

# Questionnaire for all participants and supporters of Butterfly Monitoring Germany (BMG)

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Department Community Ecology and  
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Halle / Leipzig

Dear butterfly lovers,

The project "Butterfly Monitoring Germany" has now been in existence for 14 years. In the starting year 2005 we had about 200 active participants and this number increased rapidly to over 500 participants per year nationwide. This high number of participants has been maintained over the years and in the last exceptional summer of 2018, another 50 new participants were added. We are very happy about this constantly high participation and it is an important part of the success of our project.

Butterfly monitoring has become one of the most successful Citizen Science projects in Germany and we are often asked what makes a good Citizen Science project and how we manage to get so many people involved in our project over such a long period of time.

Of course, we already have ideas what this could be due to, but we don't know exactly. Deshalb haben wir heute eine große Bitte an Sie: Helfen Sie uns herauszufinden, welche Personen sich eigentlich an einem Projekt wie dem Tagfalter-Monitoring beteiligen und warum sie sich beteiligen. Was ist Ihre Motivation, was sind Ihre Erwartungen und Wünsche und was können wir noch besser machen?

In cooperation with the Department of Urban and Environmental Sociology at the UFZ in Leipzig we have developed a questionnaire. We kindly ask you to fill in this questionnaire and thereby help us to answer the above mentioned questions.

All information is anonymous and no personal data is collected. Today we are sending you the link to the questionnaire with the request to fill it out online. If you wish, we can also send you a printed version of the questionnaire by post and you can return it completed. Just send us a short message.

<https://www.soscisurvey.de/TMDsurvey/>

Please decide for one of the two variants!

Do you still have questions? Then you are welcome to contact us at the given address by mail, phone or post.

Kind regards, Elisabeth Kühn and Josef Settele on behalf of the BMG team and Christian Kuhlicke (Department of Urban and Environmental Sociology)

**Many thanks for your support!**

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**1. In what form do you participate in the BMG? (multiple answers possible)**

- I am currently counting butterflies on one (or more) transect route(s)
- I have counted butterflies on one (or more) transect route(s) in the past.
- I supervise and advise transect counters as country or regional coordinator and also participate myself as a transect walker (please continue with question 2)
- I supervise and advise transect walkers as country or regional coordinator, but do not count myself (please continue with question 12)
- I am not participating in the project (please continue with question 12)
- Other form of participation, namely: ..... (please continue with question 12)

**2. In which years did you participate in butterfly monitoring?**

In the years .....

**3. Can you estimate how much time per year you spend on butterfly monitoring in total?**

Hours: .....

**4. Have you already observed butterflies before participating in butterfly monitoring?  
If so, since when?**

- No
- Yes, since: ..... (year)

**5. What is your motivation to participate in butterfly monitoring?**

I agree with this statement ...	... not at all				...completely
I would like to make a contribution, to stop the loss of butterflies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to make a contribution, to stop the loss of biodiversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I generally have a great interest in preserving the natural environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gathering data on butterflies brings me closer to nature.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to better understand ecological interrelationships.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to make a contribution, to collect scientific data on butterflies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others: .....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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6. How well did you know about butterflies in your region before participating in butterfly monitoring?

I didn't know anything about it.				I knew a lot about it.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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7. How well do you know about butterflies in your region today?

I don't know anything about it				I know a lot about it.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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8. Are you or have you been professionally involved with butterfly monitoring? (multiple answers possible)

- No, not at all
- Yes, as an employee in nature conservation
- Yes, as an employee in a specialist authority
- Yes, as a scientist
- Yes, namely .....

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9. How do you determine the butterflies in your transect? (multiple answers possible)

- By looking at them without aids
- By looking at them with aids (e.g. small binoculars)
- I catch questionable species with a net for subsequent determination on site.
- I photograph the butterflies.
- I catch questionable species and sometimes take a specimen copy home for further analysis.
- Others: .....

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10. How do you ensure the identification of butterflies? (multiple answers possible)

- With field guides
- With further specialist literature
- Through research in specialist Internet portals
- By direct inquiry with experts
- Others: .....

**11. Please estimate: How many butterfly species did you know before you participated in the butterfly monitoring? (Please mark with a cross)**

1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41+
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**12. Please estimate: How many butterfly species do you know today? (Please mark with a cross)**

1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41+
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**13. Do you intend to (continue to) participate in butterfly monitoring?**

- No, I will definitely not participate any more (please explain briefly under point 14)
- I will rather not participate anymore.
- I am undecided.
- I will rather participate.
- Yes, I will definitely participate.

**14. Reasons, if you do not intend to participate:**

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**15. In your opinion, how threatened are butterflies in Germany or in your region?**

	Not threatened at all				Highly threatened
In Germany	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In my region	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**16. Please give an assessment: Has your transect route or routes changed structurally (e.g. vegetation, construction measures) during the time you count butterflies?**

**Transect route 1:**

- Yes, it has changed completely, as follows: .....
- Yes, individual sections have changed completely: .....
- There were slight changes: .....
- There were no changes: .....

**Transect route 2:**

- Yes, it has changed completely, as follows: .....
- Yes, individual sections have changed completely: .....
- There were slight changes: .....
- There were no changes: .....

**Transect route 3:**

- Yes, it has changed completely, as follows: .....
- Yes, individual sections have changed completely: .....
- There were slight changes: .....
- There were no changes: .....

**Transect route 4:**

- Yes, it has changed completely, as follows: .....
- Yes, individual sections have changed completely: .....
- There were slight changes: .....
- There were no changes: .....

**17. Please give, without much thought, an estimate of how the number of butterflies on your transect route has changed over the years?**

	Has declined sharply				Has increased sharply
Total change in number (number of individuals)	○	○	○	○	○
Change in the number of species	○	○	○	○	○
<b>Noticeable change in individual species</b>					
Name of species:	○	○	○	○	○
Name of species:	○	○	○	○	○
Name of species:	○	○	○	○	○
Name of species:	○	○	○	○	○
Name of species:	○	○	○	○	○

**18. If you could sense any change: What do you think are the main reasons for the change in the number of butterflies on your transect?**

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**19. What role do butterflies and, in general, nature and species conservation play in your life?**

I agree with this statement ...					
	... not at all				... completely
I pay close attention to butterflies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I cultivate my garden in a butterfly-friendly way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I assign other people the importance of butterflies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I give advice to other people for a butterfly-friendly garden design.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whenever possible, I am committed to the protection of butterflies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I support nature conservation passively (e.g. through donations).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I actively support nature conservation (e.g. as a member).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I stand up politically for the interests of nature (e.g. demonstrations, petitions).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**20. Now we have some questions about your personal attitude to environmental problems.**

I agree with this statement ...					
	... not at all				... completely
Being environmentally responsible is an important part of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am someone who cares about environmental issues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could not act in an environmentally responsible manner, I would care a lot.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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21.

How well do you think you can prevent the loss of biodiversity by your own actions?

I agree with this statement ...					
	... not at all				... completely
I can help prevent the decline of butterflies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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22. Do you exchange with other transect walkers?

- Yes
- No (continue with 25)

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23. How regularly do you exchange information with other transect walkers? (please tick only one answer)

Every week	Every month	Every 2-3 months	Every 4-5 months	Every 6-7 months	Every 8-9 months	Every 10-11 months	Once a year	Less than once a year
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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24. are the majority of the people with whom you exchange in ... (please tick only one answer)

- My immediate neighbourhood
- My town/my city
- My county
- My province
- Germany
- Somewhere else, namely in: .....

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25. Which of the following groups do you feel you belong to? (multiple answers possible)

- Group of transect walkers
- Group of Conservationists
- Group of Citizen Scientists
- Other groups, namely: .....



**26. How strongly do you identify with the groups just mentioned?**

I identify with...					
	not at all				comple- tely
... the group of transect walkers	0	0	0	0	0
... the group of Conservationists	0	0	0	0	0
... the group of Citizen Scientists	0	0	0	0	0
... other groups	0	0	0	0	0

**27. As participants in butterfly monitoring ...**

I agree with this statement ...					
	... not at all				... comple- tely
... together we can achieve more in the protection of butterflies than any individual.	0	0	0	0	0
... we can stop the loss of butterflies.	0	0	0	0	0
... we can jointly plan and implement interventions to prevent the loss of butterflies.	0	0	0	0	0

**28. Have you followed the media debate on insect decline in recent years?**

- Yes
- No (please proceed with question 32)

**29. What were or are your main sources of information on insect decline? (multiple answers possible)**

- conversations with neighbours, relatives, acquaintances
- Regional Presses
- Nationale Presse
- Presse online
- Social media like Facebook or Twitter
- Local / regional radio
- TV
- Scientific publications
- Information events
- Others: .....

30. What do you think about the reporting on insect decline in general?

The problem is played down.					The problem is greatly exaggerated.
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

31. Would you like to write us something more on this subject?

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32. Butterfly monitoring contributes to the preparation of scientific trend analyses in relation to butterflies, i.e. whether the number of butterflies or their species increases or decreases over time. We would like to ask you a few more questions on this topic.

I agree with this statement ...					
	... not at all				... completely
I make an important contribution to the preparation of trend analyses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to know more about what my contribution to trend analysis is.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to be more involved in the evaluation of the data.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trend analyses are important because they are the basis for the protection of butterflies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

33. In addition to BMG data, do you have observation data (e.g. "old" data or data from other regions) that you can make available for scientific purposes?

- Yes, namely: .....  
 What time period does the data cover? .....  
 To which region(s) the data refer? .....
- No

34. Have you also dealt or are still dealing with other animal and/or plant groups?

- Yes, namely: .....  
 What time period does the data cover? .....
- No

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**35. Do you participate in other Citizen Science projects besides butterfly monitoring? If so, which ones and since when?**

- Yes, namely: ..... since: ..... (year)
- No

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**36. What do you wish from the coordination of butterfly monitoring? (multiple answers possible)**

- More exchange
- Better reachability
- More notifications by e-mail
- More notifications by mail
- More notifications via Social Media (Facebook, Twitter...)
- More training courses
- More events, e.g. regional meetings, excursions, seminars
- Others: .....

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**37. In which way would you like to receive more information / exchange on the project? (multiple answers possible)**

- Mail
- Reachability by phone
- E-Mail exchange
- Information on the Homepage [www.tagfalter-monitoring.de](http://www.tagfalter-monitoring.de)
- Information on the Facebook page
- Information on Twitter
- Others: .....

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**38. Do you have further wishes or suggestions for improvement for the project coordination?**

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**We would be pleased if you could answer some more personal questions. These will help us to better understand who is participating in butterfly monitoring.**

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**39. please enter your year of birth.**

..... (year of birth)

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**40. What is your highest educational attainment?**

- Secondary school certificate grade 8/9
  - Secondary school certificate grade 10
  - High school
  - Without degree / left school before 8th grade
  - Still in school
- 

**41. What is your highest professional qualification?**

- Part-skilled worker
  - Skilled worker
  - Master craftsman's diploma
  - Technical college degree
  - University degree
  - Without degree
  - Still in education
- 

**42. Are you ...**

- ... male?
  - ... female?
  - ... diverse?
- 

**MANY THANKS FOR YOUR TIME AND COOPERATION!**

**You have helped us a lot with your answers.**

**We plan to prepare the evaluation of the survey for a scientific journal, but will definitely present it in the next annual report.**