

The National Wolf Strategy in Austria

An Evaluation of the Wolf Management-Plan and its Formulation Process using the Multiple-Streams Framework

Master Thesis

Author(s):

Schäfer, Marleen

Publication date:

2012

Permanent link:

<https://doi.org/10.3929/ethz-a-007366616>

Rights / license:

[In Copyright - Non-Commercial Use Permitted](#)



Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

The National Wolf Strategy in Austria

An Evaluation of the Wolf Management-Plan and its Formulation
Process using the Multiple-Streams Framework



National Geographic Society 2003

Master Thesis in
Environmental Science

By:
Marleen Schäfer

July 2012

Supervisor:
Prof. Dr. Willi Zimmermann
Dr. Christian Hirschi
Institute for Environmental Policy and Economics

Table of Contents

List of Tables	iv
List of Figures	iv
Acronyms	v
Acknowledgements.....	vi
Summary.....	1
1 Introduction.....	2
1.1 The Context	2
1.2 The Focus.....	3
1.3 Research Questions.....	4
1.4 Delineation and Outline of the Thesis.....	5
2 The Wolf.....	6
2.1 Biology.....	6
2.2 Emotions in Society	7
2.3 European Wolf Dispersal and Habitat Suitability in Austria.....	7
2.4 Protection Status	11
2.4.1 Bern Convention.....	11
2.4.2 Habitats Directive	12
2.4.3 National Legislation.....	13
3 Conceptual Framework and Methodology	16
3.1 The Multiple-Streams Framework.....	16
3.1.1 Problem Stream.....	17
3.1.2 Policy Stream.....	18
3.1.3 Politics Stream.....	20
3.1.4 Policy Entrepreneurs	20
3.1.5 Window of Opportunity	21
3.1.6 Stream coupling	22
3.1.7 Applicability of the Multiple-Streams Framework.....	22
3.2 The Policy Design	23
3.3 Method	25
3.3.1 Document Analysis.....	25
3.3.2 Survey.....	25
3.3.3 Expert Interviews.....	26

4	Case Analysis	28
4.1	The Problem Stream.....	28
4.1.1	Problem Recognition	29
4.1.2	Problem Definition	31
4.1.3	Focusing Events	32
4.1.4	Indicators.....	34
4.1.5	Feedback	35
4.1.6	Budget	36
4.2	The Policy Stream	37
4.2.1	Policy community	37
4.2.2	The Management Policy.....	40
4.2.3	Technical Feasibility.....	40
4.2.4	Value Acceptance	41
4.2.5	Anticipation of Future Constraints	41
4.3	The Politics Stream	42
4.3.1	National Mood	43
4.3.2	Political Mood	43
4.3.3	Organized Political Forces	44
4.3.4	Intra-political Events	47
4.4	Policy Entrepreneurs	48
4.5	Agenda-Setting.....	50
4.5.1	Open Windows but no Stream Coupling	51
4.5.2	Stream Coupling – was it really successful?	51
4.5.3	Post Coupling.....	53
5	The Result: The Austrian Wolf Management Plan	54
5.1	Goals and Objectives.....	54
5.2	Evaluative Elements	55
5.3	Operational Elements	56
5.3.1	Regulatory – Direct Measures	56
5.3.2	Incentive Mode	57
5.3.3	Direct Supply of Goods and Services	60
5.3.4	Persuasion and Information	61
5.4	Political-Administrative Arrangement and Resources	62
5.5	Procedural Elements	63

6	Discussion and Conclusion.....	66
6.1	Reflecting Thoughts and Critique	68
6.2	Future Research and Outlook	69
	References	71
	Experts	71
	Legislation Register	73
	Official Documents.....	75
	List of References.....	75
	Appendix.....	81

List of Tables

Table 1: Wolf Population Size in Austria’s Bordering Countries (situation in 2008)	10
Table 2: The Wolf’s International Protection Status	11
Table 3: State Legislative Regulations Addressing the Wolf.....	14
Table 4: List of KOST Members	38
Table 5: Overview of the Most Relevant Positions by each Interest Group.....	44
Table 6: Overview of Operational Elements	56
Table 7: Compensation Payment Regulations in the Federal States	59

List of Figures

Figure 1: Wolf Distribution in the 20th Century.....	8
Figure 2: Present Wolf Populations and Possible Migration to Austria.....	9
Figure 3: Suitable Habitats for Wolves in the Alpine Ridge	10
Figure 4: The Multiple Streams Analysis	17
Figure 5: Distribution of Regions where Livestock was killed by the Wolf	33
Figure 6: Wolf dispersal in 2009 and 2010 based on DNA samples	34
Figure 7: Expediting, Hindering, and Neutral Agenda-Setting Factors	50

Acronyms

ABGB	General Civil Law (Allgemeines bürgerliches Gesetzbuch)
art.	article
Bgld	Burgenland
BMLFUW	Federal Ministry of Agriculture, Forestry, Environment and Water Management (Lebensministerium)
BOKU	University of Natural Resources and Life Sciences, Vienna (Universität für Bodenkultur Wien)
BVB	District Council Authority (Bezirksverwaltungsbehörde)
B-VG	Constitutional Law (Bundes-Verfassungsgesetz)
cf.	confer
DVO	Implementing Regulation (Durchführungsverordnung)
EU	European Union
FIWI	Research Institute of Wildlife Ecology (Forschungsinstitut für Wildtierkunde und Ökologie)
Gov't	Government
HA	Hunting Association
HD	Habitats Directive
IUCN	International Union for the Conservation of Nature
JagdzeitenVO	Hunting Season Decree (Jagdzeiten Verordnung)
JG	Hunting Act (Jagdgesetz)
JVO	Hunting Decree (Jagdverordnung)
KOST	Coordination Office for Bear, Wolf and Lynx (Koordinierungsstelle für Bär, Wolf und Luchs)
Ktn	Carinthia (Kärnten)
LCIE	Large Carnivore Initiative for Europe
LH-Stv	Vice Governor (Landeshauptmann Stellvertreter)
MS	Multiple Streams Framework
NGO	Non-governmental Organization
Nö	Lower Austria (Niederösterreich)
NschG	Conservation Act (Naturschutzgesetz)
ÖBf AG	Austrian Federal Forests (Österreichische Bundesforste)
ÖBSZ	Austrian Federal Association for Sheep and Goats (Österreichischer Bundesverband für Schaf und Ziegenzüchter)
Oö	Upper Austria (Oberösterreich)
para	Paragraph
PAS	Political-Administrative System
PR	Public Relations
S	Salzburg
SCALP	Status and Conservation of the Alpine Lynx Population
SchonzoVO	Closed Hunting Season Decree (Schonzeitenverordnung)
SGA	Sheep and Goat Association (Schaf- und Ziegenzucht Verband)
Stmk	Styria (Steiermark)
Tir	Tyrol (Tirol)
Vlbg	Vorarlberg
Wr	Vienna (Wien)

Acknowledgements

Studying environmental sciences at the Swiss Federal Institute of Technology in Zurich was a major personal achievement and this thesis represents its fulfillment. I would like to thank both my supervisors, Prof. Dr. Willi Zimmermann for giving me the chance of investigating carnivore management in Austria, and Dr. Christian Hirschi for patiently guiding and advising me throughout the process. Their feedback and constructive comments helped me construct, develop, improve and finalize this thesis.

I would like to dearly thank all the numerous interview partners and further respondents for taking their time in answering my questions. Their inputs represent the core of this thesis, which would not have been possible without their knowledge.

The process of finalizing the thesis was very interesting and personally enriching but also challenging. I am grateful for my family's strong support, their motivation and help throughout this time. I would also like to thank my friends for their encouragement and their constructive feedback.

Summary

Wolves largely disappeared from central Europe more than a century ago, but over the last decades they have steadily made a comeback. Austria is one of the last central European countries where the wolf has started to reappear. While the wolf would encounter suitable habitats in Austria, its biggest challenge in settling and permanently inhabiting a territory lays in the acceptance of the species. The local community is mainly affected and expresses resentment, in particular small livestock farmers. However, the wolf is strictly protected by international legislations, such as the Bern Convention and the European Habitats Directive as well as by national legislations. Hunting or removal of the species is therefore prohibited by law. Consequently, the wolf's return becomes not only a conservation- but also a social issue.

This thesis depicted the wolf's return to Austria based on biological and social factors. The main objective was to describe the political response to the reappearance of wolves and show what factors were involved in setting the issue onto the agenda. The identification of these factors and analysis of the agenda-setting process was based on John Kingdon's Multiple-Streams Framework. The framework places pre-agenda-setting occurrences into three independent streams: the problem, policy, and politics stream. When these streams couple the issue has successfully been set on the agenda. While the framework primarily was established to explain agenda-setting, I also used it to describe the policy formulation process which took place simultaneously.

Overall, I could not identify a strong political reaction to the wolf issue on the national level or among decision makers in the individual states. However a bottom-up driven process ensured the formulation of the policy. Mostly factors from the problem and policy streams, i.e. focusing events, indicators, strong interest groups and a competent policy community, expedited agenda-setting. On the other hand, feedback from the bear management, the political mood and especially budget constraints were hindering factors. Thus the political stream was mainly impeding, as top-down actors did not sense an urgency to act on the wolf issue.

The policy community was one of the central elements in both the agenda-setting and policy formulation process. Through their inter-state coordination and effort to integrate all relevant stakeholders into the plan's formulation, a consensus based policy was created. The creation of the management plan already took place before the streams had coupled. A competent top-down policy entrepreneur, vice governor Steixner, ensured stream coupling for a specific measure within the management plan: herd protection. As a result, the wolf issue in general received political attention. However, a clear order to formulate a wolf management plan was not given, a factor which might cause future constraints in implementing the policy.

In the third part of the thesis, the wolf management plan was depicted based on the policy design by Knoepfel and Weidner. The overall set-up and content of the plan did not differ from other existing management plans. However, due to the proposal by the vice governor, a strong focus on herd protection measures linked to compensation payments could be identified.

On the whole, the agenda-setting process was undermined by lacking political will to address the issue. Even though competent bottom-up actors were driving the policy process, they were not capable of pushing the issue onto the political agenda. Nonetheless, they were engaged in an exemplary policy formulation process, which resulted in a potentially effective and practicable management plan.

1 Introduction

1.1 The Context

The wolf is one of the most controversial animals in Europe (Reinhardt & Kluth 2007). Only until a couple of decades ago, large carnivores and especially the wolf, were excessively and fiercely hunted and driven to extinction in many European countries. Moreover about one hundred years ago large forest areas were cut down and the big game species almost driven to extinction, additionally diminishing the wolf's chance for survival. Only small relict populations managed to survive in Italy, Greece, the Iberian Peninsula, the Balkans and the Carpathians (Breitenmoser 1998). In the late 1970's the first international legislations aimed at protecting the wolf (Boitani 2000) and as forest cover expanded and large game species returned, their populations started to recover as well. In the new millennium wolves have returned to most European countries and in some cases even managed to reestablish permanent populations, e.g. in Germany, France, and the Czech Republic (Hofrichter 2005:228).

A wolf can travel far distances in search for food, a mate and a territory. Due to this excellent ability to disperse and its capability to adapt to new conditions, the wolf could inhabit largely most of Europe (Salvatori & Linnell 2005). Its permanent return however will also be a matter of social acceptance (Reinhardt & Kluth 2007). The reappearance of wolves in areas where they have been eradicated for centuries can cause significant feelings of hostility and rejection by those directly or indirectly affected. Primarily problems arise in regions where unprotected livestock fall prey to the wolf (Enserink & Vogel 2006). Furthermore, hunters often also show a very negative attitude towards the carnivore, as they either see it as a competitor or as being detrimental to local ungulate populations. Thirdly, tourists portray another potential conflict group, as leisure activities often take place in (possible) wolf territories and accurate wolf knowledge is often lacking. For many alpine regions, the tourist industry is a main source of revenue. Therefore many locals fear the wolf can harm the tourist industry.

To facilitate the comeback of the wolf, conflicts between humans and wolves need to be minimized and ideally prevented. Management plans play an essential role in this goal and should greatly aim at informing affected persons, regulating compensation payments and initiating prevention measures in order to increase the acceptance of wolves (Pavlik 2009).

In the year 2000 the wildlife biologists Boitani finalized an "Action Plan for the conservation of Wolves in Europe", which was legally based on the *Convention on the Conservation of European Wildlife and Natural Habitats* (Bern Convention, 19.9.1979). The action plan meant to be a guide for European countries for creating a national management plan. Many European countries have undertaken this task in order to maintain or restore wolf populations and ensure minimal conflict coexistence between humans and wolves. Among these are Switzerland, France, Italy and the German federal states Saxony and Bavaria. Ideally, every country with returning and settling wolves should formulate such a management plan to ensure the carnivore's European wide conservation (Linnell et al. 2008).

1.2 The Focus

The underlying thesis focuses on the reappearance of the wolf in Austria and investigates the related social issues and the reaction to the matter on the political level. The interest to investigate the wolf issue in Austria – particularly on the political level - arose after the wolf problems in Switzerland peaked in 2011. Switzerland contemplated to change article 22 from the Bern Convention (Fournier 2010¹), in order to simplify the process of shooting “problem” wolves. A motion which could have caused Switzerland to withdraw from the Bern Convention, in case the convention's standing committee denies the proposal. But the wolf is a transnational species and does not halt at international borders. Therefore, it is of interest to investigate if neighboring countries are also experiencing problems with the wolf's return and how they are addressing the issue politically. In the scope of the master thesis, I will lay the focus solely on the Republic of Austria.

Austria remains one of the only countries where the number of present wolves has not even exceeded eight individuals at a time (KOST 2011). This low number of individuals is surprising, as almost all the neighboring countries already resident established wolf populations, i.e. Slovenia, Italy and Slovakia, or are experiencing strong wolf immigration, particularly Switzerland. Therefore, Austria is a country of potentially high wolf immigration due to its geographic location. As wolf populations continue to grow in the Balkans, the Carpathians and Western Alps Regions, more individual wolves will migrate to other, uninhabited territories (Salvatori & Linnell 2005). Austria is located in the middle of these expanding populations and could contribute to sustainable conservation measures, if individuals from different wolf populations mate, exchange genetic information and hence enhance the fitness of their offspring (Dungler 2006). Thus, the conservation of wolves in Austria is of biological importance.

On the socio-political side, Austria has not only ratified the Bern Convention but is also part of the European Union (EU), thereby underlying the obligations of the *EU council directive on the conservation of natural habitats and of wild flora and fauna* (Habitats Directive, 21.5.1992), the EU's implementation legislation for the Bern Convention. Consequently and unlike Switzerland, Austria does not have the capability of altering parts of the EU legislation. Accordingly, the case focus on Austria is meant to depict how an EU member state is abiding to international obligations and has integrated these nationally. This is especially worth investigating, as conservation- and hunting legislations are under competency of each separate federal state and the national government does not have authority. Consequently it is the task of each state to integrate the Habitats Directive into their legislation and further implement it. In a country such as Austria, where the largest federal state is not even 20,000 km² in size², a wolf can easily and quickly travel through several bordering states. In order to manage the species effectively and appropriately, coordinated national measures should be taken.

Single wolves had passed through Austria as early as 1996 and in 2009 and 2010 several individuals were present, killing not only wild game but also livestock (KOST 2011). However, Austria does not have a national wolf strategy to respond to the return of or correctly manage the large

¹ „Revision von Artikel 22 der Berner Konvention“

² Lower Austria has a size of 19.186 km², and Vorarlberg, the smallest state (excluding Vienna), is only 2.601 km² in size (Statistik Austria 2011a)

carnivore. After the sudden appearance of more wolves in 2009, the political decision to create a plan of action was then taken in 2010. In contrast, Switzerland formulated the first national wolf strategy in 2004, Italy in 2002 and Bavaria in 2007. Part of this thesis will be to investigate if Austria has taken a much longer time in formulating a national wolf strategy in contrast to some of its neighboring countries. The main focus though, will lay on how the issue reached the political agenda in the first place and what factors influenced the formulation of a wolf policy.

1.3 Research Questions

For a conservationist, the obvious conservation measure to protect the wolf would be to prevent any kind of hunting and killing of the species. However, wolves are returning to densely populated areas, where its long-term survival can only be guaranteed if it is accepted by the local people and society. Hence wolf management is not only an issue for biologists and conservationists, but also a social issue to which the leaders of society, i.e. political actors, need to find a suitable solution to. The aim of the thesis is to investigate the possible habitat situation, evaluate the reasons for Austria to politically address the wolf and subsequently depict the policy process and the formulated policy output. Based on this aim, the following four research questions were developed, which also guide the structure of the thesis.

- I. *Is there a positive trend for the reappearance of wolves in Austria and do these individuals encounter a suitable habitat, which will be favorable for their future dispersal and settlement?*

Single wolves have already appeared within Austria over the last decade (KOST 2011). If a positive trend can be identifiable, is the species also likely to settle within an anthropogenic landscape? The wolf's biology and habitat requirements need to be understood, in order to postulate if the wolf can potentially settle.

- II. *What social issues are associated with the wolf's return and what type of conflicts arise or can be expected to occur in Austria?*

A clear problem description is necessary to develop a suitable and directed solution. In various countries where the wolf has reappeared after its local eradication, problems with locals, especially small livestock farmers, have been noted (Enserink & Vogel 2006; Reinhardt & Kluth 2007). Do the same problems also arise in Austria?

- III. *How did the Austrian political system react to wolf related issues and what major difficulties and constraints had to be overcome in order for the matter to reach the political agenda?*

Since the wolf is strictly protected by international legislation, the issue is not solely of conservation concern but has a legislative base (Salvatori & Linnell 2005). Austria is a federalist state, so difficulties in reaching a nationally accepted solution are expected. Thus, this central question also aims at depicting the elements needed to facilitate the agenda-setting process in a country without an overarching national competency.

- IV. *How did the political reaction and the policy formulation process shape the structure and content of the national wolf management plan and what are its main characteristics?*

The structure of a policy depends on the formulation process (Howlett et al. 2009:111, 137). By depicting this process and simultaneously incorporating the agenda-setting elements, the choice for and design of the policy can be explained. Moreover, the analysis of the process gives an aid to postulate about future limitation and implementation hurdles.

1.4 Delineation and Outline of the Thesis

To define the case study in space and time, a bounded system is created (Behrens 2002:215), in which the thesis will focus on the Republic of Austria and its efforts over the last years in creating a national wolf management plan. Individual wolves have started to reappear in Austria infrequently over the last 15 years. In 2005, a publicly funded research project initially investigated the possibility of wolves returning to Austria. Therefore only the happenings over the last seven years, starting from when the project was assigned, are relevant for this study and will be further investigated.

The thesis is divided into two central sections, the biological and conceptual background part and the analysis part. I begin in chapter 2 with general biological and legal information about the wolf. After a short summary of the wolf's biology, I highlight the emotions this animal can trigger in society. Thirdly, I describe the carnivore's international and national legal status and particularly indicate the significance of its protection. Chapter 3 clarifies the conceptual background on which the framework for the thesis' analysis is based. While the policy cycle and the policy design will be briefly explained, the main analytical approach, i.e. the Multiple Streams Framework, is described in greater detail. The chapter also includes a detailed description of the methodological research approach.

The main body of the thesis, the case study analysis, follows in chapter 4. Based on the analytical framework, the various factors are identified which either hinder or facilitate agenda-setting. Bottom-up actors are the main driving force within the whole process, but the constellation of the streams and the policy entrepreneurs' coupling capacity will ultimately determine agenda-setting. In chapter 5, the policy design of the formulated policy is depicted. By first describing the policy's formulation process, it will become apparent how the content of the wolf management plan is a result of this process. As the management plan has not been officially finalized and approved at the moment of completing my study, the depiction is based on the version from November 2011. Ultimately in chapter 6, the conclusion summarizes the most important findings, criticizes the methods used for the analysis and highlights the limitations and strengths of the research approach, the theoretical framework and the analysis. Ultimately I will make recommendations for future research areas.

2 The Wolf

2.1 Biology

The grey wolf, *Canis lupus*, is a large carnivore which can reach a shoulder height of 90cm and a weight of maximum 75kg, even though in the alps the wolves tend to be smaller and weigh between 25 and 35kg (Hofrichter 2005:217; Baumgartner et al. 2011:27). On average their life expectancy ranges from five to ten years (KORA 2005). Their most prominent trait is their lifestyle: to live in groups called packs. In Europe wolf packs consist of two to eight individuals, depending on availability of food, and are always led by an alpha male and female (KORA 2005). The pack does not only increase protection for the offspring from other predators, but also greatly enhances hunting success. Wolves feed on large herbivores available to them in their territory, which make up their main prey if the area is rich in wild ungulate species (Wagner et al. 2012). In Europe these include roe deer, chamois, wild boars, red deer and occasionally an ibex. Unprotected livestock, especially sheep and goats and even cows or horses can also be part of its menu. Overall a wolf consumes an estimated 3.7-4.5 kg every day, which equals to roughly 25 red deer each year (KORA 2005). The wolf chases its prey, but carefully selects the weak, injured or older prey individuals in order to maximize its success. Predation is largely compensatory, i.e. the wolf hunts animals which would have died soon anyway and does not contribute to a higher mortality rate in the prey population (Boitani 2000). This has several effects on prey populations, such as mitigating the risk of spreading diseases or epidemics in the prey species and increasing the probability of the survival of healthy ungulate individuals, but can also lead to a change in the prey's migration patterns (Boitani 2000).

As the head of the pack, the alpha pair is the only one allowed to mate. Once a year, an average litter size of four to six puppies is born, which will be raised by the whole pack (Boitani 2000). Depending on food availability and territory conditions most young will remain with the pack for one to two years until they migrate to a new territory (Baumgartner et al. 2011:51). These singles can travel very far distances in order to find a suitable territory and a mate. On average individual wolves disperse about 100km until they find a new mate and suitable territory, but few individuals were able to travel up to 1000km (Ciucci et al. 2009). The size of a territory can vary significantly. It depends on food availability and the size of the pack. In the USA and Canada territories of up to 2,500 km² have been recorded, while in Italy they range between 120-350 km² (KORA 2005). Wolves are very adaptable animals and are generally only restricted in their choice of territory by the availability of food. In Europe, wolf habitats are often described as having large forest areas and being thinly populated by humans (Hofrichter 2005:228). In fact, wolves can adapt to mainly all kinds of habitats, but as human settlements expanded across the continent, the wolf retreated into forests (Habenicht 2005). More importantly, wolves have more problems finding a habitat, due to conflicts with humans by whom they are not always accepted. So even though ecologically the wolf would find a suitable habitat, the social setting could hinder the carnivore from successfully establishing itself.

2.2 Emotions in Society

Even though one of the wolves' closest relatives, the dog, has become man's best friend, wolves have been feared, despised and ruthlessly hunted. Throughout history the wolf symbolized a malicious animal, killing not only sheep and goats but also little children or the elderly (Hofrichter 2005:222-225). Not only in little red riding hood's fairytale was the wolf depicted as an evil creature, but also biblical texts or symbols such as the wolf in sheep's clothing have contributed to this negative connotation. Already Carl the Great (747-814) called upon his knights to intensively hunt wolves, an endeavor which lasted until the 19th century (Hofrichter 2005:226; Breitenmoser-Würsten et al. 2001).

Not only fear but also the wolf's competition with people's lifestyle was a cause for his decline. In the 16th century humans started to clear forests and increased their livestock. Until the 18th century the wolf's natural prey had significantly been reduced and conflicts between people and the wolf exacerbated (Breitenmoser-Würsten et al. 2001). In search of food, wolves would occasionally come into villages and not only cause a threat to livestock, but also humans – mainly small unaccompanied children (Kaczensky 2006). Consequently, in many regions the national objective was to eradicate the carnivore and very often a dead wolf was worth a premium for the hunter.

Today the wolf still triggers strong emotions in people, ranging from rejection and fear, to indifference or lack of appreciation, to joy and enthusiasm. Generally, citizens in urban areas tend to have positive attitudes towards the returning and permanent presence of wolves, while people in rural areas have a rather negative attitude (Karlsson & Sjoström 2007). The acceptance for the wolf seems to increase the further away a person is from the actual animal. Hence the acceptance among those directly affected by the wolf's return tends to be quite small (Majic-Skrbinsek & Bath 2005; Kaczensky 2006). Furthermore, a study in Austria (Wechselberger & Leizinger 2005) in which different population groups were questioned, illustrated that the acceptance and approval of the wolf in general is much lower (only 36.5%) as for the bear (48.3%) and the lynx (49.5%).

Central stakeholders in the wolf discussion are those directly affected by their return, i.e. the livestock farmers, hunters and people depending on tourism; as well as conservationists and naturalists who associate a comeback of wilderness with the wolf's return. When the wolf was still part of the rural environment, shepherds and hunters had little choice but to arrange themselves with their presence and even tolerated them (Meriggi & Lovari 1996). However, due to their long absence in the 20th century, their reacceptance continues to be difficult.

2.3 European Wolf Dispersal and Habitat Suitability in Austria

Wolves had once inhabited the whole northern hemisphere, but extreme hunting has diminished their range of dispersal and caused widespread local extinctions (Breitenmoser 1998). Small remnant populations managed to survive in the Iberian Peninsula, Greece, Italy, the Balkan, Carpathians and other eastern European countries (KORA 2005). After the introduction of strong protection measures, many carnivore populations started to recover. Nowadays in Europe, established wolf populations can be found in the Carpathian and Baltic regions, Scandinavia, the Iberian Peninsula, as well as the Dinaric-Balkan and the Italian Peninsula.

The Austrian wolf population similarly continuously diminished over the centuries until it was completely eradicated. A study conducted by Zedrosser (1996), detected the presence of 52 registered wolves during the 19th century. The last Austrian wolf was officially shot in 1882 in Styria (Dungler 2006). Wolves were also detected in the early 20th century, but these only totaled 19 individuals and immigrated from neighboring populations. As can be seen in Figure 1, these wolves had either migrated into Austria from the Czech Republic, or from the southern Balkan populations. Similar migration routes were detected by the recent immigrated wolves. Most of the wolves hunted in the 20th century were shot in the first half of the century (Zedrosser 1996).

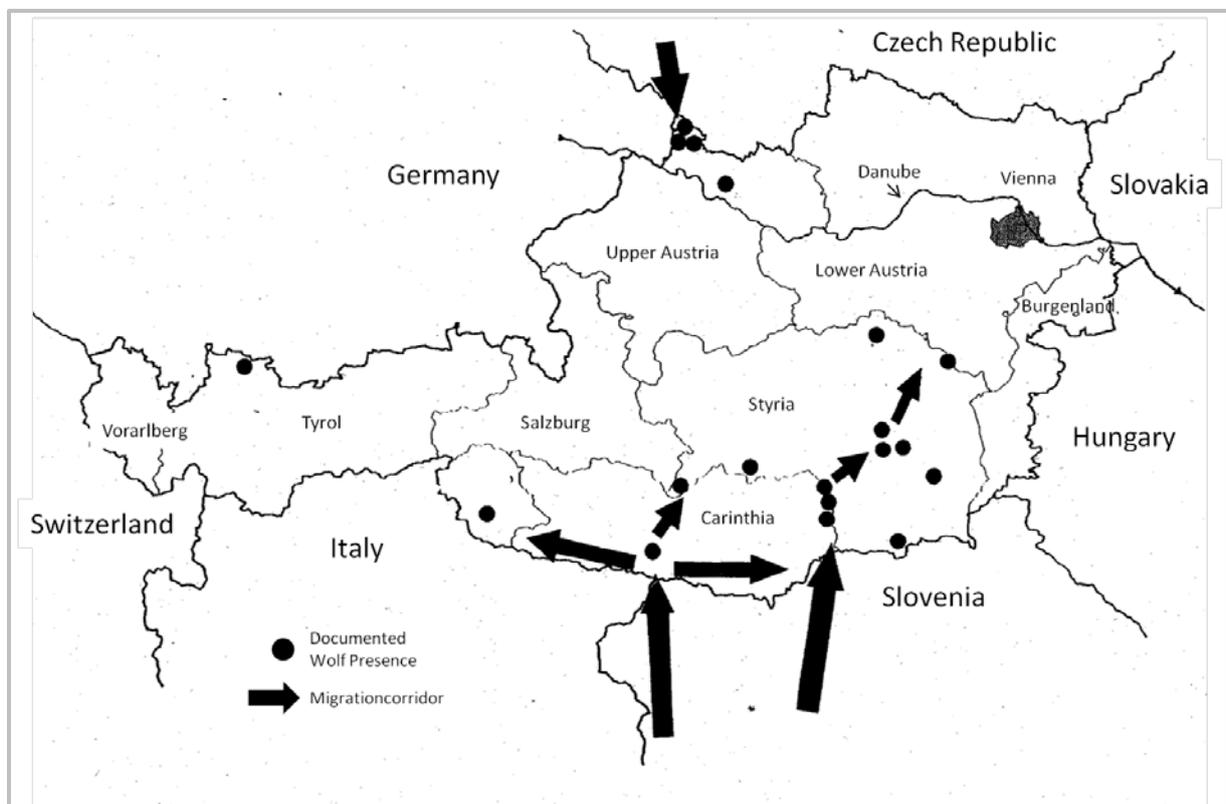


Figure 1: Wolf Distribution in the 20th Century
Source: Zedrosser 1996 with minor adjustments

Towards the end of the 20th century, in 1996, a wolf was sighted in Upper Austria, but was shot soon after (Dungler 2006). In 2002 another individual was illegally shot close to Bad Ischl (southern Upper Austria) and in 2005 a wolf was sighted and photographed in western Styria close to Zirbitzkogel (Bufka et al. 2005). Since then several more individual wolves have crossed into Austria in the new millennium and photos, sightings, dead wolves and DNA samples have documented their return. In 2009 and 2010 an estimated six to eight individual wolves were genetically detected in Austria (Interview WWF). An uncertainty in the exact number of wolves, despite their genetic identification was due to the samples not always being fresh and only mitochondrial DNA could be obtained (KOST 2011). Thus a genotype classification and hence a distinction of each individual was not always possible. In 2011 the wolves diminished again and only two or three were detected.

Determining from where these wolves are returning, what migratory potential exists and if they will find a suitable habitat in Austria is central for developing a management plan. Figure 2 gives an overview of the populations surrounding Austria and their potential migration routes into Austria.

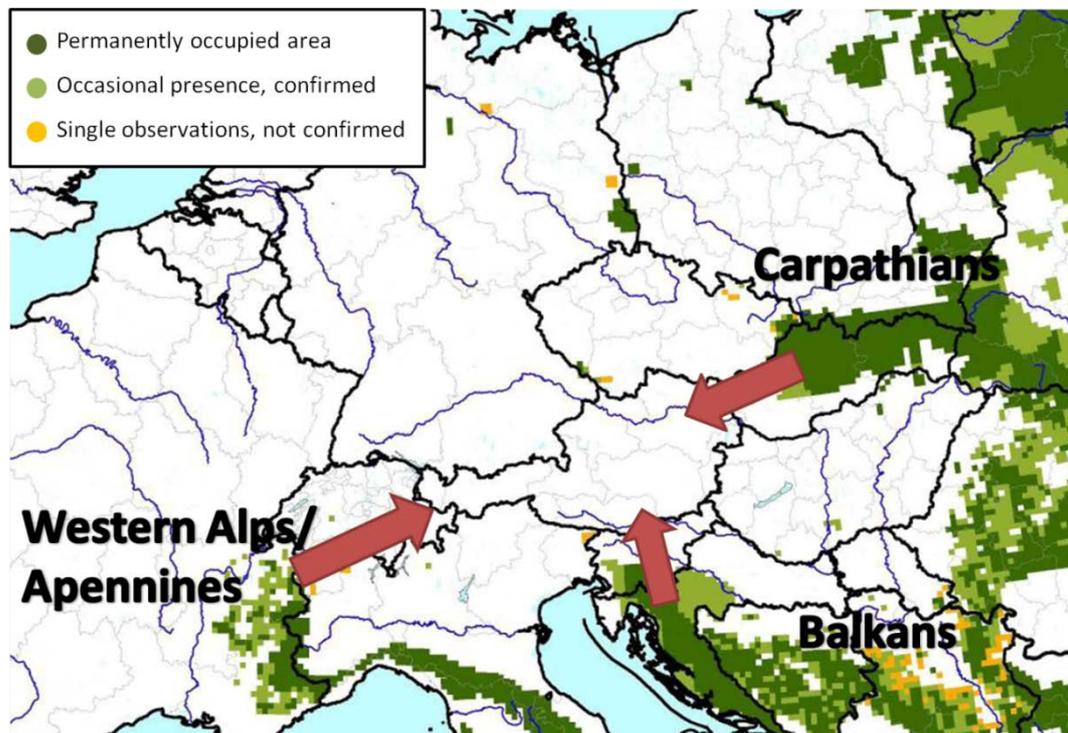


Figure 2: Present Wolf Populations and Possible Migration to Austria
Source: KORA/LCIE 2007 and Rauer 2010

In the early nineties, wolves started to return to the Alpine region, mainly migrating northwards from the Apennine mountains (Pavlik 2009). These Italian wolves have already successfully inhabited the Western Alps and packs have established themselves. Since 1998 solitary wolves have started to frequently come into Switzerland (KORA 2005). Other stable wolf populations have established themselves in Slovakia, Slovenia, and at the Czech-Bavarian-Austrian border region. The genetic analyses of the immigrated Austrian wolves confirmed that they either came from the Carpathian population to Lower Austria, from the Balkan population to Carinthia and Styria, or from the Western Alps and Apennines to Vorarlberg and Tyrol (Interview FIWI). This could be very beneficial to wolf conservation in Europe, as individuals from different wolf populations meet and contribute to refreshing the gene pool.

Secondly, the potential Austrian wolf immigration depends on the size of the circumjacent populations. Keeping in mind that wolves can travel very far distances in search of a suitable habitat, it is important to consider these populations based on a wide radius. The following table gives an overview of wolf populations in the three regions surrounding Austria. The numbers for wolf population sizes should be considered as estimates, diverging from reality, since determining the actual population size is difficult and not homogeneously detected throughout the European countries. Moreover, these surveys are not always conducted regularly.

Table 1: Wolf Population Size in Austria's Bordering Countries (situation in 2008)

Region	Countries	Wolf Population	Comment
<i>Western Alps</i>	Italy , France, Switzerland	600 - 920	Largest pop. in Italy (500-800); increasing pop. in France (120)
<i>Dinaric-Balkan</i>	Slovenia, Croatia, Bosnia-Herzegovina, Greece, Serbia, Montenegro, Bulgaria, Albania, Macedonia	5,000	Population in Slovenia (100) increasing
<i>Carpathian</i>	Czech Republic, Slovakia, Poland, Hungary, Romania, Ukraine, Serbia	4,000	Large but stable pop. in Slovakia (400-600) and Poland (200)

Source: Linnell et al. 2008

Potentially, the wolf can and will disperse into new regions including Austria, but the question remains if it will also encounter a suitable habitat. The Wolf has an excellent ability to adapt to new environments, as long as enough food is available and it finds a place to find cover. Marucco (2011) developed a habitat model, validated with data from the Italian wolf population, to determine and locate suitable wolf habitats in the alpine ridge. The model shows (cf. figure 3), that Austria offers even better suitable habitats, as the now already inhabited Italian and French part.

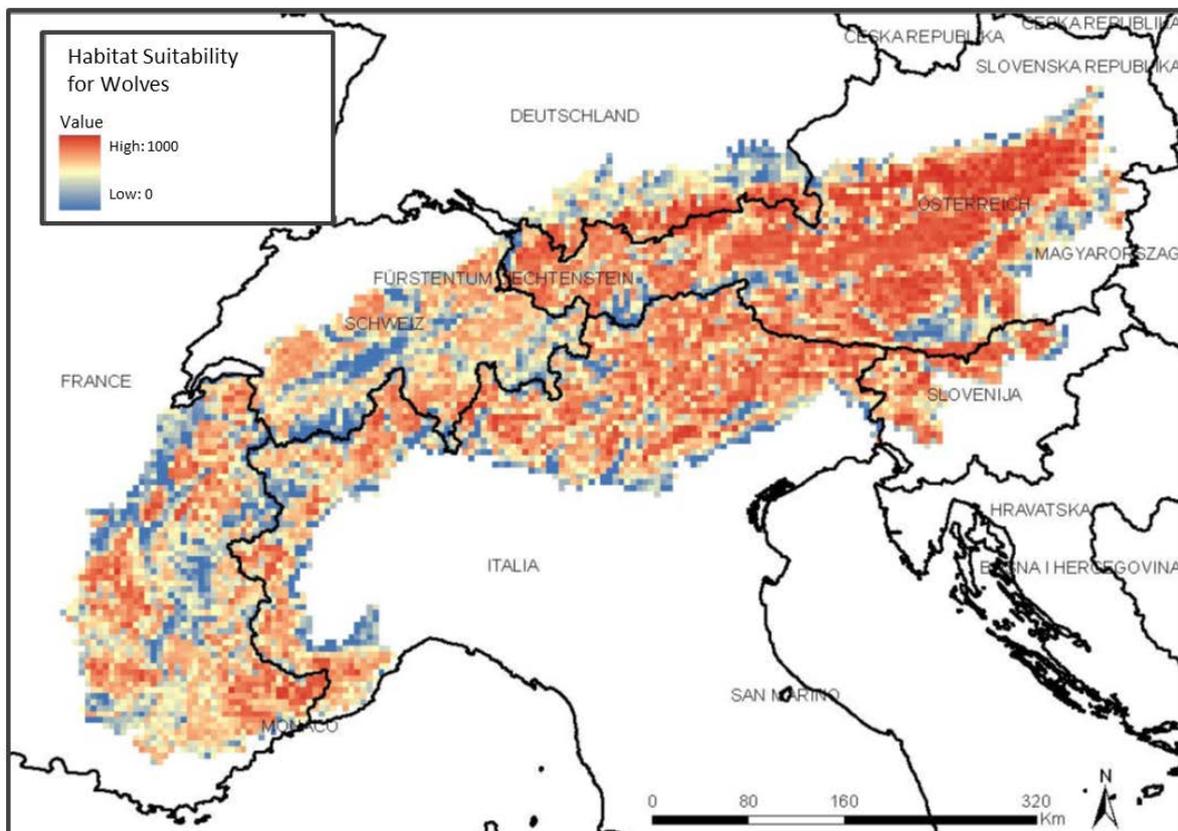


Figure 3: Suitable Habitats for Wolves in the Alpine Ridge
Source: Marucco 2011

The model also integrated data on the presence of red deer, an important source of food for the carnivore. Large herbivore populations have continuously increased in the Alps over the last

decades, due to the protection of these species, the revitalization of forests and the absence of natural predators. In response, approx. 250,000 roe deer, 50,000 red deer and 30,000 wild boars were hunted in Austria alone in 2010 (Statistik Austria 2011b). For the wolf, a large ungulate population signifies a stable source of food, making Austria generally a very suitable habitat for large carnivores.

Ecologically, Austria offers a suitable habitat for wolves. Austrian wildlife biologists and further experts in the field are expecting the carnivore's return (Dungler 2009; Rauer 2011). However, his permanent comeback will depend greatly on the public's attitude, social tolerance and the willingness to share the environment with this large predator (Habenicht 2005).

2.4 Protection Status

In Austria the wolf is protected by several different national and international legislations. International legislations list the wolf as a protected species and prohibit catching, killing and the destruction of its resting and reproduction sites. Table 2 illustrates the two relevant international agreements protecting wild living wolves.

Table 2: The Wolf's International Protection Status

Jurisdiction	Legislation	Protection Status
European Union	<i>EU council directive on the conservation of natural habitats and of wild flora and fauna (Habitats Directive) (92/43/EEC)(21.5.1992)</i>	Protected species under Annex IV Special protection of Habitat under Annex II
International	<i>Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) (19.9.1979)</i>	Strictly protected species under Appendix II

Source: Own compilation

The wolf has steadily improved its status on the international union for conservation of nature's (IUCN) Red List of endangered species from vulnerable to least concern worldwide (Mech & Boitani 2010). However, it is still classified as regionally extinct in Austria.

2.4.1 Bern Convention

The first main international agreement aimed at conserving wild flora and fauna and their habitats, is the Bern Convention. In Austria it entered into force in 1983, and to date has been ratified by 50 countries. The wolf is listed as a strictly protected fauna species (Appendix II), enjoying strong protection measures which forbid the following (art.6):

- a) *All forms of deliberate capture and keeping and deliberate killing;*
- b) *the deliberate damage to or destruction of breeding or resting sites;*
- c) *the deliberate disturbance of wild fauna, particularly during the period of breeding, rearing and hibernation, [...];*
- d) *[...];*
- e) *the possession of and internal trade in these animals, alive or dead,[...].*

Further, the convention obligates its members to take appropriate measures to promote conservation (art.2) and to integrate conservation into national and regional policies (art.3). For contracting states measures include designating special habitats and minimizing conflicts with humans for problematic species. In 2000 a European action plan for the conservation of wolves was published, under the auspices of the convention (Boitani 2000). Official governmental reviewing was done by Bern Convention contracting parties (in 1998) and the Habitats Directive Scientific Committee (in 1999). This plan was meant to guarantee the coordination between countries and be used as a guide for creating national management plans.

Derogations to the wolves' strict protection status can be made in special cases (art.9 para1). Derogation implies a definite extraction of an individual from its habitat, either through catching or killing. Emphasis is put on the necessity of not having a detrimental effect on the species survival and population. A formal reporting of these exceptions needs to be done every two years to the standing committee (art.9 para2).

2.4.2 Habitats Directive

The European Union is one of the 50 parties who signed the Bern Convention. In response the special protection of species and natural habitats have been implemented through the Habitats Directive and is applicable to all EU members. It was created to *"maintain or restore, at favorable conservation status, natural habitats and species of wild flora and fauna"* (art.2 para2). The Wolf is listed under Annex IV as a strictly protected species, whose conservation requires a *"system of strict protection"* (art.12 para1). Similar as in the Bern Convention, the Habitats Directive regulates the strict prohibition of capture and killing, destruction of resting sites and the deliberate disturbance of the species.

The wolf is also listed under Annex II, which requires member states to designate special areas for conservation for the species. These areas, combined with Annex I species, constitute of a Europe-wide network of protected areas, the Natura 2000 network (art.3). In Austria the wolf has only sporadically entered the country without any individual inhabiting an area. Therefore, currently the requirement to integrate special areas for conservation does not apply.

Already in 1997 the Council of Europe recommended its member states to create action plans in order to facilitate a species recovery and ensure its conservation (Machado 1997). In parallel, the EU commission has also recommended developing specific action plans for large carnivores, in order to facilitate the fulfillment of EU obligations. The EU commission further claims that species action plans can be an effective means to fulfilling requirements and tailoring a strict protection system for the Annex IV species (Trouwborst 2010). Nonetheless, these are only general recommendations, whose immediate implementation is not legally obligatory.

Derogations to art.12 can be made according to art. 16 para1, if national authorities can demonstrate the following three conditions are being met: First, the situation must be such that *"no [other] satisfactory alternative exists, except for the derogation. To what extent preventive measures, such as herd protection dogs and fences, can lead to a satisfactory alternative often depends on the efforts and financial aid related to herd protection methods. Second, the action cannot be "detrimental to the maintenance of the population [...] at a favorable conservation status"* (art. 16 para1). This criterion makes the granting of derogations especially unlikely in Austria, as currently the present wolves are far from reaching a viable population size. Third, the situation needs

to fall under one of five potential criteria, where the most relevant criteria would be: *“To prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property”* (art.16 para1b). Crucial is the word *prevent* in this context, as it implies damage could also be prevented by selectively keeping carnivores out of a certain area (Linnell et al. 2007).

In case a member state violates the Habitats Directive, reminders followed by monetary penalties are imposed. However, it does not give an incentive to become proactive before the violation has been committed. The European Commission in this sense does not fulfill a prescriptive role in order to prevent violations and cannot oblige the member states to implement certain measures (Rosen & Bath 2009).

2.4.3 National Legislation

Austria is a federalist country, where the national government does not have a judicial competency in every legal area. Hunting and conservation legislations are under state authority, while the national government has no legal competency. This means there is no national hunting or conservation act. Separate acts exist in each federal state. On the 1st of January 1995 Austria joined the EU, agreeing to abide to the European Community Law and the Habitats Directive. These have precedence over national laws (Talos 2000). Nonetheless, international law is not directly applicable within Austria (according to art.50 para2 B-VG³), but first needs to be integrated into national legislations (Strasser & Proschek 2004). Thus, every state had to integrate the international regulations in their own legislations.

The right for states to make their own hunting and conservation legislations and implement these are based on art. 15 para 1 of the national constitution (B-VG). In most states the wolf is listed under the hunting act (JG). Tyrol, Vorarlberg and Styria list the wolf under both legislations. Only Vienna lists the wolf as a strictly protected species under the conservation act (NSchG), and not under the hunting act. In cases where the wolf is part of the hunting act, it is always declared as a game species. Further it is classified as a species with a year-round closed hunting season, to which exceptions can be made under certain circumstances. If the wolf is also included in the conservation act, it is either declared as a protected or even strictly protected species (art.9 para1 Wr NSchG). The following table gives an overview of how the wolf is addressed legally in the nine different federal states.

³ Erfüllungsvorbehalt

Table 3: State Legislative Regulations Addressing the Wolf

State	Legislation	Protection Status	Possible Derogations
<i>Burgenland</i>	Hunting Act (Bgl JG)(2004) Game species: art.3 para1a	Year-round closed season: art.77 para1a Bgl JVO	Authorized by state gov't (after expert assessment) art. 82 para4 Bgl JG
<i>Carinthia</i>	Hunting Act (Ktn JG)(2000) Game species: art.4 para1a	Year-round closed season: art.51 para1 Ktn JG art.9 para1 DVO Ktn JG	Authorized by state gov't art. 51 para4a Ktn JG art.52 para 1; 2
<i>Lower Austria</i>	Hunting Act (Nö JG)(1974) Game species: art.3 para1	Not huntable species: art.3 para2 Nö JG Killing Prohibited (based on HD ⁴): art.3 para4 Nö JG	Authorized by state gov't art. 3 para6 Nö JG and/or authorized by BVB ⁵ art. 3 para8 Nö JG
<i>Upper Austria</i>	Hunting Act (Oö JG)(1964) Game species: art.3 para1	Year-round closed season: art.1 para1 Oö SchonzVO	Authorized by state gov't (and advice from hunting advisory council ⁶) art. 48 para 4; 5 Oö JG
<i>Salzburg</i>	Hunting Act (S JG)(1993) Game species: art.4 para1b	Year-round closed season: art.54 para3 S JG Special protection (based on HD): art.103 S JG	Authorized by BVB art. 104b S JG
<i>Styria</i>	Hunting Act (Stmk JG)(1986) Game species: art.2 para1d	Year-round closed season: art.49 para2 Stmk JG art.2 Stmk JagdzeitenVO	Authorized by state gov't art. 49 para 2; 3 Stmk JG
	Conservation Act (Stmk NSchG)(1976)	Protected Species: art.13d para1,2 Stmk NSchG	Authorized by state gov't art.13d para 5 Stmk NSchG
<i>Tyrol</i>	Hunting Act (Tir JG)(2004) Game species: art.1 para2 in Appendix 1	Year-round closed season: art.1 para3 2.DVO Tir JG	Authorized by BVB art. 52 para1 Tir JG
	Conservation Act (Tir NSchG)(2005)	Protected Species (HD): art.24 para1 Tir NSchG art.4 para1 Tir NSchVO (2006)	Authorized by state gov't art. 24 para5 Tir NSchG
<i>Vorarlberg</i>	Hunting Regulation (Vbg JVO)(2008) Game species: art.1 lit a	Killing Prohibited: art.23a Vbg JVO Year-round closed season: art.26 lit b Vbg JVO	Authorized by BVB art. 27a para3 Vbg JVO
	Conservation Act (Vbg NSchG) (2008)	Protected Species: art.18 para1 Vbg NSchG art.6 para1 Vbg NSchVO (2009) (HD)	Authorized by BVB art.12 para2 Vbg NSchVO
<i>Vienna</i>	Conservation Act (Wr NSchG) (2006)	Strictly protected species (HD): art.10 para3 Wr NSchG art.4 para1 Wr NSchVO (2010)	art.10 para3 Wr NSchG

Source: Own compilation, national legislations and Strasser & Proschek 2004

⁴ HD: Habitats Directive

⁵ BVB: Bezirksverwaltungsbehörde (District Council Authority)

⁶ Landesjagdbeirat

Exceptions can be granted for the killing or removal of individuals in special situations. Since the protection status is regulated differently in the nine states, derogations are also regulated either through the federal hunting or conservation acts. In any case, the abatement to the subordinated Habitats Directive needs to be respected. In Burgenland, Carinthia, Lower and Upper Austria, and Salzburg derogations can be granted according to the hunting act. Generally all of the acts share a similar wording, where derogations can only be granted:

“if there is no other satisfactory solution, the population of the wild species concerned can remain in a viable conservation status in their natural range of distribution and the restriction serves the following purposes: [...] for the prevention of considerable damage to crops, livestock, forests, fishing areas, and bodies of water [...]” (art.82 Abs 4 Bgld JG).

Overall these derogations are conforming to art. 16 from the Habitats Directive. In some states, namely Carinthia and Lower Austria, the derogation is decided by the state government through a regulation, which does not ask for a close examination of each specific case. Consequently the requirement of the Habitats Directive is not fully executed. In Styria, Tyrol and Vorarlberg the situation is different, as the wolf is also protected by the conservation act of each respective state. In Tyrol the possibility for granting derogations under the hunting act is not fully Habitats Directive conform, but does fulfill the Directives requirement under the conservation act. In Styria and Vorarlberg both acts, respectively regulations are conform concerning the Directives guidelines.

Legal jurisdiction for the execution of the derogation is generally either carried out by the state government - after the consultation with experts - or the municipal district council authority. In general, the requirements for derogations are quite vague and do not specifically state values of reference for state officials to judge when a viable population size has been reached and to what extent the damages caused to livestock are acceptable. At present the granting of an exception is unlikely though, as it will probably still take several years until the wolf population in Austria has reached a stable size and removal of individual species will not be detrimental to the whole population.

3 Conceptual Framework and Methodology

The description and analysis of the agenda-setting and policy formulation of the Austrian wolf management plan, is conducted within the frame of a policy analysis. The following chapter will depict the research design and clarify the method for the analytical procedure. The delineation of the analysis is based on the policy cycle and focuses on the agenda-setting and policy formulation stages. A demarcation of the two stages will not be done. For general guidance, a schematic illustration of the policy cycle is given in Appendix 1. The heart of the analysis will be based on the Multiple-Streams Framework (MS) developed by Kingdon in 1984. Unlike the policy cycle, which linearly represents the policy process, the MS framework depicts the process as a dynamic and multi-level course of simultaneous events which independently influence the agenda. I have chosen the MS framework, because the depiction of a linear policy process is often too simplistic and heuristic. The MS gives a detailed and empirically verified explanation of the agenda-setting process, without losing its credibility due to strong assumptions. Even though the MS is also based on assumptions, the simplistic assumption of a policy process with distinct phases does not apply.

Using the MS framework I will depict the process of problem identification, agenda-setting and policy formulation. The content of the MS approach will be explained in chapter 3.1. The actual wolf management plan will then be depicted based on the policy design introduced by Knoepfel and Weidner. The set-up of this design is described in chapter 3.2. In chapter 3.3 I will then explain the methods I have used to obtain information.

3.1 The Multiple-Streams Framework

The analytical assessment of the wolf policy formulation is based on the MS Framework. The MS was first developed by John Kingdon in 1984 and is founded on his research in US federal government agenda-setting. It aims at explaining a principle question in the policy process: why do some public issues get addressed by politics and then are set on the agenda, while others are ignored? (Kingdon 2003:1). Based on the “Garbage-Can Model” by Cohen et al. (1972, cited in Kingdon 2003:19), Kingdon ties his theory to the idea that a decision not necessarily originates from a problem, but actually depends on organizational choice and generated alternatives. The political system and organizations are thought of as an “organized anarchy”, where actors fulfill certain responsibilities which cannot be determined or controlled by the rules of the whole organization (Rüb 2009:350). This implies that the political system will not always act uniformly towards achieving the idealized social common good, but faces internal, actor influenced processes which greatly affect the outcome of a decision.

Kingdon (2003) describes these processes along three streams: the problem, politics and policy streams. Even though they are parallel, they flow through the system at different speeds, as each stream develops its own and independent momentum. The contents of the streams either stimulate or inhibit the course of agenda-setting, but certain opportunities or moments in time will determine if an issue is raised, successfully defined by policy-makers and then put on the agenda. These moments in time are called windows of opportunity (Kingdon 2003:166). They enable or accelerate stream coupling, the prerequisite for successful agenda-setting. Strongly engaged actors, called policy entrepreneurs, can seize the moment of an open policy window and facilitate stream coupling. The framework is schematically illustrated in Figure 4.

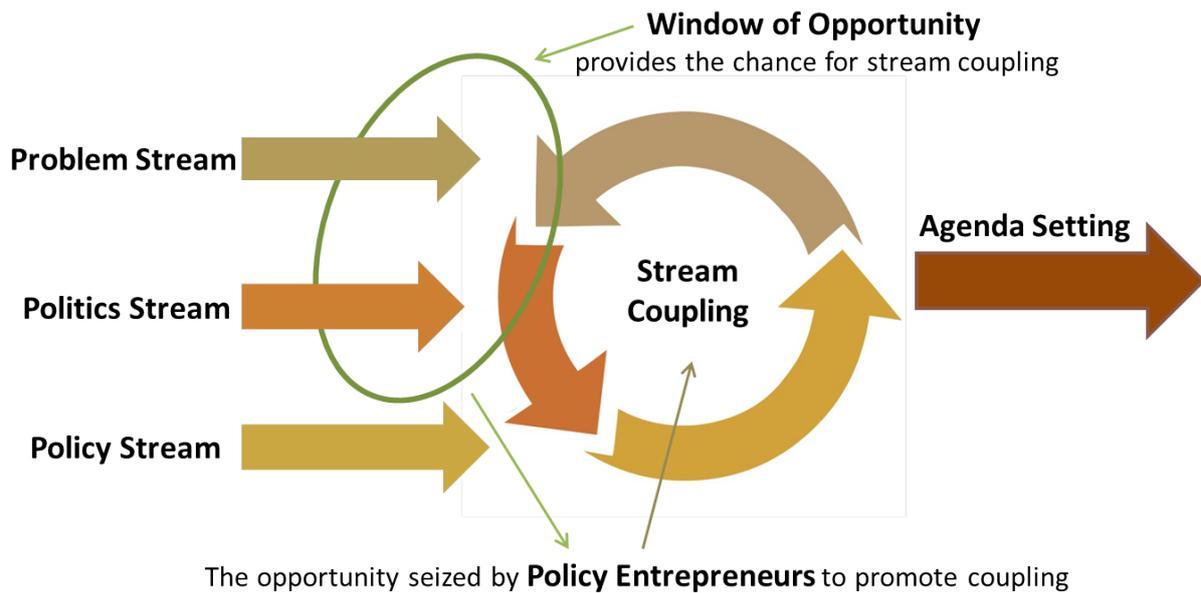


Figure 4: The Multiple Streams Analysis
Source: Own illustration based on Kingdon (2003)

Distinct matters can appear in a stream without being detected in another stream. This ties into another assumption: individual attention is serial, where a person can only focus his attention on one issue at a time, while attention within a system is parallel, since the system contains many individuals who can simultaneously focus their attention on several issues (Zahariadis 2003:5). Therefore time can be considered a limiting resource, which causes policy makers to operate under time constraints while trying to make decisions about ambiguous themes. Consequently they rely on other stakeholders to explain and clarify these themes, making them more susceptible to manipulation by these actors (Zahariadis 2003:5). The type of manipulation or depiction of the problem further influences the moment of agenda-setting and the choice of policy. The MS focuses on how and what kind of decisions policy makers make when an issue is ambiguous.

Zahariadis (2003) places greater emphasis on the ambiguity of problems in the agenda-setting and policy formulation process. The wolf issue can be regarded as an ambiguous theme, since it includes many different stakeholders, their beliefs and their proposed solutions. The MS does not focus on the policymaker's ambiguity, but how they make decisions when ambiguity is present.

3.1.1 Problem Stream

All public problems are summarized under the problem stream. They compete for recognition and processing by authorities and can remain unrecognized for long periods of time or completely remain unaddressed. This can have different causes and is based on how information about an issue is gained and how the issue gets defined. A problem is a "perceptual and interpretative element" (Kingdon 2003:110) and only recognized as such when it is in conflict with normative views and the situation is perceived to be undesirable, hence it needs to be changed. Zahariadis (2003:153) defines these perceptions as policy images, where the perceptual element represents the values associated with the issue. Actors influence this image and can focus attention on value or norm related issues. The definition of the actual problem is central in designing a wolf policy. As a main part of the problem stream, I will illustrate the expected and current problems that

different actor groups face. Depending on the type of actor group and their views, the definition of the problem can strongly vary.

Kingdon (2003: 90-103) proposes three forms of how an issue can be politically recognized:

1. **Focusing events** are sudden events, such as catastrophes, crisis, or scandals, which abruptly receive public attention and can be actively influenced and excelled through the media. Especially if these focusing events have an effect on many people, the media attention will increase, generating greater public concern. The focusing event will be reinforced, if knowledge about their possible occurrence exists or they occur in combination with similar events. Focusing events related to the wolf generally are killed sheep or goats. The severity of the event depends on the number of dead livestock and the way it is portrayed in the media.
2. **Indicators** portray changes within statistics that can signalize a problematic condition. These can be made routinely by the government or directly on request by universities, foundations, etc. They rely on interpretation but can also quantify the magnitude of the problem. Not mentioned by Kingdon, but relevant for my analysis, is the possibility of prognosticating scientific data into the future leading to a scientifically sound prediction. These types of predictions are important though, as they can indicate to what extent a reappearance of wolves is likely.
3. **Feedback** from previous policies indicates successful policies, which could spill over to other issues. They can also show new aspects of a policy, resulting in its improvement. On the other hand, unsuccessful policies are undesirable and can lead to similar issues being further ignored. For politicians either public support or opposition demonstrates the general acceptability of policy choices. An example of a previous policy could be the Austrian brown bear management plan which has been formulated several years ago.

In addition to these three criteria, the **budget** available to the state or country for certain policies can hinder or promote the agenda-setting of an issue (Kingdon 2003:105-106). In cases where policy proposals are perceived to be very costly, the budget acts as a constraint and policy makers may tend to ignore the subject. An example would be the implementation of herd protection measures, a central part in wolf management which generally requires adequate funding in order to be successful. On the other hand, if the problem itself is considered extremely costly, policy makers will be pressured to reduce this cost by developing new policies. Since wolves also cause financial damage to farmers or hunters, those affected have an incentive to put pressure on politicians to avoid further damage. As with the identification and definition of the problem, the interpretation of the current budget will determine if it is a constraint or a promoter (Kingdon 2003:114).

Overall, it seems very unlikely for a state government to proactively get involved with large carnivore conservation without their return becoming a social issue. Therefore, I postulate that the reappearance and further expansion of the wolf caused significant social problems, which were pressing enough to generate a political reaction. These social problems were especially propagated through focusing events. Thus focusing events are primarily necessary in order to receive the needed attention which leads to stream coupling.

3.1.2 Policy Stream

Within the policy stream countless problem definitions and preferred solutions “swim” together in a so-called “primeval soup” (Kingdon 2003:116), waiting to be considered. In Europe, the prevailing appropriate approach to address large carnivores is in the form of a management plan.

Thus, the multiplicity of possible policy solutions, as expressed by Kingdon, is less applicable. The analysis of the policy stream will therefore concentrate less on how a suitable policy was chosen from a large pool of ideas and more on the type of elements within the policy. Policy ideas, concepts and alternatives are proposed and disputed in **policy communities** grouped around a certain political field. Policy communities are mainly stable groups consisting of government officials, consultants, academics, lobbyists, and actors from the private sector, hence a constellation of different interest groups (Zahariadis 2003:48). They introduce and discuss their ideas in workshops, conferences, hearings, papers, proposals and further information channels. The type of policy community, its structure and how its members interact can affect the actual policy formulation. For multifaceted issues such as carnivore management, a policy community should aim at combining scientific knowledge with legal recourses while integrating the affected stakeholders as well.

The policy stream aims at describing the selection process for policies that reach the agenda. According to Kingdon (2003:131-143) the following three criteria increase the probability of an idea being chosen. For my case study the criteria will be important as well for describing the choice of policy content. (1) **Technical feasibility** is a term already foreshadowing the implementation phase. Before a policy maker or -community can introduce a new policy, they have to consider if it can actually be doable. At the latest when a proposal is seriously worked on and considered in detail, does a policy maker also have to put his attention on the practical achievability of the policy. The achievability can also depend on the financial feasibility of the suggested policy. (2) Similar to perceptions and definitions, policies are also based on societal norms and ideologies. Hence **value acceptability** of the proposed policy plays a second, central role. Proposals need to be in line with dominant values of the policy community in order to have a chance in reaching the agenda. Moreover, a policy needs to be fair or conversely can be driven by equity issues, when a stakeholder group feels discriminated against by the current situation. (3) Finally, policies also need to **anticipate future constraints** which could lead to problems in the future or even failure of the policy. These include a tolerable monetary budget for the formulation and implementation of the policy, a realistic chance of politicians to approve the policy and lastly for the public to accept it and abide to it.

Instead of explaining the policy choice, as described by Kingdon, these criteria will also be useful in explaining the type of measures selected within the policy formulation. Thus, the policy stream will essentially also depict the formulation process.

The policy itself is often not a completely new concept, but has been gradually changed over time and can originate from other existing policies (Kingdon 2003:141). In such a case, the existing policy can highlight constraints and problems, or can identify a best practice choice. In Austria, the bear has made its comeback years before the wolf was noticed and the first national strategy was formulated in 1996/97. It is reasonable to assume that the wolf management plan will include many elements of this bear management plan. Based on the identified problems and constraints of the stream, the identified criteria then further aid in explaining the policy design. Ultimately, in order to increase the probability for the policy stream to successfully couple during a policy window, it is important that a preliminary proposal of a wolf management plan is at hand.

3.1.3 Politics Stream

Politicians need to think an issue is important enough to be debated and urgent enough to be tackled. According to Kingdon (2003: 145-159), the politics stream consists of three factors which can influence the likelihood of an issue being addressed. First, a particular issue can be influenced by a **national mood**, which exists in and around the government. As politicians depend on the public to stay in office, they are very sensitive to changes in public opinion and intend to act or react in favor of the public. Consequently the national mood can promote or hinder certain issues in reaching the agenda. Especially the media play an important role in portraying this vague presence as something more graspable. As large carnivores are very shy and hard to spot in the wild, it is the media who raise attention and contribute in making their presence known. Second, **organized political forces** such as pressure- or political interest groups try to directly influence political actions. Concerning a specific issue usually pro and contra groups can be identified which either try to create incentives for the politicians to address a problem or try to hinder these. Pressure groups are often personally involved with the issue, e.g. the agricultural sector and particularly small livestock farmers. However their motivation can also come from conviction, e.g. conservationists who work on behalf of the wolf without a direct personal gain. Third, **intra-political events** address events within the government itself. Jurisdiction is a central governmental process, in which disputes over or missing competency can inhibit the agenda-setting. In rare cases this dispute over jurisdiction can also lead to agenda-setting. Austria is a highly federalist state and large carnivore issues are regulated by each state separately. Moreover, in some states the wolf is mentioned in both hunting and conservation acts. Consequently, a dispute over jurisdiction and competencies is highly probable. The second intra-political event is the turnover of key government personnel after elections. They can make way to new ideas or values, leading to new possibilities to focus on a problem.

An extension to these categories will be what I have called the *political mood*. This category is narrowed down at the reaction and awareness of an issue on high political levels. As the wolf issue is simultaneously discussed and handled at different governmental levels, the distinction between an overall national mood and a narrowed down political mood can help clarify the process. Moreover, Kingdon's approach is heavily focused on political processes within high level circles, which mainly do not apply to the wolf policy process. The political mood therewith only represents the general atmosphere among politicians and decision makers, while the national mood is extended onto the mood within the country expressed by the general public.

3.1.4 Policy Entrepreneurs

Policy entrepreneurs are individuals or corporative actors aiming at influencing decision makers in order to promote their favored policy. They vary for different policies and can be in or out of government, solely a single actor or an interest group. However they all invest their own time, skill, expertise and reputation in order to attempt to manipulate policy choices to pursue anticipated future gains (Kingdon 2003:122). Herein manipulation does not only have a negative connotation, but refers to the clarification of an issue. Zahariadis (2003:1) explains the ambiguity of political issues, referring to the multiple ways of perceiving, interpreting and addressing a problem. Decision makers simply do not have enough time to thoroughly understand all aspects of an ambiguous issue, so they rely on entrepreneurs to clarify and identify these for them. However, ambiguity is not eliminated through more information, it depends on how the entrepreneur interprets and presents

the situation (Zahariadis 2003:1), which becomes more relevant when the streams couple. Furthermore, the entrepreneur's efforts contribute to a "softening-up" of the agenda-setting process, enhancing the decision maker's awareness of the problem and familiarity with possible solutions (Kingdon 2003:123).

Policy entrepreneurs engage in various tasks, such as defining a problem, clarifying problematic preferences or unclear technologies and formulating policy solutions. Yet, their most important task is coupling the three streams (Kingdon 2003: 181). Their skill, position and certain strategies enhance the actor's success of coupling. Found within the problem or policy stream, they can be visible participants, such as politicians or journalists who experience public attention, or hidden participants, e.g. scientists and academics, administration employees or other experts. According to Kingdon (2003: 199-200), the visible actors tend to determine the agenda, while the hidden participants can influence the policies or come up with alternatives. Furthermore, the position of the entrepreneur within the system influences success, where well connected, high ranking and members with access to multiple institutional areas are strategically at an advantage. Time, energy and money are further important assets, but sometimes the mere presence of an entrepreneur at a key event can be determining (Zahariadis 1999:84). Without the presence of a skilled entrepreneur, the chance for an issue to reach the political agenda decreases considerably (Kingdon 2003:205).

According to Kingdon, policy entrepreneurs play a central role in coupling the streams. Therefore, it is highly probable that policy entrepreneurs have also played a central role in coupling the streams for the Austrian wolf issue. Particularly as the policy process is expected to be strongly bottom-up driven, I postulate that the presence of a central and competent policy entrepreneur was essential in order for the streams to couple.

3.1.5 Window of Opportunity

Critical moments in time give advocates the opportunity to focus attention on a certain issue or push their favorable solution forward (Kingdon 2003:165). These are windows of opportunity or so-called policy windows that open infrequently and then are only open for a short period of time. They can open in the problem stream, when focusing events for example cause policy makers to act quickly. These are so-called consequential windows, in which a solution needs to be found to an evident problem (Zahariadis 1999:82). The policy window can also open through events in the politics stream, for example after elections or change of the national mood. In such a case a doctrinal window opens, to which the far more difficult task is assigned of finding a problem to the proposed solution (Zahariadis 2008:519). Moreover policy entrepreneurs can actively open a policy window, if they sense it to be a good opportunity to couple the streams (Rüb 2009:361). For policy and decision makers, an open policy window makes the need to act apparent for a certain issue, but it is the policy entrepreneur who waits for this moment with a solution at hand.

If a policy window opens, but the streams fail to couple, the chance for putting the issue onto the agenda goes unused and the window closes again. This occurs due to several reasons: policy makers feel they have addressed the issue sufficiently, but they have failed to generate action; there were no existing alternatives and the proposed solution was discarded; the persons responsible for opening the window are no longer in power or the focusing event has passed (Zahariadis 1999:82). Furthermore how the issue and its solution are perceived and interpreted is essential for successful

agenda-setting. If decision makers perceive an issue to be unpromising or misinterpret the necessity to address it, the policy window will close again (Kingdon 2003:171). Entrepreneurs now have to wait until another incident opens the next window of opportunity.

Related to large carnivore issues, an example for an open problem window is when focusing events occur and generate a lot of media attention. Since the media will only focus on the event for a short period of time, the window will close again when the event has passed. A policy window could theoretically be opened when certain changes in the politics stream focus attention on large carnivores. It is unlikely however, that such a window will open without the actual presence of a carnivore.

3.1.6 Stream coupling

Within the process of agenda-setting, actors of the policy stream look for problems and suitable political actors, while political actors look for promising problems and solutions. Partial coupling of two streams occasionally occurs. However, agenda-setting is only successful if the three streams couple, making it the essential step within the MS. The three streams come together during an open policy window and with the engaged work from policy entrepreneurs they can be coupled. Ordinarily the streams couple when a solution (Policy-Stream) has been found to a certain problem (Problem stream), or vice versa, and the political constellation is favorable (Political Stream). Without the coupling of all three streams, the probability of agenda setting diminishes as none of the streams are sufficient by themselves to reach this phase (Kingdon 2003:178). Success also increases, if viable solutions already exist before a policy window opens and the entrepreneurs seize the moment just at the right time to bring the solution forward.

The stream coupling will identify what events were determining in setting the wolf issue onto the agenda. As the wolf issue is mainly identified to be a problem, I postulate that a window of opportunity opened due to significant happenings in the problem stream. The success of stream coupling will depend on the effectiveness of the policy entrepreneurs and more importantly on the happenings within the politics stream. Without political support the wolf issue cannot reach the political agenda.

3.1.7 Applicability of the Multiple-Streams Framework

The MS is a framework based on empirical evidence and theoretical knowledge and has been used by various scholars (Brunner 2008; Henstra 2010; Zahariadis 2008). Originally Kingdon developed the MS analysis for the US governmental system, a presidential system. Therefore the theoretical framework may not be completely applicable to a European parliamentary government system. For example, in the US system a single politician can greatly affect the agenda as his actions as a single person are important. In many European systems however, a single politician acts as a representative of his political party. The general political direction is therefore not given by a single actor, but the party itself. This limits the applicability of some of Kingdon's criteria, e.g. the change of political personnel in the intra political events. Nonetheless the MS has been applied successfully in the European system, where especially Zahariadis (1999; 2003; 2008) played a pioneer role in his work about Great Britain, France, Germany and Greece. His studies showed that by making small alterations to the reasoning of Kingdon's framework, e.g. the idea of manipulation by specific actors

(cf. 3.2), policy images (cf. 3.2.1) and the presence of ambiguity (cf. 3.2.4) the MS can be a useful tool for policy analyses in European countries as well.

The second constraint of the MS for my case study is the analytical object itself. Kingdon developed his analysis for typical political issues, such as health care or transport, which are addressed by high level politicians. The wolf issue however, does not reach these high level dimensions. Consequently some of the Kingdon's factors will be less applicable or pronounced, as described above. These are mainly within the politics stream, the stream which is generally the least distinct in the analysis. By expanding the politics stream, I hope to go around this minor limitation.

Overall, the MS is a scientifically underpinned framework, which analyzes the agenda-setting stage in detail and based on empirical evidence. Kingdon is referenced in numerous political science works (Howlett et al. 2009; Rüb 2009; Blum & Schubert 2011; Zahariadis 1999; 2003) , underlining his significance and applicability in the field. Even though it has limitations, the MS is probably one of the most applicable analyses for the agenda-setting process. Limitations for my case study include the assumption of the streams' independence, based on this independence, unpredictable happenings will catapult the issue onto the agenda and the assumption that many policies are made for a single issue. By keeping these points on mind for the case analysis, I will try to find alternative explanations or expand the MS criteria itself.

3.2 The Policy Design

The importance of understanding the policy making process lies in understanding the different elements of the formulated policy and explaining why certain measures were applied. In the second part of the case analysis I will describe the policy program in detail. Based on the MS framework, I will highlight how the management plan is a result of the policy making process. The description of the policy design is based on Knoepfel and Weidner (1982, cited in Bussmann et al. 1997; Knoepfel et al. 2007), who portrayed the policy program as a circle consisting of five layers representing different elements. These are divided into three core or substantive elements and two institutional elements in the external skin.

The innermost layer consists of the **goals and objectives** of a policy. These are based on the problem definition phase or problem stream and show what target the policy will pursue in order to abolish the addressed problem. On the regulatory level exact objectives are often very concrete, quantifiable and measurable. Especially for their implementation and later evaluation a quantified target can be advantageous. For wolf management, such a goal could include an exact number of desirable individuals within the country. On the other hand, policy makers can also be held accountable more easily if the stated targets are not met. Therefore on the legislative level, the goals tend to be broader. This could be something like the general protection of a species. An abstract objective may also be formulated when a policy cannot be measured or no appropriate indicators exist.

Encasing the inner layer is the layer of **evaluative elements**. These are linked to the goals and objectives and are ideally quantitative indicators or measures. Therefore in cases where distinct goals were set by the policy, the evaluation and follow-up of these goals can be included and is easily captured. Conversely, policies with rather vague goals are more apt to not include this element at all or only very sporadic. Thus, the extent to which the wolf management plan can be evaluated depends on the description of the actual goals.

The third substantive elements are the **operational elements** or instruments of the policy. These are probably the most principle elements as they depict how the policy will be implemented and therefore characterize it. The choice of instrument depends on the desired mode of intervention, which needs to be based upon a sound legal frame as it directly affects public and private actors. National and international legislations represent this legal framework. Additionally, the operational element needs to explicitly determine at what time a certain element will come into play. Without this indication, the administrative officer might apply the policy instrument incorrectly. Knoepfel et al. (2007: 157-158) identified four possible modes for intervention: (1) the *regulatory mode* is mainly based on command and control instruments and requires direct state intervention. Examples include fines or sanctions for non-compliance, restrictions and special authorizations. (2) *Incentive instruments* are market-based instruments that try to influence an actor's behavior through financial inducements. Taxes and subsidies are prominent examples of this tool. (3) A less intervening mode can be *persuasion*. Information about an issue is meant to convince target groups to reflect their actions and at best change them. Campaigns, advertisement or other forms of education can fall under this category. (4) Finally a state can also decide to *directly supply goods and services*, such as resources, infrastructure or other services. Even though they can be similar to positive incentives, they are generally aimed at improving the standard of life in general and not necessarily induce a change in behavior (Zimmermann 1994:245).

However, due to the interventions ideal-typical character a distinct allocation is not always possible (Zimmermann 1994:243). It is therefore possible, that a measure can be described under more than one category.

Surrounding the three substantive elements are two institutional elements. The **political-administrative arrangement** designates which authorities will be responsible for the implementation and allocates their **resources**. In some cases, new positions need to be created and additional resources deployed. Though not centrally positioned, the element is not trivial since the allocation of the wrong authorities or inadequate budget allotment can influence the policies effectiveness.

The outermost layer consists of the **procedural elements** that guide policy actors on how to communicate internally and externally. This is meant to ensure the transparency, traceability, objectivity and independence of public bodies. Furthermore by structuring the procedure, the policy can avoid a chaotic mix of authorities interacting with each other and the public. For Austria, where every state implements different legislations regarding the wolf, a defined procedure also aids in nationally unifying the actions.

Similar to the policy cycle, the policy design is a framework that identifies what a policy consists of and highlights its relevant themes. Its importance lies within its clear set-up and explanation of the policy program and how it can highlight inter-linkages between stakeholders, institutions, instruments and the legal framework. In my case study, the wolf management plan represents this policy program. Furthermore this structured and in-depth insight can show if the policy is coherent within itself and the existing legal structure and hence helps in postulating about its future success. By describing the actual policy, I will hope to demonstrate how the policy process actively affects the policy design. The prospect of its future successful implementation will then be discussed in the conclusion.

3.3 Method

The underlying research method is a qualitative process analysis⁷, which focuses on the emergence of a problem and the development of a policy. Through an analytical approach, i.e. the MS approach, the policy making process is descriptively illustrated. Since it is not a holistic analytical method, the focus of the analysis is restricted on a distinct part of the whole policy process, the agenda-setting part (Behrens 2002:209; Blum & Schubert 2011:50). Furthermore the analysis will only focus on a single case study, a study method that is especially useful in explorative studies (Kromrey 2000:507). As a single case study, I will reconstruct past events in detail to illustrate the process and explain them with the analytical framework.

The reconstruction of the process and the analysis of the policy will be based on documents, a survey and expert interviews. The focus of the analysis is predominantly aimed at events from the years 2010, 2011 and 2012. Hence written documentation is not always publicly available. To complement the documents and fill knowledge gaps I will conduct a survey and do expert interviews. This process of integrating different methods is called triangulation, which tries to minimize the deficits of one method by compensating them with another technique (Gläser & Laudel 2004:103; Kromrey 2000:508).

3.3.1 Document Analysis

The analysis of documents is widely used in social sciences and is especially necessary as a primary tool to gather information and make oneself familiar with the issue (Behrens 2002: 221). To get an initial overview of the species, I gathered scientific papers, books, reports and workshop protocols about wolves in Austria and Europe. Further, official and legislative documents, websites from institutions, books and official statistics were used to familiarize myself with the Austrian governmental system and the extent to which the wolf had been officially addressed. This information later formed a major part of the biological background and legislative status in chapter 2. Newspaper articles were especially helpful in identifying if a comeback of wolves had taken place and to what extent the public was informed about it. I used them not only for developing a framework for the thesis, but also within the actual analysis of the process.

Other written documentation in the form of official statements, government publications, personal email communication, etc. was more sporadic, but particularly important for the analysis. Often the information presented and used in the thesis was not publicly available, but was sent to me on request. The correspondence via email in general represented a central part in obtaining information or creating the first contact with possible interview partners. Especially the contact with state representatives was facilitated via email.

3.3.2 Survey

By conducting a survey I collected a lot of information from a specific interest group. The managers of farmer associations, particularly small livestock farmer associations, were contacted via email and requested to fill out a short survey. Their feedback was then valuable for generating a broad overview of the problems the wolf could and has generated. As I conducted the survey

⁷ Qualitative Inhaltsanalyse

towards the beginning of my research, its purpose was on the one hand to get a better feel for the issue and on the other hand to collect a large amount of information in a standardized form.

The way a survey is formulated greatly influences the quality of the answers, as ambiguous questions originate ambiguous answers (Kromrey 2000:347). Therefore, I aimed at expressing the questions in easy and straight forward German, without suggestive phrases. The framework was a standardized survey with closed and open questions. Open questions were mainly asked, in order to let the respondent explain certain issues. Closed questions were asked if the questioned aimed at personal reflections of a situation. The survey was made with the program "survey monkey" and sent to the managing directors of the associations for sheep and goats⁸ of each federal state. Initially, I further intended to create a second survey for the hunting associations, but my first contact with this interest group was barely fruitful. Therefore, I decided to contact a few selected representative hunters via telephone instead.

The replies were mostly used to depict if livestock farmers were preoccupied with the reappearing wolves and how they perceived the situation. By combining the different viewpoints, I received a more holistic picture of the wolf issue. The answers were then further used as guide for creating the expert interviews and also qualitatively analyzed along with these. A statistical analysis could not have been applied, due to the very small number of data.

3.3.3 Expert Interviews

Expert interviews accompany and in some cases supplement the document analysis, especially as sufficient documents often did not exist. It is important that the right choice of experts, questions and their later interpretation, transforms the - by connotation - subjective interview into a scientifically sound and objective instrument (Mieg & Näf 2005:4). I chose the interview partners based on their expertise, competence and their experiences gained over the years of working in a given field. They were selected from the national, the state or the community level and included scientists, interest group representatives from the agricultural, forestry, hunting, and conservation sectors, government officials, and a politician. Many of them had been personally involved in creating the management plan or were closely affiliated. All of the interview partners are listed in the references section. Since the wolf is a delicate theme, the in-text citation will only name the interviewees organization and not their actual name.

I identified the experts either through the preceding document search, e.g. the participants of the Austrian brown bear management plan, or they were recommended by stakeholders, using the so-called snowball method. Hereby the objective was to identify enough individuals from different interest groups, in order to integrate all perspectives and gain a holistic picture of the situation. Furthermore, a considerable grasp of experts needed to be interviewed as one expert from a certain field could not answer all my questions and the recollection of past events varied from person to person (Gläser & Laudel 2004:37). At the same time, it was also a form of validating the information given by each expert.

Before starting my interviews, all experts were formally contacted via email, in which the subject of the thesis was explained. Additionally I made a short list of preliminary questions to ask in

⁸ Schaf und Ziegenzüchter Verband

an introductory telephone conversation. Through this first personal contact, I was able to gain a lot of information about the interviewee's point of view and expertise and ask direct question about fields, which could not be discovered in documents. I was then better prepared to develop my formal interview, and did not need to spend time on clarifying simple subject matters. In some cases, a formal interview would not have given me more information and the telephone conversation was sufficient.

Based on these preliminary conversations, a general guideline was created, which narrowed the topic of interest down to the desired theme and focuses the interview on it (Meuser & Nagel 1991:453). By generalizing the guideline, the information could be better compared and analyzed afterwards. The general guideline was then customized for each expert according to their field of expertise. While creating the questions, it was important to keep in mind what knowledge I was looking for within the expert's field (Gläser & Laudel 2004:38). I chose to only ask open questions (Mieg & Näf 2005:16), as the possibilities to answer my questions mainly could not be standardized for all experts. I often asked for the expert to recollect events before and during the policy making process, for which direct and follow-up questions were used to retain knowledge about the sequence of events. In order to validate the statements of one actor, I directly asked another actor about their opinion on the same subject matter. Through these types of questions, I also could test some of my assumptions or hypotheses. Hence, it already served as the first step in analyzing the gathered knowledge.

After finishing my formal interviews, I conducted several more question guided telephone conversations with further stakeholders in order to verify the gathered information or clarify subject matter.

Analysis of interviews

In order to correctly interpret and analyze the data, I used the qualitative content analysis approach (described in Gläser & Laudel 2004:191ff). Based on the policy formulation stages and the MS analysis, I created different categories, which I then tried to identify within the interview protocols. Occasionally a statement did not fit into these categories, in which case I tried to make a new category. By sorting the information along a set of categories, I was able to examine the subjective information from a more neutral point of view. Within each separate category, I then closely examined the different statements and compared them with each other. This was also important in order not to adopt and integrate the causalities expressed by an interview partner, but recognize them as the viewpoint of the individual actor (Gläser & Laudel 2004:241). The herewith identified categories could then be used to explain the procedures involved in the agenda-setting phase and helped in interpreting the final results.

4 Case Analysis

I have described the different national and international legislations protecting the wolf and the formulation of the policy which is meant to improve the coexistence of humans and carnivores. It would be naïve though to reason that the mere existence of legislations that strictly protect the wolf would lead to further political awareness and actions. The following analysis will depict the different factors which led to a political awareness and agenda-setting of the issue. As the agenda-setting and policy formulation phases are interlinked, this analysis is able to give explanations for the course of the formulation process.

The structure of the case analysis is based on the MS framework. The first three sub-chapters introduce the three streams. The relevant policy entrepreneurs are then depicted under 4.4 and the actual coupling within sub-chapter 4.5.

4.1 The Problem Stream

An issue only becomes a problem if society or societal values define the current situation as unfavorable and a desire to change the situation arises (Kingdon 2003: 110). Decision makers must recognize the problem as such as well and feel a necessity to act. Especially focusing events were responsible for putting attention on the issue, as they caused a significant and emotional response. The impact of the rather low number of wolf incidents was enhanced through the proceeding brown bear problems and affiliated large media hypes.

The events were particularly significant on the local level and within individual states, namely Carinthia and Tyrol. At the national level a report on the wolf's possible return had initially raised awareness before the wolf had officially reappeared. International monitoring data also indicated the increase of surrounding wolf populations, but this data was mainly recognized by scientists and wolf experts. When monitoring data and killed livestock confirmed the first wolf individuals within Austria, the necessity to act arose among experts, authorities and those affected.

Kingdon's third criterion, feedback, was generated through the brown bear management, which was initiated in during the 90's. The problems with brown bears had already signaled the need for a wolf policy when the time would come. Especially for authorities the security to rely on a management plan in times of crisis became apparent. Politicians on the other hand also saw the risk of having to support unpopular actions related to carnivore management. As a result, the feedback is generally positive for bottom-up actors, such as locals, authorities and experts, but negative for top-down actors, namely politicians. Similarly budget constraints pushed the willingness to act amongst bottom-up actors, while hindered it amongst top-down actors. For politicians the possibilities to invest large sums into carnivore management are limited, while farmers fear an even greater financial loss, if wolves kill their sheep and new investments for herd protection have to be made.

Overall, bottom-up actors and public authorities were more involved with detecting and defining a problem situation, while most top-down actors had not perceived the situation as pressing enough for action. This will further tie into the political stream. Constraints that hinder the political willingness to act, such as budget constraints or existing policies, drive the perceived need for action among those affected.

4.1.1 Problem Recognition

The first step within the problem stream lays in illustrating and recognizing a situation as a problem. I will begin by depicting each relevant stakeholder group and how they are affected by wolves in Austria. Based on this description, I will depict how the problem was defined in the subsequent sub-chapter.

Farmers

Approx. 187,000 agricultural holdings were registered in the year 2007 of which roughly 25,000 holdings are for sheep or goats (Statistik Austria 2008, ÖBSZ 2011). The number of sheep has been gradually increasing over the last decades (now there are approx. 350,000 sheep) and also the industry is gaining importance as a product line (ÖBSZ 2010). The total of goats amounts to roughly 70,000 individuals, but they also steadily increase (ÖBSZ 2010). As stated by all respondents from my survey, sheep and goat farms are generally small structured, run as a side job or hobby and traditionally summered on alpine pastures.

Overall, sheep and goat farmers are the most affected group because their livestock either is threatened and disappear or is killed by wolves. Five from nine managers of the sheep and goat associations directly said the wolf's comeback is problematic, which was reaffirmed by several interview partners (Interviews FIWI, SGA Ktn). The domesticated animals often do not or cannot flee when a wolf attacks and the carnivore might instinctively end up killing far more individuals than it can consume (ÖBf & WWF 2012). This unnecessary waste of life contributes to the wolves' negative image among farmers. In general, many livestock owners see the return of the wolf and especially the forming of packs as incompatible with the small livestock farming on alpine pastures (Kärntner Almwirtschaftsverein 2011).

Based on the threat of losing livestock to the wolf, three arguments were identified that cause the farmers resentment against the wolf: Firstly, the farmers are unprepared and are therefore scared of the new situation (Habenicht 2005). Since the eradication of large carnivores traditional livestock protection systems have disappeared (Dungler 2006); sheep and goats are left on alpine pastures during the summer without supervision or fencing. Farmers therefore are concerned about not being able to practice this kind of livestock keeping and particularly in mountainous regions worry about losing this tradition (Interview ÖBSZ). From the sheep and goat associations and the alpine pasture associations, this is brought up as a serious risk, as they see their whole agricultural section threatened.

Secondly, the sheep face a dangerous animal, and the farmer feels overexerted (Interview ÖBSZ). Due to the legislative protection of the wolf, but the missing measures and support to protect the small livestock, farmers feel neglected by the government. Almost all sheep and goat association managers claimed in the survey that they had little or only mediocre political influence. Among farmer's the perception prevails that politicians develop guidelines and legislations, but have no idea of the alpine livestock sector (Interviews APA Ktn, ÖBSZ).

Thirdly, livestock farmers, especially in part time, worry about the extra financial burden and of suffering a financial damage (Habenicht 2005). Due to the long absence of the carnivores, the compensation schemes are weak, require the farmer to be proactive and take a long time to complete the money transaction (Interviews FIWI, SGA Ktn). Therefore financial damage is especially significant on the local scale, but may appear trivial nationally.

On the whole, if the problems become too great and part time farmers feel like the work is too strenuous they might quit their farming activity. Livestock farmers define the issue as a threat to their existence and hence have a strong interest that decision makers address the issue.

Hunters

In 2011 approx. 120,000 hunters were registered in Austria (1.4% of the population) and an additional 10,000 visitor hunting permits were issued (Statistik Austria 2011c). Austria has a typical area-based hunting system⁹, where the hunt is legally tied to land and property. Thus, every hunter is responsible and viable for damage caused by hunting activities or the game species. Statistically these hunting grounds are only 75ha in size, but cover 98% of land in the whole of Austria (LJV n.d.).

For many, hunting is a leisure activity, but it is also a form of managing wild game species and controlling their numbers. Even though there is enough game for hunters and wolves, the wolf is still a competition to human hunting (Interview ÖBf). Furthermore, game species might become more cautious if they sense the presence of a predator, hampering hunting success also for humans. Consequently, some hunters do not want to accept this predator on their hunting grounds.

Another special task is assigned to Austrian hunters: targeted winter feeding of wild ungulates, especially red deer, to make them spend the winter in specific areas (Interviews HA Ktn, ÖBf). As the red deer population is quite large, they could cause great damage to forests during the winter months, when they feed on the bark of small trees. According to the hunting acts of the states, the hunter or the owner of the hunting ground needs to pay for this damage caused by the ungulate. If the wolf additionally kills some of these deer, they will be deducted from the hunters hunting quota. Consequently, hunters will face a double damage caused by an animal they cannot hunt (Interview ÖBf). Nationally, this damage is insignificant, but locally and for the hunter, the damage can become quite large. Compensation payments are difficult though, as it is hard to prove to any authority that the ungulates have left their winter feeding site in response to the presence of a wolf.

In some states, the hunting association also compensates the loss of livestock. For this purpose, the hunting associations have contracted a special insurance to cover this loss. However, it is important for hunters to accept the presence of the wolf, an endeavor which is hindered if they need to pay for damage caused by a species they cannot hunt (Interview APA Ktn). Particularly since the conservation of wolves is a public interest, it is unreasonable to only burden the hunting association with compensating damage (Binder 1992:120). This uneven situation causes a lower acceptance for large carnivores among hunters and will probably become an area of tension as more wolves are present.

Foresters

Roughly 45% of the Austrian land area is covered by forests, of which approx. 80 % are managed privately (Land- & Forst Betriebe Ö. n.d.). The biggest forest enterprise is the Austrian Federal Forests¹⁰, which owns and manages 10% of the national land. Wildlife, such as ungulates, can

⁹ Revierjagd

¹⁰ Österreichische Bundesforste (ÖBf AG)

cause great harm to these forests, especially during the winter months, when other sources of food are scarce. As mentioned above, winter feeding sites are meant to keep these ungulates in specific areas. With the presence of wolves, the current wildlife management could be more difficult and some forests might suffer great damage (Interviews HA UA, ÖBf). The assessment and compensation of this resulting economic loss is quite difficult however, particularly if the payment is made through a commercial insurance. Even though many foresters think the wolf will reduce the ungulate pressure on the forests, this might only be a naïve perception (Interview ÖBf). Overall, there is still too little information about the wolf and its impact on other wildlife species, complicating the prediction of possible impacts. Therefore the foresters have not yet experienced the wolf as being a problem. Since many foresters are also hunters, the acceptance of the wolf is heterogeneous and a clear direction cannot be defined.

Tourists, Leisure Seekers and other Sectors

Overall, the tourist industry is an important sector with approx. €15 billion in revenue in the year 2010, trend increasing (Statistik Austria 2012). In 2007, a study assigned by the federal chancellery (SpEA) found out that roughly every 6th tourist will travel to the mountains to experience nature. Furthermore, Austrians themselves regularly seek the outdoors and Alpine regions for leisure activities. These tourists often know little about the Austria environment and especially about large carnivores. The uninformed public can develop a great fear for the wolf, resulting in its non-acceptance (Interview State Gov. Tyrol). Therefore, people whose livelihood depends on the tourist industry worry about the wolf becoming a threat to their industry if the number of tourists decreases (Habenicht 2005). Momentarily, this group is not clearly affected and has not signaled a concrete problem with the wolf.

4.1.2 Problem Definition

As explained in the previous sub-chapter, the biggest problems occur in the agricultural sector. Problems of accepting the wolf are also among the hunters, some foresters and local communities. On the other hand, many citizens were enthusiastic about the wolf's return (Interviews FIWI, State Gov. Slbg). These are mainly urban citizens who associated the wolf with the return of wilderness to an anthropogenic degraded environment (Kazcensky 2006). The wolf only became a serious problem in local areas where people were directly affected. There, farmers, hunters, wildlife biologists and sometimes state representatives held regional meetings, workshops or informational talks to discuss these occurring problems (Jury 2011). Among these were events in Tyrol and Carinthia (Interview State Rep. Tyrol), a regional event in Salzburg in 2009 (Interview APA Slbg), and a largely national and international meeting organized by the Austrian Federal Forests (Interview ÖBf). Most managers from the sheep and goat association indicated in my survey that they had received information in a talk for sheep farmers at the mountain-sheep Interalpin¹¹ in the beginning of 2010.

As the problem definition is based on the actor and their views, the wolf was clearly portrayed as a very problematic species at many of these meetings and the call for its removal was loud (Interview State Rep. Tyrol). Interest from wolf supporters also arose and some small

¹¹ The Interalpin is a fair for sheep breeders, with representatives from Austria, Switzerland, Germany and Italy

conservation institutions held informational events (Interview State Gov. Slbg), but this rather large group of wolf supporters had no broader motivation to get further involved with the issue. Mostly, the degree of affectedness influenced the willingness to engage oneself. Thus the problem was defined mainly by livestock farmers as an unreasonable impairment to their lifestyle. Agenda-setting depends on the problem recognition by decision makers as well. Overall these were rather oblivious to the problem (Rauer 2010), a point which is further described in the politics stream. The emergence of the problem in general can be tied to the appearance and damage caused by the wolf, i.e. focusing events. The following sub-chapter depicts the course of these events and their severity.

4.1.3 Focusing Events

A series of killed livestock incidents, preceded by the media hype about the brown bear JJ1, are the central events responsible for supporting agenda-setting. In 2006 the brown bear JJ1, known as “Bruno”, traveled between Tyrol and Bavaria (Germany), damaging agricultural installations and coming close to human settlements. Discussions were held about the necessary actions to resolve the problem (Rosen & Bath 2009), but a Bavarian management plan or set of guidelines for public authorities was not at hand. The State of Bavaria acted upon the advice from the Austrian bear emergency team (Ö. Bären-Eingreiftruppe 2006), who eventually classified JJ1 as a “problem bear” and recommended his removal (Enserink & Vogel 2006; Interview ÖBf). After the bear’s death, the media attention was enormous and even the BBC broadcasted a short report (Rosen & Bath 2009). For the first time, an individual large carnivore did not only arouse strong emotions amongst those affected, but initiated an intense political debate (Interview State Gov. Tyrol). This event clearly signaled the importance of a management plan as an authoritative guide of action in special situations (Interviews State Gov. Tyrol, HA Ktn). It further served as the primary focusing event, raising awareness for large carnivores on the political level.

The wolf on the other hand, did not cause a large focusing event on the national level, but the accumulation of small events contributed to building awareness among a few decision makers. Already in 2005 the first killed livestock by a wolf were identified in the region of the Obdacher Sattel (border area of Styria and Carinthia) (KOST 2011). Four years later, in 2009, several wolves killed livestock in Tyrol, Styria, Carinthia, Salzburg, and Vorarlberg (cf. Figure 5). In Lungau (Salzburg) a foal was killed, which immediately became an intense topic within the region (Interview APA Slbg). Simultaneously a wolf in the Pitztal region (Tyrol) killed 12 sheep in one night (Interview State Gov. Tyrol; N.N. 2009a). In response to killed sheep in the Wechsel region and Fischbacher Alpen (Styria) the affected stakeholders called in a meeting to discuss the situation, but government officials did not attend (Interview FIWI). In the Nockbergen (Carinthia), where the brown bear had already caused damage, the livestock damage accumulated and anger and displeasure among those affected grew (Schaschl 2011).

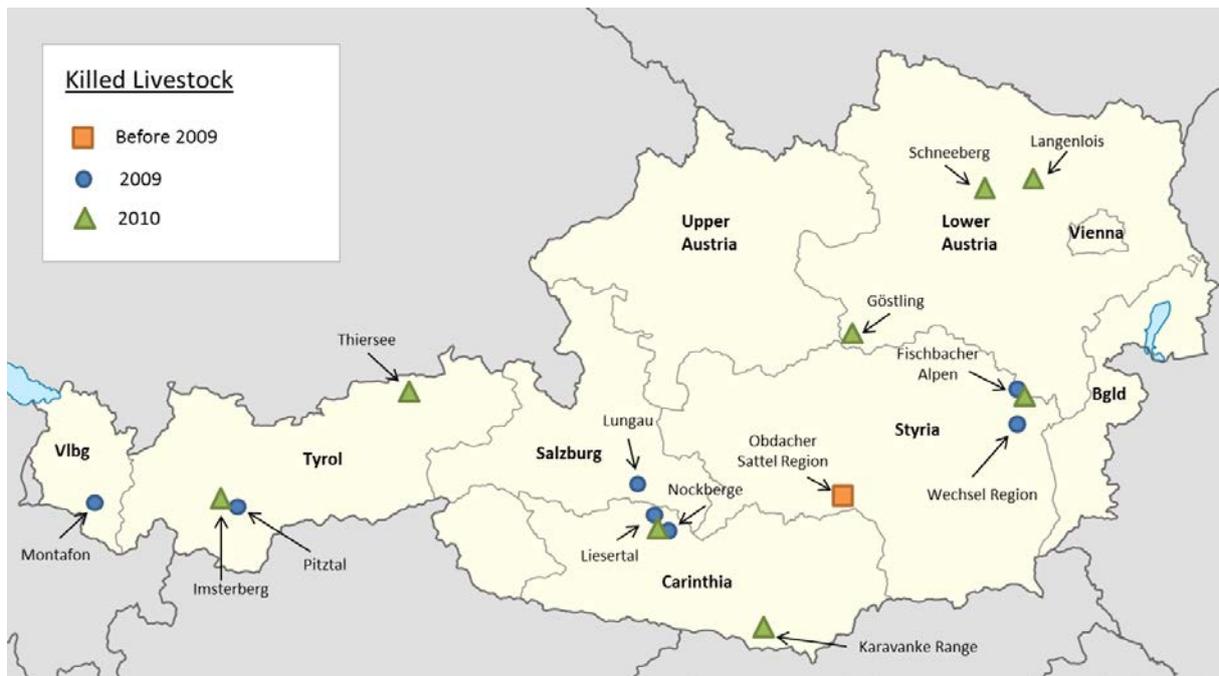


Figure 5: Distribution of Regions where Livestock was killed by the Wolf¹²

Source: Own illustration based on expert interviews and newspaper articles

In the following year, 2010, again six to seven wolves could be confirmed (Interview FIWI), causing damage to livestock in several states (cf. Figure 5). One of these regions was Thiersee in Tyrol (N.N. 2010c), where the sheep and goat farmers consequently drove all their animals from the alpine pastures into the lower valleys (Interview State Rep. Tyrol). In the Karavanke Range, close to the Slovenian border, several sheep were killed and a few dozen went missing (N.N. 2010d). Also in the Schneeberg region (Lower Austria) nine sheep were killed by a wolf, confirmed through DNA samples (Özkan 2010). Austria appeared to become a “hub for wolves¹³” (Interview State Gov. Tyrol), as the news about wolves and killed livestock accumulated. Locally meetings were held between those affected (mainly farmers), hunters and authorities (Interview APA Ktn). On the other hand, large newspapers for urban readers mainly published positive or neutral articles about the wolf, dampening the actual problem nationally (Interview WWF).

Based on the experiences with the brown bear and the attention created now by lost livestock, the need for a wolf management plan became apparent amongst those affected, state officials, conservationists and wildlife biologists (Interview BMLFUW). These small events were not sufficient by themselves to catapult the wolf matter onto the political agenda, but due to the brown bear incidents in 2006, a general awareness building had already taken place. Thus, the large amount of small focusing events throughout Austria was the main factor within the problem stream facilitating agenda setting. The return of the wolf in general did not come a surprise, as indicators – described below – signaled its immigration.

¹² Due to the lack of standardized killed livestock statistics, Figure 5 may not be complete

¹³ „Drehscheibe für Wölfe“

4.1.4 Indicators

A first official investigation concerning the wolf in Austria and regularly documented monitoring data represent the two essential indicators. In 2005, the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW) assigned a project to investigate the possible appearance of wolves and create first contact to large stakeholders, such as the forestry sector (Interview BMLFUW). However, during this time it was more the bear than the wolf, which had captured the attention of authorities and politicians. Nonetheless, the report signaled the possible occurrence of wolves within the next years and conclusively recognized the necessity for a management plan (Dungler 2006). The project further aimed at creating awareness among politicians and stakeholders, as it described the type of social problems caused by reappearing wolves (Interview Univ. Slbg). Even though the report was lastly not published by the BMLFUW it did contribute to internally creating awareness on the need to attend to the wolf issue in the future.

The second, statistical, indicator is the monitoring data depicting the presence and distribution of wolves. The data for monitoring is gathered by each state separately, leaving it up to them to decide what to do with it further (Interview HA Ktn). DNA samples are taken by the bear lawyer, who is based at the Research Institute of Wildlife Ecology (FIWI) and is responsible for analyzing cadavers and collecting and analyzing the obtained samples. All states as well as the national government contribute an annually determined sum for the monitoring and DNA sampling (Interview State Gov. Slbg). Therefore, the results and information about wolf dispersal are regularly conveyed to the states and the state representatives. In consequence, at least theoretically the state governments should all have been aware about the presence and distribution of individual wolves. Figure 6 depicts the wolf distribution based on DNA samples. The DNA analyses also revealed that in six states, up to eight wolves were coming from three different wolf populations (Land Tirol 2010). For the first time since the wolf's eradication, several individuals immigrated at the same time.

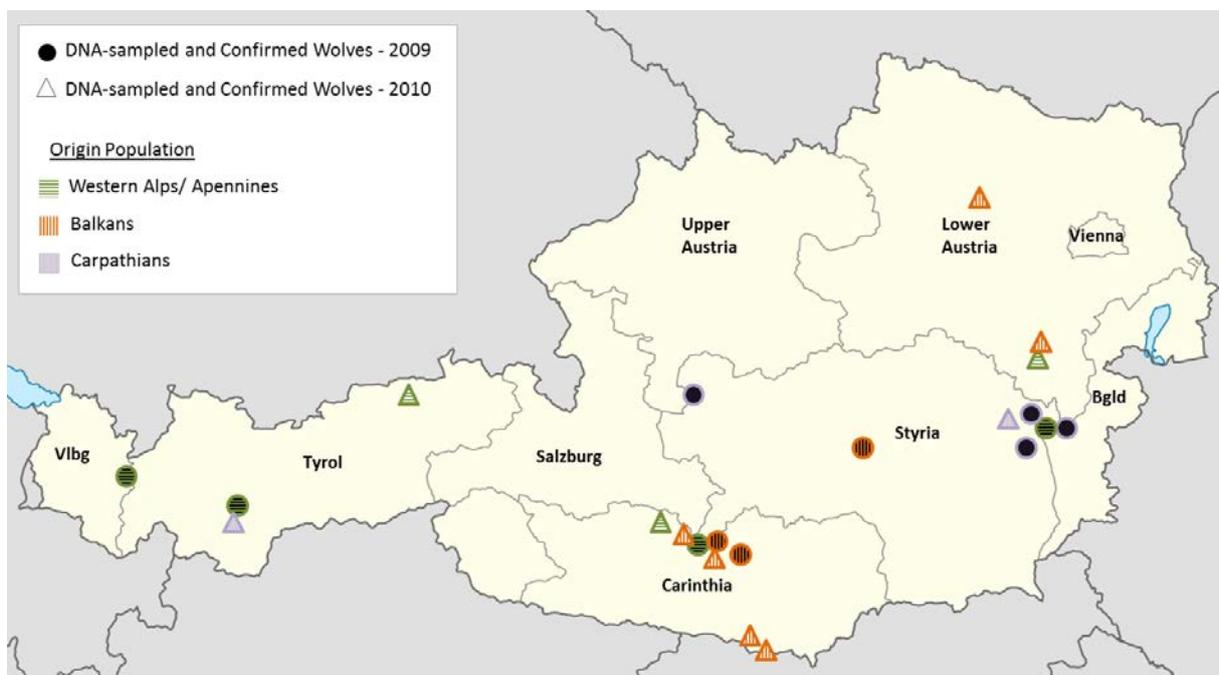


Figure 6: Wolf dispersal in 2009 and 2010 based on DNA samples

Source: Own illustration based on Rauer 2011

Internationally, wolf distribution and data on population size is collected by individual countries and exchanged among scientists, e.g. within the large carnivore initiative for Europe (LCIE). Numerous conference protocols, reports and other publications are also available, which highlight the expansion of wolf populations around Austria (Alparc 2009; Kotal & Rigg 2008; Salvatori & Linnell 2005). Since the wolf is a good disperser, scientists, wildlife biologists and conservationists had long expected the return of the wolf to Austria (Interviews FIWI, WWF). Furthermore, through collaborations between scientists from Saxony and the FIWI, the quick settlement, pack building and population size increase were noted and the consequences for Austria discussed. This information was further discussed with the public officers handling large carnivores (Interview State Gov. Tyrol).

Each state government received ongoing notice about the occurrence and distribution of the wolf (Interview FIWI). All contacted state representatives have confirmed that they are informed about the wolf presence within their state. However, it is uncertain if they all actively acknowledged the monitoring information. In Styria for example, the wolf only became an issue when livestock were killed (pers. Comm. State Rep. Styria). In general, state representatives, so-called top-down actors, work under time constraints, minimizing the possibility of them examining every delivered report.

For the affected stakeholders and attentive public authorities, these indicators increased the necessity for action. Based on data from Saxony, the head of the Alpine Pasture Association of Carinthia identified the establishment of packs, followed by their “uncontrolled dispersal”, as a threat to a traditional lifestyle (Interview APA Ktn).

4.1.5 Feedback

The brown bear management generated feedback on both the public authority and political levels. The Management plan Brown Bear Austria¹⁴ (KOST 2005) represents the first Austrian attempt to manage large carnivores. It was meant to protect resident and immigrating bears, as well as provide for a long-term favorable conservation status. Preceding this management plan, were re-introductions of brown bears and immigrations, which led to the estimated presence of 15 to 23 bears in 2005 (KOST 2005). Since then, many of these bears have been shot, also illegally or emigrated, so their numbers have decreased significantly (Interview WWF).

Does this signify that the brown bear management plan was a failure? Some interview partners have stated that the bear management was not very successful (Interviews State Gov. Tyrol, WWF, Univ. Slbg) and the plan contained many measures, which were not feasible (Interview State Gov. Slbg). On the other hand, some interviewees have also mentioned the positive effects and outcomes of the bear management plan (pers. Comm. State Gov. UA). Brown bear management in Austria therefore was not clearly a failure. Large carnivore management is multifaceted and best practice options or ineffective measures cannot always be clearly identified (Interview State Gov. Slbg). The either very positive or negative responses given by the interviewees about the bear management further highlight this ambiguity.

For federal administrative bodies feedback from the bear management was generally positive. The plan represents a guideline, directing the necessary actions in case of a special event

¹⁴ Revised version of the management plan from 1996/'97

(Interview State Gov. Styria). This is especially important for public authorities, as a set of guidelines support decision making and justify taken measures to the public. A plan of action hence gives security in deciding on and implementing an action. Moreover, a public officer might also not always know the best procedure, so it is important that he can rely on guidelines which have been developed by experts. The “problem” bear JJ1 received significant media coverage, while authorities were struggling to find the best procedure. Even though the bear was finally shot in Germany, authorities and politicians in Austria were also now more aware of the need and reason to manage large carnivores (Interviews FIWI, State Gov. Tyrol).

At the same time, the feedback from JJ1 had a rather dampening effect on politicians. Even though, according to the Austrian bear management plan the bear had to be removed (Interview FIWI), the high emotional response illustrated the difficulty with taking to the subject politically. The attitude and emotions either for or against the bear were very pronounced in public, making it demanding for a politician to find the best line of action. The wolf is a less charismatic animal than the bear however, making the possibility of a political gain very challenging (Interview State Rep. Tyrol). Amongst politicians, the bear management and especially the negative feedback from JJ1, consequently contributed more to the tendency to ignore the wolf issue rather than to address it.

4.1.6 Budget

In combination with negative feedback by the previous carnivore management, the Austrian budget was another impeding factor in the agenda-setting process. Over the last years, the available budget in Austria and the federal states has become fairly tight and cost savings have limited and restricted the available funds (pers. Comm. State Rep. Ktn; Interviews State Gov. Slbg, State Gov. Tyrol). Currently, expenses for large carnivores are restricted to the financing of the bear appointee, who collects the monitoring data and centralizes it. This is a sum which is covered by the federal environmental ministry and seven states, excluding Burgenland and Vienna, and is re-negotiated annually (Interview State Gov. Slbg).

The budget restrictions not only complicate the financing of conservation projects, but also put a lot of stress on the agricultural sector. The sheep and goat herding industry is not a main part of Austria’s agricultural monetary turnover, but is an important niche product (ÖBSZ 2011). Small scale sheep and goat farmers rely on subsidies to maintain their business (Interview ÖBSZ), but national cost cuttings reduce their financial possibilities. The political willingness to additionally finance herd protection measures, which benefit a conservation issue, is consequently very low.

The cost cuttings and budget savings restrict the possibilities to act, react as well as formulate and implement new policies. For politicians who need to answer to the general public, large investments for carnivore protection can be delicate and not always perceived as positive. Consequently, a proposed solution will be more successful in reaching the political agenda, if it is economical (Kingdon 2003:107). As a new policy always generates additional costs, the budget acted as a constraint in agenda-setting.

4.2 The Policy Stream

Based on the definition of the problem, a wolf management plan was proposed and developed. The following section focuses on the actors involved with creating the policy and the type of requirements they had to abide to. The idea and interest for creating a wolf management plan was already exerted for several years within the policy community. In response to the return of the wolf and the occurred damage they proactively started to formulate the plan, attaching a solution to the problem. This considerably increased the probability of the issue reaching the political decision agenda. On the other hand, the policy community consists of bottom-up actors and public officers. For successful agenda-setting, the plans recognition by top-down actors and especially by decision makers is essential.

The plan of action was not a completely new policy, but was based on already existing management plans and incorporated feedback from the Austrian brown bear management plan. The existence of certain structures due to the bear management was an expediting factor for agenda-setting. These structures include the policy community, monitoring and in some cases compensation payment regulations. Hindering for the agenda-setting process was the policy community's lack of possible financial considerations. The before mentioned budget constraints did not favor the discussion about carnivore management, or the recommended compensation payments and costly herd protection measures. Even though the current resources can be relocated, extra investments are inevitable. In contrast, the non-legality of the plan of action makes it easier for politicians to address the issue. It will probably become limiting in the successful implementation of the whole management plan though.

Besides a management plan, other suitable policies were not discussed. Yet based on international examples and the EU proposal a management plan is expected to be the best solution. Therefore the focus of the policy stream is not the depiction of competing policies, but a depiction of when the time came to start drafting the policy plan and what its content were. Within the policy community, this time came with the return or the first wolves in 2009 and was substantiated in 2010 (Interview State Gov. Ktn). The actual formulation and filling the plan with content took place by this community. Overall, the wolf policy is built on consensus and the policy community laid great focus on integrating all stakeholders. Therewith the values of the relevant stakeholders were not only considered but integrated. For the acceptance of the policy measures, this was an exemplary procedure. For agenda-setting, the content of the policy is crucial in order to be accepted and politically addressed.

4.2.1 Policy community

The policy community is one of the central elements in the policy process, as they formulated the management plan and to some extent facilitated agenda-setting. The community is an assemblage of stakeholders in the inter-state coordinating office for bear, wolf, and lynx (KOST). The core of the KOST consists of public authorities from each state. Being public officers, they do not have the authority to take final decisions, but they work under the order of each respective politician (Interview HA Ktn). Further members include scientists, farmers, environmentalists and hunters (cf. Table 4). Presently the core KOST consists of 35 members and at least nine additional extended KOST members.

Table 4: List of KOST Members (normal font = core KOST, italic = extended KOST)

Participants' Field	Members	Associated State or Country
Government Officials (Conservation- and/or hunting authorities)	18 (+ 1 bear manager)	2 or 3 representatives from every state, except Burgenland with only 1
Federal environmental ministry (BMLFUW)	1	National
Bear Lawyers	2	National
Research Institute of Wildlife Ecology (FIWI)	3 (+ 1 bear lawyer)	National
Other Assigned Experts and Scientists (e.g. BOKU)	2	National and International (Italy)
Central body for the Austrian Hunting Associations	1	National (Carinthia)
Styria Hunting Association	1	Styria
Nature Conservation (WWF)	3	National
Bavarian Environmental Ministry	3	International (German)
<i>City Vienna</i>	1	Vienna
<i>Central Austrian Hunting Association</i>	No Specification	Variable
<i>Agricultural chamber Austria</i>	2	National and Salzburg
<i>Agriculture- and Forestry Services Austria</i>	No Specification	National
<i>Austrian Federal Association for Sheep and Goats (ÖBSZ)</i>	1	National
<i>National Austrian Forestry (ÖBf AG)</i>	2	National
<i>National Park Upper Austria</i>	1	Upper Austria

Source: Own compilation based on pers. Comm. State Gov. Ktn

The necessity to create a coordinating body, evolved in 1994 when bears started to become a problem in Austria. Initially, the individual public hunting authorities from the states with bear presence were in contact with each other and started to regularly meet in order to discuss possible measures (pers. comm. State Gov. UA). Over time, the idea arose to create a coordinating group, which would include other stakeholders and ensure a flow of information to state representatives as well (Interview State Gov. Ktn). In 1997, the committee was established to discuss and coordinate bear management, but it did not become an independent institution (pers. Comm. State Gov. UA). In 2008, the need for further large carnivore management appeared and the KOST expanded its responsibilities to include the wolf and the lynx (pers. Comm. State Gov. Ktn). In respect to large carnivore management, the creation of the KOST represents the first national measure to address and cope with these species.

The KOST aims at including all relevant stakeholders. This special approach in the policy process is meant to ensure the future acceptance of management measures by the policy addressees. Therefore, additional interest groups or experts can be invited to the extended KOST or can request to be admitted. Alternatively, a request can be denied if the actors are not perceived to bring in an added value (Interview State Gov. Ktn), e.g. the request by the NGO Four Paws was denied (Interview Four Paws), as the WWF was already fully representing the conservation position

(Interview State Gov. Ktn). Not permanently included are the agricultural and the forestry sectors. Even though they are mainly affected by large carnivores, these sectors have no legal jurisdiction in the field. Thus, they only get engaged if an issue necessitates their involvement. Overall, the KOST is an open network, where new ideas are welcomed and the inclusion of actors does not depend on their influence or status.

Due to the inclusion of wildlife experts and the regular exchange of knowledge, the KOST had been aware of the possible wolf reappearance for many years (Interview State Gov. Tyrol). Within the core KOST's semiannual meetings, the necessity of a management plan was already occasionally discussed before the sudden appearance of wolves (Interview FIWI). Most KOST members had known each other for many years, which facilitated the open discussion regarding wolf management. In 2009 the KOST had taken the general decision to make a management plan and officially debated the idea again in an extended KOST meeting in April 2010 (Interview State Gov. Tyrol). Within these discussions, the group concluded that a formal process which included all relevant stakeholders would be required (Interviews FIWI, State Gov. Slbg, WWF). However, the representatives from the agricultural chamber did not attend the first two or three general meetings, in which the preliminary and fundamental management plan ideas were elaborated (Interviews FIWI, State Gov. Ktn). While some of the permanent KOST members claim their non-attendance was due to missing interest (Interview FIWI), some concerned agriculturalists stated that they had not been contacted and only by chance had heard about the KOST's existence (Interview APA Ktn). In the end, the head of the Austrian Federal Association for Sheep and Goats (ÖBSZ) joined the process in late 2010 (Interview ÖBSZ). The two heads from the Alpine Pasture Associations of Salzburg and Carinthia joined the KOST in the beginning of 2011 (Interviews APA Ktn, APA Slbg).

The general content of the management plan was discussed in April 2010 and an index was agreed upon by the whole KOST. Since the entire KOST would have been too large to efficiently draft the plan, a small working group with seven representatives from different fields was formed. The group was headed by the bear lawyer, and included another scientist from the FIWI, as well as one representative each from the WWF, the hunting associations, the agricultural sector and government representatives from Salzburg and Tyrol (Interviews FIWI, WWF). Roughly half of these members had already participated in the creation of the bear management plan, while the others were new to the process (Interview WWF).

The first meeting of the working group took place in September 2010 (Interview State Gov. Tyrol). Over the next year, the working group drafted individual chapters, which were then sent to and discussed with the whole KOST (Interview WWF). All stakeholders and interest representatives had the chance to bring forward their concerns, suggestions or propositions. The final draft was finished a year later in November 2011 and since then has not been worked on any further (Interview FIWI). Even though this process was probably lengthier than it would have been if the working group had written the plan on its own, several different interview partners described the timeframe as adequate. Especially by incorporating all relevant stakeholders the acceptance could be increased and local prejudices eventually resolved (Rosen & Bath 2009). Ideally, a consensus of all interest groups could thus be found within the plans' formulation.

The KOST was an aiding element in stream coupling as they received political attention based on their inclusion within the different state governments. Even though the KOST did not exert direct pressure on decision makers, it built awareness and demonstrated the necessity of large carnivore management (Interview State Gov. Ktn).

4.2.2 The Management Policy

For the policy community, two main features were clear right from the beginning: first, the policy which regulates the handling of wolf issues would be in the form of a national management plan and second, this kind of management plan would not be legally binding (Interview FIWI). (1) Established wolf management plans already existed in neighboring countries, such as Switzerland, Italy, Bavaria, and from the EU. Austria itself had also made its own experiences with the brown bear management plan. Moreover, the EU commission had sent a recommendation to all of its member states suggesting the creation of such a management plan (pers. Comm. State Gov. Ktn) and accordingly, a plan model had been written in 2000 (Boitani). (2) A legally binding document could only be possible, if all states would uniformly agree to the implementation of the policy. This sort of obligation is almost unobtainable however, as the statutory guidelines are under the jurisdiction of each individual state.

As already stated, the bear management plan had been formulated in 2005. The structures created for the bear, such as the KOST, as well as the knowledge gained, were very beneficial for the creation of the wolf management plan (Interview BMLFUW). Other wolf management plans were used as a guide, especially the Bavarian and Saxon action plans. Moreover, several of the members within the working groups had experience in formulating such a plan from either the brown bear management or from collaborating with other countries (Interview HA Ktn). For instance, the author of the bear management plan was also the designated author for the wolf policy. He furthermore is financed by the federal states and the national government and is deployed at the FIWI, where an open and easy exchange of scientific information is given (Interview FIWI). The final policy proposal represents a compilation of best practice measures from other countries applied and fitted to Austrian conditions. However, general best practice guidelines do not exist and each country and region is different in its geography and society. Therefore, the finished work should be seen as a dynamic policy program, which will continuously be updated and further developed as more experience is gained in the future (Interview State Gov. Slbg). A detailed description of the policy design is given in chapter 5.

The plans non-legally binding status eased the process of drafting the policy, as it was less complicated for all stakeholders to come together and agree upon certain measures (Interview State Gov. Slbg). Furthermore this characteristic does not facilitate agenda-setting but it increases its chances due to two reasons: Primarily, decision makers do not have to fear about agreeing to obligatory policy elements. Secondly, all the states then do not have to uniformly agree upon the policy, even though this would increase the chances of the policy's successful implementation. The content of the management plan can further influence agenda-setting through technical feasibility, value acceptance and the anticipation of future constraints. These are depicted in the following three sub-chapters.

4.2.3 Technical Feasibility

“Feasibility is heavily involved with implementation” (Kingdon 2003:132). To successfully implement the management plan, sufficient monetary resources and educated and experienced personnel who can be flexibly deployed are essential. The two major foci of the management plan, herd protection measures and compensation payments, require further investments in order to be

satisfactorily implemented. However, the KOST did not address the actual possibility of their financing nor did they see this as their task (Interview BMLFUW). The prospect of having to make these investments is a strong hindering factor for agenda-setting. Even though certain elements are currently already financed, e.g. the bear lawyer and the monitoring, its long-term funding is uncertain. At present, compensation payments are regulated by each state separately, but only in Styria, Salzburg and Vorarlberg does the state government exclusively pay for damage (KOST 2011). Herd protection on the other hand would require more consultation by experts and also the equipment itself, such as fences or trained herd protection dogs. Yearly an expected cost of €400,000 to €500,000 would be required (Interview APA Slbg), a sum which is far from being politically plausible at the moment. The political readiness to invest large monetary sums in conservation issues is currently not given, especially as budgets constraints are heightened by the current cuts in public spending. (Interview State Gov. Ktn). Multiple actors from the policy community have confirmed that the financing will be a problem for the plan (Interviews FIWI, State Gov. Slbg, State Gov. Ktn). Thus the limited possibilities for realistic future investments are a hindering factor in the agenda-setting phase.

In certain cases, the technical feasibility also acted as an expediting factor for agenda setting, i.e. when general structures already existed from the bear management. Monitoring for example is already part of the currently provided budget and could be adopted for the wolf. A second example is the network of personnel. By using the currently available employees and expand their responsibilities new investments would not have to be made at the moment (pers. Comm. State Rep. Ktn). Both of these solutions would not be satisfactory in the long run, but act as an aid for agenda-setting.

4.2.4 Value Acceptance

Large carnivores have a direct impact on a small percentage of the population, the small livestock farmers, and a minimal to no impact on the rest of the population. However, their conservation is of societal concern, especially in urban areas where their presence is virtually romanticized (Interview State Gov. Slbg). The carnivores return represents the return of nature to a highly anthropogenic landscape, symbolizing nature's resistance to human actions (Kazcensky 2006). Many unaffected citizens - a large percentage of the population - therefore welcome the wolves return. In contrast, the farmers do not want to pay the price for a social desire. Furthermore, through the strict protection of the wolf, farmers feel it is socially unacceptable to remove the wolf, but socially acceptable if it kills sheep and goats (Interview ÖBSZ). In order for the management plan to be recognized and selected by decision makers, it needs to address both opposing values. With the intention of finding a consensus, the creation of the plan of action incorporated all main stakeholders into the formulation process. This sort of formulation process can act as an expediting agenda-setting factor, as decision makers are not contemplating a socially unacceptable policy.

4.2.5 Anticipation of Future Constraints

The three major future constraints identified are the issues ambiguity, budget constraints and the policy's non-legally binding character. The last two elements have already been depicted in the previous sub-chapters, as hindering factors for agenda-setting. The ambiguity of the issue originates from the nature of issue itself. The wolf is an ambiguous issue, where different opinions

and viewpoints clash, while several options could possibly lead to a satisfying solution. By consulting the brown bear management plan the policy community had a good overview of reasonable measures a carnivore management plan could contain. However, carnivore management is complex and social aspects need to be incorporated (Rosen & Bath 2009). It is therefore not always clearly apparent if one part of the bear management plan was not effective or the implementation of the measure itself was faulty (Interview State Gov. Slbg). For a decision maker, the prospect of addressing an issue where a best practice method is not available is greatly hindering. Therefore the anticipation of future constraints was overall an impeding element in stream coupling and hence agenda-setting.

4.3 The Politics Stream

The politics stream is multifaceted and has both factors which expedite or deter the probability of political agenda-setting. Nationally, the awareness of the returning wolf is highly heterogeneous. Congruently so is the public's reaction to it. While urban citizens welcome the wolf, rural and local communities tend to resent it. Since the distribution of wolves and their damages was unbalanced across Austria, some state representatives experienced feedback from citizens while many others remained unaware of the issue. This was further reflected in the political mood. The wolf only received significant political attention in Tyrol and Carinthia, where the agricultural sector was well organized and pushed for a political reaction. In all other states, the issue went largely unrecognized. Consequently, a great necessity to act also did not arise amongst decision makers. In addition, the ambiguity related to the wolf issue and the political uncertainty of correctly and successfully addressing the matter further hindered the perceived need of action. The hope prevailed that the problem could solve itself without governmental inclusion.

Dichotomy also existed on the jurisdictional level. The federal state Austria has obligations towards the EU and the Bern Convention, but the nine separate states are actually in charge of the conservation and respectively hunting issues. At the time, none of the state representatives clearly wanted to take the lead and instead the responsibility to act was somewhat pushed back and forth between national and state level. Nationally however, the low occurrence of wolves and incidents led to a general political unawareness of the issue. In areas where a single incident occurred and afterwards was dealt with, the necessity to further implement prophylactic actions did not appear, e.g. in Styria.

The politics stream is the weakest stream within the procedure, as unawareness, unwillingness and ambiguous interpretation of the situation hindered a clear line of action to develop. As many interview partners have stated, the best way the awareness and necessity to act can be increased, is when more wolves enter into Austria that cause significantly higher damage (Interviews FIWI, State Gov. Slbg, WWF).

4.3.1 National Mood

A general and uniform national mood could not be identified across the country. Before 2009, most Austrian citizens were not aware of the possibility of returning wolves. When the first news emerged about several individuals appearing in distinct regions, it was a small sensation (Interview FIWI). In the city of Salzburg for example, the public exerted general interest and was hoping to be more informed about the carnivore (Interview State Gov. Slbg). The large newspapers further contributed to the neutral to positive atmosphere. Even articles which reported damages caused by the wolf, were kept fairly objective and neutral (Özkan 2010; N.N. 2009a; N.N.2010d). Of course, the general audiences of these large newspapers are urban citizens who are mainly wolf supporters. A neutral to positive mood further prevailed among most citizens, as overall only a few wolves appeared and caused considerably little damage.

In contrast, in regions where the wolf caused damage the mood very quickly dropped as the locals felt distressed and overwhelmed by the new situation (Interview ÖBSZ). In these regions, the call for a regulation of the wolf population soon was heard and gained in volume amongst many agriculturalists (Interviews FIWI, State Gov. Tyrol). The local media took up the topic and negative regional or agricultural reports contributed to the feelings of hostility and rejection (Interview SGA Ktn). As a result, many of these citizens turned to their local authorities or also wrote letters to the agricultural state ministers (Interview State Rep. Tyrol). Even though the group of affected and clearly opposing people is much smaller than those in favor of the wolf, their discontentment and hence their voices grew louder.

In 2009 and 2010, when six to eight wolves were present in Austria, the citizens' response was strongly polarized. Furthermore, not all states were equally affected. Wolves were mainly present and hunting livestock in Carinthia, Tyrol, Styria and sporadically Lower Austria and Salzburg. As a result, some states had been more aware of the wolf's presence than others. A stark difference in awareness and concernedness arose between urban and rural areas (Interview State Gov. Tyrol), as well as between different regions in general. This dichotomy in the public's mood and the heterogeneous distribution of the problem was a source for ambiguity amongst politicians. As an ambiguous problem is hard to address, the political willingness to react was mellow and the national mood did not contribute to raising awareness for the matter.

4.3.2 Political Mood

In addition to the national mood, which aims at how an issue is grasped by the public, the political mood intends to only depict the mood amongst politicians themselves. In congruence to the heterogeneity of opinion within the public, the nine states also diverged in their understanding of the subject and their willingness to address it. For many politicians the necessity for action was not given (Interview State Rep. Tyrol) and many interview partners have stated that there was little political influence, interest or awareness (Interviews APA Slbg, FIWI, State Gov. Slbg). This has many reasons: for one, the number of individual wolves was never really high in Austria and also the damage they have caused was economically insignificant on the national scale. Even though scientists and wildlife biologists postulated the enduring wolf immigration (Rauer 2010; Dungler 2009), they were not significant enough at the political level to trigger a sense of action (Interview State Gov. Slbg). Unawareness of the subject and lacking of information is another reason why politicians do not realize how the subject could be beneficial for them. In Salzburg for example, the state

representative was surprised to hear that his state could also be a potential wolf habitat (Interview WWF). Furthermore, the belief that the wolf only inhabits mountainous and forest covered regions is present among some politicians.

Large carnivores are also not a very easy topic to address politically. During the late 1980's and 90's when the first bears were reintroduced, a sense of doing something for large carnivores arose (Interview State Gov. Tyrol). As the bears disappeared, so did the positive upbeat mood and the willingness to further address this topic. Additionally, when the bear JJ1 turned into a "problem" bear and the media picked up the matter, the whole story took on a strong self-dynamic (Interview State Gov. Tyrol). The situation seemed to get out of hand and the possibility to take professional action according to the Austrian bear management plan became complicated (Rosen & Bath 2009). This experience, together with the dichotomous public opinion, caused ambiguity and uncertainty amongst politicians in Austria as well (Interview State Rep. Tyrol). The decision makers need to interpret the ambiguous problem correctly in order to solve it, as well as to have a personal gain. Consequently, it is difficult for a politician to find the best solution which satisfies everybody. Thus for decision makers, it is easier not to address the topic at all and rather hope it can solve itself (Interviews FIWI, State Gov. Tyrol, APA SIbg).

4.3.3 Organized Political Forces

Kingdon states organized political forces either facilitate or hinder a topic from entering the agenda (2003:150-152). In the case study, all the involved actors wanted the politicians to address the situation. More importantly therefore was the actors influence on how the issue should be addressed and consequently the type of policy output. The following table gives an overview of the requests and aspirations of the main stakeholder groups. In some cases a formal resolution or official position paper was released by the interest group, e.g. the farmer associations, conservationists. These generally then also represented the stronger organized political forces. Strong interest groups in terms of resources, accessibility and persistence contribute to and increase the probability that decision makers focus their attention on the issue.

Table 5: Overview of the Most Relevant Positions by each Interest Group

Interest Group	Request / Position	Additional Details
<i>Farmers</i>	No obligation to facilitate a favorable conservation status for the wolf in Austria	The wolf is not an endangered species
	Financing of preventative measures – herd protection	Identifying the most reasonable herd protection measures
	Financing of compensation payments	Insurance regulations are insufficient
<i>Hunters</i>	An active re-introduction of the wolf is not accepted	Immigrated wolves will be tolerated
<i>Conservationists</i>	Establishing a favorable conservation status in Austria	States should be obliged to establish a favorable conservation status
	Killing or hunting of wolves, even individually based, has to be prohibited	A favorable wolf population first needs to be established before a wolf can be legally hunted

Source: Own compilation based on various sources and personal communication

Farmers

The agricultural sector generally sees their livelihood threatened by the wolf. Therefore, their greatest concern is an increased wolf immigrating and permanent settlement (Kärntner Almwirtschaftsverein 2011). In general, farmers are strictly against introducing measures that facilitate the wolf's establishment or could lead to a favorable conservation status in Austria (pers. Comm. Agr. Chamber Austria). Even though the terminology 'favorable conservation status' is stated as such in the Habitats Directive, the agricultural representatives argue that such a conservation status already exists in Europe and hence Austria is not subject to an obligation. The resolution by the Alpine Pasture Association of Carinthia (2011) even explicitly demands a change in legislation, in order to allow the regulation of the wolf population via hunting. The head of the ÖBSZ congruently requested the politicians to clearly depict and explain the legal status of the wolf, and especially explain if its removal is in any way possible.

The agricultural chamber demands, with strong support from sheep and goat farmers, the financing of preventative measures and the reimbursement of damage (pers. Comm. Agr. Chamber Austria). Since the wolf's return is a conservational issue, the agricultural sector requested establishing a fund within each state's environmental budget. Moreover, the Alpine Pasture Association (Kärntner Almwirtschaftsverein 2011) suggested guaranteeing a legislative entitlement for each farmer to receive compensation payments. The current compensation payment scheme, where in many states damage is covered by liability insurance, is considered to be only a temporary solution, as it holds uncertainties and therefore insufficient protection. A satisfactory solution would also compensate the collateral damage. Finally, herd protection is requested to be financially and informatively supported (Interview ÖBSZ).

Especially the sheep and goat farmers were a strong politically involved interest group from the agricultural sector. Locally, the presence of a wolf and especially killed livestock highly roused the community's emotions and expedited the forming of local groups or the holding of local events. Furthermore, the negative experience with bears had depicted what consequences and emotions a large carnivore can cause, so in local communities the farmers had consolidated and were better organized to address the issue (Interview State Gov. Tyrol). However, this cannot be extrapolated and affirmed nation-wide. In Salzburg for example, the hunted foal in 2009 had caused great distress at the moment and regionally the situation and the further approach were discussed. There were no further wolf attacks however, and after the situation cooled down again the issue was not attended to any more (Interview APA Slbg). Similarly, damage in the Wechsel region in Styria had greatly aroused the emotions of farmers (Preiss 2010) and in response the state installed a system to compensate wolf damages (pers. Comm. State Rep. Styria). As there was no further loss (Interview State Gov. Styria), the discussions congruently disappeared as well. Similar short and local foci also occurred in other states, e.g. Lower Austria (Interview APA Ktn).

In states where wolves were present for a longer time period and caused more damage, i.e. Tyrol and Carinthia, the call for political action did not fade away. In Tyrol, the vice governor Steixner received numerous letters and requests to deal with the wolf and present satisfactory solutions (Interview State Rep. Tyrol). A similar situation prevailed in Carinthia, where approx. 274 sheep and individual cattle were killed or went missing due to the bear or the wolf between 2008 and 2010 (Kärntner Almwirtschaftsverein 2011). The agricultural chamber as well as the state agricultural associations actively attempted to trigger a political response, especially aiming at the compensation

payments (Interview APA Ktn). For the agenda-setting, this pressure group represents a large expediting factor.

Hunters

Even though there probably are hunters who are against the return of the wolf and the establishment of packs (Interview APA Ktn), an official position that underlines this assumption does not exist. Overall, the hunting associations are temporarily still very reserved, especially about making public statements (Interviews FIWI, SGA Ktn). Currently, their attitude is neutral to positive and the wolf will be welcome as long as they are not actively re-introduced (Interview HA Ktn; pers. Comm. HA LA). However, the possibility of hunting the wolf, being an important aspect for hunters, will probably arise once packs have been established and the population has increased (Interview HA UA). Even though the hunters are also expected to encounter problems with the wolf and internally the issue is already being debated (Interview APA Ktn), they have not greatly engaged themselves politically. Their reserved action is probably partially due to the negative publicity hunters received concerning the disappearance of bears. Thus, they are quickly accused of killing a large carnivore (Interview ÖBf) and have become careful about making strong statements in public. Moreover, the hunters are largely the interest group, which see the management plan as a less pressing and necessary policy (Habenicht 2005). Consequently the hunters neither played an expediting nor hindering role in facilitating stream coupling.

Conservationists

The largest environmental organization in Austria is the WWF. Even though the organization Four Paws – an animal protection organization – has also tried to get involved with the wolf management process and created a position paper, they were not further involved in the process (Interview Four Paws). Nonetheless, both organizations state that potential conflicts can be minimized with an established management plan. For the WWF, the key aspect of the management plan should be a clear recognition of the ecological goal – the construction of a favorable conservation status in Austria (WWF 2011). Other aspects stated in the WWF's position paper (2011) include PR work, the financing of management measures by the states and the strict protection of the wolf, which forbids any kind of hunting and killing of wolves. Overall, the conservationist's objective is to act in the best interest for the wolf, which also includes finding a suitable and socially acceptable wolf policy (Interview WWF). As an important element in re-establishing Austrian biodiversity, the wolf's natural return is highly welcomed and strongly supported.

The WWF was a very active interest group, especially in building awareness (Interview State Gov. Tyrol). Even though the WWF is part of the KOST, they also lobby for nature conservation issues and directly address politicians. Since 1989 they have been involved in brown bear management. They were the main drivers for the bear's reintroduction (Interview WWF) and also a strong partner in the creation of the brown bear management plan. Since 1999 the wolf has become part of their focus as well. Through their PR work, the WWF continuously demanded for the creation of a plan of action, but also approached state governors, including LH-Stv Steixner and the national minister via either written correspondence or engaged them in conversations (Interview WWF). The WWF is furthermore the largest conservation NGO in Austria and hence are particularly important, also for representing the whole conservation sector (Interview ÖBf). Furthermore, they have the necessary financial and personnel resources to get deeply involved with the issue and be present at various

events. This gives them access and therewith the opportunity to have personal conversations or be part in meetings with the state representatives (Interview WWF). At the same time, they were also the only wolf supporters who had approached these government authorities (Interview State Rep. Tyrol). Their lobbying goals were a clear political agreement to create a management plan and publically present it as the official Austrian approach for wolf protection.

Overall, the organized political groups are bottom-up advocates, which are either ideologically strongly involved, such as the WWF, or directly affected by the wolf and by political decisions on the issue. In contrast to pressure groups outside the government expediting agenda-setting, events within the political system were an obstructive element in the process. These are depicted in the next sub-chapter.

4.3.4 Intra-political Events

Overall, intra-political events were acted as a hindering factor in stream coupling. In Austrian a federal political system is very pronounced and as stated before, all issues on conservation or hunting fall under the jurisdiction of each state. In principle, the direct involvement of the national government into legal issues which fall under the federal states competencies is not possible (Lebensministerium 2009). The national government however has signed international treaties, such as the Bern Convention and the Habitats Directive. Even though the content of these agreements have been integrated into the respective state legislations, many states still want the national government to contribute to carnivore conservation issues, mainly financially (Interview BMLFUW). On the other hand, the national government is not willing to significantly finance an issue in which it has no jurisdiction. The national minister does meet with the state governors to discuss ways of action regarding current issues, but he has no possibility of obligating the states to address and implement certain measures (Interview State Gov. Tyrol). Moreover, the nine federal states do not have an obligation to work together on conservation issues nor to coordinate themselves. Yet, for a wide-ranging species such as the wolf, coordination and a joint procedure is essential for a successful management (Boitani 2000). The coordinating body KOST has been established to tackle this problem, but as its members are public authorities, they have no legal power or the possibility to establish legal obligations (Interview State Gov. Ktn). Their task is to inform the state governors, but they cannot force a politician to further take to the subject. Consequently, the state representatives are not obliged to a joint strategy for action.

Problems with jurisdiction can further play a role in states where the wolf is both mentioned in the hunting and the conservation act. In Vorarlberg for example, the two responsible public officers professionally work together and coordinate themselves (Interview State Gov. Vlb). However, there also have not been any major incidents which could have caused disputes. In Styria, the department for nature conservation is responsible for establishing a favorable conservation status for species listed under the Habitats Directive. Hunting is integrated into the agricultural department. After the agricultural department undermined a project to increase measures for large carnivores, the nature conservation department eventually resigned from actively pushing for measures into this area (Interview FIWI).

Thirdly, the distribution of competencies in some states combine the hunting and the nature conservation sector, e.g. in Carinthia, or even integrate the agricultural sector as well, e.g. Lower Austria, Salzburg, Burgenland and Vorarlberg. For the assigned politician, who experiences lobbying

from many different sides (Interview WWF), the combination of competencies is a hindering factor when addressing a controversial and unpopular subject such as the wolf.

4.4 Policy Entrepreneurs

A policy entrepreneur can come from many different levels of the policy process and is especially characterized by investing great efforts and resources to push their favored political claims and policy beliefs onto the political agenda. The most prominent entrepreneur within the case study is the vice governor Steixner, who brought a national herd protection request forward. He is vice governor in Tyrol and his competencies include agriculture, forestry and hunting. Consequently, he is in charge of the two areas most affected by large carnivores. Furthermore, he owns roughly 200 sheep himself, which are also sent to alpine pastures over the summer (Interview State Rep. Tyrol). He is the vice chairman of the Alpine Pasture Association in Tyrol and was involved with the JJ1 occurrences in 2006 (Ö. Bären-Eingreiftruppe 2006). This personal contact to the conflicting area explains why Steixner was well aware of the problem and its future potential. His dedicated involvement in the issue could therefore also have been personally strengthened. In addition, the vice governor has a strongly engaged public officer and bear manager, who is part of the KOST and who propagated the idea of a national herd protection concept (Interview FIWI). As an expert of the field, the bear manager was able to give competent advice and clearly depict the legalities involved with large carnivores. Furthermore, the WWF employee situated in Tyrol was actively involved with the governor in several conservation fields and personally addressed and coerced a political reaction for the wolf issue (Interview WWF).

Steixner's involvement can therefore be explained by the following factors: first, the vice governors' competencies include two controversial areas, the agricultural sector and the wolf (due to the hunting sector). Of these, the agricultural sector demands a measure – the removal of wolves – which would go against national and international legislations. In order to find a plausible and long-term solution, a policy needs to integrate livestock-farmers and prevent their personal loss due to the wolf's strict protection. Second, the vice governor was pressured by conservationists, who demanded the wolf's strict protection. Thirdly, as the owner of sheep, Steixner could relate to the issue and was acquainted with the problem. Lastly, the internal expert carefully explained the issue, while simultaneously also proposing a reasonable and accepted solution. He did not exert pressure, but acted as an advisor.

Policy entrepreneurs do not necessarily have to be single actors they can also be a cooperative group of actors. The second group of entrepreneurs is the public officers represented in the KOST, particularly a public officer from Salzburg and one from Tyrol. Public officers work on request of the politicians and have to – sometimes more indirectly – report to them. As officers, they cannot make important political decisions by themselves, nor are they able to exert direct political pressure or force a political action from decision makers (Interview State Gov. Tyrol). On the other hand, the members of the KOST were elected to manage large carnivores and are the state experts of the field. In delicate situations, where problems with large carnivores arise, they are also the ones who have to respond to the happenings and implement measures. Consequently, they have a strong interest in creating a set of guidelines, which accompanies their actions and to which they can refer to (Interview State Gov. VlbG).

Public officers have good access to decision makers, even though they might not always receive their full attention. In most states, the public officers wanted a management plan and

needed the political support to guarantee its implementation (Interview State Gov. Vlbj). Moreover, the involvement of public officers in the creation of the management plan requires their work time and consequently costs money. Therefore, it is important that the officer is acting in the general interest of his department, political superior and hence the politically chosen direction (Interview State Gov. Styria). If the political support is not given, this could be a hindering factor for the public officer to get further involved with the process. On the other hand, as an expert of the field, some public officers were also approached by the state governors in order to clarify the legalities and depict the issue's urgency (Interview State Gov. Slbg). Generally, these officers appear as consultants who subtly influence the decision makers. Nevertheless, they could contribute to clarifying the ambiguity of the issue by explaining why the wolf cannot simply be shot and depicting the general obligations Austria has as an EU member state.

Kingdon distinguishes between two groups of entrepreneurs, visible and hidden ones. As a politician, the visible entrepreneur vice governor Steixner, receives public attention and needs to justify his actions in front of the citizens. Through his position, he has notable access to key events and disposes of a large resource pool. Furthermore, he represents the agricultural sector, the chiefly affected sector with a significant public voice and hearing. If the agricultural sector claims that the current situation is unbearable and unconscionable, they have a bigger probability of being heard (Interview State Gov. Slbg). Steixner was consulted by different actors, one of them being a self-engaged public officer. Overall, public officers represent the hidden entrepreneurs who aim at influencing the choice for a policy. These officers are in charge of managing large carnivores, created the national wolf strategy and had great interest to get their proposal recognized by decision makers. Beneficial for their actions is their national coordination and representation within the government as an expert. Thus, they can imply manipulative and explaining strategies in order to receive attention and clarify ambiguous elements associated with the wolf issue. Hindering however, is their lack of resources such as decision making power and accessibility to central events.

4.5 Agenda-Setting

I have separately depicted how the streams have developed and their content: expediting or hindering factors in the agenda-setting process. Based on the explanations of these factors, the following figure gives an overview and classifies them as facilitating, impeding or neutral for the agenda-setting. Moreover, some factors were partially facilitating and impeding or partially neutral. It should also be remembered that these factors were not equally significant in every state.

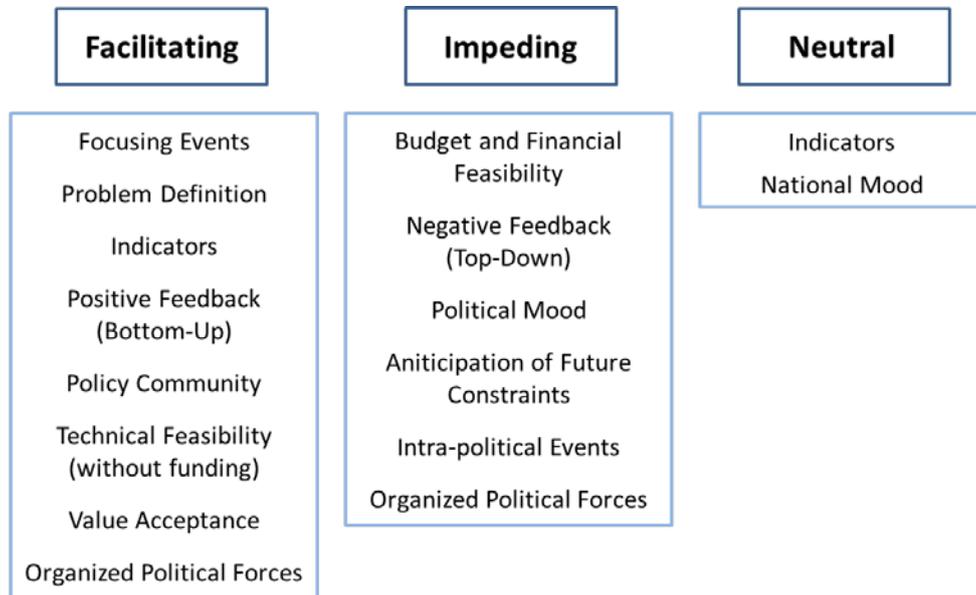


Figure 7: Expediting, Hindering, and Neutral Agenda-Setting Factors

Source: Own compilation

Even though focusing events have occurred, they were neither sufficient in their severity nor did they occur continuously enough to receive sufficient political attention. Similarly the other facilitating factors were not sufficient in setting the wolf management plan on the agenda. The process was impeded by factors, such as jurisdiction, negative feedback, the political mood and budget constraints (cf. Figure 7). Bottom-up actors, namely those affected and conservationists, public officials and wildlife experts were the main driving forces within the process. In December 2010, at the federal agricultural council conference¹⁵ where nine agricultural governors and the state minister are present, the top-down policy entrepreneur LH-Stv. Steixner coupled the streams. The output of the conference was a request to develop herd protection methods, but the stream coupling did not trigger a political request for a wolf management plan. The second policy entrepreneurs, the public officers were able to coordinate themselves within the KOST and therewith succeeded in creating the management plan nonetheless. A second working group meanwhile attended to the vice governor's request and developed a national strategy for herd protection. These measures were then integrated into the actual wolf management plan.

¹⁵ Landesagrarräte Konferenz

4.5.1 Open Windows but no Stream Coupling

In comparison to other European countries, such as Switzerland, Italy and Germany, the formulation of a management plan was undertaken with many years delay. In Bavaria for example, a wolf had been detected in 2006 and a year later, 2007, the first wolf management plan was installed (StMUGV 2007). Is the Austrian case a typical example of a non-decision scenario? From the viewpoint of wildlife experts or biologists, who have been expecting the wolf back since the turn of the millennium (Interview State Gov. Tyrol), decision makers were ignoring the comeback of the wolf and not properly preparing themselves (Rauer 2010). In 2005 and 2007 individual wolves entered Austria. At this time however, the KOST and most other actors were mainly focused on the bear and the wolves disappeared again without causing any attention (Interview Univ. Slbg). During this time, Dungler conducted a research project about the possibility of wolves reappearing in Austria and was the first expert to confront politicians with the subject. The idea of creating a real management plan was not born at this time though and as there were no incidents, neither was there a problem. When in 2006 the bear JJ1 aroused the media, causing public discussions about bear and large carnivore management, the first window of opportunity opened. At this time the KOST was preoccupied with creating a bear management plan and due to the absence of the wolf, no politician would have come forward to request a prophylactic strategy for other large carnivores. Overall, the streams had not been sufficiently developed to be coupled.

Three years later, in 2009, suddenly six to eight wolves immigrated to Austria, causing damage to livestock. In Tyrol a wolf had killed 12 sheep overnight and genetic analysis proved that the wolves had come from three different surrounding populations (Interview State Gov. Tyrol). At this time, the necessity to act arose among the members of the KOST, who had already discussed the creation of a plan of action (Interview BMLFUW). Moreover, the first negative attitude was coming from affected farmers. A window of opportunity opened in the problem stream. A policy was theoretically at hand, but had not been formulated. Likewise, the politics stream was still mostly oblivious to the wolf issue and there were no suitable policy entrepreneurs to couple the streams.

Even though two windows of opportunity opened, the issue itself was not socially pressing enough to cause a national political reaction. Damage had occurred, but nationally the return of the wolf caused a more euphoric feeling of nature's comeback, rather than the feeling of resentment. The affected citizens were a minority and received little further attention from decision makers. The creation of a management plan was extremely difficult beforehand. In conclusion, the case of the Austrian wolf management plan is not a typical example for a non-decision scenario.

4.5.2 Stream Coupling – was it really successful?

Focusing events were the main trigger in generating awareness and the necessity to act. They were also responsible for opening previous windows of opportunity. However, these events occurred regionally and received little attention on the national level and within the politics stream. In the spring of 2010, things started to change. The KOST was preparing to start the formulation of a national strategy and a strong entrepreneur, vice governor Steixner, started to get more involved. Livestock damage and regional negative attitudes towards the wolf continued and future projections indicated an increase in damage and problems (Land Tirol 2010). A window of opportunity opened in

the problem stream, as focusing events and indicators gradually exposed the importance of the issue. It was now time for the policy entrepreneurs to couple the streams.

In response to the killed livestock incidents in 2009 and 2010, the vice governor Steixner proposed a request in August 2010 to the federal minister of the BMLFUW Nikolaus Berlakovich. In this request, Steixner depicted the situation and happenings since 2009, drew parallels to the Swiss herd protection system and concluded with a request to nationally address the issue and deploy a national Austrian herd protection information center (Land Tirol 2010). Steixner's request was underlined by further damage to livestock in Tyrol, adding importance and urgency to his actions. Furthermore, he also prompted the request at a key event, the federal agricultural council conference. This conference is held four times a year and all nine agricultural state representatives and the federal state minister are present. As part of these state representatives, Steixner had first-hand access to his counterparts and was able to directly discuss the matter. Moreover, through his rank as a politician, Steixner had direct access to other decision makers and is colloquial¹⁶ with the federal minister Berlakovich. Nonetheless, Steixner had to go through a phase of "softening-up" the issue amongst the other decision makers by bringing his request up at several preceding federal agricultural council conferences (Interview State Rep. Tyrol). Many of the other state representatives however did not understand the actual problem and were not willing to spend money on the issue (Interview State Rep. Tyrol). Once again, the ambiguity of the issue partially explains the strong hesitations and non-willingness to act. Secondly, some state governors were not sufficiently informed about the wolf's legal status and directly wanted to shoot the wolf before he would become a problem (Interview State Gov. Slbg). In public only a vice governor in Carinthia, Martinz, made this appeal (Steno. Protokoll 2011).

While Steixner was publicly trying to gain attention for the wolf issue, the public officers were getting more active as well. In the absence of a political demand, the public officials proactively decided within the extended KOST to begin with an official policy formulation process (Interview FIWI). Simultaneously the public officers served as experts within the state government and needed to convince their superiors of the importance of a management plan (Interview State Gov. VlbG). However, the public officials were not able to exert real pressure and so they played a greater role in raising awareness for the subject in general and clarifying the context of the issue. A sudden rush forward by the public officers, in which they proposed the management plan as the best solution did not occur. Instead, they were rather gradually raising the necessary awareness within the political stream. Even though the public officers were very motivated and engaged themselves in the formulation process, they did not have the necessary resources to generate the required political acceptability for the wolf issue needed for coupling.

On the political level, Steixner's persistence eventually led to success and in early December 2010 the agricultural council members and the federal minister accepted the vice governor's proposal (Gerzabek 2010). The entrepreneur was successful in coupling the streams due to his persistence and his presence at a key event where all important decision makers were united. As the proposal by Steixner only aimed at a national herd protection concept and its financing, the stream coupling did not generate a request for a wolf management concept. The public officers also did not

¹⁶ In the request, Steixner addresses Berlakovich with "Du", the German form to address amongst intimates

receive the desired political instruction or official approval to create a management plan after the conference. The public authorities were only officially assigned the task of developing a national concept for herd protection and examining the possibilities for installing an Austrian competence center for herd protection. In response, the KOST designated a second working group in early 2011 to focus only on herd protection and develop a concept with applicable methods for Austria (Interview WWF). This group was led by the head of the ÖBSZ and included two other representatives from the Alpine Pasture Associations of Salzburg and Carinthia (Interview APA Ktn). The WWF also occasionally attended these meetings. The creation of this second herd protection guide roughly took half a year and many of these measures and contents were also integrated into the actual wolf management plan (Interviews FIWI, WWF).

4.5.3 Post Coupling

During 2011, the wolf management plan and the herd protection concept were finalized. Even though there are two documents at the moment, the politically relevant plan of action will be the wolf management plan. The plan was finalized in November 2011 and since then has not been changed. However, content disputes are still ongoing between the WWF and the agricultural sector, concerning the overall goal of the management plan (Interview State Gov. Ktn). While the conservationists strongly insist in including a definite ecological goal in the plan, the agriculturalists and partially also the hunters are strongly against any kind of an ecological obligation (Interviews WWF, ÖBSZ, ÖBf). The discussions were continued at an extended KOST meeting in February 2012, but an Austrian obligation was not included in the goals. For several actors, that is scientists and government officials, this issue has been sufficiently disputed (Interview FIWI). The agriculturalists are also satisfied with the present phrasing of the goals and are not intending to spend more time on the subject. However, for the WWF the possibility of addressing the matter at another KOST meeting prevails (Interview WWF). In case the obligation to create a favorable conservation status within Austria will not be included in the management plan, the WWF is strongly considering withdrawing from the policy and not officially carrying the final document (Interview WWF). Nonetheless, the plan was sent to all the states decision makers, from whom its acceptance is still awaited.

On the political level and across all states, the recognition and implementation of the plan is not yet certain. The overall weak political awareness for the issue impedes the formal termination of the policy's formulation. Tyrol has already signaled that they will implement the entire plan (Interview State Gov. Tyrol), but for the time being Carinthia will not implement the herd protection measures (Interview WWF). In Carinthia the compensation payment scheme was greatly developed by vice governor Scheuch in 2011 and momentarily is a satisfactory measure for cases of damage (pers. Comm. State Rep. Ktn). Other states, such as Styria, still have not uttered their opinion about the concept or their willingness to implement the measures (Interviews HA Ktn, State Gov. Styria). On the initiative of governor Seitinger, compensation payments are processed by the state government and financial support can also be granted for rudimentary herd protection measures (pers. Comm. State Rep. Styria). In Vorarlberg, wolf incidents were limited and the political awareness is low. More importantly, the public official indicated that overall it is not so important at the moment to have a management plan, as Vorarlberg closely works together with the Swiss officials, particularly in Grison (Interview State Gov. Vlb). Ultimately, the management plan is less important for Burgenland and Vienna, as wolves have not appeared in these states yet (pers. Comm. State Gov. Bgld).

5 The Result: The Austrian Wolf Management Plan

The following depiction of the Austrian wolf management plan is based on a draft copy, status November 2011. Even though several interview partners, including the author, have confirmed that this draft will most probably be the final version, the possibility that changes are made to the document before it is officially accepted remains. The depicted measures are only partially already implemented, when the management plan will be completely implemented is still uncertain.

The focus of the management plan was laid on elaborating herd protection measures and applying them to Austria, as well as making suggestions about a functioning damage compensation scheme. Stimuli for a more centralized monitoring and the development of more PR work were also given, as well as a brief description of possible problems and solutions related to hunting activities (KOST 2011). Due to the involvement of all stakeholders in the formulation process, the plan of action is a consensus policy. As a result, some sections could only be phrased very broadly and concrete and obligatory measures are rare.

5.1 Goals and Objectives

The Austrian wolf management plan pursues two main goals, which are clearly stated at the beginning of the policy. The first goal aims at protecting the wolf according to the provisions given under the Habitats Directive, other international agreements and national legislations (KOST 2011). By referring to already existing legislations, the legally non-binding plan is linked to binding legislations. These primarily designate the complete protection of the wolf. The second goal focuses on creating a conflict free coexistence between the wolf and the interests of land users (i.e. farmers, foresters and hunters) and conservationists (KOST 2011). This goal aims more at the actual problems associated with the wolf in Austria. Across Europe, problems with coexistence between humans and wolves are most prominent, thus this general goal can be found in numerous other wolf management plans, i.e. the European Wolf Action Plan (Boitani 2000), the Swiss Concept Wolf (BAFU 2008) and the Bavarian Management Plan (StMUGV 2007).

Overall, these two goals are kept very broad and leave a lot of room for interpretation. This represents the ambiguity of the issue itself, as it can be interpreted depending on one's personal point of view. The working group was not able to include clear definitions or stringent and regulative goals (Interview FIWI), a reflection of the policy process aimed at consensus building between all stakeholders. Furthermore, it is a way of increasing its political acceptance and enhancing the possibility of being implemented, as decision makers do not need to agree to an obligation or stringent targets.

Ultimately, the plan states that by reaching these two goals, Austria contributes to establishing a long term wolf population across different countries (KOST 2011). Unlike proposed by the conservationists, this phrase does not indicate the contribution to long term wolf populations has to be made explicitly in Austria. In addition to the conservationist's proposal, art. 2 para 2 of the Habitats Directive also states a "favorable conservation status" must be maintained or restored for Annex IV species. Depending on the interpreter of the Habitats Directive, a clear obligation to establish a favorable conservation status for wolves within Austria cannot be identified (Interviews State Gov. Ktn, HA Ktn, ÖBSZ). The main argument behind this reasoning is based on the fact that during the time when Austria signed the Habitats Directive, wolves were not resident within the country. Therefore maintaining or restoring a viable population is not obligatory as the last viable

population was eradicated 200 years ago (pers. Comm. State Gov. Ktn). Ultimately, it would be up to the European Commission to confirm if this interpretation is acceptable.

5.2 Evaluative Elements

Evaluative elements are coupled to the goals and objectives of the policy. A general goal is very difficult to evaluate however, since there are no quantitative measures to indicate the achievement of policy goals (Bussmann et al. 1997:87). As stated by the wildlife biologist from the FIWI, there is no concrete goal, so the outcome correspondingly cannot be evaluated. On the other hand, the plan is supposed to be a dynamic policy (Interview State Gov. Tyrol), which is meant to be edited every five to ten years according to the situation (KOST 2011). Regular KOST meetings are also supposed to contribute to the evaluation of current management measures (KOST 2011). In spite of this reference to evaluating the management, the policy does not include further explanations of how such a revision should be done. Thus, to what extent the achievements and problems of the management plan are actually examined remains undetermined.

Nonetheless, the plan does include an evaluative element: monitoring. Monitoring data are quantitative and hence can be directly measurable. Currently monitoring widely relies on hints and reporting's from the population, namely hunters, and is rather passively conducted (Interviews State Gov. Tyrol, State Gov. Styria). The public authorities note these reports, but their authentication is difficult as many leads cannot be reaffirmed or are based on coincidental sightings (Interview State Gov. Styria). To improve this system, the management plan mentions four monitoring methods: collecting and investigating information and clues, genetic investigations of samples, active and systematic searches and radio telemetry (KOST 2011). To ensure homogeneity of the data, it should be collected by trained wolf appointees and wildlife biologists and assessed according to the so-called SCALP-criteria (KOST 2011). These criteria were primarily developed by wildlife biologists for monitoring the alpine lynx population and were then expanded to include wolves and bears in other regions as well (Kazcensky et al. 2009). By giving a very detailed and exact description of the procedures, the application of these criteria is meant to standardize the monitoring nationally and internationally. Internally, the current monitoring is already discussed annually and its strengths and weaknesses evaluated (Interview State Gov. Slbg).

Setting up a centralized monitoring system is also a requirement by the Habitats Directive, which requires a "system for surveillance of the conservation status of the [...] species covered by the Directive" (preamble Habitats Directive). Ideally, the monitoring data is then sent to the European Commission, which collects the information and thus can evaluate the implementation of the Directive within Europe (preamble Habitats Directive). Overall, a centralized monitoring contributes to the better understanding of the species and their behavior. The more knowledge exists about how wolves behave and where they prefer to live, the better the species can be managed (Interview WWF).

By keeping the goals and objectives broad and not intending to evaluate the policy, it is easier to be accepted by decision makers. A failure of the policy will be harder to prove and the question of its effectiveness less assailable. Secondly, feedback from the bear management plan might also have influenced this section. In the brown bear management plan, a regular revision should be undertaken every six years (KOST 2005), however this plan was established in 2005 and a revision still has not taken place.

5.3 Operational Elements

The operational elements represent the main part of the policy, as they include the measures and means of action. The two main measures thereby are herd protection and compensation payments. PR illustrates the third pillar, even though it is fairly briefly covered. Table six gives an overview of all the relevant instruments. These are further described in the following sub-chapters.

Table 6: Overview of Operational Elements

Element	Type of Measure	Content
Regulatory Mode	Strict Legal Protection of the Wolf	Based on legislations, it is illegal to hunt or remove wolves
	Handling of Special Situations	Coordinated measures ensure an effective response to certain situations
	Exceptions	Highlights when exceptions to the wolf's protection can be made
Incentive Mode	Subsidies for Herd Protection	Several methods are introduced to protect herds of small livestock
	Linking Herd Protection to Compensation Payments	Payments are only made if proper herd protection measures were installed
Direct Supply of Goods and Services	Compensation Payments	The state covers the compensation payment, ensuring its long term persistence
Persuasion and Information	PR Work	Guidelines of PR work allocation and implementation
	National Information Center for Herd Protection ¹⁷	Develop herd protection measures for Austria and inform and advise livestock farmers
	Information for Hunters	Investigation of the effect wolves have on hunting activity
		Minimize hunting conflicts through knowledge

Source: Own compilation

The elements are not mutually exclusive and the measures are combined in their application.

5.3.1 Regulatory – Direct Measures

As the wolf management plan has no direct legal power, strong regulatory measures are mainly not practicable and realistically achievable. However, the plan is based on the existing legislations pointed out in chapter 2. These contain regulations which are applicable.

Complete Protection

The wolf's complete legislative protection was already described in previous chapters. The wolf management plan similarly denotes these legislations (KOST 2011). It represents a classical form in which the state can be active, as it sets up prohibitions and obligations. These are rules for how to

¹⁷ "Nationale Beratungsstelle für Herdenschutz"

do something or respond to an incident. In case of non-compliance sanctions can be imposed. The sanctions imposed by the state for hunting a wolf differ across Austria, but the action itself is illegal in all of them and represents an administrative offence (Strasser & Proschek 2004). Furthermore, Austria can also be sanctioned in case the Habitats Directive is not deployed within the national legislations and state measures are not conforming to the legal provisions. However, the current management plan and national actions have been in line with the Habitats Directive (Interview State Gov. Ktn).

Special Situations

Special situations are circumstances in which a wolf's actions differ from the norm. In worst case scenarios, this type of behavior can lead to a threat to humans or at least the perception of a threat (KOST 2011). In order to be prepared for such a situation a table with instructions was included in the plan, which is based on experiences from Saxony and other countries (Interview WWF). They represent conditional circumstances under which specific actions are predetermined. Even though they might limit a flexible response to the situation, the guidelines standardize the actions nationwide and give security to the public officers implementing the measure.

These special situations are typical conditional (if ... then) scenarios. If a wolf is habituated, i.e. used to the presence of humans, or food conditioned, i.e. based on experience the wolf relates a situation with obtaining food, then a measure needs to be implemented to prevent further problems (KOST 2011). Different measures such as aversive conditioning and aggrieving are proposed and an explicit table describes additional possible scenarios. These measures do not injure the wolves. The only reason, under which a wolf could be legally removed, is if it becomes a threat to humans. Predetermining criteria under which a wolf can be shot, such as in Switzerland (BAFU 2008), are not aspired for in Austria (Interview State Gov. Slbg). Furthermore, the removal or killing of the wolf is generally forbidden through the Habitats Directive. Only under exceptional circumstances can derogations be made.

Exceptions of the Strict Protection

Even though the management plan includes a separate section on exceptions to the wolf's strict protection, it is entirely based on the Habitats Directive (KOST 2011). Throughout the policy formulation process, individual actors and also state representatives have inquired or called for the wolf's removal (Interview State Rep. Tyrol; Steno. Protokoll 2011). By clarifying the possibilities of derogations within the management plan, the unlawfulness of such a request is emphasized. Moreover, for public officers the work is simplified as they can quickly see the legal status of the wolf without reading legislative texts.

5.3.2 Incentive Mode

Incentives are generated through financial motivations and are less stringent than regulatory instruments. They should be clearly formulated and the criteria and requirements understandable for the addressee in order to be successful (Zimmermann 1994:244). Therefore a clear description of the conditions for payments has to be given in the policy and its comprehension developed amongst those implementing the policy. When the addressee accepts the state-incentive, a relationship with contract character emerges, which may include similar obligations as given by regulatory instruments (Zimmermann 1994:244).

Herd Protection and Compensation Payments

Herd protection measures and compensation payments are addressed within the same chapter. This is done deliberately to emphasize the interconnectedness between the two measures. As they are meant to complement each other, “damage should not be compensated, if the recommended protection measures have not been implemented” (KOST 2011). Consequently, the incentive for livestock farmers to implement herd protection measures should be increased. In contrast to this incentive the management plan also states that in principle, compensation payments should be made for wolf induced damage (KOST 2011). This discrepancy results from the fact that momentarily herd protection measures are not ready for implementation in Austria, so recommendations also cannot be given.

Compensation payments are already made within the states. They are supposed to guarantee livestock farmers do not suffer a financial loss. Nevertheless, as expressed by the managers of the sheep and goat associations in my survey the loss of livestock is still unsatisfying for a farmer as the small livestock are unprotected. Therefore, herd protection measures are supposed to help farmers protect their herds against the carnivore, but are currently not implemented yet. These measures are costly and in the future should be sufficiently and uniformly financed through public funds (KOST 2011). The incentive to implement herd protection needs to be strong enough however, to produce the “personal responsibility of the animal keeper” to implement them. Furthermore, in areas with permanent wolf presence herd protection should be extensively practiced (KOST 2011). Yet, the plan can only recommend and not obligate a farmer to use measures that protect livestock. Coupling the compensation payments to the application of herd protection measures is similarly not a binding requirement. So even though herd protection was identified by many experts as one of the principle measures of the management plan (Habenicht 2005; Interviews WWF, ÖBSZ), it is uncertain if farmers are also going to be willing to use the proposed methods.

As a preliminary guide, a list of herd protection measures is given within the plan. They include different forms of fencing, the use of shepherds and herd protection dogs, as well as penning the herd during the night (KOST 2011). The measures are based on experience from other countries or states, such as Saxony, but have not been directly tested within Austria. As a result, a strong aversion against these measures is prevailing amongst livestock farmers and the Sheep and Goat Associations (Interviews APA Ktn, SGA Ktn). Moreover, the plan also describes the problems associated with herd protection in the alpine regions and mentions that in some areas small herds would have to be joined together in order to be economically feasible (KOST 2011). Yet, the head of the Alpine Association of Carinthia has already identified this solution as unsatisfactory for livestock farmers. Implementing voluntary herd protection methods could therefore be difficult in areas where these methods are still criticized.

It is challenging to convince farmers and politicians to deploy and support herd protection measures, if the actual wolf attacks are low and the compensation of the damage more cost efficient (Habenicht 2005). Therefore, at the time being compensation payments are often perceived as a suitable measure to aid farmers (pers. Comm. State Rep. Ktn). These are regulated differently in every state. Either the liability insurance of the state hunting association and/or the state government covers the expenses (cf. Table 7). The reason why hunting associations are compensating farmers is due to the fact, that the wolf is classified as a game species in the different

state hunting acts. All hunting acts contain regulations which obligate hunters or hunting associations to cover damage caused by game species (Binder 1992:100). Each hunting community is consequently insured. Ideally however, the compensation payments should be the same for all states and not carried out by the hunting associations (Interview FIWI; KOST 2011).

Table 7: Compensation Payment Regulations in the Federal States

State	Hunting Legislation (JG) – Liability for damages on property and land (y/n)	Compensation Payment	Further Measures
<i>Burgenland</i>	art. 111 para1 (n)	None	-
<i>Carinthia</i>	art. 74 para2a (y, and explicitly mentions damage caused by large carnivores)	Liability insurance: Hunting Association Carinthia	€ 50,000.- annually: State Government Carinthia (since May 2011)
<i>Lower Austria</i>	art. 101 para1 (y)	Liability Insurance: Hunting Association Lower Austria	-
<i>Upper Austria</i>	art. 65 (y)	Liability Insurance: Hunting Association Upper Austria	-
<i>Salzburg</i>	art. 91 (n)	State Government Salzburg	-
<i>Styria</i>	art. 64 (n)	Liability Insurance (only damage by bear and lynx): Hunting Association Styria	Liability Insurance: State Government Styria (since 1.9.2010)
<i>Tyrol</i>	art. 54 (n)	Liability Insurance: Hunting Association Tyrol	In case of doubt: State Government Tyrol (since 4.10.2011)
<i>Vorarlberg</i>	art. 59 (n)	State Government Vorarlberg ¹⁸	-
<i>Vienna</i>	art. 95 (y)	None	-

Source: KOST 2011; State legislations; pers. Comm. State Gov. Styria

Momentarily, the Hunting Associations of Lower– and Upper Austria still exclusively cover compensation payments. Other states have introduced further state financed compensation schemes. However, a fixed monetary sum was only established in Carinthia. These schemes are further illustrated in the sub-chapter: direct supply of goods and services.

Compensation payments may further be necessary for hunters who have lost their hunting dog. The plan recognizes this threat and the value of a well-trained dog. In case of the dog's injury or death, the hunter should therefore be compensated (KOST 2011). Even though hunting dogs have not been lost to a wolf in Austria yet, the inclusion of this section in the management plan can be attributed to the inclusion of hunters in the formulation. The measure also aims at increasing the hunters' acceptance for the wolf.

In spite of all the problems and reservations against the herd protection measures addressed above, they still make up the core measure within the management plan. Compensation payments are equally important to create acceptance for the wolf, but the principle "prevention before compensation" (KOST 2011) should be followed. Overall, this section is very elaborate due the

¹⁸ From the general agricultural fund, but no long-term agreement exists

importance for generating acceptance among those primarily affected and secondly due to the proposal by vice governor Steixner. In response to the proposal, an individual herd protection plan was intensively discussed and formulated (Interview ÖBSZ). This plan was then integrated into the management plan.

5.3.3 Direct Supply of Goods and Services

Unlike incentive modes, the supply of goods and services are directly provided by the state or the nation. They are not coupled to a requirement and can be granted to increase the general well-being of the citizens.

Compensation payments

Compensation payments should ideally be coupled to the installation of herd protection measures. This clause only can be applied though, if herd protection measures are available and are publically financed. As it is uncertain when and if herd protection will be ready to be put into practice damage caused by wolves is principally supposed to be compensated (KOST 2011). The current regulations of some states, where the hunting associations cover the payment are “not sufficient” (KOST 2011) and can be a problem (Interview APA Ktn). By regulating compensation payments through insurances, the leeway of determining the damage and its monetary dimension is extremely narrow. For example if the cadaver of the killed animal cannot be found the farmer also will not be compensated. Additionally, the hunting associations may also decide to stop making payments, once the damage becomes too costly (Interview FIWI). Therefore, the state governments should make these payments from a beforehand established fond (Interview FIWI).

Carinthia is an exemplary state in terms of compensation payments. During the late 80's and 90's, before the wolf had returned to Austria, recolonizing and reintroduced bears had killed more livestock in Carinthia than in any other state (Rauer et al. 2005). The Hunting Association of Carinthia has an insurance to cover damage caused by large predators since 1971 (Dinnebier & Zeitlinger 2011). Due to a proposal by vice governor Scheuch an additional compensation model was introduced in May 2011 (Land Kärnten 2011). This model promises to dispose of €50,000 from the conservation-budget annually (Dinnebier & Zeitlinger 2011). Even though the Hunting Association will still cover the expenses of cadavers, the state budget will cover all further legitimate claims for compensation.

In contrast, Vorarlberg does not have a specific system for compensating damage. The Hunting Association also does not cover these expenses. In response to an incident, the state government eventually covered the damage, but in case of further carnivores, a compensation system would have to be installed (Interview State Gov. VlbG).

Even though the plan of action states that current compensation schemes will not be satisfactory when more wolves return and new models should be developed (KOST 2011), it does not make recommendations on what kind of models would suffice. Once again this is due to the legally non-binding character of the management guidelines. Thus a change in compensation payment mechanisms cannot be expected to occur in the near future. Proper compensation payment regulations can increase the farmer's acceptance, but the legal situation makes an adoption of new models by state governments highly unlikely.

5.3.4 Persuasion and Information

One of the main problems associated with the wolf's reappearance can be traced to the general lack of knowledge about the carnivore. This results in fear and stereotypes and lowers the acceptance for the species. Informing the public and those affected is consequently an important part in a carnivore management plan (Boitani 2000; Interviews WWF, State Gov. Slbg).

PR Work

Effective PR work increases the general awareness, facilitates objectivity at damage sights, and prevents panic reactions to media coverage (pers. Comm. State Rep. Ktn). Nonetheless, the once so elaborate PR section in the Austrian brown bear management plan has shrunk to a brief description of the most basic features. On the one hand, this is due to the lacking implementation of PR work suggested in the brown bear plan of action and hence the negative feedback it created (Interview State Gov. Slbg). On the other hand, PR work requires the employment of personnel who are competent and have the necessary resources, particularly time. Momentarily, the wolf appointees and appointed wildlife biologists work under stringent schedules (Interviews State Gov. Vlb, State Gov. Styria). The employment of further personnel would be required, but with the current savings in cost this is probably not possible. Thus, budget constraints and doubts about the financial feasibility have additionally shaped this measure.

The management plan gives general descriptions of PR types which should be put to use. It also suggests the creation of a webpage by the wolf appointee in collaboration with the states (KOST 2011). The idea to establish an informational platform with objective and factual knowledge is based on the contact office in Saxony (Interview FIWI). It is meant to contain information for affected farmers as well as for journalists and the broad public. The actual creation of the webpage has not been done as momentarily the demand has not been stated (Interview FIWI).

National Information Center for Herd Protection

Herd protection is a central part of the management plan. On the request by Steixner, a concept to create a national information center for herd protection is introduced within the plan. The center will be led by two persons from the sheep and goat farming industry and is assigned with five main tasks: gather information about herd protection, monitor current measures and develop them further, give information and advice on prevention measures, educate shepherds and introduce herd protection dogs, and test herd protection measures in model regions (KOST 2011).

A main reason why this center will soon be established is due to the work by the head of the ÖBSZ. His personal engagement has led to the possibility of establishing the first model region in Salzburg (Interview ÖBSZ). Furthermore, he has been significantly involved in ensuring the first national herd protection measures will be financed.

Hunting

A section specifically aimed at hunting is included in the management plan. It briefly mentions problems associated with hunting activity, especially related to the feeding of red deer and fencing them during the winter (KOST 2011). Problems are expected within this area, but the impact of a wolf on this special type of wildlife management is scientifically still not sufficiently investigated

(Interview ÖBf). The management plan proposes further research into this area and the advising of foresters and hunters (KOST 2011), but fails to become more concrete on these elements.

Independent of the management plan, the ÖBf AG has already started investigating the possible impact of wolves on wild ungulate populations and is currently negotiating the set-up of a research project with the research institute of wildlife ecology (Interview ÖBf). In the future, this knowledge could then contribute to elaborate the management plan.

Overall, the section was included due to the integration of the Austrian Federal Forests (ÖBf AG) and the hunters. As even the experts of the field currently are unsure about the wolf's future impact on the sector, it was important to give an aid to public officers who are possibly going to confront the issue in the future (Interview ÖBf).

5.4 Political-Administrative Arrangement and Resources

The legislative bases of the management plan are the state hunting- and conservation acts. The state governments, regional administrative authorities or hunting associations are entrusted with their implementation (KOST 2011). The KOST then has the responsibility to coordinate these different authorities to ensure a uniform approach for wolf management. Since the management plan itself was created by the KOST, the measures should therefore be familiar among the members. This detailed knowledge about the management measures encourages their successful implementation. Moreover, many of these public authorities have already been involved in the creation and implementation of the brown bear management plan (KOST 2005). Therefore, they are acquainted with the management procedures. Decisions on accepting a measure and implementing it will ultimately be taken by the state representatives (Interview BMLFUW).

The management plan includes four further positions to support the implementation of the measures: a wolf appointee, damage assessor, prevention advisor, and the intervention team (KOST 2011). The wolf appointees fulfill all kinds of tasks mentioned in the management guidelines. On the one hand, they advise and inform the public authorities or undertake PR work. On the other hand, they also assess damage, collect and examine monitoring data and join the intervention team if necessary (KOST 2011). The same tasks were already designated to the so-called bear lawyers in the brown bear management plan (KOST 2005). As the brown bear has mostly disappeared, these experts will now become wolf appointees. Currently, these consist of three appointees for the whole of Austria (Interview State Gov. Tyrol).

The damage assessors document and assess damage in accordance with the wolf appointees (KOST 2011). As the wolf appointees cannot always directly be present at the sight of an incident, the damage assessors are meant to act as an aid and locally ensure the quick execution of the case. Wildlife biologists from the hunting associations or official veterinarians from the local population could be possible choices for this position (Interview State Gov. Styria). Selected experts received schooling in 2010, where a first network of candidates was established (Interview State Gov. Tyrol). Prevention advisors are the counterpart to the damage assessors and work together in supporting the farmer in handling damage cases (KOST 2011). Furthermore, they work together with the experts from the national center for herd protection and advise local livestock farmers. Ideally, these advisors should be part of the community and be locally integrated to increase their acceptance among the other farmers (Interview State Gov. Slbg). At the moment however, there has been no

concrete confirmation from the states that would ensure the employment of the assessor and advisor positions (Interview FIWI). The fourth service, the intervention team, was also already established for the brown bear management. In special situations, when a wolf becomes a problem, this team of professionals can be deployed to implement certain measures, such as aversive conditioning and aggrieving (KOST 2011).

The responsible public authorities are in charge of overseeing the activities of these positions. Even though the plan would require the deployment of new positions, the current strategy is to reallocate personnel, instead of employing a new expert (pers. Comm. State Rep. Ktn). In the case of an increase in returning wolves, this strategy might not be sufficient, as the work-load for individual experts can quickly intensify (Interviews State Gov. Slbg, State Gov. Styria). Moreover, the allocation of damage assessors and prevention advisors is useful for the future, but seems less applicable at the moment. Time and resources will be needed to find, educate and employ the additional personnel.

Along with the necessity to deploy new personnel, wolf management also requires further financial investments. Currently a small budget of €60,000 is paid by the seven states with wolf presence (excluding Vienna and Burgenland) and the national government (Interview BMLFUW). This money is available for the bear lawyer at the FIWI and the monitoring activity. In order to improve the current monitoring and ensure its effectiveness when more wolves migrate to Austria, this sum will have to be increased (Interview State Gov. Slbg).

While the public authorities and hence also the KOST do not need to be extra financed, the plan of action distinctively states that damage assessors and prevention advisors should be paid (KOST 2011). Even though not directly stated, the herd protection measures would also require further investments in order to be effective (Interview APA Slbg). However, besides the promised payment of €70,000 yearly over three years for herd protection and the creation of the national information center (Interviews State Gov. Ktn, ÖBSZ), no further payments have been confirmed (Interview BMLFUW). As this could be a strong hindering factor in the plans implementation, other financing forms have also been suggested, such as the use of sponsors for herd protection model regions (Interview ÖBSZ). Of course this would not be a sustainable solution, but could be used to bridge the time until further financing becomes available. The compensation payment schemes have already been depicted beforehand. Even though some schemes, such as in Carinthia already involve the state, new models should be developed where appropriate (KOST 2011). Ideally, the states should carry these expenses as well (Interview FIWI), but it is not stated as such within the plan.

5.5 Procedural Elements

The regulation of the KOST members' interaction constitutes the first procedural element. Regular KOST meetings should be held in alternating states (KOST 2011). These meetings are already a regular procedure and ensure the integration of all actors, even if a wolf is not present in the state (Interview State Gov. Ktn). Further interest groups and experts can also be invited to the meetings, ensuring the transparency and integration of all major stakeholders. In addition, these stakeholders can give feedback on the management methods, which should contribute to an ongoing evaluation of the measures (KOST 2011). Thirdly, regional representatives can join extended KOST meetings where a personal exchange of knowledge should further support trust-building among opposing interest groups. This has been a proven method which persists for numerous years already (Interview FIWI).

The second, already implemented element is monitoring. Foremost, the standardization of the monitoring within the whole of Austria is desirable (KOST 2011). At the moment, every state collects its own monitoring data and they can then decide what to do with the data (Interview HA Ktn). Furthermore, the collection of the data is often only based on coincidental sightings (Interview State Gov. Styria). The plan therefore suggests collecting the data according to the SCALP-criteria. This would standardize the data within the country and would make them comparable with data from other countries using the same method. In addition, many of the sightings are made by hunters or other people who spend a lot of time in the outdoors (Interview HA Ktn). Hence, cooperation and collaboration between hunters, wildlife biologists, landowners and foresters is considered essential for an efficient monitoring and the exchange of information (KOST 2011).

The central elements of the plan, prevention and compensation have the most detailed procedural description. As the management plan is established nationally, an overall request is to standardize the financing of these two elements (KOST 2011). Based on the heterogeneous regulations, the implementation of the request might not be feasible momentarily though.

Generally the procedure to report an incident and receive the compensation payment should be negotiated between the organization in charge and the agricultural representative beforehand (KOST 2011). All the involved actors should then be clear about the process. Delays in reporting a loss and the compensation payment could hence be minimized. According to the manager of the Sheep and Goat Association in Carinthia, delays in payments occur on the one hand, because the responsible wildlife biologists are not always able to attend the scene right away, making the identification of the predator very difficult. On the other hand, the farmers also do not immediately report every killed or missing sheep and goat. As a result the farmers miss important deadlines, in which they were supposed to make a formal report.

The procedure declared in the management plan for reporting a loss requires the farmer to call a public authority or directly the damage assessor. Yet, the plan does not specify a specific time-frame in which the damage assessor should inspect the animal. If the damage assessor believes a wolf could have been the cause of death, the prevention advisor will also be contacted to support the livestock farmer with further steps (KOST 2011). Furthermore, the prevention advisor then contacts the surrounding farms and informs these. To some extent, installed structures already exist from the bear management, which can be used for the wolf management as well (Interview State Gov. Slbg). However, it will still take a long time and the presence of more wolves until the system and proposed procedure can be applied. At the moment mainly the wolf appointees are attending the sites (Interview State Gov. Styria; pers. Comm. HA LA).

The first step in herd protection is to examine the local conditions in order to recommend a suitable measure (KOST 2011). A list of possible measures is given, but the actual preparation of a suitable set of methods in Austria should be done by the national information center. As this center is currently being installed and only a few model regions have been selected and confirmed, it will take several more years before advice for recognized measures can be given. At the same time, herd protection is a long-term endeavor, which gains importance when more wolves appear and have started to settle (Interview ÖBSZ). In regions where wolves are permanently present, small livestock herds would then have to be continuously and effectively protected (KOST 2011).

Following a detailed description of herd protection methods and the procedure for compensation payments is a brief section on PR work. According to the plan, public authorities and the wolf appointees are responsible for the PR work. While the public authorities are in charge of

informing the public through media reports, the wolf appointees are also meant to give talks and respond to media enquiries (KOST 2011). Further indications about the involved procedures are not given though. Probably after the installation of compensation payment schemes and the first herd protection measures, the PR section will then receive more attention and can be elaborated (Interview State Gov. Slbg).

Finally, the wolf management plan gives a detailed description and instructions on how to deal with a conspicuous wolf. Assigned by the corresponding public authorities, the wolf appointee is responsible for investigating the local situation and determining further measures (KOST 2011). The wolf appointee should consult further experts to discuss these measures before making a final recommendation. The actual decision then has to be taken by the public authority while staying within the legal framework. The state government needs to be involved as well, if the contemplated measure is the wolf's removal (Interview HA UA). In these situations, the integration of all affected stakeholders is central in order to increase the acceptance for the proposed measure (KOST 2005).

The procedural elements are aimed at ensuring the proper implementation of the management plan. Similar as the policy formulation process, the implementation will also strongly depend on the actor's voluntary use of the plan. At this stage, its use might therefore be largely limited to public authorities and depend on their time and ability to implement it.

6 Discussion and Conclusion

The aim of the research thesis was to identify the wolf situation in Austria and depict the political response to the carnivores' reappearance. Individual wolves have immigrated over the last decade. The number of sightings and damage suddenly increased in 2009 and 2010. Even though in 2011 only two wolves were detected, wildlife biologists expect a general positive trend (Rauer 2011). Moreover, a scientific model has confirmed the habitat suitability for wolves in Austria (Marucco 2011) and as the wolf can well adapt to new conditions it is expected to potentially find adequate territories. Consequently my first research question, will wolves encounter a suitable habitat favoring their future dispersal and settlement, can be confirmed. However, this is only based on the biology of the wolf. The return of the large carnivore is further a social question. Its permanent settlement will therefore also depend on if it will find a socially acceptable habitat.

This point leads to the second research question, aimed at identifying the social issues and expected conflicts within society. The reappearance of wolves has caused extremely polarized reactions among citizens. While many, particularly urban citizens, have welcomed the carnivore back and showed great enthusiasm, a part of the rural population has been noticeably reserved and negative toward its return. The reason for people's negative attitude is largely linked to their direct affectedness. Similar as in other countries, sheep and goat farmers in particular can suffer losses. Special for Austria however, are the problems hunters can potentially face. Due to the winter feeding sites of red deer and in some states the fencing of the ungulate over the winter, the presence of a wolf and particularly a pack can significantly interfere into this artificial system. Financial loss and emotional responses from hunters may cause considerable problems in the future. A further explanation for feelings of resentment and even fear of the wolf can be traced back to the lack of knowledge for the species. Stereotypes and sensational newspaper articles can then increase the non-acceptance and cause emotionally driven discussions.

Austria remained one of the last central European countries to formulate a national wolf management plan. Nonetheless, the merely recent appearance of several wolf individuals mainly explains why the wolf could not be politically addressed earlier. In respect to the first reappearance of multiple wolves in 2009, Austria did not take much longer than its neighboring countries in formulating a management policy. Subsequently, I had assumed wolf problems in society and an increase in the occurrence of damage to livestock would trigger a political action. However, the analysis with the MS framework has shown that even though focusing events were the main element to cause attention for the subject and a social problem was identified, a strong political reaction neither occurred on the national level nor in most states. The analysis of the agenda-setting process revealed that focusing events were only a part of further facilitating or impeding factors in the process. Several elements expedited stream coupling and hence agenda-setting, such as the problem definition, indicators, policy communities, technical feasibility, value acceptance and organized political forces. Yet, almost just as many factors were impeding for stream coupling. Especially financial constraints and the political mood or rather political unawareness were hindering in the process. Negative feedback from previous carnivore management measures and the anticipation of future constraints with such a policy could further be identified. On the national level, these factors were differently pronounced as the wolf presence and extent of damage also differed across the nation.

Overall, the issue became pressing at the local level, but decision makers on the political level did not perceive a strong enough need to act on the matter. Consequently the most important actors were, with one exception, mainly bottom-up actors. Many of these actors, such as conservationists, farmers, scientists and a few public officers, were strongly interested in creating a national plan of action. They were the driving forces for the development of a national wolf strategy. However, the needed and desired action from top-down actors was either insufficient or very limited. A stronger involvement of top-down actors would have been required to create the necessary attention leading to more political support for a management plan policy.

An exception to the lack of top-down actors was the policy entrepreneur vice governor Steixner. He has played a positive role in the process of agenda-setting as a strong entrepreneur with good availability to resources and access to the other decision makers. However, he only successfully coupled the streams for the implementation of herd protection measures and not for the entire wolf management plan. Nevertheless, his proposal caused national political awareness among high-ranking decision makers. For implementing wolf management measures in the future, this might be an important milestone.

Stream coupling also could not be successfully induced by public officers. Especially, as the small number of wolves did not cause a significant amount of damage, the public officers were not able to persuade decision makers of the urgency to act on the issue. Thus, I derived at the general conclusion that strong policy drivers are necessary, particularly on the higher political level, in order to achieve stream coupling which leads to the formulation of a policy with high chances for its future implementation. For the Austrian management plan formulation an interactive process produced a good and practicable policy. However, without the inclusion of the decision making level, the policy's appropriate and extensive implementation cannot be assured.

The fourth research question aimed at the elements within the wolf management plan and how these can be linked to the formulation process. The management plan addresses the most important elements of carnivore management, already proposed in the general European wolf action plan. These are damage assessment, compensation and prevention, education of staff, PR work and the implementation of a monitoring system (Boitani 2000). Overall, the plan aims at being a practicable and implementable policy. It focuses on aiding public officers in their two most important focal points, compensations payments and the identification and reaction to special situations. Yet the plan sometimes misses to give direct instructions needed for more successful wolf conservation, e.g. what the wolf's protection implies or a description of the type of compensation models.

The formulation of the plan roughly took a year in its completion. An appropriate timeframe for the creation of a consensus based policy. The formulation process was exemplary, especially considering that an extended range of stakeholders, experts and interest groups were continuously involved to ensure its acceptance. As the actors' views and opinions about wolf management diverge, most measures could only be written in the form of a general recommendation. Furthermore, the current dispute about the formulation of a strict ecological goal has not been completely resolved and could still lead to discussions in the future. Future constraints in the plans implementation are also expected due to its legally non-binding status. As every state can individually decide on what part of the plan of action it will implement, a nationally uniform implementation is uncertain. An examples is Carinthia, which momentarily emphasizes compensation payments, but is not prepared to finance herd protection measures (pers. Comm. State Rep. Ktn). Furthermore, by linking the two most important measures, i.e. herd protection methods and

compensation payments, problems could also arise as extra monetary resources and personnel would need to be deployed to successfully implement both measures. Nonetheless, these two areas are essential for effective wolf management, thus on the long run it is the right decision to combine them.

Similar to the agenda-setting process, the effective policy implementation can only be guaranteed when its necessity and use is recognized on the political level as well. As the necessary political attention was already minimal during the agenda-setting phase, it will probably continue to be difficult to gain political awareness for its complete implementation. The success of the Austria wolf management plan will depend on the extent to which decision makers are willing to proactively invest money and resources in order to be well prepared for the return of the wolf. On the whole, if the plan of action is appropriately implemented, it has the potential to ensure a conflict free, long-term co-existence between wolves and citizens.

Austria has a unique opportunity to prepare itself for the return of the wolf before the issue will become emotionally driven by media coverage and badly addressed situations. Currently the mood for the carnivore is generally positive. Austria should take advantage of this and prepare itself thoroughly and proactively. Herd protection methods represent one direction, which can minimize future wolf-human conflicts. Yet, a complete prevention of damage to livestock is not realistic and compensation payment schemes should be improved and ready for implementation. Momentarily, decision makers might not realize the need for these preparations, but when more wolves return or even settle in Austria, pro-activeness will be rewarded.

6.1 Reflecting Thoughts and Critique

Overall, Kingdon's MS framework applied quite well to the process in Austria, which is surprising considering the far different field of study which Kingdon based his approach on. By using the MS framework, I was able to understand and allocate the happenings of wolf management and identify different factors which facilitated and impeded agenda-setting. Its suitability to grasp the policy process originates from its dynamic and multilayered structure (Zahariadis 1999:74). Moreover, the framework helped explain why neither the issue could have been addressed nor a management plan formulated earlier. Secondly, the good applicability of the model probably can also be traced back to the overarching variables, the three streams, which are linked under further theoretical conditions, policy entrepreneurs and windows of opportunity. Kingdon does not predetermine what kinds of problems would most likely couple with a kind of policy, or what kind of a political condition directly favors agenda-setting. Instead he identified possible conditions of a problem, policy or political situation, which have proven to positively or negatively affect agenda-setting. This gives the model sufficient flexibility to be applied to various cases and countries.

The MS framework's further strength is the focus it places on actors, rather than on institutions (Zahariadis 2008). While an institution has to be installed to set a general framework, it is the actors within these institutions that determine and shape the happenings of the streams. In my case study, where particularly stakeholders, rather than whole institutions, have played a central role, this focus on actors was suitable.

One of the main criticisms of the MS framework is the assumption of the streams' independence (Rüb 2009: 363; Zahariadis 1999:80). The assumption, that a problem does not influence the type of policy or the politics stream seems to be over simplistic. I have found that the

streams can actually influence each other, e.g. the type of focusing events will influence the kind of policy proposed, while also influencing the national mood. Problems and policies are interlinked, as the policy aims at addressing the problem. Without the knowledge of a problem the policy cannot be formulated. The problem stream also influences the happenings in the politics stream. A national mood about the subject originates from the associated problems. These inter-linkages of the streams influence coupling, as the event becomes more strategic instead of fortuitous (Zahariadis 1999:80). Consequently the need for a policy window becomes secondary, as a planned event can also suffice for coupling.

The second limitation of the approach, is the uncertainty about complete stream coupling. Kingdon stated the “key to understanding agenda and policy change is [stream] coupling” (2003: 88). Even though the streams coupled, the result was not the favored management plan policy. Nonetheless, a management plan was drafted and will probably be implemented, at least in some states. Thus, stream coupling does not seem to be the key element in this case study. Instead, the depiction of the different streams and especially the policy community were more clarifying for the policy process and its understanding.

The depiction and analysis of case study was essentially only possible due to the methodological approach, the interviews. The policy process mainly took place on the authoritative level and written documentation was rare. By personally speaking to the experts, I was able to receive a direct insight to the process and their personal opinions. Moreover, interviews were a good instrument to gain in-depth and first-hand information from an otherwise non-public policy process. I was able to extract the information I needed and derive at concluding results. Furthermore, the process took place over the last three years and is still on-going. By focusing most questions on this short time-frame, the probability of the experts remembering exact details was high.

In contrast, the strong focus on interviews holds limitations as well. Primarily, each interview partner gives a subjective description of the past occurrences. I tried to go around this problem by interviewing a large number of experts from different fields. Moreover, the policy process was recognized differently in every state. Identifying the actual occurrences and their national applicability was not always easy. I was able to overcome these limitations through my analysis of the interviews in which I matched and compared all statements about a certain topic. More hindering however, was the difficulty in obtaining information from all relevant actors. While most experts were open to an interview, it was exceptionally difficult to contact the hunting group. Similarly, the planned survey for hunters also was not sent out due to lack of response. Fortunately, I was still able to contact the central hunting representative involved in the policy formulation process. Ultimately, some interview partners were hesitant in making too critical statements or were unsure about how much of the process they were allowed to depict. Officially, the management plan is still not public, which contributed to the uncertainty of some interview partners.

6.2 Future Research and Outlook

The case study has described the complex process of agenda-setting and policy formulation for a politically unpopular and under-perceived event. This process’ complexity was enhanced, due to the autonomy of each state over hunting and conservation legislations. A more detailed look at the different stand points and contributions from each of these states would give an even better insight into the mechanisms and factors shaping the agenda-setting and determining each states possibilities and need for the policy’s future implementation. For the scope of the thesis, this

stronger focus on each state would have been too large however, as I would have needed to contact and interview numerous more experts.

This thesis was the first study about the policy formulation process of a carnivore management plan. By applying the MS framework to other countries in which a carnivore management policy was established, stronger generalizations could be made and new theories deduced. In addition, this sort of research in other countries could also help identify if the agenda-setting and policy formulation in Austria was a special case. This would be of interest, as the process was strongly driven by bottom-up actors, while top-down actors were often missing. A comparison to a country with a top-down driving force, such as the federal council in Switzerland (BAFU 2008), could identify the similarities and differences in a top-down initiated process and highlight its significance.

This investigation of wolf management in Austria should be considered the primary step within a long policy process. Therefore, of greater interest for future research is the development of the process over the next years. Austria has managed to formulate a management policy in a commendable process, by involving all relevant actors and seeking their consensus. Still, the plan of action did not receive a great deal of political attention over the course of the process. Further research should aim at investigating how Austria can now accomplish the step of putting the formulated policy into practice. Again, a comparison with a country in which a legally-binding wolf concept is implemented, could give valuable information about success and factors leading to success. Austria has the opportunity to play a key role in wolf conservation. To what extent it will manage to meet this conservation responsibility depends on the political vigor over the coming years. The creation of a national wolf management plan is the first step to tackle this task.

References

Experts

Complete list of interview partners and further contacted experts (in alphabetical order)

Expert	Field & Occupation	Type of Contact	Date	In-Text Citation
Mag. Sonja Berger assigned by LH-Stv. Uwe Scheuch	State Gov't Carinthia Vice Governor	Written Communication	26.4.2012	State Rep. Ktn
Mag. Christopher Böck	Hunting Association Upper Austria Wildlife Ecologist	Telephone Conversation	23.2.2012	Hunting Association – Upper Austria (HA UA)
Dr. Heinrich Dungler	University of Salzburg	Telephone Conversation	14.2.2012	Univ. Slbg
Mag. Freydis Burgstaller- Gradenegger	Hunting Association Carinthia – Manager	Guideline based Interview (Telephone)	16.4.2012	HA Ktn
Ing. Alois Gansterer	Hunting Association Lower Austria - Education	Written Communication	7.2.2012	HA LA
Dr. Susanne Gyenge assigned by LR Dr. Stephan Pernkopf	State Gov't Lower Austria Governor	Written Communication	10.5.2012	State Rep. LA
Mag. Gundi Habenicht	State Gov't Salzburg Nature Conservation Dept.	Preliminary Telephone Conversation; Personal Guideline based Interview	21.2.2012 19.3.2012	State Gov. Slbg
Mag. Sandra Höbel assigned by LR Johann Seitinger	State Gov't Styria Governor	Written Communication	4.4.2012	State Rep. Styria
Georg Höllbacher	Austrian Federal Association for Sheep and Goats (ÖBSZ) - Head	Preliminary Telephone Conversation; Personal Guideline based Interview	17.2.2012 19.3.2012	ÖBSZ
Dr. Martin Janovsky	State Gov't Tyrol Veterinary Official/ Bear Manager	Preliminary Telephone Conversation; Guideline based Interview (Telephone)	6.2.2012 3.4.2012	State Gov. Tyrol
Ing. Heinz Jury	Sheep and Goat Association Carinthia Manager	Telephone Conversation	3.2.2012	SGA Ktn
Mag. Martin Längauer	Agricultural Chamber Austria	Written Communication	12.4.2012	Agr. Chamber Austria
Dr. Helmut Mülleider	State Gov't Upper Austria Agriculture and Forestry Dept.	Written Communication	20.2.2012	State Gov. UA

Josef Obwegger	Alpine Pasture Association Carinthia Head	Telephone Conversation	12.4.2012	APA Ktn
Mag. Cornelia Peter	State Gov't Vorarlberg Nature Conservation Dept.	Written Communication	20.2.2012	State Gov. VlbG
Christian Pichler	WWF Austria	Preliminary Telephone Conversation; Personal Guideline based Interview	1.2.2012 21.3.2012	WWF
Thomas Pietsch	Four Paws	Telephone Conversation	22.11.2011	Four Paws
Ing. Gerald Plattner	Austrian Federal Forests (ÖBf AG) Nature Conservation	Telephone Conversation	2.5.2012	ÖBf
Mag. Dr. Andreas Ranner	State Gov't Burgenland Nature Conservation Dept.	Written Communication	12.3.2012	State Gov. Bgld
Dr. Georg Rauer	Research Institute of Wildlife Ecology (FIWI) Bear lawyer	Preliminary Telephone Conversation; Personal Guideline based Interview	13.2.2012 20.3.2012	FIWI
Gabriela Sagris	State Gov't Styria Nature Conservation Dept.	Written Communication	14.3.2012	State Gov. Styria
DI Hubert Schatz	State Gov't Vorarlberg Wildlife Biologist	Telephone Conversation	23.2.2012	State Gov. VlbG
MMag. Renate Scherling	State Gov't Carinthia Hunting Dept. & Chairperson of the KOST	Guideline based Interview (Telephone)	2.4.2012	State Gov. Ktn
Paul Schreilechner	Alpine Pasture Association Salzburg Head	Telephone Conversation	30.4.2012	APA Slbg
LH-Stv. OR Anton Steixner	State Gov't Tirol Vice Governor	Telephone Conversation	4.5.2012	State Rep. Tyrol
Dr. Enrica Seltenhammer	Fed. Env. Ministry (BMLFUW) – Nature Conservation Dept.	Guideline based Interview (Telephone)	18.4.2012	BMLFUW
Klaus Tiefnig	State Gov't Styria Conservation and Hunting	Telephone Conversation	12.4.2012	State Gov. Styria
Friedrich Völk	Austrian Federal Forests (ÖBf AG) Hunting	Telephone Conversation	24.2.2012	ÖBf

Correspondents for the survey (10.02.2012)

Correspondent	Position	State
Birgit Lang	Manager	National – ÖBSZ
DI Tamara Hettlinger	Manager	Burgenland
Johann Hörth	Manager	Lower Austria
Krenn Volker	Manager	Upper Austria
DI Franz Horn	Manager	Salzburg
Michael Zeiler	Association Assistant, Breeding Manager	Styria
Johannes Fitsch	Manager	Tyrol
Thomas Fitsch	Manager	Vorarlberg

Note: The Manager of the association in Vienna did not reply. The Manager of the Association for Sheep and Goats of Carinthia, Heinz Jury, was contacted personally per telephone and is listed above.

Legislation Register

Bundes-Verfassungsgesetz (B-VG)

from 1. October 1920 (StGBI. Nr. 450, BGBl Nr. 1).

Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)

from 19. September 1979.

Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) from 21. May 1992 (92/43/EEC).

Gesetz mit dem das Wiener Naturschutzgesetz erlassen wird (Naturschutzgesetz Wien, Wr NschG)

from 31. August 1998 (LGBl. Nr. 45/1998).

Gesetz über das Jagdwesen im Land Salzburg (Salzburger Jagdgesetz, S JG)

from 29. March 1993 (LGBl. Nr. 100/1993).

Gesetz über das Jagdwesen (Vorarlberger Jagdgesetz, Vbg JG)

from 12. July 1988 (LGBl. Nr. 32/1988).

Gesetz über den Schutz der Natur und die Pflege der Landschaft (Steiermärkisches

Naturschutzgesetz, Stmk NschG) from 30. June 1976 (LGBl. Nr. 65/1976)

Gesetz über die Regelung des Jagdwesens im Burgenland (Burgenland Jagdgesetz, Bgld JG)

from 10. November 2004 (LGBl. Nr. 11/2005).

Gesetz über die Regelung des Jagdwesens (Oberösterreichisches Jagdgesetz, Oö JG)
from 3. April 1964 (LGBl. Nr. 32/1964).

Gesetz über die Regelung des Jagdwesens (Wiener Jagdgesetz, Wr JG)
from 19. December 1947 (LGBl Nr. 6/1948).

Gesetz über Naturschutz und Landschaftsentwicklung Vorarlberg (Naturschutzgesetz Vorarlberg, Vbg
NschG) from 4. March 1997 (LGBl. Nr. 22/1997).

Kärntner Jagdgesetz (Ktn JG)
from 5. May 2000 (LGBl. Nr. 21/2000).

Kundmachung der Landesregierung über die Wiederverlautbarung des Tiroler Naturschutzgesetzes
1997 (Tiroler Naturschutzgesetz, Tir NschG) from 12. April 2005 (LGBl.Nr. 26/2005).

Kundmachung der Landesregierung über die Wiederverlautbarung des Tiroler Jagdgesetzes 1983
(Tiroler Jagdgesetz, Tir JG) from 15. June 2004 (LGBl. Nr. 41/2004).

Niederösterreichisches Jagdgesetz (NÖ JG)
from 21. May 1974 (LGBl. Nr. 6500).

Oberösterreichische Schonzeitenverordnung (Oö SchonzVO)
from 16. August 2007 (LGBl. Nr. 72/2007).

Steiermärkisches Jagdgesetz (Stmk JG)
from 6. February 1986 (LGBl. Nr. 23/1986).

Verordnung der Landesregierung zur Durchführung des Gesetzes über Naturschutz und
Landschaftsentwicklung (Naturschutzverordnung Vorarlberg, Vbg NschVO)
from 24. June 1998 (LGBl. Nr. 8/1998).

Verordnung der Wiener Landesregierung über den Schutz wild wachsender Pflanzen- und frei
lebender Tierarten und deren Lebensräume sowie zur Bezeichnung von Biotoptypen (Wiener
Naturschutzverordnung, Wr NschVO) from 20. January 2000 (LGBl. Nr. 05/2000).

Verordnung der Landesregierung über das Jagdwesen (Vorarlberger Jagdverordnung, VlbG JVO)
from 17 May 1995 (LGBl.Nr. 24/1995).

Verordnung der Burgenländischen Landesregierung mit der Bestimmungen des Bgld. Jagdgesetzes
2004 ausgeführt werden (Bgld. Jagdverordnung, Bgld JVO)
from 21. February 2005 (LGBl.Nr. 23/2005).

Verordnung der Landesregierung zur Durchführung des Kärntner Jagdgesetzes 2000 (Kärntner
Durchführungsverordnung, Ktn DVO) from 23. May 2006 (LGBl Nr 32/2006)

Verordnung der Steiermärkischen Landesregierung über die Festsetzung der Jagdzeiten (Steirische
Jagdzeitenverordnung, Stmk Jagdzeiten VO) from 9. March 1987 (LGBl. Nr. 16/1987).

Verordnung der Landesregierung über geschützte Pflanzenarten, geschützte Tierarten und
geschützte Vogelarten (Tiroler Naturschutzverordnung, Tir NschVO)
from 18. April 2006 (LGBl. Nr. 39/2006).

Official Documents

- BAFU (2008) Konzept Wolf – Management Plan für den Wolf in der Schweiz. Bern. pp 16.
- Kärntner Almwirtschaftsverein (30.6.2011) Resolution Betreff: Schäden an landwirtschaftlichen Nutztieren auf Kärntens Almen durch Grossbeutegreifer.
Received on request by the Obmann Ing. Josef Obweger
- KOST - Länderübergreifende Koordinierungsstelle für Bärenfragen (2005) Managementplan Braunbär Österreich. Überarbeitete Version 2005, WWF Österreich, Wien, 53pp.
- KOST (2011) Wolfsmanagement in Österreich – Grundlagen und Empfehlungen. Entwurf 14.11.2011
- Land Kärnten (22.2.2011) Resolution. 40. Regierungssitzung am 22.2.2011. Klagenfurt.
- Land Tirol (10.8.2010) Proposal by LH-Stv ÖR Anton Steixner to Bundesminister Niki Berlakovich. Entwicklung von Präventionsmassnahmen zum Schutz von Weidevieh vor grossen Beutegreifern. Received on written request to the state ministry of Tyrol.
- Lebensministerium (26.3.2009) Letter by Bundesminister Nikolaus Berlakovich to Nationalrat Mag Barbara Prammer. Anfragebeantwortung 813/AB XXIV.GP.
- Stenographisches Protokoll (10.2.2011) 25. Sitzung des Kärntner Landtages: Ldtgs.Zl. 69-4/30: Dringlichkeitsantrag von Abgeordneten des ÖVP-Klubs betreffend rasche und unbürokratische Abgeltung beim Auftreten von Schadensfällen durch Wölfe, Luchse oder Bären an landwirtschaftlichen Nutztieren durch die Kärntner Landesregierung. pp 2782-2785.
- StMUGV 2007. Managementplan Wölfe in Bayern – Stufe 1. München. pp16.
- WWF (2011) WWF Positionspapier – Strategische Überlegungen zu Einwanderung von Wölfen nach Österreich.
- Fournier (2010) Revision von Artikel 22 der Berner Konvention (Motion - 10.3264) date of submission: 19.3.2010.

List of References

- Alparc (2009): I Fogli dell' Orso – Alparc's Large Carnivore Working Group Workshop. May 2009 Italy.
- Bath, A. J. and Majic A. (2001): Human dimensions in wolf management in Croatia: understanding attitudes and beliefs of residents in Gorski kotar, Lika, and Dalmatia toward wolves and wolf management. Report produced for the Large Carnivore Initiative for Europe (LCIE). Memorial University of Newfoundland, St. John's, Canada.
- Baumgartner, H., Gloor, S., Weber, J.M. and Dettling, P.A. (2011): *Der Wolf: Ein Raubtier in unserer Nähe*, Bern: Haupt Verlag.
- Behrens, M. (2002): "Quantitative und qualitative Methoden in der Politikfeldanalyse". In *Lehrbuch der Politikfeldanalyse*, eds. Schubert, K. and Bandelow, N.C. Oldenburg: Wissenschaftsverlag, 203-235.

- Binder, H. (1992): *Jagdrecht*, Wien: Springer Verlag.
- Blum, S. and Schubert, K. (2011): *Politikfeldanalyse* (2. Aufl.), Wiesbaden: VS Verlag.
- Boitani, L. (2000): Action Plan for the Conservation of Wolves in Europe (*Canis Lupus*). Nature and Environment Nr.113, Council of Europe.
- Breitenmoser, U. (1998): Large Predators in the Alps- The Fall and Rise of Mans Competitors. *Biological Conservation*, Vol. 83 No. 3, pp. 279-289.
- Breitenmoser-Würsten, C., Robin, K., Landry, J.M., Gloor, S., Olsson, P. and Breitenmoser, U.(2001): Die Geschichte von Fuchs, Luchs, Bartgeier, Wolf und Braunbär in der Schweiz – ein kurzer Überblick, *Snow Landsc. Res.*, Vol. 76, No. 1/2, pp. 9–21.
- Brunner, S. (2008): Understanding Policy Change: Multiple Streams and Emissions Trading in Germany, *Global Environmental Change*, Vol. 18 no. 3, pp.501-507.
- Bufka, L., Heurich, M., Engleder, T., Wöfl, M., Cervený, J. and Scherzinger, W. (2005): Wolf occurrence in the Czech-Bavarian-Austrian border region – review of the history and current status, *Silva Gabreta*, Vol. 11, No.1, pp 27-42.
- Bussmann, W., Klöti, U. and Knoepfel, P. (1997): *Einführung in die Politikevaluation*, Basel: Helbing & Lichtenhahn Verlag.
- Ciucci, P., Reggioni, W., Maiorani, L. and Biotoni, L. (2009): Long-Distance Dispersal of a Rescued Wolf From the Northern Apennines to the Western Alps, *Journal of Wildlife Management*, Vol. 73, No.8, pp 1300-1306.
- Dinnebier and Zeitlinger (2011) "Entschädigungsmodell für Beutegreiferschäden präsentiert," *Pressemitteilung Land Kärnten*, 4 May, 2011, http://www.ktn.gv.at/27987p_DE-ktn.gv.at?newsid=17010 (accessed 15.2.2012).
- Dungler, H. (2006): Öffentliche Vorsorge im grenzüberschreitenden Artenschutz- Rahmenbedingungen für ein mögliches Auftreten des Wolfes (*Canis lupus*) in Österreich. Report: 1-35. Im Auftrag des Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft.
- Dungler, H. (2009): Wolfsprojekt Österreich – Ein Beispiel für Zustand und Perspektive Grosser Raubtiere im Alpenraum. In *Grosse Beutegreifer in den Alpen und Karpaten*, ed. Alparc. Chambéry, France.
- Enserink, M. and Vogel, G. (2006): The Carnivore Comeback. *Science*, Vol. 314 pp. 746-749.
- Gerzabek, R. (2010) "Gemeinsame Wolfsstrategie wird geprüft," *Medienmitteilung Tirol*, 3 December, 2010, http://www.tirol.gv.at/presse/meldungen/meldung/artikel/gemeinsame-wolfsstrategie-wird-geprueft/?no_cache=1&cHash=e090dca5d3c70560e137b079c9eaf382 (accessed 1.2.2012)
- Gläser, J. and Laudel, G. (2004): *Experteninterviews und qualitative Inhaltsanalyse*. Wiesbaden: VS Verlag.

- Habenicht, G. (2005): Die Rückkehr des Wolfes (*Canis lupus*) nach Österreich. Universität für Bodenkultur Wien, Diplomarbeit, Wien.
- Henstra, D. (2010): Explaining local policy choices: A multiple streams analysis of municipal emergency management, *Can. Public Admin.*, Vol. 53, No.2, pp241-258.
- Hofrichter, R. (2005): *Die Rückkehr der Wildtiere - Wolf, Geier, Elch & Co.*, Graz – Stuttgart: Leopold Stocker Verlag.
- Howlett, M., Ramesh, M. and Perl, A. (2009): *Studying Public Policy – Policy cycles and policy subsystems*, USA: Oxford University Press.
- Jann, W. and Wegrich, K. (2002): "Phasenmodelle und Politikprozesse: Der Policy Cycle". In *Lehrbuch der Politikfeldanalyse*, eds. Schubert, K. and Bandelow, N.C. Oldenburg: Wissenschaftsverlag, 71-104.
- Jury, H. (2011) "Rückkehr der Raubtiere: Zahlreiche Standpunkte," *Pressemeldung Landwirtschaftskammer Kärnten*, 22 June, 2011, <http://www.lk-kaernten.at/?id=2500%2C1613465%2C%2C%2CbnBmX3NldF9wb3NbaGl0c109NQ%3D%3D> (accessed 19.1.2012)
- Karlsson, J. and M. Sjostrom (2007): Human attitudes towards wolves, a matter of distance, *Biological Conservation*, Vol. 137 No.4, pp 610-616.
- Kazcensky, P. (2006): *Medienpräsenz- und Akzeptanzstudie ,Wölfe in Deutschland'*. Im Auftrag des Staatlichen Museums für Naturkunde, Görlitz.
- Kazcensky, P., Kluth, G., Knauer, F., Rauer, G., Reinhardt, I., and Wotschikowsky, G. (2009): *Monitoring von Grossraubtieren in Deutschland*. BfN, Bonn, pp 89.
- Kingdon, J.W. (2003): *Agendas, Alternatives, and Public Policies*, New York: Longman.
- Knoepfel, P., Larrue, C. and Hill, M. (2007): *Public Policy Analyses*, Bristol: The Policy Press.
- KORA/LCIE (2007): "Wolf Online Information System for Europe." <http://www.kora.ch/sp-ois/wolf-ois/index.htm>, accessed 10.3.2012.
- Kromrey, H. (2000): *Empirische Sozialforschung* (9.Auflage), Opladen: Verlag Leske + Budrich.
- Kutal M. and Rigg R. (2008): Perspectives of wolves in Central Europe: Proceedings from the conference held on 9th April 2008 in Malenovice, Beskydy Mts., Czech Republic. Hnutí DUHA Olomouc.
- Land und Forst Betriebe Österreich (n.d.): "Unternehmen Wachstum." <http://www.landforstbetriebe.at/content.php?p=73>, accessed 2.5.2012.
- Linnell J., V. Salvatori and L. Boitani (2007): *Guidelines for population level management plans for large carnivores in Europe*. A Large Carnivore Initiative for Europe report prepared for the European Commission. Final draft May 2007.

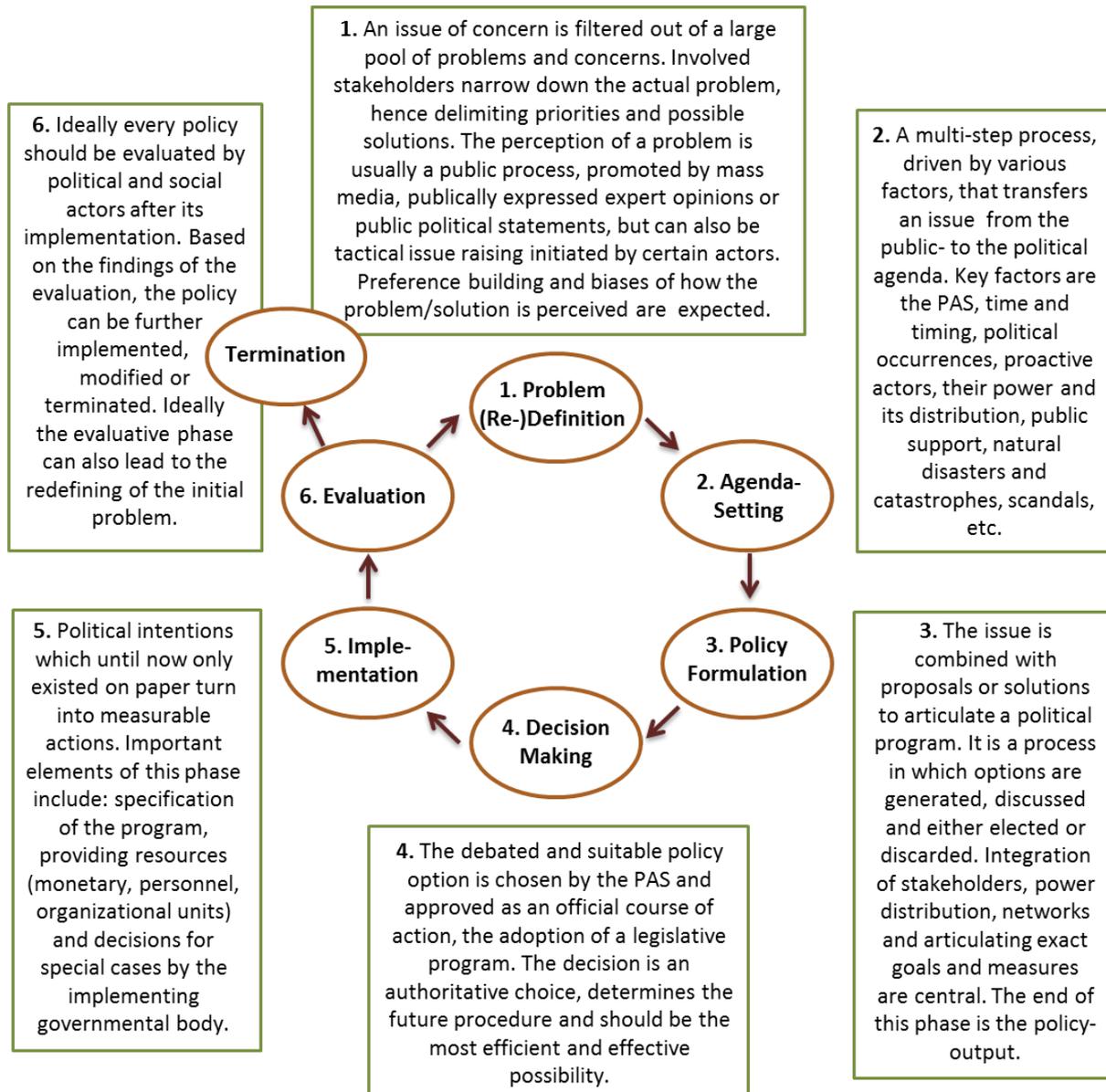
- Linnell J., V. Salvatori and L. Boitani (2008): *Guidelines for population level management plans for large carnivores in Europe*. A Large Carnivore Initiative for Europe report prepared for the European Commission. Final draft July 2008.
- LJV (n.d.): "Jagd in Österreich." http://www.ljv.at/jagd_jagd.htm, accessed 15.4.2012.
- Machado, A. (1997): *Guidelines for actions plans for animal species: planning recovery*. Nature and Environment Report, No 92. Council of Europe Publishing.
- Majic-Skrbinsek, A. and Bath, A. J. (2005): *Attitudes of rural and urban public toward Wolves in Croatia. Zagreb*, State Institute for Nature Protection, Final Report.
- Marucco, F. (2011): *Distribution, Habitat Suitability, and Connectivity of Wolves (Canis lupus) in the Alps*. Umweltbundesamt Österreich, Austria.
- Mech, L.D. and Boitani, L. (2010): "Canis lupus." In IUCN 2011. *IUCN Red List of Threatened Species*. Version 2011.2. www.iucnredlist.org. accessed 29 April 2012.
- Meriggi, A. and Lovari, S. (1996): A review of wolf predation in southern Europe: does the wolf prefer wild prey to livestock. *Journal of Applied Ecology*, Vol. 33, No. 6, pp. 1561-1571.
- Meuser, M. and Nagel, U. (1991): "ExpertInneninterviews - vielfach erprobt, wenig bedacht. Ein Beitrag zur Methodendiskussion". In *Qualitativ-empirische Sozialforschung. Konzepte, Methoden, Analysen*, eds. Garz, D. and Kraimer, K. Opladen: Westdeutscher Verlag, 441-471.
- Mieg, H.A. and Näf, M. (2005): *Experteninterviews (2. Aufl.)*. Institut für Mensch-Umwelt-Systeme (HES), ETH Zürich.
- N.N. (2009a) "Freilebende Wölfe nach Tirol zurückgekehrt," *ORF.at*, 27 November, 2009, <http://tirv1.orf.at/stories/406196> (accessed 6.4.2012).
- N.N. (2009b) "Erster Wolf in Österreich entdeckt" *Welt Online*, 1 May, 2009, <http://www.welt.de/vermishtes/article3659899/Erster-Wolf-in-Oesterreich-entdeckt.html> (accessed 1.2.2012).
- N.N. (2010c) "Tirol: Wildernder Wolf reißt mehrere Schafe," *Die Presse*, 10 August, 2010, http://diepresse.com/home/panorama/oesterreich/586626/Tirol_Wildernder-Wolf-reisst-mehrere-Schafe (accessed 6.2.2012).
- N.N. (2010d) "Karawanken-Wolf riss mehrere Schafe". *Kleine Zeitung*, 30 September, 2010, <http://www.kleinezeitung.at/kaernten/klagenfurtland/2499700/karawanken-wolf-riss-mehrere-schafe.story> (accessed 1.2.2012).
- Novak, P. (2009) "In Gurktaler Alpen "tanzt" der Wolf," *Kleine Zeitung*, 6 May 2009, <http://www.kleinezeitung.at/kaernten/sanktveit/gloednitz/1950530/index.do> (accessed 6.2.2012).
- ÖBSZ (2010): Fact-Sheet. Graz.

- ÖBSZ (2011): Jahresbericht 2010. Herausgeber: Österreichischer Bundesverband für Schafe und Ziegen, 1-52.
- ÖBf and WWF (2012): Aktiv für Grosse Beutegreifer – Bär, Luchs, Wolf. Melk, Österreich. pp. 1-32.
- Österreichische Bären-Eingreiftruppe (2006): *JJ1 „Bruno“ in Tirol, Vorarlberg und Bayern 2006*, Protokoll und Beurteilung der Ereignisse, Wien, pp. 1-23.
- Özkan, D. (2010) “Immer mehr Wölfe kommen nach Österreich,” *Die Presse*, 28 October, 2010, <http://diepresse.com/text/home/panorama/oesterreich/605969> (accessed 6.2.2012).
- Pavlik, M. (2009): “Grosse Beutegreifer in den Alpen.“ In *Grosse Beutegreifer in den Alpen und Karpaten*. Ed. Alparc, Chambéry, France.
- Preiss, S. (2010) “Wölfe hinterlassen ihre Spuren im Hartberg,” *Kleine Zeitung*, 29 January, 2010, <http://www.kleinezeitung.at/steiermark/hartberg/2280724/woelfe-hinterlassen-spuren.story> (accessed 4.2.2012).
- Rauer, G., Laass, J. and Striebel, B. (2005): *Der Braunbär in Österreich III. Aktueller Status, Lebensraum und Strategien für die Zukunft*. Report, Umweltbundesamt, Wien, pp. 1-65.
- Rauer, G. (2010): *Bär-Wolf-Luchs in Österreich, Aktuelle Situation und Ausblick*. Powerpoint presented 29.1.2010 at Symposium “Rückkehr der großen Beutegreifer in den Alpenraum”, available online 27.9.2011.
- Rauer, G. (2011): *Der Wolf in Österreich – Rückeroberung eines Lebensraums und mögliche Auswirkungen*. Powerpoint presented 25.2.2011 at Seminar Forstliche Ausbildungsstätte Pichl, available online 27.9.2011.
- Reinhardt, I. and Kluth, G. (2007): *Leben mit Wölfen Leitfaden für den Umgang mit einer konflikträchtigen Tierart in Deutschland*. Report BfN: Bonn, 1-181.
- Rosen, T. and Bath, A. (2009): Transboundary management of large carnivores in Europe: from incident to opportunity. *Conservation Letters*, Vol 2, pp. 109–114.
- Rüb, F.W. (2009): “Multiple-Streams-Ansatz: Grundlagen, Probleme und Kritik.“ In *Lehrbuch der Politikfeldanalyse*, eds. Schubert, K. and Bandelow, N.C. Oldenburg: Wissenschaftsverlag, 348-376.
- Salvatori, V. and Linnell, J. (2005): *Report on the conservation status and threats for wolf (Canis lupus) in Europe*. Report for 25th meeting of Standing Committee in Strasbourg, 28 November-1 December 2005, Bern Convention.
- Schaschl, E. (2011): “Wolfsrisse sorgen für Unmut bei den Bauern,” *Pressemeldung Landwirtschaftskammer Kärnten*. 3. Februar, 2011, <http://www.lk-kaernten.at/?+Wolfsrisse+sorgen+fuer+Unmut+bei+den+Bauern+&id=2500%2C1579766%2C%2C%2Cc2V0PTE0> (accessed 8.2.2012)
- SpEA (2007): *Der Bergsport in Österreich*. Im Auftrag vom Bundeskanzleramt – Sport. Wien.

- Statistik Austria (2008): Land- und forstwirtschaftliche Betriebe und deren Gesamtfläche 1990, 1995, 1999, 2005 und 2007. http://www.statistik.at/web_de/statistiken/land_und_forstwirtschaft/agrarstruktur_flaechen_ertraege/betriebsstruktur/022961.html, accessed 15.4.2012
- Statistik Austria (2011a): Österreichischer Zahlenspiegel – 2011 Jahresausgabe. Statistik Austria, Wien.
- Statistik Austria (2011b): Statistik der Landwirtschaft – 2010. Statistik Austria, Wien.
- Statistik Austria (2011c): Jagdschutzorgane und Jagdkarten 2010/2011. accessed 15.4.2012: http://www.statistik.at/web_de/statistiken/land_und_forstwirtschaft/viehbestand_tierische_erzeugung/jagd/020316.html
- Statistik Austria 2012: Die volkswirtschaftliche Bedeutung der direkten Effekte des Tourismus in Österreich 2000 bis 2011. Accessed 1.5.2012: http://www.statistik.at/web_de/statistiken/tourismus/tourismus-satellitenkonto/wertschoepfung/019850.html
- Strasser, V. and Proschek, M. (2004): *Die rechtliche Situation von Bär, Luchs und Wolf in Österreich. Rechtliche Bestimmungen der Bundesländer, des Bundes, der Europäischen Union, sowie internationale Abkommen*, Report, Wien: WWF Österreich, pp 1-136.
- Talos, E. (2000): *Das politische System in Österreich*, Wien: Bundespressdienst, pp. 1-36.
- Trouwborst, A. (2010): Managing the Carnivore Comeback: International and EU Species Protection Law and the Return of Lynx, Wolf and Bear to Western Europe, *Journal Env. Law*, Vol. 22 No.3, pp. 347-372.
- Wagner, C., Holzapfel, M., Kluth, G., Reinhardt, I. and Ansorge, H. (2012): Wolf (*Canis lupus*) feeding habits during the first eight years of its occurrence in Germany. *Mammal. Bio.* Vol.77, No.3, pp. 196-203.
- Wechselberger, M. and Leizinger, D. (2005): *Die Akzeptanz von Bär, Wolf und Luchs in Österreich*, Report, WWF Austria and Institut für Wildbiologie und Jagdwirtschaft (IWJ), pp. 1-42.
- Zahariadis, N. (1999): "Ambiguity, Time and Multiple Streams." In *Theories of the Policy Process*, ed. Sabatier, P.A. Boulder: Westview Press, 73-96.
- Zahariadis, N. (2003): *Ambiguity and Choice in Public Policy – Political Decision Making in Modern Democracies*. Washington D.C.: Georgetown University Press.
- Zahariadis, N. (2008): Ambiguity and choice in European public policy. *Journal of European Public Policy* Vol. 15, No.4, pp. 514-530.
- Zedrosser, A. (1996): *Der Wolf (Canis lupus) in Österreich. Historische Entwicklung und Zukunftsaussichten*. Studie 25, Forschungsinstitut WWF Österreich, pp. 1-38.
- Zimmermann, W. (1994): Neue Instrumente braucht das Land? *Umweltrecht in der Praxis*. Zürich 2:237-263.

Appendix

1 - The Policy Cycle



Source: Own compilation based on Blum & Schubert 2011:104-130; Howlett et al. 2009:92-104; Jann & Wegrich 2009:71-96

2 – General Interview Guideline

Interview Leitfaden

Das Interview wird ca. 1 Stunde dauern, ich danke Ihnen im Voraus schon mal für Ihre Zeit. Ich würde gerne das Interview mit einem Rekorder aufnehmen, ist das in Ordnung für Sie? Haben Sie noch irgendwelche Fragen zum Ablauf, bevor es los geht?

Fragen zur Person

- Was genau ist Ihre Aufgabe im Bereich ...
- In wie fern haben Sie dadurch mit dem Thema Wolf zu tun?
- Wie sehen Sie die Arbeit der (eigene Institution) in Richtung Wolf?

Die Rückkehr der Wölfe nach Österreich

1. Wie würden Sie die Rückkehr des Wolfes beschreiben, bezogen auf die und die Medien?
2. Stimmung und Akzeptanz
 - Wie würden Sie die Stimmung bezüglich des Wolfes derzeitig beschreiben, und im Vergleich über die letzten 5 Jahre?
 - In wie fern ist die Rückkehr des Wolfes problematisch? (Lebensraum, Nahrungsangebot, Akzeptanz, Wolfsschäden, etc.)
 - Wo sehen Sie die grössten Konfliktpunkte wenn Wölfe vermehrt nach Österreich zurück kehren und von wem gehen diese aus?

Der Wolf Managementplan

1. Was sind die wichtigsten Elemente des Managementplanes? Generell und für Sie (ihrer Institution)?
 - Ist speziell ein stärkerer Fokus auf den Herdenschutz gelegt worden? (im Bezug auf die Konferenz in Wieselburg und der Antrag von LHStv Steixner)
 - Wie wichtig ist es für die Bundesländer, dass dieser Plan nicht gesetzlich Bindend ist?
2. Ziele
 - Was sind die Ziele des Managementplanes? Wie konkret ausformuliert sind diese? Was verstehen Sie darunter?
 - Gibt es einen Grund, warum diese Ziele eher generell gehalten wurden?
 - Für den Braunbären, wollte man die Lebensräume der verschiedenen Populationen vernetzen. Was wurde dafür getan, und gibt es eine bestehende Infrastruktur von Schutzgebieten, von dem jetzt auch der Wolf profitieren könnte?
 - In wie fern wird die Rudelbildung erwünscht und unterstützt? Gibt es dafür Hinweise im Plan?
3. Evaluative Elemente
 - Wird es eine Art Evaluation geben, bzw. ist dies im Projekt/ Plan mit vorgesehen? Wie sind die Chancen, dass es dann auch wirklich eine Evaluierung gibt?

- Kann ein funktionierendes Monitoring etwas über die Erreichung des Schutzes vom Wolf aussagen?
 - Erläutert der Plan, wie ein konfliktfreies Zusammenleben von Wolf und Mensch, erfasst werden kann?
 - Wie kann man feststellen, dass die Ziele des Managementplanes erreicht wurden?
4. Operative Elemente – Instrumente und Massnahmen für das Management
- Was sind Ihrer Meinung nach die wichtigsten Massnahmen des Managementplans?
 - Herdenschutz – Welche konkreten Massnahmen, werden für Österreich relevant sein? Die grosse Frage hier ist die Finanzierung und wie man die Politiker davon überzeugt. Wie viel Eigeninitiative ist von den einzelnen Schafbauern gefragt? Die Beratungsstelle soll national agieren, wird sie dementsprechend auch finanziert?
 - Kompensationszahlungen - in wie fern werden Zahlungen an Herdenschutz-Bedingungen gekoppelt sein? Im Plan wird nicht erwähnt, wie schnell ein Wolfsriss gemeldet werden muss, wie ist hier die Regelung?
 - Wie funktioniert die Öffentlichkeitsarbeit? Wird diese Koordiniert? Im Plan steht, es wäre notwendig eine Website zu etablieren, was steht dieser im Weg/ Probleme?
 - Für den Bär sollten die Bärenanwälte die meiste Öffentlichkeitsarbeit tragen, ist dies geschehen? Realistisch?
 - Abschuss - Wer kann einen Wolf zum Abschuss freigeben? Wie wird dies alles geprüft? Wer ist dann Verantwortlich um den Wolf abzuschliessen? Der Abschuss kann bei Betroffenen zu einer höheren Akzeptanz führen, jedoch in der breiten Bevölkerung ist dies wahrscheinlich nicht beliebt, wie hat man einen Mittelweg gefunden?
5. Behördenarrangement und finanzielle Mittel
- Wie ist das Personelle Arrangement nachdem der Plan in Kraft tritt? In wie weit sind die Behörden mit involviert? Der Plan wird von Behörden umgesetzt, braucht die Umsetzung des Planes jedoch auch weitere personelle Unterstützung? (externe Experten, etc.)
 - Der Plan beschreibt oftmals gezielt, wo Leistungen finanziert werden sollen (Schadensbegutachter, Herdenschutz, Präventionsberater, Eingreifteam, Entschädigungszahlungen, Öffentlichkeitsarbeit). Über welche Summen sprechen wir hier? Von wem wird dies finanziert?
 - Stehen weitere finanzielle Mittel zur Verfügung?
 - Wie hat sich die Frage der Finanzierung auf die Erstellung des Planes ausgewirkt?
 - Wie unterstützt der Bund die Umsetzung des Planes? Dies kann auch indirekt sein (zB Finanzierung von bestimmten Stellen, personelle Unterstützung)
6. Prozedurale Elemente
- Wie gut funktioniert die Kommunikation unter den verschiedenen zuständigen Behörden, bzw. Beauftragten? Ist das streng geregelt? Offiziell? Transparent?
 - Wie effektiv ist die Rollenverteilung bei verschiedenen Zuständigkeiten? (Schadensbegutachter, Präventionsberater, Wolfsbeauftragter, etc.)

7. Kohärenz

- Sehen Sie Widersprüche im Management Plan? Wie schlüssig ist der Plan in sich selbst und dann das Behörden Arrangement um den Plan umzusetzen?
- Was waren beim Bären Managementplan die grössten Probleme, die man versucht im Wolf Managementplan zu verbessern?

8. Einstellung vom eigenen Bundesland zum Plan

- Sind Sie zufrieden mit dem Plan? Ist die Meinung ihres BL genug vertreten?
- Wird ihr BL den Plan umsetzen?
- Was hätten sie noch gerne darin gesehen oder ist etwas überflüssig?

Vor dem Managementplan

1. Erstellung eines Planes

- Wann haben Sie das erste Mal davon gehört, dass ein Wolf Managementplan gebraucht wird?
- Wer hatte dies propagiert und wie haben Sie davon gehört?
- Wann hat die KOST entschlossen sich mit dem Wolf intensiver zu beschäftigen und angefangen einen Plan zu formulieren?
- Wie wichtig ist dabei der Bären Managementplan, bzw. das Thema Bär überhaupt?

2. Involvierte Politik – Wie wurde das Thema Wolf von Politikern aufgefasst?

- Wann und wie wurde das Thema Wolf das erste Mal von der Politik aufgefasst?
- Wurde das Thema Wolf lange von Politikern ignoriert (nicht auf die Agenda gesetzt)?
- Was war die Aufgabe des Bundes? Was hat der Bund konkret gemacht?
- Gab es bestimmte Organisationen oder Institutionen, die sich an Politiker gewendet haben um das Thema Wolf auf die politische Agenda zu bekommen?
- Falls ja, wie sieht deren Arbeit aus und wie sind sie organisiert?
- Wie sind sie in der Bevölkerung vertreten? Und wie würden Sie deren politischen Einfluss einschätzen?

3. Weitere Faktoren

- Fokussierendes Ereignis - Sie erinnern sich vielleicht an das Jahr 1994, in welchem der Bär zum Problem wurde und daraufhin ein Plan gemacht wurde? Gab es dies auch beim Wolf? (vor Dezember 2010)
- Wurde der Bären Managementplan als Erfolg oder Misserfolg empfunden? Es sind viele der gleichen Akteure beim Wolf Management vorhanden, wie beim Bär, in wie fern hat dieser Plan Einfluss auf die Erstellung des Wolf Plans?
- Wie sah die politische Agenda aus, als die ersten Akteure ein Wolfsmanagement verlangten? War es eine aussergewöhnliche Zeit, in der es schwierig war für grosse Beutegreifer politisch erhört zu bekommen?
- Gab es Indikatoren (zB. Statistiken über die Ausgaben für den Wolf, Nutztierrisse, Wolfs-sichtung, oder eine wissenschaftliche Studie) die auf Wolfsrückkehr und damit Problematik deutete? Wer erfasst diese und wer wertet sie aus?
- Falls Indikatoren vorhanden, wie wichtig sind diese gewesen, um die Entscheidung zu einem Management zu beschliessen?

Politischer Beschluss einen Managementplan zu erstellen

1. Landesagrarräte Konferenz in Wieselburg Dezember 2010
 - Können Sie sich noch daran erinnern, wann politisch beschlossen wurde einen Wolfs Managementplan zu erstellen?
 - Wie würden Sie beschreiben, ist es zu dieser Entscheidung gekommen? (Und in wie fern kann man dies auf die Arbeit von LHStv Anton Steixner zurück führen?)
 - Was waren seine Motive?
 - Gab es noch andere Lösungen für die Wolfsproblematik?
 - Wer musste zustimmen, damit ein Plan überhaupt in einem offiziellen Prozess erstellt wird?

2. „Politische Unternehmer“
 - Wer hatte aktiv beigetragen um Entscheidungsträgern das Wolfsproblem so zu erklären, dass sie eine Handlungsnotwendigkeit erkennen konnten?
 - LHStv Steixner - was für Ressourcen standen ihm zur Verfügung und wie konnte er mit der nationalen Ebene Kontakt aufnehmen?
 - Von der Seite des Herrn LHStv Steixner wurde nur eine Massnahme zum Herdenschutz gefordert, während der Plan ja für das Management generell gilt. Gab es hier Diskrepanzen in der Vorstellung was benötigt wurde?
 - Gab es noch weitere regionale Politiker, die sich dafür einsetzten, dass mein ein Wolfs Konzept erstellen sollte?
 - Was waren deren Motive und Motivation?

3. Wie war die Stimmung für die Erstellung eines Planes ?

Ablauf der Ereignisse während der Plan erstellt wurde

1. Der offizielle Prozess – Können Sie beschreiben, wie der Plan gemacht wurde?
 - Welche Akteure waren dabei?
 - Wie wurden alle Interessensfelder, bzw. betroffenen mit einbezogen? (Falls diese überhaupt miteinbezogen wurden)
 - Wie sah die Interaktion der verschiedenen Akteure aus?
 - Wie wurde Wissen von Experten und Vorstellungen anderer Stakeholder in den Plan integriert und was waren Schlüsselpunkte?
 - Wie lange hatte es gedauert, bis ein vorläufiger Plan erstellt wurde? Und was wurde mit diesem ersten Entwurf gemacht?
 - Gab es Einschränkungen oder Rahmenbedingungen, die eingehalten werden mussten?
 - Wie verliefen die letzten Verhandlungen über den Inhalt des Planes und seine Umsetzung?
 - Wie wird der Plan von politischer Seite her anerkannt?
 - Gibt es Bundesländer die den Plan nicht umsetzen oder anerkennen werden?
 - Wann und wie wurde über die Finanzierung gesprochen?

- Wie war der Dialog in dieser Zeit (besonders geht es hier um das Jahr 2011). Gab es ausser den KOST Sitzungen noch andere Treffen von wichtigen Akteuren? zB. Auch um dann danach zur KOST heranzutreten, um noch andere Ideen mit einzubeziehen?
- Konnte der Bund sich einbringen? Personal, Finanzen, weitere Mittel?
- Haben sich die Akteure zwischen der Agenda Setting Phase (also vor Dez. 2010) und in der Policy Formulation Phase (nach Dez. 2010 bis jetzt) verändert? Welche kamen neu hinzu und welche haben das Interesse verloren?
- Wie läuft die Konsolidierungsphase ab? Wer muss am Ende entscheiden, ob der erstellte Plan zufriedenstellend ist, und wie einigt man sich bei Streitpunkten? Auf was basierten diese Entscheidungen?

2. Hindernisse

- Was waren die grössten Hindernisse bei der Erstellung des Planes und bei der Fertigstellung?
- Was sind die grössten Schwierigkeiten? Bezogen auf Verschiedenes, zB. Kommunikation, Zusammenarbeit, Finanzierung, Umsetzung des Planes, etc.
- Was wurde am meisten bei der ersten Fassung des Planes kritisiert? Wieso? Wie wurde es geändert?
- Es gab sicherlich nicht immer Einigkeit zwischen den Akteuren, wer waren diese und wie wurde dann verhandelt? Und wie wurde letztlich ein Entschluss gefasst?
- Wie lange haben diese verschiedenen Phasen (Erstellung, Einbezug der Interessen, und Konsolidierung, Fertigstellung und *Veröffentlichung*) gedauert? Ist dies zu lang, genau recht, oder zu kurz?

Ausblick

1. Möchten Sie noch etwas ergänzen, was ich noch nicht angesprochen habe?
2. Was wird sich für Sie, bzw. ihrer Institution, durch den Plan ändern?
3. Wie wirksam schätzen Sie den Plan ein und was erhoffen Sie sich in der Zukunft?

Vielen Dank für Ihre Zeit, möchten Sie noch gerne etwas von mir wissen?

3 - Survey for Sheep and Goat Association Managers

1. Bitte beschreiben Sie kurz, was Ihre Arbeit beim Schaf- und Ziegenzucht Verband genau beinhaltet. Da diese Umfrage vom Umfrage-Programm anonymisiert wird, nennen Sie bitte auch ihr Bundesland.

2. Wie würden Sie die Rückkehr des Wolfes nach Österreich beschreiben?

(Sie können mehrere Antworten ankreuzen)

Die Rückkehr des Wolfes ist mir unbekannt

- Hin und wieder habe ich von Wölfen in Österreich gehört
- Unproblematisch
- Starke Präsenz in den Medien
- Problematisch
- Mir sind Fälle von Wolfsschäden bekannt
- Ich habe persönliche Erfahrungen mit einem Wolf gemacht (Schafe verloren, Risse aufgenommen, etc.)

Falls Sie die Rückkehr des Wolfes als Problematisch erachten, oder weitere Kommentare haben, erläutern Sie diese bitte:

3. Wie werden Entschädigungen bei Verlusten durch grosse Beutegreifer geregelt?

Nennen Sie bitte auch wer dafür Zuständig ist.

4. In wie weit funktioniert dieses Entschädigungssystem in der Praxis?

- Gar nicht
- Schlecht
- Mittelmäßig
- Gut
- Sehr gut
- Weiß nicht

Weitere Bemerkungen:

5. Gibt es spezielle Massnahmen für den Herdenschutz?

- Ja
- Nein

Falls ja, beschreiben Sie diese bitte

6. Wann und wie haben Sie das erste Mal von der Notwendigkeit eines nationalen Managementplans für den Wolf gehört?

7. In wie weit wurde der Landwirtschaftssektor in die Erstellung des Planes involviert?

- Gar nicht
- Schlecht
- Mittelmäßig
- Gut
- Sehr gut
- Weiß nicht

Weitere Bemerkungen:

8. Was ändert sich für die Schaf- und Ziegenzucht durch den nationalen Managementplan?

9. Welche ökonomische Bedeutung hat die Schaf- und Ziegenhaltung für den Grossteil der Landwirte?

- Haupteinkommensquelle
- Teileinkommensquelle
- Keine signifikante Einkommensquelle

Weitere Bemerkungen:

10. Wie würden Sie den politischen Einfluss des Schaf- und Ziegenzucht Verbandes einschätzen?

- Keinen Einfluss
- Gering
- Mittelmässig
- Hoch
- Sehr Hoch
- Weiß nicht

Weitere Bemerkungen