

Questionnaire on the presence of bears in the High Tatras

This questionnaire was created by a team from UMB, UPJŠ and UK in cooperation with CNRS. The purpose is to assess the attitude of local inhabitants and/or visitors about the presence of the brown bear in the High Tatras (some questions concern the entire territory of the Slovak Republic), with the final objective to develop new research directions for conflict management in the context of human–wildlife coexistence. The questionnaire was realized to be completed in at about 10 minutes. There are no "good" or "bad" answers. The most important thing is that your answers match your opinions and/or feelings. The questionnaire is completely anonymous, the information provided are strictly confidential and will be solely used for research purposes among those people involved in the research (the information will not be shared with people not involved in the study).

If possible, please complete this questionnaire by January 31st, 2022.

A. Your feelings about the presence of the bear

1. Which statement best describes your feelings about the presence of the bear in Slovakia:

Totally against Rather against Neutral Rather for Totally for

2. The presence of bears in the High Tatras is something:

Extremely negative Rather negative Neutral Rather positive Extremely positive

3. To what extent would you say you are afraid of bears:

I'm not scared at all I'm a little scared I don't know I'm scared I'm extremely scared

B. Your views on the various aspects regarding the bear presence. A list of statements will be presented. For each of them, state the extent to which you agree with it by choosing the option that best matches your opinion.

4. The bear protection in Slovakia is a topic that is:

Completely unnecessary Rather unnecessary Neutral Rather important Extremely important

5. It is important to maintain the bear population in the High Tatras because they have always been present (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above line according to your opinion).

6. We must ensure the presence of a large bear population for the future generations (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above line according to your opinion).

7. It's useless to have a bear population in the High Tatras as there are large populations in other European countries (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above line according to your opinion).

8. Bears in the High Tatras must be completely protected (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above line according to your opinion).

9. Problematic bears must be moved to another part of Slovakia (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above line according to your opinion).

10. Problematic bears should be killed (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above line according to your opinion).

11. Bear hunting must be allowed (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above line according to your opinion).

12. In areas where bears live near human settlements attacks on humans are common (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above line according to your opinion).

13. Bears cause substantial damages to human property (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above line according to your opinion).

C. Let's take a closer look at the situation in the High Tatras

14. A problem of coexistence occurs between bears and humans in the High Tatras (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above line according to your opinion)

15. If you agree, you would say that the problem is:

- Bear multiplication
- Habitat loss and fragmentation
- Change in bear behavior
- Unsuitable containers and waste disposal
- Available agricultural crops
- Presence of tourists in nature
- Baits used by hunters
- Disruption of the population structure due to hunting
- Other (please, specify) _____

16. Please, check if any of the events listed below occurred in the High Tatras or your area (1 = very common, 2 = common, 3 = occasional, 4 = rare, 5 = very rare, 6 = absent. Please, sign the number on the above squares according to your opinion).

- Broken window/roof/door
- Bear attacking pets
- Damaged car
- Bear taking food from buildings or trash cans
- Bear incurring into house gardens
- Bear damaging beehives

17. How the following characteristics of bears have been changed in recent years (1 = drastic increase, 2 = very slight increase, 3 = slight increase, 4 = no changes, 5 = very slight decrease, 6 = slight decrease, 7 = drastic decrease. Please, sign the number on the above squares according to your opinion).

- Number
- Loss of shyness
- Distance from human settlements

18. Which measures that have been put in place so far do you consider as appropriate and sufficiently effective (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above squares according to your opinion).

- Visual and auditory deterrents
- Bear shooting
- Bear captures
- Container security
- Electric fences

19. The following organizations involved in addressing the bear situation are effective in reducing bear damages (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above squares according to your opinion).

- Poľovnícke Združenie
- Animal Welfare Organization
- Local Municipal Police
- State forests TANAP resp. Lesy SR
- TANAP administration resp. ŠOP SR
- Fire brigade
- Brown bear intervention team

20. Problems with bears in the High Tatras could be mitigated through (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above squares according to your opinion):

- Permit to relevant organizations to kill food-affected bears
- Increasing the bear shooting quota
- Moving bears that repeatedly visit containers to less human populated areas
- Transferring bears that repeatedly visit containers to captivity (e.g., zoos)
- Increasing the amount of food at feeding places ubicated in the forest
- Sterilizing female bears that repeatedly visit containers
- Installing electric fences around containers
- Replacing all containers with bear resistant ones
- Moving containers closer to the city center/village (farther from the forest)
- Enclosing containers in cages or buildings
- Other (please, specify) _____

D. Your knowledge about bears

21. What is the average size of an adult male brown bear when standing on its hindlegs?

- 1m 1.5m 2m 2.5m 3m 3.5m 4m

22. Up to what age do bears raise their cubs (on average)?

3 months 6 months 1 year 2 years 3 years 4 years 5 years

23. How many cubs (on average) are given to birth by females?

1 2-3 4-6 7+

24. How many bears were present in the High Tatras in 2020?

10 50 100 300 500 1000

25. Bears are usually active:

During the day During the night

26. Are bears territorial animals?

yes no

27. You have gained knowledge about bears thanks to (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neutral, 5 = somewhat agree, 6 = agree, 7 = strongly agree. Please, sign the number on the above squares according to your opinion):

- Books, exhibitions, audios or videos
- Television news, newspapers and radio
- Personal experience with bears
- Knowledge of the environment in which you live
- Your studies
- Other (please, specify) _____

28. Have you ever had direct or indirect interaction with a bear? If so, select specific situations (more answers are possible).

Direct encounter inside the High Tatras.

Direct encounter outside the High Tatras.

Animal present in a zoo or similar.

- Signs of presence found (e.g., footprints, hair, claws, etc.).
- Damages caused by bears.
- Other (please, specify) _____

E. Tell us something about you (As stated at the beginning, the information given is completely anonymous, strictly confidential and will be solely used for research purposes among those people involved in the research)

29. You are:

- Man Woman

30. Age

31. What is your highest level of education?

- Primary school Secondary school College/University

32. In which city / municipality do you primarily live (please provide name or postcode)?

33. To which category do you belong according to your main job?

- Administrative worker
- Retiree
- Manual worker
- Unemployed
- Economically inactive (e.g., maternity, student, etc.)

Do you have any comments or suggestions about this study or the questions you received?

Thanks a lot for your time!