

Scottish Government Honey Bee Health Strategy Survey 2022

Analysis Report

March 2022

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Background and Methodology

As a continuation of the review of Scotland's first 10-year Honey Bee Health Strategy, the Scottish Government Bee Health Team were keen to hear the views of the beekeeping community and those with an interest in honey bees. A survey was launched with the purpose of gathering those views and to help identify the areas which can be improved upon to best continue supporting Scotland's honey bees in future years.

The survey was divided into 3 parts:

- In the first section, we asked questions about participants' beekeeping to help us understand better our population of beekeepers in Scotland, helping us to tailor our communications.
- In the second section we asked a number of quick questions regarding the Scottish Government's Bee Health Team and our work.
- The final section focussed on more in depth questions regarding the challenges we face in disease control and bee health in Scotland.

16 question were included for analysis. The primary type of questions asked were multiple choice but with additional opportunities to provide targeted and general open feedback. The survey was created by the Bee Health Team but was subject to consultation and comments by members of the [Bee Health Improvement Partnership](#).

This bespoke questionnaire was distributed via an online survey tool through a web link. The survey was open for completion from 8th December 2021 to 28th January 2022.

The survey results were analysed by identifying themes and categorising responses. This report gives a detailed account of the findings highlighting the key themes and conclusions.

We are delighted with the level of response and would like to thank everyone who took the time to complete the survey and to our stakeholders who used their communication channels to share and publicise the survey amongst their members.

The results of the survey along with the lessons learned from the Review of the first Strategy will be key in helping to determine and guide us on the direction of the new 10-year Scottish honey bee health strategy.

Please note the results in this document are the views, thoughts and opinions gathered from the replies to the survey. These represent a wide range of people, including those who currently do not keep honey bees, and do not necessarily reflect the views or policy of the Scottish Government.

**Scottish Government Bee Health Team
March 2022**

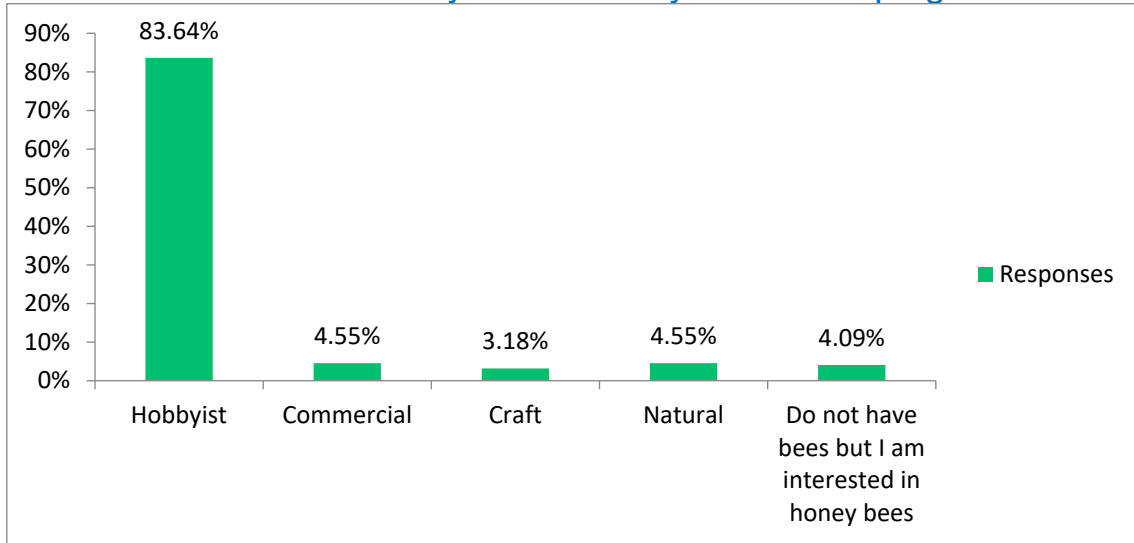
Results

Response Rate

660 responses were received.

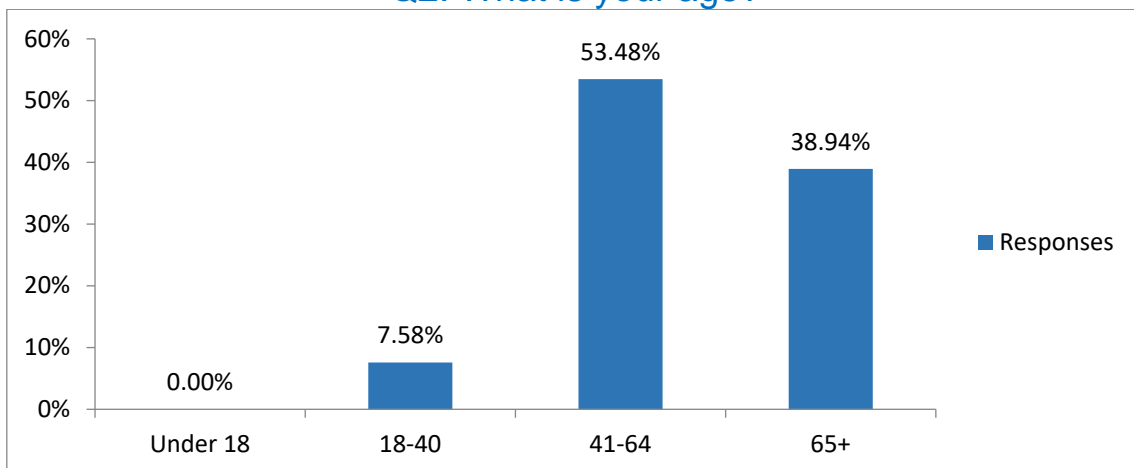
Section 1: About You

Q1. How would you describe your beekeeping?



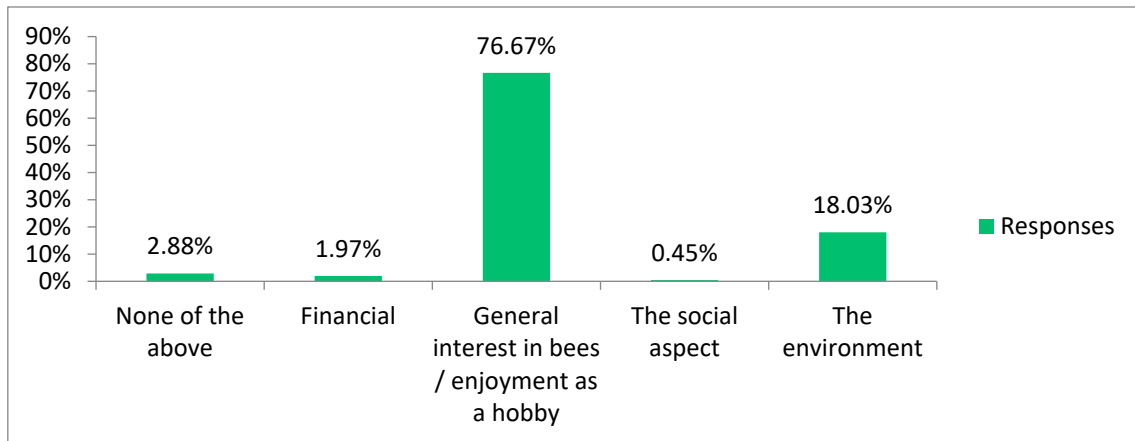
Of the 660 participants, 552 would describe their beekeeping as hobbyist with the remaining respondents split between commercial, craft, natural beekeeping and those who have an interest in bees.

Q2. What is your age?



Over 92% of participants indicated they were age 41 or over. A small percentage were between 18-40 and we received no responses from those under 18 years of age.

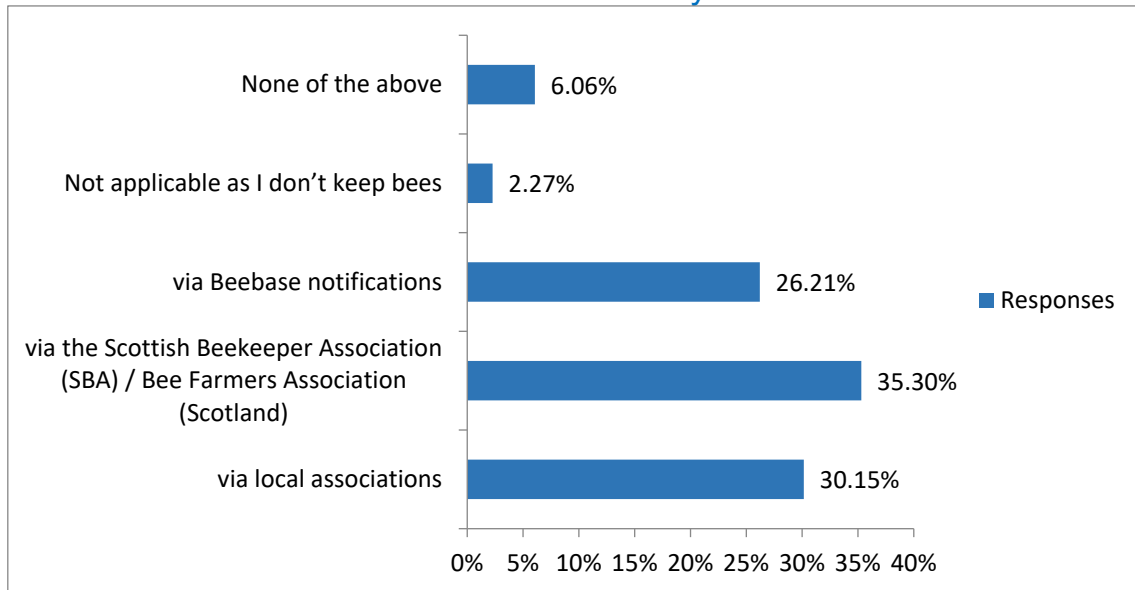
Q3. What would you say is the main reason for your interest in honey bees?



Of the 660 participants, 506 indicated the main reason for their interest in honey bees was their enjoyment as a hobby or a general interest in bees. The second main reason for interest of participants was from an environmental perspective. Respondents were given the opportunity to further expand on their reasons of interest which are noted below:

- **Honey consumption** - 11 participants noted this as a reason with some also mentioning it as a source of extra income.
- **Pollinators** – 10 participants noted the value of bees in pollinating their fruit and veg crops.
- **Family tradition** – Eight participants gave family members previously kept bees / inherited them as their main reason.
- **Environment as well as a hobby or general interest** was noted by seven participants.
- **Health benefits of keeping bees** - personal, mental, physical and social as well as the benefits from honey was noted by five participants.
- **Educational or scientific interest** was noted by four participants.

Q4. The Scottish Government is looking at ways to improve communications with beekeepers. What would be the best way to communicate with you?

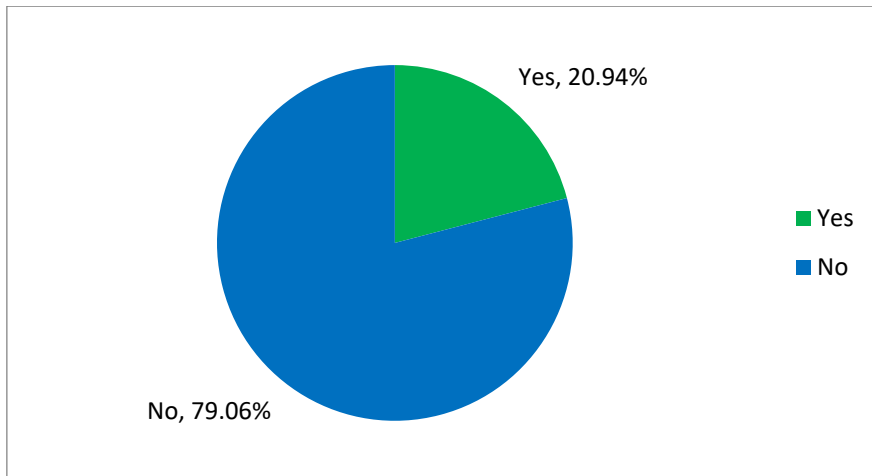


Responses show a fairly even split with participants favouring the SBA/BFA, local associations and Beebase as the best way for Scottish Government to communicate with them. Respondents were given the opportunity to expand on their reasons which are listed below:

- **Direct contact / email**- of the 73 participants who chose to comment, 42 stated they would like to be contacted direct and 36 of the 42 specified they would like this to be via email.
- **All of the above** – Eight participants noted by communicating through multiple channels there is a higher chance of reaching everyone.
- **Social media** - two participants.
- **Newsletter** - one participant.
- **No contact** - of the 73 participants who commented, one stated they did not wish to be contacted.

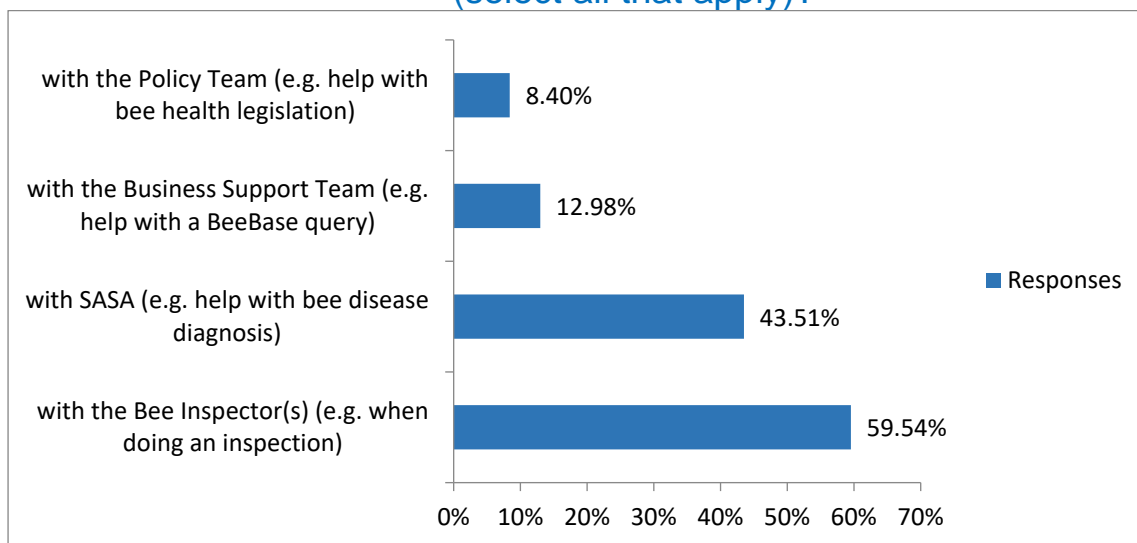
Section 2: Scottish Government's Bee Health Team

Q5. Have you had contact with the Scottish Government's Bee Health Team in the last 24 months?



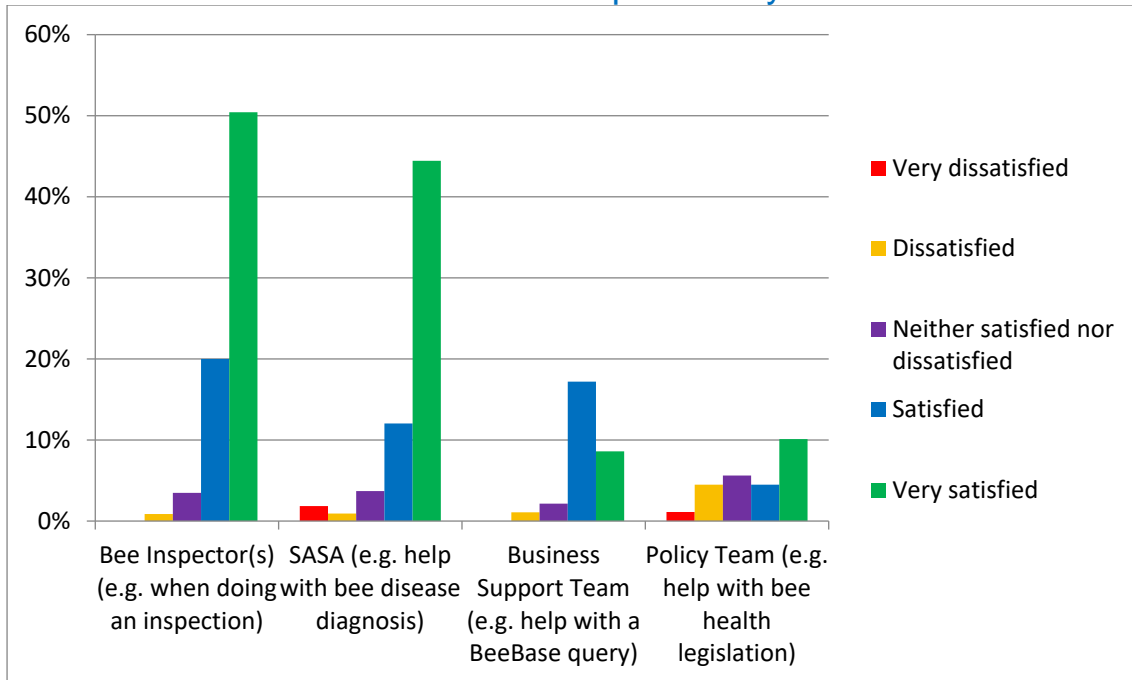
Of the 659 respondents who answered this question, 138 confirmed they'd had contact with the Scottish Government's Bee Health Team in the last 24 months.

Q6. Which part of the Bee Health Team have you had contact with (select all that apply)?



Almost 60% of the 131 respondents who participated in this question had contact with Bee Inspector(s). Nearly 44% had contact with SASA and a small percentage of participants noted contact with the Business Support Team and the Policy Team.

Q7. Please rate the experience you received



The results show that overall the response was very positive from those who had experienced contact with the Bee Health Team. See summary below:

Bee Inspector(s): Of the 86 participants who had contact, 81 were satisfied or very satisfied with only one participant selecting dissatisfied. The remaining four were neither satisfied nor dissatisfied.

SASA: Of the 86 participants who had contact, 61 stated they were satisfied or very satisfied with 3 of the 86 who had contact selecting dissatisfied/very dissatisfied. The remaining four were neither satisfied nor dissatisfied.

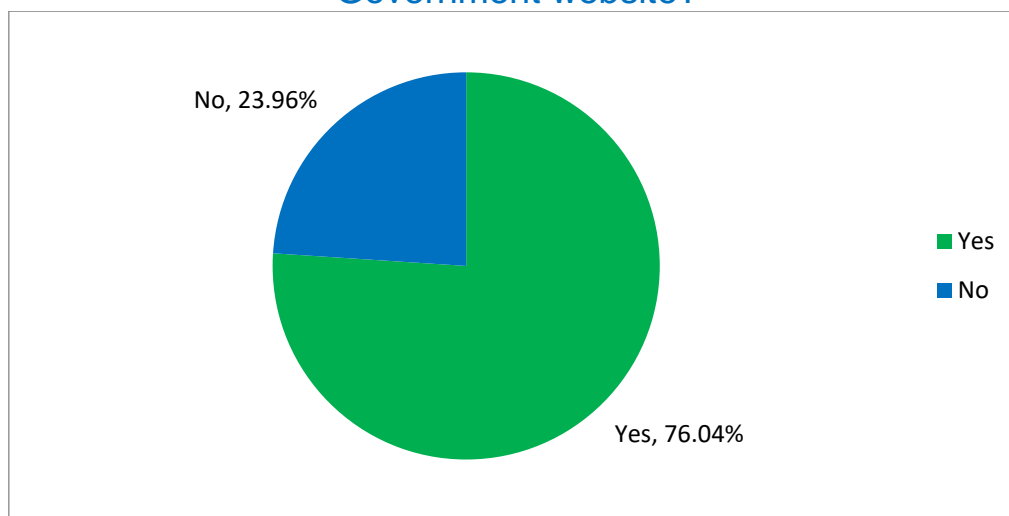
Business Support Team: Of the 27 participants who'd had contact, over 24 were satisfied or very satisfied with only 1 of the 27 who had contact selecting dissatisfied. The remaining two were neither satisfied nor dissatisfied.

Policy Team: Of the 23 participants who'd had contact, 13 were satisfied or very satisfied. Five were dissatisfied/ very dissatisfied and the remaining five were neither satisfied nor dissatisfied.

Participants were asked to provide comments to support their answer. The majority of comments were positive with key themes summarised below:

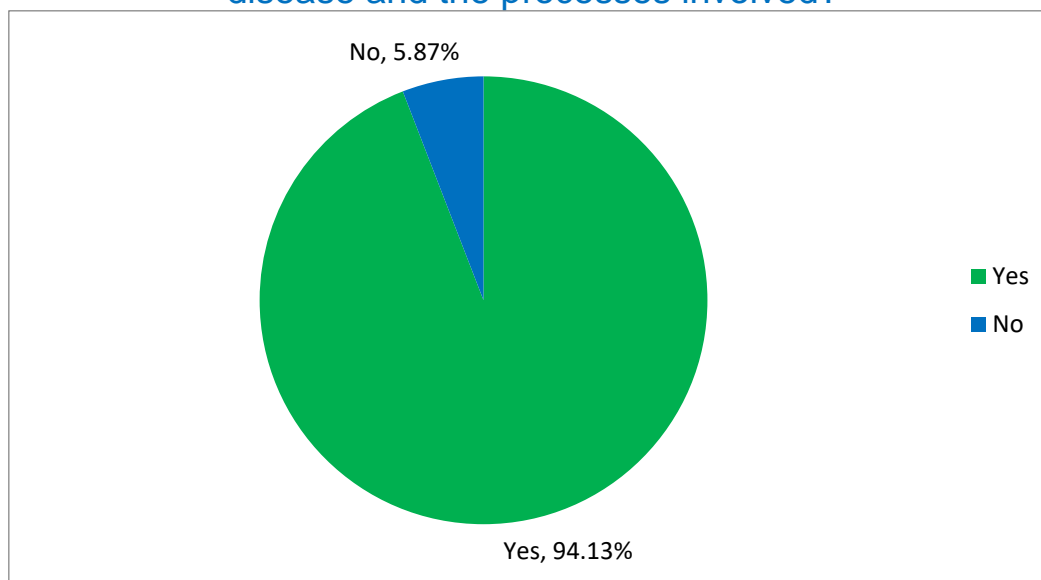
- **Quick / prompt response times:** 12 of the 47 comments referred to receiving a quick response specifically from enquiries, diagnosis and inspections. Four respondents highlighted a delay with sample results due to Covid-19 (but noted this was understandable), Christmas & New Year period and equipment failures.
- **Inspectors** - from those who'd had contact with a bee inspector the common theme was they found them to be friendly, approachable, helpful, professional and knowledgeable.
- **Talks by lead bee inspector or SASA through local associations/ seminars** – positive response with those who commented found them very helpful.
- **Varroa free Scottish Islands** – 3 out of 47 were dissatisfied with Scottish Government's response to those seeking Varroa free status for Scottish islands.

Q8. Are you aware that responsibility for Bee Health policy is devolved to Scottish Ministers and relevant information is available on the Scottish Government website?



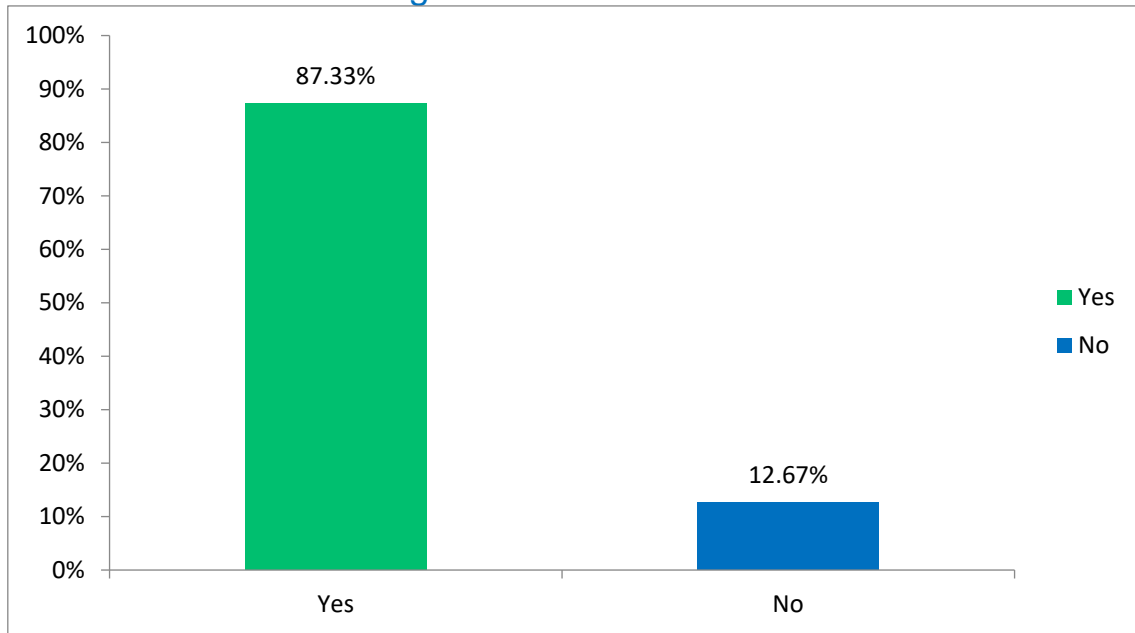
The figures highlight that the majority of participants are aware that bee health policy in Scotland is devolved and the Scottish Government website contains relevant information. Although it's also noted that nearly a quarter of respondents were not aware.

Q9. Are you aware of the appropriate legislation requiring beekeepers to notify the Scottish Government of any suspicion of a notifiable pest or disease and the processes involved?



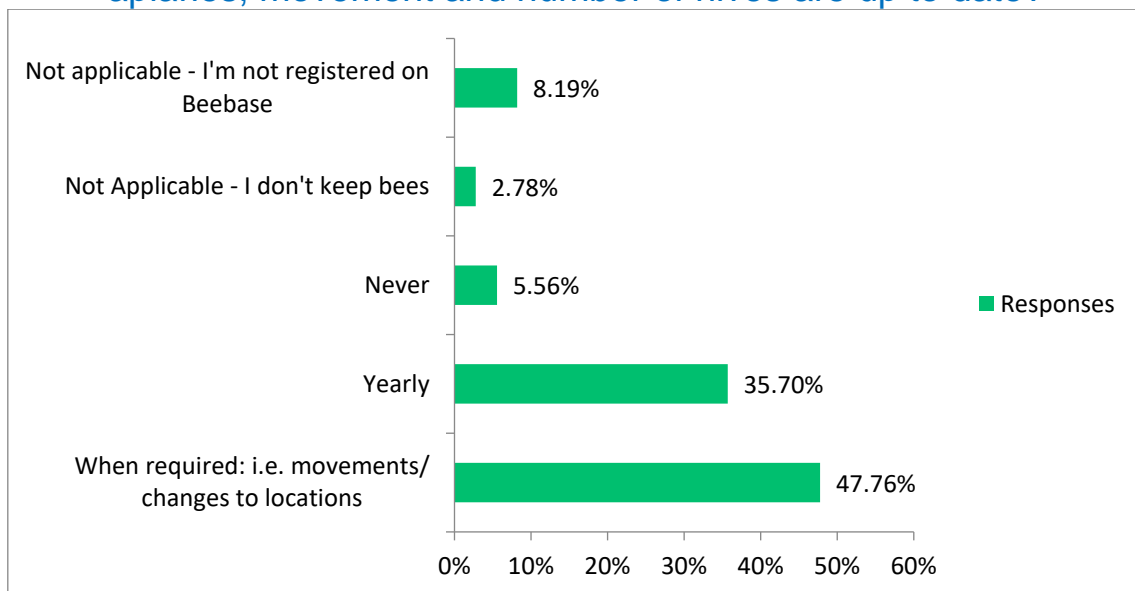
Of the 647 respondents to this question, 609 confirmed they were aware of the legislation and process that requires beekeepers to notify Scottish Government of any notifiable pests or diseases.

Q10. BeeBase is the national database for beekeepers in England, Wales and Scotland. It is secure, safe and registration is free. Are you registered on BeeBase?



A high percentage of respondents (87.33%) confirmed they were registered on BeeBase.

Q11. How often do you log in to BeeBase to ensure the location of your apiaries, movement and number of hives are up to date?



The majority of participants (47.76%) replied that they update their records as movement occurs. 35.70% stated that they review their record on annual basis.

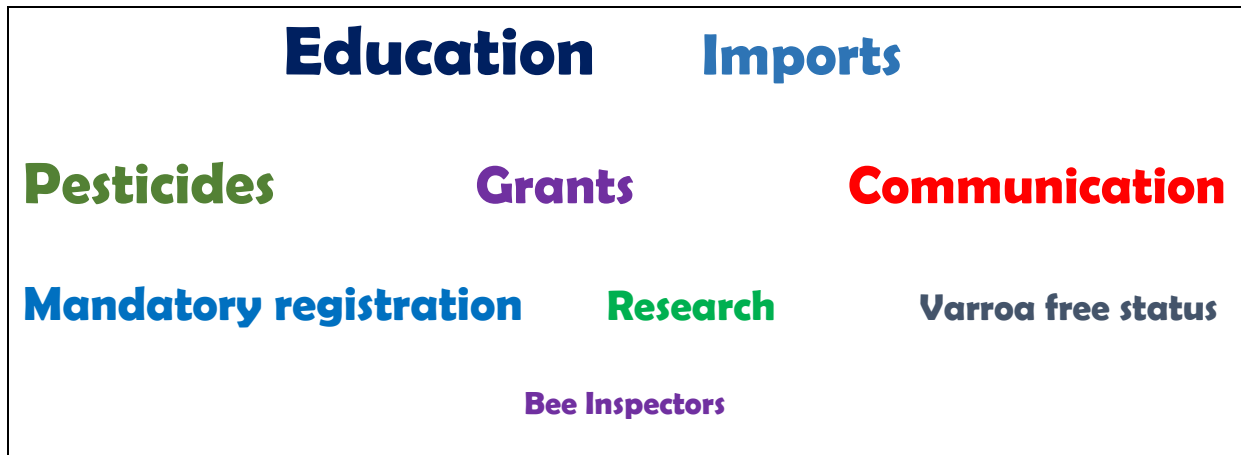
When asked to suggest how we could encourage beekeepers to keep their records up-to-date, 118 responses were received. Suggestions are summarised below:

- **Email reminders**
This was the most popular suggestion (22 participants) with different frequencies of reminders proposed (twice a year, three times a year, at the beginning and end of the season. Monthly and annually were all suggested).
- **Through the SBA and local association**
Another suggestion (18 participants) was for the SBA and local associations to remind their members. This could be through SBA magazine articles, local beekeeping pages or discussions at local meetings.
- **Improvements to BeeBase**
16 participants reported issues with BeeBase specifically that it was not user friendly. Suggestions included making it easier to record and navigate, modernise by introducing a BeeBase App and allow shared apiaries to be registered by all beekeepers in that apiary.
- **Make it mandatory**
A further suggestion from 13 participants was to make it a legal requirement for beekeepers to be registered and to keep their records up-to-date.
- **Incentives**
Four participants suggested offering a financial incentive. Suggestions included reduced cost of treating Varroa if you register, offering a prize draw with a voucher for a company who sell beekeeping products for keeping details up to date or provide finance to local associations as an incentive for them to promote record keeping.

Section 3: Future Challenges

Q12. Participants were asked to provide information on what improvements they would like to see included in the new strategy to help improve the health of Scotland's honey bees.

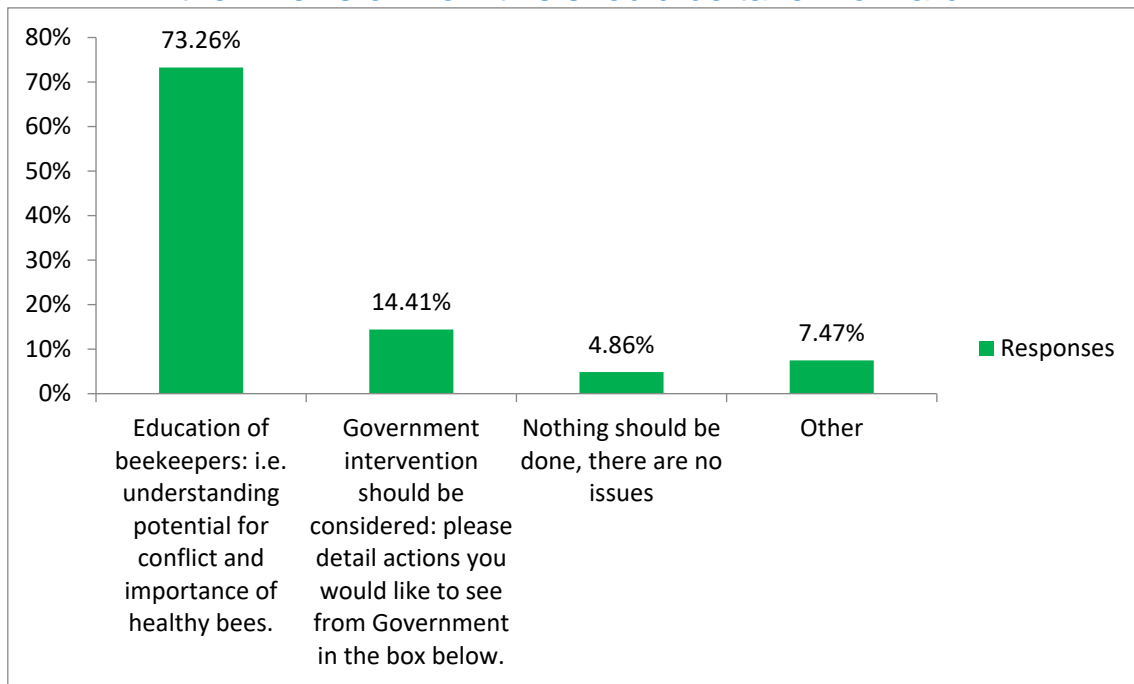
576 respondents provided comments. Suggestions for the main areas of improvement are listed below:



- **Education:** This remains a topic at the forefront for the future with 148 participants mentioning education in their comments. Popular suggestions included:
 - more talks & education held locally or through local associations
 - Courses on specific issues such as disease recognition, good husbandry, effective treatments, breeding, queen rearing and how to support a broader range of pollinators.
 - Guidance and training on identifying, controlling and treatments for Varroa in Scotland
 - Bee Health Training Days
 - more online training
 - more education for the public especially at schools about bees
- **Imports:** 62 participants commented that wanted restrictions or a stop on imports from outside the UK into Scotland with more focus on encouraging beekeepers to breed and keep native bees.
- **Pesticides:** this was a further topic amongst comments with 54 participants looking for a ban or restrictions placed on the use of pesticides/ insecticides in agriculture and in local communities which are harmful to honey bees and other pollinators.
- **Communication:** 36 participants suggested more communication either direct via email or through local associations. Recommendations included:
 - Better communication with beekeepers about nearby notifiable disease outbreaks including steps to take when outbreaks occur locally and notification when the disease outbreak has ended.

- Additionally, more communication on research findings, current developments and on the progress of the strategy.
- **Grants:** 33 participants suggested there should be government funding to cover areas such as:
 - financial support for new beekeepers for equipment/bees and training courses for starting up
 - funded mentorship schemes for new beekeepers
 - funding available for bee keepers and or methods of repopulating lost colonies at a subsidised rate
 - More financial support for local associations to help new beekeepers
 - Allowances or funding to expand foraging ground for pollinators
- **Mandatory registration:** This was a notable topic with 23 participants suggesting the possibility of compulsory registration of beekeepers as something they want to see as part of the new strategy.
- **Research:** There were 23 suggestions that more research should be undertaken on areas such as:
 - treatment free beekeeping and natural beekeeping
 - best management or eradication of Varroa in Scotland
 - the impact of pesticides
 - The impact of the loss of local biodiversity and climate change and how this will affect honey bees in the future.
 - Research into why queens are failing at earlier stages
 - a test for Varroa be developed based on a chemical/DNA analysis rather than visual
- **Bee Inspectors:** 13 participants want to see more visits by Bee Inspectors and more locally based Bee Inspectors.
- **Varroa free status:** There were 12 participants who want to see Varroa free status for areas of Scotland, particularly the Scottish Islands, and protection of those areas by preventing or controlling movement of bees from any areas that are not Varroa free.

Q13. The next 10-year Strategy will consider issues such as biodiversity and the interaction of managed honey bees with other pollinators in terms of competition and pathogen spread. Participants were asked for their views on how this should be taken forward.



It is clear from the results that the majority of participants feel education of beekeepers is the best way to take this forward with a small number of participants opting for government intervention to be considered. Participants were given the opportunity to further expand on how this should be taken forward:

- **Education-**
This was featured in 35 participant’s comments. Suggestions included educating the public, land-owners, farmers and Councils as well as beekeepers. More education or banning of insecticides was a common suggestion as well as more on bee-friendly planting.
- **Imports-**
15 respondents stated that they wanted to see more restrictions on imports of bees into Scotland with a move away from imports to prevent pests and more encouragement to conserve and protect native species and black bees.
- **Registration of all beekeepers-**
Mandatory registration was once again raised as a suggestion by 14 participants. Monitoring of the density of hives/colonies can ensure there is not over-crowding in certain areas.
- **Funding and Investment –**
12 participants suggested there should be more investment into research & science on this topic highlighting that we need to be clear on the science before educating the public. Other suggestions included more funding to support farmers and landowners to promote environmentally sustainable practices and help build biodiversity on the lands. In addition, the recruitment of more bee inspectors to manage and effect change and offer support and advice. Other suggestions were to

ask Councils to grow more wildflower and encourage naturalisation by leaving verges to grow and not cutting the grass short by roadsides and parks.

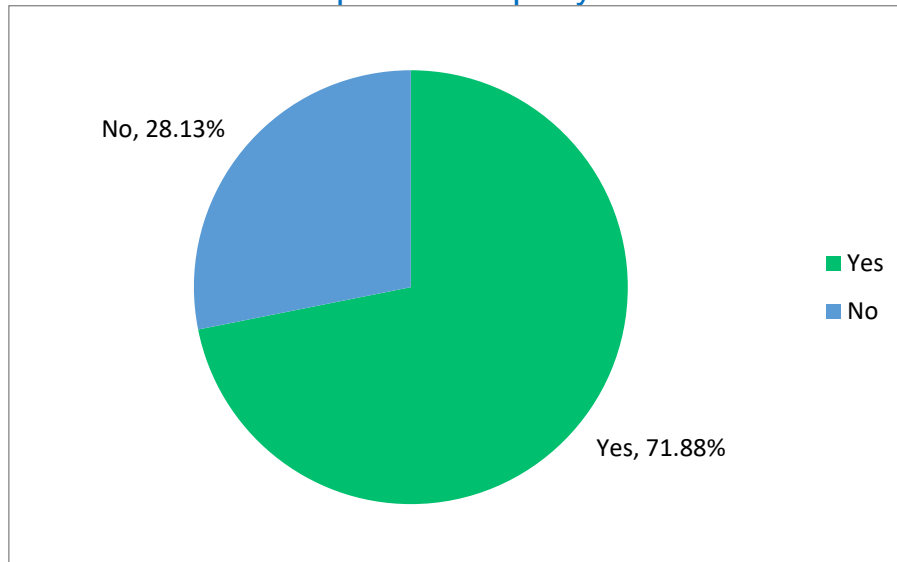
- **Commercial beekeepers –**

Six respondents suggested there should be more work looking at the impact of large-scale beekeeping which in their opinion can strip areas of bee forage to the detriment of other pollinators. Some felt there should be limits on the size of bee farming businesses in one place with some control over the numbers of honey bee colonies being kept to protect other pollinators.

- **No Government involvement –**

Of the 146 participants who chose to comment, 6 felt the government should not get involved. Comments included: government should only get involved if there is a disease issue, not wanting government interference in their hobby, unnecessary restrictions would discourage hobbyist or new beekeepers and that education should be carried out by local associations and the SBA, not the Scottish Government.

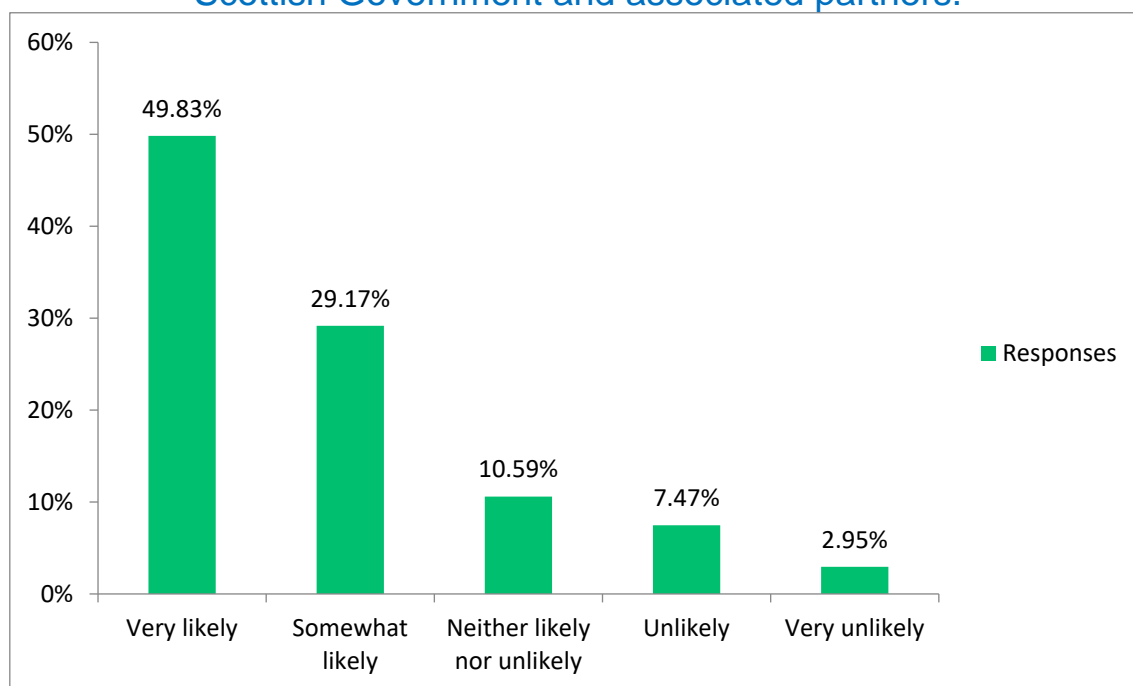
Q14. The new EU Animal Health Regulation, if fully implemented in Scotland, requires compulsory registration of beekeepers and recording movement of bee hives for traceability and disease control purposes. Whilst there is currently no legal requirement for beekeepers to register on BeeBase, it is our best tool for disease control. Participant were asked if they would support the introduction of compulsory registration for beekeepers and apiary locations.



Of the 576 respondents, 414 are in support of introducing compulsory registration for beekeepers and apiary locations. 162 are not in support. Respondents were invited to provide additional comments to support their answer which are detailed below:

- **Disease control** – A recurring comment from 44 respondents in favour of compulsory registration for beekeepers and apiary locations is that it would help limit the spread of disease and improve traceability. It was also felt that this would help encourage responsible beekeeping.
- **No legislation** – 17 respondents felt education and engagement is the best approach. Common themes from respondents not in favour of compulsory registration were that voluntary was best as bureaucracy and regulations could deter hobbyist beekeepers and put off a lot of new beekeepers. It could also lead to those not registered to become more elusive. Some referred to government interference being like ‘big brother’.
- **Enforcement**- 13 respondents questioned how registration could be policed and felt it would be too difficult to enforce.
- **Compulsory for some** – 12 respondents suggested that this should only apply to commercial beekeepers or those with large apiaries not hobbyists with 1 or 2 hives. A threshold should be set and only those who meet this should be required to register.
- **Bees are livestock** – 11 comments focussed on bees being livestock and should be subject to movement and traceability requirements as other livestock are.
- **Not in EU**- 11 respondents commented that their understanding is that Scotland is no longer in the EU and therefore these regulations need not apply.
- **Data stored securely**- nine respondents were concerned about the location of their apiaries being made public due to risk of theft.

Q15. Prior to the Covid pandemic, the Scottish Government ran bee health training/education days which covered issues such as: Varroa control, identification of notifiable diseases, disease control, pest recognition and good biosecurity practices. Participants were asked how likely they would be to attend a similar event in future hosted by the Scottish Government and associated partners.

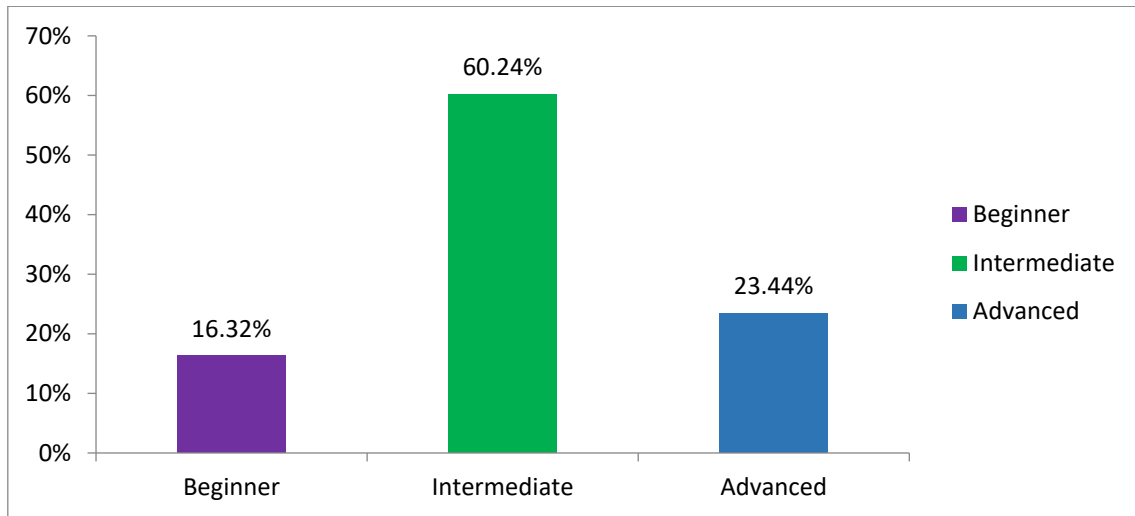


79% of respondent said they would likely attend a Scottish Government bee health training/education day in future. Almost half of respondents said they would very likely attend and only 10.35% stated they would be unlikely to attend.

Participants were invited to tell us about other ways they would like to receive training/education. Main suggestions are noted below:

- **Pre-recorded demos/videos**—84 participants would like to receive education/training this way. Ideas included having a library of pre-recorded information and demonstrations that people can access in their own time. With some suggesting these should be short in length (e.g. 10 minute clips). Some stated they chose this option due to not wishing to travel because of living in remote areas or costs.
- **Live webinars**—this was mentioned by 83 participants. Suggestions included having live supported practical sessions over the hive or on how to apply Varroa treatments.
- **Local Association/SBA**— 29 participants stated they'd prefer to receive training/education through their local association or the SBA. Practical demonstrations by experienced local beekeepers would be more tailored to their environment.
- **In person practical demos** – While most people felt pre-recorded demos and webinars were good, 25 participants stated they still preferred face to face training.
- **Held locally** – 15 participants said they would only attend if the training was local or within reasonable travelling distance.

Q16. What level of training would you prefer?



Results show differing preferred levels of training. However, intermediate is the most popular level of training with the majority of participants choosing this option.

Conclusions

1. The Scottish Government Honey Bee Health survey did accomplish the original aims of gathering the views of the Beekeeping Community in Scotland and those with an interest in honey bees to help guide the direction of the 2022 honey bee health strategy as well as identifying areas which can be improved upon to best continue supporting Scotland's honey bees in the longer term.
2. 83.64% of participants who completed this survey described their beekeeping as hobbyist, 92% were age 41 or over and 76.67% indicated the main reason for their interest in honey bees was their enjoyment as a hobby or they had a general interest in bees. The environment was another notable reason amongst 18.03% of participants.
3. 35.30% of participants told us the best way for Scottish Government to communicate with them was through the SBA or BFA. This was closely followed by their local association (30.15%) or through BeeBase (26.21%). When asked for other suggestions the top suggestion was to contact them direct by email.
4. Only 20.94% of respondents reported they'd had contact with the Scottish Government's Bee Health Team in the last 24 months. Of those who'd had contact, almost 60% was with the Bee Inspector(s) and almost 44% with SASA. When asked to rate their experience the responses were mostly positive with the majority of people rating their experience satisfied or very satisfied. From the comments, the main reasons for the small

number who were dissatisfied were due to delays or not being happy with the Scottish Government Policy position on the area they enquired.

5. The majority of participants (76.04%) are aware that bee health policy in Scotland is devolved and the Scottish Government website contains relevant information. Although results indicate that there is still work to be done on communication and engagement on this area.

6. The vast majority (94.13%) of participants confirmed they were aware of the appropriate legislation requiring beekeepers to notify the Scottish Government of any suspicion of a notifiable pest or disease and the processes involved.

7. A high percentage (87.33%) of participants confirmed they were registered on BeeBase. When asked how often they logged into BeeBase to ensure the location of their apiaries, movement and number of hives were up to date, just less than half (47.76%) do this when the movement or change of location occurs. 35.70% of participants review their record on an annual basis. When asked to suggest how we could encourage beekeepers to keep their records up-to-date, email reminders were a popular suggestion. Other suggestions included the SBA and local associations reminding their members, making it mandatory and improving BeeBase.

8. Participants were asked to provide information on what improvements they would like to see included in the new strategy to help improve the health of Scotland's honey bees. Comments show education remains at the forefront of future work. Other topics suggested included bans or restrictions placed on imports and pesticides, government funding for new beekeepers and local associations, more communication, introduction of compulsory registration, more research, more bee inspections and protection for Varroa-free areas.

9. The next strategy will consider issues such as biodiversity and the interaction of managed honey bees with other pollinators in terms of competition and pathogen spread. Participants were asked for their views on how this should be taken forward. 73.26% of participants chose education as the best way to take this forward. Suggestions included educating the public, landowners, farmers and Councils as well as beekeepers. A small number (14.41%) of participants opted for government intervention to be considered. During open feedback other suggestions included restriction on importing bees with more encouragement to conserve native stocks of honey bees, funding and investment into research and science on this topic, funding for farmers and landowners to promote environmentally sustainable practices and work looking at the impact of large-scale commercial beekeeping.

10. Participants were asked if they would support the introduction of compulsory registration for beekeepers and apiary locations. 71.88% confirmed they would support this with the remaining 28.13% not in support. When invited to provide additional comments many felt it would limit the spread of disease and improve traceability, some felt bees should be subject to movement and traceability requirements the same as other livestock. Those not in support, commented that education and engagement was a better approach and regulations could deter new or hobbyist beekeepers. Others queried how this would be

enforced, some were concerned about the location of their apiaries being made public and others queried why we would want to bring in EU regulation when Scotland is no longer in the EU.

11. Participants were asked how likely they would be to attend a Bee Health day in future hosted by the Scottish Government and associated partners. 79% of respondent said they would likely attend. Participants were invited to tell us about other ways they would like to receive training/education. Popular suggestions included pre-recorded demos or live webinars. Some stated they would attend if they were held locally or within reasonable travelling distance. Some said they'd prefer training delivered through their local association.

12. Participants were asked to choose what level of training they'd prefer with the options being beginner, intermediate or advanced. Differing levels were preferred with the most popular level being intermediate with just over 60% of participants selecting this option.

Next Steps

With the identification of the above conclusions, the Scottish Government Bee Health Team along with the Bee Health Improvement Partnership will be using this information to develop a new 10-year Honey Bee Health Strategy for Scotland which will include a focus on the following key areas:

- The way that participants have described their beekeeping and communication preferences will be key information when designing the pillars in the new honey bee health strategy.
- The information provided whether positive or negative will be taken into account and will help us on the decision making required to continue to build an expert and efficient bee health inspectorate that can adequately support the needs of the Scottish Beekeeping community. This will include better communication of clarifying our policy position and the work that we plan to carry out in each of the pillars in the next 10 years. Particularly on positions regarding important issues such as imports, Varroa free areas and issues which have been raised regarding our international obligations after Brexit. It should be noted that some of the areas mentioned are not within scope of the bee health team in Scotland (for example, the use of pesticides), however, our new strategy will emphasise the need to work in partnership with those parts of government who are responsible for these areas.
- We will continue to develop tools to support our disease control strategies, including BeeBase to encourage up-to-date and accurate data.
- We will continue to look at opportunities through the next 10 years to improve our understanding of the interaction of honey bees with the environment and other pollinators through science and research.
- We will also continue to work in partnership with NatureScot and their pollinator strategy, SASA on research and science as well as other UK administrations to reach the best outcome for beekeepers, honey bees and the environment.

End of report



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