Social Research for Red Squirrels United

Annual Progress report from Forest Research

February 2018

Introduction

A number of activities have taken place in D2 and E2. A summary is provided below.

D2 – Socio-economic impact evaluation in local population and economy (FR)

- Red Squirrels United case study visits and interviews with Intern Marlène Baudet in N. Ireland (Glens of Antrim/North west/Mourns) and Merseyside to explore volunteer motivations. Revealed contrasting attitudes towards the RSU team (support vs. encroachment) (May '17)
- In-person surveys with community members, and interviews/recruitment of volunteers and landowners in Northern Ireland (North West/Glens of Antrim/Belfast). Survey locations included an agricultural show, high streets, public parks and an aquarium. (July '17)
- Visited Anglesey to assist with Red Squirrels Trust Wales community and volunteer events (building of nest boxes). Carried out short interviews with 7 participants (Aug '17)
- Large focus group event with 12 volunteers related to Clocaenog forest area, North Wales (Aug' 17)
- Interviews (N=3) and focus group (N=5) with volunteers in Mid-Wales. Attendance at agricultural show to survey community members (Sept' 17).
- Visited Merseyside for community engagement (spoke at a community event and carried out in-person surveys at a Botanic garden) (Sept '17)
- Met with RSNE team in Carlisle to discuss upcoming opportunities for outreach and evaluation (Sept '17)
- Presentation on FR's role in RSU and CLL workshop with community members at Stannington, Morpeth. Event was also used to promote awareness of RSU and gain contacts in the area for further research. (Nov '17). Subsequently produced a meeting report summarising the findings from the workshop (see below)
- Facilitation of CLL with RSNE's Programme Advisory Group (Dec' 17). Subsequently produced a report (see below)
- Presented FR's work and recruited contacts for further research through a community event in Rothbury organised by the Coquetdale Red Squirrel Group in Northumberland (Feb '18)
- MD joined RSU Knowledge Fair working group and assisted in developing agenda for knowledge transfer during the event in Bangor (Dec '17 – Mar '18).

Volunteers interested in sharing their views were identified and interviewed by FR social researchers across the case study areas. A full report will be delivered by May2018 but a short summary and recommendations for RSU was produced by our intern Marlène Baudet and is presented below. A summary was also presented at the RSU team meeting in Liverpool (Sept' 17):

- **The rewards of being part of RSU**

Some volunteers said they appreciated being under the umbrella of RSU. They felt it gave the group more visibility, access to funding and more influence over the scale of their actions.

> *"More effective results, yes, a better line of communication, you can talk to the national medias, you can get national newspapers involved, you get sort of more celebrities who potentially get involved that way, so you can change opinions by changing the minds of the opinion-makers, so it becomes more national that way." (a volunteer from Merseyside)*

Attending the RSU events and meetings was also seen as a good way to recruit new volunteers: one of the groups from Northern Ireland gained around six members thanks to the knowledge fair in Belfast (7th-8th March 2017), although only one became an active member. The same group said it gained twelve new members through RSU more widely.

With regards to the knowledge fair and general networking volunteers stated that they enjoyed sharing knowledge and ideas with different groups:

> *"I think it is good, I mean everybody seems to have the same issues, so I think that the forum is definitely a good support, just to see what else is going on, really." (a volunteer from Northern Ireland)*

> *"Yes I do, I have actually attended a couple of group things where they were presenting the research they were up to, what people were doing in the local areas and I think that work is good, networking is important, and we also share ideas, information, and just generally keep things moving forward I guess." (a volunteer from Merseyside)*

However, timing of events is crucial and some volunteers were unable to attend due to a lack of time, familial or professional commitments during the week.

Receiving feedback and acknowledgement for efforts is also appreciated by the volunteers. This is stated as an important factor for staying motivated by a volunteer from Merseyside:

> *"I respect them and have high regards for them, and the team of Lancashire Wildlife Trust, and the team at Natural England, and that sort of qualifications, and with the major fact that both of them and particularly the Lancashire Wildlife Trust they value the contribution of volunteers, they are terribly grateful, terribly welcoming to volunteers, and give us their time, so they reward generally people as well, that backs up my motivation." (a volunteer from Merseyside)*

- **Information isn't reaching everybody in the volunteering groups**

A number of volunteer we spoke with had not heard about RSU. There is a need to expand communications between RSU and the potential volunteer network, but also highlights a bigger issue relating to the role of RSU. For example, volunteers seemed unsure about the role of different bodies and organisations dealing with squirrel conservation. A good example of this is the current situation in Northern England, where there are many overlapping organisations, groups and local subgroups.

Groups that are not directly involved with RSU have also shown an interest in the project, and were eager to meet people and exchange information and ideas.

> *"I've been to their conference in Belfast […] the only thing is that they don't cover Cumbria very much, we were quite disappointed by that actually. But we wish them well, not that we don't like them or don't approve on them or anything, it's just that it would have been better to show we and our area were inclusive." (a volunteer from Cumbria)*

- **Fear RSU might be a threat to the volunteer group**

There was an issue raised where smaller established groups were concerned that they might get absorbed by a big project like RSU, and lose their legitimacy, their independence in decision-making, or be replaced by projects with more funding.

> *"We don't want anything to be taken away from us, we are a very very small group, and [the Wildlife trust] can totally wash us away in two minutes, with their two-year projects or three-year projects funding, and after that what are we going to have, are they going to walk away or, I don't know the future, I don't know." (a volunteer from Northern Ireland)*

A couple of groups are still hoping for more dialogue and consultation with RSU teams, and would like their points of view and experience from the field to be taken into consideration.

- **Need for feedback**

Some volunteers were concerned about a lack of consultation and feedback from RSU, conflicting information and feeling that it was a one-way communication (coming from RSU). Volunteers showed some disappointment, and the lack of feedback as mentioned led some of them to say they were feeling "used", called upon, and scarcely rewarded. Good engagement with volunteers that is consistent and recognises contributions is often raised in the literature about environmental volunteering and is an important motivator.

> *"The feedback is the most important, how what you do is contributing, and what the picture is, generally, you know. If you just did the surveys and put the results and then heard nothing, what's the point of this you know, whereas if someone says 'well, we can see from this that…" […] It's good, it motivates you to carry on doing it." (a volunteer from Merseyside)*

> *"Yes, [having feedback] just reiterates that there is a problem. The problem hasn't gone away, and the more we know the more we are able to address the problem." (a volunteer from Merseyside)*

Volunteers appreciated receiving credit for their work, information on the results and outcome of their work, as well as seeing graphs (one graph showing the fluctuation of the red squirrel population was much appreciated in a meeting in Merseyside for example). Giving feedback is also a way to make sure the group doesn't feel the credit of its work has been taken away by a bigger organisation. The most appreciated formats seem to be presentations during meeting, and newsletters via email.

Recommendations to project managers

- ### Prevent volunteers from feeling left out

Volunteer groups from Cumbria are a sample of groups on a national scale that couldn't be included in the RSU project. It would be useful to think of ways in which volunteer groups for red squirrel conservation could be more involved. They could, for example, be invited to events or knowledge fairs or there could be the creation of a learning exchange network where lessons learned from different groups could be exchanged with RSU experiences. Managers of RSU may also want to include these groups' data to national studies to have a broader view of the national situation.

- ### Prevent volunteers from feeling threatened

Reinforcing levels of communication and engagement with volunteers and volunteer group leaders might be necessary, especially in some regions like Northern Ireland. It would be helpful for the RSU lead (Wildlife Trust) to provide some short document to explain the aims and characteristics of RSU and how it sits with (and can add value to) established volunteer groups. Organising meetings and presentations or widening the email network to circulate a newsletter seem to be the best way to reach volunteers.

Volunteers can be reassured in a number of ways but it is especially important to acknowledge their contributions when discussing RSU results more widely.

- ### Improve internal communication

For volunteers to feel updated with what is going on, it might be worth creating a platform to exchange information 'from the inside', between the volunteers themselves and the volunteers and the Wildlife Trust. Insights for that can be taken from other citizen science data sharing platforms. As volunteers mentioned, most information is broadcast on the social networks and social media, such as Facebook or Twitter. Many volunteers said they tend to draw information from online resources and social media, rather than other media like television or newspapers.

Alongside existing or ongoing training sessions about squirrel ecological knowledge or grey squirrel dispatch protocols, it could be useful to organise training session on volunteer group management, or on how to use communication tools (e.g. social media) to network and recruit. This could involve a partnership with a communication expert, for example.

- ### Improve the messages given to the public

When it comes to raising public awareness of the red squirrel situation and to encourage greater involvement, different techniques have been tried by volunteers and from what the interviews revealed, giving or selling feeders isn't a completely efficient solution as people often use them for different purposes such as feeding birds. It is the same for traps, as anecdotal evidence suggests that people use them to catch rats or any other unwanted animals. Here again, it might be useful to set up a RSU Facebook page, or join a relevant community network to engage with communities.

- ### Volunteers recruitment

The greatest difficulty when recruiting new volunteers is to encourage <u>active</u> members. According to the volunteers, many people are happy to pay a membership fee and support the group, but it is hard to get participation in squirrel monitoring or control:

> *"It's hard to get active members. You can get members, who are willing to pay the membership fee, and that's it. But to get active members, who will feedback in to you, the work they are doing, the work that you might be able to ask them to do, continue to do, because you have members that will start something, come up with a great idea, maybe they'll put up a feeder and they'll do it for a week, do it for a month, and then… they'll stop." (a volunteer from Northern Ireland)*

Many volunteers would like to see more young people joining. In this context, partnerships with universities, schools or students were discussed as potential avenues. Using word of mouth is an already existing way of recruiting new volunteers (friends of friends, neighbours etc), but the idea of encouraging families to join along was felt to be worth exploring. One volunteer noted that joining as a couple or as a group would be easier, as they could go to the meetings in turns, and result more people doing fieldwork. Cooper et al (2007) have shown that one key for recruiting volunteers was to target civic groups, neighbourhood organizations, non-profit environmental protection groups, outdoor recreation groups, retirement communities, and after-school programs. This is particularly true for the red squirrels volunteers, who often seek new volunteers in groups such as the RSPB and walking clubs. Out study found that word of mouth is the most broadly used method.

One of the main difficulties in recruiting new people are due to the grey squirrel control activities, hence it would be good to reinforce that it is possible to join a volunteer group without being involved in grey squirrel control. Volunteers noticed as well that people were often afraid to get involved in a red squirrel group because they fear it might be too time-consuming, but advertising the fact that a commitment to the group represents something like four hours a month (according to a volunteer from Merseyside) would be a good idea.

> *"It is the family circumstances, the personal circumstances, you get children to look after, even if it is just for a few hours, you say you haven't got time. So I would like the newsletter and leaflets to mention roughly how many hours a month it would take, it would be many that go « oh, I could do that, it's not so much, surely, what's four hours a month ? », that might draw them in." (a volunteer from Merseyside)*

- **Capacity building**

There was certainly an appetite amongst volunteers for more inter-groups meetings, as the volunteers were keen to hear about other groups work, their issues, and to exchange ideas. Much news is shared on social networks for the red squirrel groups, but it would be useful to bring it all together and develop an internal platform to share knowledge and ideas amongst the different groups.

One possible idea would be to build on the networks between the RSU case studies and organise a series of meetings or event between the groups (other than the knowledge fair), so that they can meet each other more often and develop links, such as with groups in Cumbria and Northern Ireland. According to volunteers, they help each other out and report sightings to each other. The volunteer groups from Cumbria seem to have a solid and sustainable membership, and to deal quite well with communication to the public.

One volunteer from Merseyside was also affiliated to RSNE. It might be good to start by organising meetings with volunteers groups that are located close to each other in the first instance. It seems that the national feedback is a secondary interest for volunteers' who feel they can find this information in national media or reports.

"[Other people from the group] did have meetings, they attended a meeting with some groups that were much further away, and… it was local issues really I wanted to discuss on local groups and at the same time get feedback on national issues, so the feedback that we get, if our meetings are structured well enough, we should get that sort of national feedback, that's what I want." (a volunteer from Merseyside)

> **Key recommendations in a nutshell:**
> - Reassure volunteers over RSU's role and future plans
> - Improve internal communication
> - Work on way to build capacity amongst volunteers (social media,…etc)
> - Encourage volunteers exchange
> - Improve local feedback and emphasise recognition of work that volunteers are doing

As the teams have building momentum in recruiting volunteers and raising awareness about red squirrel conservation through local events, FR have been exploring the potential to hold **Community Learning Lab (CLL)** workshops to discuss issues of relevance to that case study. FR have also developed a short questionnaire for the team to survey community members at events with the aim of identifying interested parties who will be willing to participate in a CLL workshop . It is envisaged that the requisite number of CLL discussions will take place over the lifetime of the project once the appropriate time, issue and relevant stakeholders have been clearly identified. For example, **a CLL session was set up with the RSNE Programme Advisory Group** and facilitated by Simon O'Hare (RSNE) and Mariella Marzano (FR) to explore the future of red squirrel conservation in Northern England. Six topics were set up and participants were asked to visit each topic written on flipchart paper and write their thoughts on post-it notes. The following is a summary:

Topic 1: Mindful of all of the current players, who should (a) write and (b) lead on strategy? (Is there a role for RSU?)
There were a broad range of perspectives. One participant suggested that it was not necessary to have a new strategy:

> *"We don't need a new strategy. Current one is working. Red [squirrel] range has been maintained and reds [are] present in all the reserves"*

Another suggested that there should be a revision of the strategy instead of a new one but there were a number of suggestions of what RSNE should focus on:

> *"Monitoring results [which are] crucial to guiding further works"*

"Spring monitoring; Enthusing and supporting groups; targeted grey control"

While one participant felt that RSNE has "*lost sight of its objectives*", several signified the need for a single lead but with collaboration from local groups:

> "*Need a single government lead sourced from an active ground worker*"
> "*Single lead but from a collaborative meeting to decide on the strategy…Partnership, community groups etc. Use what's working well*"

It was acknowledged that local involved was necessary:

> "*Active community groups should write up their strategy and continue to deliver as it's clearly working*"
> "*Local knowledge and strategy needed. Local stakeholders needed e.g. NRS, RSNE, FC, NE, National Trust, Wildlife Trust and landowners*"

However, one participant highlighted that it was important to think about the scale of strategy. For example, will it be regional, cover England or the UK.

Topic 2: Should we move away from the full time ranger model and look to invest more in community-led conservation? (Is there a role for RSU?)

While it was acknowledged that more investment in community capacity is needed, the majority response was that rangers are needed as they can lead by example, cover areas where there is low interest and low human population and they can follow up grey squirrel sightings.

> "*More community support needed through project officers*"
> "*Full time rangers to be targeted in areas where there is no community coverage or no community desire to survey/control*"
> "*RSNE needs to retain a small number of rangers to lead by example and fill gaps in low population density areas*"
> "*Too few people interested to have effective community involvement*"
> "*Remote groups unable to respond to grey sightings from RSU monitoring*"

Topic 3: How could projects (RSNE, RSU) increase community capacity?

A big role for RSNE is to help with motivation and knowledge exchange and offer support for funding applications:

> "*Can help motivate people in areas not covered by community red squirrel groups*"
> "*Improve knowledge exchange between groups and within groups*"
> "*RSNE can facilitate access to land through landowner relationships, which can lead to funding for groups*"
> "*Providing fundraising training; guidance (trapping etc.); online tools to record and map data*"
> "*Offering information and other resources and providing feedback including monitoring reports*"
> "*Assistance from staff to do funding applications*"
> "*RSNE/RSU deliver consistent long-term trapping while vols do not*"

While it was recognised that communities "*offer people power*", some participant felt that there should be a focus on support for existing groups rather than spending resources on increasing community capacity:

"*Rather than increasing community capacity through gaining more numbers - support existing groups in working more efficiently*".

Other felts that the younger generation could be targeted so that community groups were more sustainable in the long term:

"*Target schools or youth groups to gaining younger members? Thinking of sustainability of community groups*"

Finally one participant felt that the RSU programme could be shared with community groups to develop a collaborative set of activities "*as best practice is evolving*".

Further comments were made as to the role that RSU could play throughout the rest of its project life:

"*RSU can provide leadership in policy/strategy development at the country scale*"
"*RSU does need to keep profile high – national media should keep confidence [in community red squirrel work] high in public*"
"*RSU's focus on uplifting capacity nationally will benefit us all – keep that bigger is better approach going*".

Topic 4: Should RSNE be investing more in alternatives to human control of grey squirrels? What collaborations are necessary?

This topic received a lot of attention with some focus on pine marten reintroduction. Those in support of pine marten reintroduction had varying perspectives on what would work:

"*Pine Marten work in my experience could do a lot of the work in large tracts of well-connected forests. Not in smaller, isolated woodlands* "
"*Pine martens in remote areas away from commercial shoots*"

Evidence is important:
"*No longer sitting on the fence with pine marten – if results (when published) in Scotland say same as Northern Ireland and Wales. Then [we] fully support and become involved in the project*".

Partnerships to be considered in the case of pine marten reintroduction include:
"*Vincent Wildlife Trust*"
"*Depending on Scotland results, collaboration possible between Scotland and RSNE*"
Although there was a recognition of need to have a good communication strategy:

"*Getting the wider community involved could work in some areas of the National Park. Could be tricky to set up*"
"*Communication strategy from UK Squirrel Accords needs to develop quickly*"

Those against any re-introduction were concerned about landowner support and potential loss of human control effort:
"*No to alternative methods. Lethal grey control on the red/grey interface is and always was the only way of preserving reds*"

"Introduction of pine martens could be controversial in LDNP. More information needed on this"
"No, Leave this to UKSA"
"I have yet to meet a landowner who thinks reintroduction of pine martens is a good idea"
"If pine marten introduction is seriously contemplated, then landowner support will walk away"
"Invest funding at ground level as human intervention is all that works"

Three participants explored the use of fertility control and two offered recommendations for approach:
"Is a mix of fertility control and other control the answer?"
"Fertility control in grey only areas just behind red/grey interface with conventional control at interface and beyond e.g. Newcastle and Northwards?"
"While to contraceptive work progressed, if and when this new tool comes in, it must be used strategically to protect reds by building a buffer zone and giving us target areas to work towards".

More generally, several participants whether alternative methods should be used considered at all:
"Yes to all alternative methods. Collaborative approach could turn the tide. How sustainable is continued grey control in such a huge area?"
"RSNE has insufficient resources to do what it set out to do. No point in diversifying to other areas (dealt with e.g. by UKSA) and spreading resources even thinner"
"RSNE needs to support the existing research initiatives re: fertility control and pine martens. Not paying for them but highlighting progress".

A final point was made about existing data sets and exploring how "*monitoring programmes and data management support regional conservation*…"

Topic 5: Can partner organisations increase funding capacity for red squirrel conservation? If partners value red squirrels, should they be looking to deliver work in-house?
There were a number of questions, comments and suggestions raised with regards to potential funding sources. Several were linked to the forestry sector and UKSA.

"I think the forestry sector could contribute more. Perhaps a timber levy? Perhaps sponsorship from Egger for example?"
"FC Scotland employed two red squirrel rangers in Dumfries and Galloway in the past. Why can't this model be applied in England? Or funding put aside for contractors?"
"If funding could be obtained from e.g. UKSA for RSG, it would help immensely - psychologically and actually"

A key issue with lottery funding was that it didn't facilitate continuing support:
"Change lottery policy to allow continued funding"

The LDNPA felt that they could possibly look for sponsorship for work within the National Park. The Squirrel Accord was mentioned but it was highlighted that they do not do any

active work on the ground. Two concerns were that the search for funding might detract attention away from current work and that volunteer groups feel disenfranchised:

> "*Would need to ensure any new funding proposals did not detract from current work*"
> "*Fundraising work is likely to remain with the individual red squirrel groups as there is little support or encouragement forthcoming from a government that does not understand the countryside.*"

One participant suggested promoting the value of Reds in the area and fundraising through wildlife watching and guided walks.

Topic 6: <u>Where should RSNE/RSU be conserving red squirrels?</u>
There were several suggestions but this topic needs further discussion. A number of participants believed that efforts should be focused in strongholds:

> "*Stronghold/priority areas informed by topography/vegetation. Maintain "island" woodland populations.*"
> "*Around strongholds and to try and fill gaps in between NPs*"
> "*Focus on the stronghold areas where reds have a competitive advantage in large conifer forests*"
> "*Focused on core areas where red populations are strong/sustainable*"

One participant felt that reds should be protected wherever they exist. One participant suggested that the focus should be in areas where "*geography helps [and there are] large human populations*". Others felt efforts should be concentrated in isolated areas where there may not be as much community support:

> "*Isolated areas with no community coverage – rangers protect those populations of reds. Wider countryside community groups where there is appetite*"

Some specific examples were also given:

> "*Existing areas and Southeast Northumberland. Stanley to be debated*"
> "*Need ranger support in urban/suburban southeast of Northumberland*"

It was noted that the term strongholds no longer exists as a funding mechanism but there is a tension about what makes ecological sense and what may contribute to local communities and economy.

A further **CLL was carried out in Stannington, Northern England** with a broader range of stakeholder but mostly volunteers. They were asked similar questions to the RSNE PAG and the findings (presented below) are representative of the results from volunteer interviews:

1. Challenges: Key challenges for red squirrel Conservation in Northern England

Landscape level coordination - Establishing buy-in from all landowners (including private landowners and estates, local authorities, the Forestry Commission and the National Trust) is seen as a key challenge for the conservation of red squirrels in Northern England, underpinning a desire for a joined up and coordination approach towards grey squirrel

control. It was noted that even if landowners are unable or unwilling to carry out control activities themselves, negotiating access for contractors and/or volunteers could help to stem the movement of greys across the landscape. Provision of clothing displaying identification was suggested as a means of legitimising these individuals requiring access. Perhaps this measure could assist in tempering landowner's concerns about unwanted or unrestricted access.

Volunteer support - Volunteers highlighted that they need to be more informed about how grey squirrels move into new areas if they are to be more proactive with their efforts. A lack of funding and training opportunities to skill volunteers in dispatch techniques is also a problem, limiting the number of trappers and their effectiveness. Volunteers apparently carry out 80% of RSNE's control, but perhaps there is opportunity to further improve upon this impressive figure were the right training offered. More generally, a lack of funding for manpower and monitoring was noted as a key challenge, particularly for the support of local red squirrel groups who may have difficulty navigating the "complexity of grant schemes". Knowing where to go for assistance on such matters is felt to be confusing given the number of red squirrel organisations and projects operating, and the poor communication and dissemination of information, including between local groups. Volunteers also expressed a need to introduce methods that could assist in reducing grey populations, such as contraception and the introduction of pine marten as a biological control agent. Since the volunteers feel they are too few in number, the addition of these methods are considered necessary, or more volunteers willing to trap will be needed.

Outreach and education - Volunteers consider a lack of public interest and education to be a further key challenge. There is a feeling that the public are ill-informed about the impacts of grey squirrels and have misconceptions about them, as they are being thought of as "nice". Suggested strategies for overcoming the public's inertia to affirmative action include increasing publicity and improving outreach (among schools and colleges, news media, community groups). Although opposition to activities was not raised as an issue, these activities may help to minimise it while also acting as a means of raising the groups' profile and generating more volunteers.

2. Communication: Knowledge of the RSU project; How is/should information be communicated?

RSU Awareness - Few of the volunteers were clear on the goals of the Red Squirrels United project, with many having not heard of it at all. Moreover there is a lack of awareness about who the project partners are and who their local RSU officer is. As Red Squirrels United centres on only a small part of the RSNE area, many volunteers did not consider the project to be influential or beneficial to their work. While this is partly attributable to the remote locations featured in the project, there is also an argument that the benefits (e.g. potential for landscape level coordination and knowledge sharing) have been not communicated to the groups. Some called for more information on RSU (including a mission statement) as well as greater engagement with local groups. Others felt that there are already too many red squirrel organisations operating.

Information sought - Volunteers suggested that more communication was needed on meetings, events, fundraising and opportunities to volunteer. In addition, the timely provision of monitoring data to those involved in dispatch was called for. All of this information can assist volunteers in doing their roles more effectively, or allow them to realise opportunities for involvement in other activities. Others wished for more information on the use of funds among red squirrel groups such as RSNE and RSU, with some scepticism noted about

whether resources were being used appropriately. This led to calls for more openness regarding who uses the funding and how it is being spent.

Means of communication - Volunteers expressed that they would generally like to see greater communication among red squirrel groups, from national groups, RSNE and between local groups. Preferred means of communication include presentations, attendance at county shows, through local press and via local community networks (emailing lists, social media and RSNE meetings). As some volunteers have limited time to actively seek out information themselves, these channels can be heavily relied upon. More networking was thought of as a precursor to achieving greater communication between the various groups. Aside from those already involved in squirrel management, there were calls to communicate the value of red squirrels through national level marketing, and by engaging with the future generation, i.e. school children.

3. Volunteer experiences: Support needed; Motivations; What do you like; What could be improved?

Motivation - Motivation for volunteers typically revolves around a desire to save the threatened red squirrel, or the broadleaf trees which the grey squirrel also impacts. Some noted the pleasure they received from seeing or photographing red squirrels, while others expressed more altruistic motivation, particularly in relation to "making a difference" and preserving the opportunity to see red squirrels for future generations. Others pointed to the opportunity volunteering gives to form friendships, and in providing impetus to go out and enjoy the outdoors.

Insufficient manpower - There remain concerns that there are insufficient "boots on the ground". For those involved in trapping time is a key constraint, and there is also a degree of frustration that the process is not always effective. An influx of new volunteers could ease this issue, particularly as some of the folk relied upon become "old and weary". While sourcing new volunteers may be a difficulty for some groups, one participant noted that in their experience a certain group was not doing enough to welcome or involve new volunteers. In this case the individual noted that their numerous expressions of interest were ignored, and as such the group lost out on gaining an enthusiastic member.

External support and empowerment - Volunteers would like to be empowered to be more effective by learning what can be done, how to do it, and who can help. This empowerment is perceived to be reliant on funding being provided or made accessible to local red squirrel groups, but also through improved cooperation with bodies such as the Woodland Trust and National Trust. Advice and training on trapping and dispatch is in demand, as are timely updates on grey squirrel sightings, and improved methods of control - particularly those which can reduce the number of man hours being dedicated. The continuous need for grey squirrel control may be perceived as an unsustainable battle, and some volunteers see their role as maintaining communities of red squirrels until scientists can find a more effective or permanent solution. Research into a contraceptive is therefore looked upon favourably, and there are hopes that local trials can be arranged in due course.

Communication - As already referred to, volunteers would prefer to see improved communication between groups, within communities, and in the national press. Facebook posts of red squirrel photographs and talks with schools were suggested as means of raising awareness about squirrels and the groups' work. It was also suggested that lone trappers need a network in order for their efforts to be communicated among each other and the wider squirrel community; liaison between trappers and monitoring-only volunteers would help to avoid overlap in monitoring periods. One volunteer noted the need for communication of opportunities for anything which they could assist with.

4. Future: Who should lead on red squirrel conservation; Who should fund it and how?

Leading - Many of the volunteers felt that widespread distribution of grey squirrels necessitates a national approach to management led by the government. Government efforts should increase to reflect the alleged stance on alien invasive species, and without a country-led approach there are concerns that grey squirrels will simply return to well-managed areas from those which are under resourced. Suggestions for specific organisations and departments who should be involved in overseeing a national approach included Defra, Natural England, the Wildlife Trusts, the National Trust, the Woodland Trust and the Forestry Commission. Universities and research institutes were also highlighted as having the potential to contribute in certain areas, such as red squirrel conservation. Volunteers made clear that there are already too many red squirrel related organisations to the point that it has become unclear how the roles of RSNE, the UK Squirrel Accord and RSU differ. One volunteer suggested that such groups should join together to avoid confusion and to concentrate resources.

Funding - The government are accused of providing insufficient funding for what is a known problem, and it is thought that they (e.g. through the Forestry Commission) along with many of the aforementioned Trusts, should be dedicating more financial resources to squirrel management. Lottery funding was also highlighted as a source which should continue to be used going forward, while one participant felt that investment in marketing the UK's unique wildlife could generate funds for broadleaf protection and other squirrel related activities. Some felt that there is potential to tie squirrel management with access to funds for landowners by altering Countryside Stewardship and forestry grants schemes. However, it was also felt that more funding should be provided directly to local red squirrel groups to support the work of volunteers, allowing for more "practical work on the ground". This work would be facilitated by RSNE's focus on monitoring and rapid dissemination of grey sightings to the appropriate individual or group.

E3 – Dissemination for IAS policy makers and scientists (FR)

- Presentation at the first Knowledge Fair and facilitation of workshop session (see below)
- Journal article on the survey results accepted in Biological Conservation: Dunn, M., Marzano, M., Forster, J. (in press) Public attitudes towards 'pest' management: perceptions on squirrel management strategies in the UK
- Presented information on the RSU project to the Forestry Commission Scotland Conservator group at NRS (Feb '18).

At the Knowledge Fair 2017, FR facilitated an interactive session to facilitate discussions between volunteers, practitioners, academia, policy and the team leaders. Participants were divided into four groups and asked to discuss their experiences and concerns in relation to the themes below. A short summary was produced.

Knowledge Fair 2017 Workshop Session - Mariella Marzano and Mike Dunn, Forest Research
A workshop involving round table discussions was carried out with the event's participants circulating between four discussion groups, spending 15 minutes at each. Discussions centred on:

1. Community Engagement

- What do we want communities/neighbourhoods to do?

- How to raise awareness/ what has worked?

- Any evaluations?

Engaging with youths emerged as an important consideration as these people represent the future of squirrel conservation. It was also suggested that the interest and activities of children can be taken on by parents and other relatives (snowballing interest and participation in conservation). Examples of how this is (or could be) achieved included; hanging feeders in or close to school grounds or involving existing youth groups such as the scouts. It was also suggested that some form of certification could be used as a hook to encourage youths to get involved (e.g. a scout badge or certification from the Wildlife Trust). Engagement of women (for example the Women's Institute) had also led to subsequent recruitment of male volunteers as the women's husbands began to take an interest, allowing couples to share an activity or goal.

Community success was noted to be heavily reliant on a local champion – one enthusiastic individual with infectious passion and capable leadership. This applied not just to volunteer groups but also to the individuals within organisations such as the Woodland Trust or Local Authority – notably there were some starkly contrasting accounts of how much support such organisations had provided in different localities.

Engaging with landowners (such as the Forestry Commission) had proved to be a frustration to some groups, and was felt to be undermining their work. Absent landowners (i.e. residing elsewhere) were also noted as being difficult to track down, and thus engage. The fact that large areas of land could go uncontrolled because of lack of successful engagement was seen as a real threat to the wider goal of squirrel conservation in some areas.

Methods of engagement ranged from websites, newsletters (paper and electronic), twitter, email lists etc. – their use being suited to reaching different demographics. The value of piggy-backing on other organisation's events also emerged as a potential engagement strategy. This could be useful when the volunteers/Wildlife Trust felt unable to commit a full day to community engagement, and may work be most effective where an audience likely to be interested were already assembled (e.g. RSBP meeting).

2. Volunteer recruitment and motivation

- What is best practice when working with volunteers?

- How to keep volunteers motivated?

- What do volunteers want back?

- What support do organisations/recruiters need?

Involvement in a red squirrel resurgence was a clear motivating factor for many existing volunteers.

Some people prefer to work alone, whereas others are more interested in the social benefits that volunteering can bring and are thus motivated by the prospect of group work which promotes interaction. For the latter, events such as the Knowledge Fair are also considered important as a means of facilitating learning and connections with others sharing the same vision.

In terms of scale and wider impact, some volunteers are very much focussed on their own patch, but most do take a real interest in the national picture. Regardless of this focus, the vast majority of those volunteers involved in monitoring or control are interested in receiving feedback about the data they collect, over time and/or space (i.e. through figures and maps).

This helps to demonstrate that the volunteers are having an impact and serves to justify all of their efforts.

The challenge for volunteers is sourcing funding for the grass-roots level work. Owing to this they can become reliant on the likes of Red Squirrel United for resources and communication.

3. Control measure – what works where

• What works where?

• What's the latest knowledge on control?

• Any problems with using certain methods?

Discussion focussed primarily on the use of trapping versus the use of shooting (the two most commonly applied control methods for grey squirrel control). It was noted that both of these methods have their own unique set of strengths and weaknesses. For example, trapping is found to be time consuming, leads to missed opportunities, and the guidance to check traps twice a day can be insufficient at certain times (such as breeding season). In terms of success, trapping near holly was said to be particularly effective, while the use of aniseed and peanut butter were claimed to attract squirrels into an area allowing more fruitful trapping. Shooting on the other hand was associated with a degree of risk to human health. Ultimately, the preference of the landowner whose land the control occurs on was said to be the biggest factor in the decision to use a particular technique.

Although urban environments are often considered to be a particular challenge when attempting to implement control, the use of the owl box structure in parks and gardens has reportedly led to some successful efforts in these settings. More generally, participants also expressed support for kill traps (noted as being largely unacceptable with the public at large in the national attitudes survey) but only in circumstances where it could be 100% selective, i.e. where other non-target species would not be impacted.

Finally, it was pointed out that there has historically been some difficulty in conservationists engaging and collaborating with the shooting fraternity, despite the possibility of a shared interest in grey squirrel control. It was posited that conservationists may be perceived as overly liberal with potential links to animal rights activists – something which the shooting community would likely be fearful of.

4. Squirrel biology and monitoring

• What are we monitoring for & why?

• Practicalities of collecting and submitting data

• What are the gaps?

The reasons put forward for monitoring included looking at presence/absence of different squirrels, and to establish a picture of squirrel health (e.g. disease within populations).

The methods employed to monitor and exactly what is being monitored varied with the individual volunteers and with region (or volunteer area of operation). Some noted that there are too many different methods of monitoring; for those volunteers who work with different groups they are often having to alter their method to match the respective group's standard, rather than apply the same method all of the time. However, certain means of data collection are considered unsuitable for particular localities and circumstances. For those managing the data this poses a challenge, especially when there are calls for datasets to be collated or compared.

The discussion about how data is (and should be) collected and submitted largely came down to how the data would be used (volunteer patch versus at the project scale feeding into national picture), but no real solution emerged. The discussion did bring to light the variation in participants' understanding about how data is used and accessed.

Ideally volunteers would like to see a relatively simple, standardised means of collecting and submitting data so that it is easily imported to a centralised (cross border) and easily accessible database. It was also seen as advantageous to have this database or app independent of a project's funding so that it could be maintained in the long-term.

Challenges for monitoring include a reliance on elderly volunteers who have more time, but may have physical limitations. Technological issues also pose a challenge in certain instances. For example, there is no signal to send/receive data in some areas.