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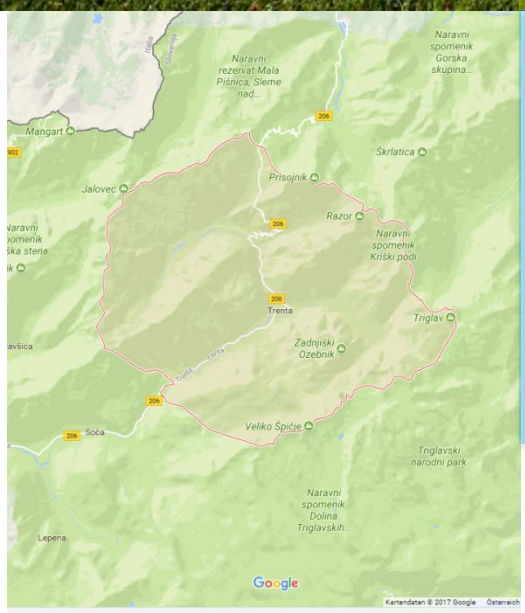
Integrative Alpine wildlife and habitat management for the next generation



REPORT

Workshop on Transboundary wildlife management

10 October 2017, Trenta, Triglav National Park, Slovenia

(Alpbionet2030 – Work Package 2)

A workshop to discuss tactics and devise actions for transboundary wildlife management between the wildlife managers of Transboundary Ecoregion Julian Alps, defined as the sum of Triglav Hunting Management Area and Gorenjska Hunting Management Area (Slovenia) and Tarvisiano Hunting District (Italy) with their core protected areas of Triglav National Park and Prealpi Giulie Nature Park, was held at the conference facilities of the “Dom Trenta” National Park house in Trenta. This Workshop is one of the activities of WP T.2 of the Alpbionet2030 project co-financed by the EU Alpine Space Programme.

INTRODUCTION

The behaviour and habitat use of animals can be strongly affected by hunting methods and wildlife management strategies. Hunting and wildlife management therefore have an influence on ecological connectivity. Lack of consistency in wildlife management between regions can cause problems for population connectivity for some species, particularly those with large home ranges, (e.g. some deer and large carnivores). Hunting seasons, feeding (or lack thereof), the existence of resting zones where hunting is prohibited, legal provisions for wildlife corridors, even administrative authority for wildlife management differ from one Alpine country to another. The Mountain Forest Protocol of the Alpine Convention (1996) asks parties to harmonise their measures for regulating the game animals, but so far this is only happening in a few isolated instances. Thus, to further the goals of ecological connectivity, ALPBIONET2030 aims coordinate wildlife management in selected pilot areas. One of which is a cross-border area *of the Eastern Julian Alps.*

The cross-border study area of the Julian Alps covers an area of 289.660 ha. The Slovenian side covers the entire area of the Triglav Hunting Management Area (141.461 ha) and part of the Gorenjska Hunting Management Area (31.050 ha), which lies within the borders of the UNESCO Man and Biosphere Reserve Julian Alps but outside of an area of hunting management units covering the Karavanke mountains. On the Italian side, the vision shall apply to the entire area of the Tarvisiano Hunting District (117.159 ha) which covers altogether 13 municipalities: Bordano, Chiusaforte, Dogna, Ligosullo, Lusevera, Moggio Udinese, Paularo, Pontebba, Resia, Resiutta, Taipana, Tarvisio-Malborghetto and Venzone.

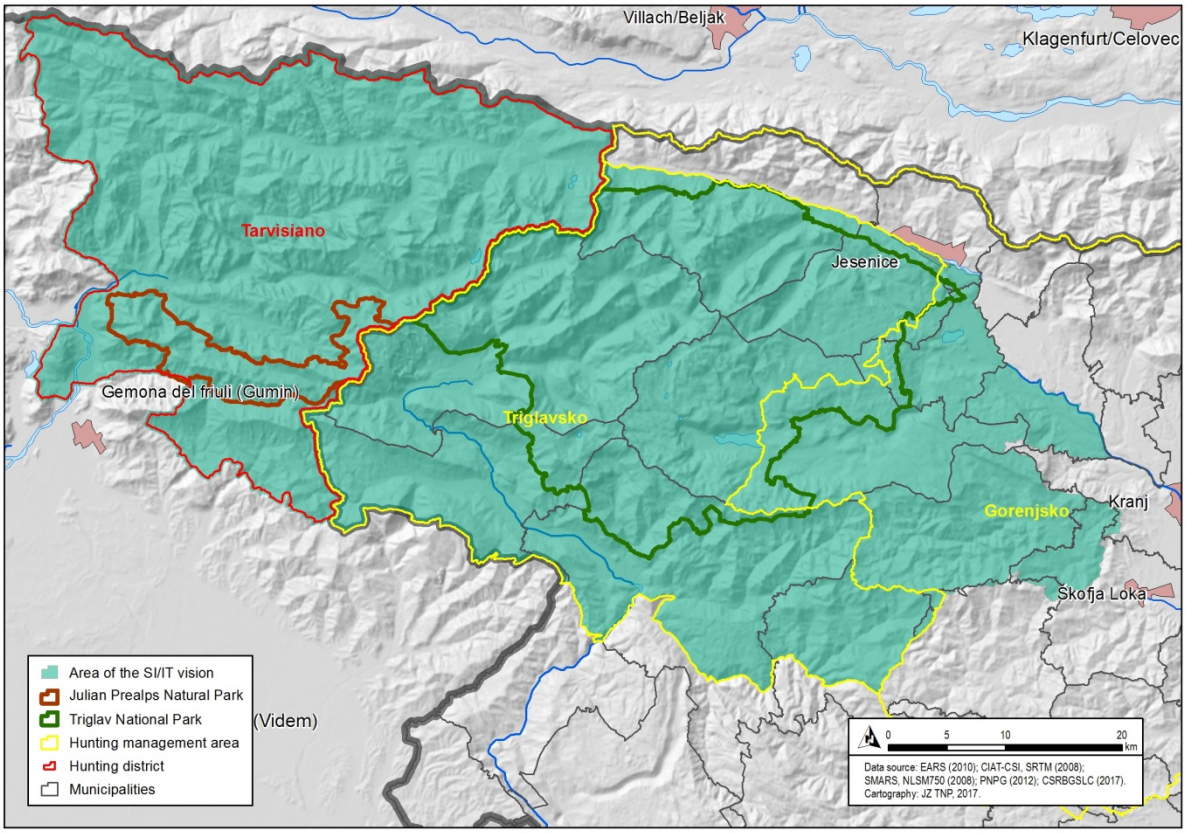


Fig. 1: Slovenia – Italy cross-border study area

In order to establish cross-border management of wildlife species, a workshop was held in Trenta, Slovenia, on 10 October 2017, in cooperation with the Slovenia Forest Service (SFS), the Research Institute of wildlife Ecology-FIWI (University of Veterinary Medicine Vienna), Triglav National Park (TNP), and Julian Prealps Natural Park (PNdPG). The focus was on two species, chamois and ibex management, due to the complexity of the problem and the different requirements of different species. Possibilities for reconciling land use conflicts were discussed. The workshop targeted stakeholders from the regions, including representatives from wildlife management, hunting, park management, forest management, and other interested area residents.

TRANS-BOUNDARY WILDLIFE MANAGEMENT VISION FOR CHAMOIS AND ALPINE IBEX

(2nd DRAFT; 26th September 2017)

The **vision** was put together by local partners of the ABN2030 project with the support of Triglav National Park experts on 26 September 2017.

THE VISION STATEMENT

*The long-term **conservation, protection and sustainable management** of the chamois (Rupicapra rupicapra) and Alpine ibex (Capra ibex) populations and **their habitats** within the **trans-boundary area of Julian Alps,** which also includes Triglav National Park (TNP) and Prealpi Giulie Nature Park (PGNP), are ensured by comprehensive and coordinated **hunting estates management** and by **land and natural resources use** adapted to the needs of these two species. This management approach is **accepted, appreciated and respected by the community** and shall be recognized as a **model for environmentally, economically and socially** accepted wild game species management within a **wider Alpine area** of Slovenia and Italy. The vision also recognizes that other sectoral policies, including those relating to nature conservation, also have a significant impact on both species (for example, protection regimes within TNP and PGNP) and that wildlife management operates within the given legal and policy framework.*

*In order to **reach the goals of our vision**, the following aspects shall be encouraged and respected within the trans-boundary area:*

- ***Conservation aspect** by preserving the individuals, populations and key habitats, by reducing negative human impacts and pressures and by conducting an effective inspection and supervision;*
- ***Developmental aspect** by ensuring the traditional, sustainable and prudent use of populations and their habitats;*
- ***Trans-boundary aspect** by establishing and maintaining regular, constant and constructive cooperation and sharing the information between competent managers, with a particular focus on highlighting the importance of such trans-boundary cooperation to achieve the international community objectives concerning the cross-border preservation or improvement of ecological connectivity among populations;*
- ***Scientific aspect** by encouraging, supporting and promoting thematic research activities, by establishing and conducting common population field surveys, by*

developing guidelines and recommendations to improve management of populations and their habitats, by project-based cooperation and by conducting analysis and developing specific models of long-term population trends considering climate change impacts;

- ***Management aspect** by improving the cooperation between competent managers in management plans preparation and concrete actions performance, by developing grounds for uniform and continuous data collection, by effective disease control, by solving conflict situations and by organizing regular trainings of employees and interested stakeholders;*
- ***Legislative aspect** by respecting and implementing the existing regulations concerning conservation, protection and sustainable use of chamois and Alpine ibex populations and their habitats;*
- ***Communication aspect** by performing shared communication activities at both, vertical and horizontal level, and at discussions with stakeholders, by developing and maintaining information exchange for the public awareness raising and education;*
- ***Promotional aspect** by emphasizing the public importance and interdependence of ecological, social and economic importance of these species, by promoting their recognition as indicators of pristine or well preserved environment and their symbolic value for the entire Alpine area, by highlighting the importance of protected areas and non-hunting areas for the monitoring, research and evaluation of populations' development without human intervention.*

BACKGROUND INFORMATION

The vision focuses on the trans-boundary management of the chamois (*Rupicapra rupicapra*) and Alpine ibex (*Capra ibex*) species in the Alps. It is as a first step in the process of developing a common trans-boundary strategy. The next step is the identification of common management goals concerning the chamois and Alpine ibex. After it has been agreed between concerned stakeholders, the management vision will also lay the foundation for further preparation of a broader management vision and strategy in the trans-boundary area of Eastern Julian Alps covering the entire aspect of wild animal species that are subject of sustainable use (game species). The period of validity of this management vision is limited to 10 years, with the possibility of its content being supplemented or amended anytime if new findings make this necessary. If agreed, the vision duration can eventually be extended indefinitely.

DISCUSSION HIGHLIGHTS AND PROPOSED IMPROVEMENTS

- The species of chamois and ibex are the first two target species, but the vision is eventually intended to deal with all wildlife species. The vision also concerns the conservation or improvement of habitat – this means it addresses not only

the game management sector or hunting sector, but involves also other sectors.

- The proposed initial period for a wider wildlife management strategy is 10 years, but can be prolonged indefinitely.
- The maps show the proposed management areas (Triglav Hunting Mgt area, Gorenjska Hunting Mgt Area and Tarvisiano Hunting District) – around 300.000 ha overall(Fig. 1).
- The Alpine ibex is included in Annex V of the Habitats Directive. However, the Alpine ibex has a somewhat unclear status in Slovenia. It is not clear whether it is to be considered autochthonous or not. It may be necessary to re-classify the ibex as a native species (legislative issue), as defining it as an introduced species constitutes a barrier to its conservation. Treating the Alpine ibex as an introduced species actually affects the management of this species, as the Nature Conservation Act only differentiates between native and non-native species. Non-native species would actually have to be eradicated if one interpreted the Act literally. However, in practice the Alpine ibex is considered "less non-native" than e.g. the mouflon. TNP treats the ibex and chamois the same way in its vision for long-term management.
- It is important that the management approach is accepted and respected by the community. It should become a model for environmentally, economically and socially accepted wildlife management within a wider Alpine area of Slovenia and Italy.
- One of the important issues is the reduction of negative human pressures, which includes quiet zones for wildlife where both hunting and tourism activities are restricted. This could also be a trans-boundary aspect.
- The scientific aspect is quite important, as joint monitoring activities are required. The project is an excellent opportunity to improve that kind of cooperation.
- Trans-boundary cooperation affords possibilities of effective disease control, solving conflict situations, developing uniform and continuous data collection, and joint trainings of employees and interested stakeholders.
- A fact is that existing legislation has to be respected, but the stakeholders have the possibility to propose changes. During the workshop suggestions were made concerning re-defining the status of protection and sustainable use of chamois and Alpine ibex populations in Slovenia.
- There is also a need for improving communication with the public. The public perception of hunting is quite negative - it is viewed as a sport, not as much as a management measure. This perception is questionable and efforts have to be made to create greater awareness on the role of hunting in wildlife management.

TRANS-BOUNDARY WILDLIFE MANAGEMENT WORKSHOP

All the most important stakeholders in the cross-border study area attended the workshop. First, Chris Walzer made a presentation on “strategy” vs “tactics”, followed by presentations of Miha Marolt and Fulvio Genero, who presented the ibex and chamois situation in Slovenia and Italy. The proposed Trans-boundary wildlife management vision statement was presented by Andrej Arih and discussed by the participants. An Overview of these presentations is presented in Appendix II to this report.

After the plenary session, participants were divided into five working groups. First, the participants followed the “H-form” to discuss and evaluate the current management approaches for both species, then they ranked the proposed future activities. In the final phase of the workshop, they agreed on an action plan for those proposals for improving transboundary wildlife management that received the highest number of votes and were thus ranked as most important.

THE WORKING GROUP PROCESS USING “H-FORM”

The key question that groups were asked to answer was: “How do you evaluate the way these two species are currently managed in the context of the transboundary vision?” To evaluate current management practice, participants were asked to consider hunting, monitoring and information exchange, wildlife management planning, management measures (e.g. regulating shooting, sport shooting, feeding, and habitat measures), communication, and proposals for changing legislation. First, they evaluated the advantages and disadvantages of the current management approach.

Participants individually rated these issues on a chart from 0 (all negative)-10 (all positive) and then explained the reasons for their rating with short statements (3 arguments/person). (“Why did you not give the worst score?”, “Why did you not give the best score?”)

Thereafter the 5 working groups each discussed their ratings and assigned a joint score to the same question, which is not

necessarily the same as the average of the individual ratings. (See images below.)

After this the groups were asked to present three recommendations each to improve transboundary management. The recommendations were collected and then voted on individually to arrive at the five most important ones.

The outcome of this process can be summarized as follows:

Advantages:

1. **Cross border collaboration and communication**. This was addressed as most positive.
2. **Collaboration between hunters and general willingness for formal and informal cooperation between both sides**. There are several ongoing project addressing transboundary issues (e.g. Europarc Transboundary Parks, Alpbionet2030, Life DINALPBEAR).
3. **Populations of both, ibex and chamois species as well as their habitats are well preserved**. In addition, the management of both species was considered positive as well, although it may be different on the both sides of cross-border area.
4. Participants also highlighted **establishment of quite zones and awareness of the importance of preserving the habitats for wildlife**.

Table 1: List of advantages highlighted by the participants.

Advantages mentioned by the workshop participants	**Rank***
Willingness to collaborate between Slovenian and Italian sides.	
Cooperation already exists at the park level and through various projects.	
Information exchange already exists.	
Ibex and chamois and their habitat is well preserved, population is stable, because management of ibex and chamois is satisfactory.	
Opportunity to change legislation.	
Opportunity to implement changes.	
Preparation of common vision.	

*Participants will be asked in a follow-up correspondence to the workshop, to **mark with "x" three most relevant for them.**

Disadvantages:

Among the disadvantages the participants highlighted the different legislation and legal status of species between Italy and Slovenia. In addition there are different monitoring methods, different data availabilities and a lack of information, communication and data exchange were found as an important weakness. Lack of

knowledge and systematic research was also highlighted as an important disadvantage.

Differences between Italy and Slovenia in perceptions and practices of hunting (e.g. in Italy it is not allowed to hunt in protected areas, whereas in Slovenia it is legally practiced) was also seen as important weakness. Furthermore, different public presence and pressures on the habitats, difficulties in communication between the park authorities and the general public, as well as low public acceptance of hunting were seen as important barriers to transnational wildlife management.

Regarding ibex species, the genetic base on both sides is identical (they stem from the same source populations), which may cause problems for the species in the future, and it is not clear how to deal with it. An important barrier regarding management of the species is the legal status of ibex in Slovenia, as the Nature Conservation Act classifies it as an introduced (alien) species, which theoretically would imply it has to be eradicated. Furthermore, the management of chamois should also be improved. The protected areas are fragmented, hunting bag-planning procedures differ among study area, and there is no systematic communication between the two sides on wildlife management planning. Despite some prior joint projects, regular cooperation has not yet been established. There was a common Interreg project on chamois, but the results have not yet been implemented.

In addition, several important questions arose during the discussion on disadvantages regarding transnational wildlife management. The reason we are defining common goals and the benefits of the strategy preparation are not clear to everyone. Is it because we want to improve the status of the species? Do we need to increase the benefits from the species? To achieve this, do we need cross-border collaboration?

Table 2: List of disadvantages highlighted by the participants.

Disadvantages	**Rank***
Different legislation, regulation, authorities between Slovenia and Italy and different legal status of Alpine ibex between Slovenia and Italy.	
Different wildlife management approaches in protected areas between Slovenia and Italy.	
No common methodology, monitoring, data collecting exchange.	
Unclear common goals.	
Insufficient scientific research activities, Lack of genotype research.	
Difficulties communicating with the general public, low public acceptance of hunting.	
Fragmentation of wildlife habitat	

*Participants will be asked in a follow-up correspondence to the workshop, to **mark with "x" three most relevant for them.**

Recommendations:

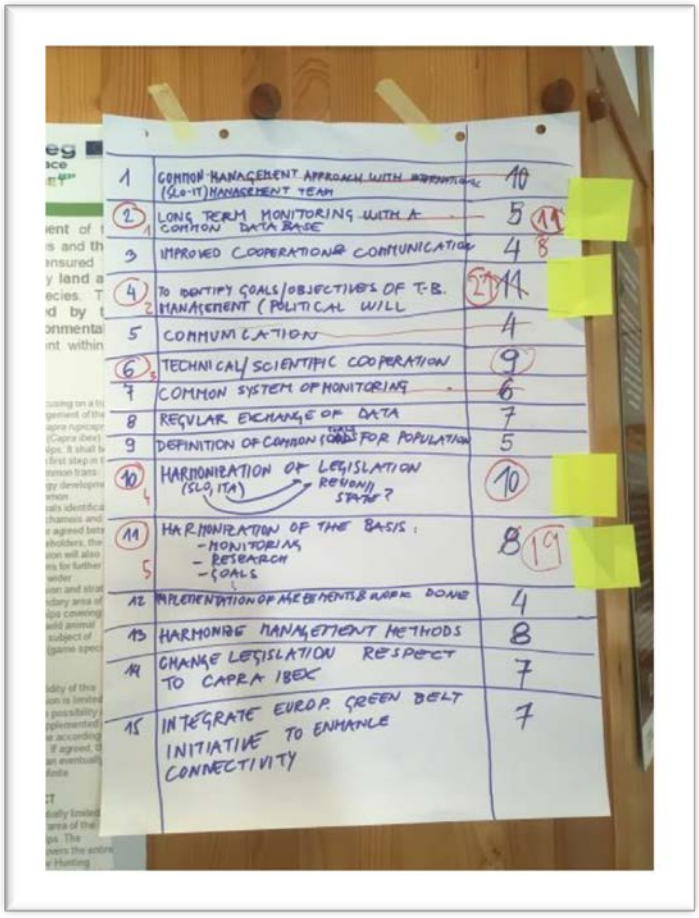
Proposed recommendations for improving transboundary management were grouped and are presented in Table 3.

Table 3: recommendations for improving transboundary management.

		Sum	Final sum
1	Common management approach with international (Slovenia-Italy) management team	10	
2	Long term monitoring with a common database	5	11
3	Improved cooperation and communication	4	
4	Identification of goals/objectives of trans-boundary management (political will)	11	21
5	Improved and more regular communication	4	
6	Technical/ scientific cooperation	9	9
7	Common system of monitoring	6	
8	Regular exchange of data	7	
9	Definition of common goals for the wildlife populations	5	
10	Harmonization (Slovenia – Italy) of legislation (Region, state)	10	11
11	Harmonization of the basis: - Monitoring - research - goals	8	8
12	Implementation of agreements and work done	4	
13	Harmonization of management methods	8	
14	Change in legislation with respect to the status of Capra ibex	7	
15	Integration of the European green belt initiative to enhance connectivity	7	

The next step was an individual vote on priorities by selecting the five most important statements by pins. Of the 5 with the most votes were considered top priorities.

1. Long-term monitoring with a common database
2. Identification of goals/objectives of transboundary management and develop the political will
3. Technical/scientific collaboration
4. Harmonization of legislation between Slovenia and Italy (Region/ State?)
5. Harmonization of the basis: monitoring, research, goals



ACTION PLAN

Subsequently the groups had to come up with specific actions to achieve the 5 identified priorities. Each group was assigned one of the 5 priority goals and had to devise actions for achieving it based on the following format:

What – where –how – with what – who involved – when – how will we know

Groups again met and discussed one of the five priority goals and find out the action based on the following questions:

1. **WHAT Long-term monitoring with a common database: species, pressures, habitat**
   WHY: To check if the management work is correct
   WHERE: 1. Extensive as a first step 2. Selected sites (small scale)
   HOW Rough data (mortality, hunters observations, test/ develop new methods
   WITH WHAT: SFS + Park managers, local authorities, hunters
   WHO INVOLVED: SFS, PGNP, hunting clubs. Forestry department, Carabinieri, NGO, volunteers, scientific institutions
   WHEN: On systematic intervals
   HOW WILL WE KNOW: Confidence intervals

2. **WHAT Identification of goals/ objectives of transboundary management and develop the political will**
   WHY: To enable common management. To present it to the politicians and push it through the political process.
   WHERE: Both side of the border. Slovenia: National level. Italy: Regional level.
   WITH WHAT/WHOM: Scientifically proven data. (University, research institutes, Slovenia Forest Service, Regional forestry corp, Parks, Hunting organizations
   WHO INVOLVED: Ministry, Regions, Local municipality, Hunters, stakeholders, general public
   WHEN: ASAP, in the frame of the ABN project
   HOW: Members of Alpbionet2030 should start the process and involve the data providers. The proposal should be first presented to governments of both sides, after public consultation should be put into action. The preparation of a legislative act will not be a quick process.
   HOW WILL WE KNOW: To fix a clear timetable. To establish a group of experts working on a topic. When timetable has been fixed check the aspect of expiry date.

3. **WHAT: Technical/scientific collaboration**
   WHY: For the good management on the population level
   WHERE: In all cross-boundary area, 3 hunting districts: Gorenjska, Triglav, Tarvisiano
   HOW: Definition and application protocol
   WITH WHAT: Working group -> Regional service-> Park -> Research unite -> Hunter?
   WHO INVOLVED: Local politician/ municipality/ Farmer/ Hunter / Forester
   WHEN: 3-5 years
   HOW WILL WE KNOW: Public announcement

4. **WHAT Harmonization of legislation between Slovenia and Italy (Regions/ State?)**
   WHY: To achieve the same goals
   WHERE: Slovenia, RFVG
   HOW: Mixed commission, working groups Slovenia – Italy
   WITH WHAT/WHOM: Hunter, Ministry: Directorates, Sectoral, Regions
   WHO INVOLVED: Ministry (Slovenia), Regional institutions (Italy)
   WHEN: This is a foundation, so ideally it should be tackled immediately
   HOW WILL WE KNOW: Legislation is changed

5. **WHAT Harmonization of the basis: monitoring, research, goals**
   WHY: Common data with the same methodology, to base decision making on the same scientific means, common publication of outputs, possibly reduced costs
   WHERE: The two parks and hunting concessions, an area as large as possible
   HOW: Identify guidelines, regular formal meetings, education and trainings
   WITH WHAT: Identifying stakeholders, Develop trans-boundary budget lines, integrate administration
   WHO INVOLVED: stakeholders, foresters, hunters, administration, researchers, local NGO, civil society
   WHEN: as soon as possible
   HOW WILL WE KNOW: Common S.O.P. published, N of people trained, N of people involved, S.O.P. integrated into legislation, common budget line

These answers will form the input to an action plan for better management.

CONCLUSIONS

The workshop results show that there is a great willingness for cooperation between stakeholders from both countries. The stakeholders very well accepted the results of the workshop and they agreed that management problems in transboundary area could only be resolved in a cross-border framework and require joint measures. An important conclusion of the workshop is that the need for coordinated management of the populations of ibex and chamois is present on both sides and that the proposed vision is a good basis for further work. Participants found this step important also in view of the opportunity to change current legislation. To improve cross border cooperation and to implement transboundary wildlife management vision in practice, further meetings will be needed. The initiative group of the Alpbionet2030 project will continue with capacity building activities for the improvement of transboundary wildlife management in the SI-IT pilot area.

Appendix 1: Individual statements of advantages and disadvantages of current wildlife management in transboundary region

Advantages

Group 3

Hunting management

Management is regulated

Sustainable management of the species

Sharing information between protected and hunting areas

Health hunting management

Learning to management

Species actually live exists

Good status of the species

Communication

Community for the local people

Positive attitude for the collaboration

People pro-forma wants to collaborate

Community and meeting

Censuring

Scientific research

Group 2

Awareness of importance of coordinated management

Cooperation TNP - PNdPG

Good personal contacts on both sides

Good animal density

Similar kind of management (Hunting reserves)

Good fundamental situation

Stable population

No impact zone

Traditional communication of hunters

Group 1

Existing cooperation between protected areas

Several project addressing the TB cooperation

Wildlife management and nature conservation legislative frameworks are already in place

Collaboration and monitoring with hunters

Information corporation already exists

Group 4

On the border, there are also passionate people

Perspective for monitoring

Monitoring

Trans-border cooperation

Attempts for cooperation

Area connectivity

Projects

We started talking

Begin to collaborate in the year 1984

Fauna occupies an area adequate to its conservation

Hope for better future

Group 5

Establishing cooperation

Former cooperation = potential

Work together

Partial communication

Vision

Always Trans-boundary vison for management (not separated)

Common wish

First step Alpbionet2030

Changes

Opportunity to change legislation

Strong common team

Common landscape

Conservation of the habitat

Establishing quiet zones

Population trend

Disadvantages

Group 3

Different laws between Slovenia and Italy

Different regulations

Completely different legal status

Not sharing information and methods

No real official cooperation

Different human Presence and pressures

Not sufficient control by officers

Less scientist activities in Italy

Absence of common management (some units)

No common strategy

Group2

Different planning procedure and authority

No systematic communication

Different system of monitoring

No clear ibex status in Slovenia

No common methodology

Data base sharing

Genotype research

Lack of communication and data exchange

Different approach for Ibex - protected in Italy, not protected in Slovenia

Establishing

Genotype researches

Group 1

Difficulties in communication in common public

Hunting- management could be improved

Different legal view between Italy / Slovenia

Unknown common goals

Benefits of cooperation?

Legislation barriers

Low public acceptance

Low knowledge of population /trends

Group 4

Different legislation Italy – Slovenia

Legislative status of Ibex

Fauna is not considered a resource

The trans-boundary commitments of 84 of 98 and 2004 have not been respected

No common database

No common monitoring

No common monitoring methods

They can not only hunt residents in the territories

Little (NO?) ling term research

No connected non hunting area

Group 5

Fragmented protected areas

But connections of the areas in Slovenia

Non-harmonized monitoring

Different methods

Data collecting

Different aspect/ methods of the organizations

Monitoring criteria differently

Different management approach

Legislation ibex

Legislative problems species

Hunting method vision

Different legislative (hunting law) inside the park

Appendix II – Brief Summary of the introductory presentations

1. Introduction lecture Chris Walzer (FIWI)

This is the first time that we are looking at wildlife management in the context of a European ecological connectivity project.

Chris Walzer made a presentation on "*strategy*" vs. "*tactics*".

The usual approach in project management is something like "Then a miracle occurs" – but hope for a good outcome is completely useless in project management. We need to have a plan, and our strategy should have a plan. The project document is not really a strategic plan.

A strategy is a careful plan or method for achieving a particular goal, usually over a long period of time. It needs to contain a clear goal, and all project participants should clearly understand it.

The **vision** was put together by local partners of the ABN2030 project with the support of Triglav National Park experts on 26 September 2017 constitutes such a long-term plan.

We have to ask:

Why are we doing this?

Will this allow us to achieve our goal?

What is it going to take to influence the key decision makers?

For **strategy** development we need to develop ONE clear specific goal and have only ONE priority, not many priorities.

We also need to identify the target person to address – it is tempting to try to influence too many stakeholders. The key stakeholders may be difficult to approach,

so often project teams approach substitute stakeholders – but those may not be the ones that have the power to implement our goals.

Tactics – i.e. the way goals can be implemented – should be discussed only after the strategic goal is clear.

A list of tactics does not constitute a strategy. It is easier to talk about the how than about the **what** and **why**. This workshop should focus on what and why.

2. **Miha Marolt - Vision presentation on chamois and ibex Triglav National Park**

TNP uses adaptive management. Wildlife management plans are prepared by Slovenian Forest Service and implemented by hunting ground managers.

There is a long term plan and an annual plan. The long term plan is a strategic plan, while the annual plan is specific for implementing the strategic plan.

For preparation of the annual plan SFS will coordinate the plan with the local hunting area managers association, and a draft is prepared to which public comments can be made. The proposal is then sent to the Ministry of Agriculture and Forests for approval. The preparation process of the annual plan takes about 3 months, but could be longer if there are a lot of discussions. There is a regulation that sets the dates by when plans have to be ready.

Management goals for chamois (long term):

To keep a stable, vital and healthy population of chamois in its natural age and sex structure and in equilibrium with the environment. The size should be kept as it is today, around 50 animals per 1000 ha.

Triglav and Gorenska are the local hunting management areas in the Julian Alps. Overall there are 15 hunting managers in Slovenia, Triglav hunting area covers about

64% of the park, but in the special protection zone there is no active population management, except in case of severely sick animals.

There is one other state hunting ground in Triglav, all others are family managed hunting grounds.

Harvesting density for chamois is highest in the perimeter of the park– the highest rate is 1.6-2 animals per ha.

Chamois are living all over the park, but since in the conservation zone (31000 ha) there is no hunting, one cannot judge population size only based on harvesting data. The core area of the park is where the best habitat for chamois is, and this is where there is no active management, so this has to be taken into account when estimating population size.

In 2010 the Law on TNP was adopted, and since then harvesting numbers have remained more or less stable. Before that the numbers changed quite a lot because of a lot of discussion on conservation zone, it was **more or less a political issue, not of actual population development.**

Climate change, competition with red deer, disease could affect population size. Sarcoptic mange is present, but at the moment not a very big problem compared to the period between 2003 and 2007, for example.

Alpine ibex

The goal is to keep the population as stable as possible and to keep it above the MVP of 50 animals. Ibex distribution is mainly in the central part of TNP, but they move out as well. It was introduced in 1963.

Chris suggests to put in confidence intervals for the monitoring the population trends.

Harvest numbers of ibex are very low. The highest is 3-4 animal in 3 years. In Slovenia the yearly mortality is between 10-20 animals. Sarcoptic mange erupted in the the early 2000s , which led to a drastic drop in ibex numbers.

The biggest threat is probably low genetic diversity, because all animals were introduced, disease, climate change, and there is insufficient knowledge on what is happening with ibex due to lack of research. Ibex is treated as an introduced species, legislatively speaking.

TNP systematically monitors one of 4 areas every year to count population. In addition there is some random monitoring and GPS telemetry. It provides an overview of population trend, but not exact numbers.

Future challenges for improvement across the border:

- Work together on collecting and exchanging data on population sizes
- Common methodological approach for assessing population
- Testing of new methods and tools for monitoring
- Exchange good practices of management (especially disease)
- Common vision/goal of chamois management

Audience comments:

Data on mange in private hunting grounds?

3. **Fulvio Genero – presentation of the issue on the Italian side**

In the Tarvisiano Hunting District (about 171.000 ha) there are three hunting grounds, 33% are free from hunting.

Prealpi Giulie Nature Park (about 10.000 ha) is constantly monitored but in the monitoring and studies a much larger area of 17.500 ha is considered, because from the ecological point of view this belongs together. The PGNP is divided into 4 monitoring units for chamois and ibex.

The Natura 2000 areas are not very effective for conservation, because they do not forbid hunting.

The trend of chamois in all Tarvisiano Hunting District is increasing, and there is still higher potential.

In some of the hunting reserves chamois management was not very well handled in the past, but now the cooperation is much better than just a few years ago. When the park was established 20 years ago, there were more observers than animals in the park. At the time it was a very low density of 0.3-0.5 chamois per km^2. Hunting was closed in the park in 1996, but not in the nearby hunting reserves. Therefore 55 animals were released in about 8 releases in 1998, and they were tracked by telemetry. Since then the population trend is up. This trend confirms the importance of correct population management, because the same trend is not observed in other hunting areas – where according to the NP there is too much hunting.

Main monitoring of chamois is in November, while for ibex it is in July.

Sarcoptic mange exists, but for the chamois did not lead to the kind of crash seen in Slovenia. The animals recovered quickly from it.

Capra ibex was reintroduced in Foresta di Tarvisio by the Corpo forestale dello Stato (now Carabinieri forestali since the beginning of 1997). 38 ibex were released from 1978 to 1994 from two protected areas (Parco nazionale del Gran Paradiso and the former Parco Regionale dell'Argentera). The species is protected from hunting in Italy (as opposed to Slovenia).

The total population estimate currently is 500 ibex.

In Monte Plauris there was another reintroduction (total 12 animals), which was an experiment because M. Plauris is only about 2000 meters, lower than usual ibex habitat, but the results were encouraging. There was also a mange issue, and some animals were vaccinated since 2015 to study the effect.

Population trend in this area is also increasing, only 2 years ago 70-80% of the population was lost due to mange.

Current population is estimated at 300 ibex in a small area, much higher than expected, and in good condition up to the mange incident.

Monte Canin is another area where Alpine ibex were introduced.

More collaboration is needed to check where the animals move on the Slovenian side, but the trend here too is upwards. Interestingly the sarcoptic mange did not have the same effect on this area population as on those in Prealpi Giulie. They seem to be more resistant to it, probably due to a genetic exchange with the animals from Montasio.

One of the goals is to connect the populations between other areas too with corridors so that the animals can migrate.

1. **Andrej Arih – Vision presentation**

The species of chamois and ibex are being used as a first target species, but the vision is to deal with all wildlife species. The proposed time frame for a wider wildlife management strategy is 10 years.

The maps available to working group participants at the tables show the proposed management areas (Triglav Hunting Mgt area, Gorenjska Hunting Mgt Area and Tarvisiano Hunting District) – around 300.000 ha overall.

The vision deals not only with species, but also with **conservation or improvement of their habitat** – this means **it addresses not only the game management sector or hunting sector, but involves also other sectors**.

Treating the Alpine ibex as an introduced species actually affects the management of the species, as the Nature Conservation Act defines only native and non-native species. Non-native species would actually have to be eradicated if one interpreted the Act literally. However, the Alpine ibex is considered “less non-native” than e.g. the mouflon. Nevertheless, the State hunting ground has asked if it is possible to re-stock ibex because of their low population status. But this is not possible, because it is forbidden to re-stock non-native species into a Natura 2000 area.

Comment from the audience is that ibex is included in Annex V of the Habitats Directive.

So the ibex has a somewhat unclear status, whether it is to be considered autochthonous or not. It may be necessary to re-classify the ibex as a native species, which is a legislative issue (barrier).

TNP at any rate treats the ibex and chamois the same way in its vision for long-term management.

It is important that the management approach is accepted and respected by the community. It should become a model for environmentally, economically and socially accepted wildlife management within a wider Alpine area of Slovenia and Italy.

One of the important issues is the reduction of negative human pressures, which includes quiet zones for wildlife where not only hunting, but also tourism activities are restricted. This could also be a transboundary aspect. The goal of trans-boundary cooperation is the cross-border preservation or improvement of ecological connectivity among populations.

The scientific aspect is quite important, as joint monitoring activities are required. The project is an excellent opportunity to improve that kind of cooperation. Transboundary cooperation affords possibilities of effective disease control, solving conflict situations, developing uniform and continuous data collection, and joint trainings of employees and interested stakeholders.

A fact is that existing legislation has to be respected, but we have a possibility to propose changes. During the workshop suggestions may be made concerning re-defining the status of protection and sustainable use of chamois and Alpine ibex populations in Slovenia.

There is also a need for improving communication with the public. The public perception of hunting is quite negative - it is viewed as a sport, not so much as a management measure. This perception is questionable.

This report can be downloaded at this link:

http://www.vetmeduni.ac.at/de/fiwi/forschung/projects/projekte-der-abteilung-conservation-medicine/alpbionet2030/trenta-workshop-on-cross-border-wildlife-management/