Carnivores and Ungulates in the Alps

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Illegal hunting is the main problem for the recovery and survival of Large Carnivores.
The Ungulates

Wild Boar: Increasing numbers, increasing range
Great fluctuations due to winter severity
Low level of management; low interest
The Ungulates

Roe Deer: All over the Alps below the forest line
Winter feeding common
High interest, esp. in absence of Red Deer
The Ungulates

Red Deer:
- High and increasing numbers
- Increasing range
- Winter feeding intensive in some countries
- Forest damage wide spread
- Loss of natural winter habitats
- High level of management; very high interest
The Ungulates

Mufflon: A few introduced populations
Species not native to the Alps
Highly vulnerable through predation
High interest
The Ungulates

Chamois: Stable (decreasing) numbers
Considerably high populations in some Alpine forests
Problem species in degraded Alpine forests
High interest
Ibex: Increasing numbers, increasing range
Confined to high Alpine habitats (exc. introductions)
High interest
Hunting for trophies
Forest damage by ungulates
Hunters’ Concern

Wild Boar: Carnivores avoid Wild Boar; irrelevant
Roe Deer: Great, esp. in absence of Red Deer
Red Deer: Very great, esp. at feeding stations and winter enclosures
Mufflon: Highly vulnerable
            Concern great, but only few situations
Chamois: Highly vulnerable in forest habitats
Ibex: Hardly vulnerable; irrelevant
The Carnivores

Bear: Irrelevant as a competitor
Damage to feeding stations and winter enclosures
The Carnivores

Lynx: Fatal for Mufflon colonies
Efficient predator of Roe Deer
Low impact on Red Deer and Chamois
The Carnivores

Wolf: Efficient predator of all ungulate species below tree line

Insignificant above tree line (Chamois, Ibex)
Hunters’ concern: Lynx

**Lynx:**

Density app. 1 resident lynx per 100 km$^2$.
Prey 1 roe deer/5 days = ca. 70 deer p.a..
Plus prey of nonresidents and juv.
Outtake app. 1 Roe Deer eq. p. a., km$^2$

**Hunters:**

2 – 4 deer p. a., km$^2$ common.
Harvest rates commonly below increment.
Hunters’ concern: Wolf

**Wolf - Assumptions:**
One pack (4 ad + 4 juv. wolves) per 250 km$^2$.
Killrate 5,4 kg living prey per 1 wolf per 1 day.
Prey biomass 50 % Red Deer, 50 % Roe Deer/Chamois.

Outtake:  
125 Red Deer 36,7 kg (d. w.)
340 Roe Deer/Chamois 12,8 kg (d. w.)

(App. 0,5 Red Deer + 1,5 Roe Deer p. a., km$^2$)

**Hunters:**
1 – 3 Red Deer, 1 – 3+ Roe Deer/Chamois common.
Winter enclosures

Winter enclosures are fenced feeding stations for Red Deer.

Goal: To prevent Deer from bark scinning and browsing in late winter.

Size 30 – 50 ha, 60 – 150+ deer.

Closed (nov) dec – mid may (jun). 5 – 6+ months.

„Deer fenced in? People fenced out!“
Further concerns of hunters

Carnivores disturb game
C. make hunting inefficient and time consuming
C. make winter feeding unfeasible and therefore cause forest damage by game
C. disturb management (harvest) plans
C. cause a deterioration of leasing prices for hunting grounds

*Data are lacking. No scientific evaluation at hand.*
Carnivores´ Concerns

**Presence of hunters in the area**

**Leasing System** (AT, G, CH some kantons):
- Open season June – January (240 days)
- Game keeper year round
- High activity during attractive periods (rut, …)
- Intensive game keeping (winter feeding)

*High interest in trophies. Great financial input. Great management efforts. L. C. are considered disturbing game management. Social control lacking.*
Carnivores´ Concerns

**Presence of hunters in the area**

**Patent System:** (F, CH some kantons)
- Short seasons with many hunters
- Game warden year round
- No traditional game keeping (winter feeding)

*Interest in quick hunting success. Low financial input.*
*No personal involvement in game management. High social control. Illegal actions difficult to achieve.*
Carnivores´ Concerns

**Presence of hunters in the area**

Community System: (South Tyrol, Slo)
- Short seasons with many hunters
- Game warden year round
- Traditional game keeping (winter feeding)

*Interest in quick hunting success. Low financial input.*
*Moderate personal involvement in game management.*
*High social control. Illegal actions difficult to achieve.*
Thank you for your attention!