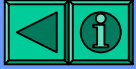


# Small Ruminants versus Large Carnivores in the Alps

Veronika Nowak, manager ÖBSZ

Georg Höllbacher, chairman





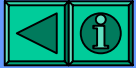
## Introduction

**transnational Federation of sheep and goat breeders in the alps**

**members: Austria, Italy, Bavaria, Slovenia**

**same problems – same solutions?**





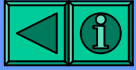
## Numbers of heads in the alpine space area

	Anzahl (2005)			Δ 2000 (%)		
	Rinder	Schafe	Ziegen	Rinder	Schafe	Ziegen
French A.S.A.	1.814.069	1.427.377	195.200	- 5,5	- 1,9	- 0,2
German A.S.A.	2.579.179	319.860	17.068	- 6,3	- 0,6	10,4
Switzerland	1.554.696	446.350	73.970	- 2,1	6,1	18,4
Liechtenstein	5.473	3.149	286	8,3	-5,1	19,7
Italian A. S. A.	3.525.400	257.448	134.906	- 4,8	- 13,5	- 8,9
Austria*	2.010.680	325.728	55.100	- 6,5	- 4,2	7,8
Slovenia	452.517	129.352	25.480	- 8,3	34,4	15,6
Gesamter Alpenraum	11.942.014	2.909.064	502.010	- 5,3	- 0,7	1,4

Quellen: Ministère de l'agriculture et de la pêche (AGRESTE), Ministerium für Ernährung und Ländlichen Raum Baden Württemberg, Bayerische Landesanstalt für Landwirtschaft, Swiss Federal Statistical Office, ISTAT, Landesverwaltung Liechtenstein, Statistik Austria, Statisticni Urad Republike Slovenije

\* Das Δ für Österreich wurde auf Basis des Jahres 2005 aus der "Agrarstruktur Vollerhebung 1999" hochgerechnet.



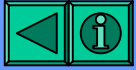


# Small ruminants in the alps

- using highest altitudes
- important for erosion control
- gene – centre for breeds
- suited for landscape management
- conservation of alpine pastures







# Production systems in the alps

- **Non specialised keeping**
- **Extensive and semi – extensive keeping**
- **Intensive keeping**

## **Permanent systems:**

- **permanent pasture**
- **enclosure keeping**
- **alpine meadow keeping**

## **Non – permanent systems:**

- **Transhumant system**
- **Nomadic system**





enclosure keeping



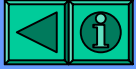
transhumant system





alpine meadow keeping

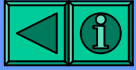




## Behaviour of sheep after being attacked from large carnivores

- **sheep basically defenceless, have no means of protecting themselves.**
- **only protection: staying together in group**
- **run when frightened**
- **often scatter in all directions**
- **becoming very shy**
- **hide themselves when hear any noise**





# Protection against large carnivores

## Electric fences

- Expensive
- Lot of work
- Daily controlling
- not possible in rough terrain

## Guard animals

- Wintertime
- Tourists
- Defence farms

Good management necessary!





# Problems

- **Agriculture in the alps for centuries without large carnivores**
- **Small structures**
- **Close colonisation**
- **No alternative income for farmers in mountainous regions**
- **Time / money needed: shepherds, building fences, controlling**

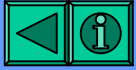




# Cohabit of small ruminant and large carnivore

- **Trentino: alps kept empty (bear)**
- **Bavaria: farmers are going to stop breeding**
- **Slovenia: farmers stop farming**

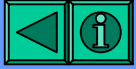




# Paying compensations - Difficulties

- **competences not clear**
- **many regions without agreement**
- **compensation only for proved cases**  
? lost animals, fallen into canyons
- **farmer has to make the evidence that it was not his fault**
- **compensation only paid if everything is perfect stock list..**
- **loosing support:**  
endangered races, size of farm – heads, penalties,  
disadvantaged regions





# Chances

- self – defence has to be allowed
- „troublemakers“ have to be hunted immediatly:  
after predators kill once, they will come back  
again to kill more.
- good management plans are needed:  
compensation for farmers,  
help for self – protecting
- stop setting free large carnivores
- allowance for stock – control















Thank you for your kind attention