

Progetto LIFE18 NAT/IT/000972 - LIFE WolfAlps EU
“Coordinated Actions to Improve Wolf-Human Coexistence
at the Alpine Population Level”

Action D1

Technical Report

**PUBLIC ATTITUDES TOWARD WOLVES AND WOLF CONSERVATION IN
AUSTRIAN, FRENCH, ITALIAN AND SLOVENIAN ALPS**

**Report on comparison of ex-ante and ex-post assessment of knowledge and
attitudes of wolves**

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Contents

Contents

List of figures.....	7
Summary.....	8
Introduction	9
Methods	9
Study area	9
Questionnaires.....	12
Sampling and data collection	12
Data preparation	18
Analytical methods.....	18
Results	19
Data set description	19
Project visibility	19
Knowledge about wolves	19
Attitudes toward wolf.....	21
Fear of wolf.....	27
Acceptance of the wolf in the local environment.....	29
Wolf population management – size of the population and hunts.....	30
Damage.....	33
Hunting and beliefs regarding wolf impacts on game species	35
Value of the wolf for ecotourism.....	38
Trust in sources of information about wolves	39
Comparison of the years 2021 and 2023 of the Austrian online dataset.....	39
Discussion and conclusion	40
References.....	42
Annex 1: Questionnaires in English, French, German, Italian and Slovenian languages	43
Annex 2: Graphs on Trust in sources of information about wolves	94
Annex 3: Comparison of the years 2021 and 2023 of the Austrian online dataset regarding the attitude of people towards wolves.....	108

List of figures

Figure 1 Study area of the public attitude survey	11
Figure 2 Gender distribution in France/Austria/Slovenia/Italy.....	19
Figure 3: Knowledge score per country per year	21
Figure 4 Feelings toward wolf: general public.....	22
Figure 5 Feelings toward wolf: opinion of general public per core areas.....	23
Figure 6 Feelings toward wolf: hunters	24
Figure 7 Feelings toward wolf: breeders	24
Figure 8 Feelings toward wolf: education professionals.....	25
Figure 9 Feelings toward wolf: tourism workers	25
Figure 10 Feelings toward wolf: environmentalists	25
Figure 11 Feelings toward wolf: journalists	26
Figure 12 Importance to maintain wolves: general public	26
Figure 13 Importance to maintain wolves: hunters.....	27
Figure 14 Importance to maintain wolves: breeders	27
Figure 15 Not to be afraid to hike - general public	28
Figure 16 Not to be afraid to hike – breeders.....	28
Figure 17 Not afraid to hike - hunters	28
Figure 18 Would tolerate wolves nearby: general public.....	29
Figure 19 Would tolerate wolves nearby: breeders.....	29
Figure 20 Would tolerate wolves nearby: hunters	30
Figure 21 Agree with increasing wolf numbers: general public	30
Figure 22 Agree with increasing wolf numbers: breeders	31
Figure 23 Agree with increasing wolf numbers: hunters.....	31
Figure 24: Wolf hunts needed: general public.....	32
Figure 25 Wolf hunts needed: breeders.....	32
Figure 26 Wolf hunts needed: hunters	32
Figure 27 Wolves cause abundant damages: general public	33
Figure 28 Wolves cause abundant damages: breeders	33
Figure 29 Wolves cause abundant damages: hunters	34
Figure 30 Livestock owners should be compensated: general public.....	34
Figure 31 Livestock owners should be compensated: breeders.....	35
Figure 32 Livestock owners should be compensated: hunters.....	35
Figure 33 Wolves keep ungulate populations healthy: general public	36
Figure 34 Wolves keep ungulate populations healthy: breeders	36
Figure 35 Wolves keep ungulate populations healthy: hunters	36
Figure 36 Wolves greatly reduce ungulate populations: general public.....	37
Figure 37 Wolves greatly reduce ungulate populations: breeders.....	37
Figure 38 Wolves greatly reduce ungulate populations: hunters	37
Figure 39 Wolves attract tourists: general public	38
Figure 40 Wolves attract tourists: breeders	38
Figure 41 Wolves attract tourists: hunters.....	39

Summary

This study offers key insights into public attitudes toward wolves in core areas in Austria, France, Italy, and Slovenia over time. We surveyed 7610 respondents in 2021 and 5523 respondents in 2023. These surveys were supplemented by data from the earlier LIFE WOLFALPS project (2014 and 2017) resulting with descriptive analysis of responses from 17018 participants being presented in this report. The stakeholder groups surveyed included the general public, hunters, livestock breeders, education professionals, tourism workers, and additionally environmentalists and journalists. Due to the COVID-19 pandemic, some core areas transitioned to online questionnaires, which introduced potential biases. As a result, the findings should be interpreted with caution, serving as indicative rather than definitive evidence.

Across all countries, the general public predominantly expressed support for wolves, though regional and temporal variations were observed. In Italy, for example, attitudes varied significantly between neighbouring core areas, highlighting the complex social and ecological dynamics influencing perceptions of wolves and their conservation.

In contrast to the generally positive views of the public, livestock breeders consistently expressed the strongest opposition to wolves, with most opposing the presence of wolves near their properties. Similarly, hunters in France and Italy exhibited low tolerance for wolves living in nearby forests. However, Slovenian hunters showed the highest level of support for wolves across the surveyed countries, though this support has been declining since 2014.

Respondents across all countries demonstrated strong knowledge of wolf biology, which previous research has shown to correlate with increased support for wolf conservation and reduced fear of wolves. This underscores the importance of educational initiatives, such as those implemented through LIFE projects, in fostering informed opinions about wildlife conservation.

Despite the methodological differences in sampling the general public across countries, the collected data suggest widespread support for wolf conservation in Italy, France, and Slovenia. Many respondents acknowledged the ecological importance of wolves and supported their conservation. A majority of French and Italian respondents indicated they would tolerate wolves living in nearby forests, signalling recognition of their broader value. Furthermore, despite their present-day conflicts with wolves, hunters and livestock breeders in most surveyed countries (except Austria) acknowledged the need to conserve wolves for future generations. To sustain and enhance positive attitudes, ongoing mitigation measures, active involvement of stakeholders in decision-making regarding wolf population management, and future surveys are recommended, particularly as wolf populations expand.

Introduction

Public awareness campaigns are essential tools in shaping human attitudes toward wildlife and informing wildlife management decisions. Large carnivore conservation projects, such as LIFE WOLFALPS EU, often aim to foster greater acceptance of these species—especially among local communities, farmers, and hunters—by addressing concerns and promoting coexistence. In regions where large carnivores like wolves are recolonizing, debates frequently arise over how these animals and their impacts should be managed. These debates reflect the differing values, priorities, and management goals of various stakeholder groups, leading to contrasting views on conservation approaches.

Understanding these values is critical for decision-makers and conservation practitioners. By gaining insights into how different stakeholders perceive large carnivores, they can craft management strategies that account for the diverse perspectives and needs. Monitoring public attitudes is particularly important because values directly shape attitudes, and attitudes in turn influence whether people support or oppose conservation efforts.

This study not only provides a comprehensive understanding of how various stakeholder groups across the Alps perceive wolves over the timeframe of the two key projects: LIFE WOLFALPS and LIFE WOLFALPS EU. It also provides a baseline for evaluating the effectiveness of a public awareness campaign initiated as part of the project. By establishing baselines, we can track changes in attitudes over time and assess whether the campaign successfully addresses knowledge gaps and misconceptions. Furthermore, these assessments enable the adaptation and refinement of the campaigns, ensuring it is better targeted and more effective in promoting stakeholder dialogue and coexistence with wolves in the long term.

Methods

Study area

Study area for the public attitude survey includes 16 core areas defined in the LIFE WOLFALPS EU project (Figure 1). Status of the wolf population in these core areas ranges from sporadically present (lone wolves / dispersing animals), recolonizing (recently established reproductive packs) to present for a couple of decades. For details of wolf presence in the Alps documented by the LIFEWolfAlps project, you can see the detailed report on the “wolf alpine population over 7 countries” (https://www.lifewolfalps.eu/wp-content/uploads/2023/05/C4_Deliverable_WAG_2020_2022_updated.pdf), and for the entire period from 2014 to 2022 the publication in Marucco et al. (2023). We briefly summarized the status in Table 1.

Table 1 Status of the wolf population in the core areas

Core Area	Status of the wolf population
Maritime Alps	Wolf packs have been permanently present for more than 10 years (High pack density).
Cottian Alps	Wolf packs have been permanently present for more than 10 years (High pack density).
Ossola Valgrande	Wolf packs are permanently present from the last 5 years and sporadically present before, so they have settled there less than 10 years ago.
Italian Central Alps	Wolves have been only sporadically present since 2001 (solitary individuals), packs have been formed since 2017
Dolomites	Wolf packs are now permanently present and have settled there less than 5 years ago. However, in the first LWA project (2013-2018) the area was considered “absent” from wolf presence.
Eastern Alps	Wolf packs are permanently present and have settled there less than 10 years ago.
Liguria	Wolf packs have been permanently present for more than 10 years (High pack density).
Piedmont Apennine	Wolf packs have been permanently present for more than 10 years (High pack density).
Torino	. Wolves have been sporadically present in the surroundings of the sampled area, and permanently present with only one pack from the last 3 years.
Aosta	Wolf packs are permanently present and have settled there less than 10 years ago.
Dinarics	Wolf packs have been permanently present for more than

	10 years (High pack density).
Mercantour	Wolf packs have been permanently present for more than 10 years (High pack density).
Northern French Alps/Bauges Natural Regional Park	In the Northern French Alps overall, wolf packs have been permanently present for more than 10 years (High pack density). But in the Bauges Natural Regional Park specifically, permanent wolf presence dates from 2019-2020.
Tyrol	Wolves have been sporadically present for more than 5 years (solitary individuals).
Styria	Wolves have been sporadically present for more than 5 years (solitary individuals).
Upper/Lower Austria	Wolf packs are permanently present and have settled there less than 10 years ago.

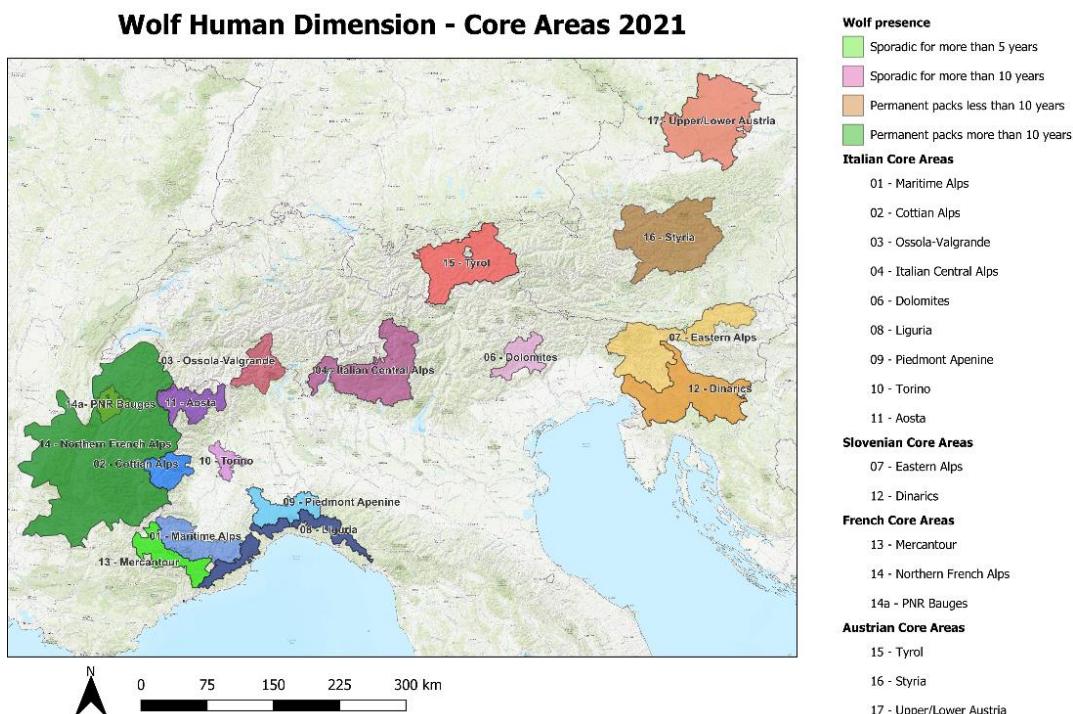


Figure 1 Study area of the public attitude survey

Questionnaires

In surveys, responses are valuable not for their intrinsic content, but for what they reveal about the underlying concepts they aim to measure. Designing a questionnaire is therefore a process of constructing a measurement tool, rather than engaging in conversational inquiry. For this study, a basic questionnaire in five languages (English, French, German, Italian and Slovenian) was designed (see Annex 1 – Questionnaires). In some countries, such as Italy, additional questions were tailored to local context. Despite these adjustments, efforts were made to maintain consistency across the different versions to facilitate meaningful comparisons between groups and countries. Consistency within the different questionnaires was preserved as much as possible in order to allow comparisons between groups.

The questionnaire covered the following key areas:

- Attitudes toward wolves.
- Beliefs about wolves and a knowledge section made up of factual questions.
- Attitudes toward various management issues, such as livestock issues, hunting, trust on different sources of information and others.
- Personal experience with wolves.
- Familiarity with the LIFE WOLFALPS EU project.
- Socio-demographic information about each respondent.

The development of the questionnaires was informed by online consultations with 68 experts and stakeholders.

Additionally, parts of the questionnaire were adapted from earlier surveys conducted in Italy and Slovenia for two main reasons:

- The questions from these previous surveys had already been tested, reducing the need for extensive pretesting of the current questionnaire.
- Using same questions allowed for direct comparisons between our findings and pre-existing data, enabling more robust longitudinal analysis of changes in attitudes and beliefs before and during the LIFE WOLFALPS EU project.

Sampling and data collection

The target groups and their respective planned sample sizes per project area were: general public (100), hunters (50), farmers (we use the word farmers for presenting livestock breeders in this report) (50), tourism workers (50), education professionals (50), members of environmental NGOs (50) and journalists (50). These groups were identified as important in wolf conservation. Members of environmental NGOs and journalists were not planned in the project application but were added later.

The sampling methods in each core area in 2021 and 2023 are listed in the table 2.

Table 2 Overview of the sampling methods implemented across the project core areas and target groups in the first project sampling (2021) and final project sampling (2023).

Core Area	General public sampling method
01 Maritime Alps	<p>2021: General public was randomly sampled with personal interviews done in the street or by randomly choosing the houses of potential respondents and asking them to answer the survey. The number of respondents was fixed proportionally to the number of residents.</p> <p>2023: Same as in 2021.</p>
02 Cottian Alps	<p>2021: General public was intercepted opportunistically on the street in each place of the Core Area, fixing the number of respondents based on number of residents.</p> <p>2023: The general public was met and interviewed in person during a country fair in Oulx, a very attractive event for all the municipalities of the core area, but also in a random way in the Municipalities of the lower Valley. Additionally, some questionnaires were gathered online.</p>
03 Ossola Valgrande	<p>2021: Telephone method, face-to-face method and online questionnaire was used. The telephone method was conducted by choosing random numbers from the telephone list of cities. For the face-to-face method they visited alternating houses, of different streets, trying to distribute the collection evenly. To some people that were visited at their homes but didn't have time to answer the questionnaire face to face, the link to the online questionnaire was given.</p> <p>2023: The interviews to general public were done in person, in smaller towns by encountering people randomly in the roads or close to restaurant and aggregation sites (such as squares). For the hunters category a mixed collection was carried out: in person and by personal invitation from the hunting office. For the categories of educators, environmentalists and workers in tourism sector, the</p>

	<p>questionnaire was administered in digital form, sent by the competent offices.</p> <p>The breeders category strongly opposed the compilation of the questionnaire.</p>
04 Italian Central Alps	<p>2021: General public was sampled by random sampling from landline telephone numbers holding the relevant area codes = CATI.</p> <p>2023: General public was sampled by random sampling from landline telephone numbers holding the relevant area codes = CATI. Interviews addressed to Resident in the municipalities of mountain communities in the provinces of BG, BS, CO, LC, SO, under 15,000 inhabitants (100 cases).</p>
06 Dolomites	<p>2021: General public questionnaires were collected with face-to-face interviews at the starting points of Park paths. This approach could led to biased results since it produced a sample that not represent the general public, but people that visit the park.</p> <p>2023: Paper questionnaire was distributed through City hall, Public library, meeting with citizen and the help of private shop as place of questionnaire's collection. Other questionnaires were collected online.</p> <p>Some Municipalities invited citizens to fill out the questionnaire through the APPs used to disseminate information among the population</p>

07 Eastern Alps	<p>2021: A sample of potential general public respondents was obtained from the register of inhabitants – a random stratified sample of adult (18 years and older) inhabitants. We've considered a minimal expected response rate using mail to be 20%, thus the number of questionnaires sent was adjusted accordingly. The questionnaires were mailed together with an additional envelope with prepaid postage for returning the filled questionnaire. Ten days after the mailing of the questionnaires, a reminder / thank you card was sent to increase the response rate.</p> <p>2023: Same as in 2021.</p>
08 Liguria	<p>2021: General public was sampled online, the link to the questionnaire was shared on FB pages of Regional Parks.</p> <p>2023: The interviews were done in person, in smaller towns by encountering people randomly in the roads or close to restaurant and aggregation sites (such as squares)</p>
09 Piedmont Apennine	<p>2021: General public was sampled through an online questionnaire by email newsletter. Before the lockdown, homes were randomly visited, but afterwards the link to the questionnaire was sent to people by mail.</p> <p>2023: The interviews were done in person encountering many people in a large fair of the territory where APAP had the opportunity for the general public interested to buy products of the territory, street food and music events. Additionally, some people were contacted and interviewed in front of the schools, and looking for the parents of the pupils but also randomly in the area.</p>
10 Torino	<p>2021: General public was sampled through an online questionnaire. The questionnaire was disseminated by the municipalities of the core area and published on their websites or on the Facebook pages of the Administrations.</p>

	2023: General public contacted in person, in the squares of local village markets.
11 Aosta	<p>2021: General public was sampled through an online questionnaire. The questionnaire was disseminated by the municipalities of the core area through their social channels.</p> <p>2023: The paper questionnaire was provided randomly to general public by post (house to house), and then picked up.</p>
12 Dinarics	<p>2021: A sample of potential general public respondents was obtained from the register of inhabitants – a random stratified sample of adult (18 years and older) inhabitants. We've considered a minimal expected response rate using mail to be 20%, thus the number of sent questionnaires was adjusted accordingly. The questionnaires were mailed together with an additional envelope with prepaid postage for returning the filled questionnaire. Ten days after the mailing of the questionnaires, a reminder / thank you card was sent in order to increase the response rate.</p> <p>2023: Same as in 2021.</p>
13 Mercantour	<p>2021: General public was interviewed opportunistically in the street.</p> <p>2023: The interview has been made face to face by PNM staff (LWA coordinator, WPIU technician, pastoral mediators, guards, PNM colleagues)</p>
14 Northern French Alps 2021/ Bauges Natural Regional Park (2023)	<p>2021: General public was targeted via flyers in their letterboxes. Flyers with the link to the online questionnaire were randomly distributed to mailboxes within the core area.</p> <p>2023: Mostly face to face, and mostly by a single interviewer. A second interviewer handled about 10-15 questionnaires. In addition, on a few occasions - about 5 - the person had no</p>

	time to answer so he/she was given the general-public-specific link to the questionnaire, which they then filled in online, on their own. Sampling was done in a smaller area within the Bauges Natural Regional Park.
15 Tyrol	2021 and 2023: The general public and all stakeholder groups were sampled through an online questionnaire. They advertised the online questionnaire on the social media channels of the Veterinary University Vienna, sent the link to the Austrian centre bear wolf lynx and to several private individuals. 2023: Additionally a panel survey done by phone through the Market institute, one of the leading institutes in Austria in market and opinion research. They have a large pool of people and select a stratified representative sample from this pool.
16 Styria	same as 15 Tyrol
17 Lower Austria	Same as 15 Tyrol

Given the different sampling methods among areas, and also within the same core area, especially due to the problem in 2021 of the Covid pandemic which obligated some core areas to move to online questionnaires, comparison among core areas and among years are likely subject to biases. Hence, the descriptive results should just be considered as indicative, and discussions should be taken with caution.

Data gathered from the general public comes from towns with less than 16.000 inhabitants, except for Dolomites and Torino core areas. In the Dolomites core area we have also included the town of Feltre, because there are small villages with farms surrounded by forest and hills where wolf predations have happened. In Torino core area, a wolf pack is currently living in the surrounding of urbanized areas, so part of the questionnaires are coming from towns with about 20.000 inhabitants.

Other groups (hunters, livestock, tourism workers, education professionals) were sampled in a more opportunistic manner. A combination of personal interviews, telephone interviews, postal mail and web-based surveys were used.

Data preparation

The questionnaire data was recorded in the pre-agreed table format in each core area and merged into a single database when the field surveys were completed. We checked the data for consistency, data-entry errors and missing data. The records with unacceptable amounts of missing data were removed and stored in a different database, labelled as problematic cases and were not included in further analysis.

The general public in all four countries consists of people who were sampled as members of the general public living in one of the defined core areas.

In France, Slovenia and Italy, respondents were assigned to the groups in which they were actually sampled. For example, a person sampled as hunter (and having also answered that he/she is a hunter), was assigned to the hunter stakeholder group.

In 2023 in Austria, general public was sampled through panel survey, all groups in 2021 and other stakeholder groups in 2023 were targeted online/through email. Since a lot of stakeholders in Austria did not confirm their stakeholder belonging with answers within questionnaire itself we have assigned those people into stakeholder groups based on their answers to the questionnaire itself according to the following rules: if the respondent answered that he/she has livestock (sheep, goats, cows or horses), then he/she was assigned to the farmers stakeholder group, if the respondent answered that he/she does not have livestock but answered that he/she is a hunter, then the person was assigned to the hunter stakeholder group, if the person answered that he/she does not have livestock nor that he/she is a hunter but that he/she works in tourism, then the respondent was assigned to tourism workers stakeholder group, this method of assigning stakeholders continued and the stakeholder groups that followed were education professionals, environmentalists and finally general public.

Analytical methods

Here, we basically used descriptive statistics to present the collected data. This does not allow conclusions on the statistical population. Any differences between countries, core areas or years found in the samples cannot be interpreted as real differences. In a future step, we will try to implement inferential statistics to better understand the dataset, and also the reasons for different attitudes between stakeholder groups and/or countries. We analysed already the Austrian online dataset to compare the years 2021 and 2023 using a modelling approach. The data from 2021 have already been analysed together with data from other countries. This revealed structural differences between the samples (e.g. more farmers and hunters in the Austrian sample), but also a more negative attitude among people in Austria who answered the questionnaire than in the other countries, even after correcting for structural differences. Therefore only 2023 panel sample representing the general public was used for the comparison among countries and is presented within the Results section. Further analysis of Austrian data is provided in Annex 3.

Results

Data set description

Final dataset for analysis included responses of 5523 respondents in 2023, altogether 17018 questionnaires from 2014 to 2023 were analysed.

Overall, 52% of our respondents were males in 2023. The sample is overall well balanced.

Mean age of the respondents was 48,1 years old, range from 18 to 100, 115 of respondents were younger than 18 and were excluded from further analysis.

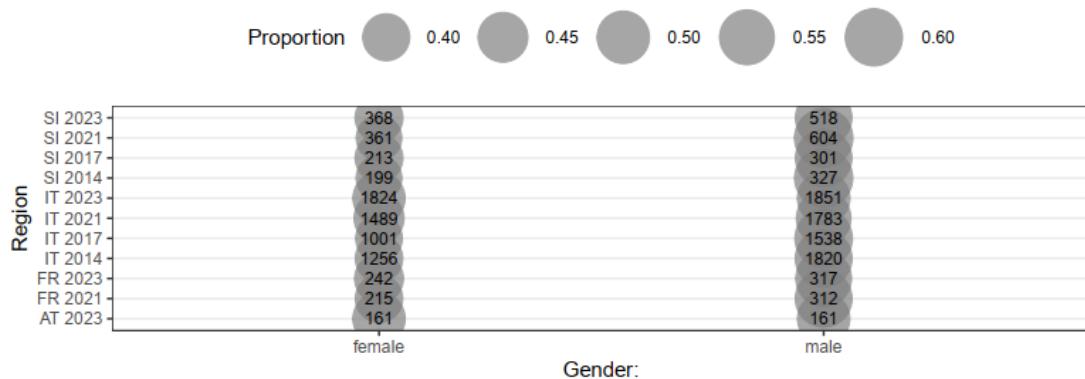


Figure 2 Gender distribution in France/Austria/Slovenia/Italy

Project visibility

In 2021 and 2023 the share of respondents reporting hearing about the project was similar, 44.5% in 2021 and 40.9% in 2023. The highest share was recorded in Slovenia, 54.3% (2021) in 55.5% (2023). In Italy 45.1% (2021) and 42.6% (2023), Austria 9.3% (2023) and France 22.6% (2021) and 23.3% (2023).

Knowledge about wolves

Questions on wolf biology and behaviour were used to assess respondents' general familiarity with wolves as a species. Average knowledge scores per country per year are presented in Figure 3. France exhibits the highest knowledge among all countries, Italy shows notable increase since knowledge measurements during first LIFE WOLFALPS project. In Slovenia general public sample was random and consistent during sampling period, and knowledge score has steadily increased since 2014.

Table 3: Knowledge questions (the correct answers are highlighted with green colour)

Question	Possible answers
1. How much does an adult wolf weigh?	a) 15-30 kg. b) 31-45 kg. c) 46-60 kg. d) More than 60 kg. e) Not sure.
2. Wolves feed mainly on:	a) wild ungulates such as deer and chamois. b) carrion. c) domestic animals. d) Not sure.
3. Wolves generally live:	a) solitary. b) in pairs. c) in groups. d) Not sure.
4. Wolves have been introduced by people in IT/SL/AUT/FR.	a) Yes. b) No. c) Not sure.
5. The wolves are naturally coming back to areas where they were once extirpated.	a) Yes. b) No. c) Not sure.
6. Do you believe wolf numbers in IT/SL/AUT/FR is:	a) Increasing. b) Decreasing. c) Remaining the same. d) Not sure.

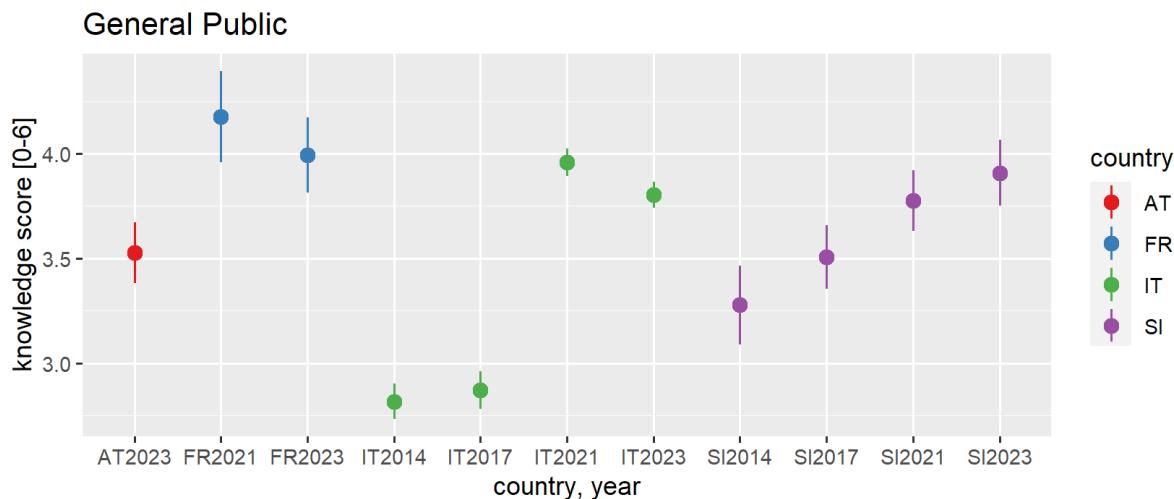


Figure 3: Knowledge score per country per year

Attitudes toward wolf

The first question asked respondents to describe their feelings toward the wolf, using a 5-point Likert-scale (completely in favour-completely against). Figure 4 represents the general public's feelings towards wolves in Austria, France, Italy, and Slovenia over different time periods. For Italy and Slovenia we have added data from the first LIFE WOLFALPS project (2014 and 2017).

For Austria we only used data for 2023, as 2021 sample was obtained online via social media and farmers were overrepresented in the sample.

In France and Italy, support for wolves remains high and more or less stable over the years.

In Slovenia, support for wolves has steadily decreased since 2017, with a sharp rise in opposition by 2023, with 33.8% of respondents against or completely against the wolf.

In general, most of the general public is in favour of wolves, with the exception of Austria, where the general public is more divided among those whose feelings are completely or moderately in favour and those whose feelings are against or completely against wolf.

General Public: Which of the following best describes your feelings toward wolf?

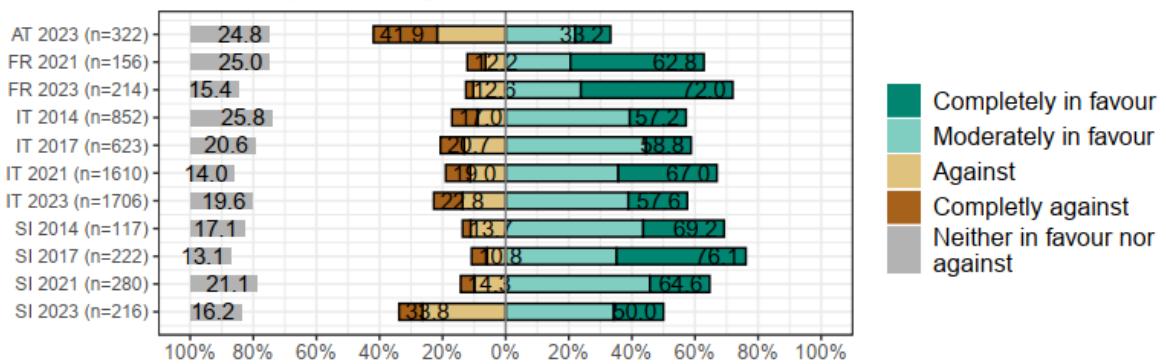


Figure 4 Feelings toward wolf: general public

If we look at the results based on core areas (Figure 5), we can see the stable or increasing trend in opinion towards wolves in most core areas. Positive attitudes especially increased in Maritime Alps and Mercantour. Attitudes declined in 3 core areas in Italy: Ossola Valgrande, Piedmont Apennine, Liguria, as well as in the Alpine and Dinaric part of Slovenia.

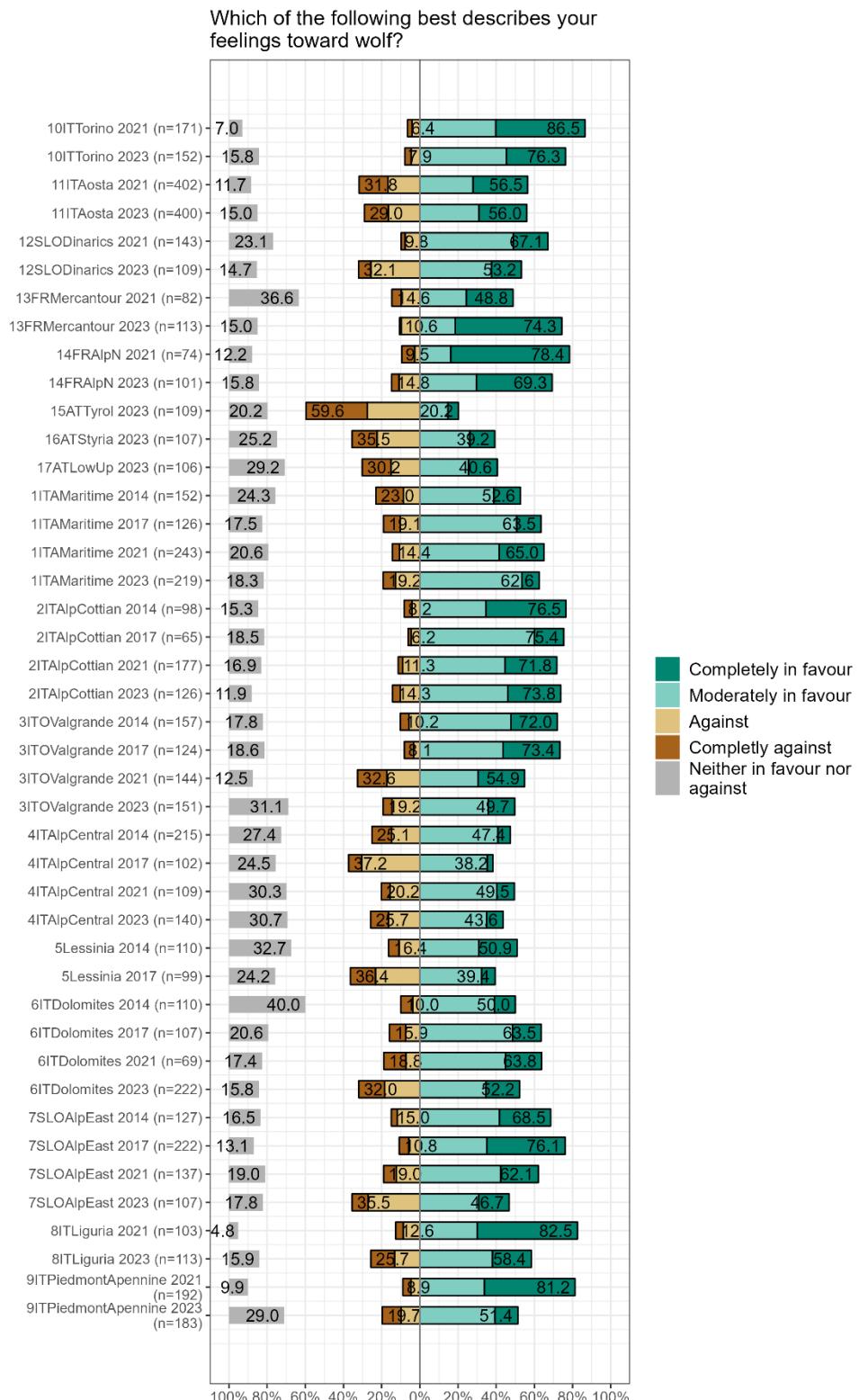


Figure 5 Feelings toward wolf: opinion of general public per core areas

Figures 6 to 9 present the results for the surveyed stakeholder groups. Austrian data is not represented due to structural differences in the online sample.

In Italy support among hunters remains stable. Slovenian hunters show the strongest support across countries, however it had declined from its peak in 2014. Hunters in France show very high opposition: in 2023 81,5% of French hunters were against or completely against the wolf.

Livestock breeders across all countries are not in favour of wolves, the strongest opposition was recorded in France.

On the other hand, education professionals and tourism workers show very positive feelings toward wolves in all countries.

Two stakeholder groups (environmentalists and journalists) were additionally sampled. Environmentalists show strongest support among all stakeholder groups in all countries (Figure 10). Only Italy was able to obtain sufficiently large sample for journalists in 2023, results show that journalist have overall positive attitude toward wolves (Figure 11).

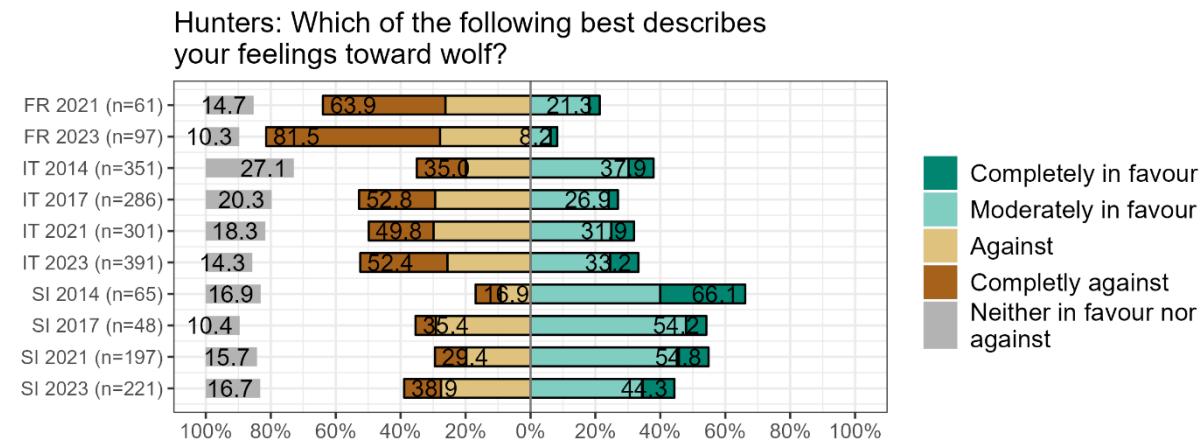


Figure 6 Feelings toward wolf: hunters

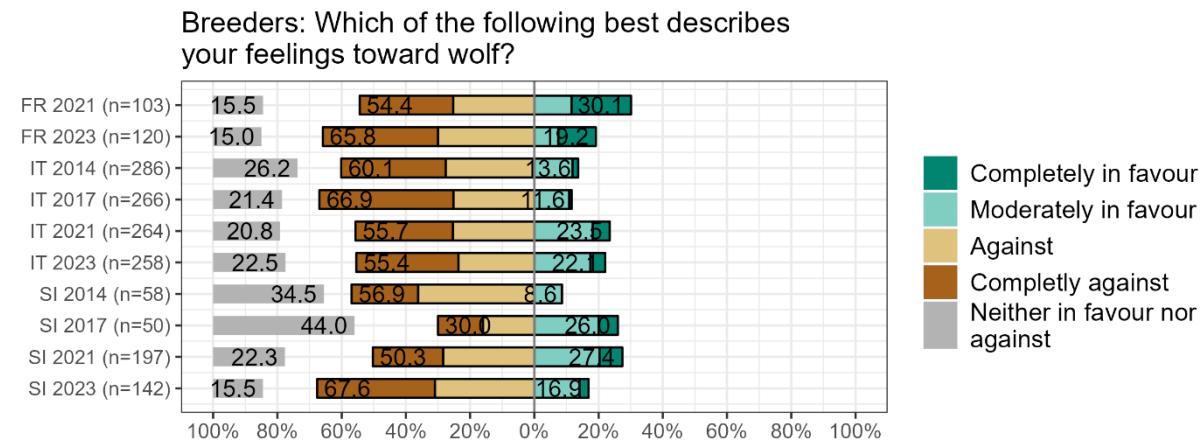


Figure 7 Feelings toward wolf: breeders

Education Professionals: Which of the following best describes your feelings toward wolf?

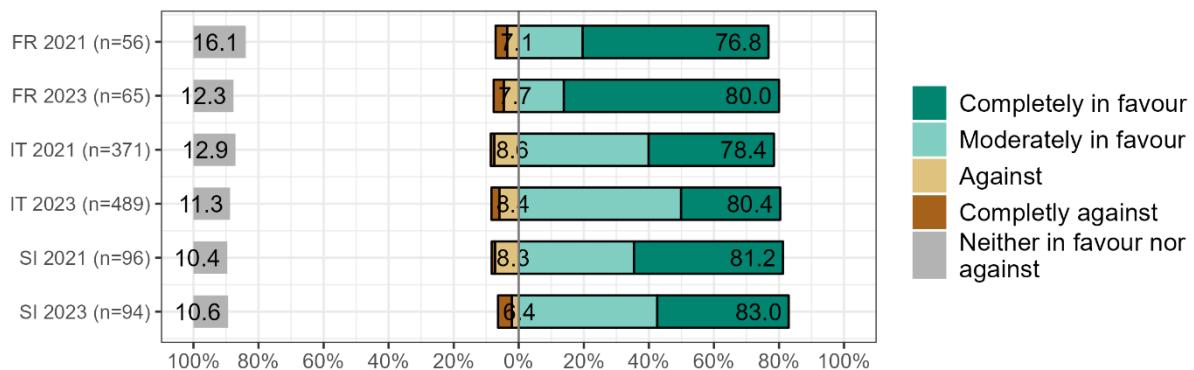


Figure 8 Feelings toward wolf: education professionals

Tourism Workers: Which of the following best describes your feelings toward wolf?

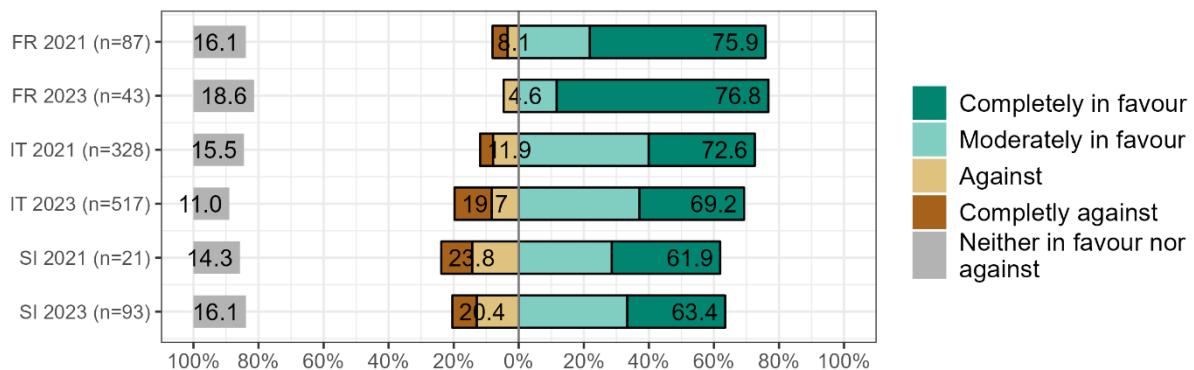


Figure 9 Feelings toward wolf: tourism workers

Environmentalists: Which of the following best describes your feelings toward wolf?

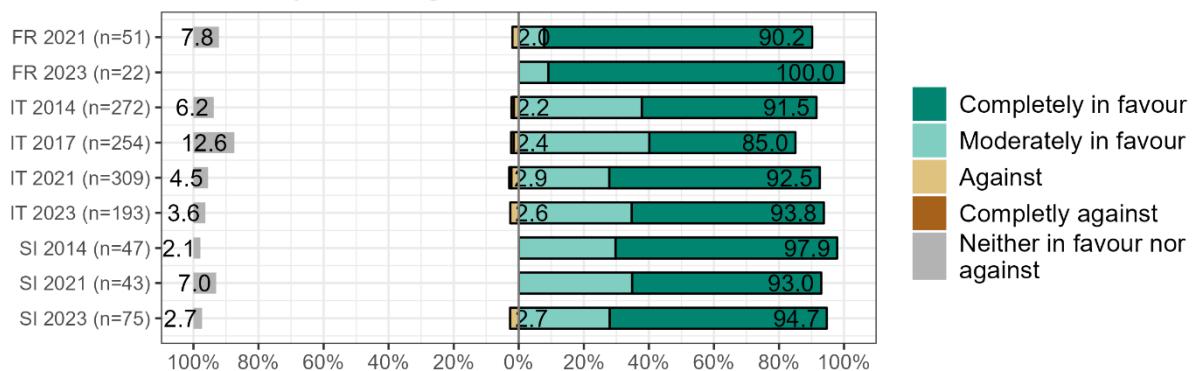
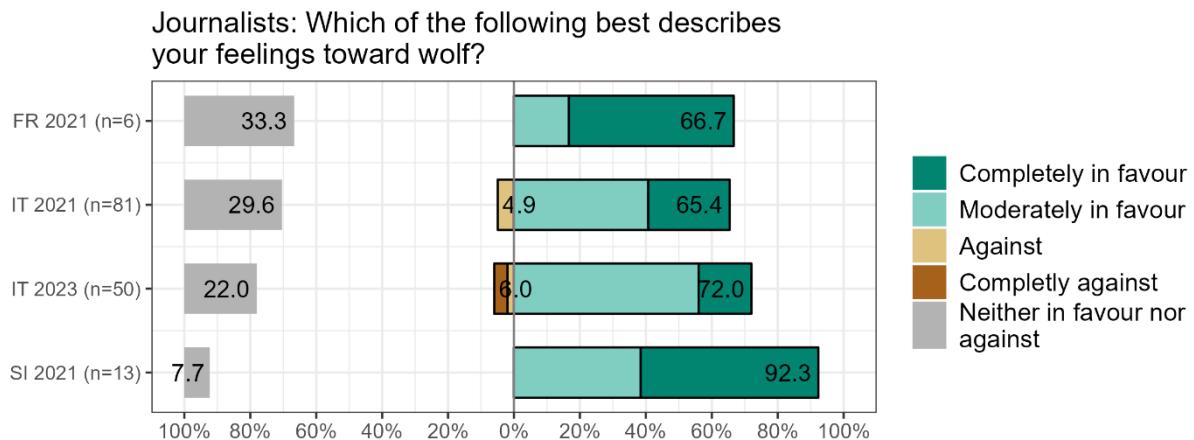
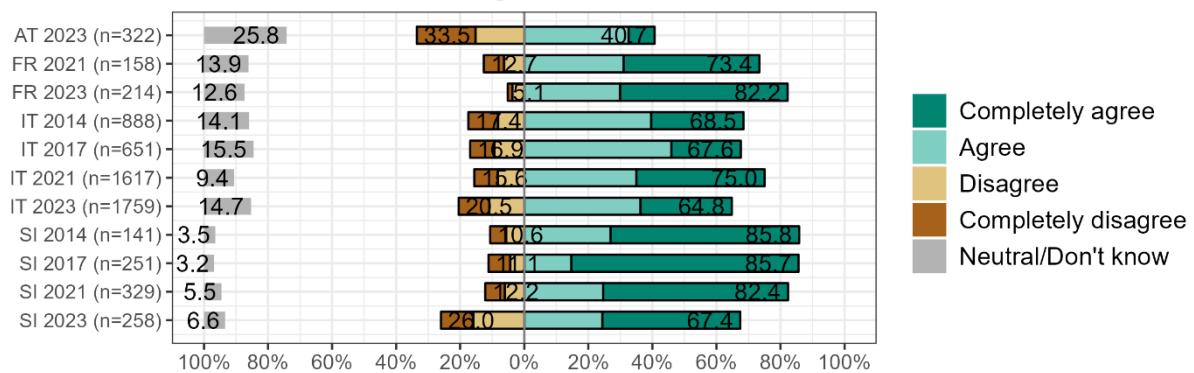


Figure 10 Feelings toward wolf: environmentalists

**Figure 11 Feelings toward wolf: journalists**

We asked respondents to tell us to what extent they agree with the statement “It is important to maintain wolves in IT/SL/AUT/FR for future generations.” Each respondent was answering about his own country. From the graphs (Figure 12), we can see that respondents from all countries overwhelmingly agreed that it is important to maintain wolves for future generations. Despite largely negative feelings of livestock farmers and hunters, graphs (Figure 13 and 14) show more supportive attitudes of farmers and hunters when asked if they believe it is important to maintain wolves for generations to come.

General Public: It is important to maintain wolves in IT/SL/AT/FR for future generations.**Figure 12 Importance to maintain wolves: general public**

Hunters: It is important to maintain wolves in IT/SL/AT/FR for future generations.

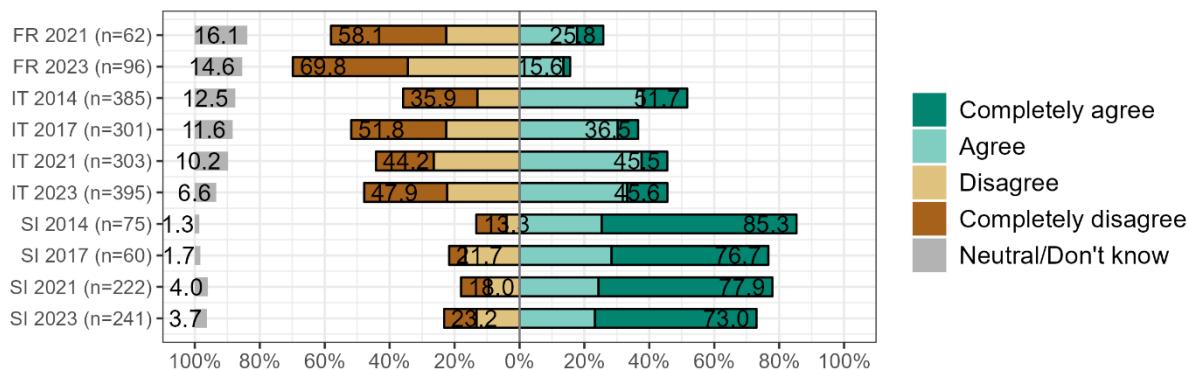


Figure 13 Importance to maintain wolves: hunters

Breeders: It is important to maintain wolves in IT/SL/AT/FR for future generations.

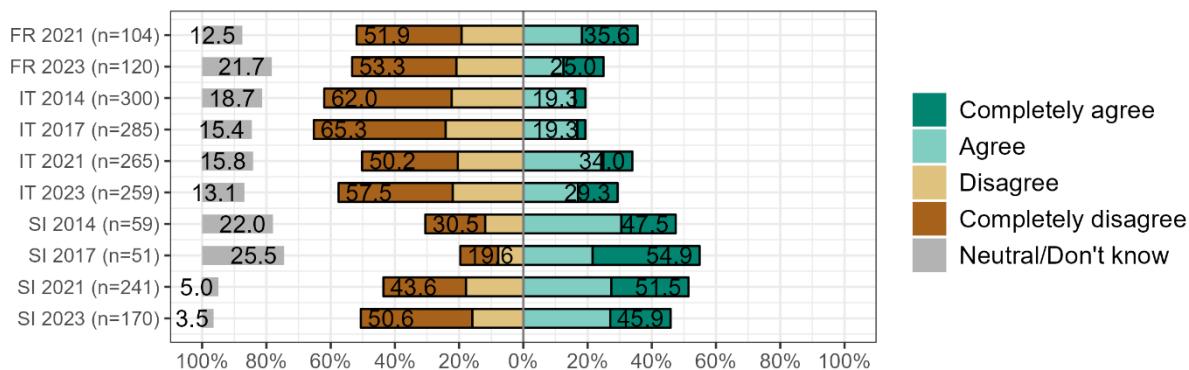


Figure 14 Importance to maintain wolves: breeders

Fear of wolf

Wolves normally avoid people and are not considered dangerous to them, which respondents from most countries seem to be aware of (Figure 15) as majority would not be afraid to hike in the wood where wolves are present. An increase in fear was recorded in Slovenia for 2023.

Hunters in France show higher fear of wolves than livestock breeders. The trend is reversed in Slovenia, where majority of hunters would not be afraid to hike in the wolf area (Figures 16 and 17).

General Public: I would not be afraid to hike in the woods where wolves are present.

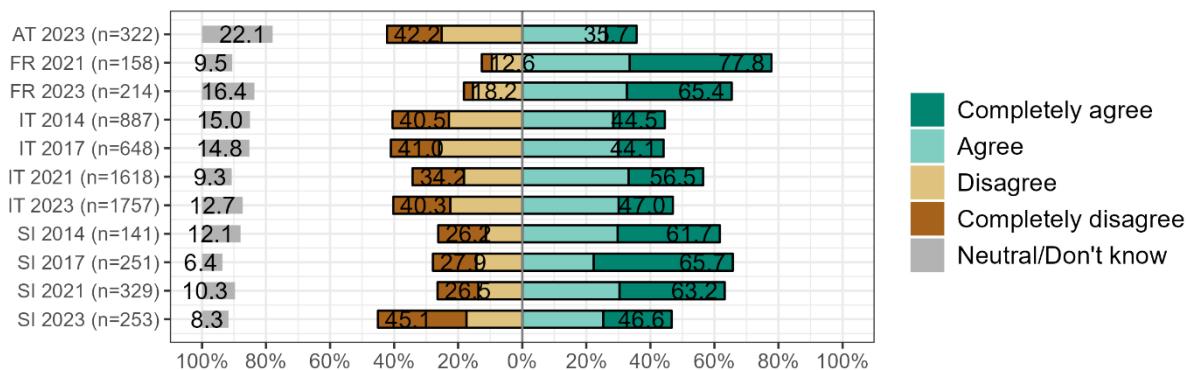


Figure 15 Not to be afraid to hike - general public

Breeders: I would not be afraid to hike in the woods where wolves are present.

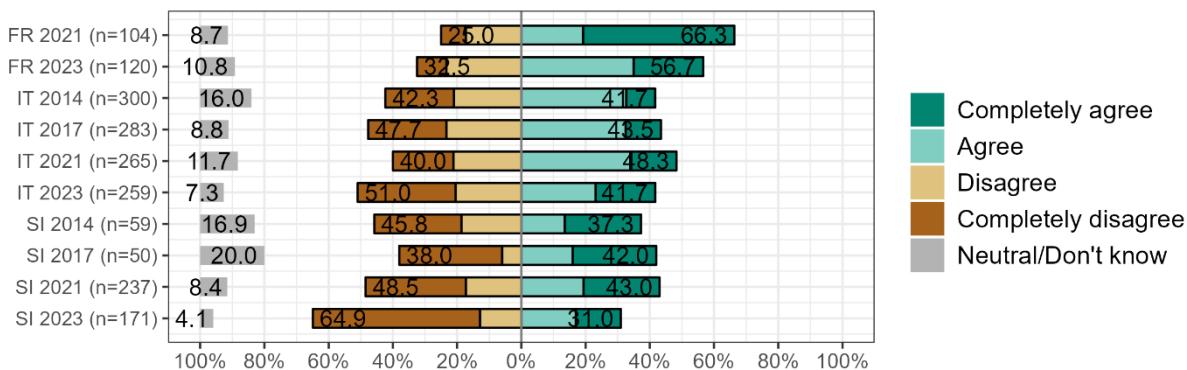


Figure 16 Not to be afraid to hike – breeders

Hunters: I would not be afraid to hike in the woods where wolves are present.

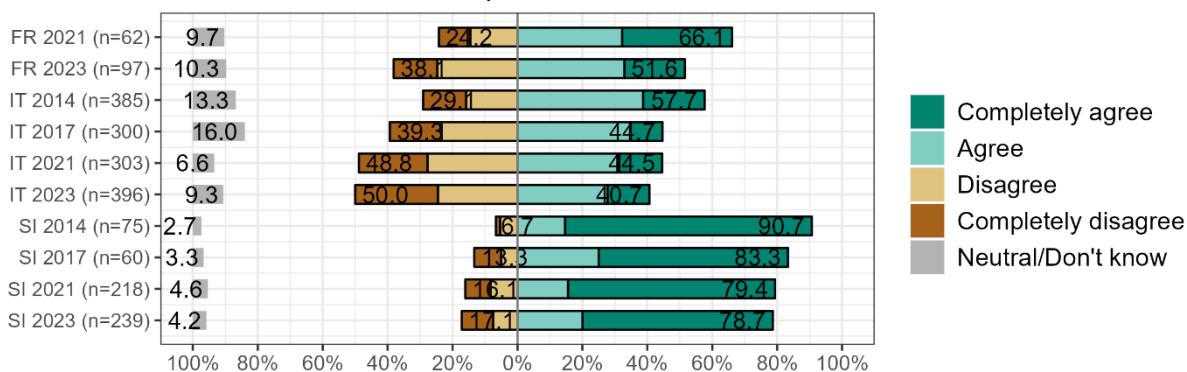


Figure 17 Not afraid to hike - hunters

Acceptance of the wolf in the local environment

Human tolerance of the wolf is the main factor that can have a significant impact on maintaining wolf presence. Strong negative attitudes can lead to poaching, which can threaten the survival of small populations.

We can see that the majority of French and Italian general public respondents agreed that they would tolerate wolves living in nearby forests of their municipality (Figure 18). Austrian public opinion on the presence of wolves in nearby forests is divided, with substantial proportion of respondents reporting uncertainty on the issue. Tolerance among Slovenian respondents towards living nearby wolves has also decreased during last measurement in 2023.

Majority of livestock breeders don't tolerate wolves living nearby. French and Italian hunters also don't tolerate wolves living in the nearby forests. Slovenian hunters are more tolerant, however their tolerance also decreased in 2023.

General Public: I would tolerate wolves living in nearby forests of our municipality.

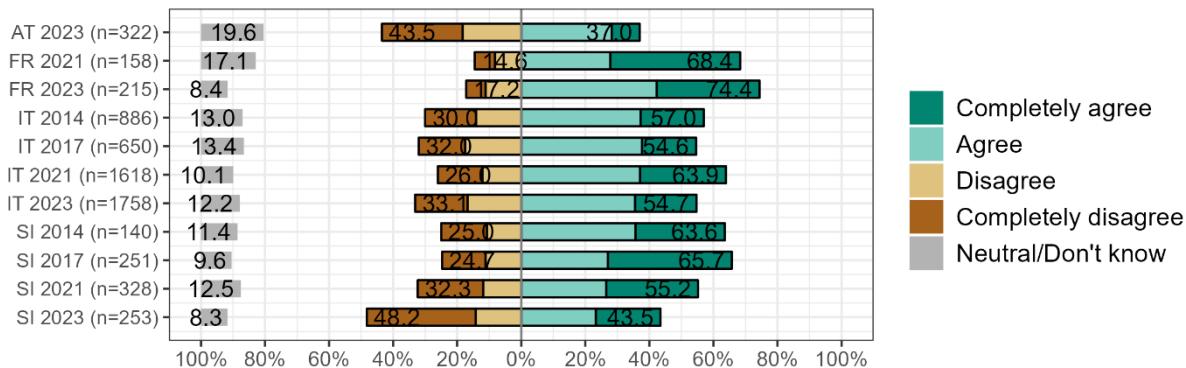


Figure 18 Would tolerate wolves nearby: general public

Breeders: I would tolerate wolves living in nearby forests of our municipality.

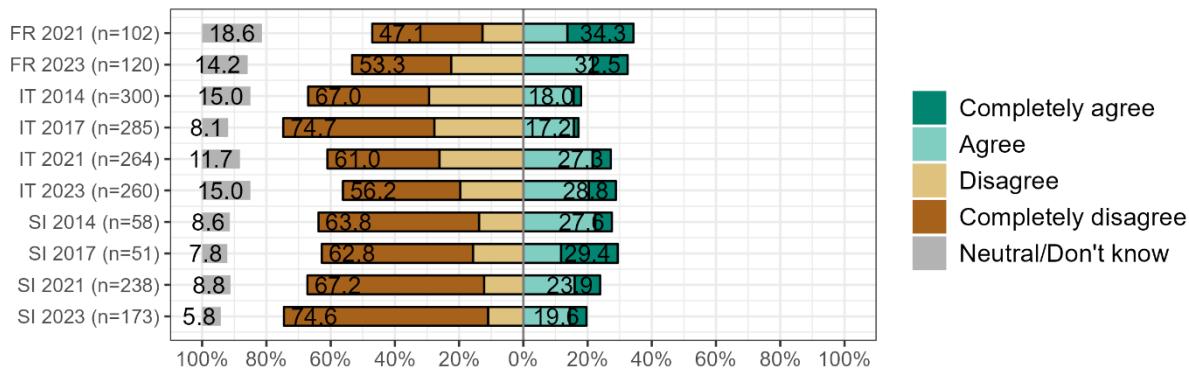


Figure 19 Would tolerate wolves nearby: breeders

Hunters: I would tolerate wolves living in nearby forests of our municipality.

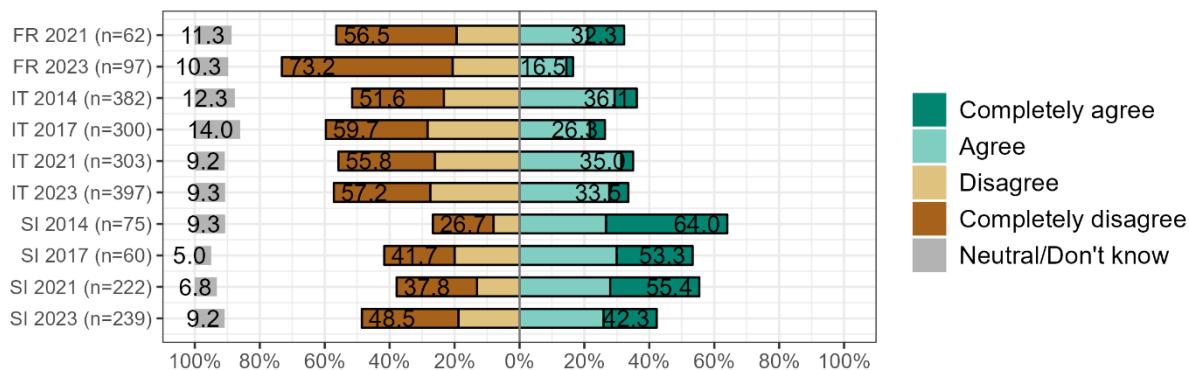


Figure 20 Would tolerate wolves nearby: hunters

Wolf population management – size of the population and hunts

Public perceptions about the species' abundance play an important role in shaping public support or opposition to different management measures.

We wanted to know whether respondents would agree with increasing wolf numbers in their region. Majority of the general public in France would agree with increased wolf numbers in the region, while Austrians, Italians and Slovenians are less supportive of the idea. In Slovenia, there is steady decline public supporting the idea of having more wolves (Figure 21). Majorities of farmer and hunter respondents in France, Italy and Slovenia disagreed with increasing wolf numbers in their region (Figure 22 and 23). This question has a different meaning in core areas with different wolf densities (core areas range from a saturated wolf population to single dispersing individuals only).

General Public: I would agree with increasing wolf numbers in my region.

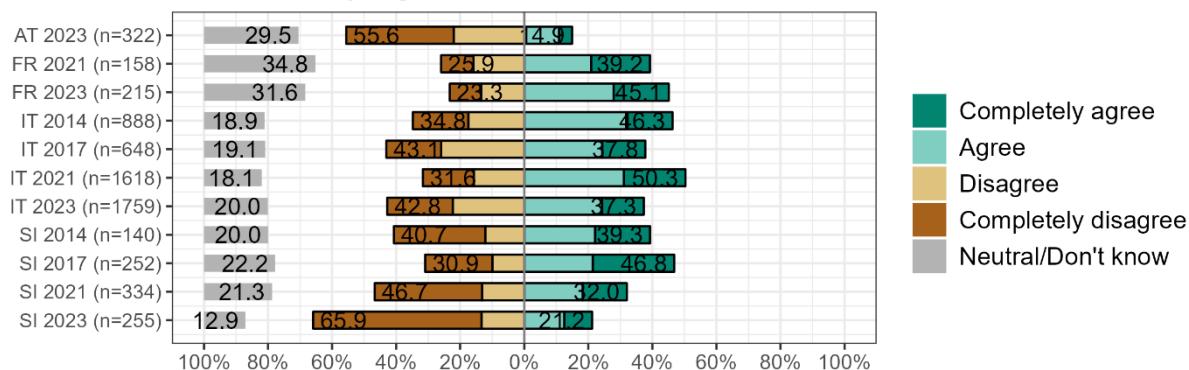


Figure 21 Agree with increasing wolf numbers: general public

Breeders: I would agree with increasing wolf numbers in my region.

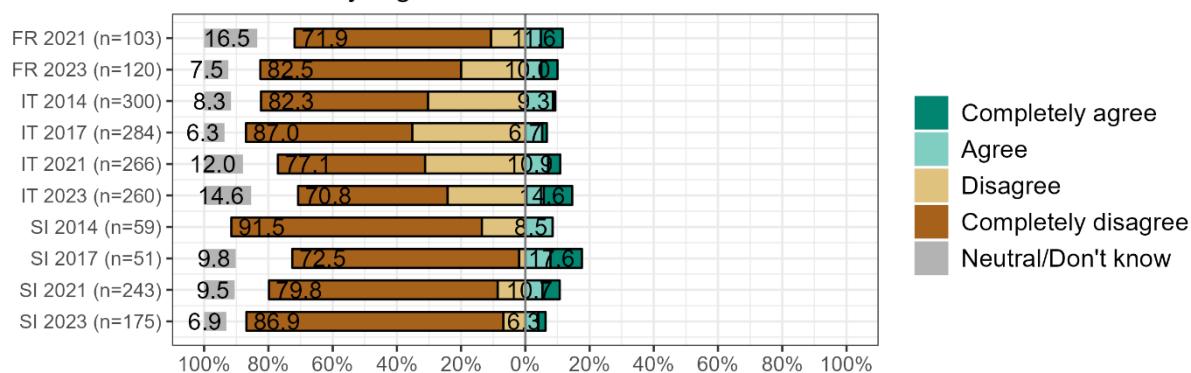


Figure 22 Agree with increasing wolf numbers: breeders

Hunters: I would agree with increasing wolf numbers in my region.

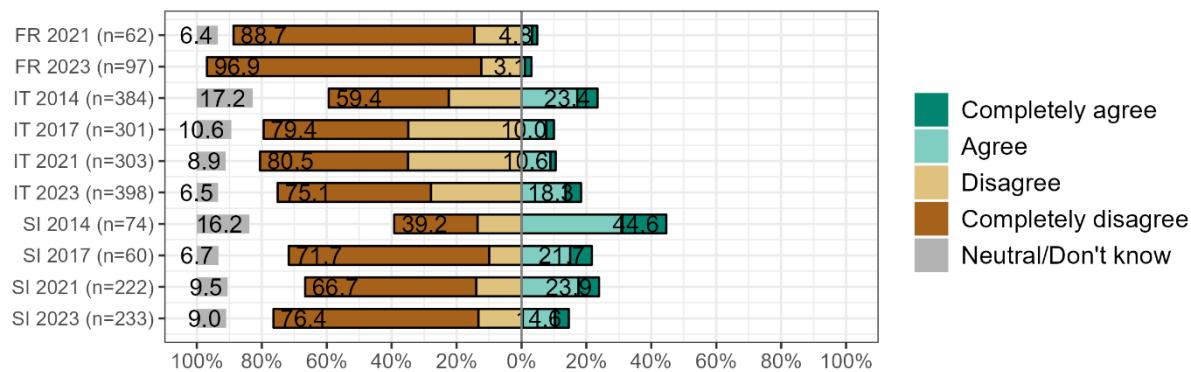


Figure 23 Agree with increasing wolf numbers: hunters

Good knowledge of the public's opinion is crucial for successful management of wolf populations. Wolf is a strictly protected species in most European countries. At the same time, in some countries culling is carried out. In Slovenia, the ministry responsible, based on population data, sightings and the number of wolves culled in the previous period, as well as based on damage to livestock and other data, can approve the exceptional cull of a predetermined number of animals. In France, an annual ceiling of 19% of the estimated average size of the wolf population at the end of winter can be culled each year under strict derogatory conditions to protect livestock from depredation.

With the question "Wolf hunts are needed in IT/SL/AUT/FR", we wanted to get the public's opinion on culling as a method to manage wolf populations. General public in Slovenia mostly agrees that wolf hunts are needed, while respondent from France and Italy completely disagree or disagree. In Austria, a significant number of respondents were undecided, while the rest were split roughly in half between those who agree and those who disagree with wolf hunts (Figure 24). Most of the breeders and hunters across France, Italy and Slovenia completely agree or agree that wolf hunts are needed (Figure 25 and 26).

General Public: Wolf hunts are needed in IT/SL/AT/FR.

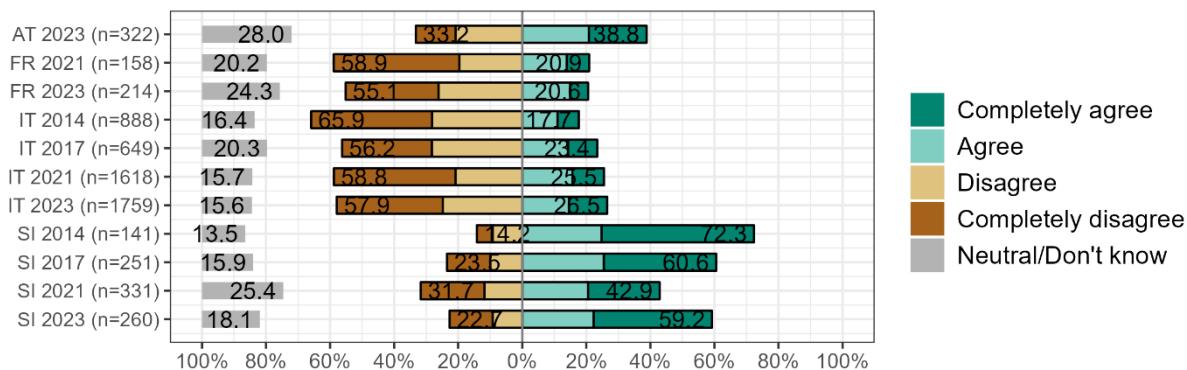


Figure 24: Wolf hunts needed: general public

Breeders: Wolf hunts are needed in IT/SL/AT/FR.

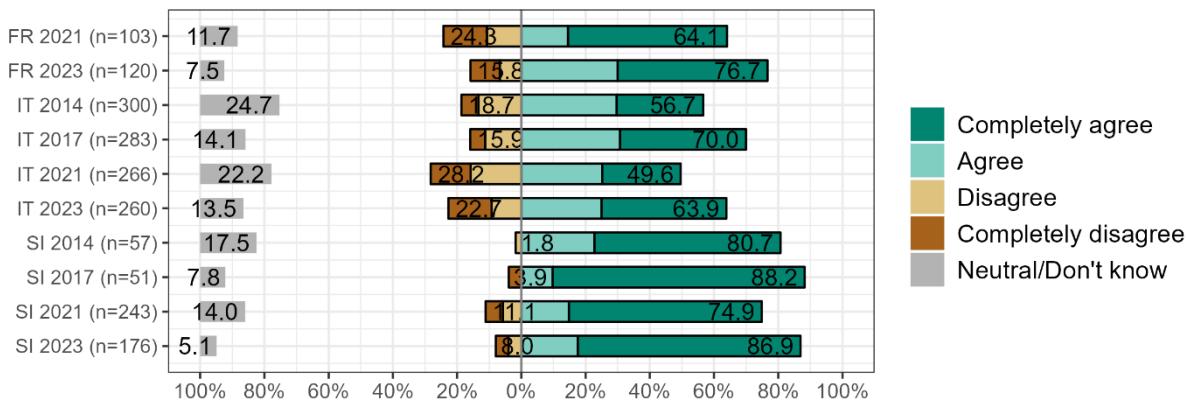


Figure 25 Wolf hunts needed: breeders

Hunters: Wolf hunts are needed in IT/SL/AT/FR.

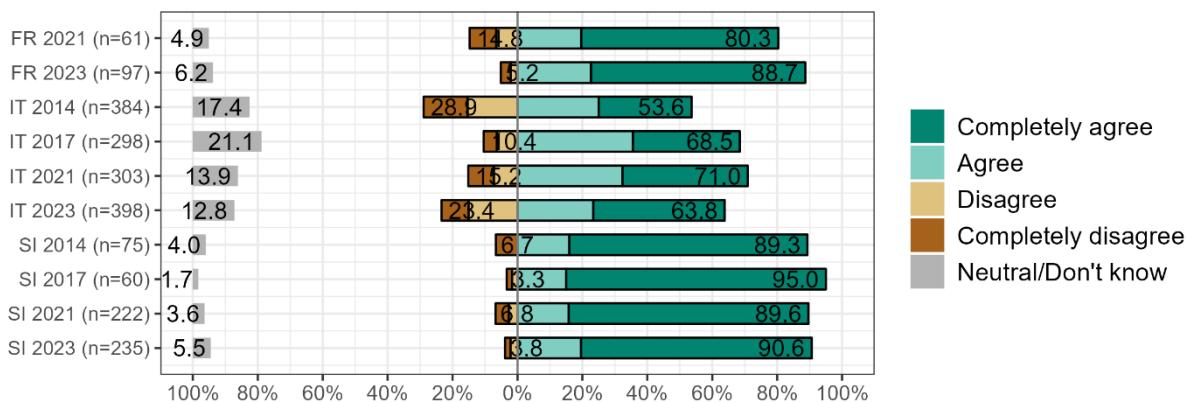


Figure 26 Wolf hunts needed: hunters

Damage

Tolerance to the presence of large carnivores depends largely on the number of conflicts they have with humans. In addition to the financial aspect, the emotions of those harmed can also play an important role. In a document prepared within the LIFE WolfAlps project (Prevention of damages caused by large carnivores in the Alps, Berce et al., 2020).we can find the numbers of attacks in each of the surveyed countries for 2019: in Austria there were 22 attacks on sheep and cattle and 84 animals affected, in France there were 3.469 attacks on sheep and cattle and 11.569 animals affected, in the regions of northern Italy there were 333 attacks on sheep, goats and cattle and 1.552 animals affected, in Slovenia there were 328 attacks on sheep and cattle and 1.304 animals affected. However, these numbers are not directly comparable because the countries vary significantly in size. We have asked the respondents to decide to what extent they agree/disagree with the statement “Wolves cause abundant damages to livestock”. Overall, majority of general public agrees with the statement (Figure 27), the same goes for stakeholder groups across France, Italy and Slovenia (Figure 28 and 29).

General Public: Wolves cause abundant damages to livestock.

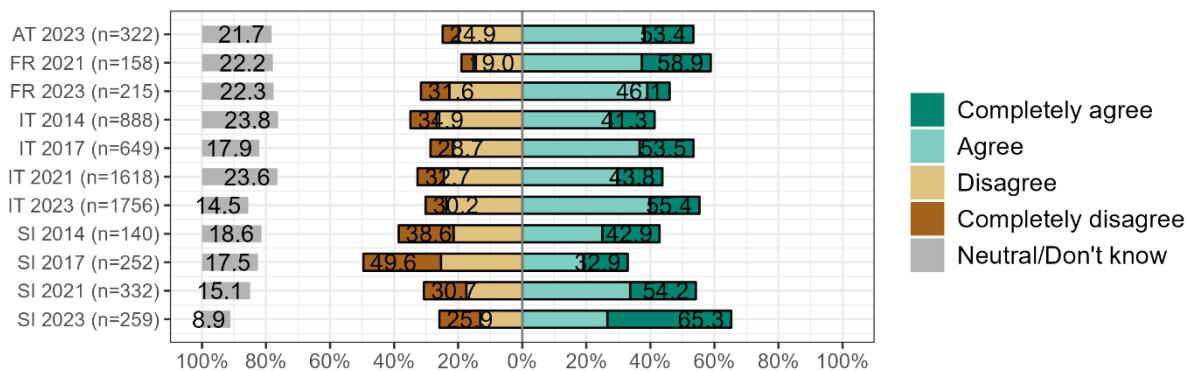


Figure 27 Wolves cause abundant damages: general public

Breeders: Wolves cause abundant damages to livestock.

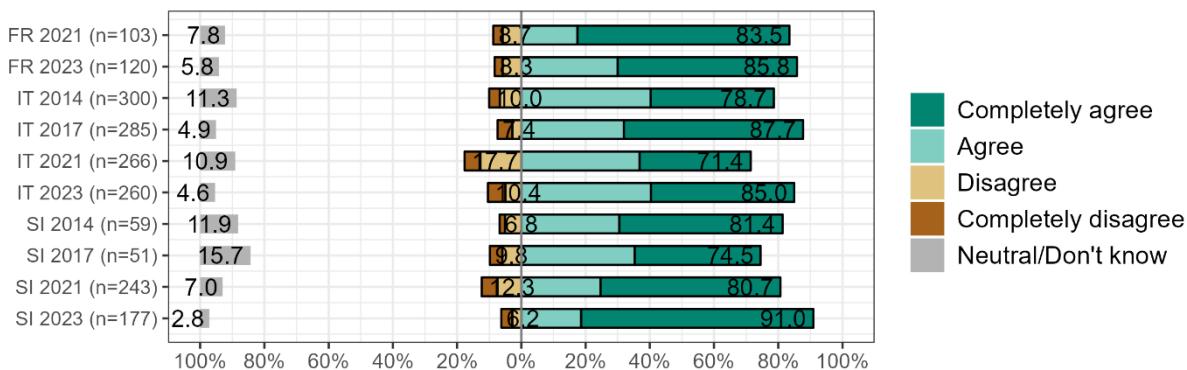


Figure 28 Wolves cause abundant damages: breeders

Hunters: Wolves cause abundant damages to livestock.

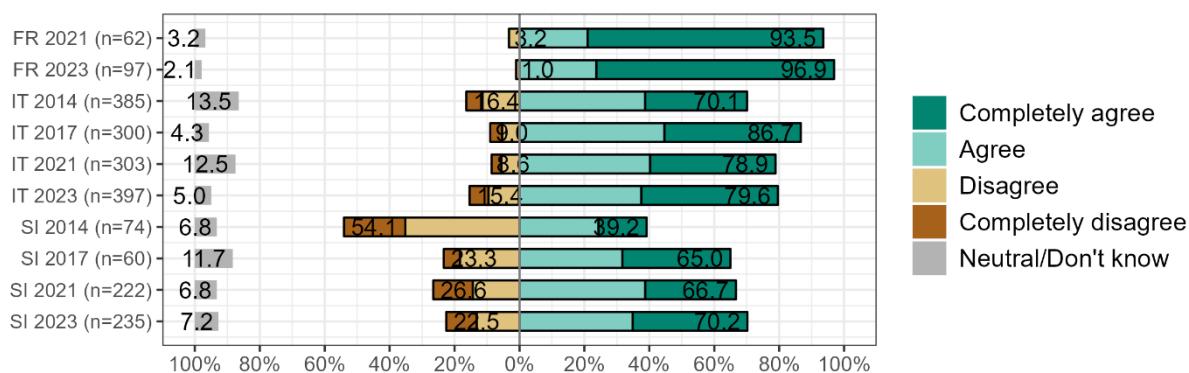


Figure 29 Wolves cause abundant damages: hunters

We have asked the respondents to decide to what extent they agree/disagree with the statement “Livestock owners that lose livestock due to wolf depredation should be compensated”. And we can very clearly see that vast majorities of the general public in all countries strongly support the compensation for livestock loss due to wolf depredation, as well as all stakeholder groups in France, Italy and Slovenia (Figures 30-32).

General Public: Livestock owners that lose livestock due to wolf should be compensated.

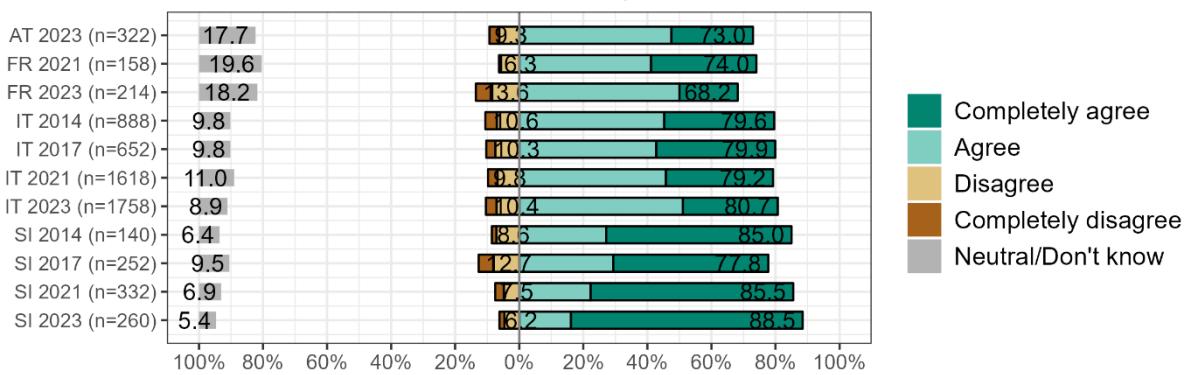


Figure 30 Livestock owners should be compensated: general public

Breeders: Livestock owners that lose livestock due to wolf should be compensated.

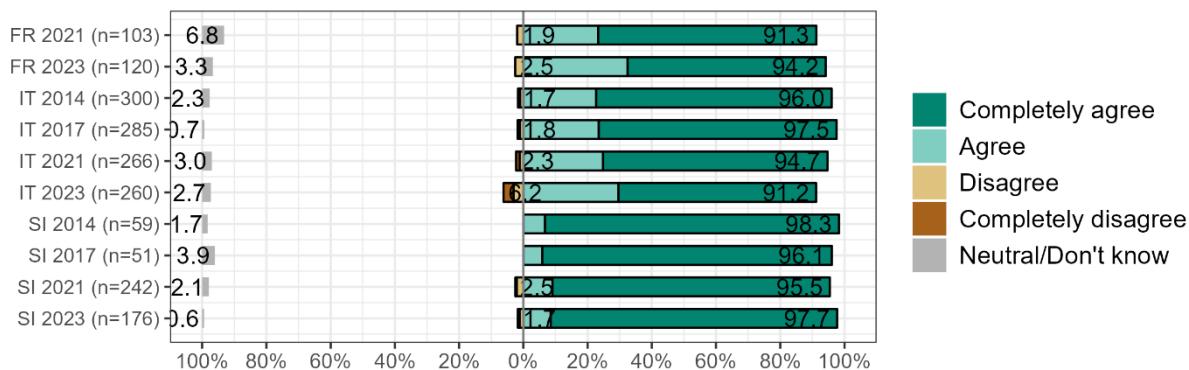


Figure 31 Livestock owners should be compensated: breeders

Hunters: Livestock owners that lose livestock due to wolf should be compensated.

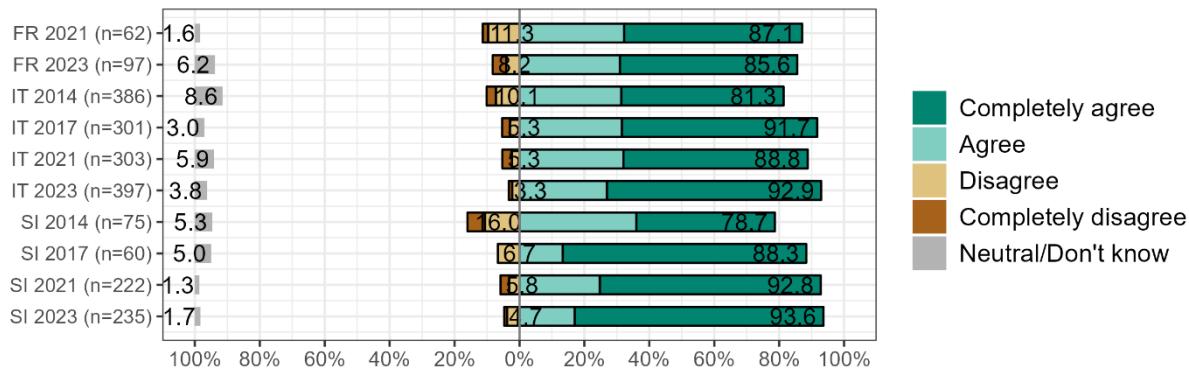


Figure 32 Livestock owners should be compensated: hunters

Hunting and beliefs regarding wolf impacts on game species

Large carnivores are apex predators and might have an important role in the ecosystem. Through predation they affect numbers, distribution and behaviour of large herbivores and can limit mesocarnivores through intraguild competition/predation. However, conflict with hunters can arise due to competition for game (deer, chamois, wild boar...). We have assessed the extent of this issue by asking the respondents to answer two questions – one about the wolf's role in keeping wild ungulate populations healthy and the other one regarding the impact of wolf predation on hunting. Overall general public is rather undecided about this statement, many of French and Italian respondents didn't know the answer. In Slovenia most respondents agreed with the statement, however agreement declines steadily since 2014 (Figure 33). Majority of breeders and hunters in France and Italy don't agree with the statement. In Slovenia disagreement among breeders have increased significantly since 2021, while hunters hold a split opinion (Figure 34 and 35).

General Public: Wolves mainly prey on old and sick animals and thus keep wild ungulate populations healthy.

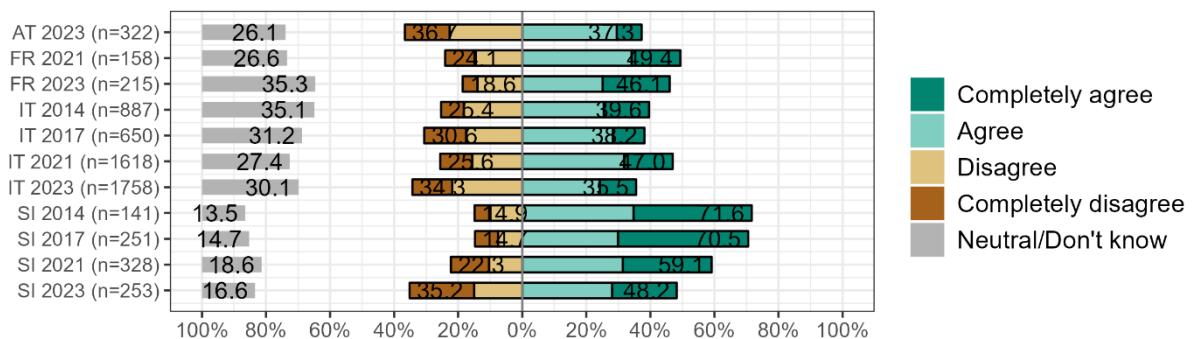


Figure 33 Wolves keep ungulate populations healthy: general public

Breeders: Wolves mainly prey on old and sick animals and thus keep wild ungulate populations healthy.

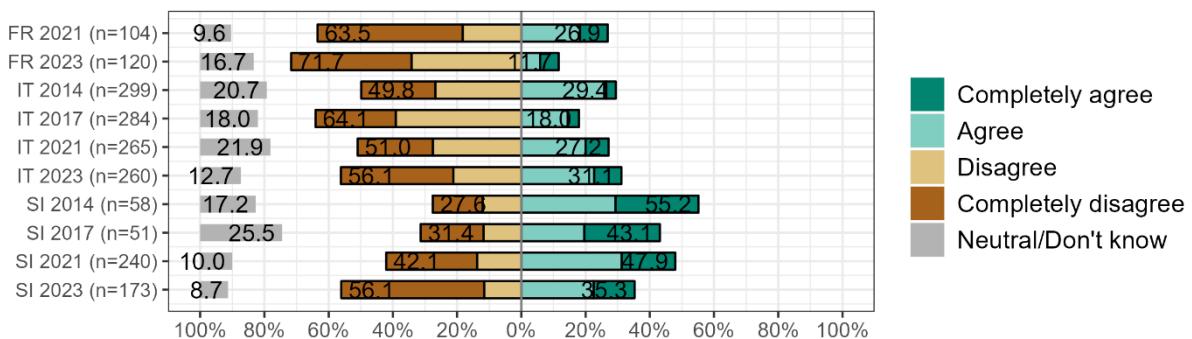


Figure 34 Wolves keep ungulate populations healthy: breeders

Hunters: Wolves mainly prey on old and sick animals and thus keep wild ungulate populations healthy.

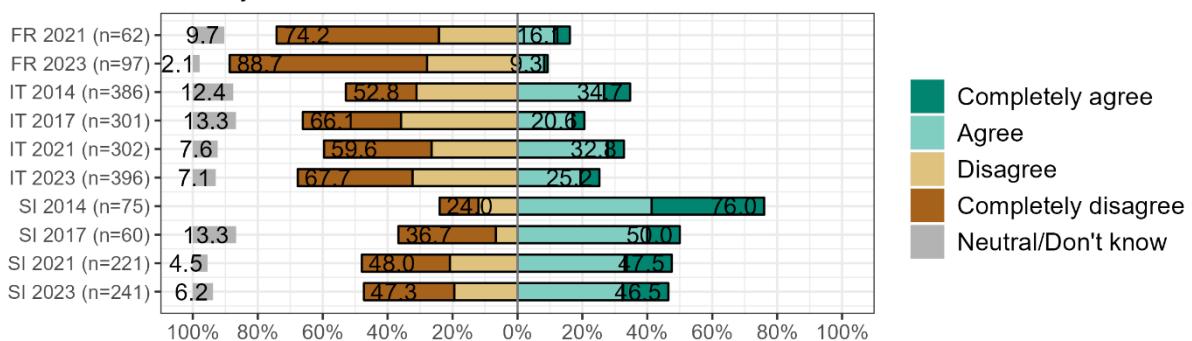


Figure 35 Wolves keep ungulate populations healthy: hunters

General public across all countries tends to disagree with the statement that wolves greatly reduce ungulate populations and make hunting impossible (Figure 36). Livestock breeders tend to agree more, especially in France and Slovenia, while in Italy they show more split

opinion (Figure 37). Hunters across France, Italy and Slovenia agree with the statement (Figure 38).

General Public: Wolves greatly reduce ungulate populations and make hunting impossible.

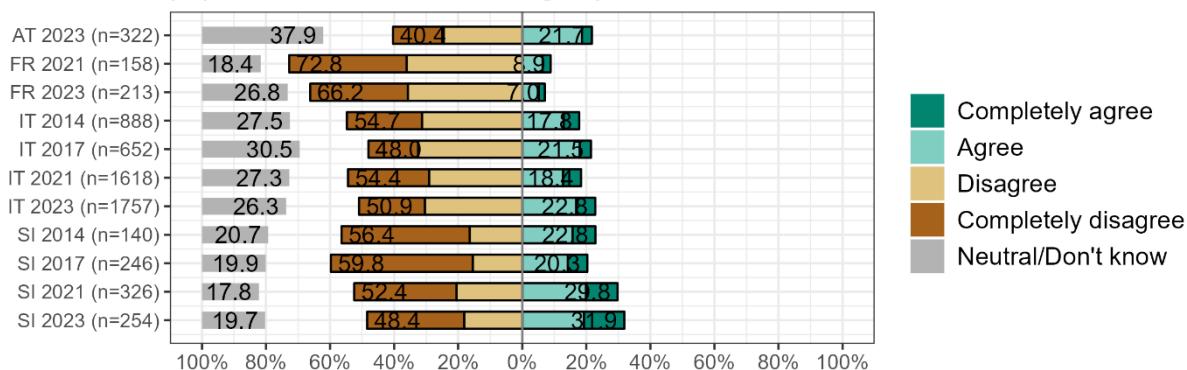


Figure 36 Wolves greatly reduce ungulate populations: general public

Breeders: Wolves greatly reduce ungulate populations and make hunting impossible.

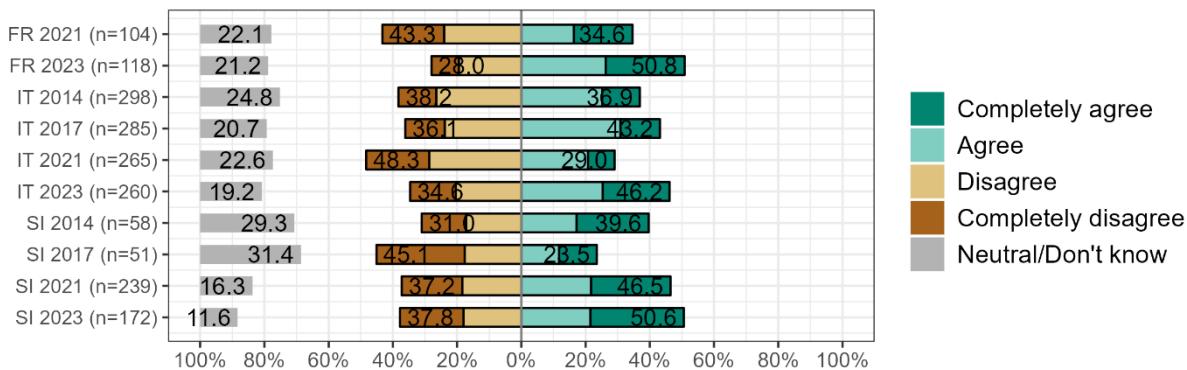


Figure 37 Wolves greatly reduce ungulate populations: breeders

Hunters: Wolves greatly reduce ungulate populations and make hunting impossible.

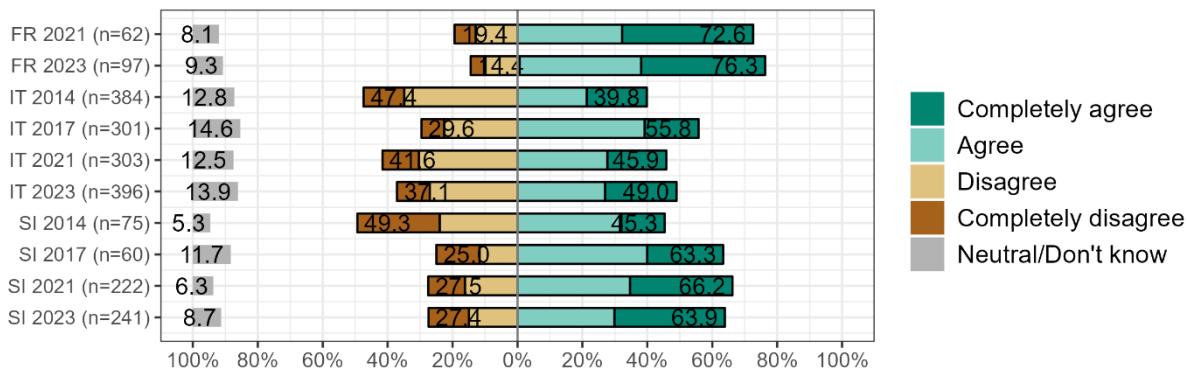


Figure 38 Wolves greatly reduce ungulate populations: hunters

Value of the wolf for ecotourism

Presence of large carnivores in the local environment does not always mean financial loss and conflict but can also be an asset for the local community. Changing social values have increased tolerance towards large carnivores, which has led to an improvement in the status of populations and an increase in their abundance. The wolf is often associated with pristine nature, and its presence can represent an additional value for the area. Presence of large carnivores in the local environment can bring opportunities for the local community, mostly in the form of ecotourism.

We asked respondents to answer to what extent they agree/disagree with the statement "Wolves attract tourists." Results show that wolf is not recognized as a value for tourism among the general public (Figure 39). The exception is France, where most respondents in 2021 agreed that wolf presence brings benefits for tourism. This support has declined in 2023, resulting in more divided opinions. Breeders and hunters in France are more likely than their counterparts in other countries to believe that the presence of wolves can positively impact tourism development. Similarly as with the general public, the support for the statement has declined among French breeders and hunters in 2023 (Figure 40 and 41).

General Public: Wolves attract tourists.

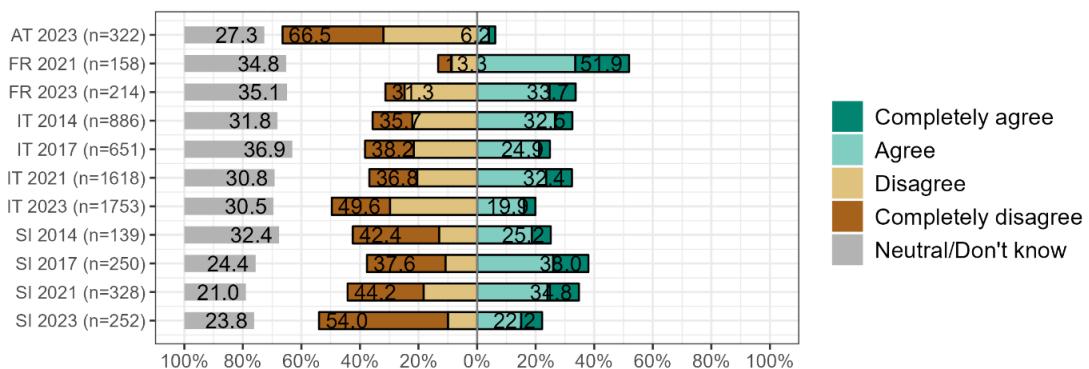


Figure 39 Wolves attract tourists: general public

Breeders: Wolves attract tourists.

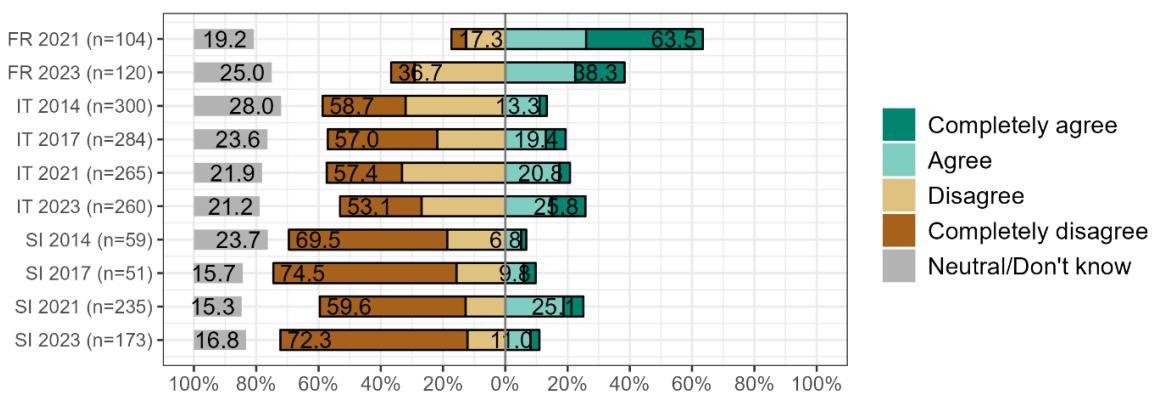


Figure 40 Wolves attract tourists: breeders

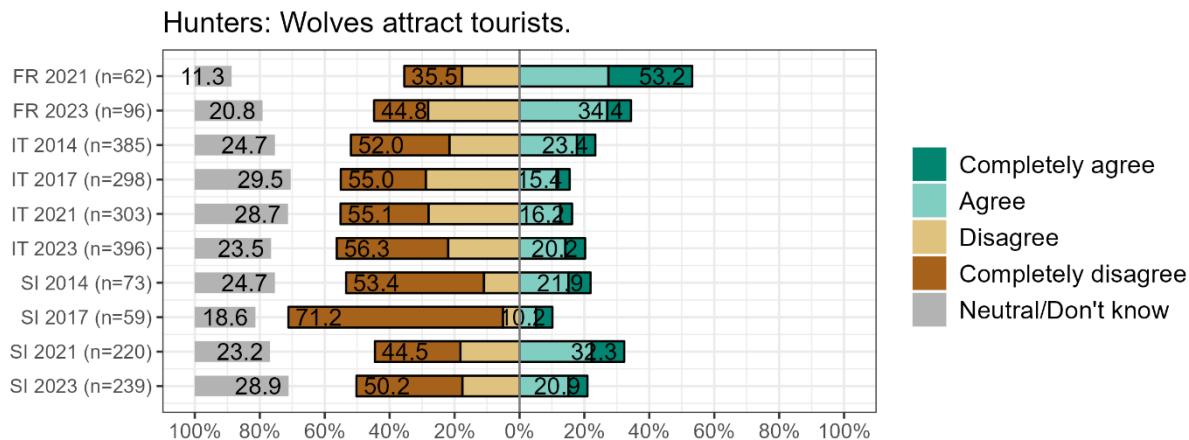


Figure 41 Wolves attract tourists: hunters

Trust in sources of information about wolves

We asked respondents how much they trust specific sources of information about wolves. General public across all countries doesn't trust media and politicians, while majority trusts biologists and foresters and veterinarians. Farmers seem to be a trusted information source for Slovenians, while in other countries opinions are divided. Hunters enjoy a high level of trust among Slovenian and Austrian respondents, while in Italy and France general public doesn't consider them as a trusted information source. French public shows a high level of trust toward information provided by environmental NGO's. Livestock breeders across France, Italy and Slovenia have the highest trust in farmers and veterinarians. In Slovenia they also tend to trust hunters. Majority of livestock breeders in France and Slovenia trusts biologists, and although Italian livestock breeders had lower trust in biologists, their trust is steadily increasing since 2014. Hunters across France, Italy and Slovenia show very low trust in information provided by politicians, media and environmental NGO's (Annex 2). All the graphs for general public and stakeholder's trust in sources of information are enclosed in the Annex 2 at the end of the report.

Comparison of the years 2021 and 2023 of the Austrian online dataset

Using a modelling approach, we found a slight improvement of the attitude of the people in Austria, which was significant ($p = 0.003$). The interpretation is not easy, since just before the questionnaire was done, culling of wolves started in several federal states and public discussion relaxed. Details are in the Annex 3.

Discussion and conclusion

The results of this study provide valuable insights into public attitudes toward wolves across Austria, France, Italy, and Slovenia over different time periods. However, it is important to understand the descriptive nature of this analysis. Differences can be real, but also a result of differences in sampling or structural differences in different samples.

Overall, we see that most respondents from the general public in France, Italy and Slovenia are either completely or moderately in favour of wolves. Despite regional differences and some opposition in specific stakeholder groups, overall support for the species remains high.

In France and Italy, public sentiment has been largely stable over time, with a consistent trend of favourable feelings toward wolves. In Slovenia a significant portion of the general public remains supportive of wolf, although support has steadily decreased since 2017. Same trend of decline in support was observed regionally within Italy, but in only 3 of the 9 core areas, in Ossola Valgrande, Piedmont Apennine, Liguria. Similar was shown for other areas within Europe. A meta-analysis of different attitude surveys towards bears and wolves (Dressel et al., 2015) shows that more positive attitudes towards a species are inversely proportional to the length of coexistence: local people were more likely to support the idea of returning large carnivores to their area, as they had no direct experience of coexistence and were not aware of the challenges that coexistence brings. Once a species has returned to an area, direct and indirect interactions with humans become more frequent, conflicts with humans increase, negatively affecting their relationship with the species (Dressel et al., 2015). This is underlined by the results of our survey, showing that majority of the public and stakeholders across countries agree that wolves cause significant damage to livestock and that livestock owners should be compensated for losses due to wolf depredation. Noticeably, however, the seven regions with the longest history of coexistence and with high pack density show both increasing (2 – Maritime Alps and Mercantour), stable (1 – Cottian Alps), and decreasing (4 - Liguria, Dinarics, Piedmont Apennine, and Northern French Alps) trends in opinion towards the species, suggesting time of coexistence alone cannot fully capture attitude trends.

Survey responses from key stakeholders - , hunters, livestock breeders, tourism workers and environmentalists - reveal important contrasts in attitudes toward wolves. Livestock breeders, across all surveyed countries, express the strongest opposition, with their views becoming more negative since the last survey in 2021. Notably, livestock breeders in France show less opposition attitudes than hunters in those countries. Fear of wolves is a key factor in shaping public and stakeholder opinions. Surprisingly, high share of Italian and French hunters exhibited higher levels of fear towards wolves (even higher than livestock breeders), a reversal of what is observed in Slovenia, where most hunters are not afraid to hike in wolf-inhabited areas. This heightened fear may contribute to broader opposition to wolf presence in France. In contrast, hunters in Italy and Slovenia have more favourable views of wolves compared to livestock breeders. Slovenian hunters, in particular, show the most positive attitudes towards wolves among hunters in all surveyed countries. This may be due to their continued active participation in large carnivores monitoring and a long-standing tradition of

prioritizing public interest over economic gains of hunting. Opposition among hunters is most pronounced in France, where 81.5% of hunters were against or completely against wolves in 2023. These findings suggest that in addition of wolf population dynamics, national and regional factors, including cultural differences and wolf management strategies, may influence stakeholders' perspectives on coexistence with wolves.

Overwhelming majority of general public's respondents across all countries agreed with the statement, "It is important to maintain wolves for future generations", indicating that the public recognises the wider importance of the wolf and the importance of its conservation. Despite their general opposition, both hunters and livestock breeders in most also showed more supportive attitudes when asked whether wolves should be maintained for future generations. While these groups may oppose wolves due to present-day conflicts and concerns about living near wolves, they still recognize the importance of conserving wolves for their ecological role and biodiversity for future generations.

Journalists in our study shared positive feelings toward wolves, however other studies (e.g. Nanni et al., 2020) showed that the information shared more frequently via social media is often sensationalist in nature. Since the media plays a significant role in shaping public attitudes, it is essential for scientists and conservation projects to collaborate with the media to ensure balanced reporting that dispels myths, reduces fear, and promotes a better understanding of wolves' ecological benefits. This may help to increase the confidence of the general public and stakeholders in the information disseminated by the media, as media proved to be among least trusted sources of information about wolves across countries. We also calculated knowledge score as the number of correct answers to the six questions about wolf biology included in the questionnaire. Overall, respondents from all countries show good knowledge about wolf biology. Among countries, knowledge was highest in France, in Italy knowledge increased notably since first LIFE WOLFALPS project, while in Slovenia it consistently grew since 2014. Data from previous research show that support for wolf conservation in general increases with knowledge, moreover knowledge about wolves was also clearly related to fear of wolves. As knowledge increased, fear of wolves decreased and the opposite (Majić Skrbinšek et al., 2015). Similar was shown for bears where respondents more knowledgeable about bears, tolerated most conflict situations and showed higher support for mitigation measures (Majić Skrbinšek et al., 2016). LIFE projects, funded by the European Union, play a crucial role in enhancing public knowledge about species through education, and community involvement initiatives.

Overall, public attitudes toward wolves remain largely positive across the surveyed countries, providing a strong foundation for continued coexistence. However, the fluctuations in support for wolves in the project countries should be viewed in the context of growing wolf population, with wolves rapidly recolonizing unoccupied areas, and the increasing prominence of anti-wolf campaigns across Europe. To maintain and strengthen this existing support for wolf conservation, especially among key stakeholder groups like hunters and livestock breeders who face more direct conflicts, it is crucial to continue implementing and refining mitigation measures. Moreover, further longitudinal surveys are recommended to track changes in attitudes over time relative to development of wolf population.

References

Dressel S., Sandström C., Ericsson G. A meta-analysis of studies on attitudes toward bears and wolves across Europe 1976-2012. 2015. *Conservation Biology*, 29(2):565-74.

<https://doi.org/10.1111/cobi.12420>

Tomaž Berce, Rok Černe, Sabrina Bertolotto, Albin Blaschka, Natalia Bragalanti, et al.. Prevention of damages caused by large carnivores in the Alps. Large Carnivores, wild ungulates and society working group (WISO) of the Alpine Convention; LIFE WolfAlps EU. 2020. (hal-04382499)

Majić Skrbinšek, A., T. Skrbinšek, U. Marinko, F. Marucco (eds.), 2015, Public attitudes toward wolves and wolf conservation in Italian and Slovenian Alps, Technical report, Project LIFE 12 NAT/IT/00080 WOLFALPS

Majić Skrbinšek, A. et al., 2016. Public attitudes, perceptions, and beliefs about bears and bearmanagement. Final report of the Action A2, project LIFE DINALP BEAR. University of Ljubljana. 262 pgs. Retrieved from www.dinalpbear.eu

Marucco, F., Reinhardt, I., Avanzinelli, E., Zimmermann, F., Manz, R., Potočnik, H., Černe, R., Rauer, G., Walter, T., Knauer, F., Chapron, G., & Duchamp, C. (2023). Transboundary Monitoring of the Wolf Alpine Population over 21 Years and Seven Countries. *Animals* : an Open Access Journal from MDPI, 13.ii

Nanni, V., Caprio, E., Bombieri, G., Schiaparelli, S., Chiorri, C., Mammola, S., Pedrini, P., & Penteriani, V., 2020. Social Media and Large Carnivores: Sharing Biased News on Attacks on Humans. *Frontiers in Ecology and Evolution*.

Annex 1: Questionnaires in English, French, German, Italian and Slovenian languages

Coordinated actions to improve wolf-human coexistence at the alpine population level



LIFE18 NAT/IT/000972



Project is co-financed by the
European Union - Programme LIFE.



ATTITUDES TOWARD WOLF IN THE ALPS

In September 2019 a LIFE+ project entitled »Coordinated actions to improve wolf-human coexistence at the alpine population level« coordinated by Parco Naturale delle Alpi Marittime in participation with other project partners in Italy, Austria, France and Slovenia. The goal of the project is to improve wolf-human coexistence at the Alpine population level by implementing coordinating actions over the entire Alpine ecosystem. **For its long-term conservation, coexistence of wolves and humans is crucial.** That is why we would like to learn more about wolf area residents' attitudes toward wolf. Knowing and understanding public opinions about different management options is necessary for its successful implementation. Furthermore, governments are obliged to respect public opinion about the topics that concerns it.

We kindly ask you to take ten minutes of your time to answer following questions. Regardless of your attitudes toward the wolf, your opinion is valuable, so we encourage you to answer all the questions. Please, send back the filled out questionnaire in the envelope enclosed. The results of the survey will be published on <https://www.lifewolfalps.eu/> in 2021.

Please answer your questions openly and do not write your name. **The questionnaire is anonymous and your answers strictly confidential.**

For further information, please contact (phone number and e-mail). We thank you in advance for your participation in the survey!

Action coordinator,
Aleksandra Majić Skrbinšek

Interviewer,
Name of the interviewer

1



PART A: We will start with general statements about your attitude toward the wolf. Please choose the response that best describes your opinion from 1 to 5.

1. Which of the following best describes your feelings toward wolf?

a) Completely against.	d) Moderately in favour
b) Moderately against.	e) Completely in favour.
c) Neither in favour nor against.	

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2. It is important to maintain wolves in IT/SL/AUS/FR for future generations.	1	2	3	4	5
3. It is unnecessary to have wolves in I/S/A/F because abundant populations already exist in other European countries.	1	2	3	4	5
4. Wolves greatly reduce ungulate populations and make hunting impossible.	1	2	3	4	5
5. Wolves mainly prey on old and sick animals and thus keep wild ungulate populations healthy.	1	2	3	4	5
6. I would tolerate wolves living in nearby forests of our municipality.	1	2	3	4	5



	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7. I would not be afraid to hike in the woods where wolves are present.	1	2	3	4	5
8. Wolves do not attack people.	1	2	3	4	5
9. Wolves attract tourists.	1	2	3	4	5
10. Wolf presence negatively impacts biodiversity of alpine meadows.	1	2	3	4	5
11. Wolf presence positively impacts biodiversity.	1	2	3	4	5

PART B: Next few questions are about general knowledge about wolf as a species. Please choose the response that you find the most appropriate or that the best describes your opinion.

1. How much does an adult wolf weigh?

a) 15-30 kg.	d) More than 60 kg.
b) 31-45 kg.	e) Not sure.
c) 46-60 kg.	



2. Wolves feed mainly on:

- a) wild ungulates such as deer and chamois.
- b) carrion.
- c) domestic animals.
- d) Not sure.

3. Wolves generally live:

- a) solitary.
- b) in pairs.
- c) in groups.
- d) Not sure.

4. Wolves have been introduced by people in IT/SL/AUS/FR.

- a) Yes.
- b) No.
- c) Not sure.

5. The wolves are naturally coming back to areas where they were once extirpated.

- a) Yes.
- b) No.
- c) Not sure.

6. Do you believe wolf numbers in IT/SL/AUS/FR is:

- a) Increasing.
- b) Decreasing.
- c) Remaining the same.
- d) Not sure.



PART C: Next statements are about wolf management. Please choose the response that you find the most appropriate or that the best describes your opinion.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	I don't know enough
1. Wolves cause abundant damages to livestock.	1	2	3	4	5	6
2. Livestock owners that lose livestock due to wolf should be compensated.	1	2	3	4	5	6
3. If a wolf killed livestock, I would agree with killing this problem animal.	1	2	3	4	5	6
4. Livestock guarding dogs are an effective measure for preventing wolf attacks on livestock.	1	2	3	4	5	6
5. Electric fences used at pastures are an effective measure for preventing wolf attacks on livestock.	1	2	3	4	5	6
6. I would agree with increasing wolf numbers in my region.	1	2	3	4	5	6
7. We already have enough wolves in my region.	1	2	3	4	5	6
8. Wolf hunts are needed in IT/SL/AUS/FR.	1	2	3	4	5	6



9. There is a lack of education and information sharing about wolves.	1	2	3	4	5	6
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PART D: Please, share your opinion about information sources.

1. How much you trust following sources of information about wolves?

	Do not trust at all	Do not trust	I cannot decide	Trust	Completely trust
Media	1	2	3	4	5
Biologists	1	2	3	4	5
Hunters	1	2	3	4	5
Foresters	1	2	3	4	5
Veterinaries	1	2	3	4	5
Livestock breeders	1	2	3	4	5
Environmental NGOs	1	2	3	4	5
Ministry responsible for nature preservation	1	2	3	4	5
Ministry responsible for agriculture	1	2	3	4	5
Politicians	1	2	3	4	5

2. Have you ever heard of the project "Coordinated actions to improve wolf-human coexistence at the alpine population level" (short name WOLFALPS EU)?

a) Yes.

b) No.



3. If your answer is »Yes«, how did you hear about the project (*multiple answers possible*)?

- a) Media.
- b) Social media.
- c) Project webpage.
- d) Personal communication.
- e) Attended an event organized by the project.
- f) Participated in the project activities.
- g) I don't remember..
- h) Other: _____

PART E: We are interested also in your experience with wolves.

1. Have you ever seen live wolf in the wild?

- a) Yes.
- b) No.

2. Have you ever seen a wolf in captivity?

- a) Yes.
- b) No.

3. Have you ever had a damage caused by a wolf?

- a) Yes.
- b) No.

PART F: To finish, we would like to know some information about you solely for the purpose of statistical analysis.

I. Gender: a) Female. b) Male.

II. Age: _____ years.



III. ZIP code: _____

IV. Education:

- a) Unfinished elementary school.
- c) Finished highschool.
- b) Finished elementary school.
- d) Finished higher education.

V. Are you a member of environmental non-governmental organization?

- a) Yes.
- b) No.

VI. If yes, which organization(s): _____

VII. What is your profession?

- a) Tourism sector.
- e) Forest management.
- b) Education.
- f) Natural science research.
- c) Professional farmer.
- g) Media (journalism)
- d) Wildlife management.
- h) Other: _____

VIII. If you are a pet owner, what type of pets do you have? (multiple answers)

- a) Dog.
- c) Other: _____
- b) Cat.
- d) I don't have pets.

IX. Are you a hunter?

- a) Yes.
- b) No.



X. **If you are a livestock owner, what type of livestock do you have? (multiple answers)**

a) Sheep. d) Horses.
b) Goats. e) Other: _____
c) Cows. f) I don't have livestock.

XI. If you are a livestock owner, do you use any specific protection measures to prevent large carnivore attacks? (multiple answers)

a) Yes, I use electric fence/nets.
b) Yes, I use livestock guarding dogs.
c) Yes, shepherd is guarding my livestock
d) Yes, other (please describe): _____
e) No.

Thank you very much for your cooperation!

Your opinion will importantly contribute to a better wolf management!



Any other comments on this subject or with respect of the questionnaire:

Project coordinator:



Action coordinator for IT/SL/AUS/FR:



**Actions coordonnées pour améliorer la coexistence entre les activités humaines et
le loup à l'échelle de l'arc alpin**



Projet cofinancé par l'Union Européenne - Programme LIFE



PARTIE A : Nous commencerons avec les aspects généraux concernant votre attitude envers le loup. Merci de choisir les réponses qui décrivent le mieux votre opinion sur une échelle de 1 à 5.

1. Parmi les propositions suivantes, laquelle décrit le mieux vos sentiments à l'égard de la présence du loup en France ?

a) complètement contre
 b) modérément contre
 c) ni pour ni contre
 d) modérément en faveur
 e) complètement en faveur

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Entièrement d'accord
2. Il est important de maintenir la présence du loup en France pour les générations futures.	1	2	3	4	5
3. Il n'est pas nécessaire d'avoir des loups en France car des populations abondantes existent déjà dans d'autres pays d'Europe.	1	2	3	4	5
4. Les loups réduisent fortement les populations d'ongulés et rendent la chasse impossible.	1	2	3	4	5
5. Les loups se nourrissent principalement d'animaux vieux et malades et maintiennent ainsi les populations d'ongulés sauvages en bonne santé.	1	2	3	4	5
6. Je pourrais tolérer que des loups vivent dans les bois avoisinants ma commune.	1	2	3	4	5
7. Je n'ai pas peur de randonner dans les forêts où les loups sont présents.	1	2	3	4	5
8. Les loups n'attaquent pas les gens.	1	2	3	4	5
9. La thématique du loup attire les touristes.	1	2	3	4	5
10. La présence du loup impacte négativement la biodiversité des prairies alpines.	1	2	3	4	5
11. La présence du loup a un impact positif sur la biodiversité en général.	1	2	3	4	5



PARTIE B : Les questions suivantes concernent vos connaissances générales sur le loup. Merci de choisir la réponse que vous trouvez la plus appropriée ou celle qui décrit le mieux vos connaissances et votre opinion (**une seule réponse possible par question**).

1. Combien pèse un loup gris adulte (loup européen des Alpes) ?

- a) 15-30 kg
- b) 31-45 kg
- c) 46-60 kg
- d) plus de 60 kg
- e) je ne sais pas

2. Les loups se nourrissent principalement :

- a) d'ongulés sauvages comme le cerf ou le chamois
- b) de cadavres
- c) d'animaux domestiques
- d) je ne sais pas

3. Les loups vivent généralement :

- a) en solitaire
- b) en couple
- c) en meute
- d) je ne sais pas

4. Les loups ont été réintroduits en France :

- a) oui
- b) non
- c) je ne sais pas

5. Les loups sont revenus naturellement dans des zones d'où ils avaient été éradiqués autrefois :

- a) oui
- b) non
- c) je ne sais pas

6. De manière générale, pensez-vous que le nombre de loups en France :

- a) augmente
- b) diminue
- c) est stable
- d) je ne sais pas



PARTIE C : Les prochaines questions concernent la gestion du loup. Merci de choisir pour chacune la réponse qui décrit le mieux vos connaissances et votre opinion.

	Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Entièrement d'accord	Je ne dispose pas de suffisamment d'informations
1. Les loups causent d'importants dommages aux animaux d'élevage.	1	2	3	4	5	6
2. Les propriétaires d'animaux d'élevage qui perdent leurs animaux à cause du loup doivent être indemnisés.	1	2	3	4	5	6
3. Si un loup tuait un animal d'élevage, je serais d'accord avec le fait de tuer cet animal posant problème.	1	2	3	4	5	6
4. Les chiens de protection sont une mesure efficace de prévention pour éviter les attaques de loup sur le bétail.	1	2	3	4	5	6
5. Les clôtures électriques utilisées sur les pâtures sont une mesure efficace de prévention pour éviter les attaques de loup sur le bétail.	1	2	3	4	5	6
6. Je serais d'accord pour voir augmenter le nombre de loups dans ma région.	1	2	3	4	5	6
7. Nous avons déjà assez de loups dans ma région.	1	2	3	4	5	6
8. La régulation de la population de loups en France par la chasse est nécessaire.	1	2	3	4	5	6
9. Il y a un manque d'éducation et d'informations partagées sur les loups.	1	2	3	4	5	6



PARTIE D : Merci de partager votre opinion sur ces différentes sources d'information.

1. A quel point faites-vous confiance aux sources d'informations suivantes sur le sujet du loup ?

	Pas confiance du tout	Pas confiance	Neutre	Confiance	Entièrement confiance
Médias	1	2	3	4	5
Biologistes	1	2	3	4	5
Chasseurs	1	2	3	4	5
Forestiers	1	2	3	4	5
Vétérinaires	1	2	3	4	5
Eleveurs	1	2	3	4	5
Associations de protection de la nature	1	2	3	4	5
Ministère de la Transition Ecologique	1	2	3	4	5
Ministère de l'Agriculture et de l'Alimentation	1	2	3	4	5
Elus	1	2	3	4	5

2. Avez-vous déjà entendu parler du projet LIFE WOLFALPS EU « Actions coordonnées pour améliorer la coexistence entre les activités humaines et le loup à l'échelle de l'arc alpin » ?

3. Si votre réponse est « Oui », comment avez-vous entendu parler du projet (plusieurs réponses possibles) ?

- a) médias
- b) réseaux sociaux
- c) site internet du projet
- d) communication personnelle
- e) via un événement organisé par le projet
- f) participation à une activité du projet
- g) je ne me souviens pas
- h) autres :



PARTIE E : Nous sommes aussi intéressés par vos expériences avec les loups.

PARTIE F : Pour finir, nous aimerais avoir des informations vous concernant à des fins d'analyses statistiques.

I. **Vous êtes :** a) une femme b) un homme

II. **Âge :** _____ ans

III. **Code postal :** _____

IV. **Niveau d'études :**

a) école élémentaire c) baccalauréat

b) brevet des collèges ou autres d) enseignement supérieur
diplômes intermédiaires

V. **Etes-vous membre d'une association de protection de la nature ?**

a) oui b) non

VI. **Si oui, laquelle :** _____

VII. **Quel est votre profession ?**

a) secteur touristique e) gestionnaire forestier

b) éducation, enseignement f) chercheur en sciences naturelles

c) éleveur professionnel g) autre : _____

d) gestionnaire de faune sauvage h) journaliste



VIII. Si vous avez des animaux - de compagnie, lesquels avez-vous ? (plusieurs réponses possibles)

a) chien	c) autre : _____
b) chat	d) je n'ai pas d'animaux de compagnie

IX. Pratiquez-vous la chasse ?

a) oui	b) non
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X. Si vous avez des animaux d'élevage, lesquels avez-vous ? (plusieurs réponses possibles)

a) ovins	d) équins
b) caprins	e) autre : _____
c) bovins	f) je n'ai pas d'animaux d'élevage

XI. Si vous avez des animaux d'élevage, utilisez-vous des mesures de protection spécifiques pour éviter les attaques de grands carnivores ? (plusieurs réponses possibles)

a) oui, j'utilise des clôtures électriques/filets
b) oui, j'utilise des chiens de protection de troupeaux.
c) oui, un berger garde mes animaux
d) oui, autre (merci de décrire) _____
e) non

XII. En cas d'attaque sur vos troupeaux, faites-vous appel au dispositif d'indemnisation mis en place au niveau national ?

a) oui	b) non	c) je ne suis pas concerné
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XIII. Si non, précisez pourquoi : _____

Nous vous remercions beaucoup pour votre coopération !



Autres commentaires sur le sujet ou en ce qui concerne le questionnaire :

Koordinierte Maßnahmen zur Verbesserung der Koexistenz von Wolf und Mensch auf Populationsebene in den Alpen



Das Projekt wird vom LIFE Programm der
Europäischen Union gefördert.



EINSTELLUNGEN ZU WÖLFEN IN DEN ALPEN

Im September 2019 wurde ein LIFE+ Projekt mit dem Titel "Koordinierte Maßnahmen zur Verbesserung der Koexistenz von Wolf und Mensch auf Populationsebene in den Alpen" unter der Leitung des Parco Naturale delle Alpi Marittime (Naturpark Seealpen im Piemont, Italien) in Zusammenarbeit mit Projektpartnern in Italien, Österreich, Frankreich und Slowenien gestartet. Ziel des Projekts ist es, die Koexistenz von Wolf und Mensch in den Alpen zu verbessern, indem koordinierte Maßnahmen im gesamten alpinen Raum und angrenzenden Gebieten durchgeführt werden. Deshalb möchten wir mehr über die Einstellung der BewohnerInnen zum Wolf erfahren. Die öffentliche Meinung zu verschiedenen Managementoptionen zu kennen und zu verstehen, ist für deren erfolgreiche Umsetzung notwendig. Darüber hinaus können so öffentliche Meinungen für Regierungen und Entscheidungsträger sichtbar gemacht werden.

Wir bitten Sie, sich 15 Minuten Zeit zu nehmen, um die folgenden Fragen zu beantworten. Unabhängig von Ihrer Einstellung zum Wolf ist Ihre Meinung wertvoll, daher bitten wir Sie, alle Fragen zu beantworten. Sollten Sie eine Frage nicht beantworten wollen, können Sie diese einfach überspringen. Die Ergebnisse der Umfrage werden im Jahr 2021 auf <https://www.lifewolfalps.eu/> veröffentlicht.

Bitte beantworten Sie die Fragen offen und ehrlich. Der Fragebogen ist anonym und Ihre Antworten streng vertraulich. Für weitere Informationen wenden Sie sich bitte an Theresa Walter an der Veterinärmedizinischen Universität Wien (+43125077 7213, theresa.walter@vetmeduni.ac.at).

Wir danken Ihnen im Voraus für Ihre Teilnahme an der Umfrage!



Datenschutzrechtliche Hinweise:

Der Schutz Ihrer persönlichen **Daten** ist uns bei dieser **Befragung** ein besonderes Anliegen. Ihre **Daten** werden daher ausschließlich auf Grundlage der gesetzlichen Bestimmungen (§7 DSG, Art. 89 GDPR und FOG) erhoben und verarbeitet.

Die Daten können von den ProjektmitarbeiterInnen im Projekt **LIFE WolfAlps EU** eingesehen werden. Die Daten werden nicht an Dritte weitergegeben. Die erhobenen **Daten** dürfen gemäß Art 89 Abs 1 DSGVO grundsätzlich unbeschränkt gespeichert werden.

In den Umfrageantworten werden keine persönlichen **Informationen** über Sie gespeichert, es sei denn, in einer Frage wird explizit danach gefragt. Angegebene personenbezogene **Daten** werden pseudonymisiert und in aggregierter Form verarbeitet, sodass ein Rückschluss auf eine konkrete Person nicht möglich ist. **IP-Adressen** werden nicht gespeichert.

Als **Betroffener** der Verarbeitung haben Sie grundsätzlich das **Recht auf Auskunft, Berichtigung, Löschung, Einschränkung der Verarbeitung, Datenübertragung und Widerspruch**. Der **Verantwortliche** kann hierfür zusätzliche **Informationen** zum Zweck der **Identifizierung** verlangen. Ist eine **Identifizierung** nachweislich nicht möglich kann der **Verantwortliche** dem **Begehr** nicht nachkommen. Durch den **Widerruf** der **Einwilligung** wird die **Rechtmäßigkeit** der aufgrund der **Einwilligung** bis zum **Widerruf** erfolgten Verarbeitung der personenbezogenen **Daten** nicht berührt. Bitte beachten Sie jedoch, dass personenbezogene **Daten** im Sinne von **Forschungsmaterial** gemäß § 2b Abs 6 FOG weiterhin verwendet werden können!

Für grundsätzliche juristische Fragen im Zusammenhang mit der DSGVO/DSG und FOG wenden Sie sich an den/die **Datenschutzbeauftragte/n** der **Vetmeduni Vienna** (datenschutz@vetmeduni.ac.at). Zudem besteht das **Recht** der **Beschwerde** bei der **Datenschutzbehörde** (dsb@dsb.gv.at).



TEIL A: Wir beginnen mit allgemeinen Aussagen zu Ihrer Einstellung gegenüber dem Wolf. Bitte wählen Sie die Antwort, die Ihre Meinung am besten beschreibt, von 1 bis 5.

1. Was beschreibt am besten Ihre grundsätzliche Einstellung zum Wolf? Ich bin...

a) Völlig dagegen.	d) Moderate dafür.
b) Moderate dagegen.	e) Völlig dafür.
c) Nicht dafür und nicht dagegen.	

	Stimme überhaupt nicht zu	Stimme eher nicht zu	Neutral, weiß nicht	Stimme eher zu	Stimme voll und ganz zu
2. Es ist wichtig, Wölfe in Österreich für zukünftige Generationen zu erhalten.	1	2	3	4	5
3. Es ist unnötig, Wölfe in Österreich zu haben, da es in anderen europäischen Ländern bereits große Populationen gibt.	1	2	3	4	5
4. Wölfe reduzieren die wildlebenden Huftierpopulationen stark und machen die Jagd unmöglich.	1	2	3	4	5



	Stimme überhaupt nicht zu	Stimme nicht zu	Neutral	Stimme zu	Stimme stark zu (ausdrücklich zu)
5. Wölfe erbeuten vor allem alte und kranke Tiere und halten so die Bestände wildlebender Huftiere gesund.	1	2	3	4	5
6. Ich kann damit leben, dass Wölfe in den Wäldern um unsere Ortschaft leben.	1	2	3	4	5
7. Ich würde mich nicht scheuen, in Wäldern zu wandern, in denen es Wölfe gibt.	1	2	3	4	5
8. Wölfe attackieren keine Menschen.	1	2	3	4	5
9. Wölfe sind für den Tourismus attraktiv.	1	2	3	4	5
10. Die Anwesenheit von Wölfen wirkt sich negativ auf die biologische Vielfalt von Almwiesen aus.	1	2	3	4	5
11. Die Anwesenheit von Wölfen wirkt sich positiv auf die biologische Vielfalt aus.	1	2	3	4	5



TEIL B: Bei den nächsten Fragen geht es um allgemeines Wissen über den Wolf als Tierart. Bitte wählen Sie die Antwort, die Sie am passendsten finden oder die Ihre Meinung am besten beschreibt.

1. Wie schwer ist ein erwachsener Wolf?

- a) 15-30 kg.
- b) 31-45 kg.
- c) 46-60 kg.
- d) Mehr als 60 kg.
- e) Nicht sicher.

2. Wölfe fressen hauptsächlich:

- a) wildlebende Huftiere wie Rehe, Rotwild und Wildschweine.
- b) Aas.
- c) Nutztiere.
- d) Nicht sicher.

3. Wölfe leben meistens:

- a) als Einzelgänger.
- b) paarweise.
- c) in Rudeln.
- d) Nicht sicher.

4. Wölfe wurden in Österreich vom Menschen ausgesetzt.

- a) Ja.
- b) Nein.
- c) Nicht sicher.



5. Die Wölfe kommen auf natürliche Weise in Gebiete zurück, in denen sie einst ausgerottet waren.

a) Ja.
b) Nein.
c) Nicht sicher.
d) Nicht sicher.

6. Glauben Sie, dass die Anzahl der Wölfe in Österreich:

a) ansteigt.
b) abnimmt.
c) gleich bleibt.
d) Nicht sicher.

TEIL C: Die nächsten Aussagen beziehen sich auf das Wolfsmanagement. Bitte wählen Sie die Antwort, die Sie am passendsten finden oder die Ihre Meinung am besten beschreibt.

	Stimme überhaupt nicht zu	Stimme eher nicht zu	Neutral, weiß nicht	Stimme eher zu	Stimme voll und ganz zu	Ich weiß es nicht genau
1. Wölfe verursachen häufig Schäden an Nutztierbeständen.	1	2	3	4	5	6
2. NutztierhalterInnen, die durch den Wolf Nutztiere verlieren, sollten entschädigt werden.	1	2	3	4	5	6
3. Wenn ein Wolf Nutztiere tötet, wäre ich damit einverstanden, dieses Tier zu töten.	1	2	3	4	5	6



	Stimme überhaupt nicht zu	Stimme eher nicht zu	Neutral, weiß nicht	Stimme eher zu	Stimme voll und ganz zu	Ich weiß es nicht genau
4. Herdenschutzhunde sind eine effektive Maßnahme, um Wolfsangriffe auf Nutztiere zu verhindern.	1	2	3	4	5	6
5. Elektrozäune auf Weiden sind eine effektive Maßnahme, um Wolfsangriffe auf Nutztiere zu verhindern.	1	2	3	4	5	6
6. Ich würde einer Zunahme der Wolfsanzahl in meiner Region zustimmen.	1	2	3	4	5	6
7. In meiner Region leben schon genügend Wölfe.	1	2	3	4	5	6
8. Die Jagd auf den Wolf ist in Österreich notwendig.	1	2	3	4	5	6
9. Es gibt einen Mangel an Aufklärung und Informationsaustausch über Wölfe.	1	2	3	4	5	6



TEIL D: Bitte teilen Sie uns Ihre Meinung über unterschiedliche Informationsquellen mit.

1. Wie sehr vertrauen Sie den folgenden Informationsquellen beim Thema Wölfe?

	Vertraue ich überhaupt nicht	Vertraue ich nicht	Kann mich nicht entscheiden	Vertraue ich	Vertraue ich vollkommen
Medien	1	2	3	4	5
BiologInnen	1	2	3	4	5
JägerInnen	1	2	3	4	5
FörsterInnen	1	2	3	4	5
VeterinärmedizinerInnen	1	2	3	4	5
Umweltorganisationen	1	2	3	4	5
Umweltministerium	1	2	3	4	5
Landwirtschaftsministerium	1	2	3	4	5
LandwirtInnen	1	2	3	4	5
PolitikerInnen	1	2	3	4	5

2. Haben Sie schon einmal von dem Projekt "Koordinierte Aktionen zur Verbesserung der Koexistenz von Wolf und Mensch auf Populationsebene in den Alpen" (Kurzname WOLFALPS EU) gehört?

a) Ja.

b) Nein.



3. Wenn Ihre Antwort "Ja" lautet, wie haben Sie von dem Projekt erfahren (Mehrfachnennungen möglich)?

- a) Medien.
- b) Soziale Medien.
- c) Homepage des Projektes.
- d) Persönliche Kommunikation.
- e) An einer vom Projekt organisierten Veranstaltung teilgenommen.
- f) An Projektaktivitäten teilgenommen.
- g) Ich erinnere mich nicht mehr.
- h) Andere: _____

TEIL E: Wir sind auch an Ihren Erfahrungen mit Wölfen interessiert.

1. Haben Sie jemals einen lebenden Wolf in freier Wildbahn gesehen?

- a) Ja.
- b) Nein.

2. Haben Sie jemals einen Wolf in Gefangenschaft gesehen?

- a) Ja.
- b) Nein.

3. Hatten Sie jemals einen Schaden, der durch einen Wolf verursacht wurde?

- a) Ja.
- b) Nein.



TEIL F: Abschließend möchten wir ausschließlich zum Zweck der statistischen Auswertung einige Informationen über Sie wissen.

I. Geschlecht: a) Weiblich. b) Männlich.

II. Alter: _____ Jahre.

III. Politischer Bezirk: _____

IV. Höchste abgeschlossene Ausbildung:

a) keinen Schulabschluss. c) Matura.

b) Hauptschulabschluss, Lehrabschluss d) Universitäts- oder
Fachhochschulabschluss.

V. Sind Sie Mitglied einer Umweltorganisation?

a) Ja.

b) Nein.

VI. Wenn ja, bei welcher/n Organisation/en: _____

VII. In welchem Bereich arbeiten Sie?

a) Tourismus. e) Forstwirtschaft.

b) Bildung. f) Naturwissenschaftliche Forschung.

c) Landwirtin im Haupterwerb. g) Medien (Journalismus)

d) Wildtiermanagement. h) Andere: _____



VIII. Wenn Sie ein Haustier/Haustiere haben, welche Tiere halten Sie?

IX. Sind Sie JägerIn?

a) Ja. b) Nein.

X. Wenn Sie Nutztiere haben, welche Tiere halten Sie?

XI. Wenn Sie Nutztiere haben, wenden Sie spezielle Schutzmaßnahmen an, um Angriffe von großen Beutegreifern zu verhindern?

- a) Ja, ich verwende Elektrozäune und/oder -netze.
- b) Ja, ich verwende Herdenschutzhunde.
- c) Ja, ein/e Hirte/in ist bei meinen Nutztieren.
- d) Ja, andere Maßnahmen (bitte beschreiben Sie diese):

e) Nein.



Wenn Sie weitere Kommentare zum Thema dieses Fragebogens oder zum Wolf im Allgemeinen haben, geben Sie diese bitte hier ein. Andernfalls klicken Sie bitte auf „Letzte Seite“.

Herzlichen Dank für Ihre Unterstützung!

Ihre Meinung ist ein wichtiger Beitrag für ein konfliktarmes Wolfsmanagement.

Projektkoordination:

Action-Koordination für AT:



10

LIFE18 NAT/IT/000972

**Azioni coordinate per migliorare la coesistenza fra lupo e attività umane
a livello di popolazione alpina**



OPINIONI E ATTEGGIAMENTI NEI CONFRONTI DEL LUPO SULLE ALPI

Nel settembre 2019 è partito il progetto LIFE+ intitolato "Azioni coordinate per migliorare la coesistenza fra lupo e attività umane a livello di popolazione alpina" coordinato dalle Aree Protette delle Alpi Marittime e con la partecipazione di 19 altri partner di progetto Italiani, Austriaci, Francesi e Sloveni. Il progetto ha l'obiettivo di supportare la coesistenza tra la presenza del lupo e le attività economiche impattate, implementando azioni coordinate su tutto l'ecosistema alpino. La coesistenza tra lupi e attività economiche è un aspetto fondamentale per il successo degli obiettivi di conservazione sul lungo periodo. Ecco perché vorremmo conoscere meglio quali sono le opinioni della popolazione residente nelle aree coinvolte nei confronti del lupo. Per un'efficace gestione della specie è infatti indispensabile conoscere e comprendere le opinioni dell'opinione pubblica in merito. Le Amministrazioni sono infatti tenute a tenere in considerazione le opinioni dell'opinione pubblica rispetto alle questioni che la riguardano.

Le chiediamo cortesemente di dedicare dieci minuti del Suo tempo per rispondere alle seguenti domande. A prescindere dalle opinioni e atteggiamenti personali nei confronti del lupo, il Suo parere è importante. La invitiamo pertanto a completare tutte le domande. I risultati del sondaggio saranno pubblicati su <https://www.lifewolfalps.eu/> a fine 2021.

La preghiamo di rispondere alle domande in modo aperto e sincero, senza scrivere il suo nome. Il questionario è anonimo e le risposte strettamente confidenziali.

Per maggiori informazioni si prega di contattare *Valentina Ruco* (email: valentinaruco@gmail.com). La ringraziamo in anticipo per la vostra partecipazione a questo sondaggio!

Coordinatrice dell'azione di progetto,
Aleksandra Majić Skrbinšek

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PARTE A: Inizieremo con alcune affermazioni generali sul suo atteggiamento nei confronti del lupo. Scelga la risposta che meglio descrive la sua opinione su una scala da 1 a 5.

1. Quale delle seguenti affermazioni descrive meglio la sua opinione personale nei confronti del lupo?

a) Non mi piace per niente.
 b) Non mi piace.
 c) Mi è indifferente.
 d) Mi piace.
 e) Mi piace molto.

	Per niente d'accordo	In disaccordo	Indifferente/ Non so	D'accordo	Pienamente d'accordo
2. È importante conservare il lupo in Italia per le generazioni future.	1	2	3	4	5
3. Non è necessario conservare i lupi in Italia perché popolazioni abbondanti esistono già in altri Paesi europei.	1	2	3	4	5
4. I lupi riducono notevolmente le popolazioni di ungulati selvatici rendendo impossibile la caccia.	1	2	3	4	5
5. I lupi predano principalmente animali vecchi e malati mantenendo sane le popolazioni di ungulati selvatici.	1	2	3	4	5
6. Sono disposto/a a tollerare la presenza del lupo sul territorio del mio Comune.	1	2	3	4	5
7. Non ho paura di camminare nei boschi dove sono presenti i lupi.	1	2	3	4	5
8. I lupi non attaccano le persone.	1	2	3	4	5
9. I lupi attraggono i turisti.	1	2	3	4	5
10. La presenza del lupo ha un impatto negativo sulla biodiversità dei pascoli alpini.	1	2	3	4	5
11. La presenza del lupo ha effetti positivi sulla biodiversità.	1	2	3	4	5

PARTE B: Le prossime domande riguardano la sua conoscenza generale del lupo. Per favore scelga la risposta che le sembra più appropriata o che descrive meglio la sua opinione.

1. Quanto pesa un lupo adulto?

a) 15-30 kg.	d) Più di 60 kg.
b) 31-45 kg.	e) Non so.
c) 46-60 kg.	

2. I lupi si cibano principalmente di:

a) Ungulati selvatici come caprioli e camosci.	c) Animali domestici.
b) Carcasse di animali.	d) Non so.

3. I lupi generalmente vivono:

a) Solitari.	c) In branco.
b) In coppia.	d) Non so.

4. I lupi sono stati reintrodotti in Italia.

a) Sì.	b) No.	c) Non so.
--------	--------	------------

5. I lupi sono tornati naturalmente nelle zone da cui sono stati eliminati in passato.

a) Sì.	b) No.	c) Non so.
--------	--------	------------

6. Pensa che il numero di lupi in Italia stia:

a) Aumentando.	c) Rimanendo stabile.
b) Diminuendo.	d) Non so.

PARTE C: Le seguenti domande e dichiarazioni si riferiscono alla gestione del lupo. Per favore scelga la risposta che meglio riflette la sua opinione o punto di vista.

	Per niente d'accordo	In disaccordo	Indifferente / Non so	D'accordo	Pienamente d'accordo	Non ne so abbastanza
1. I lupi causano ingenti danni al bestiame.	1	2	3	4	5	6
2. Gli allevatori che subiscono perdite al bestiame causate dal lupo devono ricevere un rimborso.	1	2	3	4	5	6
3. Sono favorevole all'abbattimento del lupo che uccide il bestiame.	1	2	3	4	5	6
4. I cani da guardia sono una misura efficace per prevenire gli attacchi al bestiame.	1	2	3	4	5	6
5. Le recinzioni elettriche sono una misura efficace per prevenire gli attacchi al bestiame.	1	2	3	4	5	6
6. Non ho niente in contrario a un aumento di lupi nella mia Regione/Provincia.	1	2	3	4	5	6
7. Ci sono già abbastanza lupi nella nostra Regione/Provincia.	1	2	3	4	5	6
8. Si deve autorizzare la caccia al lupo in Italia.	1	2	3	4	5	6
9. C'è una mancanza di educazione e condivisione di informazioni sul lupo.	1	2	3	4	5	6

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PARTE D: Per favore, ci dia la sua opinione sulle sue fonti d'informazione.

1. Quanta fiducia ha nelle seguenti fonti d'informazione sul lupo?

	Nessuna fiducia	Poca fiducia	Non so	Fiducia	Totale fiducia
Media	1	2	3	4	5
Biologi	1	2	3	4	5
Cacciatori	1	2	3	4	5
Forestali	1	2	3	4	5
Veterinari	1	2	3	4	5
Allevatori	1	2	3	4	5
Associazioni ambientaliste	1	2	3	4	5
Ministero dell'Ambiente e della Tutela del Territorio	1	2	3	4	5
Ministero delle Politiche Agricole Alimentari e Forestali	1	2	3	4	5
Amministrazioni pubbliche es. Province, Regioni	1	2	3	4	5
Politici	1	2	3	4	5

2. Ha mai sentito parlare del progetto "Azioni coordinate per migliorare la coesistenza fra lupo e attività umane a livello di popolazione alpina" (acronimo LIFE WOLFALPS EU)?

a) Sí. b) No.

3. Se »Sì«, da quale fonte ha saputo del progetto (è possibile segnare più opzioni)?

a) Media.
b) Social media.
c) Pagina web del progetto.
d) Comunicazione personale.
e) Partecipazione a un evento organizzato dal Progetto.
f) Partecipazione al Progetto.
g) Non mi ricordo.
h) Altro: _____

PARTE E: Siamo interessati anche alle sue esperienze con i lupi.

1. Ha mai visto un lupo in natura?

a) Si. b) No.

2. Ha mai visto un lupo in cattività?

a) Si b) No

3. Ha mai avuto un danno causato dal lupo?

a) Si b) No

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PARTE F: Per finire, le chiediamo alcune informazioni personali per le analisi statistiche.

I. Sesso: a) Donna. b) Uomo.

II. Età: _____ anni.

III. Comune di residenza _____

IV. Provincia _____

V. Titolo di studio:

a) Nessuno. d) Diploma.
 b) Scuole elementari. e) Laurea.
 c) Scuole medie.

VI. Lei è socio di qualche associazione ambientalista?

a) Sì. b) No.

VII. Se "Sì", di quale?: _____

VIII. Qual è la sua professione?

a) Settore turistico. f) Ricercatore nell'ambito delle scienze
 b) Educazione. naturali.
 c) Allevatore professionista. g) Altro: _____
 d) Gestione della fauna selvatica.
 e) Gestione forestale.

IX. Se lei ha animali da compagnia, di che tipo sono?

a) Cane. c) Altro: _____
 b) Gatto. d) Non ho animali da compagnia.

X. Lei è un cacciatore / una cacciatrice?

a) Sì. b) No.

XI. Se lei è un allevatore / un'allevatrice, che tipo di bestiame alleva?

a) Ovini. d) Equini.
 b) Caprini. e) Altro: _____
 c) Bovini. f) Non sono un allevatore / un'allevatrice.

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XII. Se lei è un allevatore/un'allevatrice, usa qualche misura preventiva specificatamente contro gli attacchi da grandi carnivori?

a) Sì, uso recinti/reti elettrificati.
b) Sì, uso cani da guardiana.
c) Sì, il pastore custodisce il mio bestiame.
d) Sì, altro (per favore specificare): _____
e) No.

Grazie per la sua preziosa collaborazione: la sua opinione sarà un importante contributo per una migliore gestione del lupo!

Eventuali altri commenti su questo argomento o rispetto al questionario:

Coordinatore di progetto:



Are Protette

Alpi Marittime

LIFE18 NAT/IT/000972



Progetto co-finanziato
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Projekt izvajamo s podporo finančnega
mehanizma Evropske komisije LIFE.



Spoštovanil

Skupaj s partnerji iz Avstrije, Italije in Francije izvajamo projekt imenovan "**Izvajanje usklajenih aktivnosti za izboljšanje sobivanja z volkovi na območju Alp**" (kratko ime LIFE **WolfAlps EU**). Cilj projekta je lajšanje sobivanja ljudi in volkov na evropski in pan-alpski ravni prek zmanjšanja napadov volka na domače živali, vzpostavite intervencijskih ukrepov na gorskih pašnikih, razvoja in spodbujanja ekoturizma, in priprave strategij za upravljanje z vrsto ter vzpostavite dobrih praks, ki bodo uskladile aktivnosti ljudi s prisotnostjo volka.

Za dolgoročno ohranitev volka v Alpah je uspešno sobivanje z ljudmi ključnega pomena. Vse to, pa zahteva dobro poznavanje in razumevanje odnosa lokalnih prebivalcev do volka in različnih upravljavskih strategij. Zato ste vi in mnogi drugi odrasli prebivalci Slovenije vabljeni k sodelovanju v raziskavi o odnosu javnosti do volka in upravljanju s populacijo. Prosimo, da čim bolj v celoti odgovorite na vsa vprašanja in nam izpolnjen vprašalnik v priloženi kuverti s plačano poštnino čim prej vrnete.

Vaše sodelovanje pri izpolnjevanju vprašalnika je popolnoma anonimno, vaši odgovori bodo za namene analize združeni z odgovori drugih.

Če imate kakšnakoli vprašanja o raziskavi ali bi radi izvedeli kaj več o projektu, me lahko kontaktirate na: 01/ 320 3336 (med delavniki, 10:00–14:00) ali na meta.mavec@gmail.com. Rezultati raziskave bodo objavljeni na spletni strani projekta: <https://www.lifewolfalps.eu/> po avgustu 2021.

Za vaše sodelovanje se vam že vnaprej najlepše zahvaljujemo!

S spoštovanjem,
Meta Mavec, sodelavka na projektu
Biotehniška fakulteta, Univerza v Ljubljani



DEL A: Vprašalnik bomo začeli s splošnimi vprašanimi vprašanji in izjavami o vašem odnosu do volka. Prosimo, da med ponujenimi odgovori obkrožite tistega, ki najbolje odraža vaše stališče.

1. Kaj od spodaj naštetege najbolje opiše vaše stališče do volka?

a) Popolnoma odklonilno.	d) Naklonjeno.
b) Odklonino.	e) Popolnoma naklonjeno.
c) Ne morem se opredeliti.	

	Nikakor se ne strinjam	Deloma se ne strinjam	Ne morem se opredeliti	Deloma se strinjam	Popolnoma se strinjam
2. Volka je v Sloveniji pomembno ohraniti za prihodnje generacije.	1	2	3	4	5
3. Volka v Sloveniji ni potrebno ohraniti za prihodnje generacije, ker živi drugod po Evropi.	1	2	3	4	5
4. Volkovi močno zmanjšujejo število parklarjev (srnjadi, jelenjadi, kozorogov in gamsov) ter s tem onemogočajo lov na njih.	1	2	3	4	5
5. Volkovi večinoma plenijo stare in bolne živali in tako ohranljajo zdrave populacije parklarjev.	1	2	3	4	5
6. Prisotnost volka v gozdovih svoje okolice bi sprejel/a brez težav.	1	2	3	4	5



	Nikakor se ne strinjam	Deloma se ne strinjam	Ne morem se opredeliti	Deloma se strinjam	Popolnoma se strinjam
7. Ni ne strah sprehajati se po gozdovih, kjer so prisotni tudi volkovi.	1	2	3	4	5
8. Volkovi ne napadajo ljudi.	1	2	3	4	5
9. Volkovi privlačijo turiste.	1	2	3	4	5
10. Prisotnost volkov negativno vpliva na biodiverzitet alpskih travnikov.	1	2	3	4	5
11. Prisotnost volkov pozitivno vpliva na biodiverzitet.	1	2	3	4	5

DEL B: V nadaljevanju je nekaj splošnih vprašanj o volku kot vrsti. Prosimo, da obkrožite odgovor, ki se vam zdi najbolj ustrezen ali najbolje opisuje vaše mnenje.

1. Koliko tehta povprečen odrasel volk?

a) 15-30 kg.	d) Več kot 60 kg.
b) 31-45 kg.	e) Nisem prepričan/a.
c) 46-60 kg.	



2. Kaj predstavlja večino prehrane volkov?

- a) Prostoživeči parklarji (srnjad, jelenjad, divji prasič, gams).
- b) Mrhovina.
- c) Domače živali.
- d) Nisem prepričan/a.

3. Kako živijo volkovi?

- a) Samotarsko.
- b) V paru.
- c) V tropu.
- d) Nisem prepričan/a.

4. Volkove so v Slovenijo pripeljali ljudje?

- a) Da.
- b) Ne.
- c) Nisem prepričan/a.

5. Volkovi po naravni poti poseljujejo območja, od koder so bili nekoč iztrebljeni.

- a) Da.
- b) Ne.
- c) Nisem prepričan/a.

6. Ali menite, da število volkov v Sloveniji:

- a) narašča.
- b) upada.
- c) je stabilno.
- d) Nisem prepričan/a..



DEL C: V nadaljevanju je nekaj izjav o upravljanju volka. Prosimo, da obkrožite odgovor, ki se vam zdi najbolj ustrezen ali najbolje opiše vaše mnenje.

	Nikakor se ne strinjam	Deloma se ne strinjam	Ne morem se opredeliti	Deloma se strinjam	Popolnoma se strinjam	O tem ne vem dovolj
1. Volkovi povzročajo nesprejemljivo škodo na domačih živalih.	1	2	3	4	5	6
2. Pravilno je, da rejec za škodo po volku prejme odškodnino.	1	2	3	4	5	6
3. Če bi volk ubil domačo žival, bi se strinjal/a z odstrelom te "problematične živali".	1	2	3	4	5	6
4. Zaščita pašnih živali s pastirskimi psi učinkovito zmanjšuje število napadov volkov.	1	2	3	4	5	6
5. Zaščita pašnih živali z elektro mrežami ali elektro ograjami, učinkovito zmanjšuje število napadov volkov.	1	2	3	4	5	6
6. Strinjal/a bi se s povečanjem števila volkov na območju, kjer živim.	1	2	3	4	5	6



7. Na območju, kjer živim je že sedaj dovolj volkov.	1	2	3	4	5	6
8. V Sloveniji je odstrel volkov potreben.	1	2	3	4	5	6
9. O volkovih in sobivanju je na voljo premalo informacij.	1	2	3	4	5	6

PART D: Naslednja vprašanja se nanašajo na vire od koder pridobite največ informacij o volku.

1. Koliko po vašem mnenju lahko zaupate naštetim virom informacij o volkovi?

	Nikakor ne zaupam	Ne zaupam	Nemorem se opredeliti	Zaupam	Popolnoma zaupam
Medijem	1	2	3	4	5
Biologom	1	2	3	4	5
Lovcem	1	2	3	4	5
Gozdarjem	1	2	3	4	5
Veterinarjem	1	2	3	4	5
Rejcem drobnice	1	2	3	4	5
Naravovarstvenikom	1	2	3	4	5
Ministrstvu za kmetijstvo, gozdarstvo in prehrano	1	2	3	4	5
Ministrstvu za okolje in prostor	1	2	3	4	5
Politikom	1	2	3	4	5



2. Ali ste že slišali za projekt "Izvajanje usklajenih aktivnosti za izboljšanje sobivanja z volkovi na območju Alp" (kratko ime LIFE WolfAlps EU)?

a) Da. b) Ne.

3. V kolikor ste odgovorili z "Da", prosim odgovorite na naslednje vprašanje "Kje ste slišali za projekt?" (izberete lahko več odgovorov)

a) V medijih.
b) Na socialnih omrežjih.
c) Projektna spletna stran.
d) Za projekt sem slišal/a od znanca.
e) Na projektnem dogodku.
f) Med sodelovanjem pri projektnih aktivnostih.
g) Ne spominjam se.
h) Drugo:

DEL E: Zanimajo nas tudi vaše izkušnje z volkovi.

1. Ali ste že videli volka v naravi?

a) Da. b) Nein.

2. Ali ste že videli volka v ujetništvu (na primer v živalskem vrtu)?

a) Da. b) Nein.

3. Vam je volk že kdaj povzročil škodo (napad na domače živali, škoda na vaši lastnini)?

a) Da. b) Ne.



DEL F: Za konec bi za potrebe statistične obdelave podatkov radi izvedeli še nekaj podatkov o vas.

I. **Spol:** a) Ženski. b) Moški.

II. **Starost:** _____ let.

III. **Poštna številka:** _____

IV. **Izobrazba:**

a) Nedokončana osnovna šola. c) Končana srednja šola.
 b) Končana osnovna šola. d) Visokošolska izobrazba.

V. **Ali ste član katere naravovarstvene organizacije?**

a) Da. b) Ne.

VI. **Če ste na prejšnje vprašanje odgovorili z "Da", prosimo odgovorite na naslednje vprašanje "Član katere naravovarstvene organizacije ste?" :**

VII. **Ali ste zaposleni na katerem od naslednjih področij?**

a) Turizem. e) Upravljanje z gozdom.
 b) Izobraževanje. f) Raziskave na področju naravoslovja.
 c) Kmetijstvo (primarni vir dohodka). g) Drugo: _____
 d) Upravljanje s prostoživečimi živalskimi vrstami.



VIII. Če ste lastnik domačega ljubljenčka, katero vrsto imate?

a) Psi. c) Drugo: _____
b) Mačko. d) Nimam živali.

IX. Ali ste lovec?

a) Da. b) Ne.

X. Če imate rejne živali, katero vrsto redite?

a) Ovce. d) Konje.
b) Koze. e) Drugo: _____
c) Krave. f. Nimamo rejnih živali.

XI. V kolikor redite katero izmed rejnih vrst, prosimo odgovorite na naslednje vprašanje: Ali uporabljate katerega izmed naštetih načinov za zaščito domačih živali pred napadi zveri?

a) Da uporabljam elektro mreže/ elektro ograje.
b) Da, uporabljam pastirske pse.
c) Da, moje živali varuje pastir.
d) Uporabljam druge metode (prosimo opišite): _____
f) Ne.



Najlepša hvaka za sodelovanje!

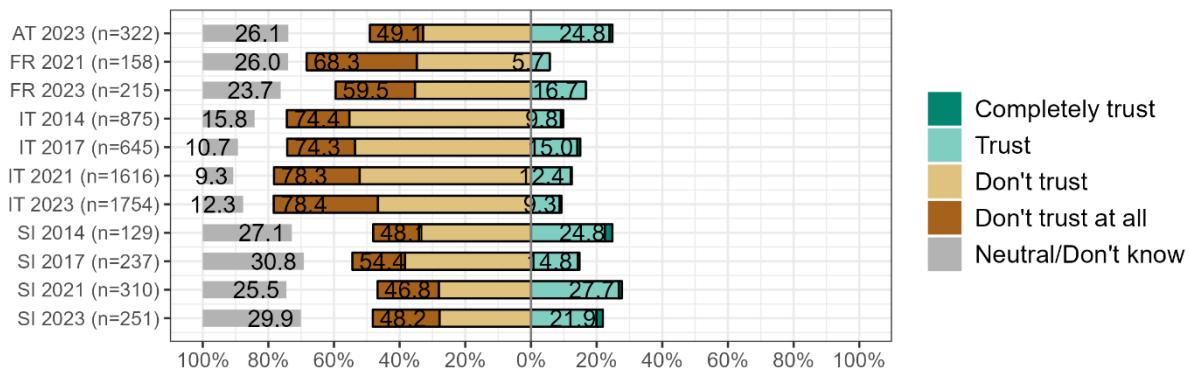
Vaše mnenje bo pomembno prispevalo k uspešnejšem upravljanju z volkom.

Če imate še kakšne komentarje o tematiki ali pripombe na vprašalnik, jih prosim napišite tu:

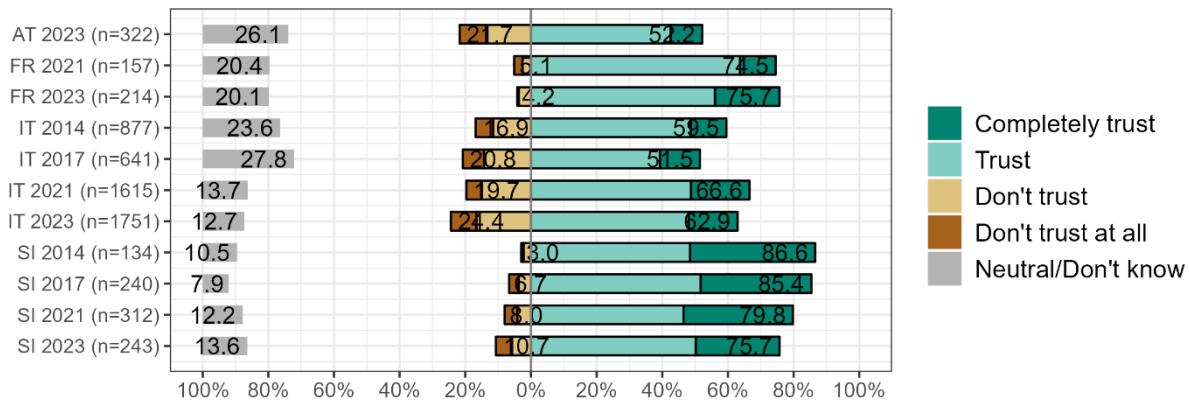
Annex 2: Graphs on Trust in sources of information about wolves

General public

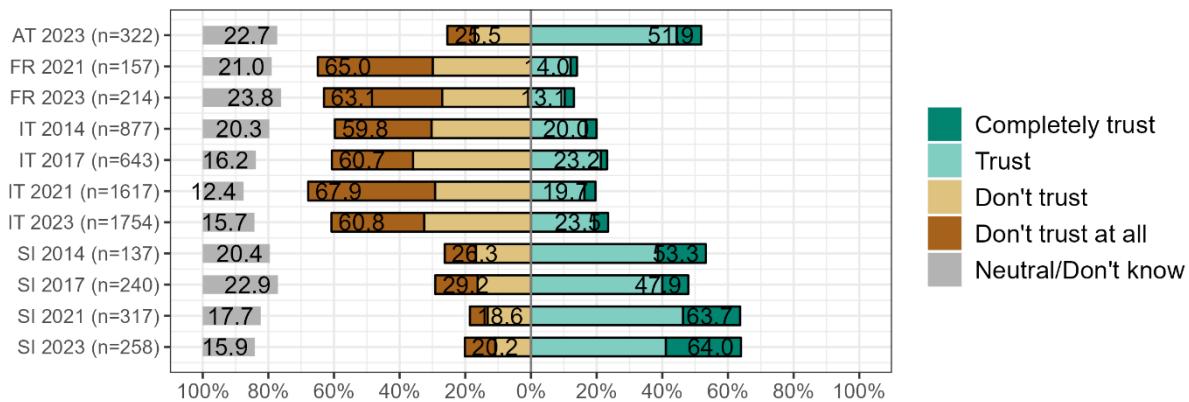
General Public: How much you trust following sources of information about wolves? Media



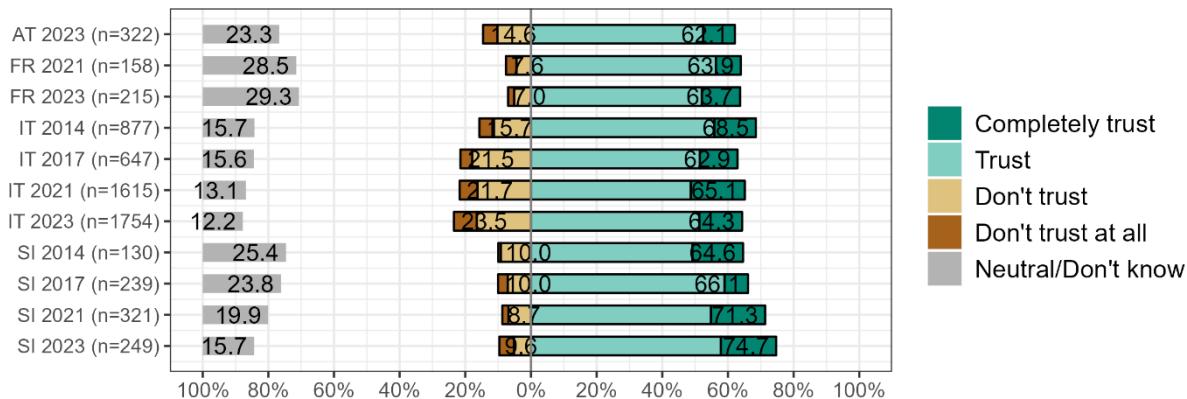
General Public: Biologists



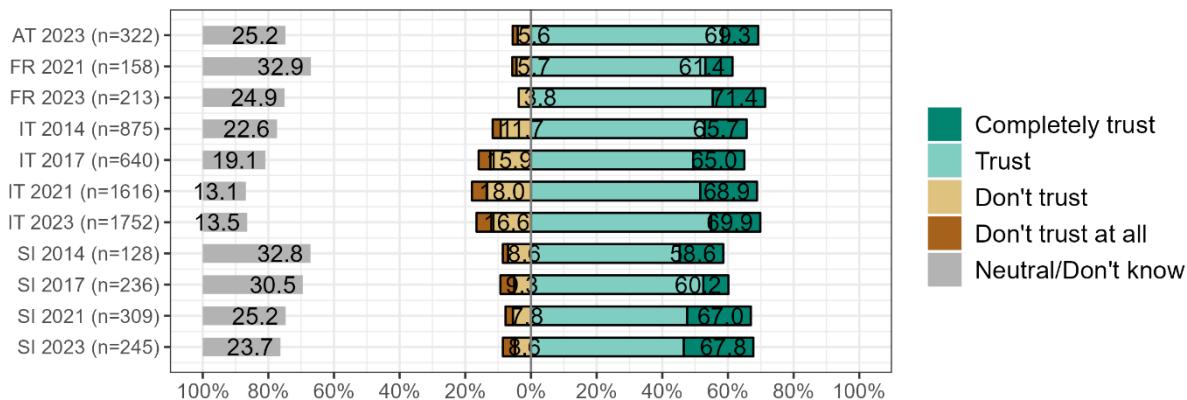
General Public: Hunters



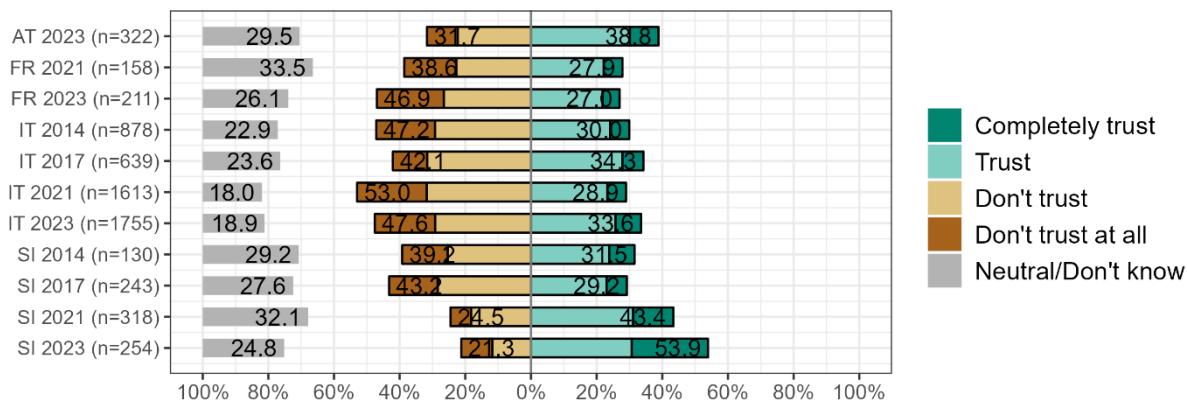
General Public: Foresters



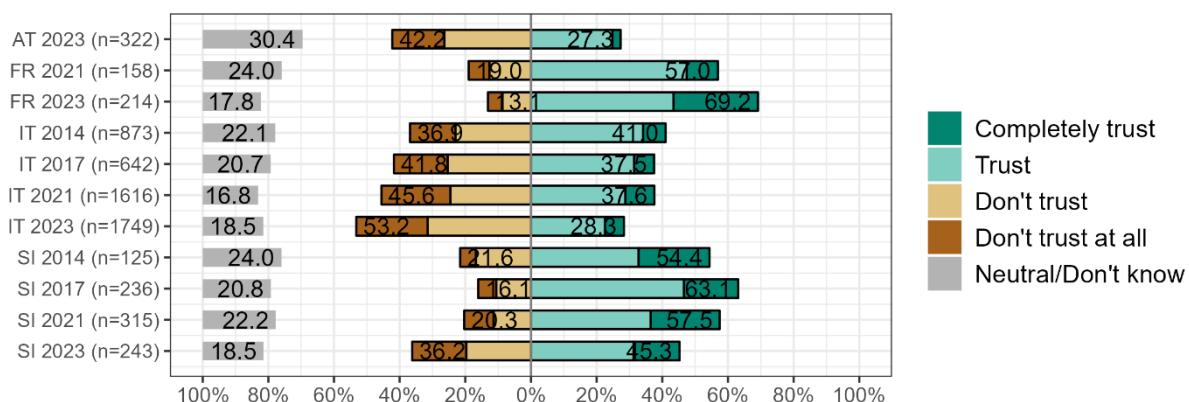
General Public: Veterinarians



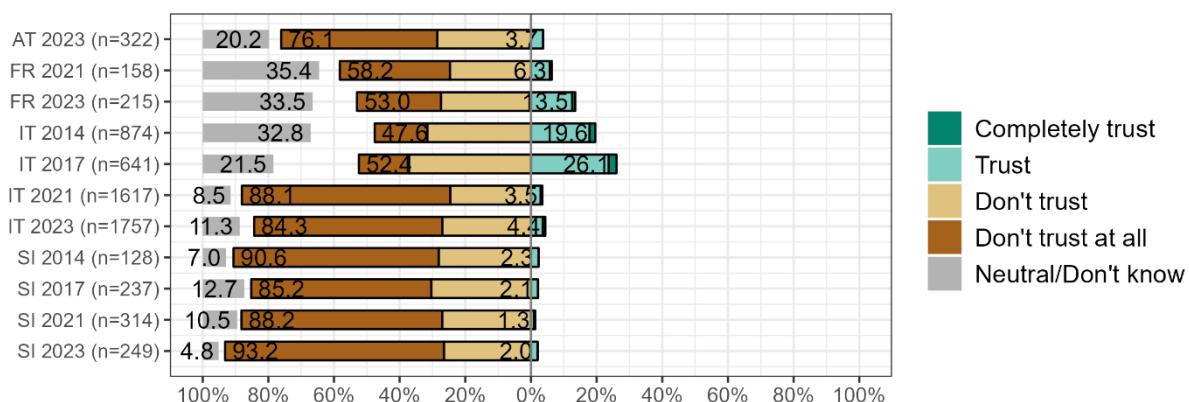
General Public: Farmers



General Public: Environmental NGOs

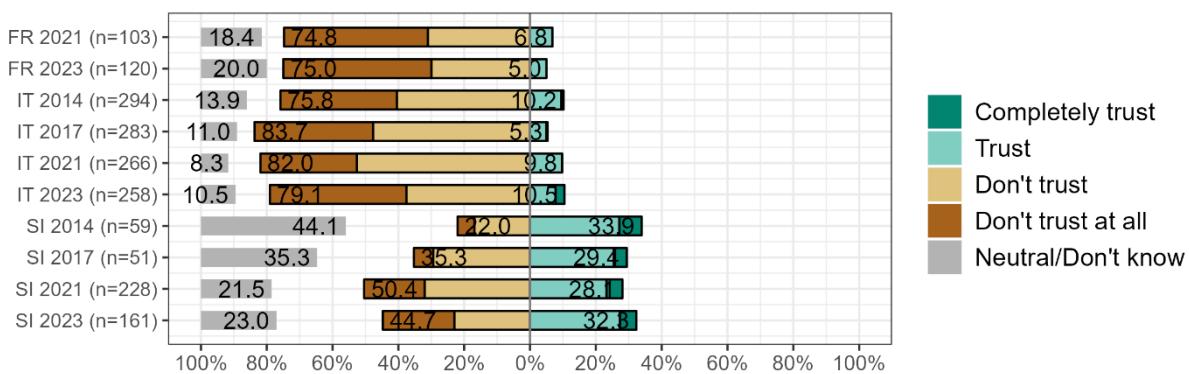


General Public: Politicians

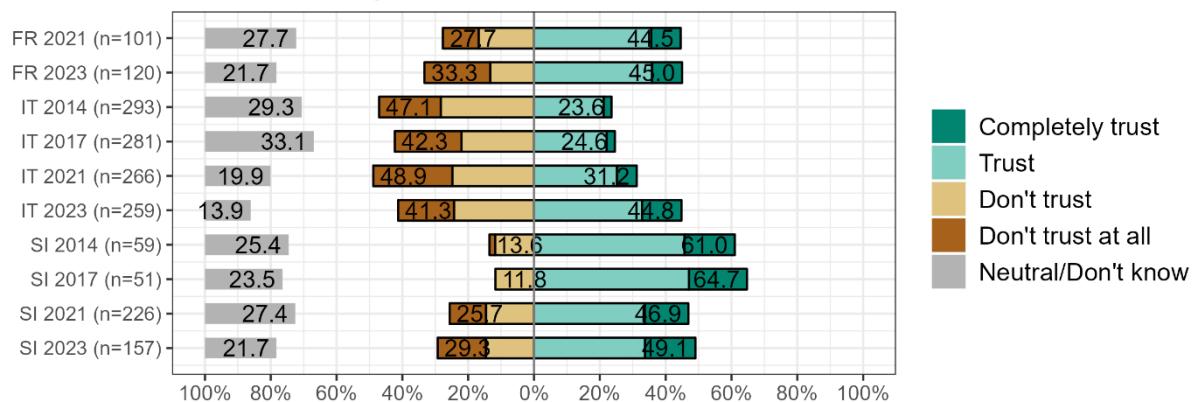


Breeders

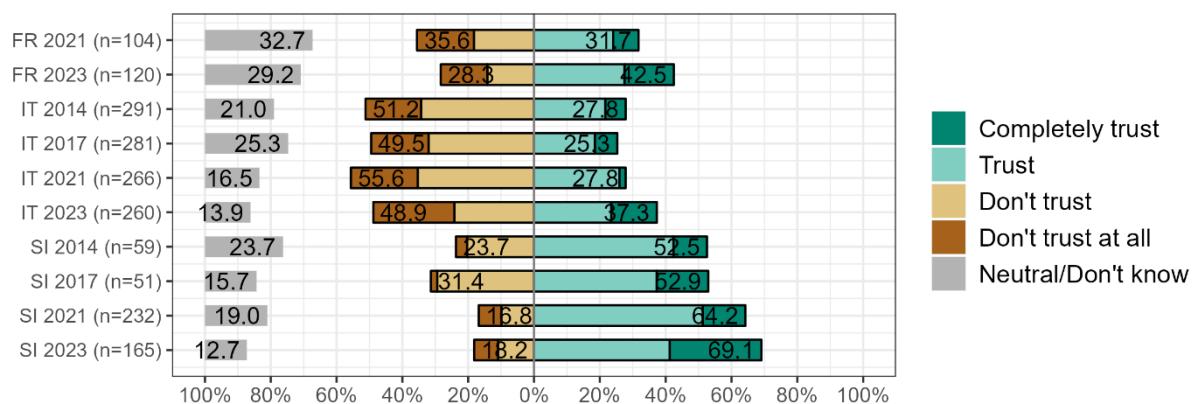
Breeders: How much you trust following sources of information about wolves? Media



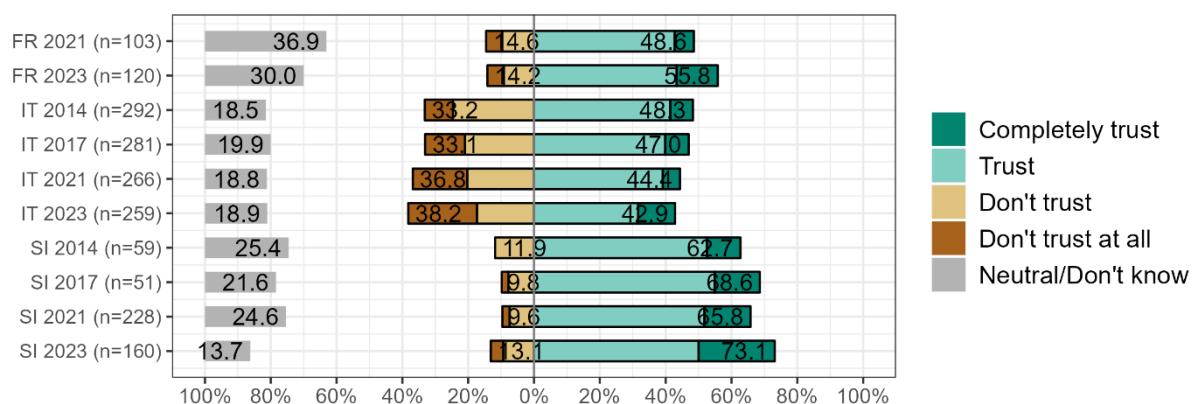
Breeders: Biologists



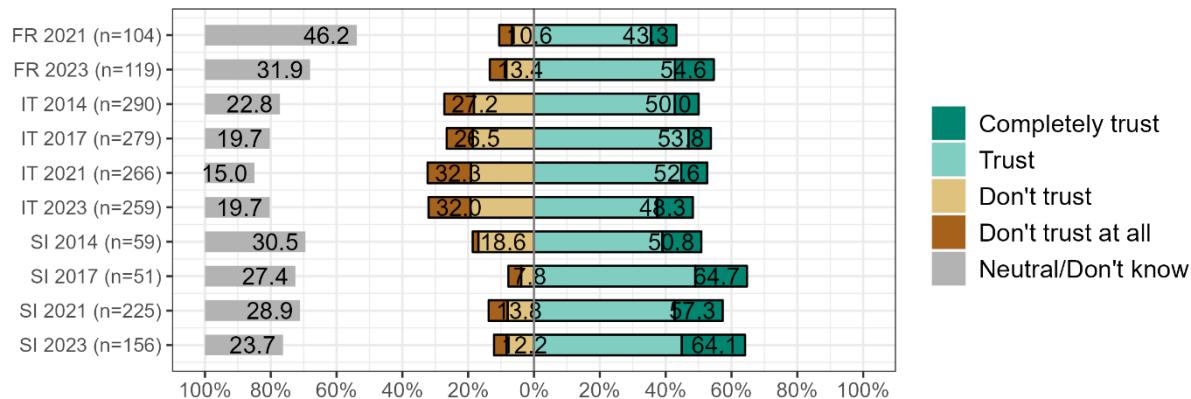
Breeders: Hunters



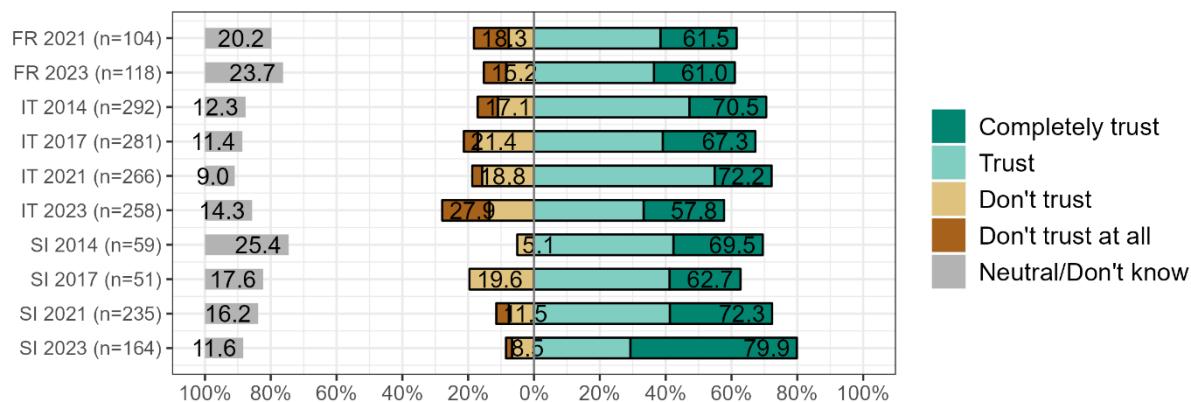
Breeders: Foresters



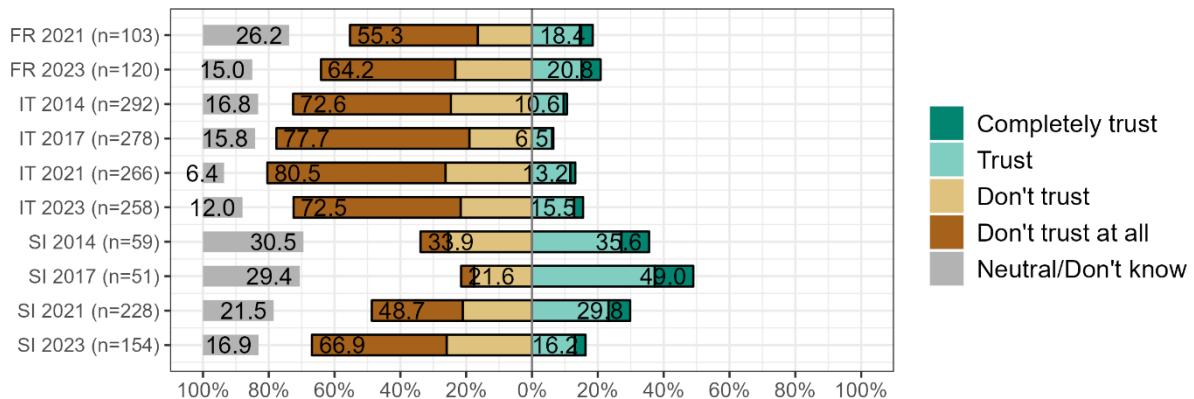
Breeders: Veterinarians



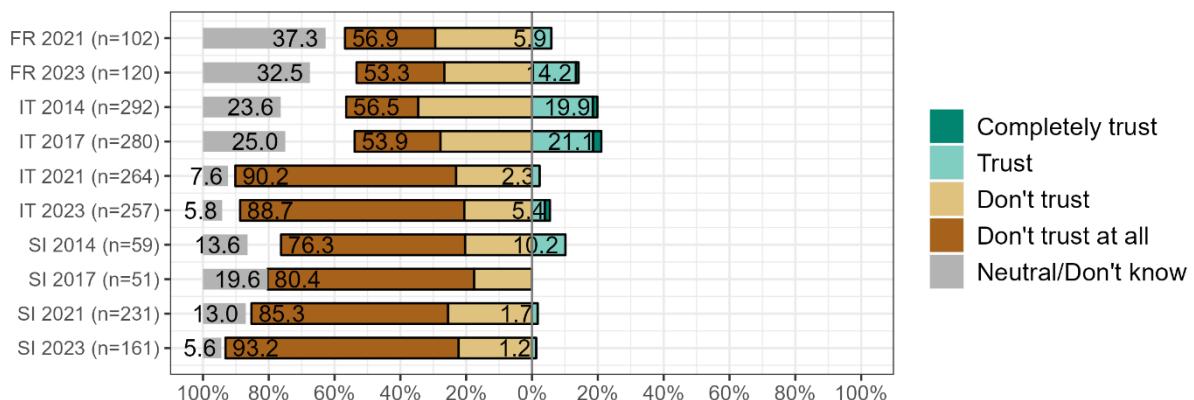
Breeders: Farmers



Breeders: Environmental NGOs

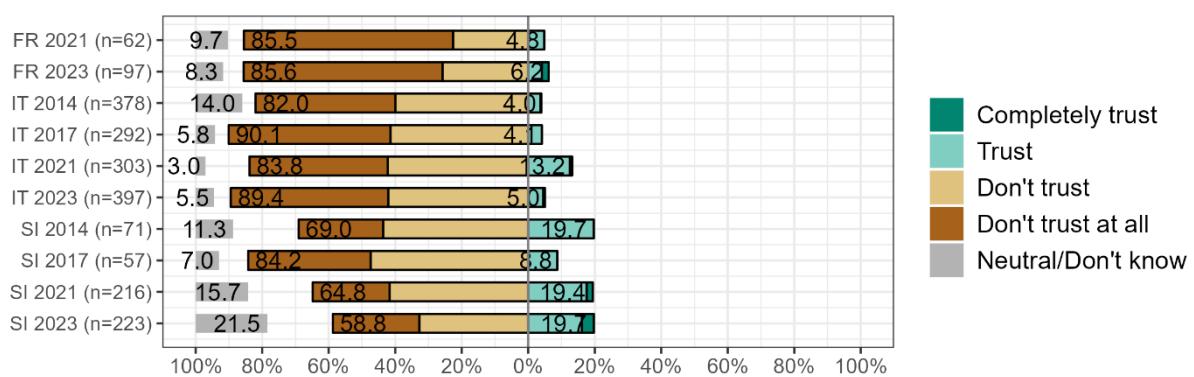


Breeders: Politicians

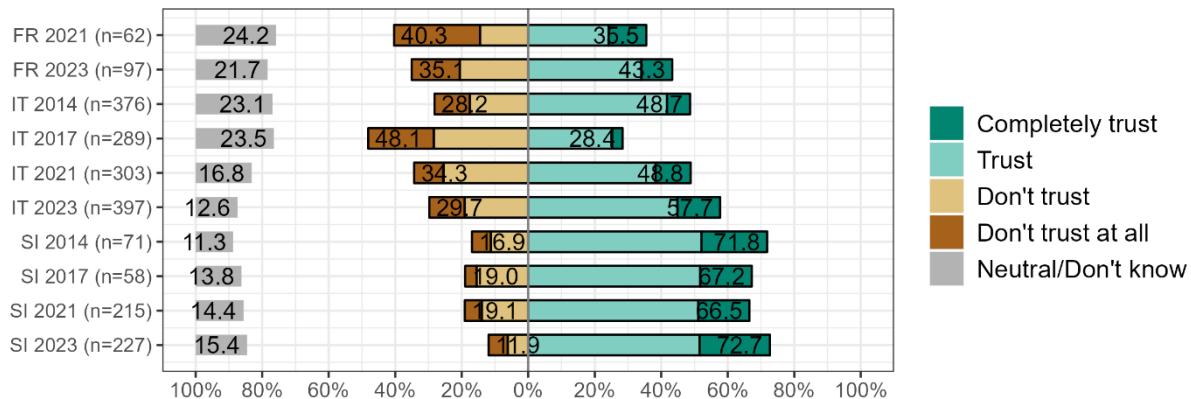


Hunters

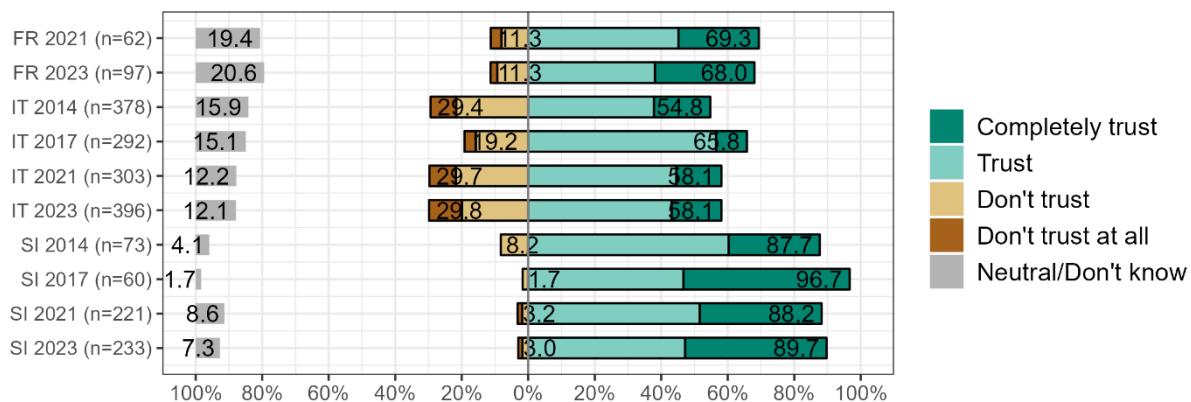
Hunters: How much you trust following sources of information about wolves? Media



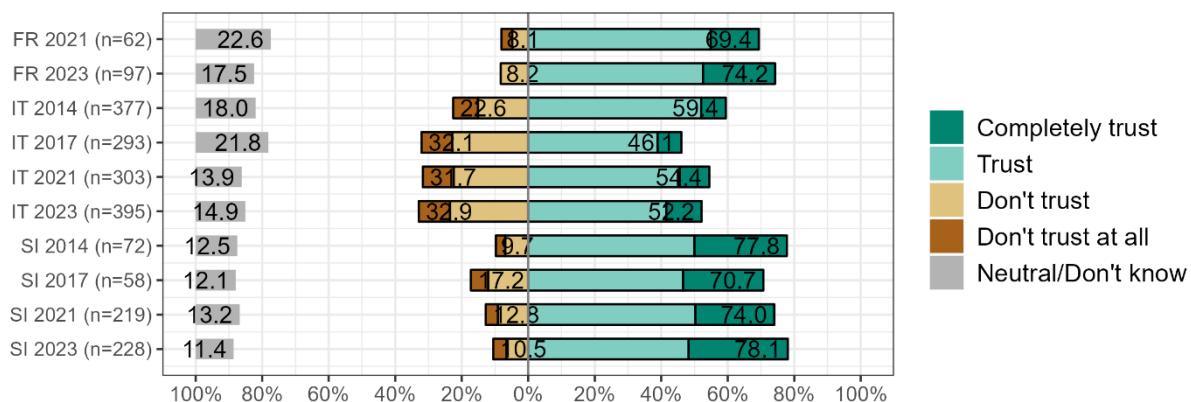
Hunters: Biologists



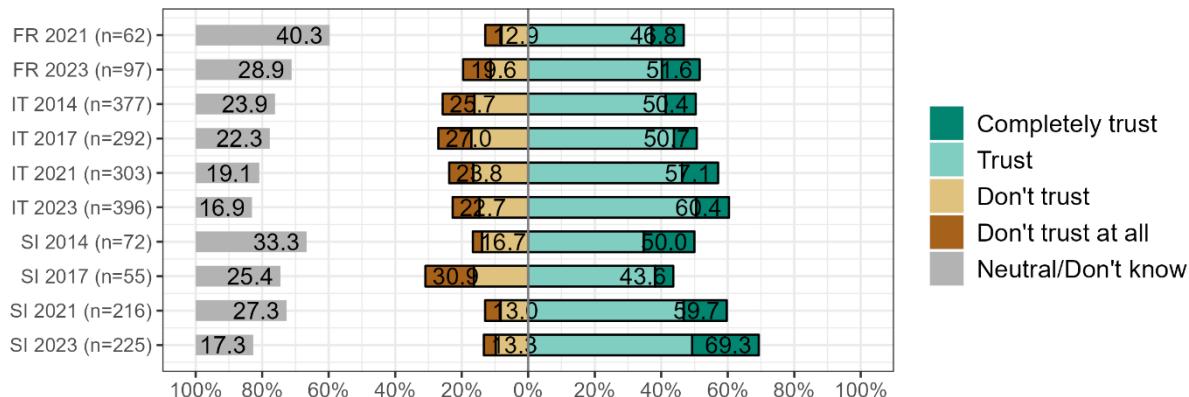
Hunters: Hunters



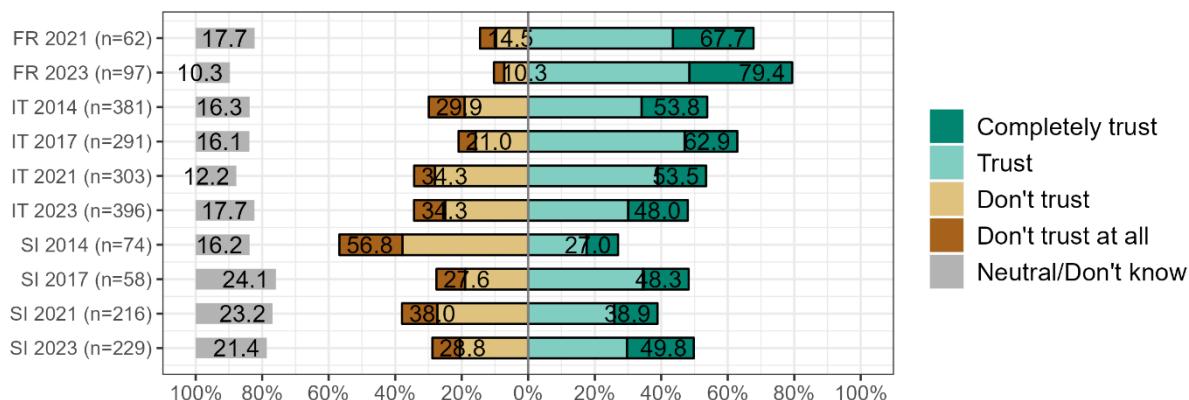
Hunters: Foresters



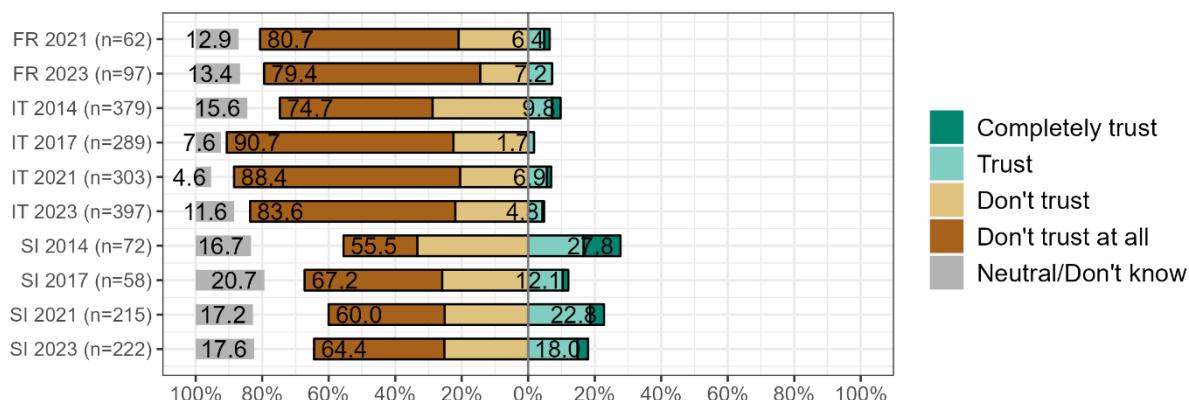
Hunters: Veterinarians



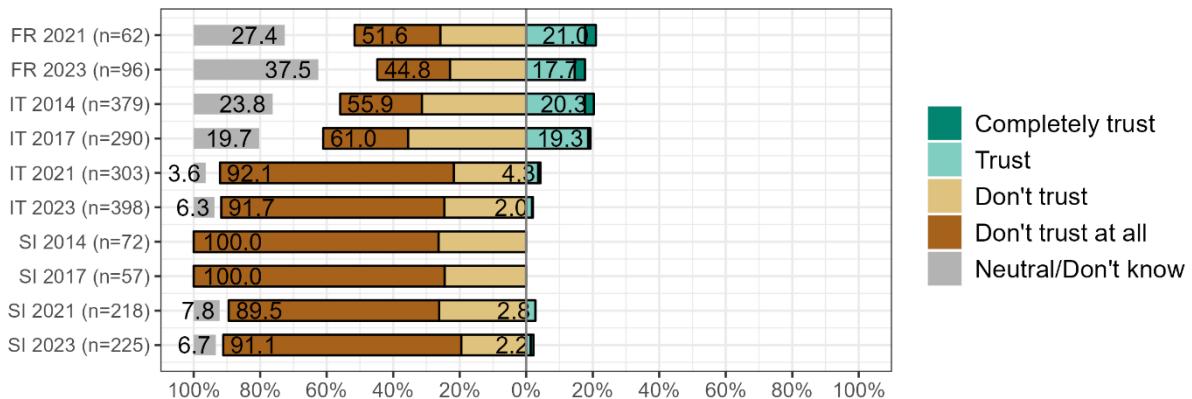
Hunters: Farmers



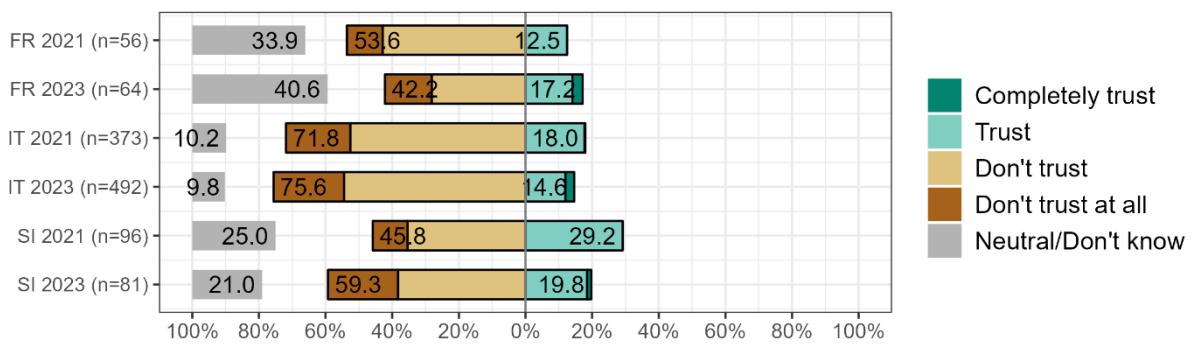
Hunters: Environmental NGOs



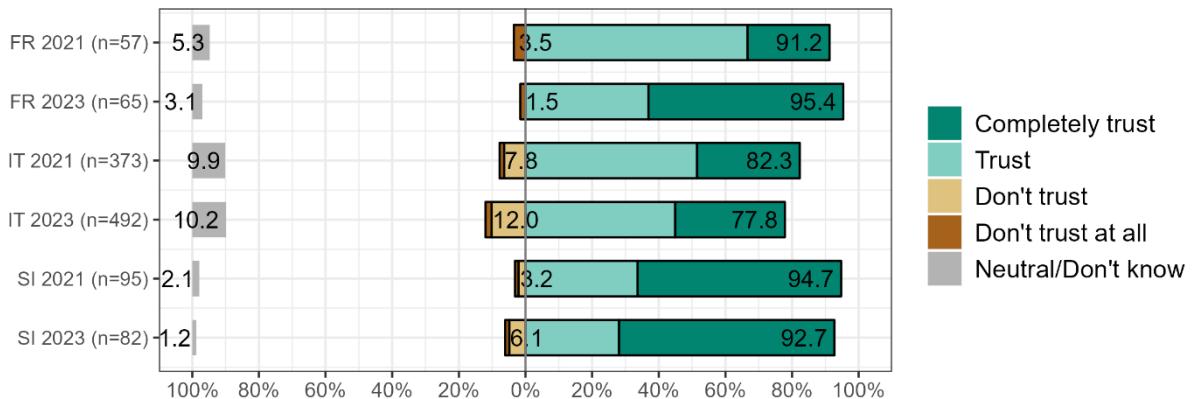
Hunters: Politicians



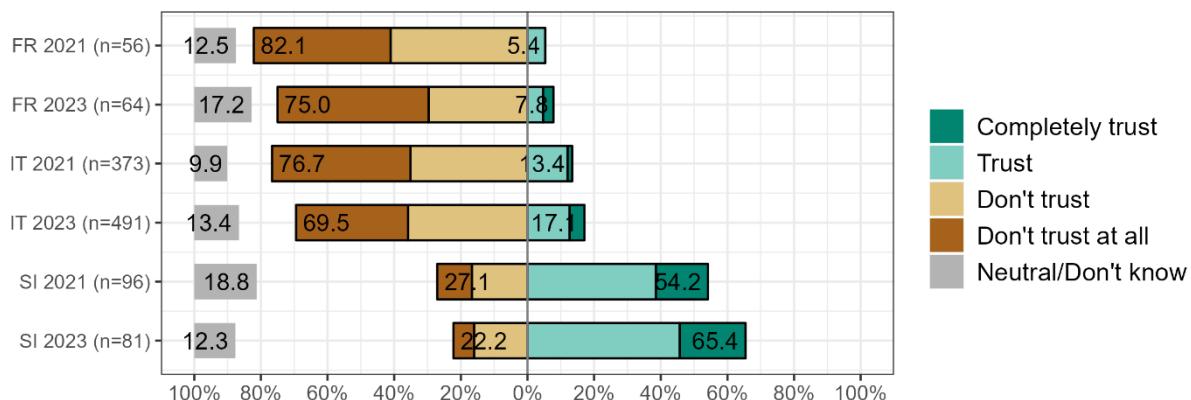
Education professionals

Education Professionals: How much you trust following sources of information about wolves?
Media

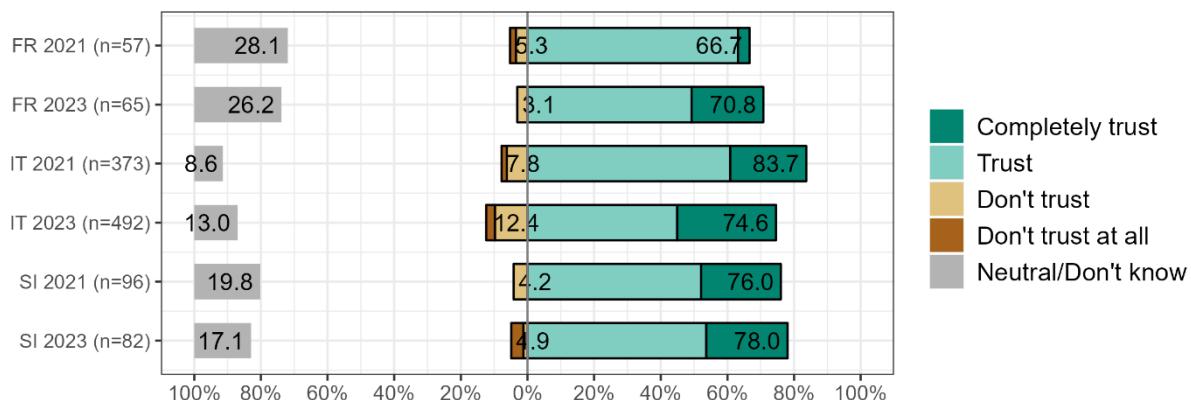
Education Professionals: Biologists



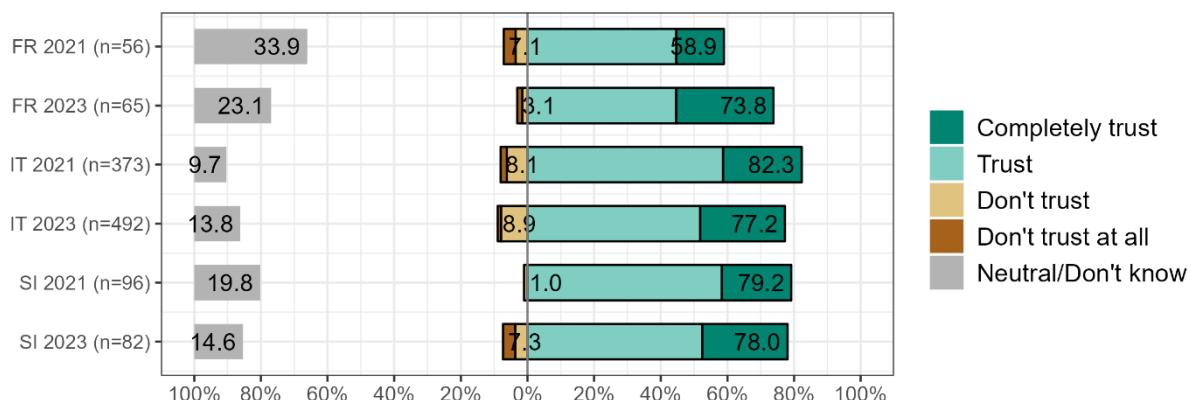
Education Professionals: Hunters



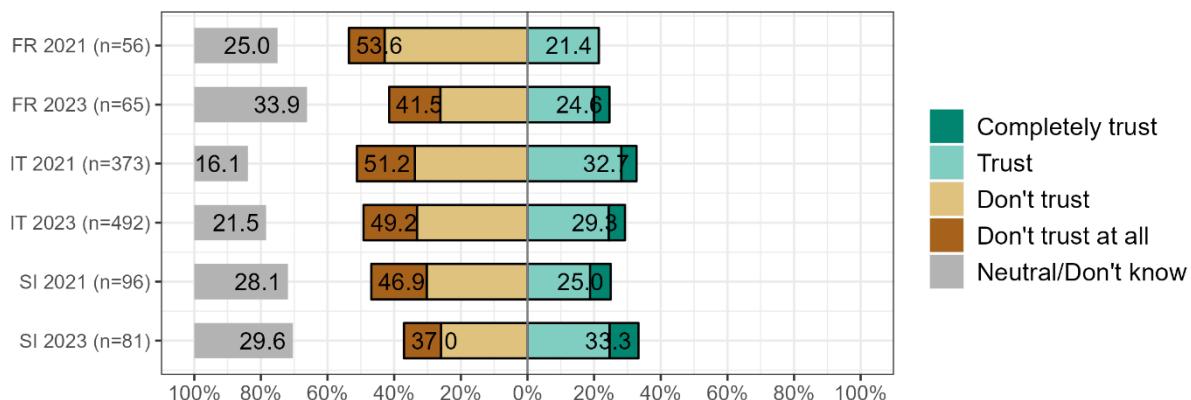
Education Professionals: Foresters



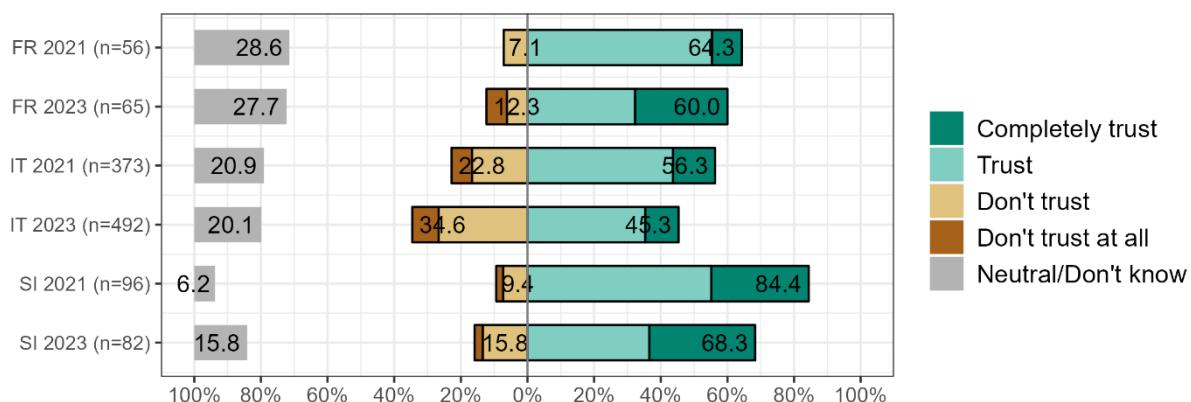
Education Professionals: Veterinarians



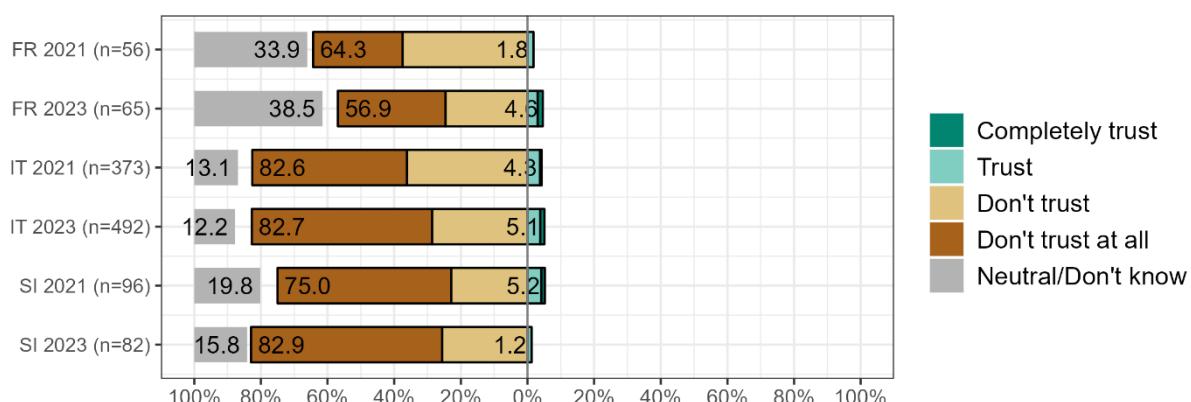
Education Professionals: Farmers



Education Professionals: Environmental NGOs

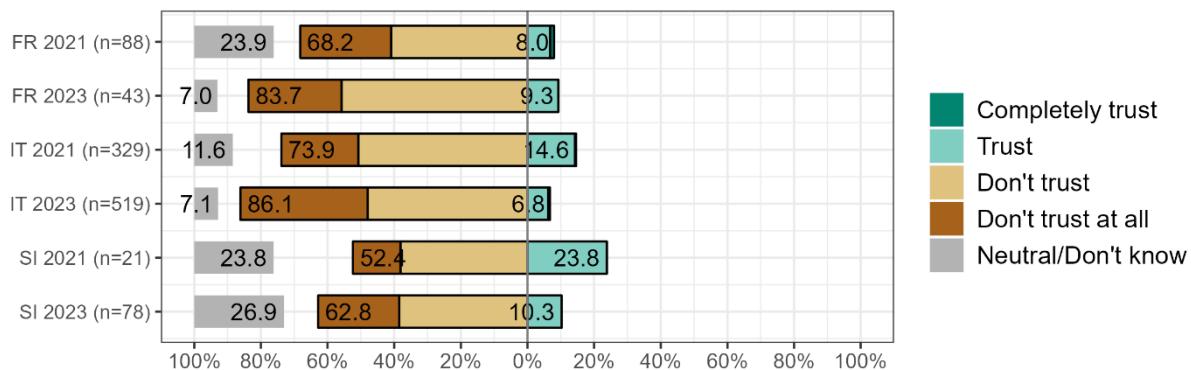


Education Professionals: Politicians

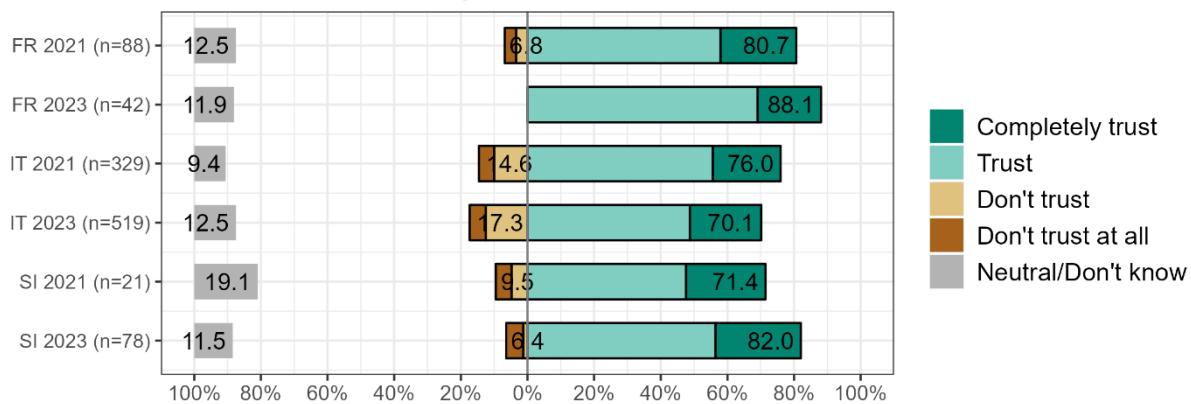


Tourism workers

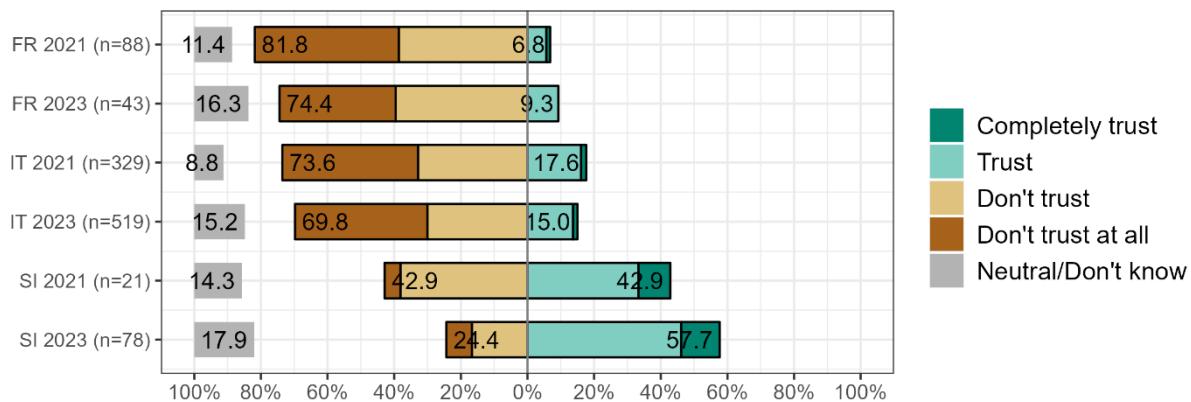
Tourism Workers: How much you trust following sources of information about wolves? Media



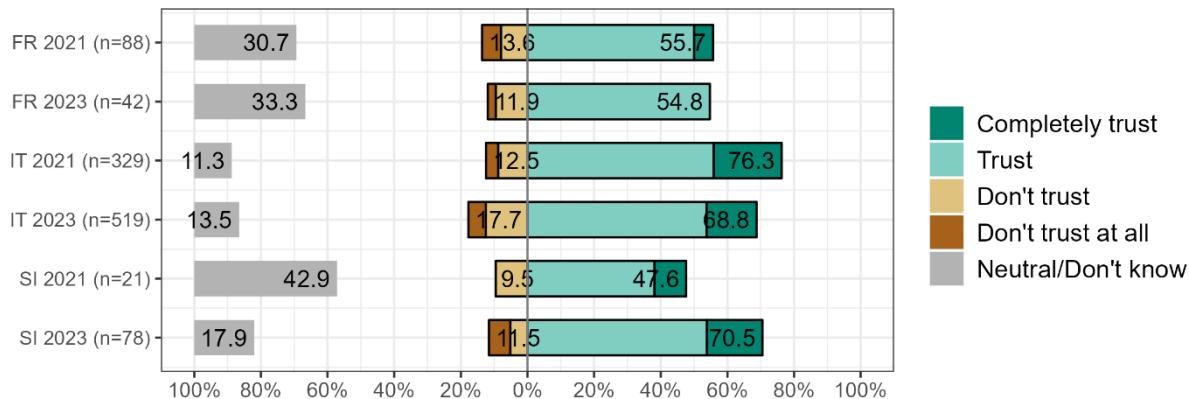
Tourism Workers: Biologists



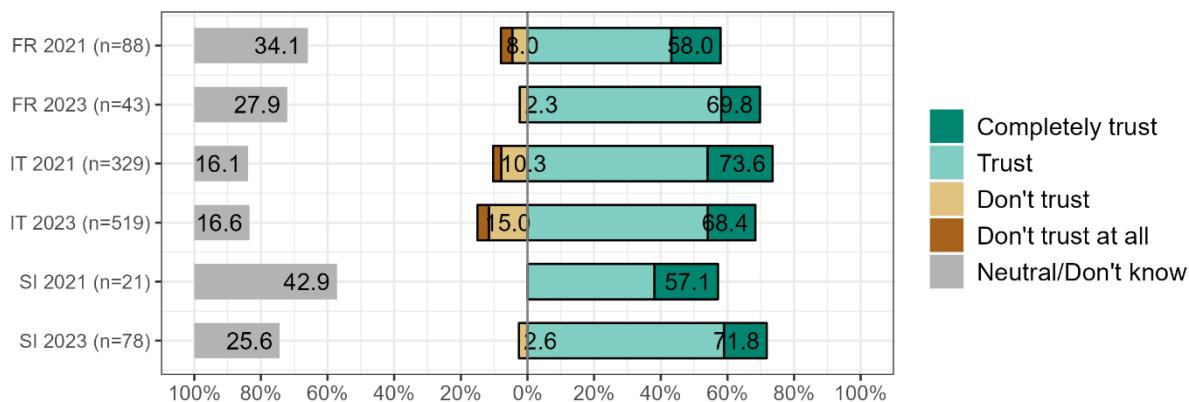
Tourism Workers: Hunters



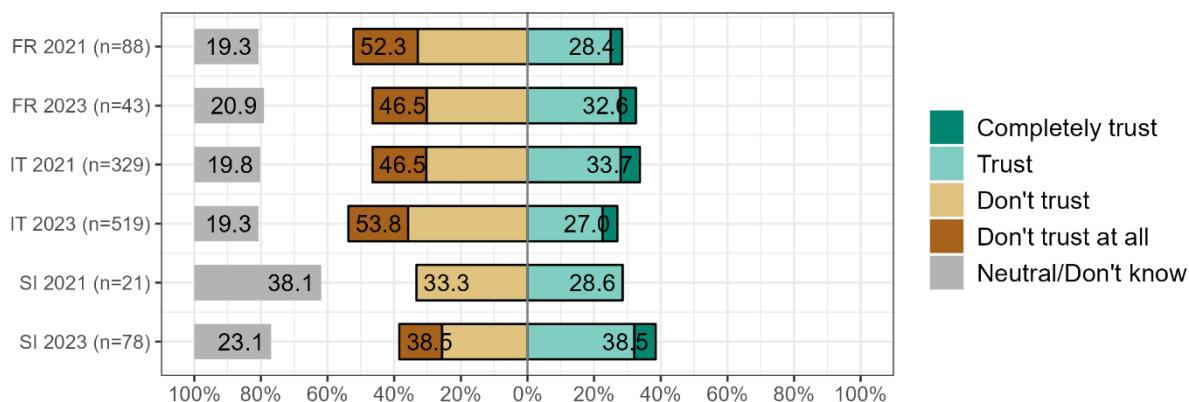
Tourism Workers: Foresters



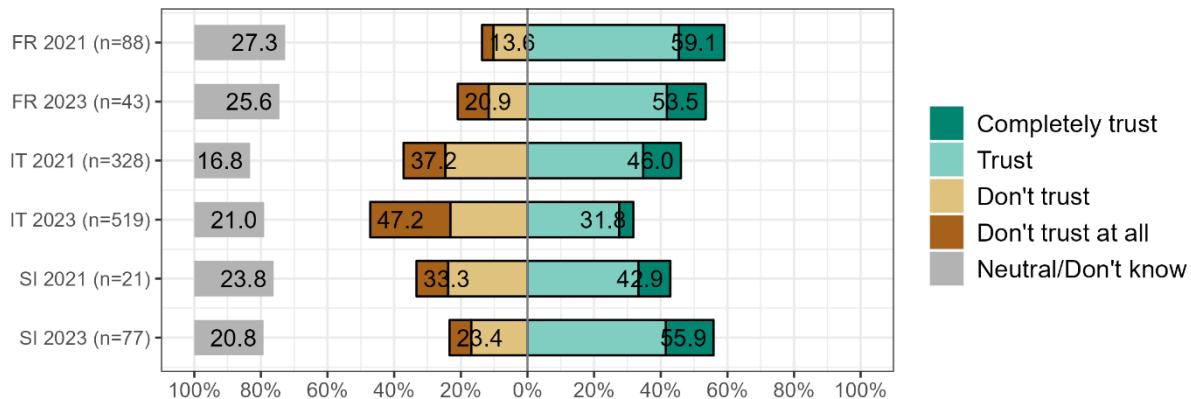
Tourism Workers: Veterinarians



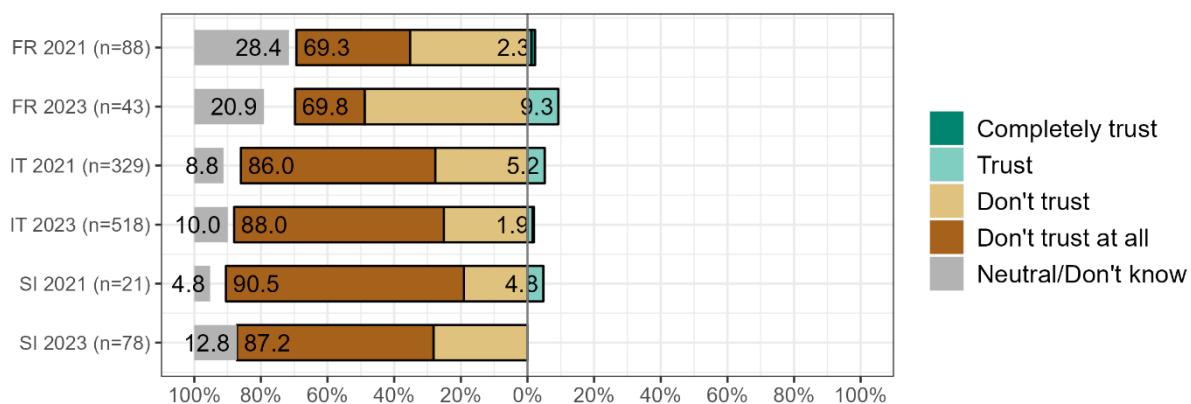
Tourism Workers: Farmers



Tourism Workers: Environmental NGOs



Tourism Workers: Politicians



Annex 3: Comparison of the years 2021 and 2023 of the Austrian online dataset regarding the attitude of people towards wolves

The online datasets in Austria were sampled via a link that was distributed by email to various stakeholders (e.g. relevant associations) and private individuals. The people were asked to forward the link to other people in order to reach as many respondents as possible.

An earlier analysis had already shown that the 2021 dataset was structurally different from the datasets of other countries, in particular it contained many more hunters and farmers. Therefore, these two datasets were analyzed separately from all other datasets.

The sample size in 2021 was 11489, in 2023 only 2493 despite the same sampling procedure. We suspect that the reason for the smaller sample size in 2023 is a certain fatigue on this topic. Nonetheless, both sample sizes are large and we can assume that the two data sets are comparable and allow us to compare the two years.

In a previous analysis, we have already shown that hunters, farmers, tourism workers, sheep and/or goat farmers and members of non-governmental organizations are important variables for our analysis. In addition, knowledge about wolves and formal education also play a role.

Tab. A3_1: Characteristics of the two samples.

	2021	2023
Hunters	34.4%	39.3%
Farmers	44.0%	49.9%
Tourism workers	5.4%	10.1%
Keepers of sheep and/or goats	29.1%	27.0%
Members of a NGO	5.2%	8.2%
Mean of the score of knowledge about wolves	3.75	3.44

Tab. A3_2: Proportion of levels of education in the two samples: 1 is unfinished elementary school, 2 finished elementary school, 3 finished high school, and 4 finished higher education.

	1	2	3	4
2021	0.2%	46.8%	27.0%	26.0%
2023	0.4%	37.4%	28.5%	33.7%

Tables 1 and 2 show similar structures in both samples, but also some differences. Hunters, farmers and people working in tourism are more common in 2023 than in 2021. As a rule, they tend to have a negative attitude towards wolves. Members of non-governmental organizations, who are generally in favour of wolves, still make up a small proportion, but are

increasing slightly. The number of sheep and/or goat farmers has decreased slightly. Interestingly, knowledge about wolves has decreased slightly, but education has increased.

Modelling

We tested the hypothesis that the general attitude of respondents in our sample towards wolves was better in 2023 than in 2021. We used a regression model that accounted for the confounding variables with their structure: Most variables were dichotomous, but knowledge was metric and education was categorical. The dependent variable was general attitude. We constructed it using a PCA of all variables of the A-section of the questionnaire. There was only one principal component with an eigenvalue greater than 1. This was the final dependent variable. It contained 61.8% of the total variance of all 11 A-variables. This dependent variable was Box-Cox transformed as the residuals were skewed (lambda = 0.26).

The final model is (r notation):

```
library(mgcv)
m = gam( FAC1_1_tr ~ Year + Education + Tourism + Farmer + Hunter +
sheepgoats + NGO + s(B_score, k=5), data = dat)
```

The result is the following:

Parametric coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	0.56461	0.16779	3.365	0.000767	***
Year2023	0.05853	0.01994	2.935	0.003344	**
Education2	-0.43219	0.16782	-2.575	0.010025	*
Education3	-0.28420	0.16806	-1.691	0.090852	.
Education4	-0.12732	0.16812	-0.757	0.448871	
Tourism	-0.23526	0.03185	-7.388	1.58e-13	***
Farmer	-0.35869	0.01659	-21.615	< 2e-16	***
Hunter	-0.14818	0.01593	-9.304	< 2e-16	***
sheepgoats	-0.23837	0.01721	-13.850	< 2e-16	***
NGO	0.51323	0.03292	15.588	< 2e-16	***

Approximate significance of smooth terms:

edf	Ref.df	F	p-value
-----	--------	---	---------

s (B_score) 3.926 3.996 295.7 <2e-16 ***

R-sq. (adj) = 0.216 Deviance explained = 21.7%

GCV = 0.7848 Scale est. = 0.78402 n = 13982

People's attitudes improved slightly (0.05853 on a scale of -1.728 to 2.007). The result is significant ($p = 0.003$). In view of the almost perfect distribution of the residuals (Fig. A3_2), it is unlikely that an important variable is missing that could change the results. However, this cannot be ruled out either.

The reasons for this improvement in attitude are not clear. Despite the public relations work of the LIFE WOLFALPS EU project and others, the first wolves were culled under official permits in the months before the second (2023) survey. This obviously eased the public debate about wolves. Nevertheless, the general attitude of the people who responded to this questionnaire remained negative.

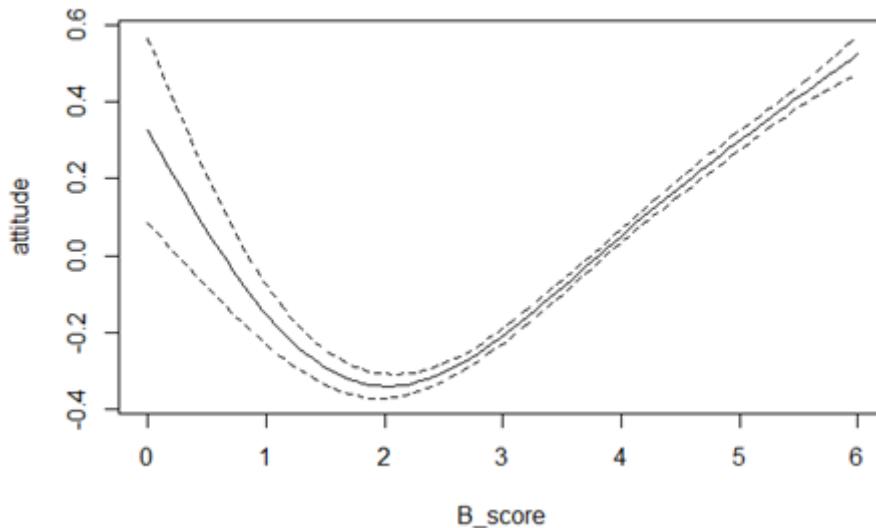


Fig. A3_1: Attitude as function of knowledge about wolves (B_score) estimated by the model. People with very poor knowledge have a more positive attitude, but then it declines rapidly and increases again with 3 and more correctly answered questions.

Education1 are people without formal education. This category serves as a reference for the other levels. People with education1 have the most positive attitude (very few people in Austria). Among people with formal education (education2-4), higher education leads to a more positive attitude.

People working in tourism, farmers and hunters are more negative than others, while members of non-governmental organizations are much more positive. People who keep sheep and/or goats are more negative. Interestingly, hunters are less negative than tourism workers or farmers.

The data from 2021 have already been analyzed together with data from other countries. This revealed structural differences between the samples (e.g. more farmers and hunters in this sample), but also a more negative attitude among people in Austria who answered the questionnaire than in the other countries, even after correcting for structural differences. It is therefore important for the interpretation of these results that you do not compare them with the results of the other countries, but only within this data set.

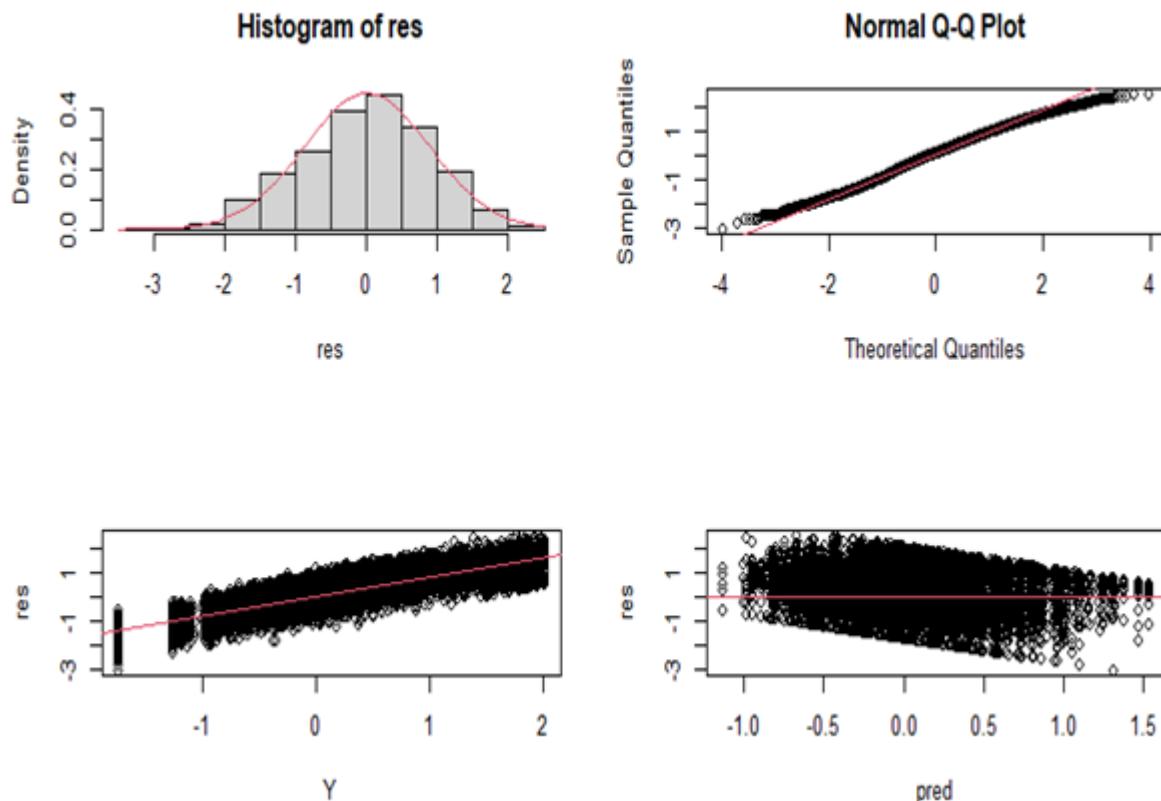


Fig. A3_2: Residual plots of the model.