

Summary of the honey bee husbandry survey 2023

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Number of responses.

1517 responses were obtained. All responses were given in English. Where questions were optional, the number of responses received is given for each question. 65 respondents reported they were no longer keeping bees and were excluded from the results reported below.

Background information

Apiary numbers

The majority of beekeepers kept bees a single local authority. 92 beekeepers kept bees in two local authorities, 11 kept bees across three local authorities, four kept bees in four local authorities and two kept bees in five local authorities. Overall, the average number of apiaries maintained by beekeepers was 2.4 apiaries per beekeeper (3439 apiaries/1452 current beekeepers). When beekeepers were asked how many colonies they keep on average, 1451 answered an average of 5.3 colonies¹.

The majority of apiaries (72.7%) were kept in rural locations (Table 1).

Table 1. Number of apiaries in rural and urban locations. *Donates where multiple answers were allowed.

Apiary location*	Number of beekeepers
Rural	1056 (72.7%)
Urban	301 (20.7%)
Rural and Urban	95 (6.5%)
Total beekeepers that answered	1452

The reasons for keeping bees

Beekeepers were asked to rank the top three reasons they kept bees from Table 2. However, respondents used free text fields to give their own reasons, leading to many variable and unique answers or ranked all options but gave the same ranks for multiple options. Therefore, results are not summarised.

Table 2. Options available for respondents when asked the rank the top three reasons for keeping bees.

Why do you keep bees?
Family history of beekeeping
Change in personal/work circumstances (including retiring, moving to a new house etc)
To spend more time outside
To be part of a beekeeping community
To do something practical
To harvest honey/ bee products for personal use
To sell honey/ bee products
To save the bees
To help the environment
As an interest in entomology
Health and well being
Other reasons

¹ Where beekeepers gave answers between two numbers, the midpoint was used.

Beekeeping association membership

The majority of beekeepers (89.7%) were members of a beekeeping association, with most beekeepers (87.7%) being members of the British Beekeepers Association (BBKA) (Table 3, Figure 1).

Table 3. Beekeeping association membership. *Donates where multiple answers were allowed.

Are you a member of a beekeeping association?	No. of beekeepers	% of responses
No	150	10.3
Yes	1302	89.7
Total beekeepers that answered	1452	
Association membership breakdown*	No. of beekeepers	% of responses
British Beekeepers' Association	1139	87.7%
Welsh Beekeepers' Association	100	7.7%
Bee Farmers' Association	14	1.1%
Independent beekeeper association	113	8.7%
Other	154	11.9%
Total beekeepers that answered	1299	

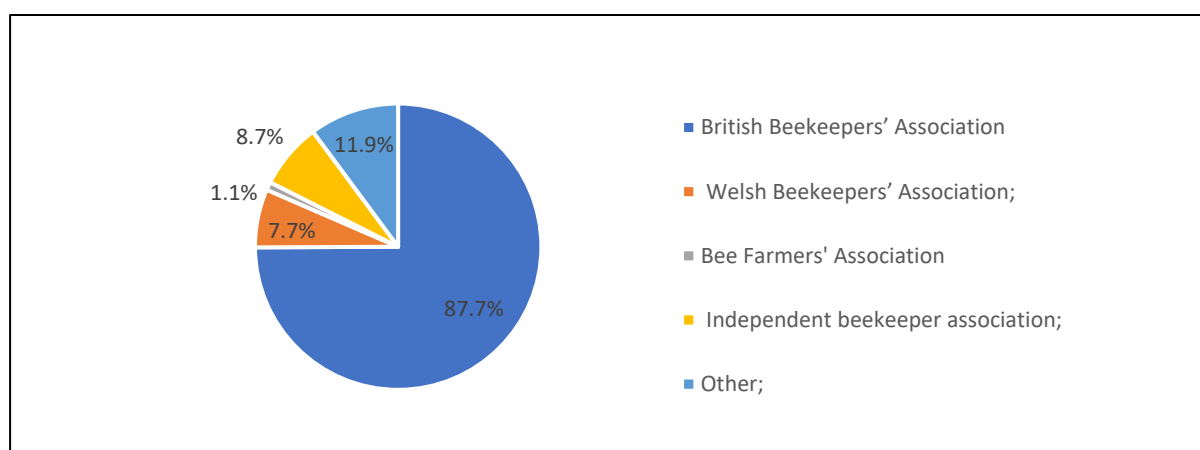


Figure 1. Beekeeping association membership.

Population changes

Colony numbers and losses

345 (23.8%) of beekeepers lost colonies over the summer (April 1st to October 1st, 2022) and 723 (49.8%) of beekeepers lost colonies of the winter (October 1st, 2022, to April 1st, 2023).

Overall, reported summer losses were 7.9% (538 of 6842) and winter losses were 20.9%² (1662 of 7939). However, the number of colonies increased from April 2022 to October 2022 by 16.0%, then decreased by 18.1% to April 2023³, resulting in slightly less colonies than in April 2022 (Table 4 & Figure 2).

² Contradictory answers were excluded e.g., 'Yes' to lost colonies but '0' colonies lost.

³ % change compared to colonies in April 2022.

Table 4. The number of colonies from April 2022 to April 2023.

Date	Number of colonies	% Change
April 2022	6842	n/a
October 2022	7936	+ 16.0
April 2023	6695	- 18.13 ³

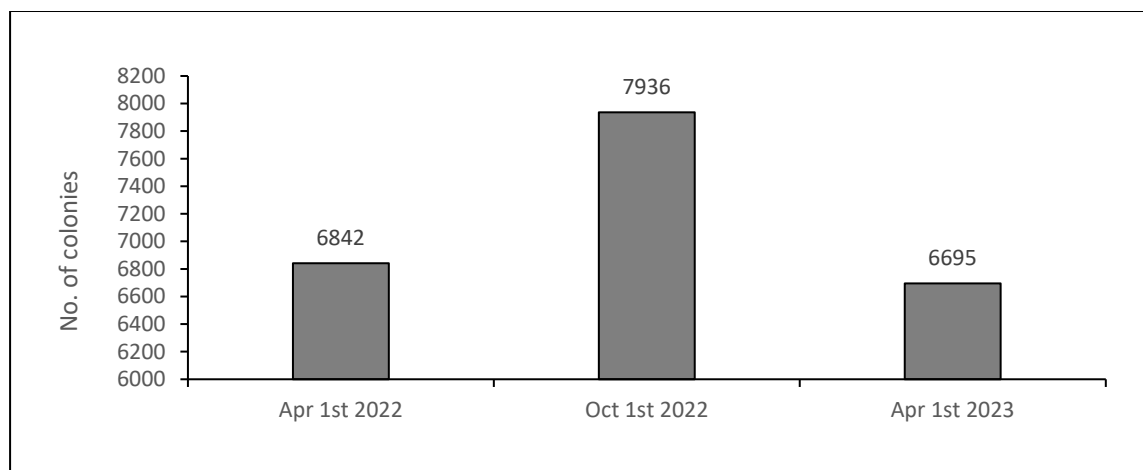


Figure 2. The number of colonies from April 2022 to April 2023.

Husbandry practices

Queen replacement

43.4% of beekeepers did not practice queen replacement, 30.6% of beekeepers only replaced queens when needed. 23.3% of beekeepers replaced queens every 1-5 years (Table 5).

Table 5. Queen replacement practices.

How often do you requeen your hives?	Number of responses	% of beekeepers
I leave my bees to requeen themselves naturally	630	43.4%
Every 1-2 years	229	15.8%
Every 3-4 years	79	5.4%
Every 5+ years	1	0.1%
Every year	29	2.0%
When needed or dependent on performance	445	30.6%
Other	39	2.7%
Total beekeepers that answered	1452	

Frequency of visits to colonies

The majority of beekeepers (70.7%) visited their colonies once a week or more during the active bee season (Table 6). Only 2.2% of beekeepers visited their colonies less than once per month.

Table 6. Frequency of beekeeper visits to colonies during the active bee season.

How often do you visit your bees during the active bee season?	Number of responses	% of beekeepers
Once a week or more	1027	70.7%
Every 2 weeks	307	21.1%
Monthly	86	5.9%
Less than once per month	32	2.2%
Total beekeepers that answered	1452	

Feeding

The majority of beekeepers (82.0%) fed their colonies between April 2022 and April 2023 (Table 7 & Figure 3) and most (53%) listed ‘as a winter intervention’ as a reason they fed.

Table 7. Colony feeding activities of beekeepers between April 2022 and April 2023.

Did you feed your bees between April 2022 and April 2023	Number of responses	% of beekeepers
No	261	18.0%
Yes	1191	82.0%
Total beekeepers that answered	1452	
Reason for treating*	Number of responses	% of beekeepers
As a precautionary measure/routine practice	630	53%
As a summer intervention	46	4%
As a winter intervention	765	64%
To feed a new colony, nuc or collected swarm	433	36%
Following a shook swarm treatment	85	7%
Other	15	1%
Total beekeepers that answered	1190	

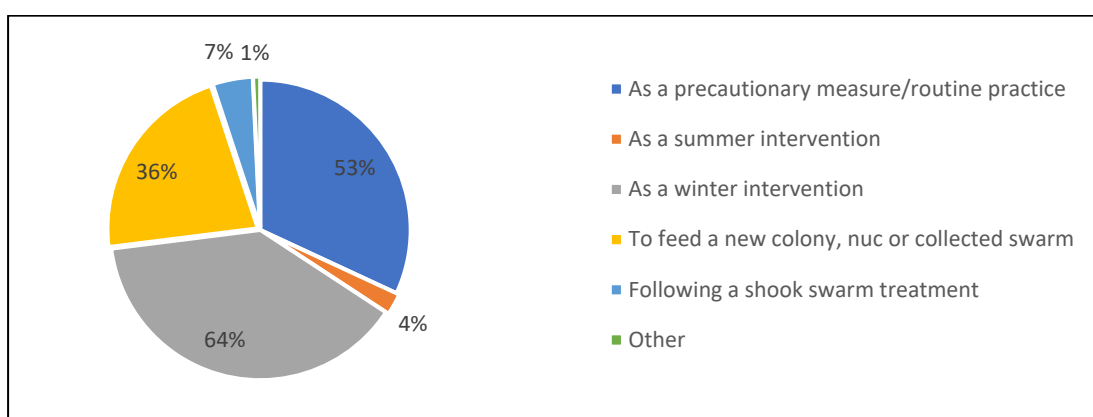


Figure 3. Reasons listed for feeding bees between April 2022 and April 2023.

Treatments

The majority of beekeepers (77.9%) treated their bees for pests and diseases between April 2022 and April 2023⁴. In total, 77.6% did so against *Varroa* (Table 8 & Figure 4).

Table 8. Treatments against honeybee pests and diseases between April 2022 and April 2023. *Donates where multiple answers were allowed.

Did you treat your bees for pests and diseases between April 2022 and April 2023?	Number of responses	% of beekeepers
No	320	22.1%
Yes	1128	77.9%
Reason for treating*	Number of responses	% of beekeepers
Yes – as a managed precaution against varroa	1106	98.0%
Yes – as an emergency response to varroa	36	3.2%
Yes – as a managed precaution against another pest or disease	17	1.5%
Yes – as an emergency response to another pest or disease	8	0.7%
Varroa treatments summarised	Number of responses	% of beekeepers
Did not treat	320	22.1%
Treated for <i>Varroa</i> and another pest or disease	1123	77.6%
Treated only for another pest or disease	5	0.3%
Total beekeepers that answered	1448 ⁴	

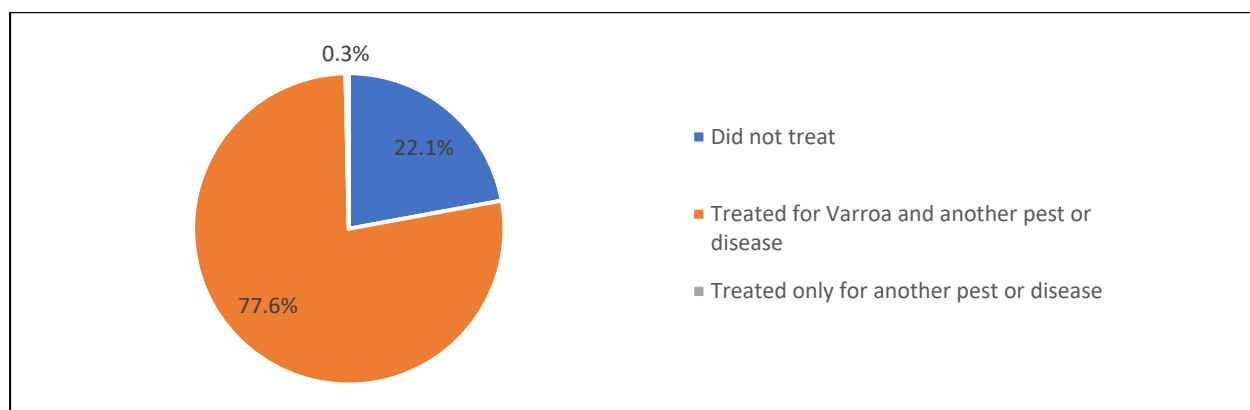


Figure 4. Percentage of beekeepers that either treated for varroa, another pest or disease or did not treat at all.

Comb replacement

When asked how what proportion of combs are replaced every three years, the group with the most responses (39.2%) was 0 - 24% (Table 9 & Figure 5).

⁴ Four responses excluded due to giving answers for both treating and not treating.

Table 9. Comb replacement activities of beekeepers.

On average, what proportion of your brood combs do you replace every 3 years?	Number of responses	% of beekeepers
0 to 24%	569	39.2%
25 to 49%	452	31.1%
50 to 74%	189	13.0%
75 to 100%	242	16.7%
Total beekeepers that answered	1452	

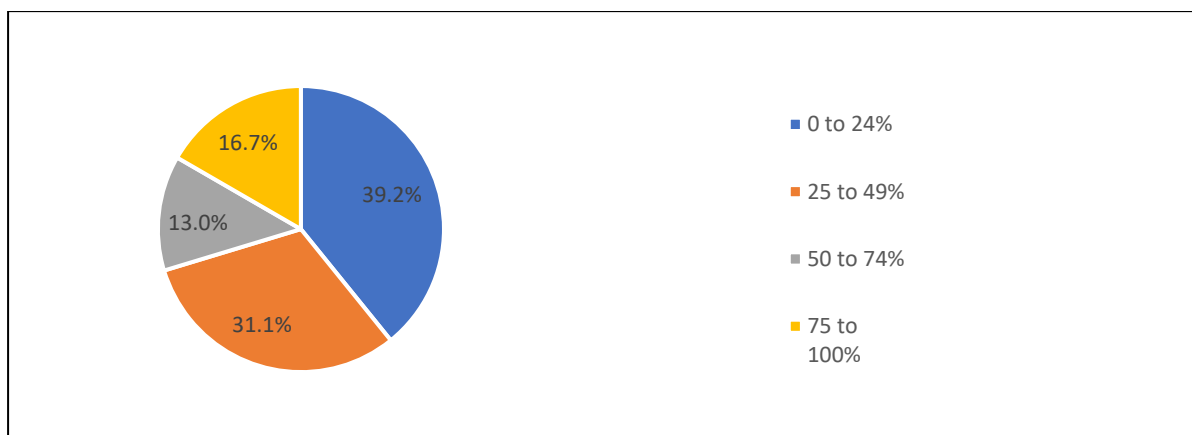


Figure 5. Percentage of comb replacement by beekeepers.

Queens

In total, 1591 beekeepers provided information on where they source their new queens from. The majority of beekeepers (66.5%) sourced new queens from their own colonies naturally (Table 10 & Figure 6).

Table 10. Origin of new queens. *Donates where multiple answers were allowed.

Where do you source your new queens from?*	Number of responses	% of beekeepers
Own colonies naturally	783	53.9%
I have not sourced any new queens	242	16.7%
Own colonies selective	361	24.9%
Sourced from a supplier	341	23.5%
Sourced from association/local beekeeper	197	13.6%
Other	17	1.2%
Total beekeepers that answered	1452	

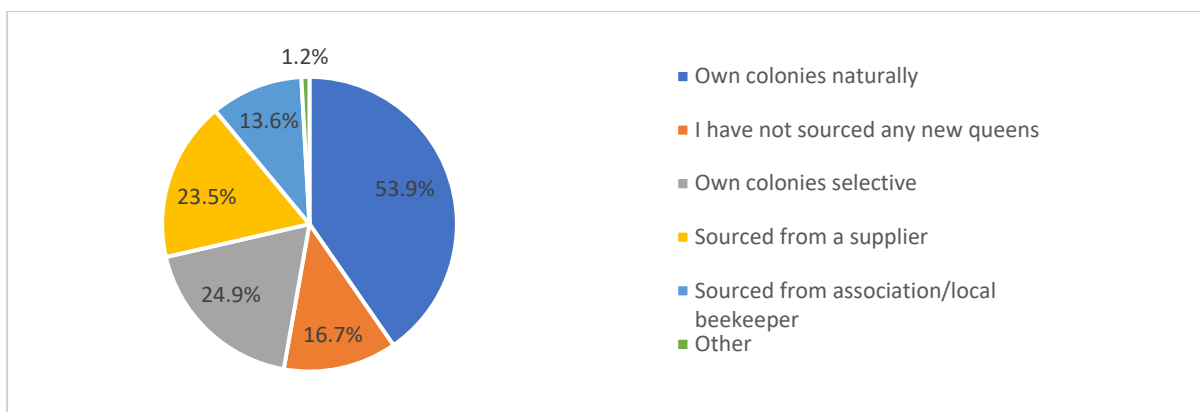


Figure 6. Percentage of queen sources by beekeepers.

Education, advice and support

Training received

1136 of 1452 beekeepers responded to say they had received training. The majority of beekeepers that answered received classroom-based training (Table 11 & Figure 7). This question was optional. Those that provided no answer could therefore have received the training.

Table 11. Training received of 1452 responses. *Donates where multiple answers were allowed.

Have you ever had any of the following formal training?*	Number of responses	% of beekeepers
Classroom based training	838	73.8%
Hive-side practical training	811	71.4%
DASH	20	1.8%
Online course	195	17.2%
Other	154	13.6%
No answer	316	27.8%
Total beekeepers that answered	1136	

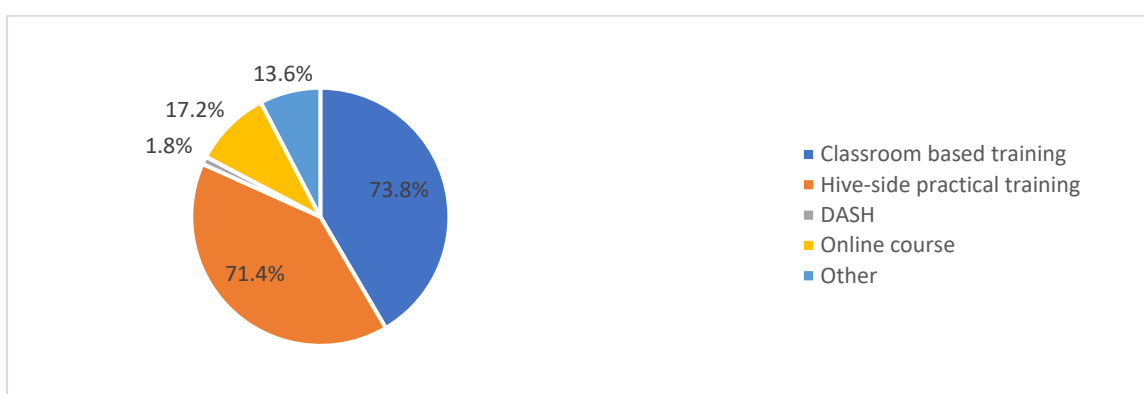


Figure 7. Types of training received by beekeepers.

451 beekeepers responded to say they had received the training outlined in Table 11 between 1st April 2022 and 1st April 2023. The majority of beekeepers that answered received classroom based and hive

side practical training (Table 12 & Figure 8). This question was optional. Those that provided no answer could therefore have received the training.

Table 12. Training received between 1st April 2022 and 1st April 2023 of 664 responses. *Donates where multiple answers were allowed.

Have you had any of the following formal training between April 2022 to April 2023?*	Number of responses	% of beekeepers
Classroom based training	210	46.6%
Hive-side practical training	229	50.8%
DASH	6	1.3%
Online course	95	21.1%
Other	95	21.1%
No answer	1001	222.0%
Total beekeepers that answered	451	

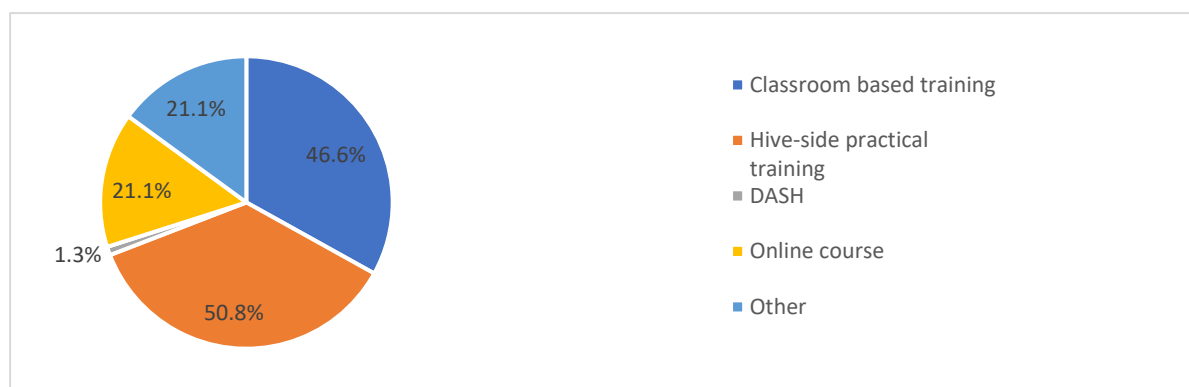


Figure 8. Types of training received by beekeepers between April 2022 – April 2023.

Support

The majority of beekeepers (69.0%) get support from their beekeeping associations, while only 1.4% reported they could not find support. Additionally, over half of the beekeepers that completed the survey (54.8%) reported they provide support to less experienced beekeepers (Table 13 & Figure 9).

Table 13. Sources of support for beekeepers. *Donates where multiple answers were allowed.

Which of the following provide support for you as a beekeeper?*	No. of beekeepers*	% of beekeepers
Beekeeping Association	986	69.0%
Experienced beekeeper - informal mentoring	730	51.1%
Mentoring set up by a beekeeping association	221	15.5%
New beekeeper mutual support group	129	9.0%
Online beekeeping group	334	23.4%
None – I don't need support	155	10.9%
None – I couldn't find support	20	1.4%
Total beekeepers that answered	1428 ⁵	

⁵ 24 responses excluded due to giving contradictory answers.

Do you provide support to less experienced beekeepers?	No. of beekeepers	% beekeepers
No	656	45.2%
Yes	796	54.8%
Total beekeepers that answered	1452	

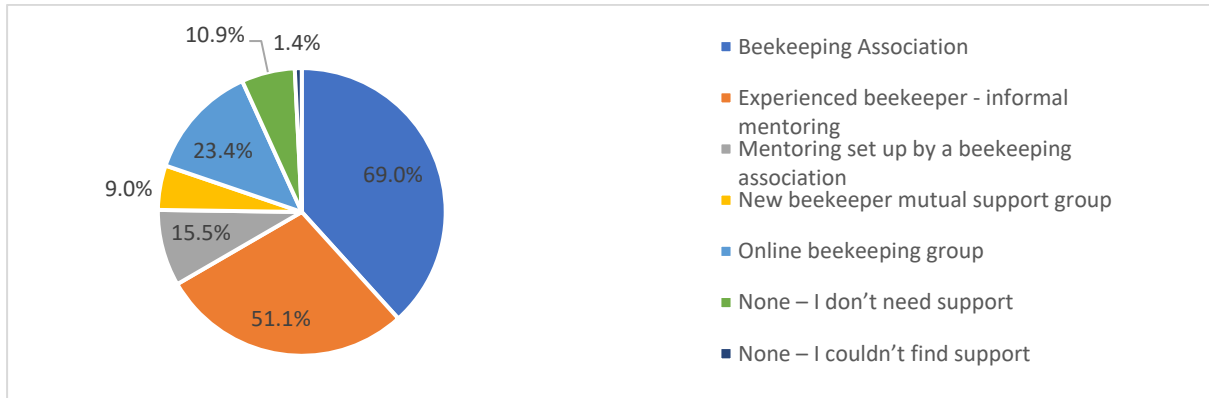


Figure 9. Percentage of support sources provided for beekeepers.

The majority of beekeepers (65.5%) used Beebase for support in their beekeeping practices (Table 14 & Figure 10).

Table 14. Sources of support for sought out by beekeepers. *Donates where multiple answers were allowed.

Where do you go when you need advice about beekeeping or bee health?*	Number of responses	% of beekeepers
Local bee group	884	61.3%
Local bee inspector	470	32.6%
Online - beekeeper blogs	489	33.9%
BeeBase	944	65.5%
NBU literature (e.g., advisory leaflets)	483	33.5%
NBU social media	49	3.4%
Online - beekeeper sites (not BeeBase)	513	35.6%
Online - other	176	12.2%
Non-NBU literature and bee keeping press	172	11.9%
Mentor	438	30.4%
Other	179	12.4%
Total beekeepers that answered	1442	

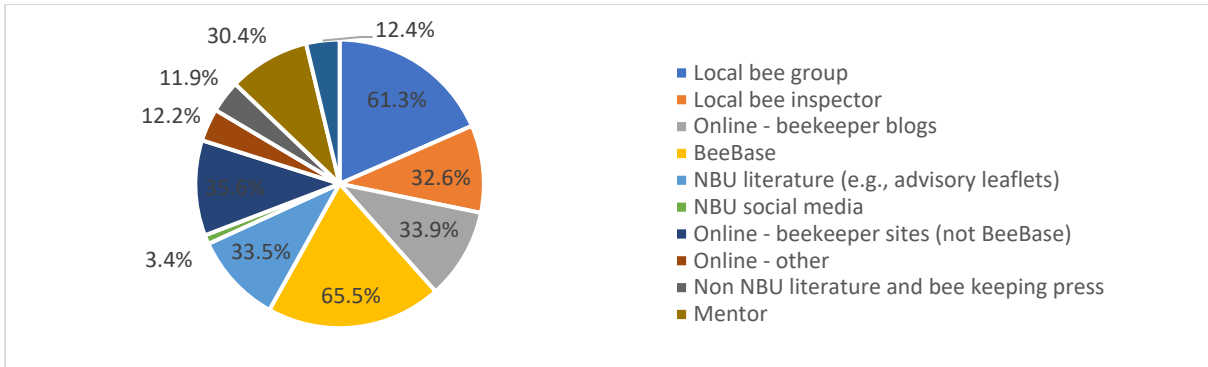


Figure 10. Percentage of support sources sourced by beekeepers.

Disease recognition

In all cases, the majority of beekeepers gave positive responses recognition of AFB, EFB and Small hive better. (Table 15 & Figure 11).

Table 15. Pest and disease recognition. *Donates where multiple answers were allowed.

Do you feel confident that you can identify pests and diseases in your bees?*	Number of responses	% of beekeepers
No, I cannot recognise AFB	140	9.7%
Yes, I can recognise AFB	1244	85.9%
No, I cannot recognise EFB	101	7.0%
Yes, I can recognise EFB	1332	91.9%
No, I cannot recognise small hive beetle	350	24.2%
Yes, I can recognise small hive beetle	1016	70.1%
Total beekeepers that answered	1449 ⁶	

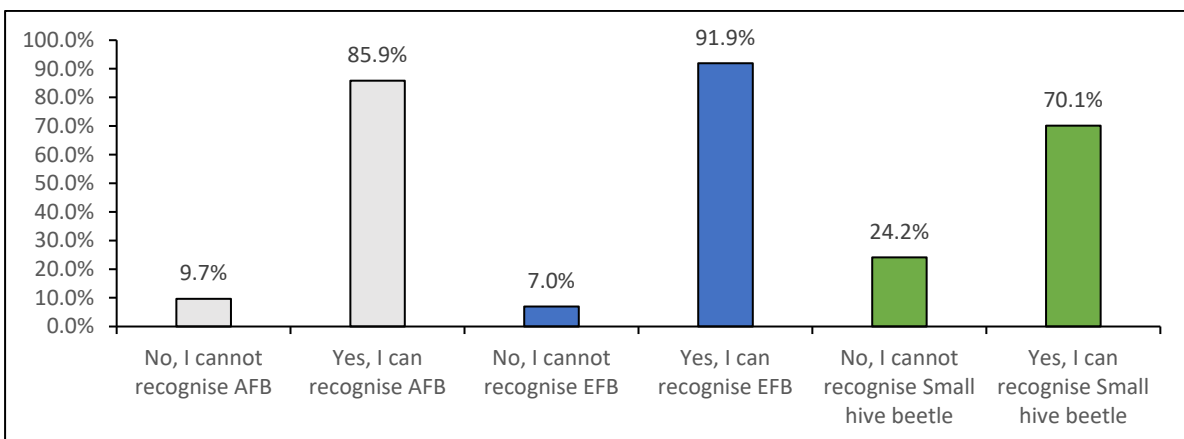


Figure 11. Percentage of confident and not confident beekeepers for recognition of small hive beetle and foulbrood disease.

⁶ Three responses were excluded due to giving contradictory answers.

Contact with the NBU

The majority of beekeepers (80.4%) had not had contact with the NBU for advice on beekeeping (Table 16).

Table 16. Contact with the NBU for beekeeping advice. *Donates where multiple answers were allowed.

Contact time period for advice*	No. of beekeepers*	% of responses
Prior to the last 12 months	168	11.6%
In the last 12 months	107	7.4%
Both prior to, and during the last 12 months	9	0.6%
No contact	1166	80.4%
Total beekeepers that answered ⁷	1450	

The majority of beekeepers (89.5%) had not had contact with the NBU for beekeeper training (Table 17).

Table 17. Contact with the NBU for beekeeper training. *Donates where multiple answers were allowed.

Have you had any contact with the NBU for beekeeping training?*	Number of responses	Number of responses
Prior to the last 12 months;	90	6.2%
Yes, in the last 12 months;	60	4.1%
Both prior to, and during the last 12 months	2	0.1%
No contact	1300	89.5%
Total beekeepers that answered	1452	

Overall, the 87.0% of beekeepers had not had any contact with the NBU in the previous 12 months (Table 18).

Table 18. Contact with the NBU in the last 12 months.

Have you had any other contact with the NBU in the last 12 months?	Number of responses	Number of responses
No	1263	87.0%
Yes	189	13.0%
Total beekeepers that answered	1452	

⁷ Two responses excluded due giving contradictory answers.