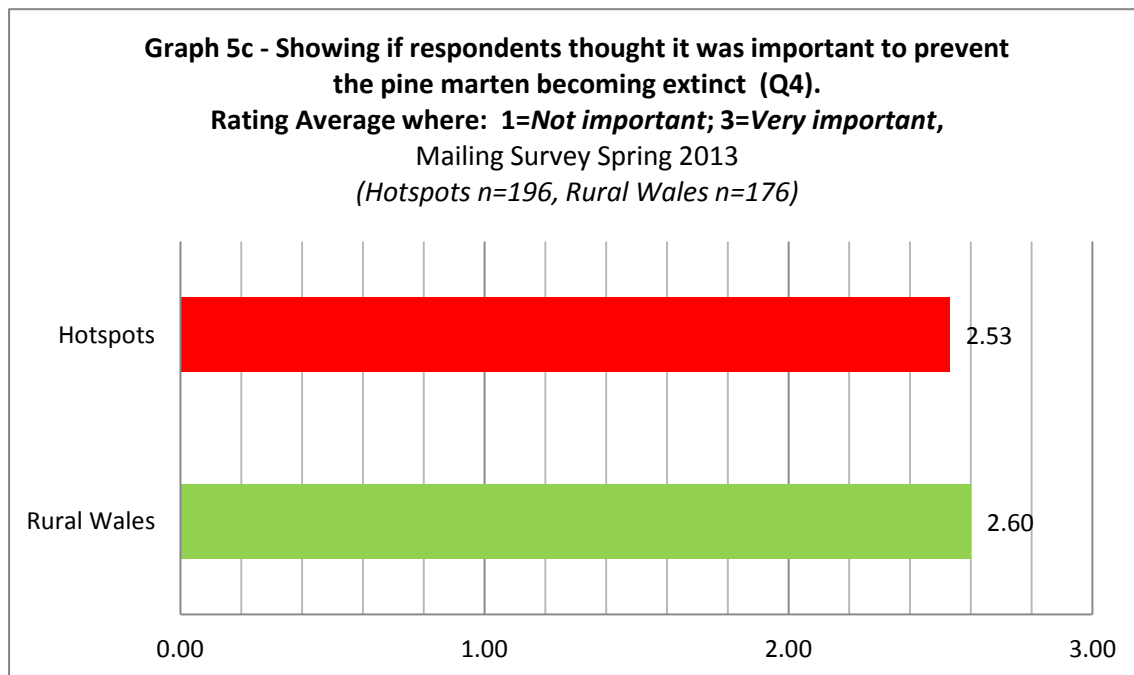
4.4 Media

- 4.4.1 Broadly similar proportions of Hotspot and Rural Wales respondents indicated that they had heard about the pine marten via a variety of methods (as illustrated in the following graph).
- 4.4.2 The most frequent method cited was by TV programmes (circa 50% of respondents that answered the question); the next most frequent category was through educational institutions (circa 20% of Rural Wales respondents and around 25% of Hotspot respondents).



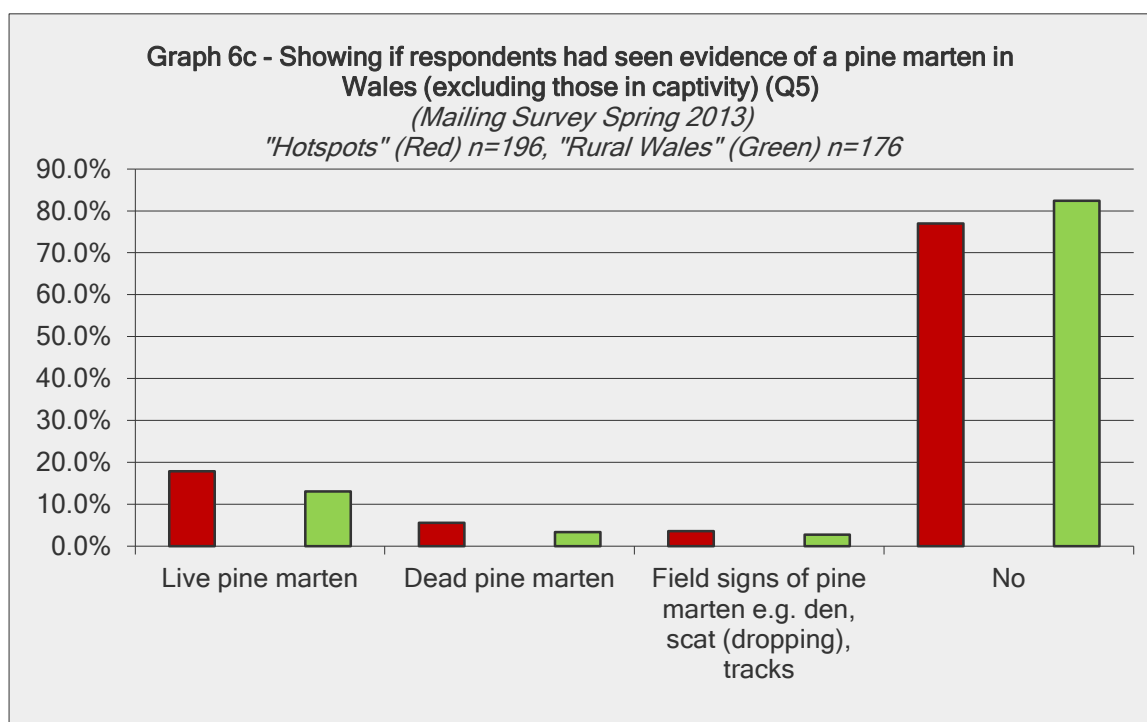
- 4.4.3 22 "Hotspot" respondents and 27 "Rural Wales" respondents skipped this question.

4.5 Pine Martens and extinction



- 4.5.1 Rural Wales respondents gave slightly higher importance than Hotspot respondents to preventing the pine marten becoming extinct, with average rating scores of around 2.6 (where 1 = *not important*, 3 = *very important*).
- 4.5.2 More than two thirds of Rural Wales and Hotspot respondents thought that it was *very important* (68.6% and 67.3% respectively).

4.6 Evidence of pine martens

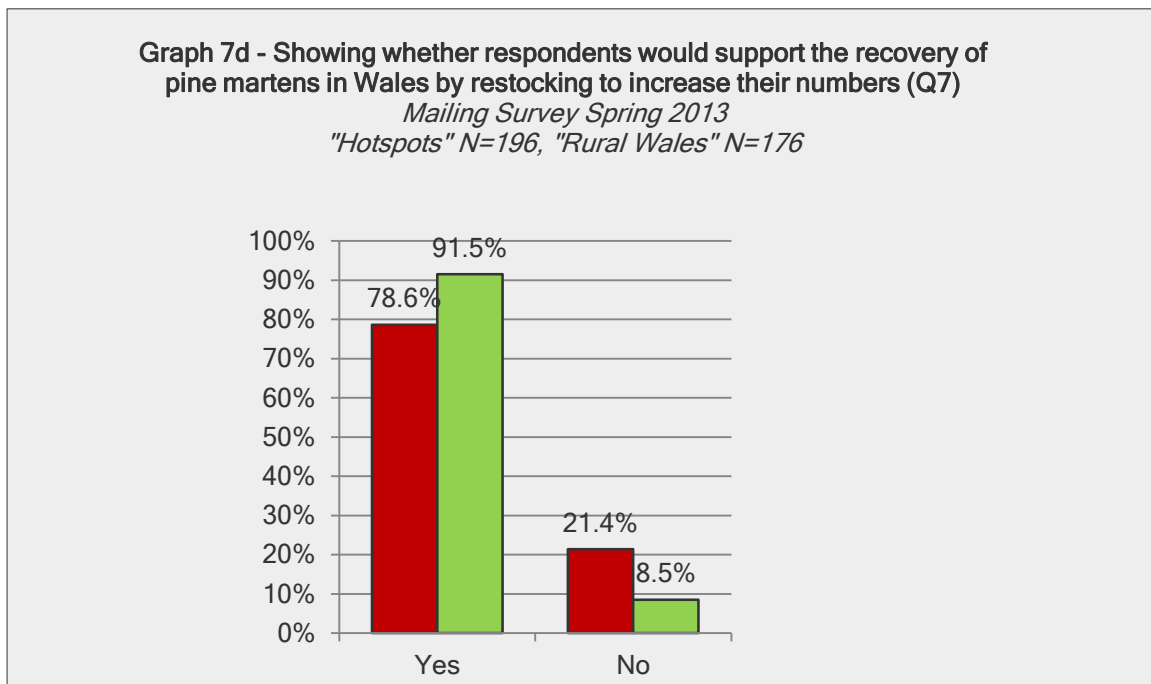


- 4.6.1 Around four out of every five respondents had not seen any evidence of pine martens at all, comprising 77% of Hotspot respondents and 82.4% of respondents from Rural Wales.
- 4.6.2 A larger percentage of Hotspot survey respondents (17.9%) claimed to have seen a live pine marten than Rural Wales respondents (13.1%), 35 and 23 respondents respectively.

Table 6c - Showing if respondents had seen evidence of a pine marten in Wales (excluding those in captivity) (Q5) (Mailing Survey "Hotspots"- Spring 2013, N=196)		
Answer Options	Response %	Response n
Live pine marten	17.9%	35
Dead pine marten	5.6%	11
Field signs of pine marten e.g. den, scat (dropping), tracks	3.6%	7
No	77.0%	151
Other (please specify)		5
answered question		196

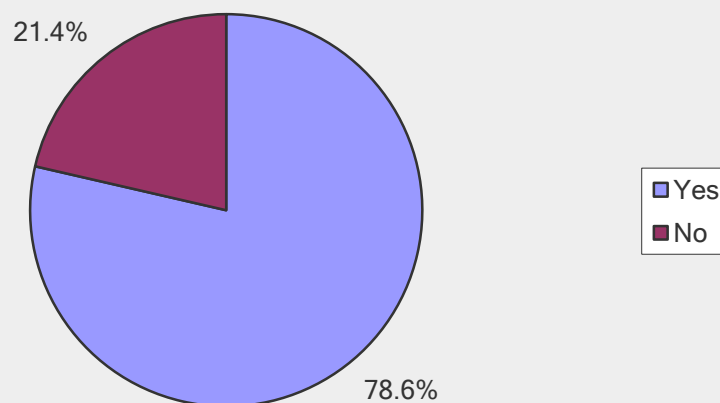
Table 6d - Showing if respondents had seen evidence of a pine marten in Wales (excluding those in captivity) (Q5) (Mailing Survey "Rural Wales" Spring 2013, N=176)		
Answer Options	Response %	Response n
Live pine marten	13.1%	23
Dead pine marten	3.4%	6
Field signs of pine marten e.g. den, scat (dropping), tracks	2.8%	5
No	82.4%	145
Other (please specify)		5
answered question		176

4.7 Restocking Pine martens



- 4.7.1 More than nine out of every ten Rural Wales survey respondents (161) indicated that they would support the recovery of pine martens in Wales by restocking.
- 4.7.2 This was a higher proportion compared with Hotspot survey respondents, where almost eight out of ten respondents would support restocking (154 Hotspot survey respondents overall).
- 4.7.3 The reason for the difference might be because of the real or perceived potential damage to game and poultry in the Hotspot areas. Further secondary analysis to explore any causal link could be subsequently undertaken if required.

Graph 7c - Showing whether respondents would support the recovery of pine martens in Wales by restocking to increase their numbers. (Q7)
(Mailing Survey - "Hotspots" Spring 2013, 196 respondents)



Graph 7d - Showing whether respondents would support the recovery of pine martens in Wales by restocking to increase their numbers (Q7)
(Mailing Survey - "Rural Wales" Spring 2013, 176 respondents)

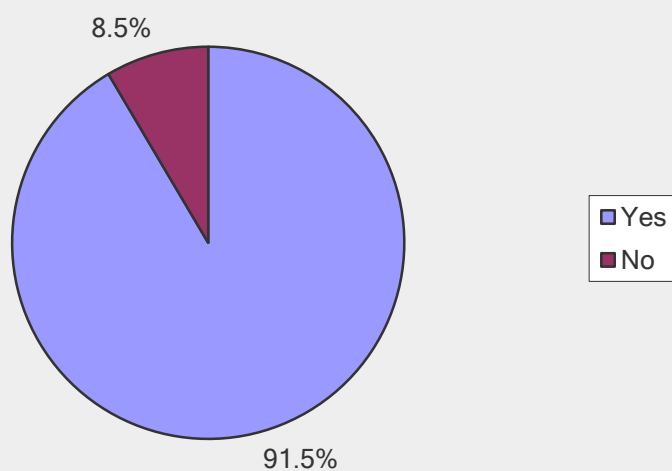


Table 11 - Showing whether *Hotspot* mailing survey respondents would support restocking (Q7) broken down by which organisations they were members of (Q12), Some were members of more than one organisation. (n=50 including “other” responses)

Answer Options	Yes	No	Ratio
BASC	2	2	1:1
Country Land & Business Association	2	2	1:1
Game and Wildlife Conservation Trust	1	0	
NFU Wales	10	6	1.7:1
RSPB	21	2	10.5:1
Wildlife Trusts Wales	9	1	9:1
Woodland Trust	4	0	
Total	49	13	3.8:1

Table 12 - Showing whether Rural Wales mailing survey respondents would support restocking (Q7) broken down by which organisations they were members of (Q12), Some were members of more than one organisation. (n=49 including “other” responses)

Answer Options	Yes	No	Ratio
BASC	3	0	
Country Land & Business Association	2	0	
Game and Wildlife Conservation Trust	1	0	
NFU Wales	7	0	
RSPB	32	3	10.7:1
Wildlife Trusts Wales	10	1	10:1
Woodland Trust	10	2	5:1
Total	65	6	10.8:1

- 4.7.4 Whereas an equal number of members of the Country Land & Business Association and BASC were for and against restocking in the Hotspot areas; Rural Wales respondents who were members of these organisations were all in favour of restocking. Similarly, in Hotspot areas NFU Wales members were divided about restocking, while in Rural Wales they were unanimously in favour of restocking.
- 4.7.5 In both areas members of RSPB, the Wildlife Trusts Wales, and the Woodland Trust, invariably supported restocking.
- 4.7.6 These findings indicate that VWT need to win over identified stakeholder segments in the Hotspot areas and should develop a tailored education programme to address potential objections to restocking. VWT need to address any specific issues that have been raised and remove perceived or actual barriers to restocking.
- 4.7.7 50 Hotspot respondents and 49 Rural Wales respondents answered this question including “other” responses; representing around one quarter of both respondent segments.

Table 13 - Showing whether Hotspot mailing survey respondents would support restocking (Q7) broken down by which countryside occupations they had worked in (Q13). (n=71 including "other" responses).

Answer Options	Yes	No	Ratio
Estate management	5	1	5:1
Farming	26	17	1.5:1
Forestry	8	3	2.7:1
Game Keeping	3	2	1.5:1
Leisure/Tourism	10	4	2.5:1
Countryside management e.g. Ranger/Warden	9	3	3:1
Wildlife Conservation	12	3	4:1
Total	73	33	2.2:1

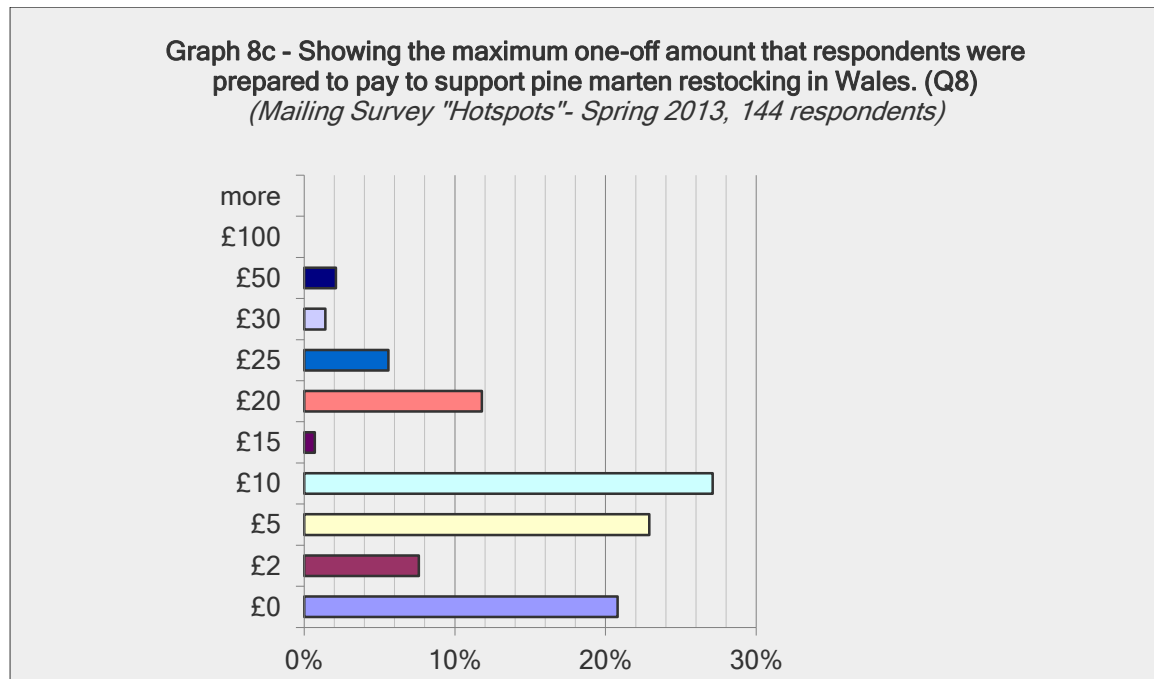
Table 14 - Showing whether Rural Wales mailing survey respondents would support restocking (Q7) broken down by which countryside occupations they had worked in (Q13). (n=63 including "other" responses).

Answer Options	Yes	No	Ratio
Estate management	1	1	1:1
Farming	29	6	4.8:1
Forestry	12	2	6:1
Game Keeping	2	0	
Leisure/Tourism	20	1	20:1
Countryside management e.g. Ranger/Warden	4	3	1.3:1
Wildlife Conservation	13	4	3.2:1
Total	81	17	4.8:1

- 4.7.8 In general, respondents from Rural Wales were more likely to be in favour of restocking than respondents from Hotspot areas; however, of the two Rural Wales respondents who had worked in Estate Management one was in favour of restocking and one was against it. Since the latter respondents were insufficient in number to draw any conclusions from, further research of this sector is recommended to see if this is in fact a representative trend or an anomaly, because of low response numbers.
- 4.7.9 In Hotspots areas gamekeeper respondents were divided over the issue unlike in Rural Wales and similarly, in farming.
- 4.7.10 Whilst in Rural Wales the support for restocking was clearer cut among farmers, forestry, Leisure/tourism, and Wildlife Conservation occupations, than in Hotspot areas; surprisingly those involved in Countryside Management were almost evenly divided over the issue indicating that VWT may need to focus on reassuring this sector, if they are to garner unambiguous support for restocking.
- 4.7.11 It is recommended that VWT help those involved in farming or gamekeeping in Hotspot areas in particular, to overcome any reservations that they have to supporting restocking.
- 4.7.12 71 Hotspot respondents and 63 Rural Wales respondents answered this question including "other" responses.

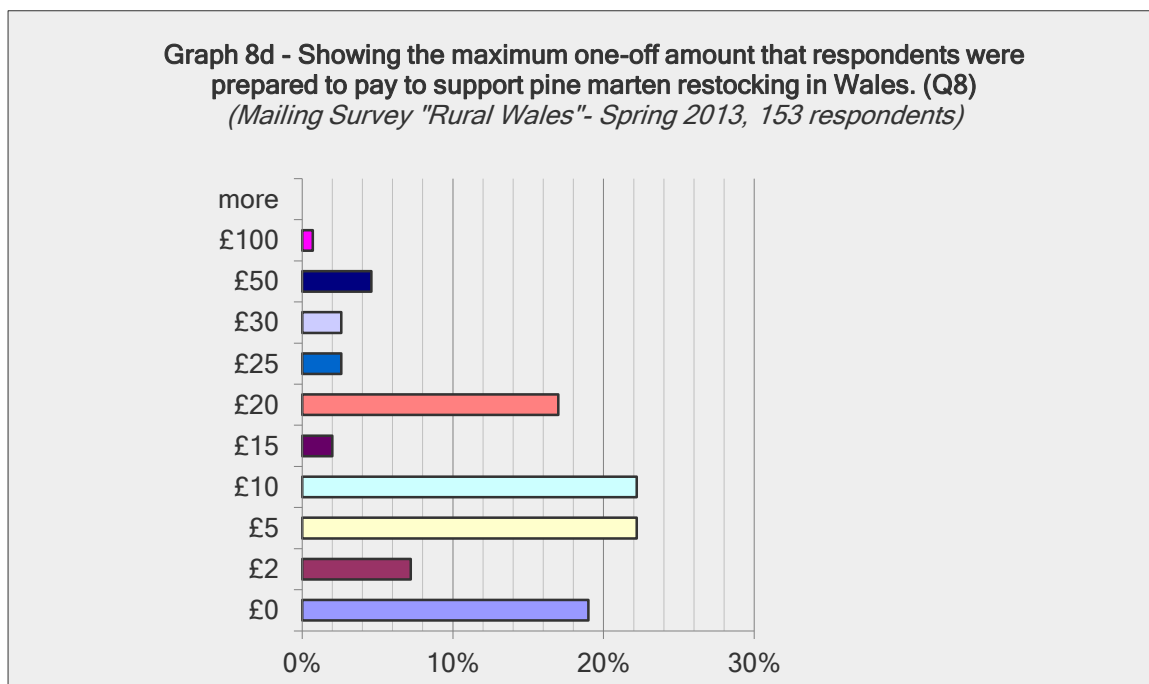
4.8 Contribution to restocking

- 4.8.1 The maximum one-off amount that respondents were prepared to pay to support pine marten restocking in Wales broadly followed similar trends for both mail survey segments; the amount Hotspot respondents would pay ranged from £0-£50, whilst Rural Wales respondents range was larger from £0-£100.
- 4.8.2 There were two exceptions: twice as many (8) Hotspot respondents were prepared to pay £25, compared to Rural Wales respondents (4) and one Rural Wales respondent was prepared to pay £100, but no Hotspot respondents were prepared to do so.
- 4.8.3 The most frequent amount Hotspot respondents were prepared to pay was £10 (n=39), 27.1% of respondents; 30 respondents (20.8%) indicated that they would pay nothing (£0).
- 4.8.4 The same number of Rural Wales respondents were prepared to pay either £5 (n=34), 22.2% of respondents in each case); while 29 respondents (19%) would pay £0.



- 4.8.5 52 Hotspot respondents skipped this question
- 4.8.6 The average WTP was £11.77 for 58% of Hotspot survey respondents, i.e. excluding £0 bids and those that declined to answer this question.
- 4.8.7 The average WTP was £13.55 for 70% of Rural Wales respondents, i.e. excluding £0 bids, the single £100 bid and those that declined to answer this question. This is a significantly higher WTP than Hotspot respondents, around £15% more. Further investigation would be needed to see if this mirrors the findings of Williams *et al* (2002) i.e. where people had had more direct experience of wolves their attitudes tended to be more negative, in this case towards the pine marten. In particular, this

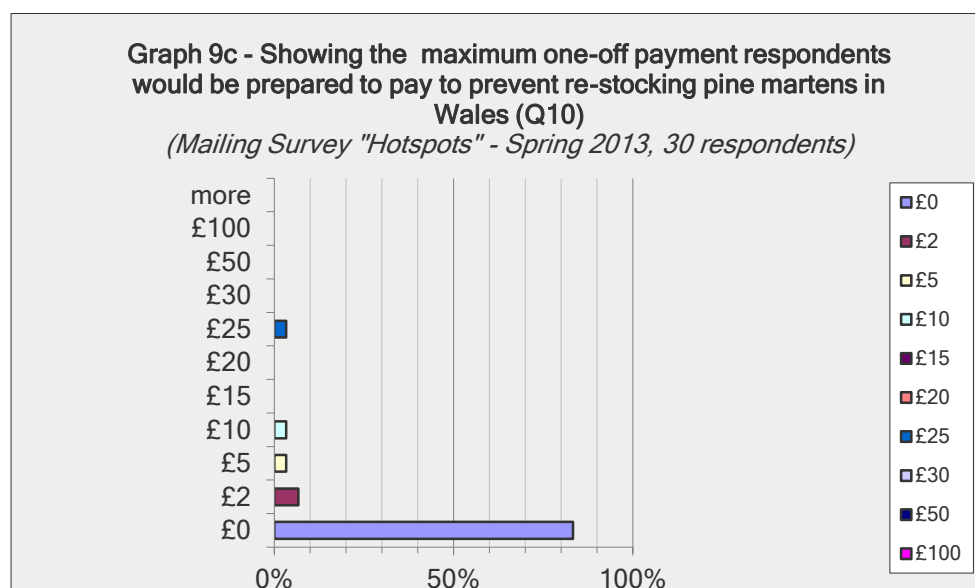
reinforces other survey findings highlighting the need for VWT to consult with stakeholders in these Hotspot areas to address any concerns.



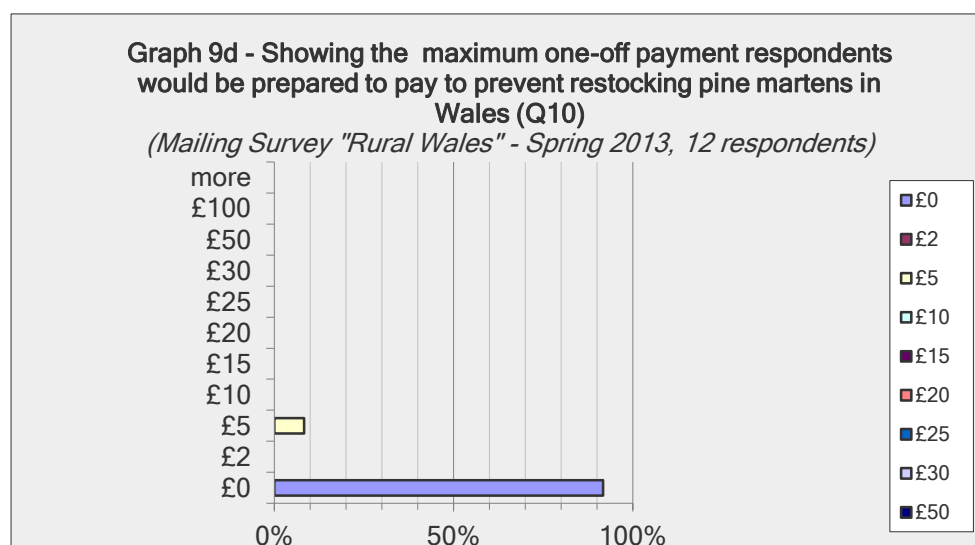
4.8.8 23 Rural Wales respondents skipped this question

4.9 Contribution to prevent restocking

- 4.9.1 Although 30 respondents from Hotspot areas answered this question (15.3% of all Hotspot respondents), just five of these were prepared to pay to *prevent restocking* pine martens in Wales (compared with the 114 Hotspot respondents who were prepared to pay to *support restocking*); and the maximum amount was £25. The two Welsh language Mailing respondents that indicated that were against restocking, were both located in a Hotspot - Aberystwyth, (Capel Bangor and Goginan) - but neither was prepared to pay anything into a fund to prevent restocking. 166 Hotspot respondents skipped this question



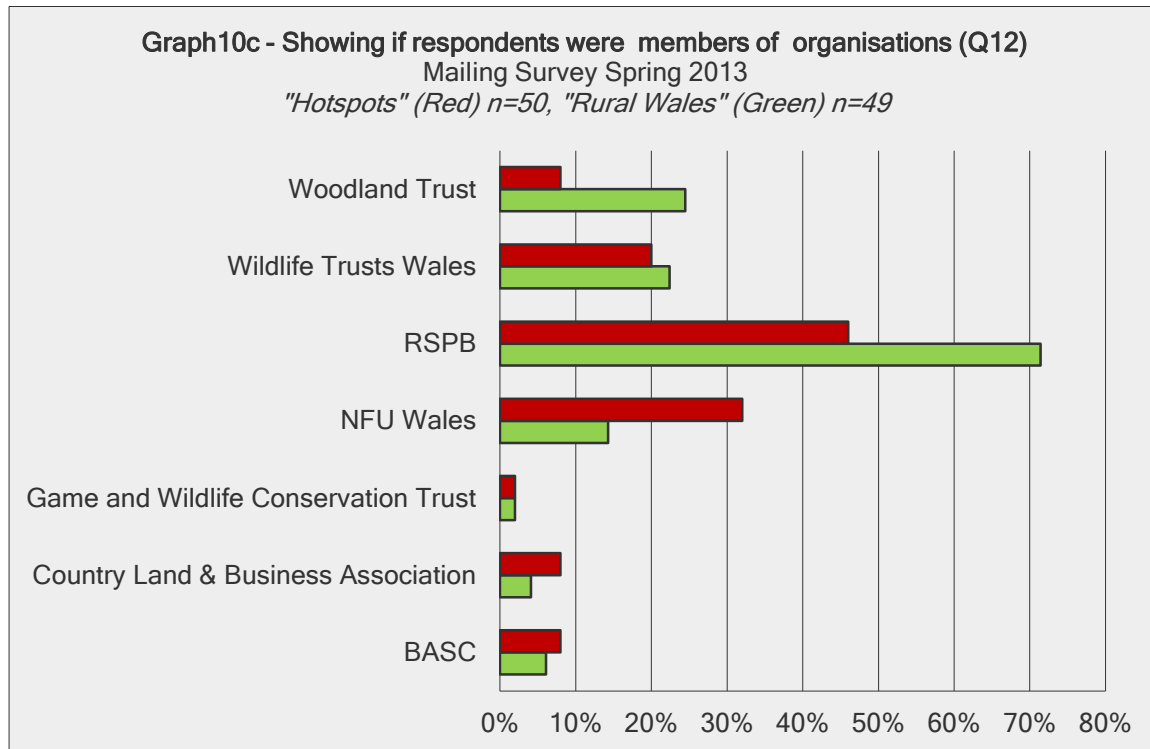
- 4.9.2 12 Rural Wales respondents answered this question (6.8% of Rural Wales respondents), but only one was prepared to pay anything to prevent restocking, and then just £5. **This was in stark contrast to the 124 Rural Wales respondents (circa 70% of these respondents) who were prepared to pay something to *support restocking* pine martens in Wales.**



- 4.9.4 164 Rural Wales respondents skipped this question.

4.10 Organisation membership

4.10.1 Similar number of respondents from the Hotspot areas and Rural Wales answered this question, 50 (25.5%) and 49 (27.8%) respectively.



4.10.2 More respondents from both mailed segments who answered this question were members of the RSPB than other organisations mentioned; a higher proportion of the respondents from Rural Wales (n= 35, more than 70%) compared with Hotspot respondents (n=23, less than 50%).

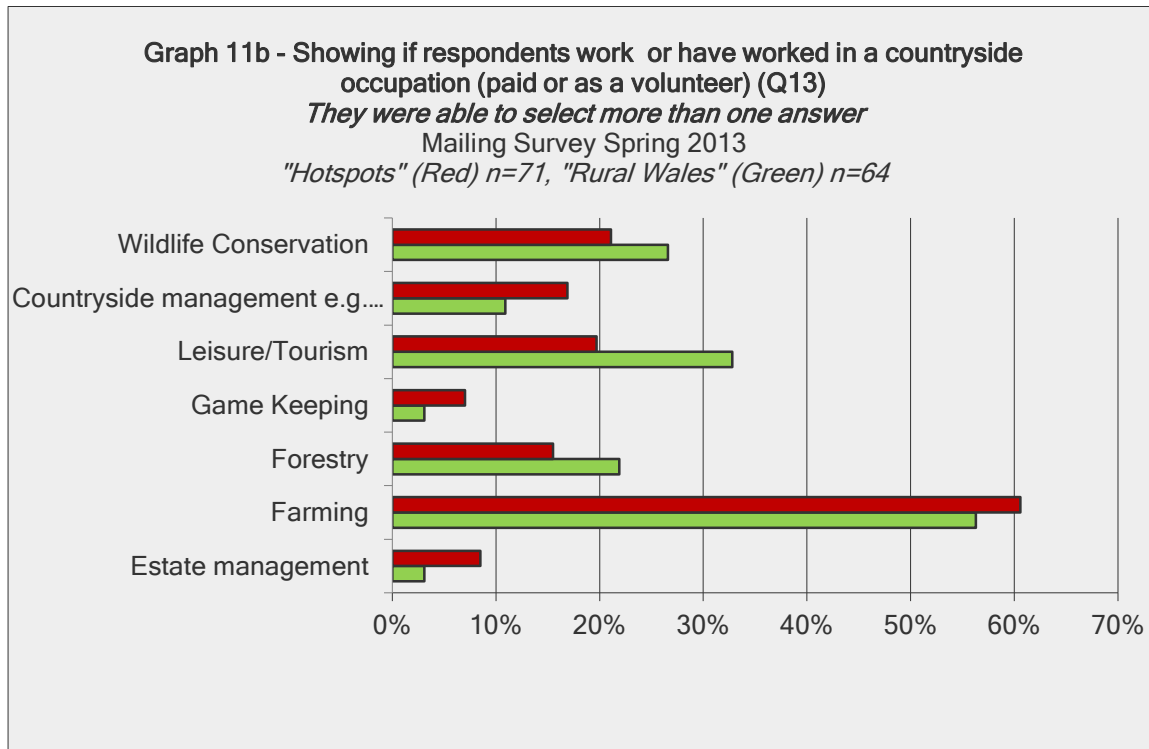
4.10.3 Similarly, a higher proportion of Rural Wales respondents were members of The Woodland Trust (24.5%, n=12) than Hotspot respondents (n=4).

4.10.4 However, a larger number of Hotspot respondents were members of the National Farming Union Wales (n=16, 32%) around one third compared with Rural Wales respondents (n=7, 14.3%). The higher proportion of NFU Wales members might account for the smaller proportion of Hotspot respondents who were prepared to support the recovery of pine martens in Wales compared with Rural Wales respondents (see Q7). ***Subsequent secondary research could be undertaken to test if there is a causal link.***

4.10.5 146 Hotspot respondents and 127 Rural Wales respondents skipped this question.

4.11 Countryside Occupations

4.11.1 Similar proportions of Hotspot and Rural Wales respondents answered this question, 36.2% and 36.4% respectively.



4.11.2 In both segments' cases the majority of respondents had worked in Farming in some capacity, indeed around six out of every ten Hotspot respondents.

4.11.3 Around one third of Rural Wales respondents had worked in Leisure and Tourism compared with one in five respondents from the Hotspot areas that answered this question.

4.11.4 More respondents from the Hotspot areas compared with Rural Wales respondents indicated that they had worked in Countryside Management (n=12), Gamekeeping and Estate Management, however the number of respondents was relatively small.

4.11.5 Three of the Welsh language mailing respondents had worked in farming; the one located in a Hotspot area was against restocking pine martens, the two living in Rural Wales supported restocking.

4.11.6 125 "Hotspot" respondents and 112 "Rural Wales" respondents skipped this question.

4.12 Hotspot Mailing Respondents' Characteristics

Table 15 - Showing Breakdown of Hotspot respondents by ACORN Type (CACI). Source: Mailing Survey Spring 2013, N=196			
Number	%	Acorn Type	Acorn Description
61	31.1	6	Financially Comfortable Families
17	8.7	7	Affluent Professionals
13	6.6	5	Wealthy Countryside Commuters
13	6.6	8	Prosperous Suburban Families
10	5.1	4	Asset Rich Families
10	5.1	27	Suburban Semis, Conventional Attitudes
7	3.6	3	Large House Luxury
7	3.6	45	Pensioners, in social housing, semis and terraces
6	3.1	11	Settled Suburbia, Older People
6	3.1	30	Older People, Neat and Tidy Neighbourhoods
6	3.1	41	Labouring Semi-Rural Estates
6	3.1	43	Families in Right-to-Buy Estates
5	2.6	10	Better-off Villagers
4	2.0	1	Exclusive Enclaves
3	1.5	9	Well-off Edge of Towners
3	1.5	25	Larger Family Homes, Multi-ethnic Areas
2	1.0	34	Student Flats and Halls of Residence
2	1.0	36	Educated Young People in Flats and Tenements
2	1.0	39	Fading Owner Occupied Terraces
2	1.0	40	High Occupancy Terraces, Many Asian Families
2	1.0	44	Post-War Estates, limited means
2	1.0	47	Low Income Older People in Smaller Semis
1	0.5	12	Retired and Empty Nesters
1	0.5	19	First Time Buyers, in small Modern Homes
1	0.5	29	Established Suburbs, Older Families
1	0.5	33	Smaller Houses and Starter Homes
1	0.5	42	Struggling Young Families in Post-War Terraces
1	0.5	46	Elderly People in Social Rented Flats
1	0.5	50	Struggling Younger People in Mixed Tenure
196	100.0		

4.12.1 The table above summarises a breakdown of Hotspot respondents by ACORN classification (CACI), Types 4-8 were most frequently found among respondents and are all classified within ACORN Group B Executive Wealth. The latter are high income people, successfully combining jobs and families.

- These are generally family areas, there are also some empty nesters and better-off retired couples.
- The likelihood of these families owning a second home, in the UK or abroad, is over five times the UK average.

- Incomes are good since many have managerial and professional occupations.
- They are financially literate, tend to be frequent users of the internet, although many will also read the broadsheets.
- Modern technology such as DAB radio, iPads or tablet PC's, portable media players and smartphones are more likely to be owned, (Source CACI: ACORN User Guide).

4.12.2 The only other Acorn Type constituting more than 5% of respondents was Type 27 – *“Stable middle class with older age profile...living in semi-detached homes...likely to be in Clerical or skilled manual employment...cautious in outlook...shop at BHS, Poundland...might enjoy gardening, photography, travel and DIY.”*

4.13 Rural Wales Respondents' Characteristics

Table 16 - Showing Breakdown of Rural Wales respondents by ACORN Type (CACI). Source: Mailing Survey Spring 2013, n=174 (N=176, 2 were not categorized)

Number	%	Acorn Type	Acorn Description
53	30.5	6	Financially Comfortable Families
15	8.6	5	Wealthy Countryside Commuters
11	6.3	8	Prosperous Suburban Families
10	5.7	11	Settled Suburbia, Older People
9	5.2	7	Affluent Professionals
9	5.2	41	Labouring Semi-Rural Estates
7	4.0	27	Suburban Semis, Conventional Attitudes
6	3.4	4	Asset Rich Families
6	3.4	34	Student Flats and Halls of Residence
5	2.9	44	Post-War Estates, limited means
4	2.3	25	Larger Family Homes, Multi-ethnic Areas
4	2.3	30	Older People, Neat and Tidy Neighbourhoods
4	2.3	32	Educated Families in Terraces, Young Children
4	2.3	45	Pensioners, in social housing, semis and terraces
3	1.7	2	Metropolitan Money
3	1.7	10	Better-off Villagers
3	1.7	33	Smaller Houses and Starter Homes
3	1.7	36	Educated Young People in Flats and Tenements
2	1.1	1	Exclusive Enclaves
2	1.1	3	Large House Luxury
2	1.1	26	Semi-Professional Families, Owner Occupied Neighbourhoods
2	1.1	28	Owner-Occupied terraces, Average Income
2	1.1	48	Pensioners and Singles in Social Rented Flats
1	0.6	13	Upmarket Downsizers
1	0.6	19	First Time Buyers, in small Modern Homes
1	0.6	39	Fading Owner Occupied Terraces
1	0.6	42	Struggling Young Families in Post-War Terraces
1	0.6	49	Young Families in Low Cost Private Flats
174	100.0		

4.13.1 Two Rural Wales respondents could not be matched with the database.

4.13.2 The classification breakdown of Rural Wales respondents by ACORN (CACI) was similar to Hotspot respondents with the two Type exceptions: The latter ACORN Types 11 and 41 each constituted more than 5% of Rural Wales respondents overall.

4.13.3 Type 11, describes *Settled Suburbia, Older People*, from Group C, *Mature Money*, and are often pensioners and older people who have downsized. These people tend to have good educational qualifications and have worked in professional or managerial occupations, are financially astute and have higher than average pensions.

- Readership of the Times and the Telegraph is much higher than average.
- They shop at department stores such as Debenhams and Marks & Spencer and established high street names such as WH Smith and Clarks. Many favour shopping at Sainsbury's.

4.13.4 Type 41 *Labouring Semi-Rural Estates*, derives from Group M *Striving Families*. These are generally small estates of ex-council and social housing in villages and semi-rural settings.

- There may be a higher than average proportion of school children.
- Incomes are generally well below the national average but these families are coping financially.
- Most people will have skilled, semi-skilled or routine jobs, some of which will be part-time. A few may have agricultural employment.
- A variety of retailers might appeal to this type, including Argos, BHS, Primark, TK Maxx, Poundland, Game and Early Learning Centre.(Source: CACI).

Age and Gender Breakdown of Respondents by Segment

Table 17 - Showing Hotspot respondents broken down by Age and Gender (Source: Mailing Survey Spring 2013, CACI) N=196						
Age range	M	%	F	%	All	%
18-24	6	3.1	8	4.1	14	7.1
25-34	7	3.6	7	3.6	14	7.1
35-44	15	7.7	18	9.2	33	16.8
45-54	20	10.2	18	9.2	38	19.4
55-64	24	12.2	26	13.3	50	25.5
65-74	22	11.2	15	7.7	37	18.9
75+	6	3.1	4	2.0	10	5.1
Total	100	51.0	96	49.0	196	100.0

Table 18 - Showing Rural Wales respondents broken down by Age and Gender (Source: Mailing Survey Spring 2013, CACI) n=174						
Age range	M	%	F	%	Total	%
18-24	12	6.9	9	5.2	21	12.1
25-34	9	5.2	14	8.0	23	13.2
35-44	10	5.7	18	10.3	28	16.1
45-54	17	9.8	21	12.1	38	21.8
55-64	12	6.9	28	16.1	40	23.0
65-74	11	6.3	7	4.0	18	10.3
75+	4	2.3	2	1.1	6	3.4
Total	75	43.1	99	56.9	174	100.0

4.13.5 Comparing Table 17 and Table 18, it is apparent that Hotspot respondents had an older age profile with almost one half (49.5%) being aged 55 or older, compared with just over one third (36.7%) of the Rural Wales respondents. In particular, there were significantly more Rural Wales respondents in the 18-24 and 25-34 categories - circa 50% more in each of these age categories.

4.13.6 Regarding gender there were slightly more male respondents from Hotspot areas just over one half of these respondents (51%). However, there was more of a gender bias among Rural Wales where nearly 57% of respondents were female.¹⁶

Rural Urban Classification of Respondents broken down by segment

Table 19 - Showing Hotspot respondents breakdown by CACI Rural Urban Classification. Source: Mailing Survey Spring 2013, N=196		
Classification	n	%
<i>Hamlet & Isolated Dwelling - Sparse</i>	58	29.6
<i>Village - Sparse</i>	59	30.1
<i>Village - Less Sparse</i>	21	10.7
<i>Town & Fringe - Sparse</i>	21	10.7
<i>Hamlet & Isolated Dwelling - Less Sparse</i>	12	6.1
<i>Town & Fringe - Less Sparse</i>	13	6.6
<i>Urban >10K - Sparse</i>	12	6.1
Total	196	100.0

4.13.7 The broadly similar Rural Urban Classification of respondents indicated by the two tables show that the CACI were reasonably successful at matching the Rural Wales component of the mailing to the classification of the Hotspot areas.

Table 20 - Showing Rural Wales respondents breakdown by CACI Rural Urban Classification. Source: Mailing Survey Spring 2013, N=176		
Classification	n	%
<i>Hamlet & Isolated Dwelling - Sparse</i>	53	30.5
<i>Village - Sparse</i>	47	27.0
<i>Village - Less Sparse</i>	23	13.2
<i>Town & Fringe - Sparse</i>	22	12.6
<i>Hamlet & Isolated Dwelling - Less Sparse</i>	13	7.5
<i>Town & Fringe - Less Sparse</i>	12	6.9
<i>Urban >10K - Sparse</i>	4	2.3
Total	174	100.0

¹⁶ For comparison the 2011 Census indicated that 49.1% of the population of Wales was male, and 50.9% female (ONS).

4.14 Roadshow Events

4.14.1 There were 254 surveys completed during the ten Roadshow Events:

Table 21 - Showing People and Pine Martens in Wales Roadshow Responses broken down by venue and location				
Hotspot Area	Venue type	Date	No. surveys completed	Hotspots
Llanidloes market	Farmers market	Sat 6th April	18	near Newtown
Brecknock Farmers Market	Farmers market	Sat 13th April	45	Brecon
Machynlleth Co-op	Co-op store	Thurs 18th April	24	SH71- Dolgellau
Carmarthen farmers market	Farmers market	Friday 3rd May	18	SN52- Brechfa, Llangathen, Llanfynydd
Aberystwyth Co-op	Co-op store	Fri 10th May	22	SN67- east of Aberystwyth
Newtown shopping centre	Market	Tues 7th May	25	Newtown
		Sub-total	152	
Non-Hotspot Area = Rural Wales	Venue	Date	No. of surveys completed	
Clydach Co-op	Co-op store	Thurs 11th April	10	No
Cwmbran Co-op	Co-op store	Friday 12th April	29	No
Mold Market	Farmers market	Sat 20th April	40	No
Haverfordwest Farmers Market	Farmers market	Friday 26th April	23	No
		Sub-total	102	

4.14.2 A slightly higher percentage of respondents had already heard of the pine marten at events in Hotspot areas (92.8%) compared with respondents attending events held outside Hotspot areas (86.3%).

4.14.3 84.3% of respondents at events held away from Hotspot areas, thought it was very important to prevent the pine marten becoming extinct, compared with 78.9% in Hotspot areas.

4.14.4 **14.5% of respondents attending events in Hotspot areas claimed to have seen a live pine marten, significantly more than those at events outside Hotspot areas (circa 6.9%).** This appears to reinforce the proposition that pine marten populations were more prevalent in the identified Hotspots, however VWT will need to analyse the sighting locations to substantiate this, as the sightings were not necessarily local to the events.

4.14.5 Twenty nine attendees at Hotspot events versus seven attendees at non-Hotspot events indicated where they had seen the evidence of pine martens.

4.14.6 All but one respondent in each event grouping indicated that they would support restocking pine martens.

4.14.7 **The main differences between the two sets of respondents were:**

- **Four events attendees in the Hotspot areas were prepared to pay more than £100 in support of the restocking; only one respondent from events in non-hotspot areas was prepared to do this.**
- **46.7% of attendees at non-hotspot events were members of the Wildlife Trusts compared with around one third of Hotspot event attendees (34.9%).**
- **A greater proportion of Hotspot attendees were members of the RSPB (65.1%) versus one half of those respondents who had attended events outside the Hotspot areas.**
- **More than one third (36.4%) of respondents to events in Hotspot areas had worked in Leisure and Tourism a significantly larger proportion than respondents who attended events outside Hotspot areas (11.8%). The Vincent Wildlife Trusts' marketing communications strategy should take this into account when developing future plans.**
- **Similarly 18.2% had been employed in Forestry compared with 5.9%, respectively.**

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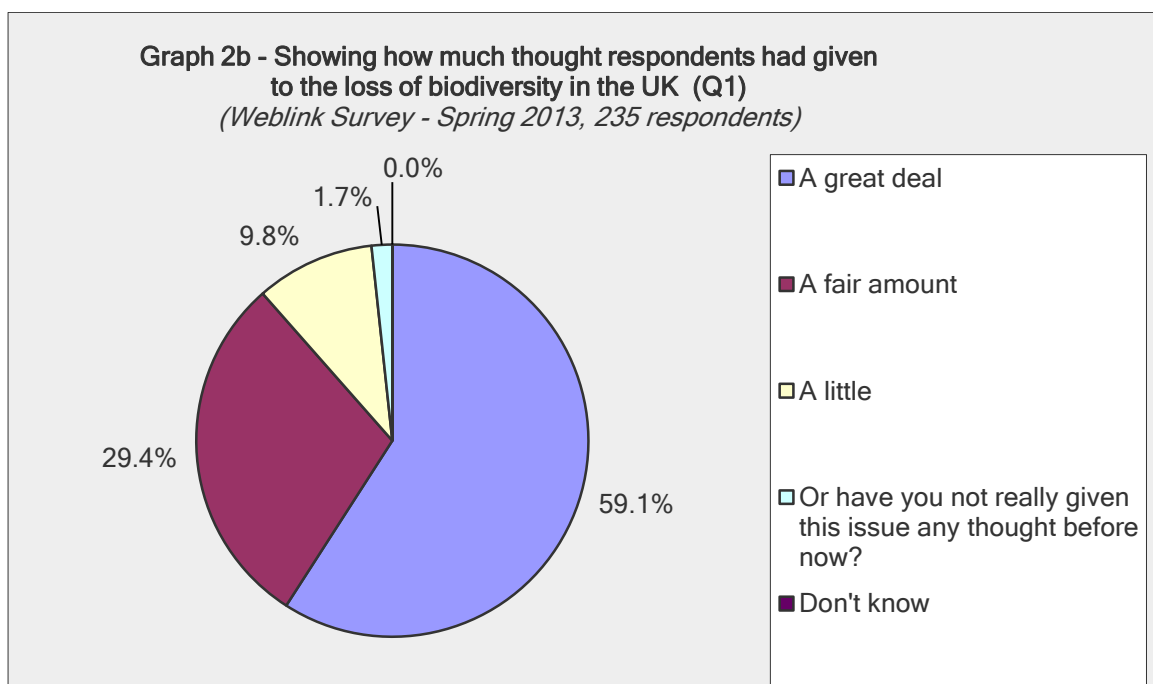
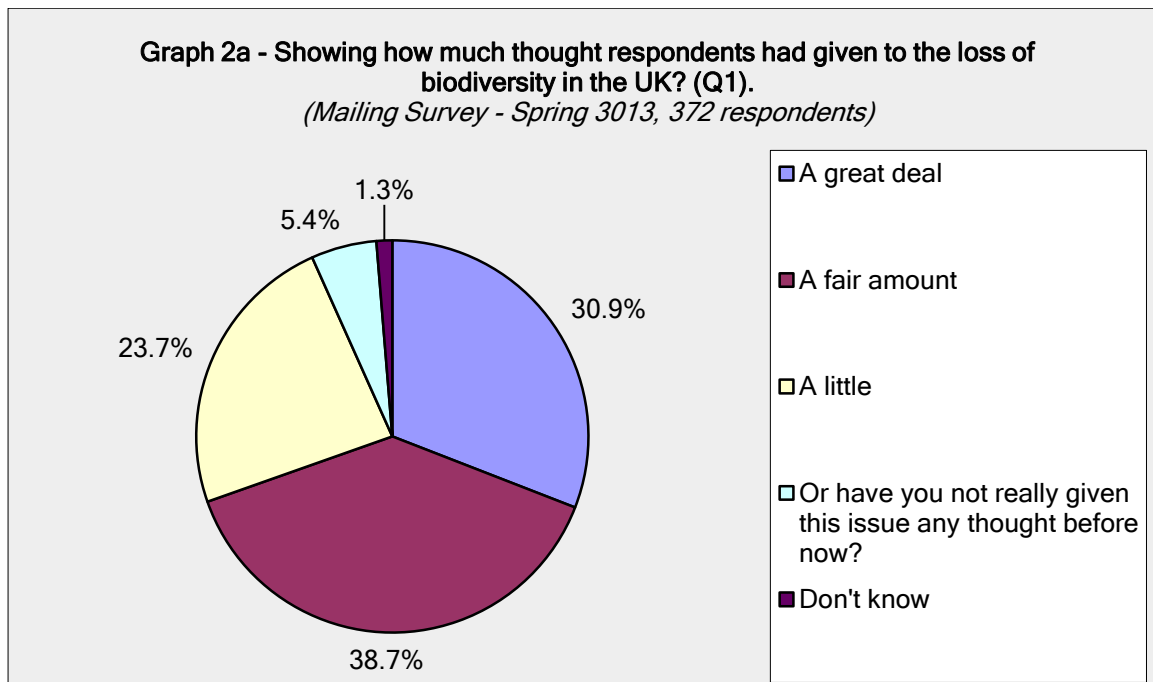
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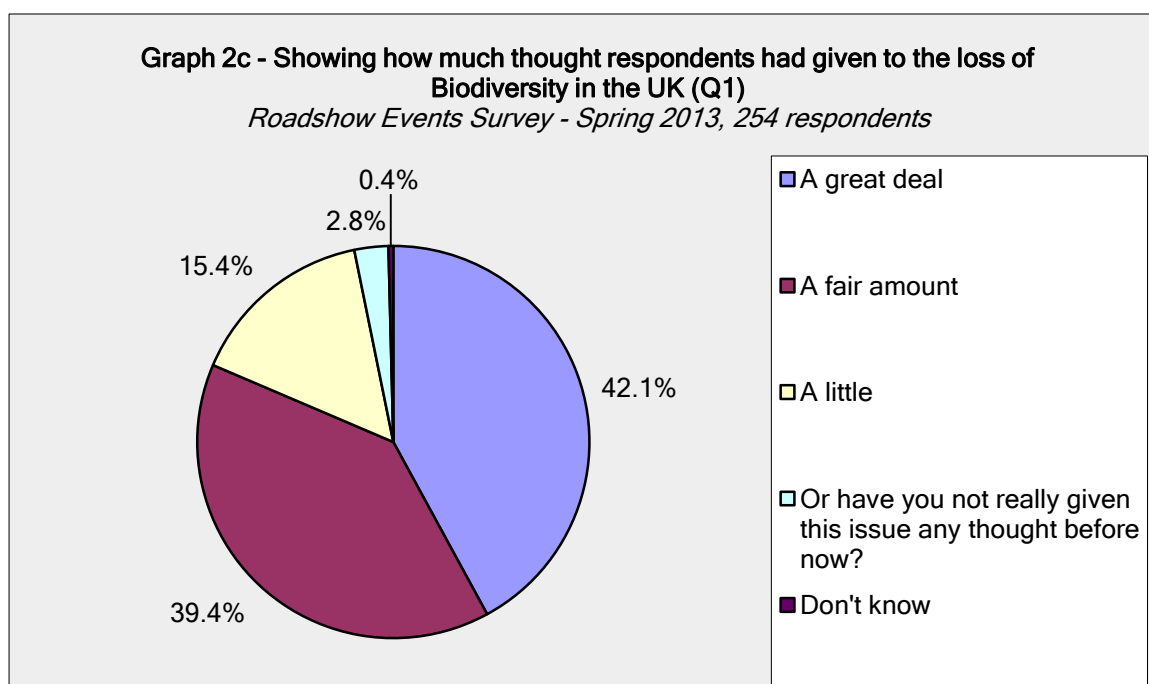
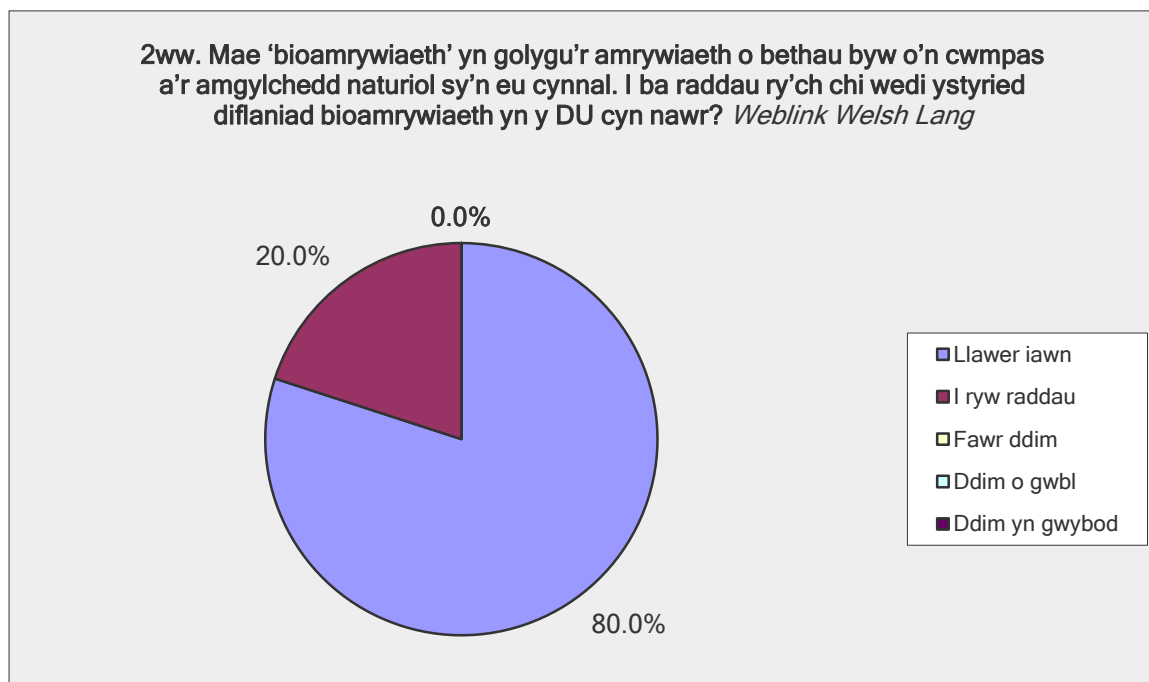
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Appendices

Appendix 1 – Graphs showing how much thought survey respondents had given to the loss of biodiversity in the UK

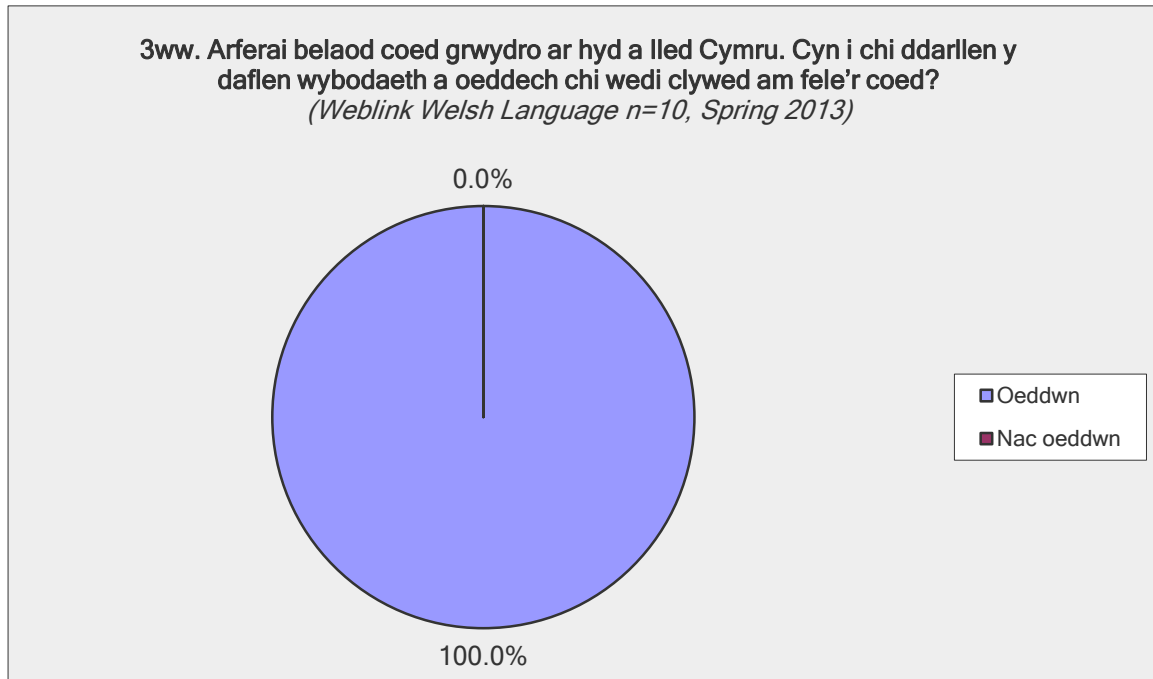


Appendix 1 (continued)

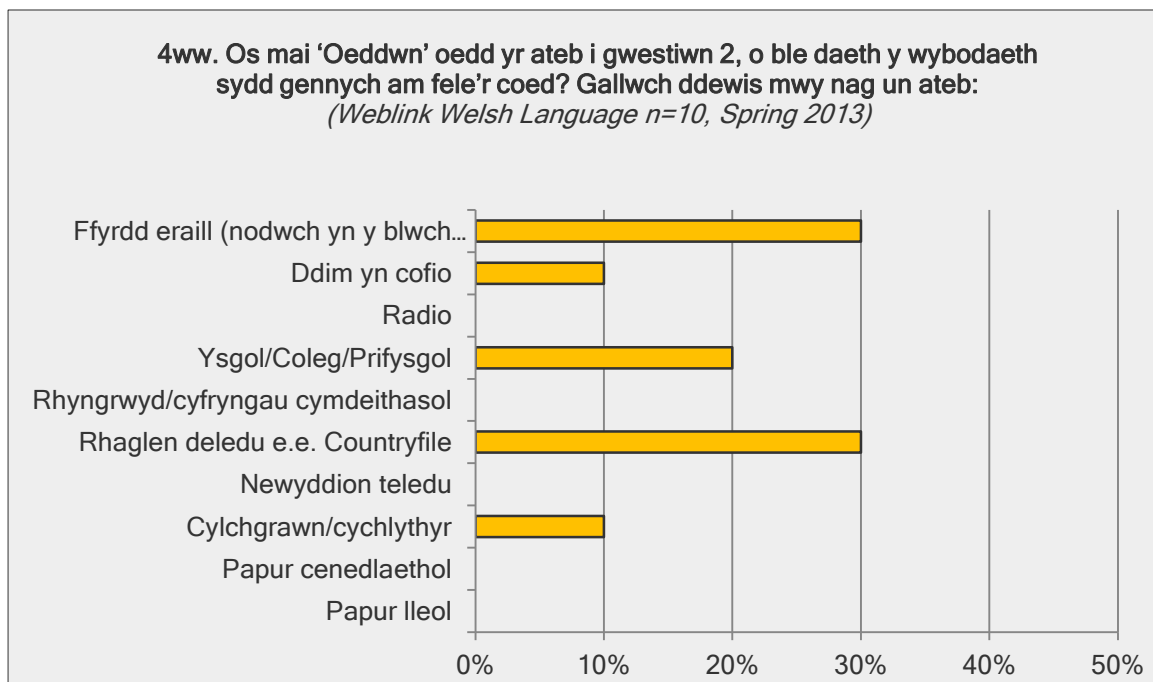


Appendix 2

Graphs indicating if survey respondents had heard of pine martens

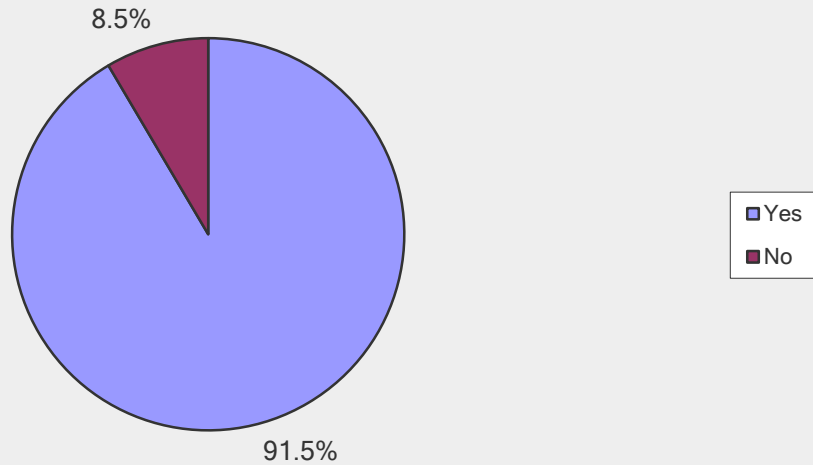


Where Web-link Welsh language respondents had heard about pine martens.

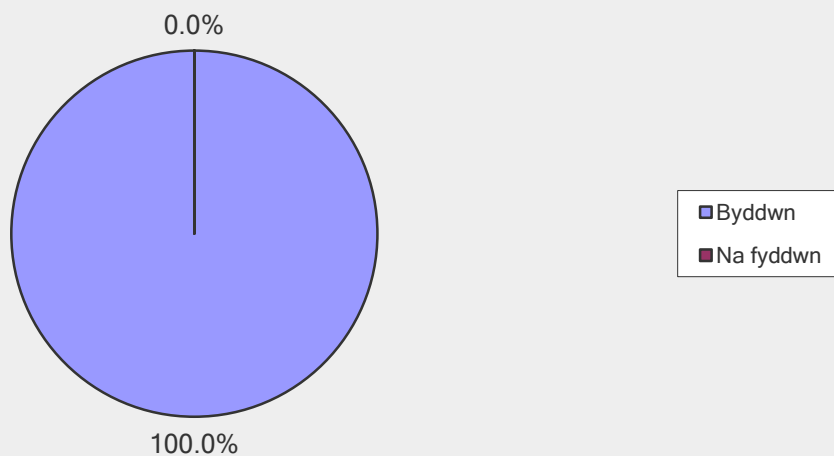


Support restocking

Graph 7b - Showing whether respondents would support the recovery of pine martens in Wales by restocking to increase their numbers (Q7)
(Weblink Survey - Spring 2013, 235 respondents)



7ww. A fydddech chi'n gefnogol i'r syniad o helpu adferiad bele'r coed yng Nghymru drwy ail-stocio neu ail-boblogi er mwyn cynyddu eu niferoedd
(Weblink Welsh language n=10, Spring 2013)



Appendix 3

Graphs & tables indicating survey respondents' memberships – Question 12

Mailing memberships

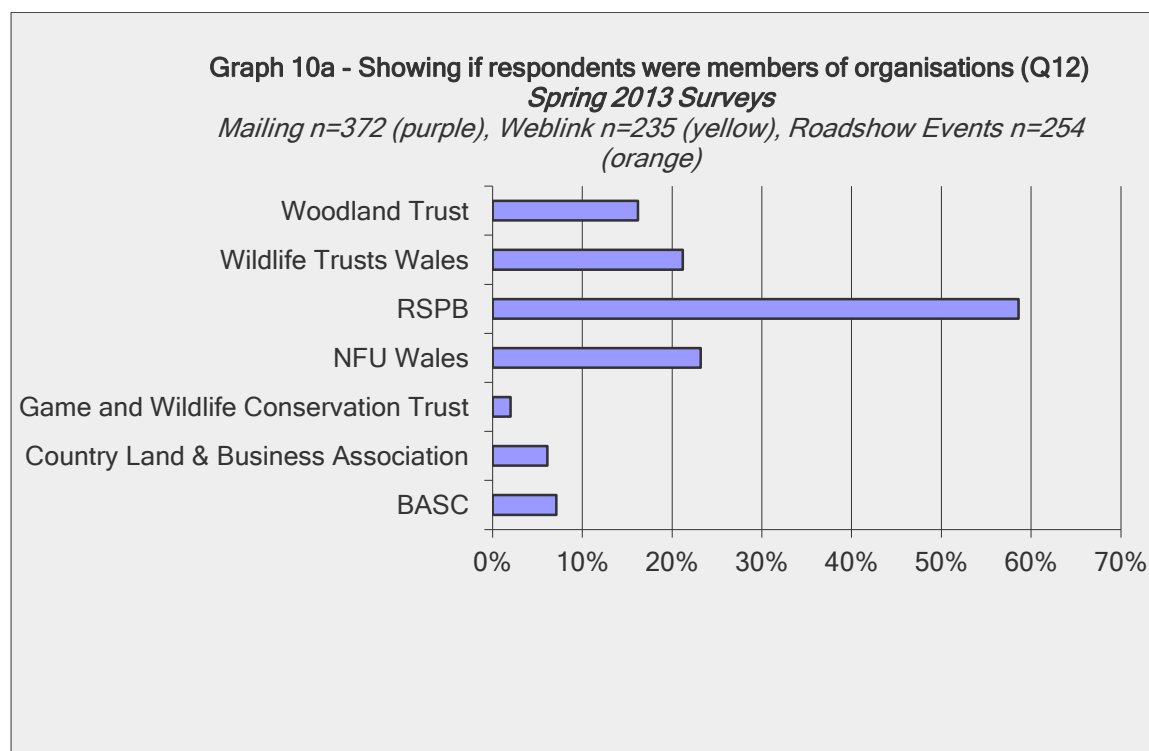


Table 22 - Showing other organisations Mailing respondents were members of where n= or >2, N=99

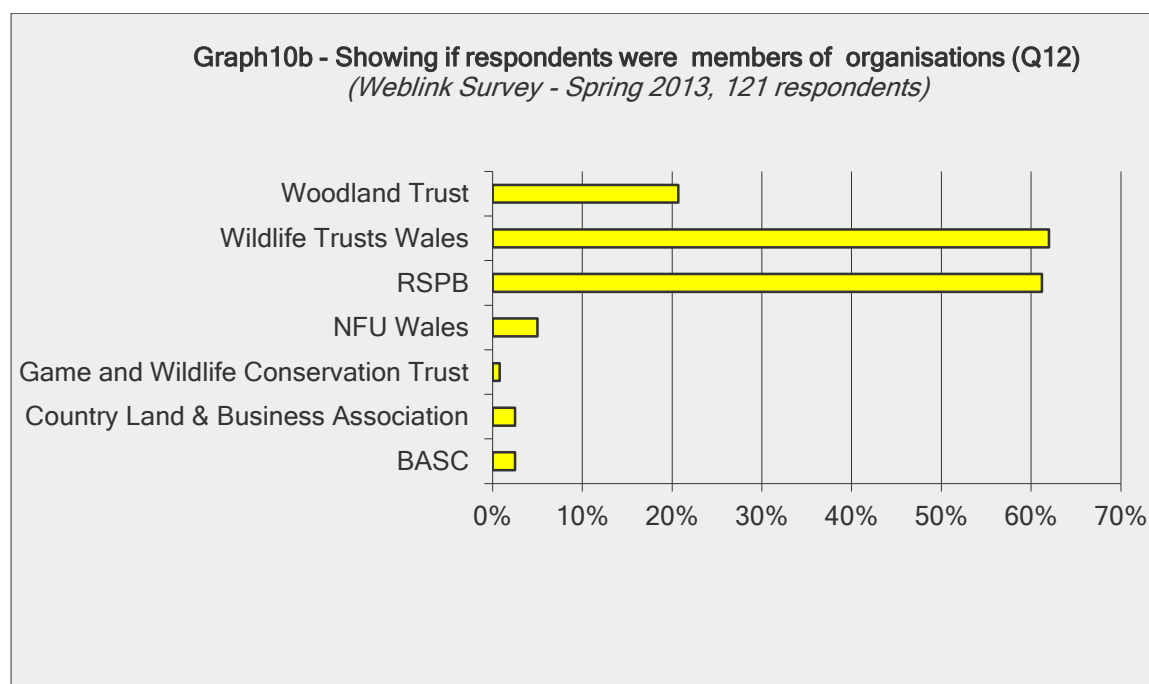
Organisations	Number	%
National Trust	15	15.1
WWF	7	7.1
Farmers Union Wales	7	7.1
Wildfowl & wetlands Trust	5	5.1
BTO	5	5.1
Greenpeace	3	4.0
The Brooke (local charity)	3	4.0
Countryside Alliance	2	2.0
IFAW	2	2.0
Songbird Survival Trust	2	2.0
RSPCA	1	1.0

Appendix 3 continued - memberships

Other organisations mentioned:

Anglers Conservation Trust ; Badger Trust; Bardsey Bird and Field Observatory; Bat Conservation Trust; Bracken Trust; Brecon and Radnor Beekeepers; British Rabbit Council; Brooks; Bumblebee Conservation Trust; Butterfly Conservation; CADW; Cambrian Mountains Society; Campaign for National Parks; Compassion in World Farming; Council for Preservation of Rural Wales; Dynffryn Clydeich Volunteers; Dogs Trust; Dolphin Watch; Edward Lloyd Society; East Carmarthenshire Bee Keeping Association; English Heritage; Forestry Commission Wales; FOE; Friends of Cardigan Bay; Friends of Llanidloes Woods; FWAG; Gower Bird Hospital; Hawk and Owl Trust; IUCN; John Muir Trust; Llandysul Angling Association; League Against Cruel Sports; Mammal Society; Montgomeryshire Barn Owl Group; Montgomeryshire Forest School; National Botanical Garden Wales; Optimum Population Trust; PDSA; Plantlife; RHS; RSPCA; Rare Breeds Survival Trust; Red Squirrel Trust; People for the Ethical Treatment of Animals; People's Trust for Endangered Species; Salmon & Trout Association; Save the Moon Bears; Quakers Sustainability Group; Society of Biology; Water Bailiff; Whale and Dolphin Conservation Society; Wildlife Sound Recording Society; Wild Trout Trust; Woodland Trust; WSPA; 38 Degrees.

Web-link memberships

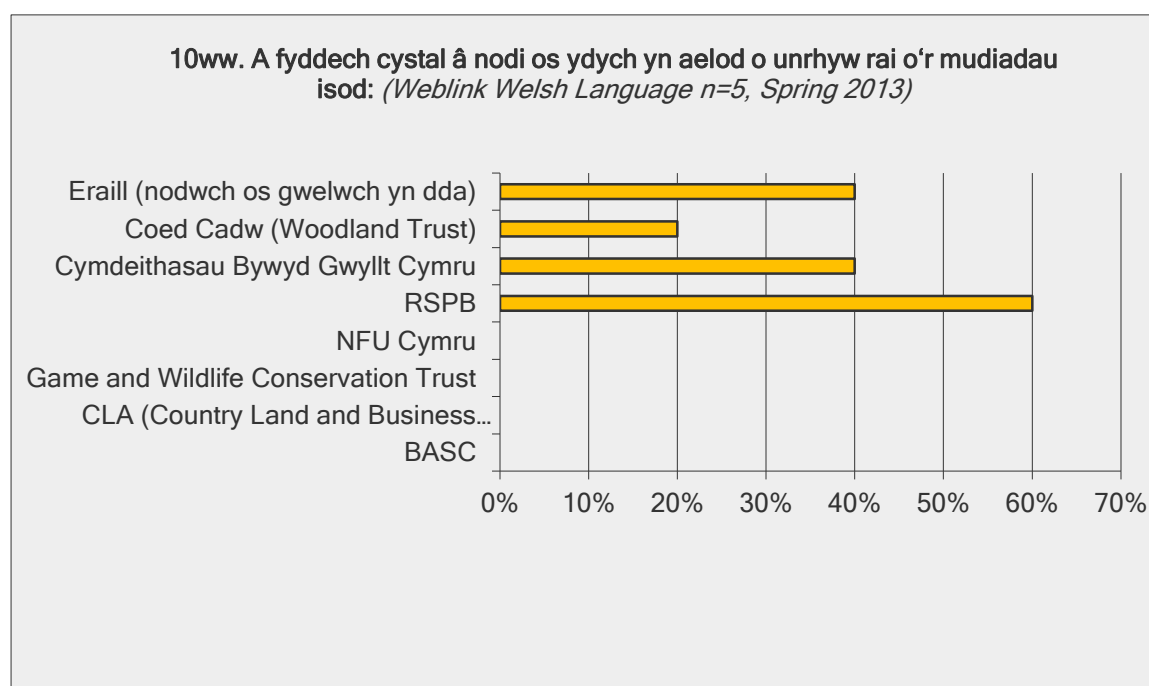


Appendix 3 Continued – memberships 2

Table 23 - Showing other organisations Web-link respondents were members of where n= or >2, N=121

Organisations	Number	%
BTO	18	14.9
National Trust (including 1 a member of NT Scotland)	7	5.8
Various Wildlife Trusts	6	5.0
Butterfly Conservation	5	4.1
Wildfowl & Wetlands Trust	5	4.1
Mammal Society	4	3.3
Welsh Ornithological Society	3	2.5
Countryside Alliance	2	1.7
Ramblers Association	2	1.7
Welsh/Red Kite Trust	2	1.7

Other organisations mentioned: Amnesty International; Botanical Society of the British Isles; British Hedgehog Preservation Society; Bumble Bee Conservation Society; FOE; Greenpeace; Heather Trust; IFAW; International Otter Survival Fund; Low Level Radiation Campaign; Glamorgan Bird Club; Montgomeryshire Forest School Forest Education Initiative ; Royal Geographical Society; Royal Forestry Society; RSPCA; Snowdonia Society; The Cooperative; Womens Institute.



Appendix 3 Continued – members 3

Roadshow Events memberships

English Heritage
PTES
None
RSPCA x 3
Anglers Conservation Trust
Society of Biology
Bumblebee Conservation Trust
WWF x 9
League Against Cruel Sports. Companion in World Farming
Brecon and Radnor Beekeepers
The Mammal Society
Merthyr Naturalists x 2
WWT
CADW
British Rabbit Council
National Trust for Scotland
National Trust x 4
PDSA, Greenpeace
Donated to RSPB
Partner member of Woodland Trust
Runs a conservation group for 26 years. Dynffryn Clydeich
Volunteers
CPL
Dogs Trust
Gwent
Visit WT reserves
Gwent
Friends of Llanidloes Woods
Bat Conservation Trust
Hawk & Owl Trust

Appendix 4

Other Occupations Q13

Mailing respondents other occupations (32)

National Trust volunteer
Woodland management
National Trust volunteering
Lecturer
Born in farming communities

Help farmers/landowners with animals and land

Help manage fields, woodland and wetlands

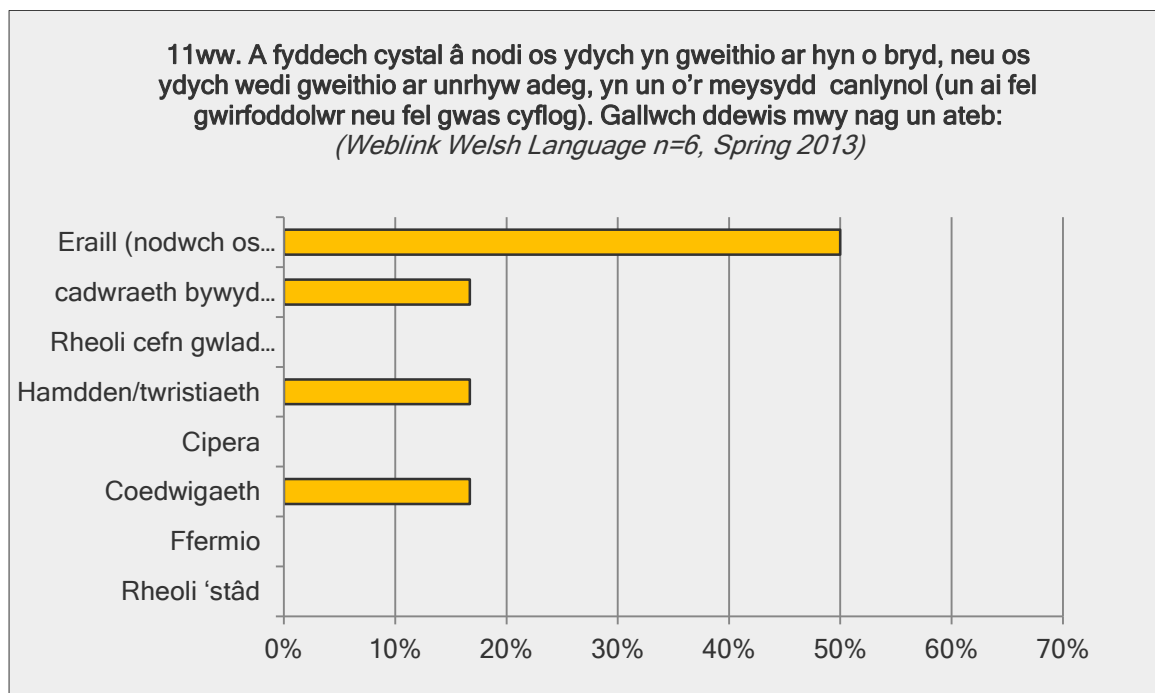
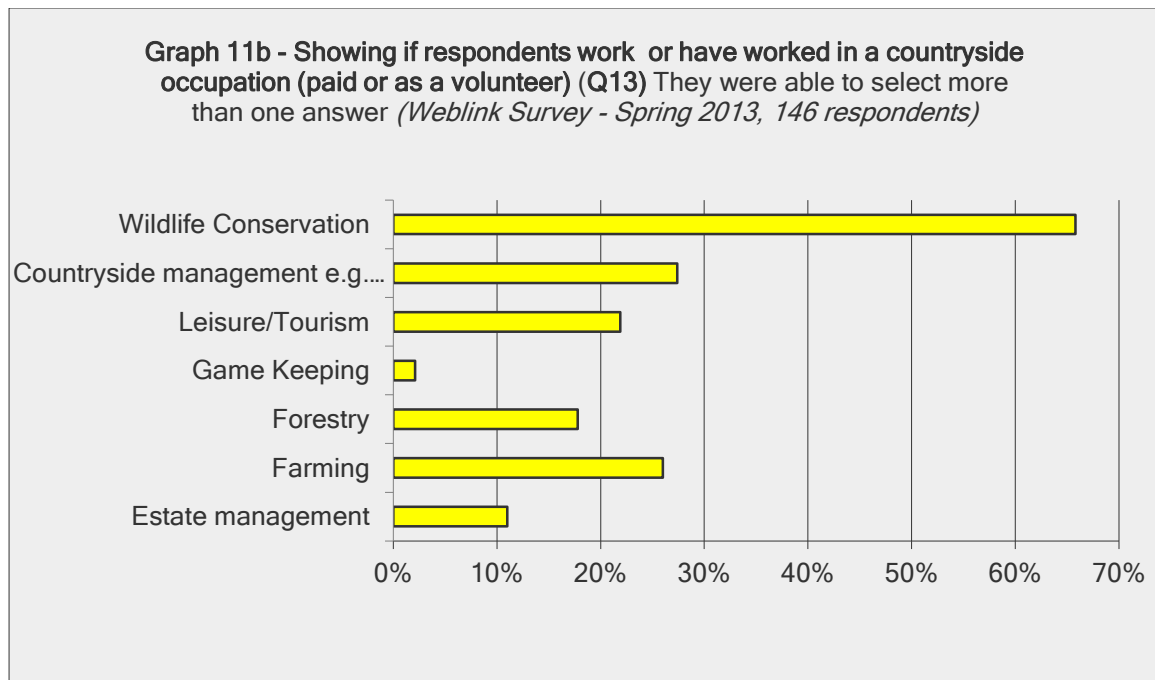
Help create habitats: black grouse, ospreys and local nesting boxes, wood and brush piles

Help clean and maintain local rivers

Volunteer and coach local groups, schools etc
Equestrian
World Horse Welfare and WSPA
Get Up and Grow Project, Mon. Youth Service
Water bailiff
Ranger led walks
RSPB
Restoration of local/urban parks in Manchester
Litter picker
Dept EIA
Small voluntary group - Lwing River Pontewydd
Bed & breakfast, St. Davids
Worked for Environment Agency for 15 years in fisheries and conservation on the upper Severn area.
Aberystwyth University
Small holding family with land in England and Wales
Heritage management
I am a lecturer in countryside management and am involved in volunteering species records (birds, moths, butterflies, plants), also in setting up habitat management projects for students with National Trust, National Parks, Bardsey Bird & Field Observatory & Grasslands Trust.
Lecturer in countryside management
Research
RSPCA sponsor & WSPCA
Consultancy
Teacher
Veterinary
Water bailiff
I am a local authority director with responsibility for the environment
Tree planting project
Have worked for Environment Agency
Equine Yard Person

Appendix 4 Continued

Web-link respondents Occupations



Appendix 4 Continued 2

35 Web-link respondents indicated additional countryside paid or volunteer connections.

Discovery Ranger (education / inclusion worker), Pembrokeshire Coast National Park Authority

Open Spaces Society

Ecology

Am a wildlife photographer based in mid-Wales (www.mwphoto.co.uk) so willing to work closely with you to publicise your work

i visit quite a lot and love the area, my boyfriend lives very close and he has done voluntary work

I live in the Countryside...so help look after it !

Ran Field Centre for Cardiff University in mid Wales

we now own a small woodland

Water industry

Forest school leader

Ecologist specialising in protected native species

Hill Research Farm in Wales

Bird ringing

Agricultural consultant

Ecological Consultant

Marine Fishery Protection

Biological records centre

Manage @ 10Ha of land for ecological value and enhancement

All on a small scale as an owner of a few acres on the Yorkshire Moors and then in the North Yorkshire National Park

wildlife research

Volunteer recording Porthkerry Park

Environmental Education

Membership Sales as well

Ex- Local Auth employee that arranged for some conservation works in the district of work. Since retirement in 2012, have become volunteer with archaeology projects. Also carry out volunteer surveys for the Peoples Trust for Endangered Species. Fruit orchard surveys that include noting wildlife frequency within/adjacent to the orchard.

Various practical work for local conservation groups. Also 10 years as a volunteer in a wildbird and hedgehog rescue centre.

Work experience

Dormice count

Voluntary work

RSPB volunteer & Hedgehog champion volunteer

Natural Resources Wales (was CCW), but not as a specialist.

Fieldwork for BTO

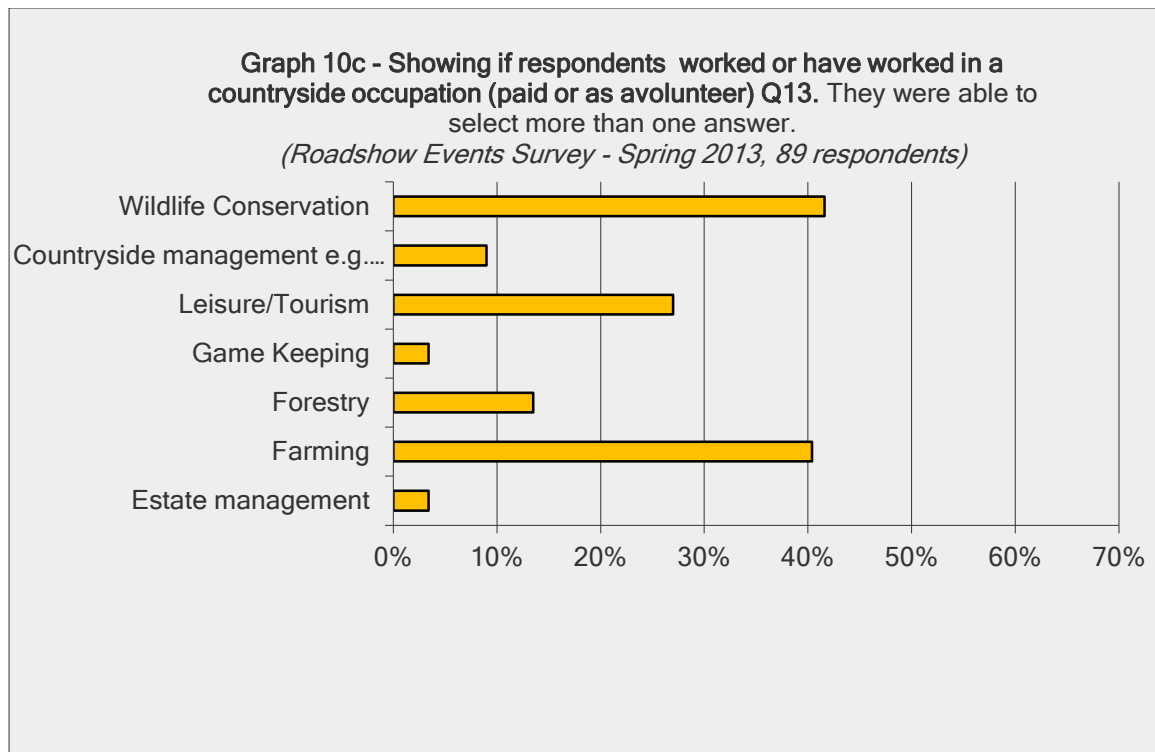
Community Partnerships Officer

Shropshire Mammal Group National Museum of Wales Biological Recording Group (1972 - 1978)

Volunteer

Appendix 4 Continued 3

Roadshow Events occupations



Roadshow Events respondents other occupations/volunteering:

NRW
 Falconry
 Fisherman
 Woodland owner
 Royal Commission
 Teaching
 Biology teacher
 Wildlife sanctuary for 20 years
 Royal Horticultural Society
 Conservation work for the MOD on red kites
 Volunteer with Brecon Beacons National Park
 Beekeeping
 Volunteer with National Botanic Gardens Wales 2003-2011
 BTCV
 Fisherman
 Gardening for the National Trust
 Zookeeper
 I did a small amount of volunteering whilst a student some 20 years ago.

Appendix 5 – Hotspot Respondents by age and gender

Hotspot respondents - Age and Gender by Hotspot

Table 24 - Showing Black Mountains hotspot respondents broken down by Age and Gender (Source: Mailing Survey Spring 2013, CACI) n=18						
Age range	M	%	F	%	All	%
18-24	1	0.6	1	0.6	2	11.1
	1	0.6	1	0.6	2	11.1
35-44	1	0.6	0	0.0	1	5.6
45-54	5	2.9	0	0.0	5	27.8
55-64	4	2.3	0	0.0	4	22.2
65-74	3	1.7	1	0.6	4	22.2
75+	0	0.0	0	0.0	0	0.0
Total	15	8.6	3	1.7	18	100.0

Table 25 - Showing Blaenau Ffestiniog hotspot respondents broken down by Age and Gender (Source: Mailing Survey Spring 2013, CACI) n=24						
Age range	M	%	F	%	All	%
18-24	1	0.6	1	0.6	2	8.3
25-34	2	1.1	1	0.6	3	12.5
35-44	1	0.6	3	1.7	4	16.7
45-54	0	0.0	3	1.7	3	12.5
55-64	5	2.9	1	0.6	6	25.0
65-74	3	1.7	1	0.6	4	16.7
75+	0	0.0	2	1.1	2	8.3
Total	12	6.9	12	6.9	24	100.0

Table 26 - Showing Brechfa hotspot respondents broken down by Age and Gender (Source: Mailing Survey Spring 2013, CACI) n=35						
Age range	M	%	F	%	All	%
18-24	0	0.0	0	0.0	0	0.0
25-34	0	0.0	2	1.1	2	5.7
35-44	4	2.3	4	2.3	8	22.9
45-54	5	2.9	3	1.7	8	22.9
55-64	2	1.1	8	4.6	10	28.6
65-74	5	2.9	1	0.6	6	17.1
75+	1	0.6	0	0.0	1	2.9
Total	17	9.8	18	10.3	35	100.0

Appendix 5 Continued – Age and Gender

Table 27 - Showing Capel Bangor hotspot respondents broken down by Age and Gender (Source: Mailing Survey Spring 2013, CACI) n=36						
Age range	M	%	F	%	All	%
18-24	1	0.6	3	1.7	4	11.1
25-34	0	0.0	0	0.0	0	0.0
35-44	3	1.7	4	2.3	7	19.4
45-54	6	3.4	2	1.1	8	22.2
55-64	1	0.6	8	4.6	9	25.0
65-74	2	1.1	3	1.7	5	13.9
75+	2	1.1	1	0.6	3	8.3
Total	15	8.6	21	12.1	36	100.0

Table 28 - Showing Cefneithin hotspot respondents broken down by Age and Gender (Source: Mailing Survey Spring 2013, CACI) n=15						
Age range	M	%	F	%	All	%
18-24	0	0.0	0	0.0	0	0.0
25-34	0	0.0	2	1.1	2	13.3
35-44	1	0.6	2	1.1	3	20.0
45-54	0	0.0	1	0.6	1	6.7
55-64	2	1.1	3	1.7	5	33.3
65-74	2	1.1	1	0.6	3	20.0
75+	1	0.6	0	0.0	1	6.7
Total	6	3.4	9	5.2	15	100.0

Table 29 - Showing Dolgellau hotspot respondents broken down by Age and Gender (Source: Mailing Survey Spring 2013, CACI) n=31						
Age range	M	%	F	%	All	%
18-24	2	1.1	2	1.1	4	12.9
25-34	1	0.6	0	0.0	1	3.2
35-44	3	1.7	2	1.1	5	16.1
45-54	2	1.1	3	1.7	5	16.1
55-64	6	3.4	4	2.3	10	32.3
65-74	2	1.1	4	2.3	6	19.4
75+	0	0.0	0	0.0	0	0.0
Total	16	9.2	15	8.6	31	100.0

Table 30 - Showing Llandysul hotspot respondents broken down by Age and Gender (Source: Mailing Survey Spring 2013, CACI) n=18						
Age range	M	%	F	%	All	%
18-24	0	0.0	1	0.6	1	5.6
25-34	1	0.6	1	0.6	2	11.1
35-44	0	0.0	2	1.1	2	11.1
45-54	1	0.6	3	1.7	4	22.2
55-64	3	1.7	0	0.0	3	16.7
65-74	4	2.3	1	0.6	5	27.8
75+	1	0.6	0	0.0	1	5.6
Total	10	5.7	8	4.6	18	100.0

Appendix 5 Continued 2 – Age and Gender

Table 31 - Showing Newtown hotspot respondents broken down by Age and Gender (Source: Mailing Survey Spring 2013, CACI) n=19						
Age range	M	%	F	%	All	%
18-24	1	0.6	0	0.0	1	5.3
25-34	2	1.1	0	0.0	2	10.5
35-44	2	1.1	1	0.6	3	15.8
45-54	1	0.6	3	1.7	4	21.1
55-64	1	0.6	2	1.1	3	15.8
65-74	1	0.6	3	1.7	4	21.1
75+	1	0.6	1	0.6	2	10.5
Total	9	5.2	10	5.7	19	100.0

Appendix 6 – Hotspot CACI Rural Urban Classification

Hotspot respondents – CACI Rural Urban Classification by Hotspot

Table 32 - Showing Black Mountains Hotspot respondents breakdown by CACI Rural Urban Classification.

Source: Mailing Survey Spring 2013

Classification	n	%
<i>Hamlet & Isolated Dwelling - Sparse</i>	1	0.5
<i>Village - Sparse</i>	1	0.5
<i>Village - Less Sparse</i>	6	3.1
<i>Town & Fringe - Sparse</i>	0	0.0
<i>Hamlet & Isolated Dwelling - Less Sparse</i>	5	2.6
<i>Town & Fringe - Less Sparse</i>	5	2.9
<i>Urban >10K - Sparse</i>	0	0.0
Total	18	9.5

Table 33 - Showing Blaenau Ffestiniog Hotspot respondents breakdown by CACI Rural Urban Classification. Source: Mailing Survey Spring 2013

Classification	n	%
<i>Hamlet & Isolated Dwelling - Sparse</i>	6	3.1
<i>Village - Sparse</i>	14	7.1
<i>Village - Less Sparse</i>	0	0.0
<i>Town & Fringe - Sparse</i>	4	2.0
<i>Hamlet & Isolated Dwelling - Less Sparse</i>	0	0.0
<i>Town & Fringe - Less Sparse</i>	0	0.0
<i>Urban >10K - Sparse</i>	0	0.0
Total	24	12.2

Table 34 - Showing Brechfa Hotspot respondents breakdown by CACI Rural Urban Classification.

Source: Mailing Survey Spring 2013

Classification	n	%
<i>Hamlet & Isolated Dwelling - Sparse</i>	13	6.6
<i>Village - Sparse</i>	7	3.6
<i>Village - Less Sparse</i>	4	2.0
<i>Town & Fringe - Sparse</i>	0	0.0
<i>Hamlet & Isolated Dwelling - Less Sparse</i>	3	1.5
<i>Town & Fringe - Less Sparse</i>	8	4.6
<i>Urban >10K - Sparse</i>	0	0.0
Total	35	18.4

Appendix 6 Continued – CACI Rural Urban Classification

Table 35 - Showing Cefneithin Hotspot respondents breakdown by CACI Rural Urban Classification.

Source: Mailing Survey Spring 2013

Classification	n	%
<i>Hamlet & Isolated Dwelling - Sparse</i>	0	0.0
<i>Village - Sparse</i>	0	0.0
<i>Village - Less Sparse</i>	11	5.6
<i>Town & Fringe - Sparse</i>	0	0.0
<i>Hamlet & Isolated Dwelling - Less Sparse</i>	4	2.0
<i>Town & Fringe - Less Sparse</i>	0	0.0
<i>Urban >10K - Sparse</i>	0	0.0
Total	15	7.7

Table 36 - Showing Llandysul Hotspot respondents breakdown by CACI Rural Urban Classification.

Source: Mailing Survey Spring 2013

Classification	n	%
<i>Hamlet & Isolated Dwelling - Sparse</i>	6	3.1
<i>Village - Sparse</i>	9	4.6
<i>Village - Less Sparse</i>	0	0.0
<i>Town & Fringe - Sparse</i>	3	1.5
<i>Hamlet & Isolated Dwelling - Less Sparse</i>	0	0.0
<i>Town & Fringe - Less Sparse</i>	0	0.0
<i>Urban >10K - Sparse</i>	0	0.0
Total	18	9.2

Table 37 - Showing Newtown Hotspot respondents breakdown by CACI Rural Urban Classification.

Source: Mailing Survey Spring 2013

Classification	n	%
<i>Hamlet & Isolated Dwelling - Sparse</i>	8	4.1
<i>Village - Sparse</i>	2	1.0
<i>Village - Less Sparse</i>	0	0.0
<i>Town & Fringe - Sparse</i>	0	0.0
<i>Hamlet & Isolated Dwelling - Less Sparse</i>	0	0.0
<i>Town & Fringe - Less Sparse</i>	0	0.0
<i>Urban >10K - Sparse</i>	9	4.6
Total	19	9.7

Appendix 7 – Weblink respondents and biodiversity

Table 38 - Showing how much thought respondents had given to the loss of biodiversity in the UK? (Q1) (Source: Web-link survey, Spring 2013 (245 respondents in total),		
Answer Options	Response Percent	Response Count
A great deal	59.1%	139
A fair amount	29.4%	69
A little	9.8%	23
Or have you not really given this issue any thought before now?	1.7%	4
Don't know	0.0%	0
<i>answered question</i>		235
<i>skipped question</i>		10