

3.5 *Espace Mont Blanc - Road infrastructures and Ecological Connectivity*

Enhancing local and transnational cooperation to overcome grey barriers and implement ecological connectivity

Date: 14.11.2017

Location: Sallanches (FR)

Summary of the workshop

In the Espace Mont Blanc and buffer areas, one of the main human-nature issues regards the interaction between road infrastructures and wildlife movements. The workshop was organized with the aim to share the knowledge and name the issues on the topic, between environmental and road management stakeholders since this phenomenon interests many people every day driving to Switzerland to work. There are no activities on the ground for the prevention and mitigation of the car accidents phenomenon. These prevention systems could even bring new job opportunities for the area. The thematic is completely new for Asters and they wish to develop the collaboration on this topic in the next years. The greatest interest in doing the workshop on this topic is related to the beginning of a new working group. Local stakeholders are already working on the topic on their own and for their specific needs, but currently, there are no strategies and agreed vision. The mitigation of wildlife-car accidents is one of the main topics for this Project Working Region.

INTRO

The Pilot working region “Espace Mont Blanc” (fig. 16) surrounds the area where the Italian, Swiss and French borders meet. This transnational alpine zone is a place of attraction, which participates in intensifying human settlement and traffic, resulting in an accelerated urbanisation. Simultaneously, the populations of ungulates are increasing and the combination of these two factors multiplies contacts between wildlife and human activities, leading to co-disturbance.

Proposed conflict issues

On the request “could you give few examples of conflicts regarding connectivity in your area”, participants mentioned the importance of urbanization, which is a cause of Human-wildlife interactions more than a conflict itself. It may indeed generate different types of human-wildlife conflicts, such as AVC, a topic that was particularly intense and interesting to investigate according to our partner (Fig. 17).

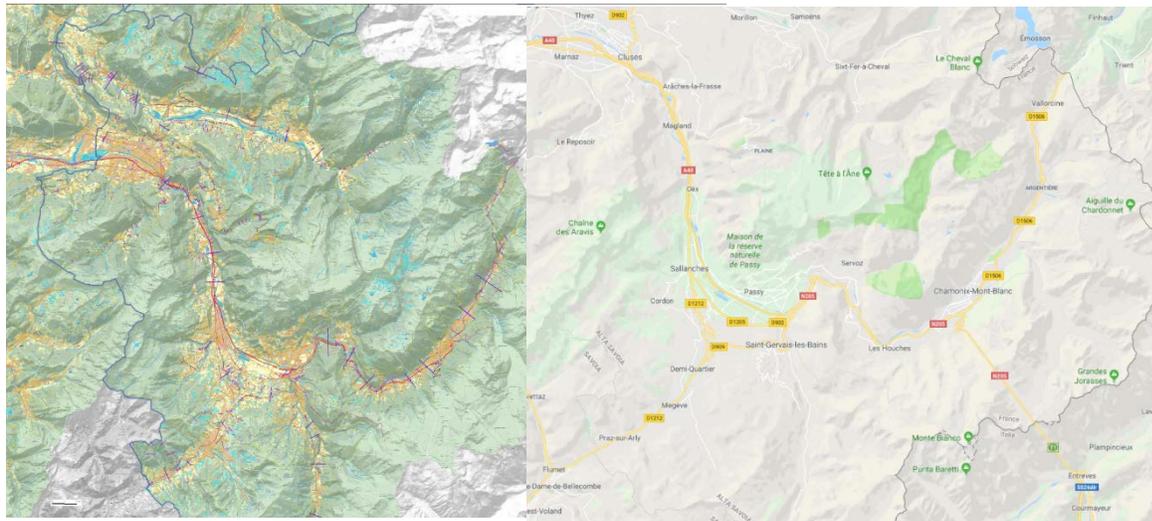


Figure 106 – Area of the Espace Mont Blanc (right), road infrastructures and ecological connectivity (left)

Espace Mont Blanc issue in WP5

Our intervention focused on the French part of this area. The conflict selected together with the partners regarded the animal-vehicle collisions (AVC) and the road infrastructures as an impediment to ecological connectivity. This issue is significant in the territory. Public and private road services, environmental services and wildlife management organisations have already been working on mitigation techniques for several years. The first motivation for administrations is their accountability for roads and highways safety. Throughout the years however, the objectives have evolved toward the need of biodiversity conservation and the protection of some prominent ecological corridors.

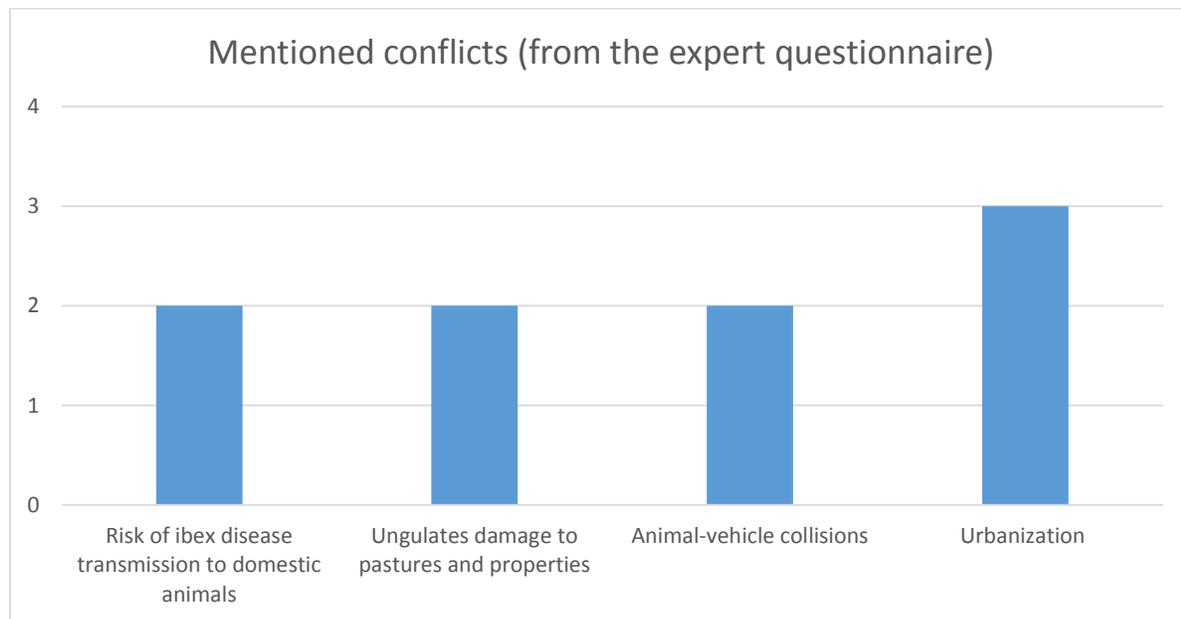


Figure 17 - Proposed conflicts in the Espace Mont Blanc Project Working Region

Animal-vehicle collision conflict mitigation encounters many obstacles through its implementation. Road infrastructure development and construction are very high-cost measures and usually not a priority when considered from an environmental point of view. As a result, road infrastructures and ecological connectivity is simply a secondary issue.

In Haute-Savoie, in addition of having already developed and experimented strategies to manage animal-vehicle collision, the stakeholders have been recently involved in developing what should soon become new forms of collaborations to manage the AVC conflict. All of them were present as representatives of administrations or involved in land management. Therefore, the workshop has been conducted in a context where the present stakeholders had a consequent level of awareness, knowledge and overview about the issue. It was indeed an exchange among experts. For this reason, our objective was not so much to initiate a discussion and to establish a clear definition of the conflict components. It was rather to consider those of the latter that would create resistance in the conflict management and to identify further issues occurring when the participative conflict management process has already been engaged. We will here present the challenged and agreed directions of work at stake according to several prominent managers concerning this topic.

Involved stakeholders and workshop approach

Most of the participants were representatives of administrations that are respectively responsible for road infrastructures (Table 5). Present were the environment and road services of the department, two communities of municipalities, a representative of the Mont Blanc Autoroutes and Tunnel, the local federation of hunters and the Conservatoire of natural spaces of Haute-Savoie (Asters). The participation process on this topic is merely beginning, under the coordination of Asters. Some of the stakeholders, for example the local hunter federation and the Haute-Savoie department already cooperate on mitigation strategies that they co-managed. Their action has been quite successful in decreasing the number of accidents, but experience in common projects also reveals the difficulty in achieving optimal coordination.

Due to the low number of participants, a focus group was held with the objective to confront the different expectations and opinions on protected species management.

Table 5: Participants to the Espace Mont Blanc workshop

Andrea Omizzolo (EURAC)	Filippo Favilli (EURAC)
Prune Claire Giatti (EURAC)	Philippe Arpin (FDC 74)
Mégane Germain (FDC 74)	Julie Raffin (FDC 74)
Aline Breton (ASTERS-CEN74)	Marion Guitteny (ASTERS-CEN74)
Delphine Plusquellec (CD74)	Béatrice Fel (CD74)
Julie Chaboud (CCVCMB (Vallée de Chamonix Mt-Blanc)	Sara Vezzano (EURAC + Villaggio degli orsi)
Aline Pissard-Maillet (CCPMB (Pays du Mont Blanc)	

Report of the meeting

The participants started to update on the importance of the animal vehicle collisions topic in their territory. They were asked to indicate in what sense their organisation was affected by the phenomenon and what mitigation measures they had respectively implemented.

Most of the administrations and road managers priority and responsibility is road safety for users, which can be threatened by the crossing of large animals. The hunters' federation has a responsibility in term of wildlife management, mostly ungulates and cares about a uniform spatial repartition of the species. As a results, most of the measures that have been implemented so far concern large mammals. And Asters has a responsibility in fauna, flora and natural areas conservation, and in fact in EC.

Measures already implemented regard data collection in order to determine hotspots, awareness and mitigation techniques:

- Since 2016, the hunters' federation has developed the application for smartphone "VIGIFAUNE" operating at the regional level, in order that witnesses of accident with animals could report the location of the collision and the species involved.
- Road sign inviting drivers to slow down are the main "awareness" measure so far implemented. Road services assume that the number of signs should be limited since if they become too numerous, there is a risk that users do not pay attention anymore. The efficiency of this measure remains very difficult to evaluate.
- In the areas that have demonstrated to be at high risk of collision, the federation of hunters, together with the department administration have installed reflectors. The result was a significant decrease of collisions, even if the efficiency is largely correlated to the landscape features. In term of management, reflectors also require a lot of attention and maintenance. Participants have pointed out that the quality of human relationships in a common project was an important part for the efficiency of the action.
- Participants agreed that fencing measures are not sufficient (but actually, fences border only motorways)
- In the future (but not in the Mont-Blanc pilot working region), one overpass is about to be built up by the ATMB, and a system of infrared detection will be tested on a hot spot for three years.

Conclusions and next steps

Due to the scarce representation of stakeholders, the discussion probably lacked a diversity of backgrounds and points of view. Despite their great knowledge and overview of the situation, the outputs represent exclusively ideas shared by road management and wildlife experts. This kind of meeting seems to set up common guidelines among different stakeholders having a relatively similar interest. However, it is hard to perceive the direction of the potential future actions since many key stakeholders were missing. The discussion should be enlarged to other categories of stakeholders as road users representatives, landowners, politicians, environmental organisations, police force in order to bring out potential issues related to conflicts of interests. In the next month, several focused meetings will be organized for local circumscriptions, under the coordination of the *Conservatoire d'Espace Naturel Haute-Savoie* (Asters). The objective is to discuss more accurately the issue and the measures that should be

taken within a specific area. On that occasion, the discussion will be widely opened to various stakeholders with the main aim to collect information that could enable a prioritisation of the different action zones, with the support of GIS.

The matrix (Fig. 18) showed that:

- Stakeholders show a positive attitude towards a potential coexistence between human activities and wildlife.
- The participants were skeptical on the fact that this workshop provided a way to better understand the different issues. This topic needs other ways of confrontation, perhaps more locally based.
- Stakeholders believe in the opportunity given by the transnational cooperation in managing this issue.
- All stakeholders replied that they have a better comprehension of the problem and new ideas to face them.

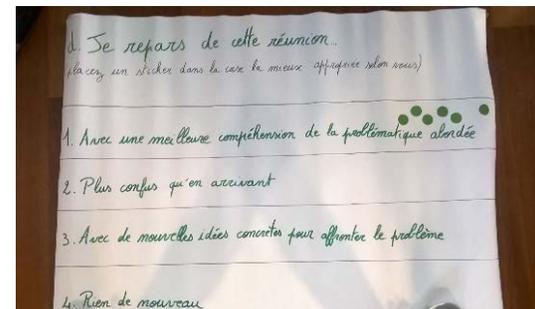
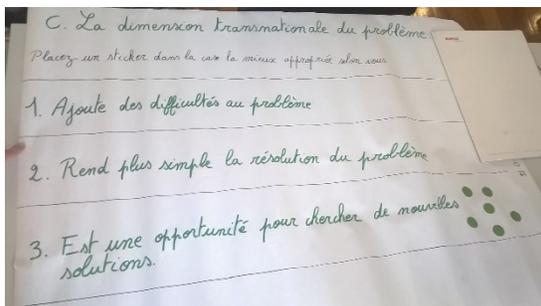
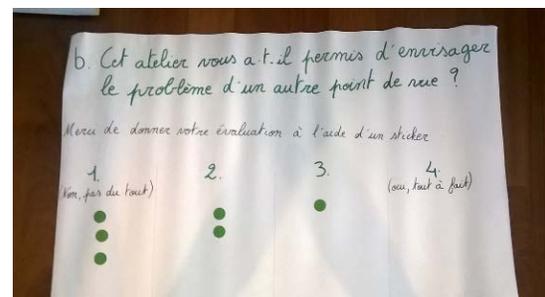
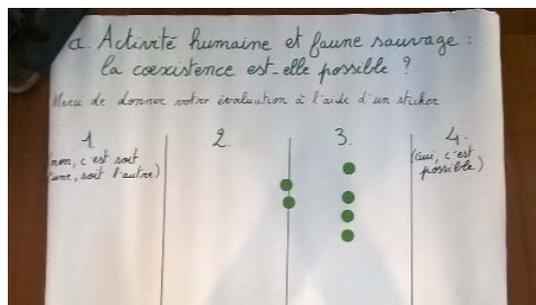


Figure 18 – Answers to the matrix of questions (in order question a,b,c,d, see general introduction)

Main findings in Espace Mont Blanc

- Some hotspots could not be equipped because of land pressure or for technical reasons.
- Road infrastructures costs are extremely high and AVC mitigation actions do not always have the support of local politics, which would priorities projects of a higher interest for the regional development (e.g. UNESCO application) or in term of healthcare.
- Different levels of administrations also have competence on the topic of roads, which makes the realization of concrete actions challenging because of bureaucracy.
- In addition, the local population is increasing, which means that urbanization will keep on extending, as well as car traffic and human pressure on wild areas. On the other hand, this means that there is a growing need for road infrastructures to be adapted to the presence of wildlife.
- Different needs were identified to overcome the AVC problem in a more efficient way. First, there is a need to involve policy makers to have a concrete support and a consideration inside planning documents, without which it is harder to conduct efficient actions.
- There is a need to improve mitigation measures and to select the best area where to install them, which can be fulfilled by developing the knowledge on wildlife presence and actual movement and the knowledge of the quality of the whole corridor (urbanism and other infrastructures taking in consideration).
- The stakeholders agreed that more data and a sharing of data among them would be needed. The will of developing a common platform to enter and share animal-vehicle collisions data was expressed, as well as the extension to the large public of the "VIGIFAUNE" application, which is currently being used mostly by hunters.
- Then, there is a need to raise awareness among the large public, which would also require a cooperation between the different organisations, because each of them can reach a specific targeted group of population.
- Finally, all of the stakeholders agreed that the transnational dimension of the issue was an opportunity to look for new solutions. They showed an interest in investigating the management of AVC in other areas in order to exchange and improve their action.
- We noticed that in many propositions to overcome the conflict or to improve the efficiency of existing measures, the importance of the collaborative aspect was coming out.