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Abstract: The wolf recovery from the Abbruzzo region in the last 15 years operated along the Apennine mountain chain. Since the 90's, the wolf species is now colonizing the alpine range. This current distribution involves now 3 countries: Italy, France and Switzerland, sharing a common objective: survey the wolf population status in order to provide technical decision tool in the wolf conservation efforts and human interaction management. Now, at least 4 wolf packs have their home ranges on the border between France and Italy and some data in Switzerland need to be clarified about the wolf movements with the Italian side. These wolf movements lead to consider the wolf in the Alps as a common recovering wolf population shared by the 3 countries. Each coordinators described the need of a formal way to exchange data, at least for the monitoring techniques and the data reliability. The meeting has been organised in 2 parts : 1. A view of each wolf project (organisation, collaborations, coordination and definition of geographic range, type of wolf monitoring and results) in the Piemont region (IT), in the Torino province (IT), in France and in Switzerland. 2. A round table about 4 specific topics concerning the needs of potential cooperation between the 3 countries: which data, which way to collecting them, how to define the data reliability, molecular tracking, predator-prey relationships (including damages on livestock), and supports of a technical group.

Office National de la Chasse et de la Faune Sauvage

Workshop report

MEETING LOCATION :	**DATE** :	**REDACTION** :
Briançon - FRANCE	2001 November 05-06	Christophe DUCHAMP (ONCFS - Life)

SUBJECT: 1st alpine wolf workshop : modalities for an international view of the wolf population biology in the Alps
List of delegates: See below
COPIES : L. Boitani, F. Marruco, S. Ricci, P. Rossi, G. Oppi, M. Apolonnio, M. Scandura, P. Bertotto, M. Ottino, P. Genovesi, J-M. Weber, P. Stahl, P. Migot, T. Dahier, B. Lequette, N. Espuno, M. Blanchet, G. Plasmann, P. Taberlet, C. Miquel, E. Randi, L. Fumagalli, J-M. Gaillard, B. Boisaubert, M. Catusse, V. Genevey, N. Lacour

GENERAL CONTEXT OF THE WORKSHOP

The wolf recovery from the Abbruzzo region in the last 15 years operated along the Apennine mountain chain. Since the 90's, the wolf species is now colonizing the alpine range. This current distribution involves now 3 countries: Italy, France and Switzerland, sharing a common objective: survey the wolf population status in order to provide technical decision tool in the wolf conservation efforts and human interaction management. The administrative border between France, Italy and Switzerland cross the current wolf range. The first exchanges about wolf distribution between France and Italy informally started in early 1990's between T. Houard (Mercantour national park) and G. Boscagli (Gruppo Lupo Italia) and then in 1993-94 between Marie-Lazarine Poulle (ONCFS), B. lequette and Luigi Boitani (University of Roma), as well as other field local contacts between Benoit Lequette, F. Marrucco and S. Ricci (Parc Alpi Marittime) in the south and M. Lambrech (ONCFS), J-P. Serres (ONCFS), D. Gauthier (LDV73) and M. Appolonio (University of Pisa) for the northern region. Nevertheless, the 3 countries never had been gathered around one project.

Now, at least 4 wolf packs have their home ranges on the border between France and Italy and some data in Switzerland need to be clarified about the wolf movements with the Italian side. These wolf movements lead to consider the wolf in the Alps as a common recovering wolf population shared by the 3 countries. Each coordinators described the need of a formal way to exchange data, at least for the monitoring techniques and the data reliability.

As a consequence, this first alpine wolf workshop has been organised in France from the French Wolf LIFE project with the strong positive agreement of Italian and Swiss colleagues. The occurrence of such a meeting has been strongly reommanded by the European community during the French LIFE project. This meeting wanted to be a small technical group in order to share a maximum of discussions, and establish an international way (structure, coordination, and data needs) to deal with exchangeable dataset of wolf spatio-temporal dynamics. Participants and program are stored thereafter.

WELCOME OF PARTICIPANTS AND ORGANISATION

The workshop was organized by the Office National de la Chasse et de la Faune Sauvage and the Mercantour national Park in France both involved in the LIFE-Nature project. Participants were welcomed in Briançon (France), November 5th and 6th 2001. The meeting has been organised in 2 parts :

- A view of each wolf project (organisation, collaborations, coordination and definition of geographic range, type of wolf monitoring and results). L. Boitani, , F. Marrucco & S. Ricci, M. Appolonio & M. Scandura, B. Lequette & C. Duchamp and J-M. Weber provided such kind of informations respectively in the Piemont region (IT), in the Torino province (IT), in France and in Switzerland.
- A round table about 4 specific topics concerning the needs of potential cooperation between the 3 countries: which data, whitch way to collecting them, how to define the data reliability, molecular tracking, predator-prey relationships (including damages on livestock), and supports of a technical group.

The program is attached to this document.

SHORT COMMUNICATIONS : WHO IS DOING WHAT AND WHERE ?

Luigi BOITANI (Italy) : Organisation of the wolf survey in Italy in the Piemont region.

The Interreg II Program (1999-2001) that has taken place in the Piemont Région was presented. The Parc Alpi Marittime was in charge of the whole administrative coordination. The Piemont region shared the Interreg funds between :

- the « Parco Alpi Marittime » for the Cuneo province where Simone RICCI was in charge of an extensive survey all over the region and Francesca Marruco, of an intensive monitoring survey of one wolf pack in the Val Pesio natural park
- the Torino province where Marco Apollonio and collaborators were in charge of an extensive survey (Paola Bertoto) associated to an intensive survey of a protected area (Ivo Bertelli)
- the « Parco Gran Bosco di Salbertrand» for population dynamics research within the park.

The Interreg funds have also been used to investigate the following topics:

- evaluating spatio-temporal variations in livestock field use and pastoral pressure
- providing communication and information tools throughout the Piemont region
- pooling the data sets within a single database in the Alpi Marittime Park

The Interreg II program ended up in December 2001. Afterward, a LIFE project has been proposed to the E.C., but the first version has not been considered because a previous transalpine LIFE project (WWF) providing a conservation action plan, was not explicitly integrated in the Italian project. A second version has been proposed but the Piemont region will take in charge (with a LIFE funding or not) the continuity of the wolf survey.

Francesca Marrucco (Italy): intensive monitoring of a wolf pack in the natural park Alte Valle Pesio

A wolf pack is intensively monitored since 1999 in the Val Pesio natural park, bordering the french Mercantour national park (Val Roya). In 99-00 and 00-01, respectively 127 km and 256 km have been snowtracked on about 300 km^2 in order to estimate minimum group size and document habitat selection, and about 20 "wolf howling" sessions have been displayed in order to identify reproduction occurrence (reply rate ranged from 10% to 40%). Non invasive genetics was done on faecal materials collected in the field, in collaboration with the Instituto nazionale della fauna selvatica (E. Randi) who provided individual genotypes from µsatellites analyses.

The principal results enlighted the difference in pack size estimates when stemmed from the snow-tracking method regarded to those from the genetic analysis (table 1) :

Table 1 : discrepancy in the determination of wolf pack size between the snowtracking and µsatellite genetic analysis

Method	Winter 99-00	Winter 00-01
Snowtracking	5 animals	4 to 6 animals
Non invasive genetic	7 animals	2 animals previously identified + 5 new

Francesca noted that within the home range, we may distinguish the hunting area, from the area used only for movements and connexions. Francesca argued that the association of wolf howling + snow-tacking + sampling design for genetics, provided a powerfull tool to monitor the wolf status on this area. The sample process for the genetic investigations should yield as scats as possible collected on a same track in order to maximise the probability of sampling all the animals within the group. Finding the rendez-vous sites during the post reproductive period seems also very important to sample the offsprings.

Two mortality cases have also been discovered, both due to natural causes.

Simone RICCI (Italy) : Extensive wolf sign survey in the Piemont region

Simone is coordinating an extensive survey of wolf sign presence (tracks, visual contacts, scats…) in the Cuneo province from "col de Larche or della madallena (N)" to the "Parc alpi maritime" (S). More than 500 km of transect are surveyed over the study area. Simone reported some exchanges with the wolf packs in Mercantour (Vésubie-Tiné and Haute-Tinée) as animals cross the border from time to time.

This research was conducted from May 1999 until October 2001 in collaboration with A.Tropini, L. Manghi and the rangers of Parco Naturale Alpi Marittime. The study area included the territory of Parco Naturale Alpi Marittime (Valle Gesso e Valle Vermenagna), Valle Stura, Valle Maira and Valle Varaita. The 4 objectives aim to document (1) the wolf distribution and abundance; (2) genetic identities; (3) the feeding ecology of the species and (4) the impact of wolf predation on livestock.

The following research techniques are used: snow-tracking, wolf-howling, genetic analysis on collected scats, and analysis of macroscopic remains in the scats. Different sampling effort are applied in each area according to wolf status : the sampling effort concentrated where the wolf presence had already been reported such as the Parco Naturale Alpi Marittime (180 Km of transect, each transect covered every 7-30 days) or in the Valley. Stura (each transect are covered every 7-30 days). In the areas where the wolf presence had not been previously identified, the sampling effort

was less intensive such as in V.Maira and V.Varaita, (110 and 118 Km of transect respectively, each transect covered every 30-40 days) but constant for the whole monitoring period. The results are listed in table 2.

Table 2 : wolf sign survey in the Cuneo province

Area	Stable presence	N° of Tracking sessions (2 winters)	remarks
V.Maira and V.Varaita	free	3	-
Parco Naturale Alpi Marittime south-eastern part	1 pack	7	could be related to the Vésubie-Roya pack (FR)
Parco Naturale Alpi Marittime north-western part	1 pack	6	could be related to the Vesubie-Tinée pack (FR)
Val Stura	1 pack (Repro)	47	could be related to the Haute Tinée pack (FR)

Among the 149 scats analysed with the non invasive genetic technics, 67 gave a positive results (45%) to the mitochondrial or nuclear D.N.A analysis. All the samples were back-tracked to the italian lineage. 45 samples gave positive identification of the individual genotype. All these samples were collected from July1999 to October 2000.

Table 3 : discrepancy between the snow-tracking method and genetic analysis (winter 2000/01) to estimate wolf pack size in the Cuneo province. *Brackets : maximum group size sampled during the previous winter1999/2000*

Method	south-eastern (PAM)	north-western (PAM)	Val Stura
Snow-tracking	5 (3)	3 (2)	3 (4)
Non invasive genetics	1	2	5

The genetical results provided a pattern in the genotype distribution similar to those observed in France and in Val Pesio. For example in Val Stura, only 3 genotypes were sampled repeatedly (8, 10, 12 times respectively) whereas the other 2 were sampled only once and twice respectively.

A better evaluation of the occurence of different packs in the Marittime Alps, could be achieve using a databank containing all the genotypes (with a concordant genetic methodology) sampled both on the french and italian sides.

Simone also pointed out the necessity to use of complementary techniques (wolf-howling, snow-tracking, genetic analysis) for complementarities. Simone also proposed that the international collaboration should take place at different levels (scientific, administrative, political) to build up a common strategy for the species conservation and management.

Marco APOLLONIO (Italy): About the investigations on wolf in the Torino province

The wolf survey in the Torino Province is conducted with the intensive collaboration of the provincial administration of Torino, the Gran Paradisio National Park, the Gran Bosco di Salbertran regional park and several other local partners. An extensive monitoring is conducted by Paola Bertotto, based on wolf signs, snow-tracking on the whole western part of Turin (4000 km^2) and wolf howling sessions with the game wardens. This survey covers the Italian side from the Val Pellice (bordering the Queyras in France) to Val di Susa northward. The objective is also to build a bridge between a LIFE project on predator prey relationships and the Interreg II.

The purpose would be to develop other intensive field work on prey population dynamics in relation to wolf predation pressure, made in 3 study areas: the Torino province, the Gran Paradisio national park (Alps) and the Arezzo province (Central Appenine).

Massimo SCANDURA (Italy): Intensive monitoring of wolves in the Torino province

Massimo (PhD student, Torino univ) is involved in the wolf sign survey in the Torino province but focuses his attention on an intensive monitoring of 3 areas: Val di Susa-Chizone, Val Troncea-Germanasca and Bardonecchia-Mt Jaffreau. On these areas, carcasses, tracks and sightings are recorded, whereas scats are collected for diet analysis. Massimo pointed out that outside of these 3 area, it's very difficult to maintain a constant sampling effort and observations are very seldom

By the way, Massimo also works on wolf diet. Wolves in the Gran Bosco mostly preyed on red deer whereas roe deer is the main prey in Bardonecchia area. The main problem is the lack of data records on prey population dynamics in order to estimate the wolf impact on ungulates (e.g. prey availability). Few sheeps are grazing on this part of the italian side. Consequently, few damages are recorded. Furthermore, Massimo also works on µsatellite methodology (see below).

Christophe DUCHAMP (France): About wolf return in France : who is doing what and where, with remaining technical questions

The wolf survey in France is conducted through a LIFE project that has taken place in 2000. A previous LIFE was concerning only the Mercantour mountains between 1997 and 1999. The 2nd LIFE involves 8 departments (all the French Alps).

The monitoring is extensive over 20 000 km^2 involving a 450 trained people so called the "Wolf network". The distribution of people is more or less homogeneous throughout the Alps. For the field work coordination, all the French Alps (from the Mediterranean sea to the Leman lake) is shared in 2 parts : the Mercantour mountains where the Mercantour national park is in charge of gathering the data, and outside the Mercantour where the Office national de la Chasse et de la Faune Sauvage is the national coordinator. The administrative coordination is done by the departmental authorities. Each wolf sign is reported and centralized on a common database together with the results of an exhaustive survey of wolf damages (carcass control).

This survey aimed at distinguishing permanent and temporary areas of wolf presence and establishing the annual evolution of this spatial pattern.

Within wolf areas previously identified as permanent (9 areas in 2001), small technical groups (also belonging to the same Wolf network) are involved in an intensive monitoring based on a standardized design (control of the sampling effort) to snow-tracking animals, in order to collect scats, sampling group size and determine the reproduction occurrence. A research investigation is conducted by Nathalie Espuno (PhD student CNRS) on mark-recapture modelling from non invasive genetics, and on a sensitivity analysis of energetic budgets.

The µsatelitte analyses are done in collaboration with P. Taberlet (CNRS Grenoble) from a scat collection of over 1000 scats gathered since 1994 . The main interest concerns the study of wolf dispersal and colonization over the Alps. A collaboration with Italian and Swiss geneticians is crucial for an optimized understanding of the colonizing process because we are all sharing the "same" wolves.

Benoît LEQUETTE (France) : Some biological results about the wolf status in the Mercantour National Park

Benoit pointed out that at least 4 packs have their territories overlapping the border line between France and Italy : Pesio/Roya, Haute-Tiné/Stura, Vésubie/Argentera and probably a new one Imperia/Bendola. The informal exchanges with Simone are very useful in that tracks have been followed several times continuously across the border.

S. Ricci asked about the occurrence of wolf howling sessions in France : C. Duchamp answered that a systematic sampling protocol of wolf howling could be helpfull at least to identify reproduction occurrences. This systematic design is not applied yet in France because it requires first a large amount of field work in summer (9 areas) if we want a systematic design sampling, and field worker availability is too much reduced. So far, this method would be efficient if some “wolf technicians” can get a position to take this protocol in charge in the field. Only few sessions have been done in Mercantour, Belledonne, and Vercors by the members of the Wolf network.

Jean-Marc WEBER (Switzerland) : The wolf concept in Switzerland

Jean-Marc, in charge of the wolf survey in Switzerland, reminded the history of wolf occurrence in Switzerland since 1995.

The Federal agency (OFEFP) supervises the “wolf concept” with the agreement of “A large predator group” (including sheepbreeders, hunters, agricultural agency, NGO for nature protection). A multiple district commission have the power to decide about measures to take. A “large predator group” has been created as a mediator between the different corporations.

The KORA is coordinating the monitoring and centralising the records. The priorities are focused on prevention and information tools. The wolf status has been categorized in 3 steps involving different rules for wolf control: the colonisation process (sparse sign records), the development step (a wolf territory + reproduction + effective prevention) and the expansion process (long term survival secured).

The district administration is in charge of the action plan implementation and decides about the wolf control

Two illegal kills occurred between 1995 and 1998. After this year, the wolf concept has been established to decide concomitantly with sheep breeders corporations about a threshold in livestock losses (>50 sheeps in colonisation phase) to enhance a legal kill by the game wardens.

In 2000, the district administrations, legally remove two wolves in the Valais district and in 2001, one wolf in the Grison district.

A collaboration with Luca Fumagalli (Lausanne Univ.) allows non-invasive genetic analysis. Only few samples are available but the first results in 2001 showed that at least 2 different wolves frequented the Grison district respectively in 2000 and 2001. In the Valais district, 4 different genotypes have been discovered through the genetic analysis whereas the sign survey was able to report only 2 erratic. Jean-Marc hopes a fruitful collaboration (not only on a paper) with common actions in the field. The main point is to clarify the gene flow between Italy, France and Switzerland.

Data needed at the alpine scale

To understand colonization process, we definitely need first to pool the history of the transversal survey of wolf presence. The lack of a common scientific publications based on field dataset since 1980 led to some misunderstandings or misinterpretation by the public opinion of the colonization process. The main problem araises when defining a minimum dataset we would have to pool, because the objectives are not the same in the different countries. We also can observe this lack at the world wide scale for any carnivore species : the last international conference on canid species in Oxford pointed out the need to build a guideline book in order to fit the objectives with the methodology of survey. Two possibilities are available :

- A transversal survey of wolf signs (following a pool of unmarked animals through space at a time $_t$ and $_{t+1}$) that allows a large scale monitoring
- A longitudinal survey of wolf individuals (following each known individual though time) that requires an intensive monitoring with telemetry or non-invasive genetics, but reduces the scale of the study area.

The transversal survey intends to document the status of the wolf population but fails in controlling sampling effort. As a consequence, an accurate dispersal rate can hardly be estimated as well as the population rate of increase. This analysis aimed to produce a spatial pattern of wolf recovery at any time t, assuming that the sampling effort trough space is homogeneous.

C. Duchamp suggested that this level is adapted to the commun objective of our 3 countries, that dealt with the spatial survey of wolf recovery. L. Boitani agreed, but argued that a formal policy of data sharing is needed to implement an homogeneous sampling in the field. The same is already done for lynxes the Large Carnivore Initiative for Europe. It's a full time job in order to pool reliable and comparable data records with people in charge of the monitoring.

All the delegates agreed with 3 following points as a minimum bases to be recorded : (1) the yearly distribution of permanent and temporary areas, (2) the occurrence of reproduction and (3) the spatio-temporal trends in damages on livestock. Another problem is the data reliability of the sign reports such as visual contacts. The group decided to separate tracks and faeces from visual observations (that are often submitted to the recorder appreciation). T. Dahier and P. Stahl asked about the damages that have also to be classified following transparent technical process : French conclusions are based on an exhaustive technical control to exclude or not the wolf responsibility , Swiss ones is a decision of the observer, and Italian damages are not surveyed exhaustively. A common work has to be done to decide about the possible discrimination. A common paper will be the starting point to gather the data. C. Duchamp will take in charge this first step for the year 2002.

Molecular tracking

Etorre Randi unfortunately had to cancel his venue in the last minute and Luca Fumaggali, sharing all the same work as Pierre Taberlet, was not able to come. The aim of this issue was to define the possible exchanges between the 3 laboratories in charge of genotyping the animals to describe the recovering process. P. Taberlet started with a previous meeting that took place in Lausanne (Swizerland) about the genetic methodology in wildlife biology. Pierre, Luca and Ettore already discussed about a possible mix of the results. French and Swiss laboratories are using the same

methodology (6 µsat, including 1 dinucleotides and 5 tetranucleotides, tested within a set of 42 available µsat) and Etorre is using another set of 6 µsatellites (3 dinucleotypes + 3 tetranucleotides) to genotype individuals. The sex discrimination is done with a common µsat on the Y chromosome. Because of this differences, the results are not directly comparable and a blind test is needed. The best solution would be to share the protocols as 6µsat(Pierre)+6µsat(Etorre)=12µsat to establish the genotype of each scat sample all over the alps. The repetability of the results first has to be tested on a random sample of 12 faeces for each of the 3 teams. This collaboration already started. M. Scandura said that he is working on another µsatellite methodology with 5 dinucleotides and 1 tetranucleotide. This third methodology is complicating the data exchange modalities.

In Italy, more than 1000 scats are available for genotyping individuals, covering the period 1998-2001 in the Alps. In France, around 1200 samples are available for the period 1994-2001. In Switzerland, some scats have been collected since 1998. Pierre, Etorre, and Luca will formalize the blind test that could be effective at the end of the year 2002.

Predator-prey relationships

Some management questions rely to this topics, such as the "selection" by wolves on each prey species including the domestic prey. Several management implications can be derived from this understanding. The main expected result would be a better understanding of the relationship between livestock losses and wild prey availability; or defining the predation rate (functional + numerical response) on wild prey species, that also are game species.

M. Appolonio is managing a research program in the Arezzo province (central Appenine) on predator-prey relationships, in order to explain the differences in wolf diet. Because in this study, wolves are mainly preying on wild boar as the main prey and roe deer as an alternative prey, Marco focused his efforts on this two species, first to determine the selection ratio between age classes (and consequently its impact on the prey population dynamics). Because finding carcasses may be age-biased (young often quickly disappeared), a mark-recapture project on preys, ranked by age classes, will be done. Another study site in the Piemont region would also be interesting, but is not yet defined.

F. Marucco referred to another work carried out by Barbero *et al.* where the main objective was to compare different predation rates among species but the data had been collected through different ways. A longitudinal survey is the only solution to achieve this aim. L Boitani noticed that the starting point should be the wolf tracking. The first question seems to be where and how the wolves are preying and can we predict that, especially regarding damages on livestock. In the coming year, a program based on wolf telemetry will probably take place in the Val Pesio natural Park with Francesca.

J-M. Weber noticed that in Switzerland, 20 years after an intensive telemetric study on lynx, only a few results are available on the predator impact, as the predator is very well known but a lot of data are missing about the prey population dynamic. Then, the system cannot be studied very well.

C. Duchamp noticed that the question could be to either study the impact on a prey species x, or to understand the relationship between the preys and the predators. If the second is the aim of the study, then both the predation pressure and the prey population dynamic should be considered. Most often, studies suffer of a lack of data on in prey population dynamics because it requires heavy investigations on ungulates populations (mark-recapture methods) made on a large spatial scale (corresponding to the predator space use). Then the effort could either be concentrated on the prey population dynamics, that may well also explain part of the damage intensity on domestic prey (prey dilution effect).

About a transalpine wolf technical group and definition of common works

Everybody agreed with an annual meeting, as a technical group. The group should be kept as an informal structure with possible adaptations. The political and national action plan topic should not be directly investigated within this group.

M. Blanchet, representing the "network of alpine protected area", reported a previous international meeting where such a structure had already been mentioned to gathered the data on wolf, lynx and bears throughout the alps. A proposition has been down with France, responsible of wolves (Ministry), Austria responsible of bears (Parc of Brenta) and Swiss responsible of lynxes (SCALP). The first objective was to pool and arrange the communication between the protected areas.

C. Duchamp asked about the organisation of this work because nothing appeared in the first proposal : who is doing the data collection ?, who is checking and analysing the data ?, does it also concern non-protected areas where large predators also often occurred ?

The ONCFS (proposed by the French ministry to do the work on wolves) will probably reject this proposition from the Alpine protected area network, as this structure is not appropriate to gathered the data all over the alps, for both protected and unprotected area. Nevertheless, the Alpine protected area network is the best way to pool all the informations among the parks as an intermediary step.

LIST OF DELEGATES

Apollonio Marco (Dr) : Responsible of the wolf monitoring in the Torino province - University of Sassari, Dpt di Zoologia e Antopologia Biologica, Via Muroni – 25-07100 Sassari - Italia

Blanchet Michel (Mr) : Chargé de mission - Parc naturel régional du Queyras, rue de la Gare, 05600 Guillestre-France (representing the Réseau Alpin des Espaces protégés – Transalpine Network of Protected Area)

Boitani Luigi (Pr) : Coordinator of the Italian wolf project, LCIE chairman - Universita di Roma, Dpt Biologia Animale, Viale Universita 32 – 00185 Roma - Italia

Dahier Thierry (Dr): Veterinary of the wolf Life project - Office National de la Chasse et de la Faune Sauvage – Programme LIFE loup, Micropolis La bérardie, 05000 Gap – France

Duchamp Christophe (Mr). Biologist of the wolf Life project - Office National de la Chasse et de la Faune Sauvage, Micropolis La bérardie, 05000 Gap - France

Favier Florent (Mr) : Communication organiser of the wolf Life project - Direction régionale de l'environnement PACA, Le tholonet BP – 13 Aix-en-Provence

Lequette Benoît (Dr): Biologist – Service scientifique, Parc National du Mercantour, 3 rue d'Italie – 06000 NICE – France

Marrucco Francesca (Dr): Biologist - Progetto Lupo Interreg II, Via Bucet 31 – 10090 ROSTA - Italia

Oppi Gianni (Mr): Parco Naturale Alpi Maritime, D.L. Bianco 5 – 12010 Valdieri -Italia

Ricci Simone (Dr) :Biologist - Progetto Lupo Interreg II, Parco Alpi Marittime valdieri – CUNEO - Italia

Scandura Massimo (Mr): PhD student - University of Sassari, Dpt di Zoologia e Antopologia Biologica, Via Muroni – 25-07100 Sassari - Italia

Stahl Philippe (Dr): Biologist - Office National de la Chasse et de la Faune Sauvage – CNERA Prédateur, Station de la Dombes, 01330 BIRIEUX – France

Taberlet Pierre (Pr): Director of the Laboratoire de Biologie des Populations d'Altitude. CNRS UMR 5553, Université J. Fourrier BP 53 – 38041 Grenoble Cedex 9 – France

Weber Jean-Marc (Dr): Biologist - KORA, Thunstrasse 31 – 3074 Muri (Suisse)

ACKNOWLEDGMENTS

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Alpine Wolf workshop

Briançon (France)

2001 November the 5-6th

HOW TO GET THERE

Parc Hotel
Immeuble central parc - Rue du centre
Briançon – Hautes Alpes - FRANCE

A map of Briançon is available thereafter.
Somebody will be at the hotel from 4PM on Monday 5th to welcome you.
If you want somebody to pick you up at the train station, please let us know.
In case : phone number 0033/ (0)492 56 05 71

PROGRAM (DRAFT)

Monday 5 November evening :

From 16h00 Arrival + welcome aperitif
19h30PM: Dinner
21h30PM Lequette : Night Vision Film of a wolf-livestock interaction in Mercantour mountain

Tuesday 6 November morning: who is doing what, where and how ?(15 min max + 15 min discussion):

9^{00} Boitani *et al.* : General framework of wolf projects in Piemont Region and INTERREG II program
9^{30} Marucco *et al.* : Exemple of intensive monitoring or population dynamic results in the Cuneo province
10^{00} Apollonio *et al.* : General framework on wolf projects in Torino province and Gran Paradiso
10^{30} Scandura *et al.* : Exemple of intensive monitoring and population dynamic results in the Torino Province
Break
11^{30} Duchamp *et al.* : About the wolf return in France : who is doing what, where, and how with remaining technical questions
12^{00} Espuno *et al.* : Exemple of intensive monitoring in Mercantour and research investigations
12^{30} Weber *et al* : The wolf concept in Switzerland and biological questions
13^{00} : Lunch

Tuesday 6 November afternoon : Data needs at the alpine scale (available visual support, transparent or powerpoint)

How to measure the wolf status in the Alps ?

What shall we record for homogeneous data compilation
What kind of monitoring system
About a common paper on wolf recovery in the alps

Molecular tracking at the international scale

Differences in methodology and implications
Implementation in population biology (colonisation process, CMR…)
Data exchange modalities

Predator-prey relationships

Projects in each countries
Methodology

Organisation :

Christophe DUCHAMP (Office National de la Chasse et de la Faune Sauvage – LIFE - France)
Benoît LEQUETTE (Parc national du Mercantour - France)
Florent FAVIER (DIREN PACA – LIFE - France)

Accommodations :

Possible arrival the previous day (recommended in order to begin at 9^{AM}).
Sleeping facilities can be arrange at Briançon Hotels (60 Euro 1/2 board) or Val des Prés Youth Hostel (15 Euro).
Restaurant is available close to the meeting place for around 15-20 Euro / meal. Lunches will be taken in charge by the organisation.
Please specify any special requirements e.g. concerning meals: vegetarians, special diet…

Have a safe travelling way !

About a Wolf Alpine Group ?

Yes/No,
To do what ?
Which organisation ?

Contact :

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Invited people :

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