

Using citizen science for early detection of tree pests and diseases: perceptions of professional and public participants

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Interview Guide for the Volunteers

1. When did you become involved, and in what role are you involved, in (name of the CS project)?
2. Have you ever participated in a CS project before (name of the current CS project)?
3. What motivated you to take part in the CS project, the very first time?
4. How has your level of involvement in (name of the CS project) changed over time?
5. Has your activity/tasks that you were doing initially, changed over time?
6. What factors have played a role in maintaining or changing your levels of involvement over time?
7. Did your involvement in the project motivate you to do more citizen science (in other projects)?
8. Has the project lived up to or exceeded your expectations? [explore why /in what ways the project has fulfilled / failed to fulfil expectations]
9. What you need to get out of a citizen science project for you to feel your participation has been worthwhile?
10. Would you like to work more closely with other volunteers in your area?
11. Do you believe there continues to be a need for the project or something similar?
12. Would you be willing to continue working on the project beyond the current end date?
13. Do you consider yourself to have gained better awareness/knowledge about trees and tree health issues as a result of involvement in (name of the CS project)?
14. Do you consider yourself to have gained better awareness about the important role of (citizen) science in identifying and combating tree pests and diseases?
15. Do you consider yourself to have gained new skills relevant to tree pest and disease identification as a result of involvement in (name of the CS project)?

16. Has involvement in (name of the CS project) changed your attitude or behaviour towards the natural environment in general? [in what ways?]
17. Has involvement in (name of the CS project) provided you with improved job prospects?
18. Has involvement in (name of the CS project) resulted in valuable new social contacts?
19. Has involvement in (name of the CS project) resulted in improved health and wellbeing as a result of spending more time outdoors?
20. Has involvement in (name of the CS project) led to a more positive self-image as a result of contributing to a 'greater good' or supporting a worthwhile activity?
21. Are there any other positive outcomes that you wish to highlight?
22. What have you found to be the best and/or most rewarding aspect of the project to date?
23. Are there any issues/challenges associated with your participation in (name of the CS project) that you wish to highlight?
 - a. How have these challenges influenced your activity and participation?
 - b. Were any steps taken to address these issues?
 - c. Is there anything else that you or the project coordinators could do to address these issues for you or others?
 - d. Based on your experience, how important is the 'communication and feedback' from the project manager/scientists to your continued participation in the project?
 - e. Did the feedback motivate you to do further activities?
24. Do you think citizen science can play an important role in identifying and combating tree pests and diseases?
25. How has your project contributed in addressing tree/plant health issues?
26. Do you think CS data can be used to provide evidence for tree health policy/decision making? (Kindly elaborate the reasons)

Interview Guide for the Professionals

1. When did you become involved, and what do you do within (name of the CS project)?
2. What motivated you to take part in the CS project, the very first time?
3. How has your level and type of involvement in (name of the CS project) changed over time?
4. What factors (capacity, capabilities and motivations) have played a role in maintaining or changing your levels of involvement over time?
5. Has your level of support/engagement for (name of the CS project) changed over time? [in what ways]
6. What project elements have been most and least successful in your eyes?
7. Do you see opportunities for expanding the role citizen science plays in supporting your role or that of your organisation into the future?
8. Did your involvement in the project motivate you to do more CS?
9. Has the project lived up to or exceeded your expectations? [in what ways?]
10. What you need to get out of a citizen science project for you to feel your participation has been worthwhile?
11. Are there any other positive or negative outcomes that you wish to highlight?
12. Do you believe that there remains a role for the project, either in its current, or a revised form?
13. If you would have the funds to extend (name of the CS project) for another three years, would you be happy to commission these? Would there be anything you would like to change about how the project is delivered? How could this be achieved?
14. To what extent has your participation in the project led to positive attitude or behaviour towards the environment?
15. Do you consider yourself to have gained better awareness about the important role of citizen science in identifying and combating tree pests and diseases?
16. Has involvement in (name of the CS project) enhanced your organisation's connections with other organisations?
17. Has involvement in (name of the CS project) changed your organisational culture in the sense that it is more open to partnership working and/or citizen science?
18. Has involvement in (name of the CS project) resulted in valuable new social contacts for you personally?
19. Do you know of any examples in which involvement in (name of the CS project) has improved a volunteer's job prospects?

20. Do you know of any examples in which involvement in (name of the CS project) has improved a volunteer's attitude and behaviour towards the environment?
21. Do you know of any examples in which involvement in (name of the CS project) has improved a volunteer's health and wellbeing?
22. In your experience what have been the most prominent issues/challenges of professional involvement in the project?
 - a. What have you done to overcome these? How successful were you?
 - b. Is there anything else that you or the project coordinators could do to overcome these challenges for you or others?
 - c. Is there anything else that you or the project coordinators could change within the (name of the CS project) project to improve your or others' ability to work effectively?
23. Do you think citizen science can play an important role in identifying and combating tree pests and diseases?
24. How has your project contributed in addressing tree/plant health issues? Has it changed over time? [in what ways]
25. Do you believe CS data can be used to provide evidence for tree health policy/decision making? (Kindly elaborate the reasons)