

**Supplemental file 4: Appendix 2.** WildLIVE! Questionnaire: Methodology and content

This survey was created as a Google Form and disseminated via email to all registered WildLIVE! participants. The survey remained open for a period of one month, during which we sent out two reminders to boost response rates.

The questionnaire was made up of two parts:

- In Part "A" we wanted to know how participants related to feedback that was provided by other WildLIVE! volunteers.
- In Part "B" we wanted to find out more about participants personal experiences, attitudes and feelings from working on the WildLIVE! project.
- Part A: Given the absence of a neutral midpoint on the 6-point Likert scale, respondents were inclined towards expressing a positive or negative sentiment (Nemoto and Beglar 2014). Thus, responses were categorized as either negative (1 – 3) or positive (4 – 6) categories and then grouped according to the five predefined constructs. To calculate the weighted average for positive responses, we first determined the proportion of positive responses for each statement, then multiplied these proportions by the total number of responses per statement. This weighted the data, allowing statements with more responses to have a greater impact on the overall sentiment measure. The sum of these weighted proportions was then divided by the total number of responses within each construct to obtain the weighted average of positive responses for each construct, which was subsequently

converted back into a percentage. While we calculated the mean and standard deviation for each item, we acknowledge that these parametric statistics are typically not recommended for ordinal data. Nevertheless, they provide a useful descriptive overview, and we have interpreted them with the necessary caution due to the ordinal nature of the Likert scale (Nemoto and Beglar 2014).

- Part B: Participants' narratives were analyzed for sentiment using the “syuzhet” R package, which assigns sentiment scores to individual words, categorizing them into positive, neutral, and negative sentiment groups (Jockers 2017). To refine the analysis, common words or “stop words” were omitted to concentrate on the more substantive content of the responses (Hardeniya and Borikar, 2016). Frequency and emphasis of the remaining words were then analyzed to determine the relative prominence of the sentiments expressed (Heimerl et al. 2014).

### *References*

Hardeniya, T., and Borikar, D.A. (2016) An approach to sentiment analysis using lexicons with comparative analysis of different techniques. IOSR Journal of Computer Engineering (IOSR-JCE) 18, 3, pp. 53-57.

Heimerl, F., Lohmann, S., Lange, S. and Ertl, T. (2014) Word cloud explorer: Text analytics based on word clouds. In: 2014 47th Hawaii international conference on system sciences, Waikoloa, USA on 9 January 2014, pp. 1833–1842. DOI: 10.1109/HICSS.2014.231.

Jockers, M. (2017) Package 'syuzhet'. URL: <https://cran.r-project.org/web/packages/syuzhet> [last accessed 22 October 2023].

Nemoto, T. and Beglar, D. (2014) Developing Likert-scale questionnaires. In N. Sonda and A. Krause (Eds.), JALT 2013 Conference Proceedings. Tokyo: JALT.

## **Part A:**

*On a scale from 1 (you do not relate) to 6 (you strongly relate) how strongly do you relate to the following statements made by WildLIVE! Participants*

Which is most applicable? What is (mostly) true?

*“My participation in WildLIVE! ....*

1. .... *is a lot of fun”*
2. .... *gives me insights into wilderness”*
3. .... *surprises me, because I experience something I did not expect”*
4. ....*increases my knowledge of biological taxa/species”*
5. ....*gives me insights into scientific practice”*
6. .... *is meaningful to me”*
7. .... *gives me a sense of purpose because I can support topical research”*
8. .... *appeases/satisfies wanderlust”*
9. .... *has increased my interest in species like jaguar, tapir, and armadillo”*
10. ....*has motivated me to advocate for these species”*
11. .... *has increased my understanding of global biodiversity loss”*
12. .... *saddens me because I can observe the destruction of the habitat”*
13. .... *was my first experience as a citizen scientist”*
14. .... *drew my attention to other citizen science projects that I am now involved in.”*
15. .... *is something that I would like to continue with.”*
16. .... *will continue if other study areas or new projects with other species are added”*
17. .... *inspired conversations about biodiversity (loss) outside the WildLIVE! community“*

## **Part B:**

18. Select the words listed below that you would use to describe your feelings from working on the WildLIVE project:

<i>knowledge</i>	<i>important</i>	<i>scared</i>
<i>real</i>	<i>research</i>	<i>experiment</i>
<i>happy</i>	<i>humble</i>	<i>ecstatic</i>
<i>inspired</i>	<i>satisfied</i>	<i>lonely</i>
<i>excited</i>	<i>annoyed</i>	<i>frustrated</i>
<i>discover</i>	<i>skills</i>	<i>education</i>
<i>curious</i>	<i>confused</i>	<i>surprised</i>
<i>empowered</i>	<i>management</i>	<i>amused</i>
<i>sad</i>	<i>monotonous</i>	<i>bored</i>
<i>grateful</i>	<i>addictive</i>	<i>concerned</i>
<i>escape</i>	<i>fearful</i>	<i>skeptical</i>
<i>research</i>	<i>hopeful</i>	<i>determined</i>
<i>absorbed</i>	<i>information</i>	<i>confident</i>
<i>interested</i>	<i>content</i>	<i>envious</i>
<i>belonging</i>	<i>proud</i>	<i>indifferent</i>
<i>learning</i>	<i>hopeful</i>	<i>science</i>
<i>useful</i>	<i>practice</i>	<i>thoughtful</i>
<i>angry</i>	<i>content</i>	

19. Describe your experience with WildLIVE! You can use individual words or string together as many words as you want.