Impatti della fauna selvatica sulla dinamica dei popolamenti forestali- L'esperienza maturata nel Parco Naturale Paneveggio-Pale di San Martino

Wildlife-forest dynamics relationships in Paneveggio-Pale di S. Martino Park

Renzo Motta[1], Fabio Meloni[1], Piergiovanni Partel[2]

[1] Dip. Disafa, Università di Torino, Largo Paolo Braccini 2, 10095 Grugliasco (Italy),

[2] Parco Naturale di Paneveggio-Pale di S. Martino, Localita' Castelpietra, 2, 38054 Tonadico (Italy)

Outline of presentation

1) Introduction: deer, forests of the Paneveggio Pale di S. Martino NP
2) Results: Forest regeneration inventory, impact on the blueberry cover
3) Discussion and perspectives
4) Further developments

1) Introduction

Paneveggio: the forest of violins

Dendrochronologia 21/1 (2003) 41–45
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http://www.urbanfischer.de/journals/dendro

DENDROCHRONOLOGIA

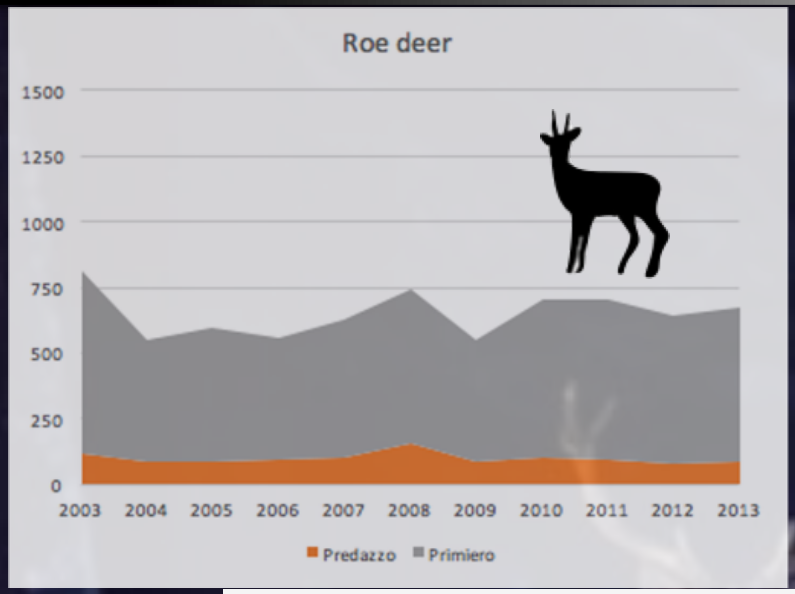
Short article

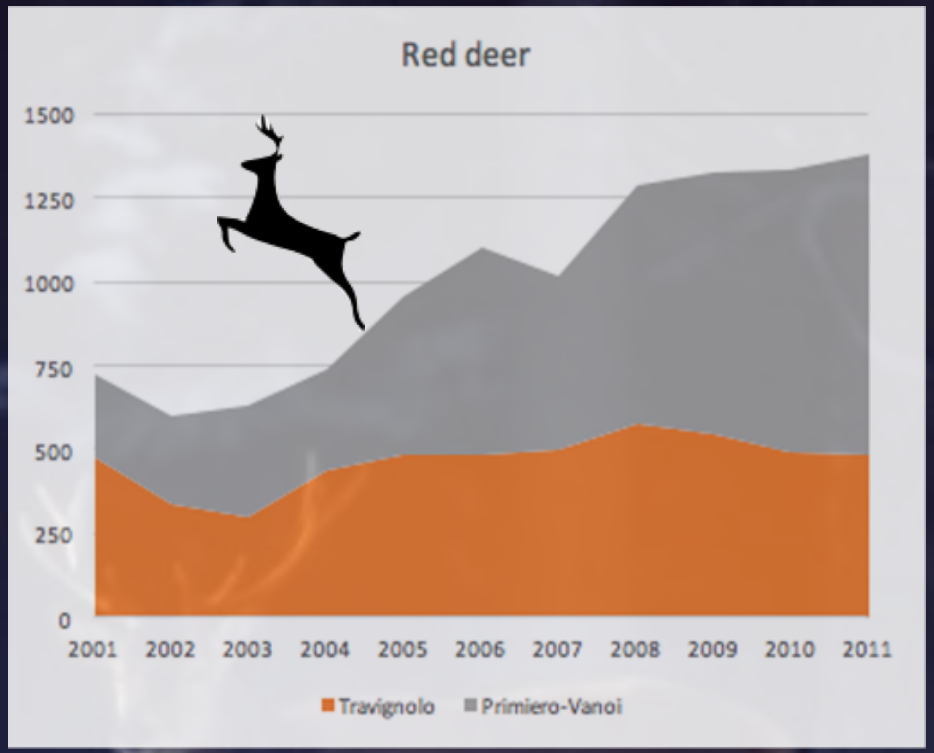
Stradivari, violins, tree rings, and the Maunder Minimum: a hypothesis

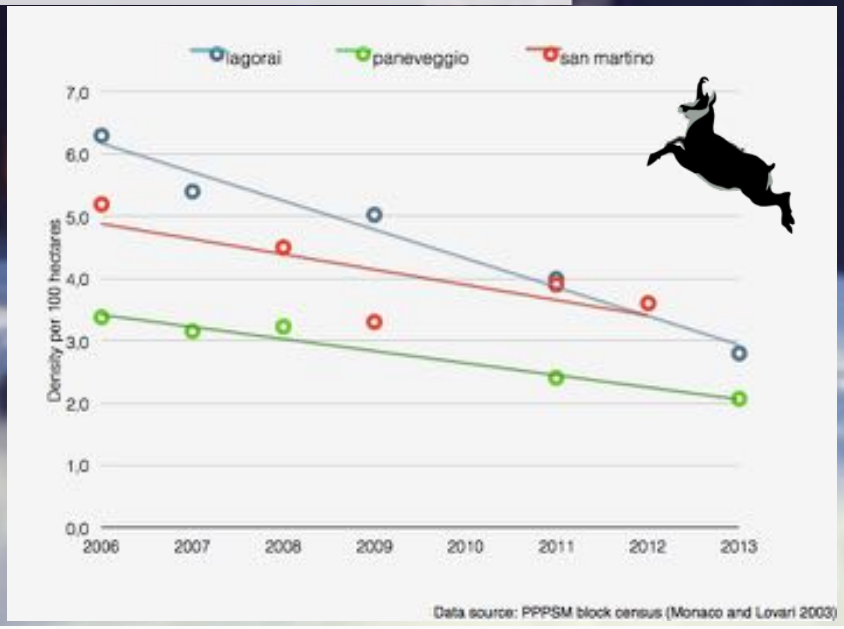
Lloyd Burckle[1], Henri D. Grissino-Mayer[2]

[1] Lamont-Doherty Earth Observatory, Columbia University, Palisades, New York
[2] Laboratory of Tree-Ring Science, Department of Geography, University of Tennessee, Knoxville, Tennessee, USA

1) Introduction







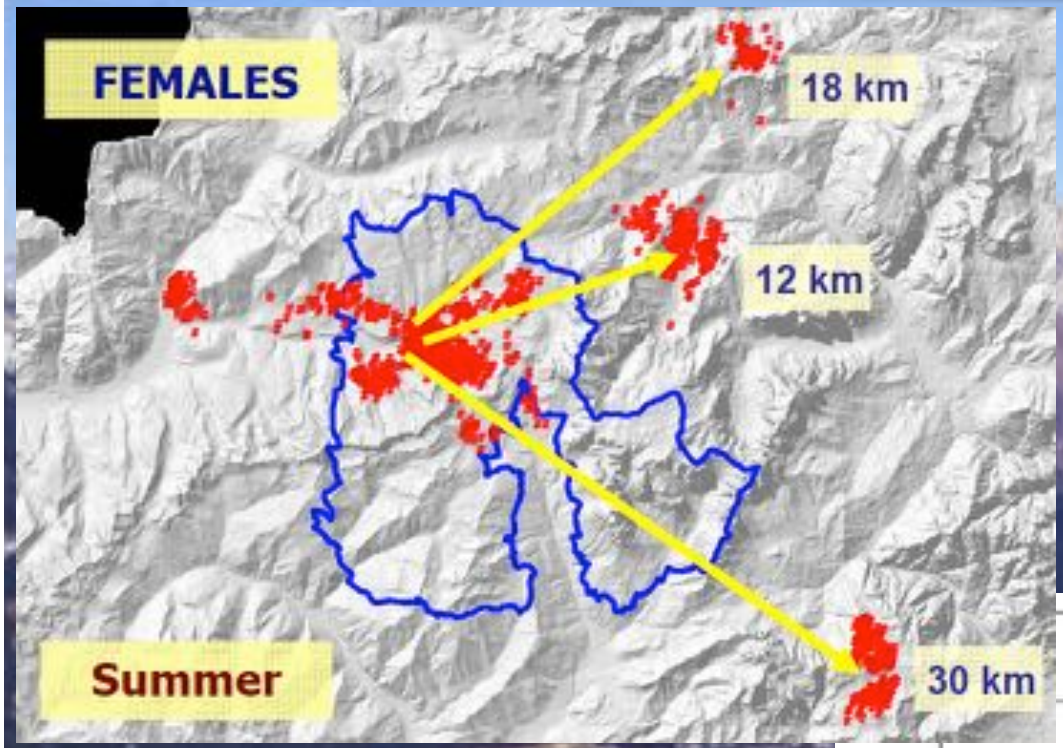

Published by Associazione Teriologica Italiana
Volume 25 (1): 25–30, 2014
Hystrix, the Italian Journal of Mammalogy
OPEN ACCESS
Available online at:
http://www.italian-journal-of-mammalogy.it/article/view/9460/pdf
doi:10.4404/hystrix-25.1-9460

Research Article

Spatial and temporal explorative analysis of sarcoptic mange in Alpine chamois (*Rupicapra r. rupicapra*)

Sara Turchetto[a,*], Federica Obber[a], Roberto Permunian[b], Stefano Vendrami[c], Monica Lorenzetto[d], Nicola Ferré[d], Laura Stancampiano[e], Luca Rossi[f], Carlo Vittorio Citterio[a]

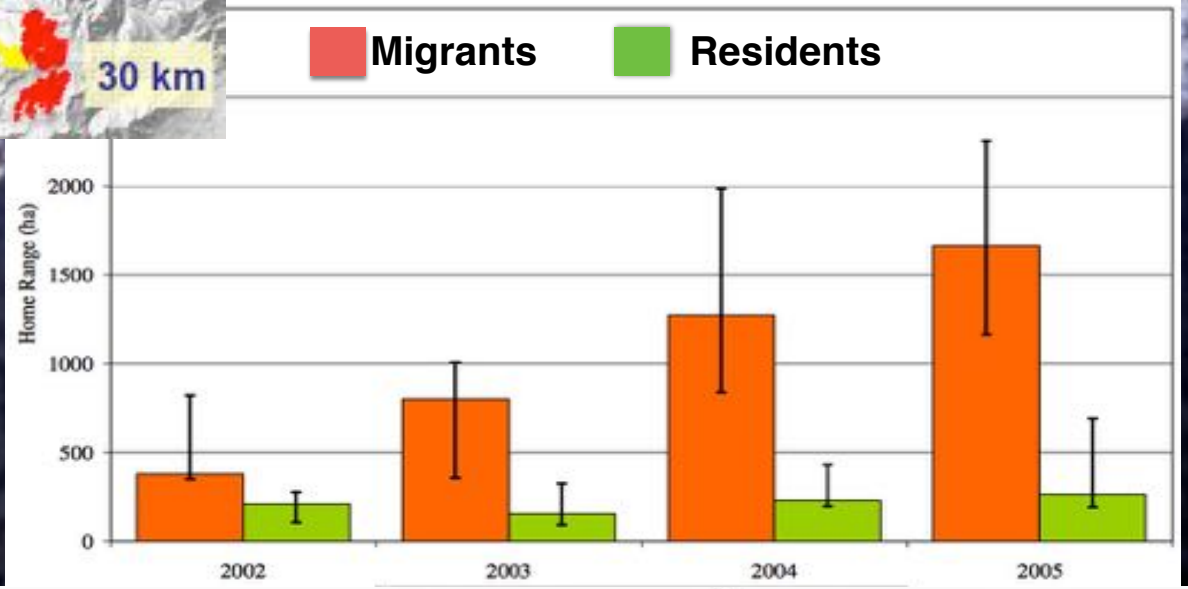
1) Introduction



Ann. Zool. Fennici 47: 57–66 ISSN 0003-455X (print), ISSN 1797-2450 (online)
Helsinki 10 March 2010

Alternative strategies of space use of female red deer in a mountainous habitat

Anna Bocci[1], Andrea Monaco[1,2], Paola Brambilla[1], Ilaria Angelini[1] & Sandro Lovari[1,*]



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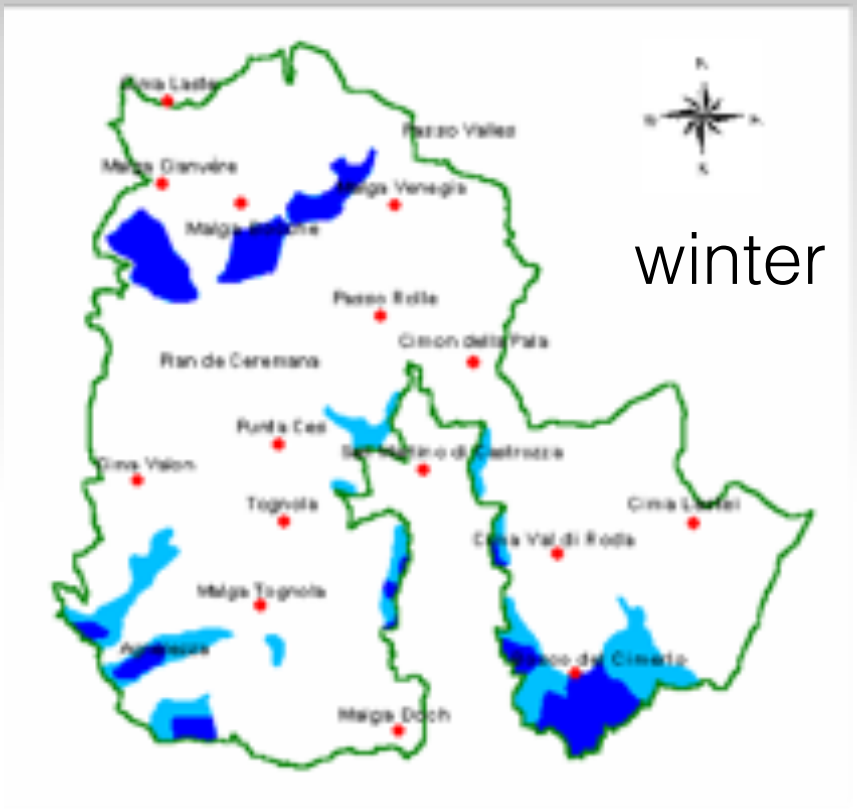
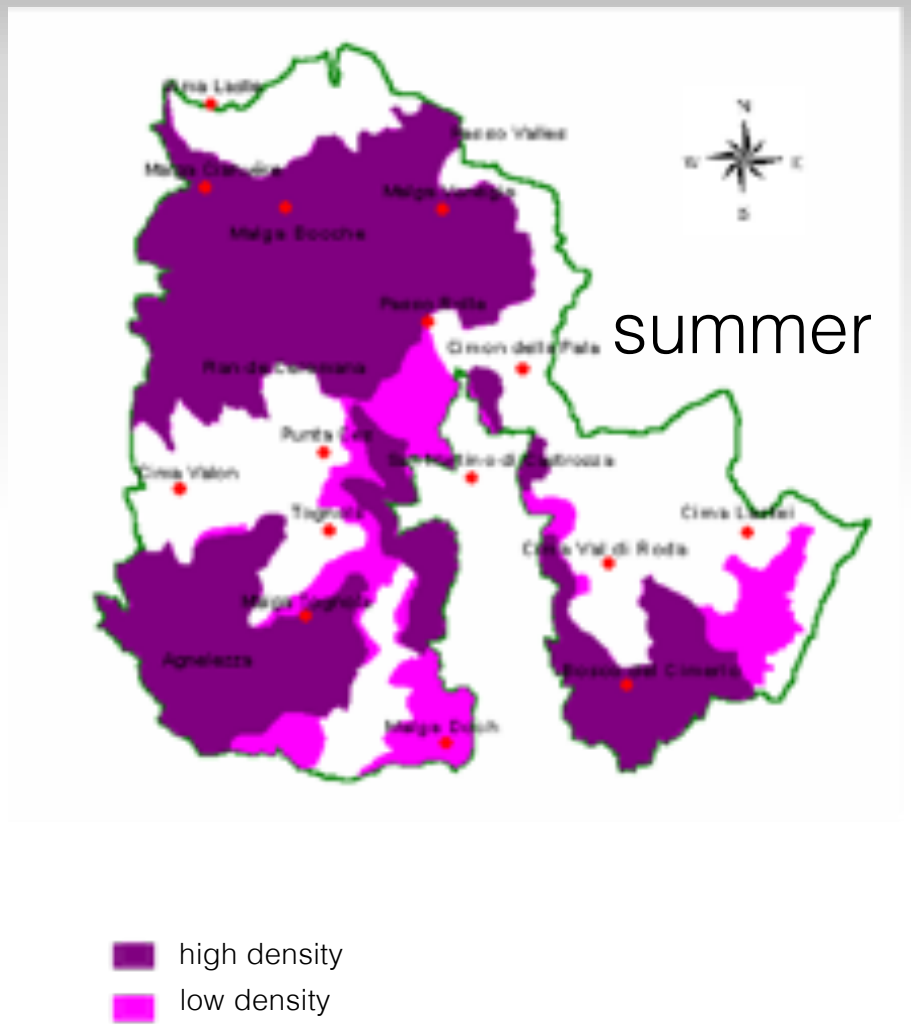
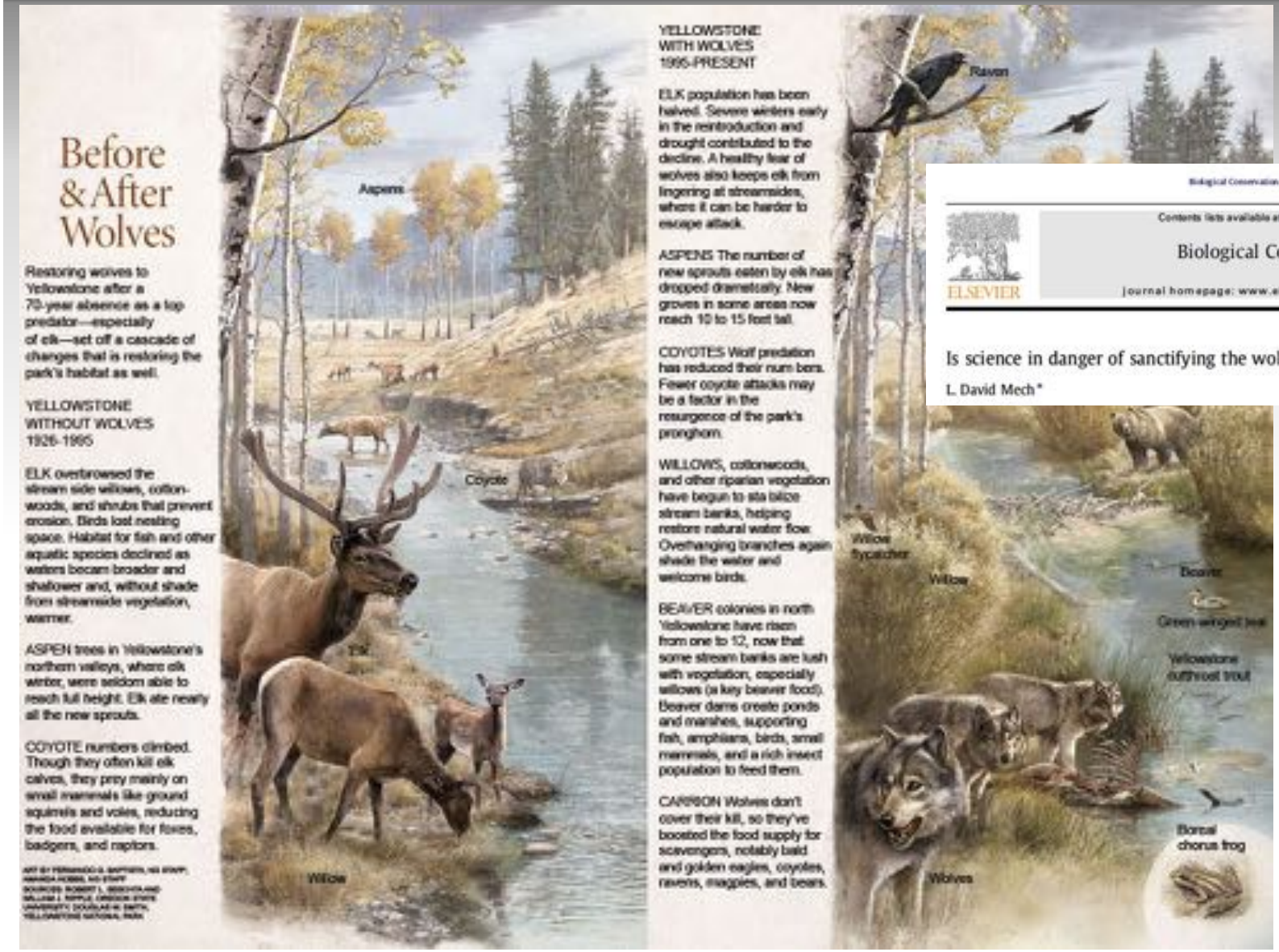
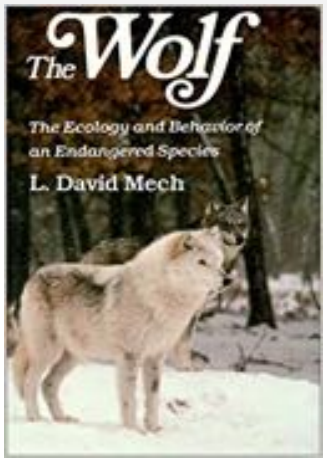


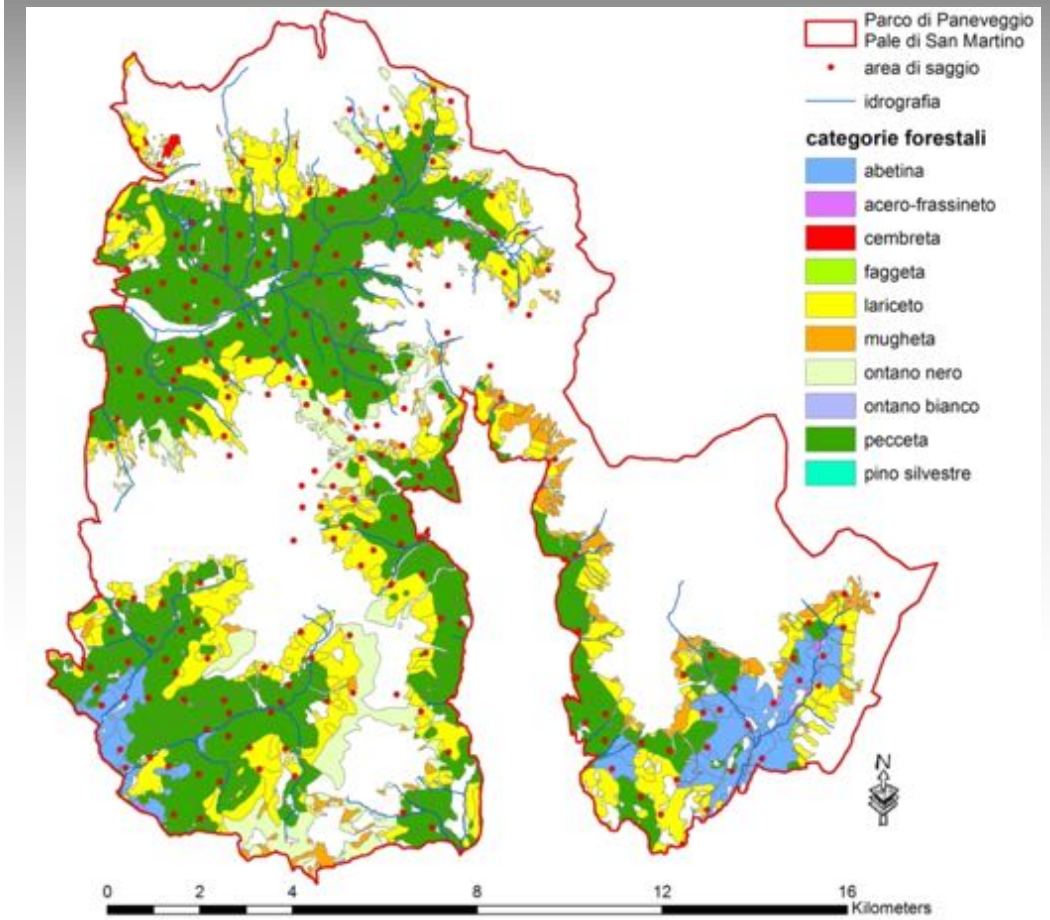


1) Introduction

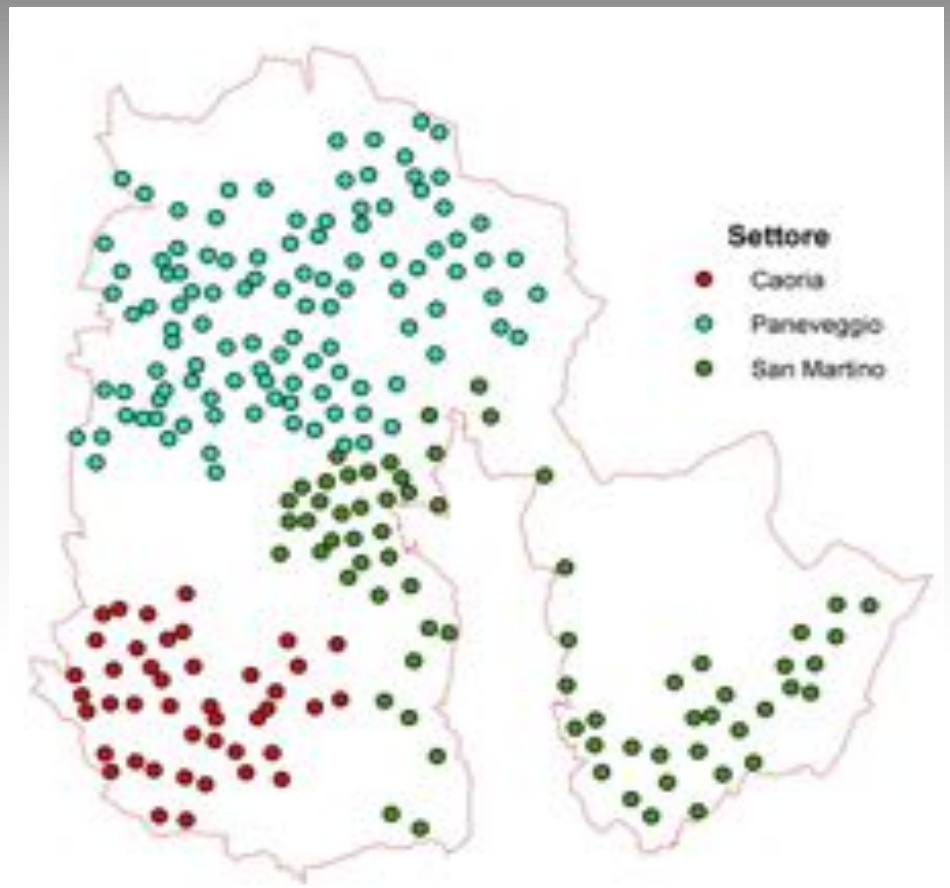




2) Results: Forest regeneration inventory



Norway spruce 60% Larch 19%
Pinus cembra 8% Fir/Beech 4%



193 sampling points (223)
-99 Paneveggio (North)
-55 San Martino (Sud-East))
-39 Caoria (Sud-West)

2) Results: Forest regeneration inventory

Size classes:
class A (10-30 cm height)
class B (30-150 cm h)
class C (0-4 cm Dbh)
class D (4-17.5 cm Dbh)

Three types of damage:
Browsing (simple or repeated, last 4 years)
Bark stripping
Fraying

Sampling:
1995, 2003, 2008, 2014

Elevation range: 1100-2200 m a.s.l.

Fences?

2) Results

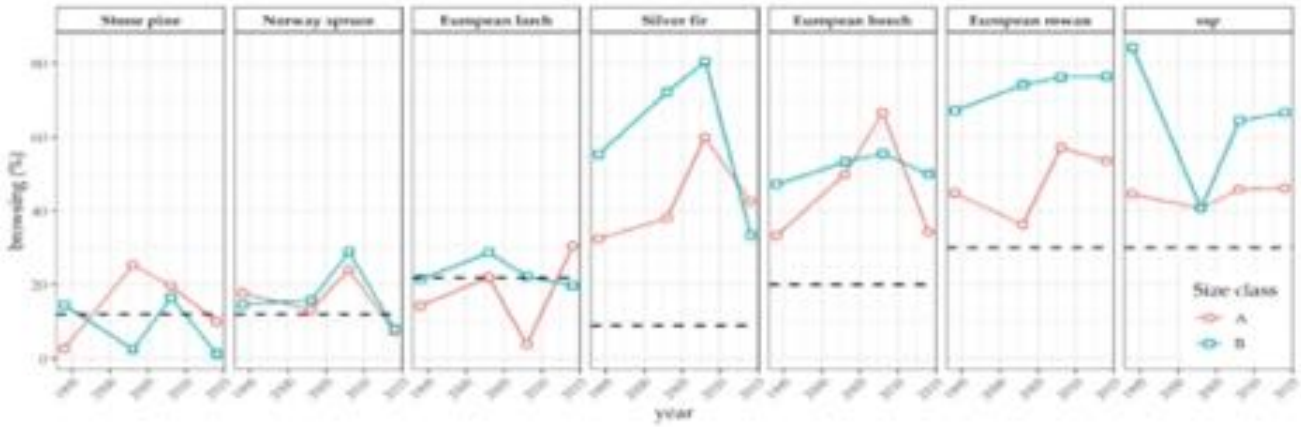


Figure 1. Mean values of percentage of browsed trees in size classes A and B (red line and blue line respectively). The dotted lines represent the browsing thresholds suggested by Eiberle and Nigg, 1987 [16].

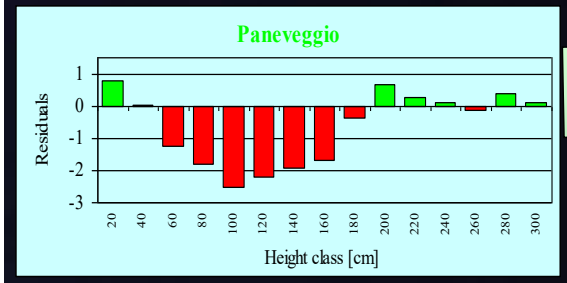
Table 1. Mean values of percentage of damaged trees per damage type within the plots and mean values of percentage of browsed trees for size classes (A–D). Standard deviation is reported in parentheses as a measure of statistical dispersion.

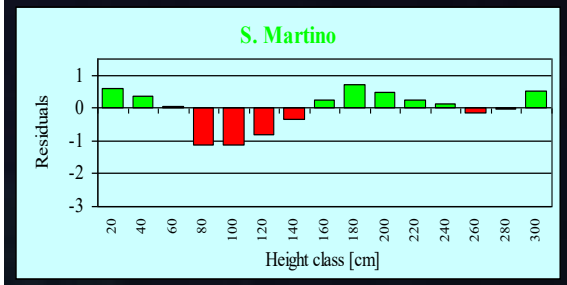
Variable	Classification	1994	2003	2008	2014
% Damaged Trees	browsing	11 (20)	16 (27)	24 (31)	16 (26)
	fraying	4 (10)	2 (9)	3 (10)	4 (12)
	bark stripping	0	1 (4)	1 (5)	3 (11)
% Browsed Trees	A	22 (28)	27 (28)	42 (33)	36 (29)
	B	22 (23)	28 (33)	36 (34)	21 (28)
	C	3 (9)	6 (17)	13 (27)	4 (14)
	D	0 (0)	1 (4)	2 (3)	2 (11)

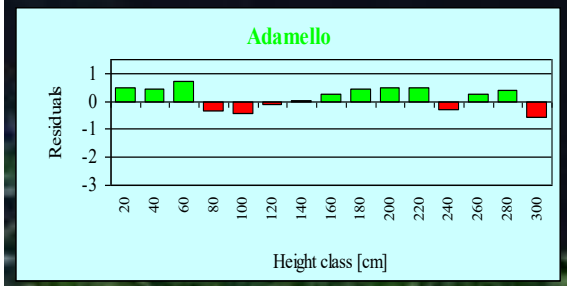
2) Results

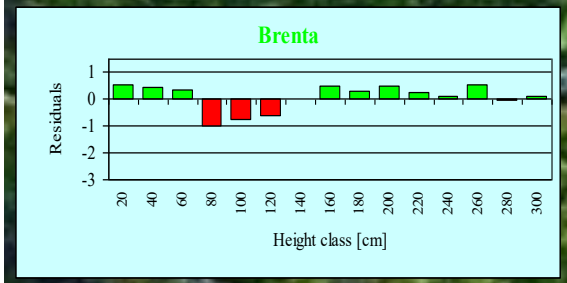
% damaged BC	1994	2003	2008	2014
Norway spruce	12%	13%	34%	21%
larch	18%	19%	20%	16%
cembran pine	17%	19%	21%	11%
silver fir	33%	70%	82%	28%
beech	9%	10%	5%	9%
mountain pine	3%	2%	3%	13%
rowan	56%	71%	73%	76%
mountain ash	63%	45%	73%	29%
aspen	92%	50%	82%	100%
willows	12%	6%	16%	22%

2) Results, rowan







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Forest Ecology and Management 181 (2003) 139–150
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Forest Ecology and Management
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Ungulate impact on rowan (*Sorbus aucuparia* L.) and Norway spruce (*Picea abies* (L.) Karst.) height structure in mountain forests in the eastern Italian Alps

Renzo Motta*

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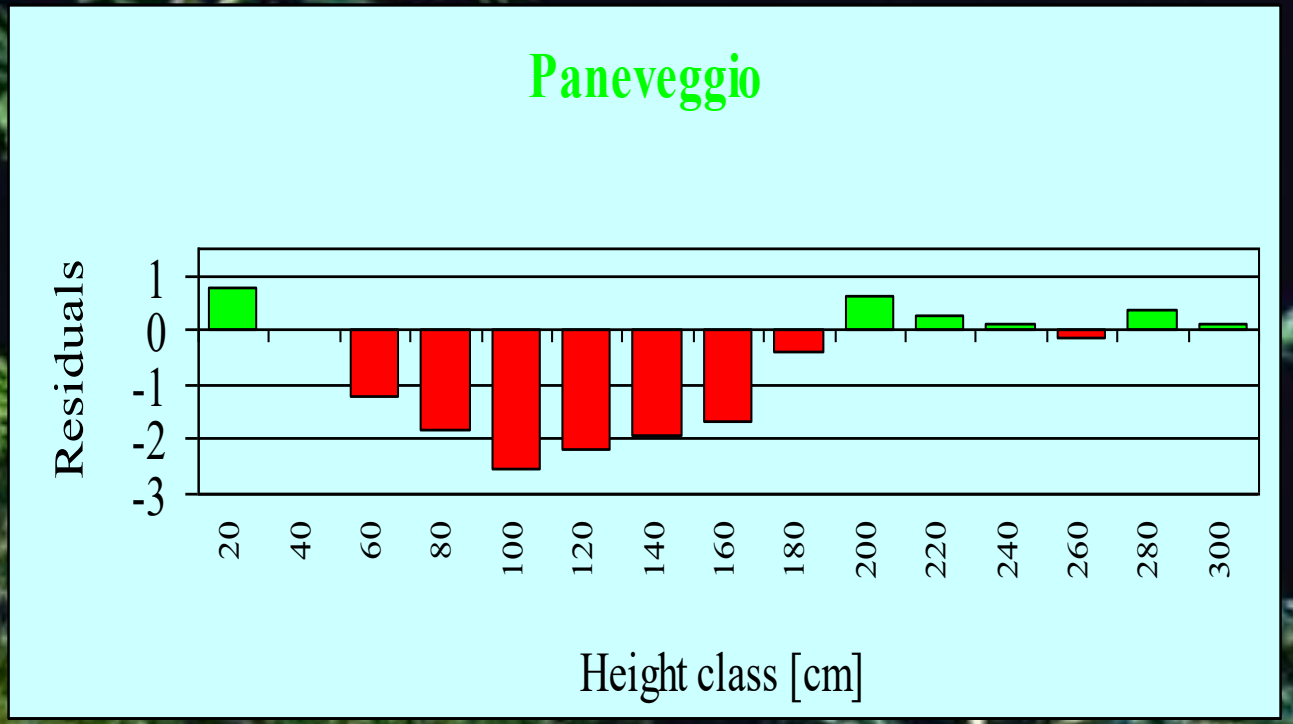
Received 1 November 2001; received in revised form 10 June 2002; accepted 20 August 2002

Sorbus aucuparia



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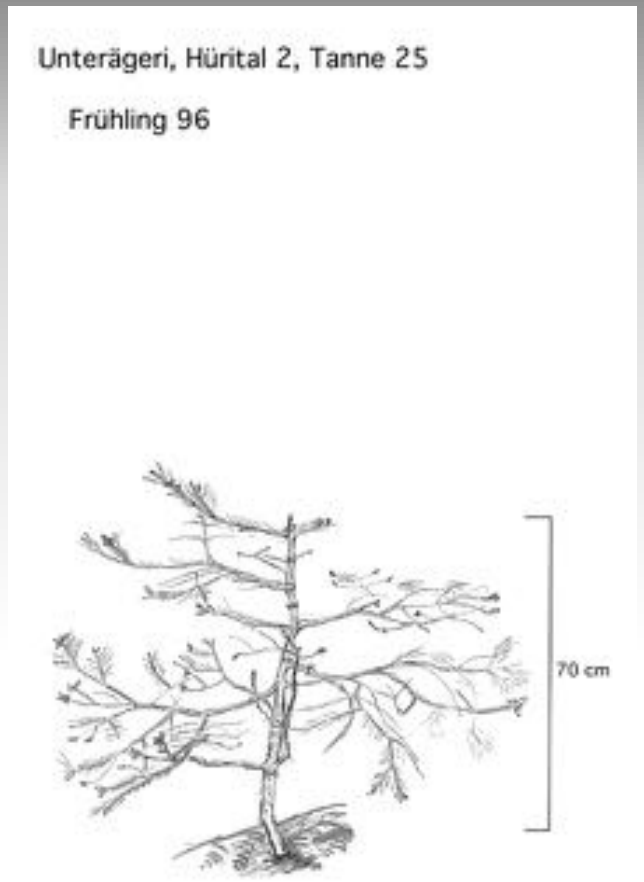
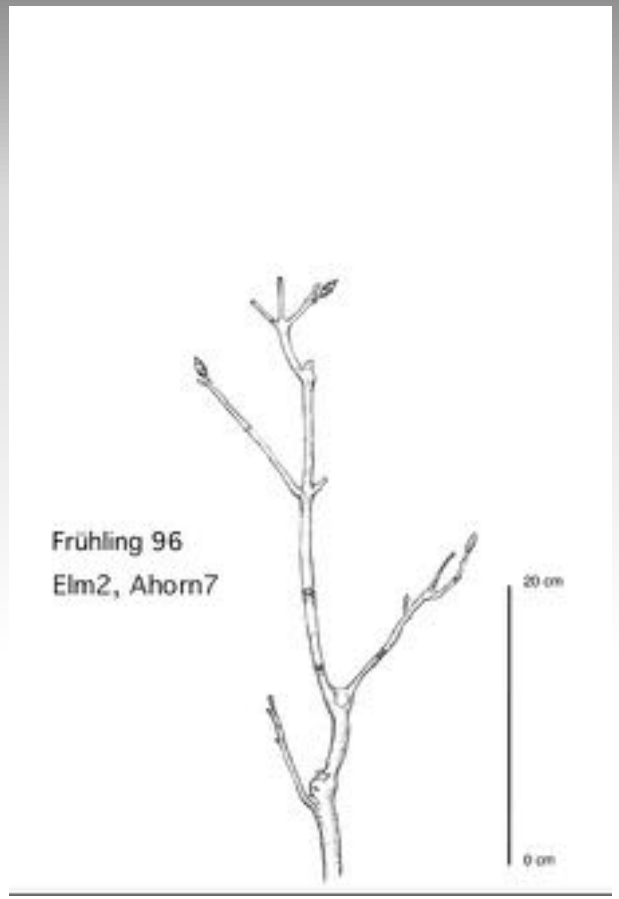
mountain ash	63%	45%	73%	29%
aspen	92%	50%	82%	100%
willows	12%	6%	16%	22%

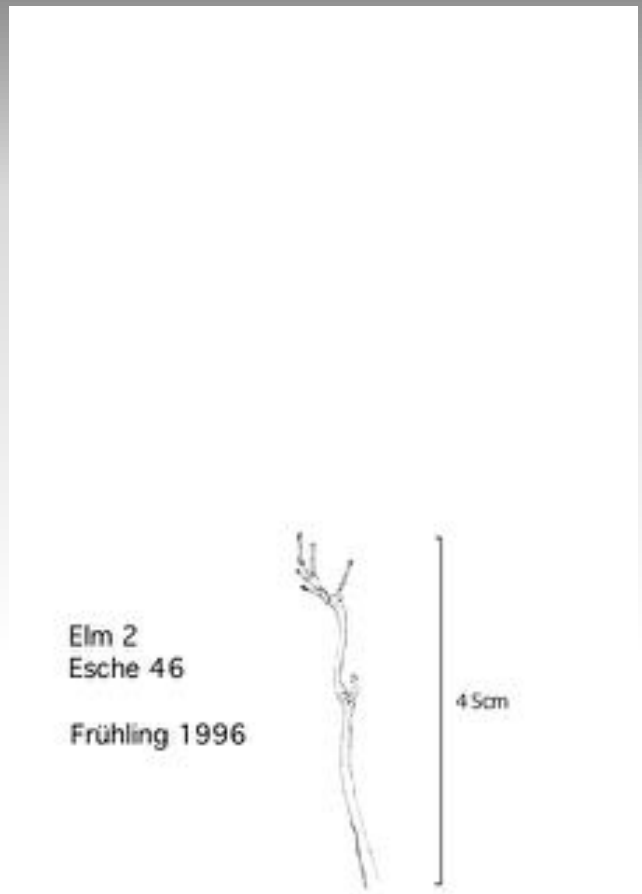
Silver fir has disappered from 19% of the sampling sites (1994-2014)

When the most palatable species are almost completely depleted they are restricted to safe sites (*sensu* Harper, 1961) where they can escape the browsing resulting in a strong underestimation of damage

2) Results

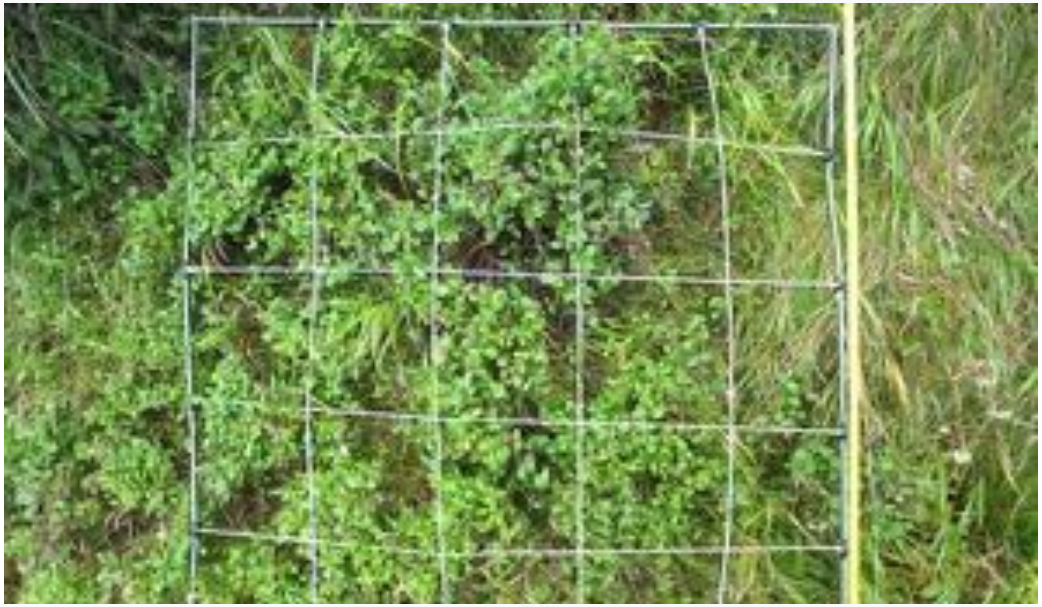






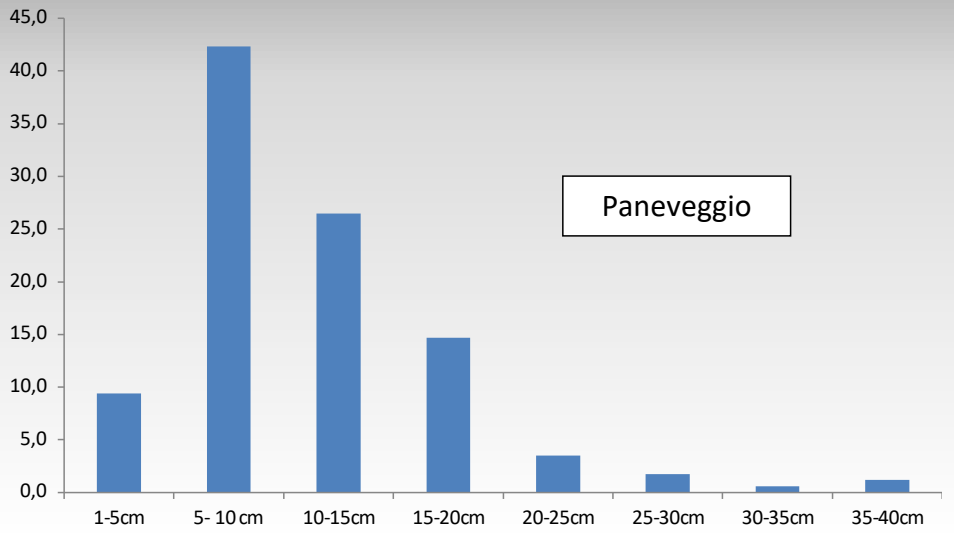
When the most palatable species are almost completely depleted they are restricted to safe sites (*sensu* Harper, 1961) where they can escape the browsing resulting in a strong underestimation of damage

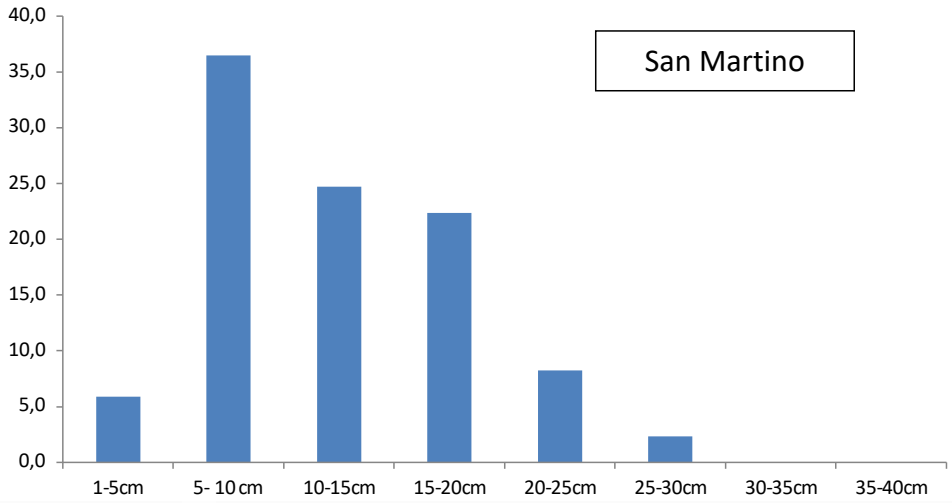
2) Results, blueberry and capercaille

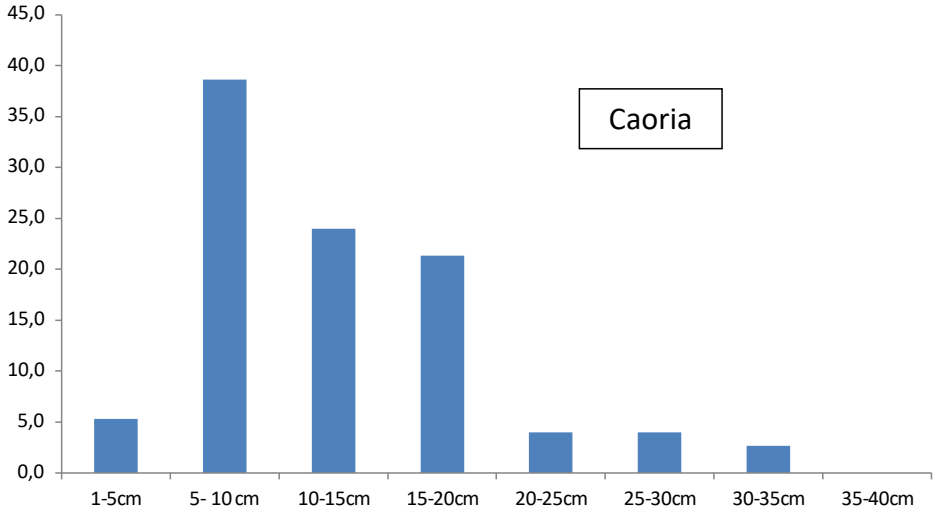


2) Results, blueberry and capercaille

Vaccinium myrtillus height







2) Results, blueberry and capercaille

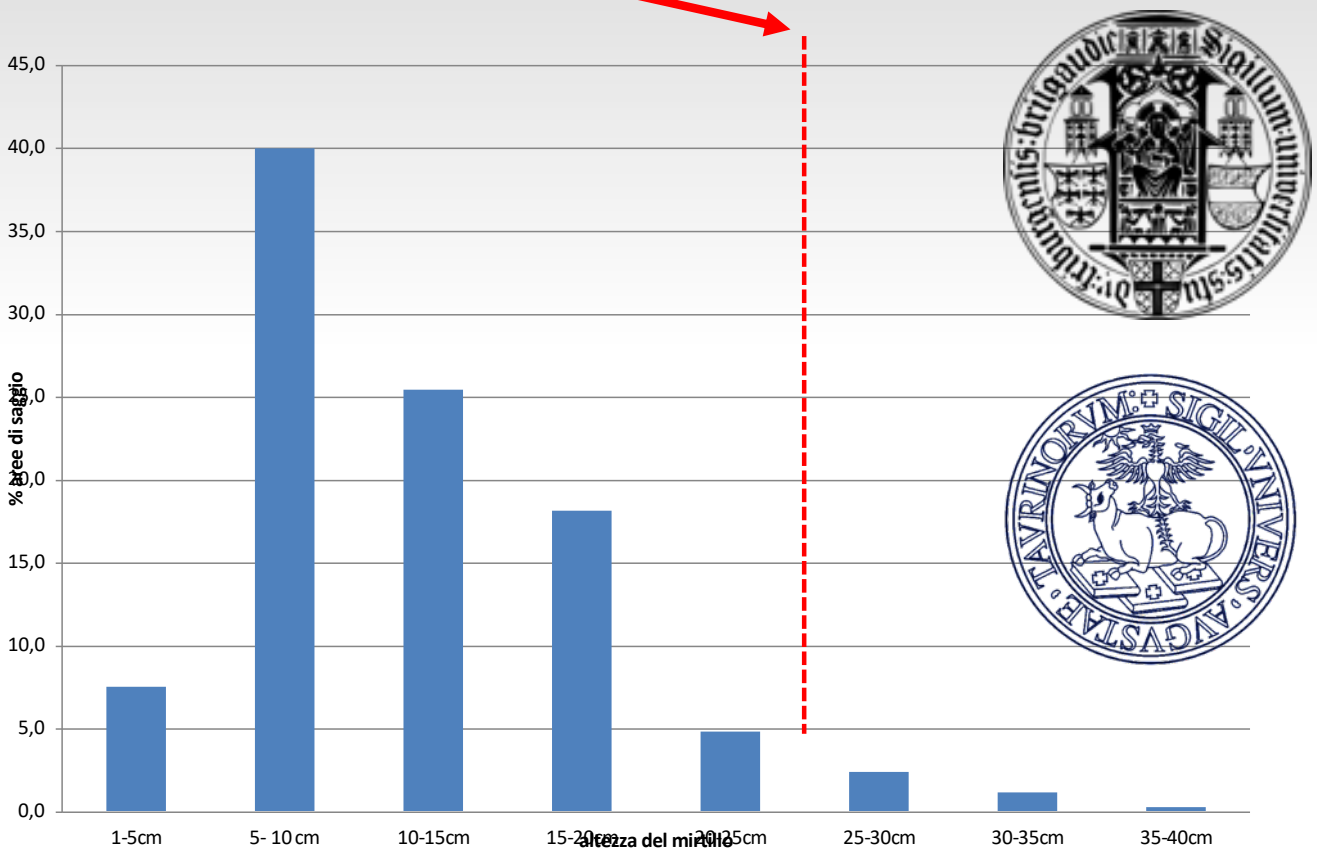
Capercaillie Summer Habitat Selection in the Natural Park Paneveggio- Pale di San Martino (Eastern Italian Alps)

Description of the project:

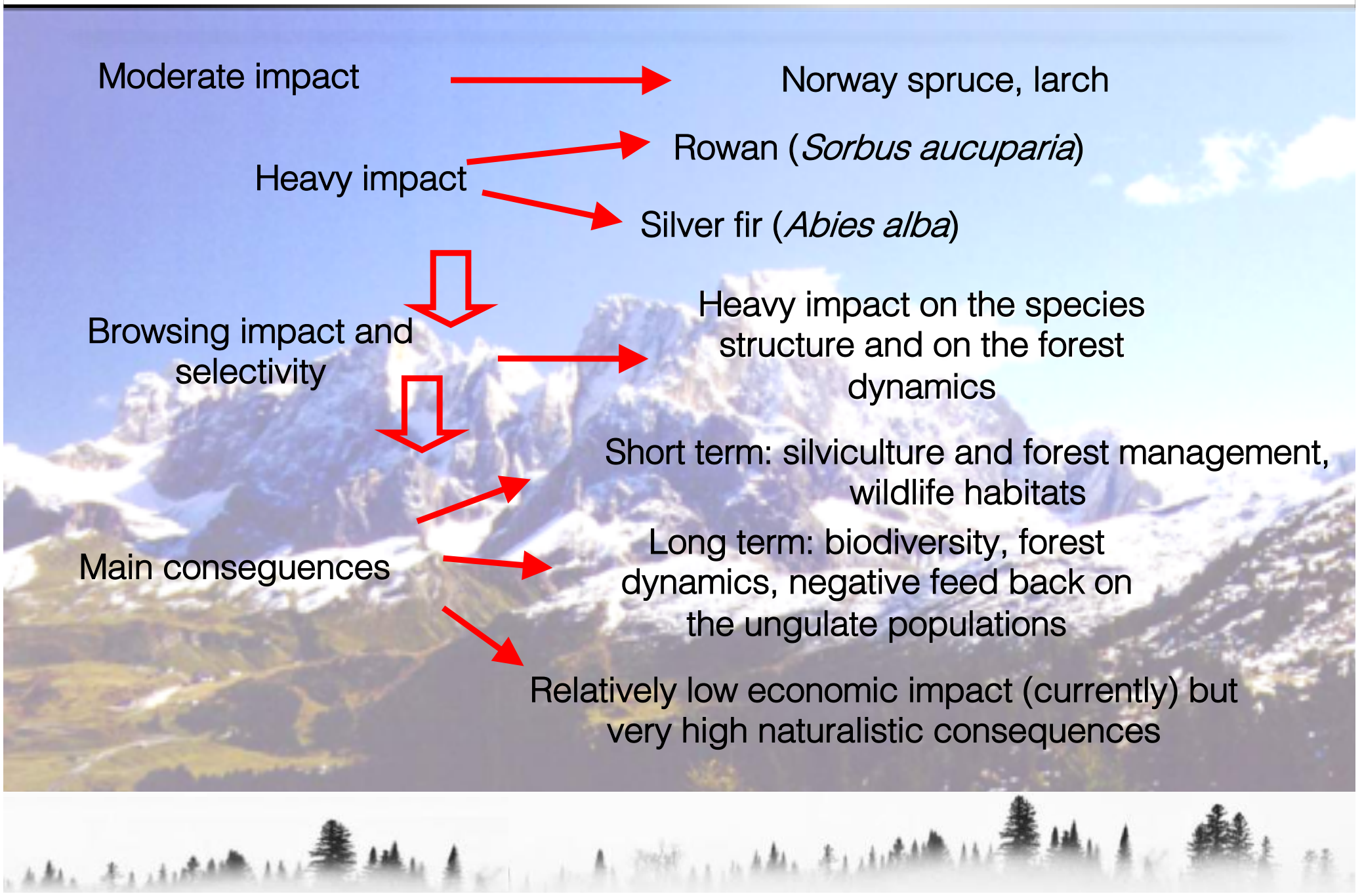
This work aims to identify capercaillie habitat selection at two different spatial levels: 1 landscape scale (first order selection) which is an area large enough to include one or more leks, usually of at least some ten km2; 2 individual home range (second order selection) occupied by an individual during a particular period of time, which may vary from several hectares to a few km2. The research aims to identify and describe habitat and vegetation types that are of particular importance for capercaillie during summer. The ultimate goal of this chapter is to identify birds' habitat requirements with the aim to promote management advises for foresters and land-managers. In order to determine summer habitat selection by capercaillie in the Natural Park Paneveggio- Pale di San Martino we will compare habitat features of visited points (radio-locations, used habitat) and random points (available habitat).

Minimum blueberry hight for capercaille habitat

Insects!!!



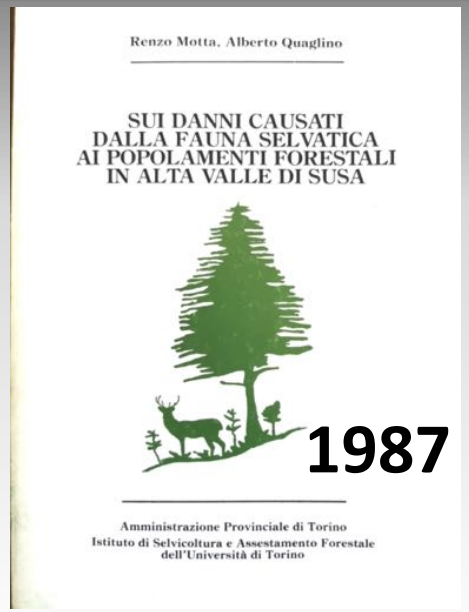
3) Discussion



3) Discussion and further developmenst

What is the main goal?
Do we want to regenerate trees or do we want to preserve the “forest”?

4) Final remarks


Renzo Motta, Alberto Quaglino

SUI DANNI CAUSATI DALLA FAUNA SELVATICA AI POPOLAMENTI FORESTALI IN ALTA VALLE DI SUSA

Amministrazione Provinciale di Torino
Istituto di Selvicoltura e Assestamento Forestale dell'Università di Torino

1987


PROVINCIA AUTONOMA DI TRENTO

SERVIZIO PARCHI E FORESTE DEMANIALI

RILIEVO DELL'IMPATTO DEGLI UNGULATI SELVATICI SULLA RINNOVAZIONE FORESTALE

Foreste demaniali di Cadino, Paneveggio, S.Martino di Castrozza (rilievi 1993 - 1994)

maggio 1995 a cura di Renzo Motta, Maria Franzoi

1994


ELSEVIER

Forest Ecology and Management

Forest Ecology and Management 88 (1996) 81–86

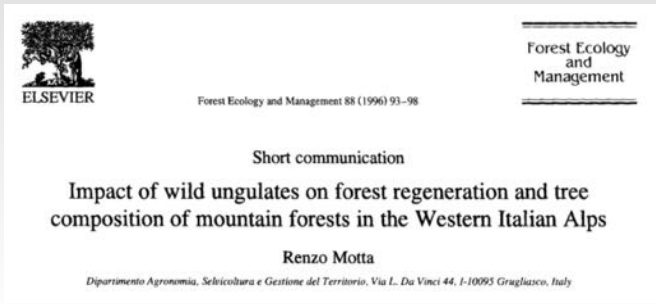
Short communication

Fraying damages in the subalpine forest of Paneveggio (Trento, Italy): a dendroecological approach

Renzo Motta [a,*], Paola Nola [b]

[a] Dipartimento Agronomia Selvicoltura e Gestione del Territorio, Via L. Da Vinci 44, I-10095, Grugliasco (TO), Italy
[b] Istituto di Botanica, Via S. Epifanio 14, I-27100, Pavia, Italy

1995


ELSEVIER

Forest Ecology and Management

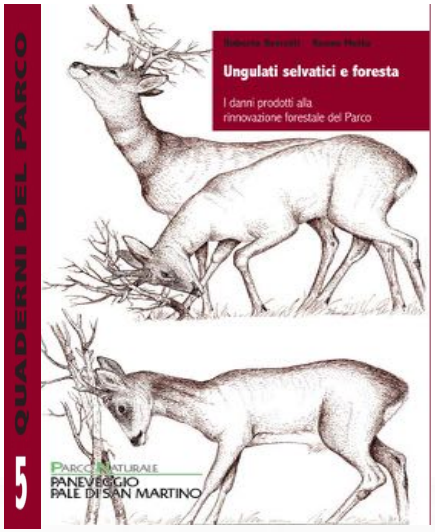
Forest Ecology and Management 88 (1996) 93–98

Short communication

Impact of wild ungulates on forest regeneration and tree composition of mountain forests in the Western Italian Alps

Renzo Motta

Dipartimento Agronomia, Selvicoltura e Gestione del Territorio, Via L. Da Vinci 44, I-10095 Grugliasco, Italy




forests

2020

MDPI

Article

Effects of Twenty Years of Ungulate Browsing on Forest Regeneration at Paneveggio Reserve, Italy

Davide D'Aprile [1,*], Giorgio Vacchiano [2], Fabio Meloni [1], Matteo Garbarino [1], Renzo Motta [1], Vittorio Ducoli [3] and Piergiovanni Partel [3]

-12 reports
-8 ISI papers
-4 books/chapters
-5 Intern. Congresses (1995 Wageningen, 2015 WSL) and so on…

4) Final remarks

Category II: National Park
Large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities.

Primary objective
To protect **natural biodiversity** along with its underlying ecological structure and **supporting environmental processes**, and to promote education and recreation.

Other objectives
•To manage the area in order **to perpetuate, in as natural a state as possible, representative examples** of physiographic regions, biotic communities, genetic resources and unimpaired natural processes;
•To **maintain viable and ecologically functional populations and assemblages of native species at densities sufficient to conserve ecosystem integrity and resilience in the long term**;
•…
•To take into account the needs of indigenous people and local communities, including subsistence resource use, in so far as these will not adversely affect the primary management objective;

4) Final remarks

National Park Primary objective

To protect natural biodiversity along with its underlying ecological structure and supporting environmental processes, and to promote education

4) Final remarks

- Protect biodiversity?
- Protect rare/peculiar species?
- Cultural, educational messages?
- Example for sustainable management?


Thank you for
your attention!