

First Round Questionnaire | Used in Interviews April and May, 2019 | English Version

**Main Research Question:** *How do Citizen Science beekeepers construct their role within the broader project, INSIGNIA?*

**Introductory words:** First, I would like to thank you for taking the time to meet with me today and discuss your participation in the INSIGNIA pilot project. I would like to start with asking you a few questions:

<b>Personal Perspectives -- Retrospective</b>	
I would be interested in hearing your personal (family) <b>history</b> with beekeeping. Could you please tell me about how you got involved with beekeeping?	
What are your general impression of the things your bees may come in contact with, in terms of what they have to forage from and potential hazards they may be exposed to? ❖ How would you describe the land use of the surrounding area?	
<b>Their relation to their Bees</b>	
Could you tell me a bit about the bees you are keeping? ❖ How long have you had them? ❖ Do you produce honey commercially? ❖ What does a typical day beekeeping look like for you? ❖ Have you noticed any changes in your bees in the recent years? ❖ How many bees colonies that you know of are there locally in your surrounding area?	
In recent years the phenomenon of colony loss has become a salient topic. I would be curious to hear about your experiences and your opinion on this topic. ❖ How has your opinion on the subject change over time?	
<b>Personal Knowledge (Practices)</b>	
Could you tell me something about beekeeping that I might find surprising?	
Could you briefly describe for me how you keep yourself informed about beekeeping? ❖ Has anything about your beekeeping changed over time? ❖ What kinds of sources do you generally use to stay informed? ❖ Which forms of communication do you use to stay up to date?	
Do you engage in any form of record keeping/storing any new information you learn?	
Do you partake in a beekeeping community? If so, could you please describe it to me?	
In which areas do you wish that you were more informed? ❖ Is there any person or thing you look to when you feel you need advice about	

<p>beekeeping?</p> <ul style="list-style-type: none"> <li>❖ Are there any areas about which you are particularly curious about what science has to say?</li> </ul>	
<p>Is there anything you wish the scientists knew more about?</p> <ul style="list-style-type: none"> <li>❖ Do you think there are any issues on which the scientists could also benefit from learning from beekeepers?</li> </ul>	
<b>Experiences with INSIGNIA project</b>	
<p>How did you come to be involved in the INSIGNIA project?</p> <ul style="list-style-type: none"> <li>❖ Could you please tell me a bit about how you imagine your role within the INSIGNIA project?</li> <li>❖ In what ways do you feel you are contributing to the project?</li> </ul>	
<p>Have you partaken in any research project before INSIGNIA or done any previous monitoring of your bees? If, so could you tell me a little more about your participation/monitoring?</p>	
<p>For the next two questions, I would like you to order from most to least relevant the terms on the cards provided and explain to me why you ordered them in this particular way. There is also a blank card in case you would like to add your own term.</p> <ul style="list-style-type: none"> <li>❖ Could you please rank the following aspects of INSIGNIA's data collection process in order of importance ?</li> <li>❖ In which area do you think the research of INSIGNIA will be most impactful?</li> </ul>	
<p>What are your expectations for the project in the future?</p> <ul style="list-style-type: none"> <li>❖ What do you hope to learn from your participation in the project?</li> <li>❖ What kind of impact do you expect this project to have?</li> <li>❖ What are some of the concerns you have regarding the project?</li> </ul>	
<b>Closing questions</b>	
<p>Is there anything else that you wish to discuss?</p>	
<p>Do you have any thoughts on how the sampling device could be improved?</p>	

*Thank them for taking their time to participate in the interview.*

## Second Round Questionnaire | Used in Interviews, September, 2019 | English Version

Main Research Question: *How do Citizen Science beekeepers construct their role within the broader project, INSIGNIA?*

Introductory words: It is nice to meet with you again. First, I would like to thank you for taking the time to meet with me today and discuss your participation in the INSIGNIA pilot project and your experiences with the sampling so far.

<b>Introductory Questions</b>	
Could you tell me a little about how the sampling process has gone for you so far?	
<p>Were there any incidences in particular that occurred since the last time we meet?</p> <ul style="list-style-type: none"> <li>❖ Did you have any difficulties with the monitoring process? If so, could you tell me a bit about the difficulties you encountered?</li> <li>❖ Was there anything about the monitoring process that you found surprising or unexpected?</li> </ul>	
<b>Experiences with INSIGNIA project</b>	
<p>So by now you have received your passive sampling device and instructions from the INSIGNIA team, could you tell me about the process of receiving the device(s)?</p> <ul style="list-style-type: none"> <li>❖ What instructions did researchers give you regarding the device(s)?</li> <li>❖ Which device(s) have you used thus far?</li> <li>❖ What were your first impressions of the device(s)?</li> <li>❖ How has it been working thus far? Did you have any difficulties with it?</li> </ul>	
Did you notice any changes in your bees since starting the process?	
<p>Could you please tell me a bit about your interactions with the scientific researchers within the project.</p> <ul style="list-style-type: none"> <li>❖ What have you done in/ for the project so far?</li> <li>❖ Have there been any instances so far where the project was different than what you would have expected? If so, did you address them and how?</li> <li>❖ Could you tell me about some things that you have learned since you started participating in the project?</li> </ul>	
<p>For the next two questions, I would like you to order from most to least relevant the terms on the cards provided and explain to me why you ordered them in this particular way. There is also a blank card in case you would like to add your own term.</p> <ul style="list-style-type: none"> <li>❖ Could you please rank the following aspects of INSIGNIA's data collection process in order of importance?</li> <li>❖ In which area do you think the research of INSIGNIA will be most impactful?</li> </ul>	

<p>What are your expectations for the project in the future?</p> <ul style="list-style-type: none"> <li>❖ What do you hope to learn from your participation in the project?</li> <li>❖ What kind of impact do you expect this project to have?</li> <li>❖ What are some of the concerns you have regarding the project? Have these concerns changes since starting the project?</li> <li>❖ How do you see the rest of the monitoring season going?</li> </ul>	
<b>Closing questions</b>	
Is there any part of the monitoring process, which you feel could be done better? If so, how would you recommend it be altered?	
Is there anything else that you wish to discuss?	
Do you have any thoughts on how the sampling device(s) could be improved?	

*Thank them for taking their time to participate in the interview.*