



## KNOWLEDGE TRANSFER FOR THE COADAPTATION OF HUMANS AND WOLVES IN ALPINE REGIONS

*Learning through experience*

**Start of the Project**  
**End of Project**

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**Project Lead**  
**Project Collaborators**  
**Written by**

CIPRA International  
CIPRA Germany, CIPRA France, CIPRA Italy  
Marion Ebster (CIPRA International), Elise Turquin  
CIPRA France), Uwe Roth (CIPRA Germany)



Federal Ministry  
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and Nuclear Safety

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## I. INTRODUCTION

The return of large carnivores is increasingly causing the fronts to harden between different groups of stakeholders. Among the large carnivores that have (re)settled in the Alps, the wolf is the most widespread and the most widely debated animal. Wolves a highly adaptable and opportunistic species and cross boundaries - physical as well as intangible ones – regularly. Thus, they have been accompanying and influencing social and cultural processes since time immemorial. The wolf provokes reflection about boundaries: about the concrete demarcation of grazing livestock by fencing it as well as about the unclear, elusive boundaries between nature/wilderness and culture/civilisation. On the one hand, the wolf makes us consolidate, establish and bureaucratise certain boundaries (e.g. loss and shooting figures, distances to human settlements, rates of remuneration for damages). On the other hand, human borders become permeable, obsolete or blurred by the wolf (national/regional borders, borders between private and public interests, between acceptance and rejection, between nature and culture) (see Frank E., Heinzer N., 2019).

The wolf is protected by several international agreements like the Bern Convention and the Fauna-Flora-Habitat Directive of the European Union or the Convention on International Trade in Endangered Species of the Wild Fauna and Flora (CITES). He belongs to an animal species of common interest and national laws have been adapted in order to integrate this protection status into national law in every country in the EU and in Switzerland. This status has been contested again and again and leads to heated debates especially in countries where the wolf has shown almost no appearances in recent decades. At the same time, its protection status is confirmed repeatedly, either by the European Union<sup>1</sup>, the Berne Convention<sup>2</sup> but also based on national and federal laws<sup>3</sup>. As it seems, there is no near prospect of changing these laws, hence adapting to practices of sharing space and landscape with this animal is a constructive solution and a logical step. As the following report shows, for this we have to deal with our own emotions, fears and conflicting notions of nature that underlie the inherent human fear - and fascination - of the wolf.

## II. INTENTIONS AND OBJECTIVES OF THE PROJECT

The developments in the alpine countries are diverse. Partly this is due to the spreading of the wolf, partly to cultural, social and political conditions. Nevertheless, the challenges are usually similar, as well as the reactions and the measures undertaken. This offers a wide cross-border "learning field" in which countries and regions can learn from and support each other. There is

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<sup>1</sup> "Wolf remains protected by EU Parliament" (<https://wilderness-society.org/wolf-remains-protected-by-eu-parliament>); Confirmation of the protection status of the wolf by the European Commissioner for the Environment addressed at the EU delegates of Tyrol (A) and South Tyrol (I) ([www.tt.com/artikel/30747399/eu-will-am-strengen-schutzstatus-des-wolfes-nicht-ruetteln](http://www.tt.com/artikel/30747399/eu-will-am-strengen-schutzstatus-des-wolfes-nicht-ruetteln))

<sup>2</sup> Switzerland's application to the Standing Committee of the Bern Convention for the downgrading of the protected status of the wolf is rejected. See KORA Report 2020, p. 31.

<sup>3</sup> Annulment of the wolf shooting order by the Salzburg Regional Administrative Court (<https://tirol.gruene.at/natur-und-umwelt/schutzstatus-des-wolfs-tiroler-gruene-sehen-klare-entscheidung-des-landesverwaltungsgerichts>);



no necessary need to make the same mistakes multiple times and successful measures - adapted to local conditions - can be adopted. The objective here is to create an overview of coadaptation activities of humans to the wolves' presence in the alpine area in recent years. For this purpose, over 30 interviews were conducted with people from Austria, Switzerland, Italy, France, Switzerland and Slovenia. We wanted to know what has worked and why but also what measures have failed and for what reasons. Insights and findings were collected on how these activities have developed over the last 10 - 20 years (depending on the occurrence and spreading of wolves): What are the main concerns today? What are the most important findings and experiences of the last years and decades? Where is the journey heading and which - social, economic, political and ecological - challenges will we have to tackle more intensively in the future? Where are the "gaps" that have perhaps received too little attention in some places up to now? The interview questions were aimed at both the technical level that is about herd protection and monitoring and the developments, successes and shortcomings in these areas. They also refer to cultural and social developments in coadaptation and possible changes in attitudes of different groups. In addition, the political level was addressed and the extent to which political measures and rules (e.g. on subsidies and compensation) have changed and what they have achieved is examined.

Furthermore, another focus has been put on the profession of shepherds in the alpine regions as this group has a special role in coadaptation processes with large carnivores. They are very exposed when it comes to practical dealings with wolves on alpine pastures and at the same time, they represent a very small, diverse, highly specialized and socially marginalized professional group in alpine society. Hence, the intention of this project also was to examine the extent to which a cross-border organisation for shepherds in the Alps would be helpful and feasible. The target group in this case was exclusively shepherds from the four countries Italy, Switzerland, Austria and France. Although everyone has a need for exchange and learning opportunities that go beyond regional or national borders - as this report will show -, first and foremost it is shepherds and herders who have to deal very directly with coadaptation issues. The challenges of herding and grazing management on alpine pastures increase drastically in amount and complexity with the occurrence of wolf populations. New (and/or very old) shepherding techniques are required, as well as refined and active communication with different stakeholders (e.g. tourists) and increased knowledge regarding animal behaviour and husbandry. Furthermore, there are very few organised interest groups for shepherds in the alpine countries. The results of this additional study form the second part of this final report. In addition, they are a fundamental component for the development of CIPRAs follow-up project in which, among other things, the support of shepherds in the Alps is a central objective.



### III.RESULTS

The conclusions presented in this summary are based on the analysis of the conducted interviews. The views presented by the interviewed persons do not have to reflect CIPRA's position on the subject.

#### RESULTS AND FINDINGS BY COUNTRY

##### Austria

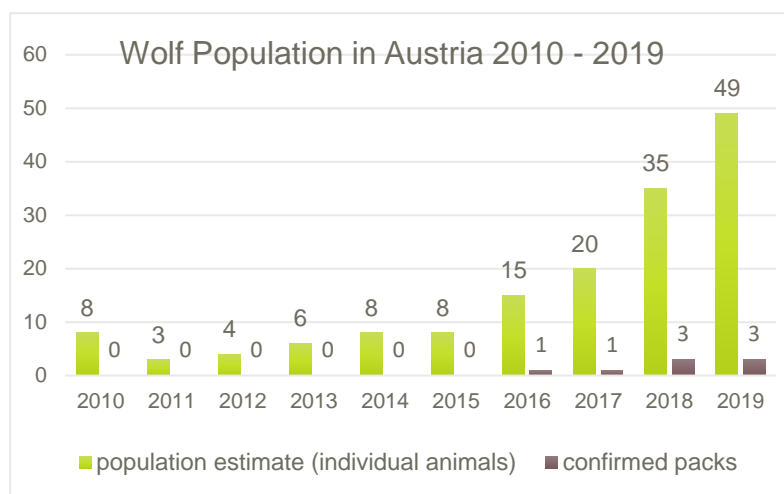


Fig. 1: Development of the wolf population in Austria from 2010 - 2019. WISO Report 2020, p. 9.

For the synthesis of statements from the Austrian interviews, please view the full version of the final report: [www.cipra.org/knowledge-wolf](http://www.cipra.org/knowledge-wolf)

The appearance of the wolf is relatively new in Austria, so the uproar and populism that accompanies it is based on a lack of experience and the persistence in the "denial phase", as one interview partner called the adherence to the belief that 'wolf-free Alps' were an achievable goal. On the one hand, the responsibility of the individual federal provinces and the reluctance of the state authorities create a great heterogeneity in terms of protective measures and communication. On the other hand, there is also a great deal of room for interest groups to communicate their own opinions and attitudes on the topic more or less aggressively through the respective channels.

In Austria, moreover, the herding profession - despite the idealistic importance of alpine farming - suffers from a lack of social prestige as well as sufficient training and earning opportunities. Accordingly, there are few professional, well-trained herders. It also has to be mentioned here that traditionally sheep farming does not have the same importance as cattle farming. In 2020, according to "Statistics Austria", there were 394.000 sheep in Austria



compared to 1.85 million cattle.<sup>4</sup> Additionally, only approximately 270.000 pieces of cattle were kept on alpine pastures during the summer months.<sup>5</sup> Small structured farming in the alpine areas in Austria is confronted with many challenges like succession problems, part time farming and low market prices for agricultural products. The return of the wolf exacerbates these problems, as has been mentioned in the interviews. At the same time, alpine farming has a very long tradition, is engraved in the Austrian identity, and plays a major role in tourism-related marketing and tourism industry. Since the return of the wolf, both sectors are even more challenged to find solutions and they should urgently do so together (herd protection, fences, dogs, communication, etc.).

## Switzerland

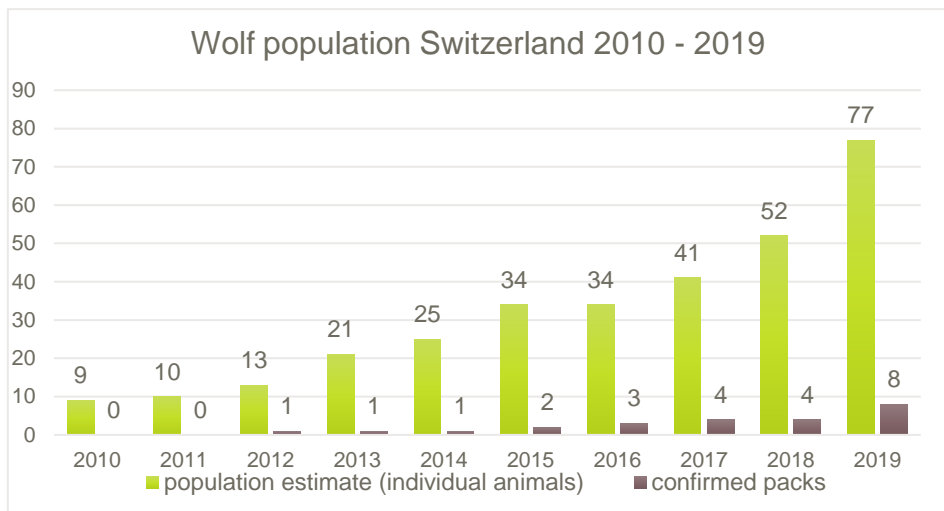


Fig. 2: Development of the wolf population in Switzerland from 2010 – 2019. WISO report 2020, p. 207.

<sup>4</sup> [www.statistik.at/web\\_de/statistiken/wirtschaft/land\\_und\\_forstwirtschaft/viehbestand\\_tierische\\_erzeugung/viehbestand/index.html#index3](http://www.statistik.at/web_de/statistiken/wirtschaft/land_und_forstwirtschaft/viehbestand_tierische_erzeugung/viehbestand/index.html#index3) (online access 10th March 2021)

<sup>5</sup> [www.almwirtschaft.com/images/stories/neuigkeiten/2017/pdfs/Almwirtschaft\\_in\\_Zahlen.pdf](http://www.almwirtschaft.com/images/stories/neuigkeiten/2017/pdfs/Almwirtschaft_in_Zahlen.pdf) (online access 10th March 21). These numbers are from 2016. The numbers probably decreased a little bit since then.

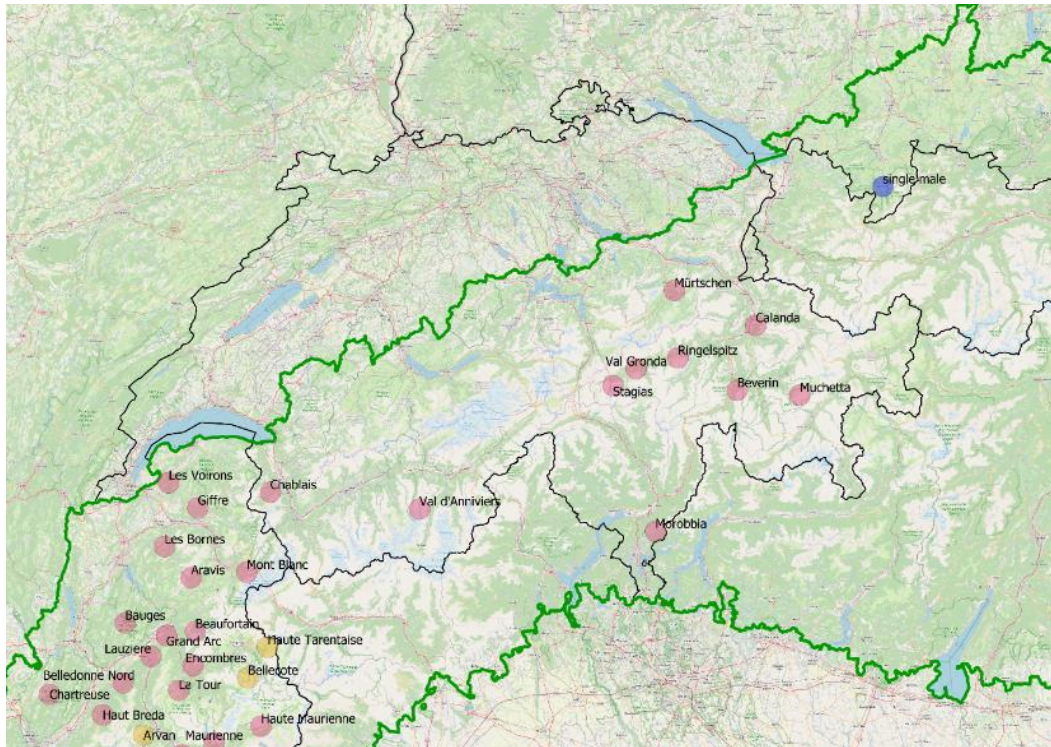


Fig. 3: Distribution of wolf packs (red dots = a pack, yellow dots = a pair, blue dots = a loner) in Switzerland in the perimeter of the Alpine Convention (green line); see Picture Credits in the full version of the final report, p. 46.

For the synthesis of statements from the Swiss interviews, please view the full version of the final report: [www.cipra.org/knowledge-wolf](http://www.cipra.org/knowledge-wolf)

Switzerland has had a 25-years old history of coadaptation with wolves since their return and is very often used as a role model, best practice example and in an advisory role for other countries and regions. Much can be learned from the Swiss example. It has to be considered, however, that the political, social and cultural meaning of mountain farming, the most exposed farming practice when it comes to wolf predation, in Switzerland is outstandingly important. Much more subsidies are paid for supporting mountain farming than in other alpine countries, although only approximately 25 percent of all agricultural enterprises are in mountain areas.<sup>6</sup> In addition, the amount of funding that flows into protection measures, counselling and monitoring cannot be reached by any other alpine country.

Another reason why Switzerland is an interesting role model is the fact that, although it is politically structured into 26 cantons with strong federal competencies, very important and strong institutions concerning prevention measures, herd protection and monitoring are organized and coordinated nationally (AGRIDEA and KORA).

Switzerland also has a special role as it is not part of the European Union and EU legislation like the Fauna-Flora-Habitat Directive do not apply. However, the wolf in Switzerland - also

<sup>6</sup> [www.sbv-usp.ch/de/schlagworte/berglawirtschaft/](http://www.sbv-usp.ch/de/schlagworte/berglawirtschaft/)



signatory of the Bern Convention - has a similarly high protection status as in the EU. But opposition against the wolf's presence in Switzerland is persistent and, despite 25 years of experience, important learnings and experiences made by now do not reach the public or even political debate. This was shown in an exemplary way by the statements made in the national council during the partial revision of the hunting law in 2019 (see KORA report, 2020 p. 68). And, it is also shown, by the statements made in the context of this report, where a lack of knowledge on wolves in general and on their role in nature has been mentioned repeatedly.

### **Liechtenstein**

In Liechtenstein, no interviews were conducted due to the small size of the country and the lack of an established wolf population. There were only two confirmed sightings of individual animals in 2018 and 2020, which were migratory animals. More migrating wolves are expected in the near future, as pack formations can be observed in the immediate vicinity of the country (e.g. in the canton of Grisons/CH) (see WISO Report, 2020 p. 158).

### **Germany**

For the synthesis of statements from the German interviews, please view the full version of the final report: [www.cipra.org/knowledge-wolf](http://www.cipra.org/knowledge-wolf)

Many farmers advocate for shooting wolves. They demand “wolf-free Alps” because herds cannot be protected properly due to alpine landscape characteristics and large numbers of tourists. (Local) Politicians follow these demands and take side with these farmers. Both groups neglect the reality that wolf-free zones are not possible since the wolf is a migratory animal and its presence is bound to prevail also in the Bavarian Alps due to rising European populations. This leads to a defensive stance towards the necessity of herd-protection measures. But recently a rising number of farmers start to step out of line and begin to prepare themselves against the “new” predator. However, positive examples for herd protection are still only to be found on a very small scale.

Problems in the context of the presence of large numbers of tourists in the Bavarian Alps and necessary herd-protection measures (guard dogs, fences, etc.) are predictable. Involving tourism representatives to the respective roundtables will probably not fully solve this problem. What is additionally needed is stronger communication efforts of tourism associations and state administration targeted at the tourists themselves. If all else fails, tourists have to be “educated” by considerable fines.

The big picture and a wider perspective on the topic seem to be missing. The return of the wolf could be a chance to re-evaluate alpine agriculture. This means, having a detailed look on the achievements of alpine agriculture and defining what is worth preserving and what is negligible. This will probably lead to new “wilderness” in a few regions but also higher efforts/payments in the rest of the cultural landscape of the Bavarian Alps.





## France

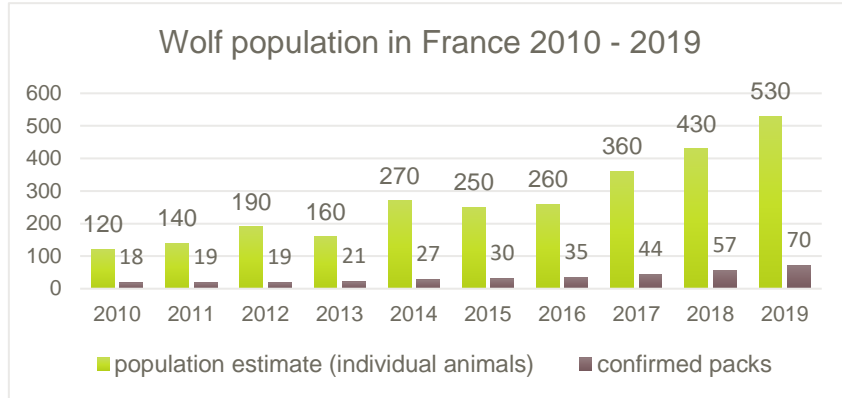


Fig. 4: Development of wolf population in France from 2010 – 2019. WISO Report 2020, p. 35.

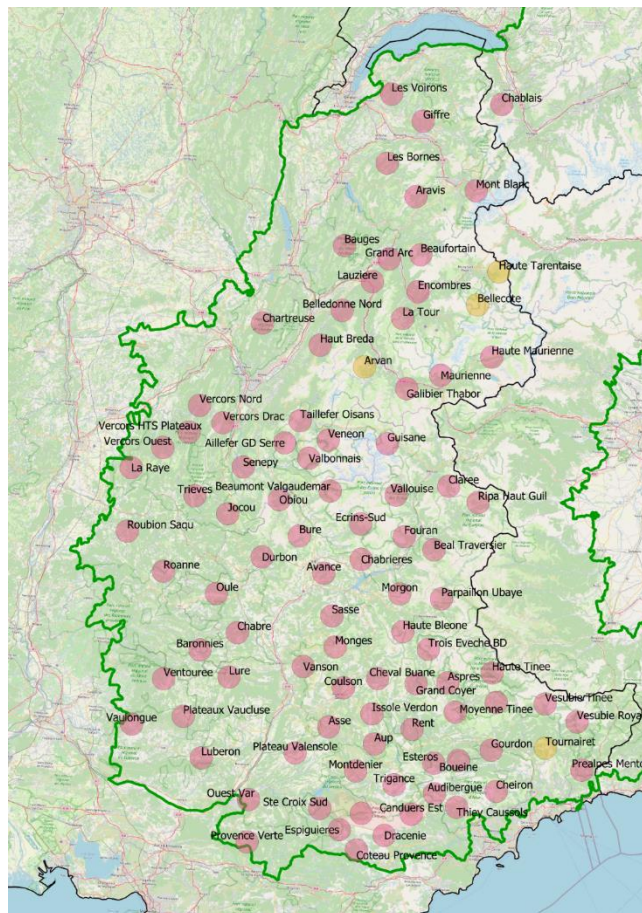


Fig. 5: Distribution of wolf packs (red dots = a pack, yellow dots = a pair, blue dots = a loner) in France in the perimeter of the Alpine Convention (green line); see Picture Credits in the full version of the final report, p. 46.



For the synthesis of statements from the French interviews, please view the full version of the final report: [www.cipra.org/knowledge-wolf](http://www.cipra.org/knowledge-wolf)

The arrival of wolves in the 1990s caught everyone by surprise: farmers, technical services and the state. Pastoral farming systems, which were set up in the absence of predation, did not have time to adapt. This has had major impacts on livestock farming systems, on the various forms of land use on mountain pastures where conflicts increased and on wild ungulates (predation and disturbance by wolves and protection dogs).

Retrospectively, the failure of the protection measures put in place in 2004 are visible today. The wolves quickly adapted to herd protection schemes (electrified nets, constant presence of human and protection dogs); the protective shootings were not flexible enough and not adapted to the realities of predation and neither is the handling of protection dogs (random genetic capital, poor education of the dogs and no training and other support for the breeders).

Another major problem identified in the interviews is the “sacralisation” of the wolf in the wider society. It is seen as a symbol for biodiversity and equipped with extreme and often passionate importance at the risk of obscuring the realities of predation experienced by farmers and shepherds.

At present, protection dogs in packs appear to be the only protective measure that works. This is potentially problematic because an increase in the number of dogs may increase the number of incidents and accidents with humans and other animals. This is all the more so as the dogs work on instinct and not on orders, with the consequences of annoying tourists, of increased predation by the dogs themselves and the subsequent disturbance of wildlife.

Furthermore, *allotment*<sup>7</sup> makes livestock farming practices particularly vulnerable to predation because it is more difficult (if not impossible) and expensive to set up protection systems. The challenge is to keep predation below a tolerable level. To do this, there are two main levers:

- Packs of protection dogs: training of technical services and breeders, establishing a guard dogs sector (work on genetic selection and education of dogs, management of problematic or over-aged dogs, providing information, etc.).
- Regulated shootings of wolves (to avoid the disappearance of the species) in order to recreate the fear of man: change of legislation.

There is a need to approach the issue from a systemic point of view and to gain a better understanding of the realities of predation. Moreover, we need to work on the conditions under which pastoral activities are carried out (particularly the housing situation). We also need to communicate on shepherding as a profession, the realities of current farming systems and the externalities produced by them (biodiversity, keeping areas open, natural risk management, etc.). A change of attitudes is also needed so that exchanges are possible, even (or especially) in the event of disagreement. However, the actors interviewed agree that lupine predation is

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<sup>7</sup> “Allotment” is a breeding technique that groups livestock by batch according to certain criteria in order to improve quality or yield.



not the major problem facing pastoral activity but it exacerbates already existing tensions of a fragile economic model.

## Italy

	Anno 2017-2018			
	Branchi	Coppie	Solitari	Minimo numero di lupi stimati
Piemonte	33	2		195
Aosta	4			31
Lombardia	1	1	1	11
Bolzano/Trento	1			3
Trento		1		2
Bolzano/Trento/Veneto	1			6
Veneto/Trento*	4			28**
Veneto	2			15
Friuli		1		2
<b>Totale</b>	<b>46</b>	<b>5</b>	<b>1</b>	<b>293</b>

Fig. 6: Number of packs (branchi), pairs (coppie) and solitaires (solitari) with stable territories and relative minimum number of wolves in the Italian Alps by region/autonomous province (Minimo numero di lupi stimati) in 2017-2018; (\* Veneto/Trento is indicated because 4 packs are shared with Trento province, one of which is documented only in Trento province) Source: The wolf population in the Italian Alps 2014-2018. Technical Report, LIFE WOLFALPS Project, p. 43.

For the synthesis of statements from the Italian interviews, please view the full version of the final report: [www.cipra.org/knowledge-wolf](http://www.cipra.org/knowledge-wolf)

Regarding wolf presence data, the results of the second WolfAlps project for the 2020-2021 campaign will be available at the end of 2021. The latest available data are those collected by the first WolfAlps and refer to the period 2017-2018. These data show that the presence of the wolf is continuously increasing in the Italian Alps, in particular a minimum of 46 packs and 5 breeding pairs have been censused, for a minimum total of 293 wolves (Fig. 6)<sup>8</sup>.

The arrival of wolves in the Italian Alps has considerably changed pastoral practices, particularly through the implementation of protection measures resulting in additional cost and workload for shepherds and breeders. The inherent limitations of the compensation system and financial aid for the implementation of protection measures is a strong issue pointed out by breeders and shepherds. Protection dogs, which have become indispensable, are

<sup>8</sup> It must be pointed out that the data reported by WolfAlps are not a population estimate, but are based on genetic analyses carried out on biological samples collected during monitoring. They are therefore to be understood as the minimum number of specimens ascertained. Furthermore, there is no homogeneous monitoring of wolf populations between regions. The methods and timeframes differ, both in terms of population monitoring and in terms of the monitoring of attacks and victims, making it difficult to obtain a reliable estimate.



expensive to maintain and create problems with tourists. There is therefore a need to support breeders and shepherds particularly in the management and education of dogs and in the implementation of protection measures in general.

The issue of monitoring wolf populations and attacks is also problematic. The lack of transparency around these figures encourages a certain distrust for politicians and scientists. This mistrust towards scientific research is fuelled by the impression that monitoring wolves is more important than finding measures to promote coexistence.

The shepherds often mentioned the French example and put it in a positive light, in particular the policy of protective shootings, the financial support from the state for the implementation of protection measures and financial compensation in the event of attacks.

The challenges of the coexistence of pastoral activities and tourism are also an issue. The need for communication with the public on the realities of pastoralism and the demystification of the wolf was clearly expressed.

## Slovenia

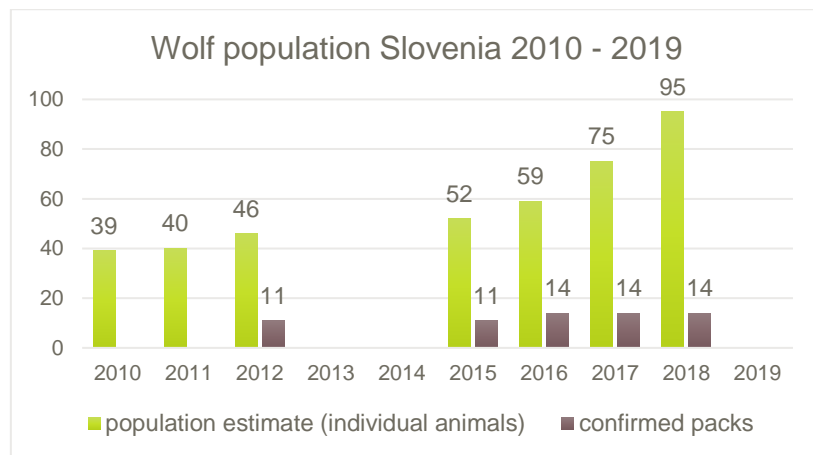


Fig. 7: Development of wolf population in Slovenia from 2010 – 2019. WISO Report 2020, p. 181.

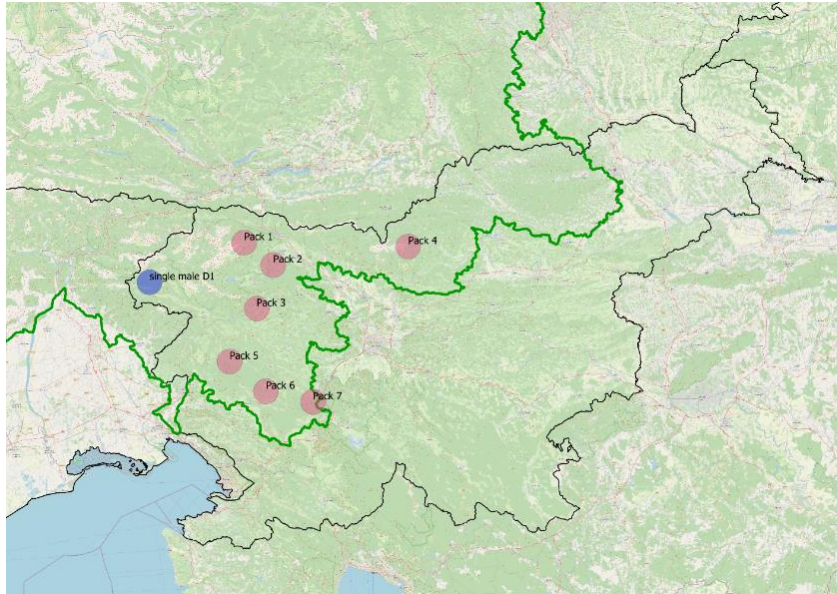


Fig. 8: Distribution of packs (red dots = a pack, yellow dots = a pair, blue dots = a loner) in Slovenia in the perimeter of the Alpine Convention (green line). See Picture Credits in the full version of the final report, p. 46.

For the synthesis of statements from the Slovenian interviews, please view the full version of the final report: [www.cipra.org/knowledge-wolf](http://www.cipra.org/knowledge-wolf)

The wolf population has grown and is expanding into new areas. Conflicts appeared in regions where people were not used to wolves anymore. The farmers were caught by surprise, experienced a lot of damages and in turn put more pressure on politicians. This brought about a juridical back and forth on the topic of shooting problematic wolves. It got worse since the abolishment of culling, which was seen as a compromise. It was mentioned several times that stopping hunting quotas was a mistake with regard to the public perception of the topic, to illegal hunting and to population management. In general, the polarisation and instrumentalisation of the conflict and with it the anti-wolf-mentality and the anger towards the government was a big problem.

In general, herd protection such as the use of herd protection dogs improved significantly in the last years. The monitoring of wolves was put in place and improved over the last 10 years. Farmers now receive more institutional support as subsidies for herd protection measures were implemented. Necessary herd protection measures require more support (financially and knowledge-wise) from the state since livestock keeping is existentially threatened due to the return of the wolf and the hence increased farming costs. Better communication by the state about existing financial support and subsidies, e.g. for herd protection measures, is needed.



A need for improvement of data availability was stressed throughout. More information on the numbers of predators are needed in order to have a common ground on which to talk to each other. Having inaccurate monitoring data has harmed the trust of the population.

Exchange between hunters, farmers and the state is already taking place in order to foster mutual understanding. But it seems that not everyone is aware of it. Some of the interviewed persons took part in transnational exchange with Switzerland and neighbouring countries. Exchange between the forestry and agricultural departments is already taking place and works well. One crucial point was that the wolf should not be a protected species under Annex 4<sup>9</sup> in Slovenia, which means that every individual is protected. Instead, Annex 5 would be better suited for the situation, which would increase the acceptance of the population.

## RESULTS AND FINDINGS BY GUIDING QUESTIONS - CROSS-SECTIONED BY COUNTRIES

For the detailed findings by guiding questions and the subsequent transnational parallels and differences, please view the full version of the final report: [www.cipra.org/knowledge-wolf](http://www.cipra.org/knowledge-wolf)

### 1. How or to what extent has the process of coexistence (the coadaptation strategy) with the wolf changed in the last years | decades | since its return? What are the political, social and technical aspects of these changes?

Here, as in many answers to other questions posed to the interviewees, a general lack of factual knowledge or the neglect thereof is deplored. The answers to the question on the general development of coadaptation strategies perpetuate mostly around the issues of political instrumentalization, polarisation and a lack of knowledge or meagre knowledge distribution on herd protection in its manifold dimensions.

To **counteract political polarisation and instrumentalization international and interregional comparisons and exchanges between administrations and political actors would be helpful** in order to learn from worst cases and best practices. Additionally, the **development of communication strategies in politics and administration** is recommended to intercept impulsive, over-emotional and clientele-oriented communication. Concerning herd protection and the above-mentioned missing capacities (e.g. on the capacities of herd protection advisories) **interregional and international exchange of administrations and practitioners on herd protection** for further improvement is advisable, also for funding issues.<sup>10</sup>

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<sup>9</sup> Annex 4 of the EU Habitat Directive: [https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index\\_en.htm](https://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm)

<sup>10</sup> Such exchanges and the institutionalization of herd protection trainings are currently being developed in the LIFEStock Protect-Project in Austria, Bavaria and South Tyrol (<https://lifestockprotect.info/en/>).



For counteracting tensions and polarisations round tables (“stakeholder meetings”) were mentioned. **Interregional and interdisciplinary exchange on coadaptation issues can be recommended but it has to follow certain standards.** Such round tables should take place on a regular basis and on a rather localized scale. Moreover, they should be facilitated by experienced and well-trained experts that are widely accepted and seen as trustworthy across different areas (e.g. farming, hunting, administration, science).

At last it seems to be **necessary to develop communication strategies, e.g. by regional and national administrations**, to counteract demonization and romanticisation of wolves and in order to spread factual knowledge among the public on topics like predation and herd protection. If there are no functioning strategies supported and carried out by the authorities but only reactive communication other institutions and organizations will take over the opinion making process and it ends up in black and white positions and the hardening of fronts that we can see now very often.

## 2. What are the most pressing concerns and challenges regarding co-adaptation with the wolf in your country | region?

The first bullet point above summarizes already three of the most pressing concerns:

- A. Having professionally carried out and facilitated stakeholder meetings (see above, question 1)
- B. a territorialized cross-border approach for monitoring
- C. professionalization of communication on all levels

**For (B) cross-border exchanges of experts (scientists and practitioners like hunters, game wardens, shepherds) on monitoring methodologies and monitoring data** are recommended in order to harmonize data and foster the trustworthiness of data among practitioners. In Italy, in the course of the LIFE Wolf Alps Project, for the first time a transregional approach to wolf monitoring in the Alpine regions of Italy is being undertaken.<sup>11</sup> This can serve as an example, but also **the transnational dimension has to be taken into account in the Alpine Space**, as national borders do not intercept the wolves` mobility. This is what the second LIFE WolfAlps project (2019-2024) is aiming for with an Alpine-wide coordinated approach, involving four Alpine countries: Italy, France, Austria and Slovenia<sup>12</sup>.

**Ad (C): The missing professionalization of communication with the public** can be counteracted by the development and **implementation of communication strategies by administrations and politics on national and regional level. Targeted communication training** for technical services and administration (official veterinarians, herd protection advisors, killing assessors, game wardens, shepherds) can also be highly recommended and is of crucial importance.

In order to improve herd protection measures and heighten their acceptance interregional and international exchanges including members of the administration and practitioners (farmers,

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<sup>11</sup> [www.lifewolfalps.eu/en/articolo-1/](http://www.lifewolfalps.eu/en/articolo-1/)

<sup>12</sup> [www.lifewolfalps.eu/en/project-area/](http://www.lifewolfalps.eu/en/project-area/)



breeders, shepherds) can be a very effective means. **Especially issues concerning herd protection dogs (genetic selection, breeding, training and education, the keeping of packs, purchasing conditions and distribution of dogs, legal issues etc.) emerge persistently in the interviews. Here international exchange and the distribution of information is urgently needed to learn from one another and to improve prevailing conditions.** Additionally, opportunities for education and professionalization for shepherds are scarce in the Alpine Space and are urgently needed. The LIFEStock Protect Project is also working on this problem as well as on protection dog related issues e.g. with the establishment of “Herd Protection Competence Centres”.<sup>13</sup> However, **regional and national administrations from the agricultural sector are well advised to foster education and training of shepherds as well as to improve and standardize working conditions** in order to have a very good lever in tackling the challenges of wolf predation.

### 3. What are the most important experiences ("learnings") you have made? What can other countries | regions learn from you?

Obviously, further implementation and continuous improvement of herd protection measures are needed almost everywhere in the Alpine space. **It cannot be stressed enough that herd protection measures should be in place BEFORE wolf attacks start.** In reality, however, implementation usually follows the attacks leading to a lot of grief, unnecessary losses of livestock and authorities that have to react instead of act, and additionally must deal with strong emotions and accusations. **Especially regions where the wolf is known to appear in bigger numbers soon, such as the Austrian and Bavarian Alps<sup>14</sup>, it is highly recommended to enforce herd protection measures, invest in capacity building and learn from the experiences in neighbouring countries.** Again, the LIFEStock Protect Project can be mentioned that targets these regions as well as South Tyrol. Additionally, the efforts that have been undertaken during the LIFE Euro Large Carnivores Project are important to mention. The project ends in 2021 and has also worked on concrete actions to be taken in numerous regions and countries all over Europe.<sup>15</sup>

As the wolf is highly adaptive and - as it is seen in France<sup>16</sup> - gets used to protection measures, these measures should also be adapted and developed further on a regular basis. **Digitalisation and monitoring technologies such as drones offer a variety of facilitation approaches for shepherds and breeders. Exchange on new possibilities and approaches as well as funding of such measures are needed.** In addition, “traditional” herd protection measures such as nets and guard dogs need constant adaptations and deeper knowledge to implement them properly. Therefore, it is highly recommended to national and regional administrations (agricultural departments, forestry departments, environmental departments etc.) to regularly exchange with administrations and practitioners from other regions and/or countries to share experiences and pool resources. This is also true when it comes to

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<sup>13</sup> <https://lifestockprotect.info/en/south-tyrol-has-found-its-first-livestock-protection-competence-center/>

<sup>14</sup> See Rauer, G. (2019).

<sup>15</sup> [www.eurolargecarnivores.eu](http://www.eurolargecarnivores.eu)

<sup>16</sup> See p. 18 – 23 in the full version of the final report: [www.cipra.org/knowledge-wolf](http://www.cipra.org/knowledge-wolf)





counteracting extremist positions: factual knowledge gained from such exchanges helps counteracting such positions.

#### 4. Where are the "gaps" in this learning and experience process? Where has too little attention been paid so far?

Interdisciplinary exchange among different stakeholders in and between regions and even countries is an important measure to meet the challenge of missing knowledge and prejudices when it comes to the realities of predation and the challenge of dealing with them. **It is crucial to consider that deep-rooted conflicts between people with different values and interests exist here, and that this plays a vital role when it comes to dealing with wolf-related issues.** Many conflicts concerning the management of wildlife and natural resources are social conflicts between people and interest groups and an underlying mistrust. The wolf serves here as a good proxy for such conflicts (see KORA report, p. 34-36 and 52-56). "Despite the diversity of conflicts associated with large carnivores and the diversity of approaches that exist to reducing these conflicts, there is one common feature that appears to be central to a successful approach. And this is the need to engage with a diversity of stakeholders in a targeted, context dependent and meaningful manner." (Linell 2013 cited in KORA report, p. 52). There are many different methods for stakeholder engagement (working groups, contact fora, practical support, joint monitoring or joint development of action plans, or even co-decision-making processes. In the end, the method is less important than the process itself and the attitude with which it is approached: **participation must be based on principles that promote empowerment, equity, trust and learning** (see *ibid* p. 53).

**When it comes to communication with the wider public, regional administrations are needed that show the willingness to provide information in a transparent and timely manner.** This approach prevents the spread of rumours and enhances the credibility of the authorities. Game wardens are essential to the communication about wolves. As direct contacts for the population and the municipalities, they play a very important role as an interface between the inhabitants and the (federal) state. They are also a kind of "antennae" which perceive the concerns of the population (see *ibid*, p. 57; see also question no. 6 below).

The "missing of active monitoring" cannot be circumvented when professional wolf management is needed. **Structures for professional monitoring have to be established in which the distribution, use of space and behaviour of wolves are monitored and kills and losses are recorded on an ongoing basis** (see Sürth, Miller et al. 2018, p. 91). It can also be vital to involve locals (shepherds, hunters, game wardens etc.) into the monitoring activities in order to heighten the trustworthiness of the activities and of the collected data among the local public. Often there exists a deep rooted mistrust for data provided by the authorities if no involvement of the local population has taken place at all.

**Regarding the psychosocial impact of wolf attacks on shepherds and breeders immediate intervention units are needed.** Currently, such Wolf Prevention Intervention Units



(WPIUs) are being implemented in the LIFEWolfeAlps EU project.<sup>17</sup> However, such intervention units should not just give support when it comes to attack prevention but should also be trained to give immediate support when an attack has happened. Often it is a deeply shocking and disturbing experience to find one's livestock suffering from an attack. To talk about the experience with a properly trained person may help a lot in this case.

## 5. What mistakes could/should be avoided?

Regarding the early implementation of prevention measures see question 3 above. **Especially when it comes to protection dogs, an early, proactive assessment of the legal, educational, financial and practical situation is needed.** Protection dogs are born into “their” herd and live there throughout the whole year. They work largely independently without being directly commanded by their owners and they react suspicious of all things new and strange to them. The dealing with protection dogs in regions that have had no contact with large carnivores for a long time triggers a learning process and is a complex issue. **For (re-)integrating the keeping of such dogs into the daily life of shepherds and breeders mutual respect is needed between the keepers of livestock and non-agricultural actors** (see Mettler, 2019 p. 233-237). Additionally, training and financial resources must be provided by the authorities in order to establish a working system of breeding, obtaining, training and the distribution of dogs. A lot of experience has been gathered in countries like Switzerland and France in the last decades. **It is highly recommended to regions where the keeping of protection dogs is still a new phenomenon, to establish close ties and entertain good relations and exchanges with relevant actors in the respective regions of those countries.**

**Concerning political involvement, a prerequisite for a constructive handling and a fact-based approach to coadaptation is the will to make it work. Political authorities have to distance themselves from emotional debates and implement the often already available management plans.** In addition, among politicians, exchanging knowledge with their colleagues from neighbouring countries in order to learn from best practice examples would be highly important, as coadaptation with wolves is a challenge that affects every alpine country.

## 6. What could and should a fruitful knowledge transfer between people on this topic look like? What best practice examples do you know?

There are various means of communication from direct to indirect communication that have different ranges of reaching out into the public. All of these have different impacts and are often applied in one or another way, but the question is “What improvements can be made?” In the Swiss KORA report from 2020 this question is answered as follows (p. 57-60):

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<sup>17</sup> [www.lifewolfealps.eu/en/al-via-la-prima-stagione-delle-squadre-di-supporto-alla-prevenzione-delle-predazioni-in-alpeggio/](http://www.lifewolfealps.eu/en/al-via-la-prima-stagione-delle-squadre-di-supporto-alla-prevenzione-delle-predazioni-in-alpeggio/)



- **Prompt and proactive communication** e. g. in case of damages or kills with as little delay as possible and thereby manage uncertainties and distinguish facts from assumptions.
- **Regular communications:** Even if wolf populations are established in a region, regular information on the wolf situation is vital because as soon as information reaches the public through other channels, the public loses trust.
- **Involve the municipalities:** When a wolf-related event occurs in a municipality, the local authorities are confronted with enquiries from both the population and the media and therefore need to be integrated in wider communication strategies of the authorities.
- **Messages conveyed:** Until now, "wolf news" mainly had negative connotations. What is missing from the communication about the wolf is information about "normal" experiences with this species. Constructive messages and examples on the coexistence of wolves and humans and the coexistence of people who have different "wolf images" should be communicated more actively.

The above-mentioned transfer of knowledge aims mainly at authorities communicating with the public. Besides, other and more direct forms of knowledge transfer are very helpful and are already being applied in different contexts. Such forms of knowledge transfer like peer-to-peer exchanges, excursions, regular round tables and stakeholder platforms, conferences and forums are important vehicles for creating understanding and knowledge. A cross border approach concerning these should be pursued more intensively. Exchange and dialogue between people is the most effective means to create understanding and to transfer knowledge and as wolves are not dependent on national or regional borders, people should not be either.

## 7. **What are the "crucial points" that need to be worked on now? What do we have to pay special attention to now?**

Many different topics are crucial points for the interviewees: More and better communications, more funding for prevention measures in comparison to compensation payments and more scientific knowledge as well as a more effective "education" for wolves are mentioned. What can definitively be concluded here is that an important underlying issue should be addressed more intensively and transparently:

Small structured mountain agriculture, as it is often associated with the Alps, is strongly affected by structural change. Less and less people in Europe earn their living in agriculture, let alone in agriculture as the sole source of income. In most European (and therefore alpine) countries farmers are a minority, as most of the inhabitants in the Alps live in cities and towns. Additionally, public debates on land use, animal welfare and the use of pesticides lead to a polarisation in society. At the same time, romantic attitudes towards nature and wilderness are on the rise for which large carnivores often serve as flagships. **This divide - very roughly spoken - separates urban from rural populations. Or, it separates people living in and from agriculture and people being utterly unfamiliar with the realities of (mountain)**



**farming and/or shepherding on alpine pastures.** Here smart communication strategies by the authorities are needed in order to transfer knowledge on the realities of mountain farming to urban or peri-urban inhabitants. Also, tourism could play a vital role here as the rural, “pristine” mountain areas are popular tourist destinations. A more elaborate communication on the importance and the general benefits, but also on the challenges of mountain farming in the Alps, is urgently needed. The impact of the return of wolves is just one factor that has to be assessed here. Even more importantly, general urban-rural relations concerning agriculture, ecology and socio-cultural issues should be part of educational programmes in schools. Especially the working conditions of shepherds, their social rank and their rising responsibilities and professional requirements due to herd protection measures should be taken into consideration by the authorities in agriculture and tourism (see “Results of Field of Investigation 2” in the full version of the final report).

#### **8. On which topics concerning the coadaptation of humans and wolves would you like to gain feedback and/or deeper knowledge?**

Here again a desire for “better” communication in different contexts is mentioned. It is easy to detect the missing communication efforts or communication efforts that do not lead to solutions or at least on a constructive path concerning human and wolf-relations. **In the pending follow up project to this preparatory survey done by CIPRA International, CIPRA Germany, CIPRA France and CIPRA Italy the focus will be, among other things, on exactly this topic (see more below in the general conclusions).**

Concerning protection dogs, the recommendation is - especially for countries and regions where protection dogs are a rather new phenomenon - **to set the course immediately for a functioning system of breeding, obtaining, training and distribution of such dogs;** legally and practically spoken. It is a complex and challenging issue especially in regions where alpine pastures play a vital role in tourism and deserves special attention. At the same time, healthy and well-bred and trained protection dogs provide the most effective protection against predation. **As there are many mistakes that can be avoided through the sharing of expertise and experience, international exchanges especially concerning the issue of protection dogs is dearly recommended. Regional and national administrations, breeders, shepherds, game wardens, hunters and also people working in tourism (guides, employees working in marketing and communications, managers etc.) can forego major difficulties if properly informed as the protection dogs’ behaviour differ considerably from the behaviour of other working dogs regarding training, dog keeping and operational mode.** Especially in regions where large carnivores have long been absent, the handling of protection dogs triggers a learning process and can easily lead to conflicts between tourism, agriculture and hunting (see Salvatori et al. according to Mettler 2019, p. 237).

Apparently, there is a big interest in the developments in France concerning coadaptation of humans and wolves. As the most wolf packs in the Alpine Space live in France, this is very comprehensible, a lot of effort has been put in coadaptation strategies there, and a lot of knowledge and experience have been gained accordingly. At the same time, also in France there is a need for gaining more knowledge especially on the above-mentioned topic of protection dogs (see section 3.1.5 “France”). **So, again international exchange between**



**administrations and practitioners (shepherds, breeders) can be highly recommended in order to avoid making the same mistakes in different countries again and to adapt functioning models of herd protection, communication, grazing management and the management of large carnivores to other national and/or regional conditions.**

## **POTENTIALS AND CHALLENGES FOR A CROSS-BORDER SHEPHERD ORGANISATION**

View the full version of the report here: [www.cipra.org/knowledge-wolf](http://www.cipra.org/knowledge-wolf)

In France, Austria, Italy and Switzerland, there is a clear need among the shepherds interviewed for a stronger organisation. In Austria and Italy - and also in France, where there are already various shepherd associations - the founding of new, local ones can be observed. However, the shepherds interviewed have reservations about a transboundary shepherd organisation that is intended to promote more than just cultural exchange between them. At the same time, our research shows that such an organisation has great potential. The shepherds from France, Austria, Italy and Switzerland all face very similar problems. A cross-border shepherd organisation could help to raise awareness for the profession across countries, advocate for cross-border vocational training, promote exchange, and networking between shepherds. Furthermore, it could act as a coherent and professional representation of shepherds' interests and be an independent contact point for questions about shepherds' rights and duties. Despite the difficult initial situation, we recommend that the establishment of a cross-border shepherd organisation should be tackled for the benefit of the sheep, goats, cattle and cows, and of course, also for the benefit of those who herd them. The first step in this direction is to clarify the following questions:

- 1) How is it possible to work as a transboundary shepherd organisation in different regions in a grassroots and competent way and at the same time to stand up for the concerns of the shepherds on a supranational level?**
- 2) What structural requirements must such an organisation fulfil in order to be able to consistently pursue its goals?**
- 3) Should a transboundary shepherd organisation limit itself to technical issues and deliberately refrain from taking political positions?**
- 4) Is it possible to finance several jobs for the organisation in order to ensure constant support?**



## IV. GENERAL CONCLUSIONS

Departing from the knowledge that the protection status of the wolf is a given fact in the Alpine countries due to the according international treaties and directives, and that we should not expect a change in the near future, the following issues derived from the over 30 interviews made for this report are to be tackled more better, wiser and quicker:

- Communication with the wider public: public authorities should take communication concerning coadaptation issues of humans and wolves into their hands (and not leave it to other organizations and institutions), have a professional approach and keep a proper distance to populist and emotionalizing attitudes. Fact based, calm, well informed and transparent communication is needed in order to build trust, spread factual knowledge and counteract instrumentalization of the issue.
- Part of this communication has to be education on the realities of predation, of pastoralism and of mountain farming in general (which, of course, are intertwined). Especially the additional effort of protection measures (workload, financial effort, new practices like the keeping and management of protection dogs) is not known to the wider public. Here also the active involvement of the touristic/recreational sector is needed.
- The profession of shepherding is more important than ever since the return of the large carnivores. Professionalization in education, training and networking/lobbying is needed in the Alpine regions, also to enhance social reputation and financial remuneration of the profession as such.
- Monitoring activities concerning wolf populations in the Alpine regions are very heterogeneous. Transregional or transnational monitoring activities are still an exception and should be harmonized and substantially expanded. At the same time, the local population (hunters, shepherds, farmers etc.) should be integrated into monitoring activities in order to prevent mistrust.
- Herd protection is the key to coadaptation and to a functioning relation of humans and wolves in the Alpine space. The implementation of herd protection measures - especially the deployment of protection dogs - is a complex and ever ongoing learning process for all involved stakeholders (administration, farmers, shepherds, politicians, tourists, hunters, game wardens etc.) and therefore must be tackled as early and as seriously as possible. Knowledge transfer, financial support, training, education, and scientific support need improvement in most countries.

In order to use resources wisely for the above-mentioned actions and to quicken up the process of coadaptation everywhere a transboundary approach is recommended highly - meaning the cross-border exchange of knowledge. Borders in this case are regional and national borders but also disciplinary borders between e.g. science, agriculture and politics. Coadaptation processes in the Alpine space have been very heterogeneous, as is already mentioned on the first pages of this report and has been further confirmed now. Therefore, the exchange of knowledge, be it peer-to-peer exchange, conferences, workshops on conflict communication or on setting up electric fences etc., is crucial for making progress in an alpine wide



coadaptation strategy, for saving resources and for speeding up learning processes. The importance of such exchange has been highlighted throughout all the interviews conducted and all interviewees showed a lively interest in learning from their foreign colleagues. It can be safely stated that a well-prepared transfer of knowledge across borders saves time and money. One of the few prerequisites being a willingness to learn.

Additionally, with great respect to the heterogeneity of the Alpine space and the different strategies adapted in order to tackle the challenge of coadaptation, in all countries the same underlying structural changes emerge: the rapid change of agriculture itself, the shrinking number of individual mountain farms and people working (full time) in agriculture and the subsequently growing distance of more and more people from the actual agricultural context. The return of the wolf exacerbates these developments and resulting conflicts and actually helps spotlighting them, as has been mentioned throughout the interviews. The agro-pastoral system is not very competitive on an aggressive, growth-oriented global market and gets mutilated and simplified by its mystification and its exploitation by other industries like tourism. Therefore, we urgently need to have honest debates on the underlying issues that affect all alpine countries. The wolf actually helps us to focus on these issues and to develop visions for the future of mountain farming and pastoralism.