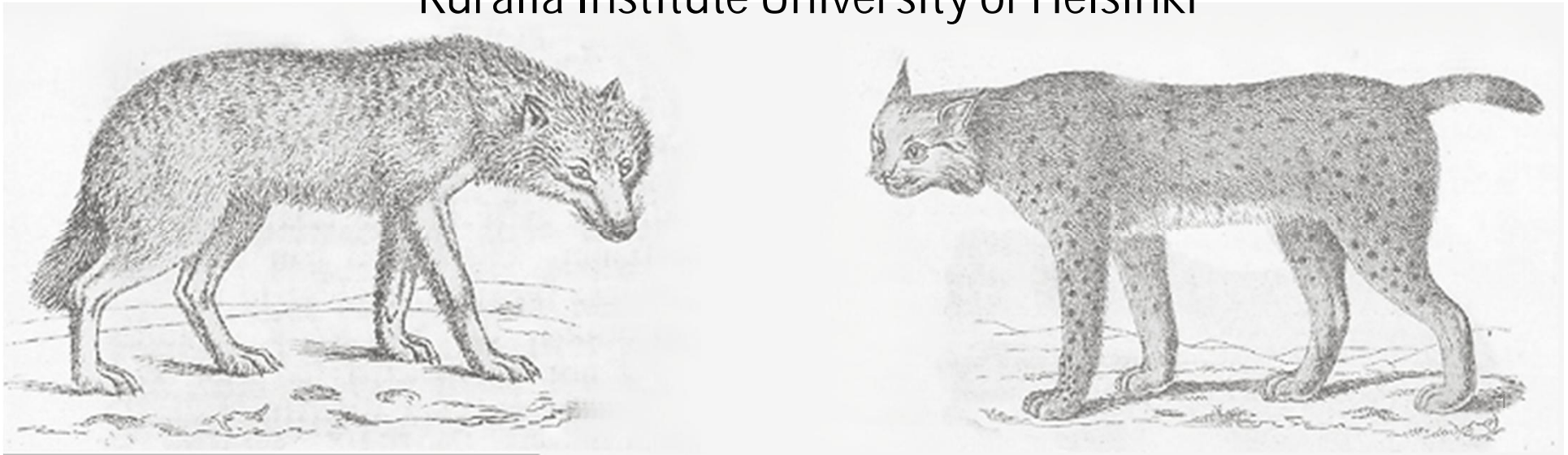


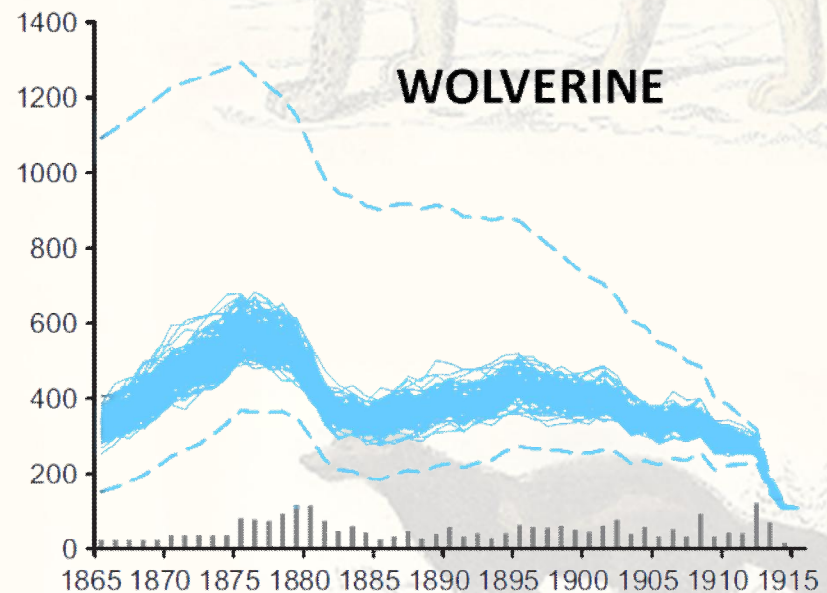
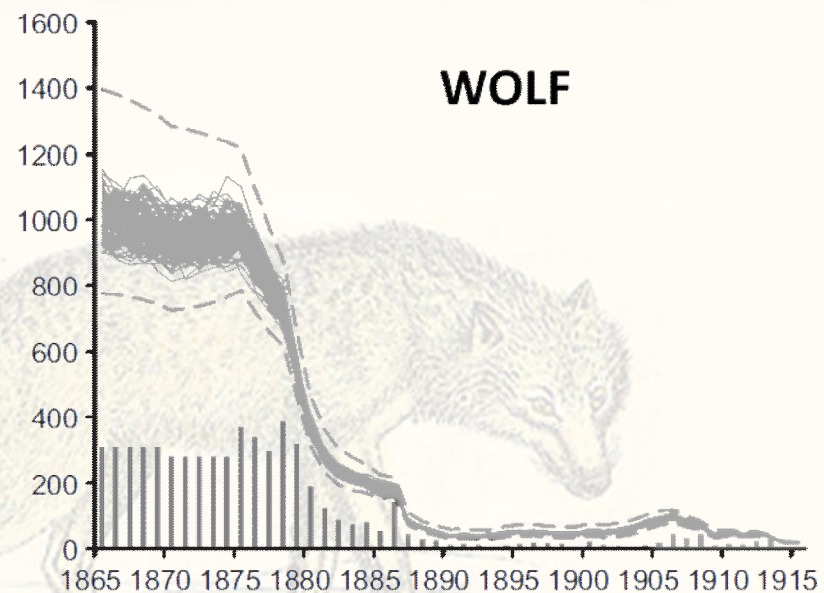
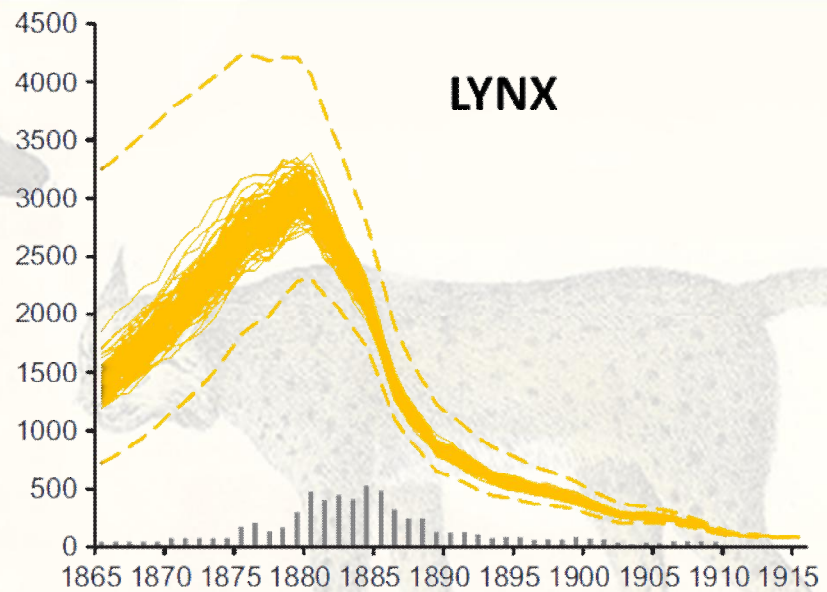
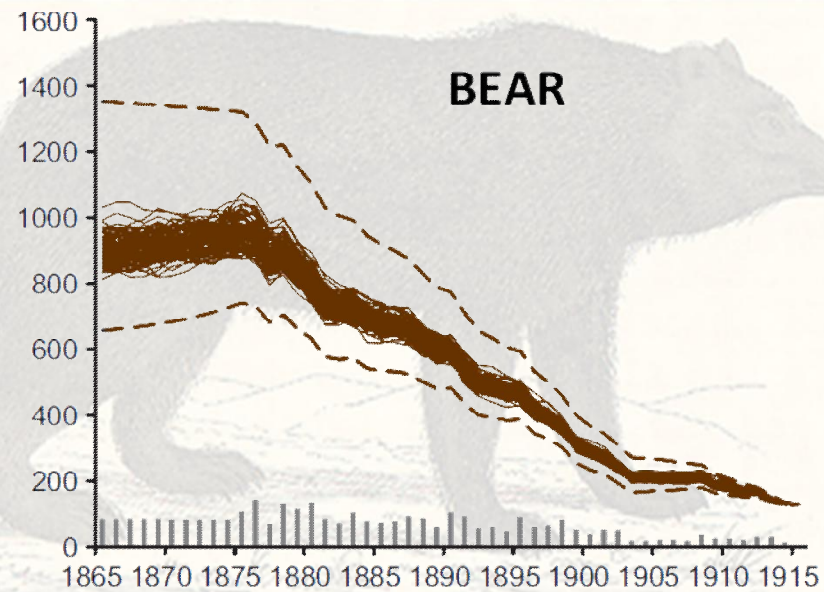


LARGE CARNIVORE MANAGEMENT IN FINLAND – HITS AND MISSES

Senior researcher Mari Pohja-Mykrä
Ruralia Institute University of Helsinki

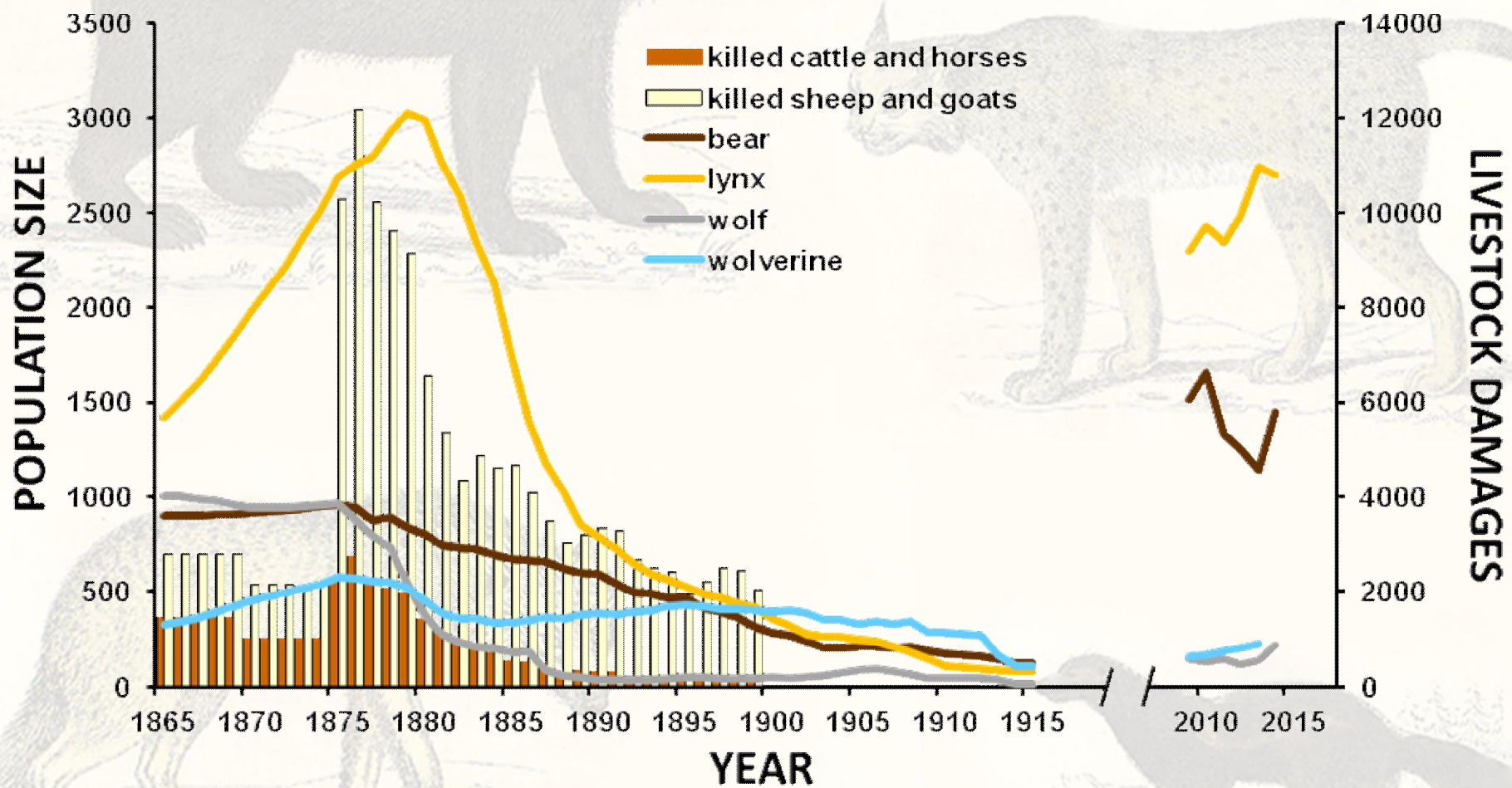


POPULATION SIZE



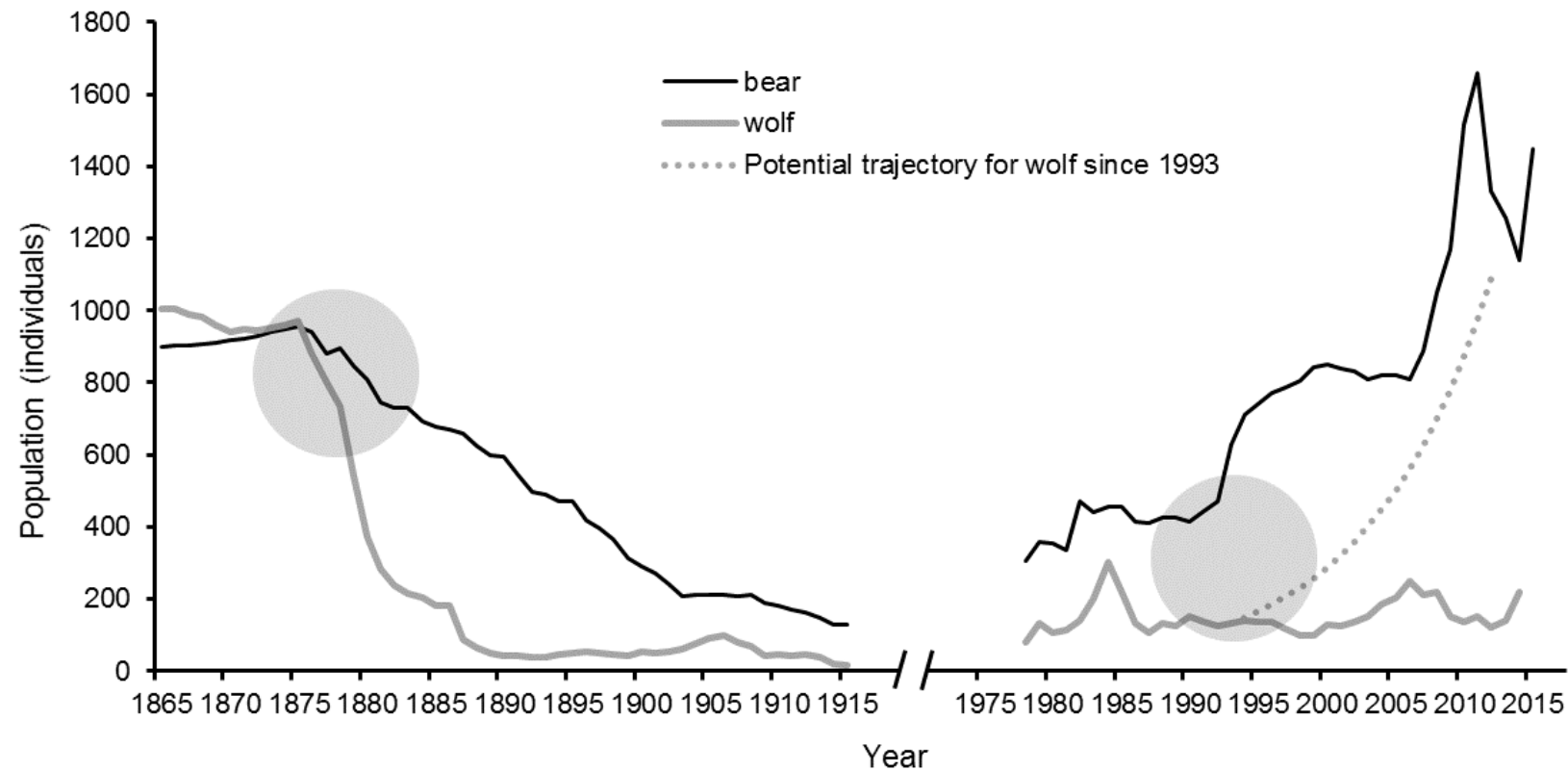
YEAR

Mykrä S & Pohja-Mykrä M (2015) Back-calculation of large carnivore populations in Finland in 1865–1915 *Annales Zoologici Fennici* 52:285-300.



Mykrä S & Pohja-Mykrä M (2015) Back-calculation of large carnivore populations in Finland in 1865–1915 *Annales Zoologici Fennici* 52:285-300.

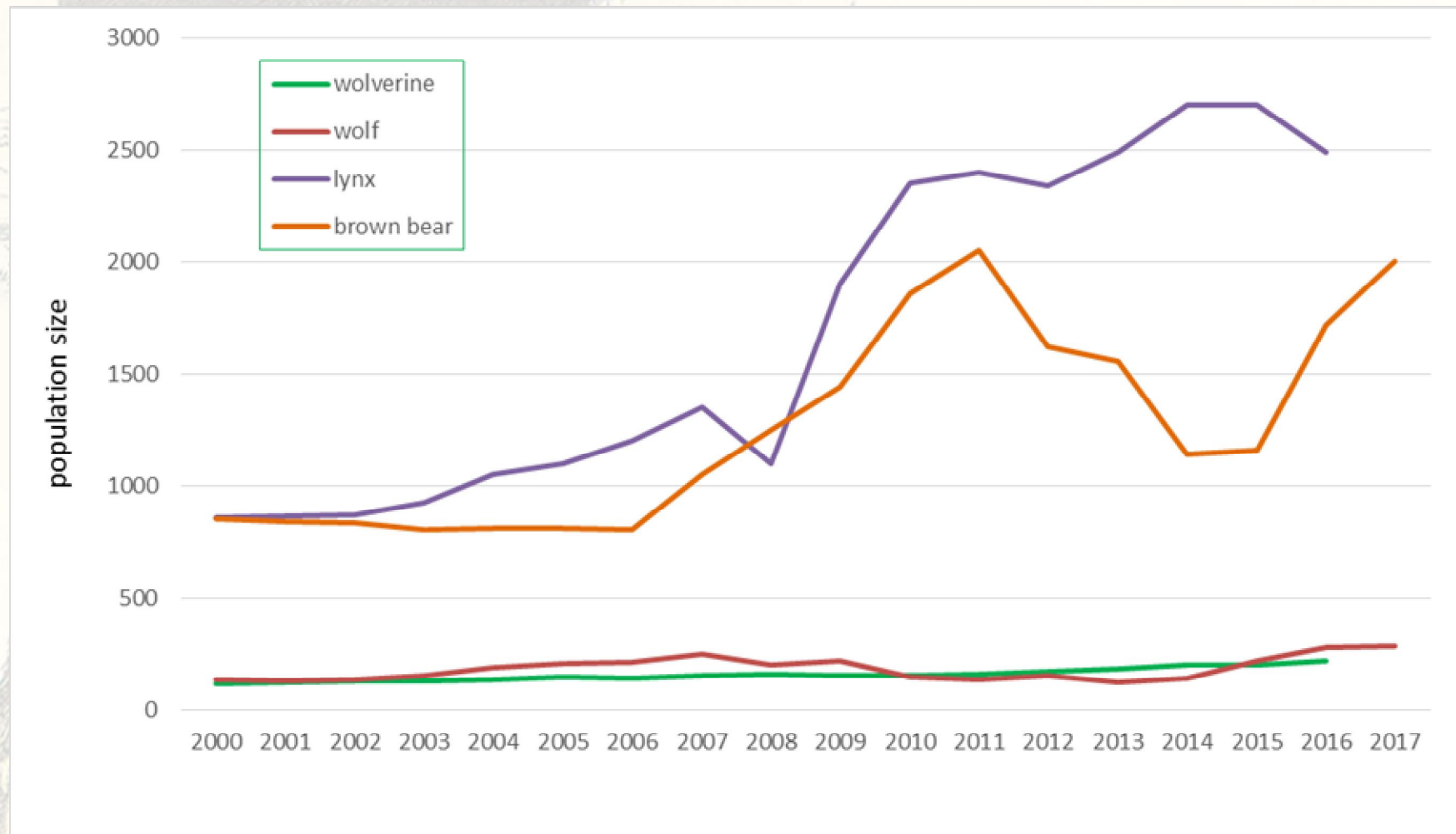
HUNTING VS. PERSECUTION



Mykrä S & Pohja-Mykrä M (2017) Hunters' opinions matter: Stakeholder attitudes and the divergence of bear and wolf population trajectories in Finland in the late 19th century and today [Manuscript]

See also Dressel, S., Sandström, C., and Ericsson, G. (2015) A meta-analysis of studies on attitudes toward bears and wolves across Europe 1976-2012. *Conservation Biology : The Journal of the Society for Conservation Biology*, 29(2), 565–574

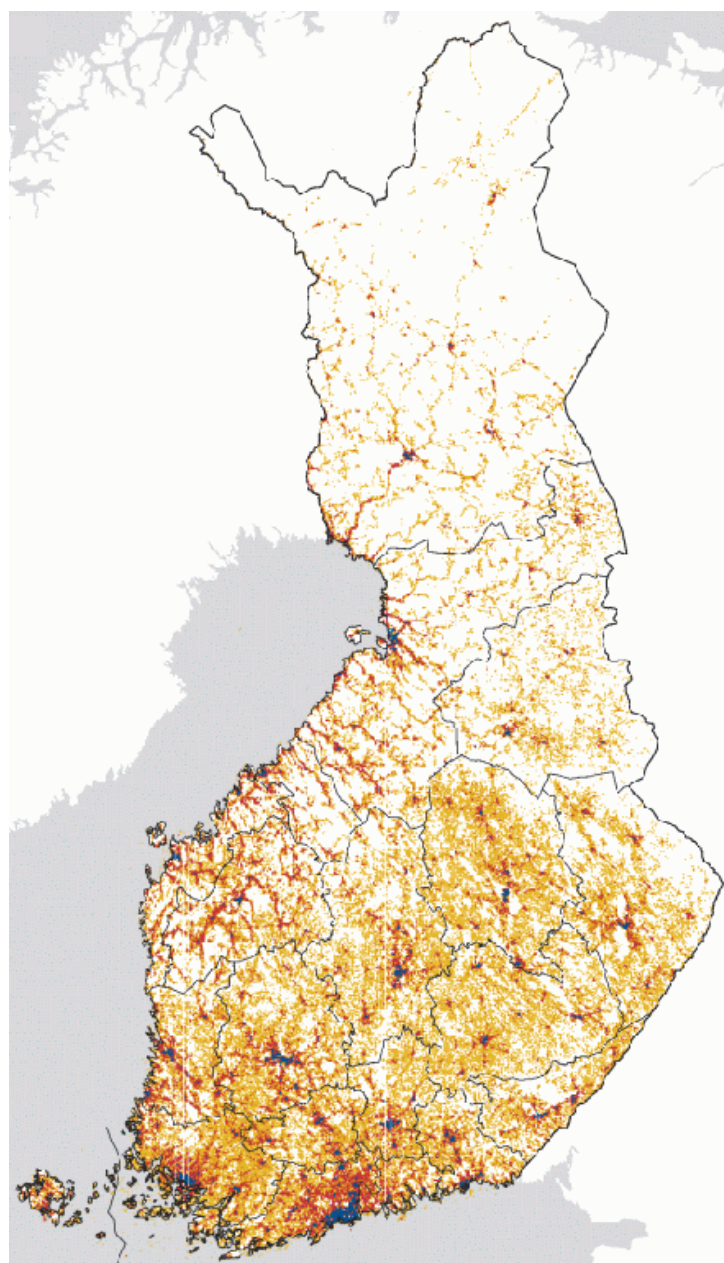
LARGE CARNIVORE POPULATION TRAJECTORIES IN FINLAND 2000-2017





DIVERGENCE OF LARGE CARNIVORE POPULATION TRAJECTORIES IN FINLAND SINCE THE 1990S

- Ø In spite of occasional conflicts such as livestock damages bear and lynx are well tolerated and they are considered as valued game species. Controlled population increase is not considered as a big problem.
- Ø Policy decisions targeting at wolf population increase have been widely opposed among the rural residents. Illegal killing of wolves (30-50 illegally killed wolves per year during 2005-2010) has kept the population in low numbers.
- Ø Wolverine management is challenging; approx. half of the population occurs in the reindeer-herding area where co-operation with researchers (tracks) is almost nonexistent and informal management (illegal killings) keeps population in low numbers.



WOLF PACKS (green) AND PAIRS (yellow) IN 2016

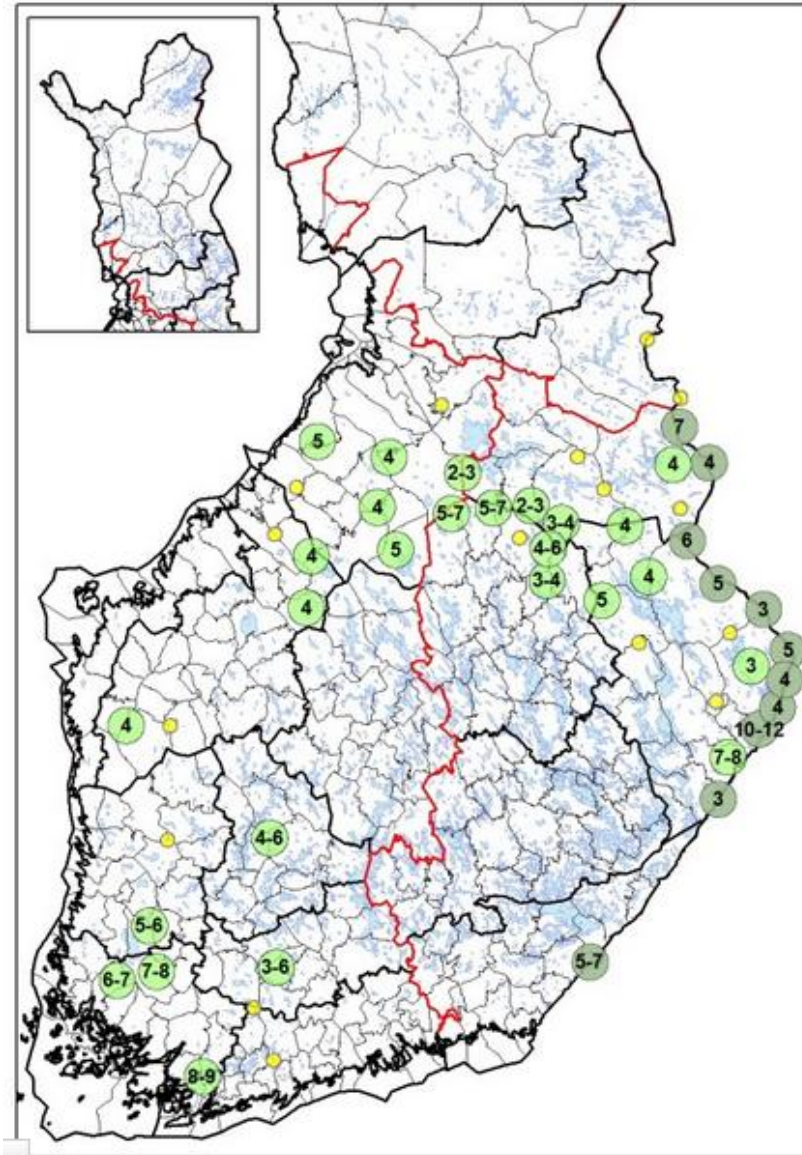


Photo: Luonnonvarakeskus

DOG DAMAGES DURING 2011-2015 (N=231)



Photo: www.google.com/maps/

BEAR CUBS (2015)

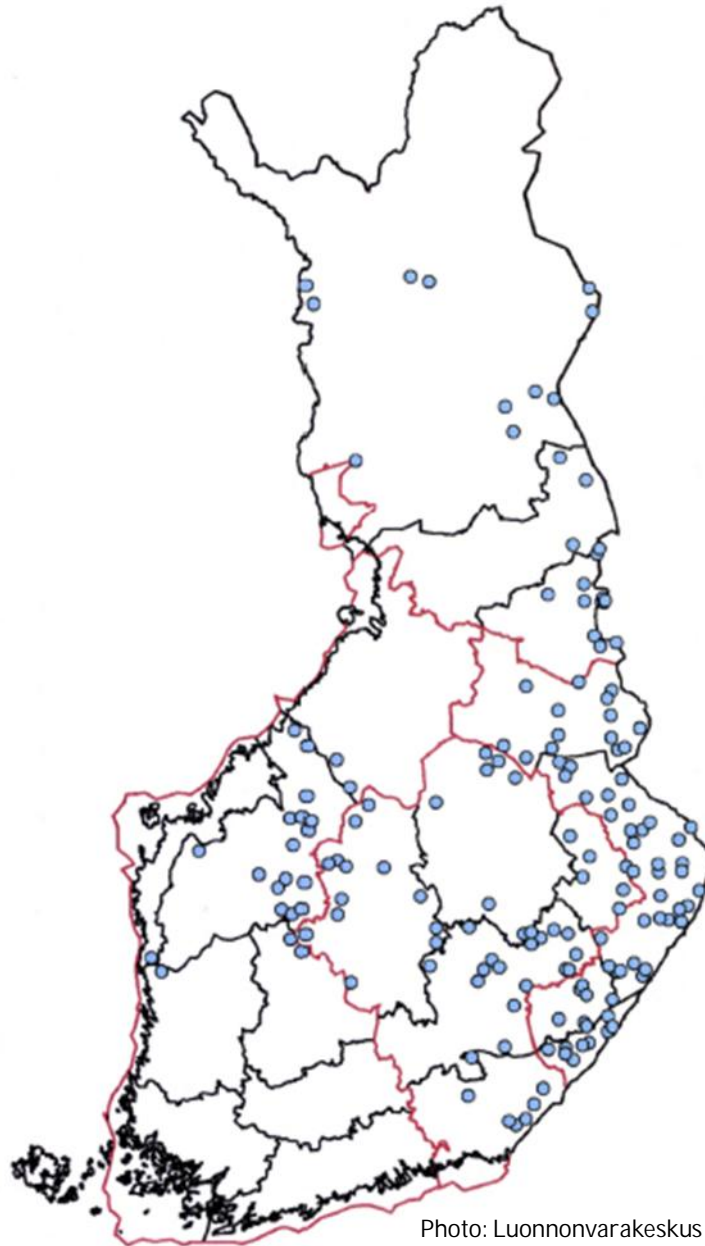
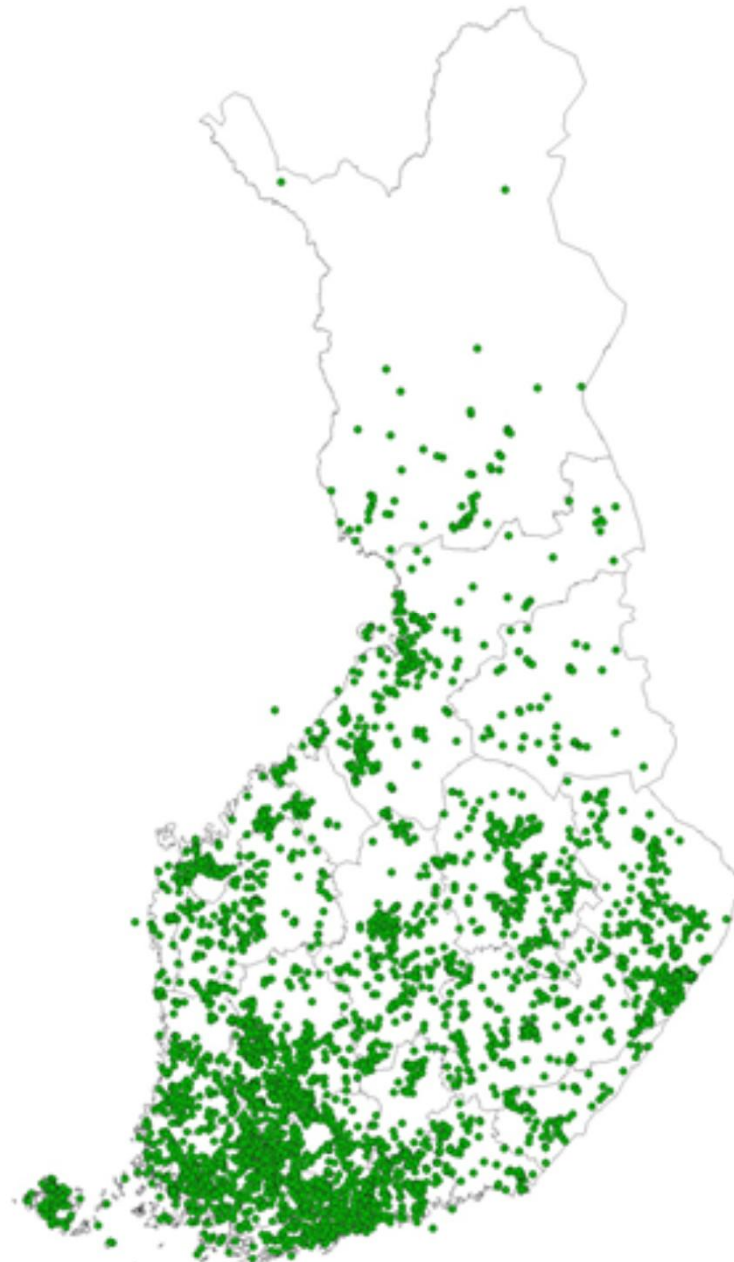


Photo: Luonnonvarakeskus

APIARISTS IN FINLAND (2015)



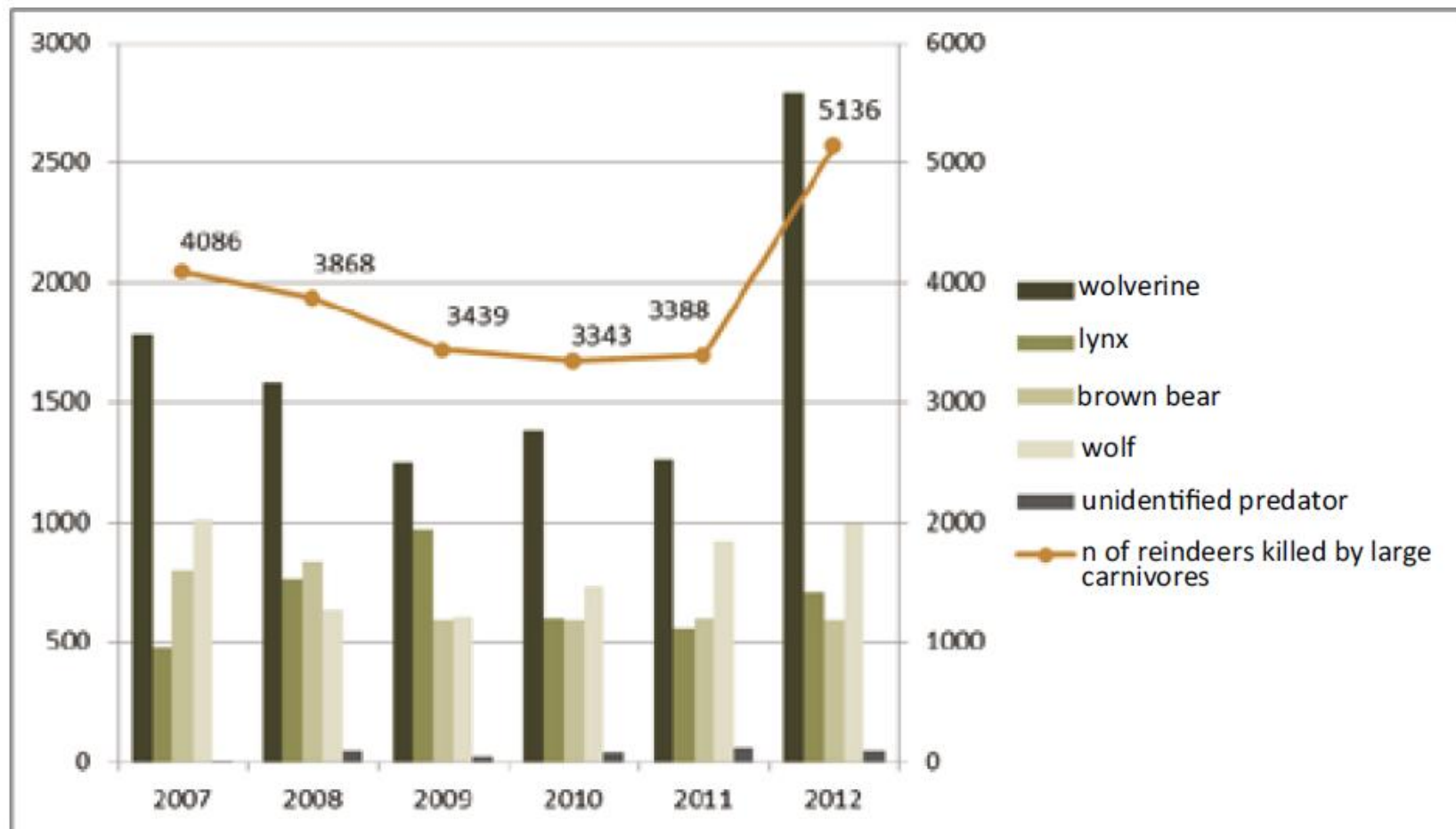
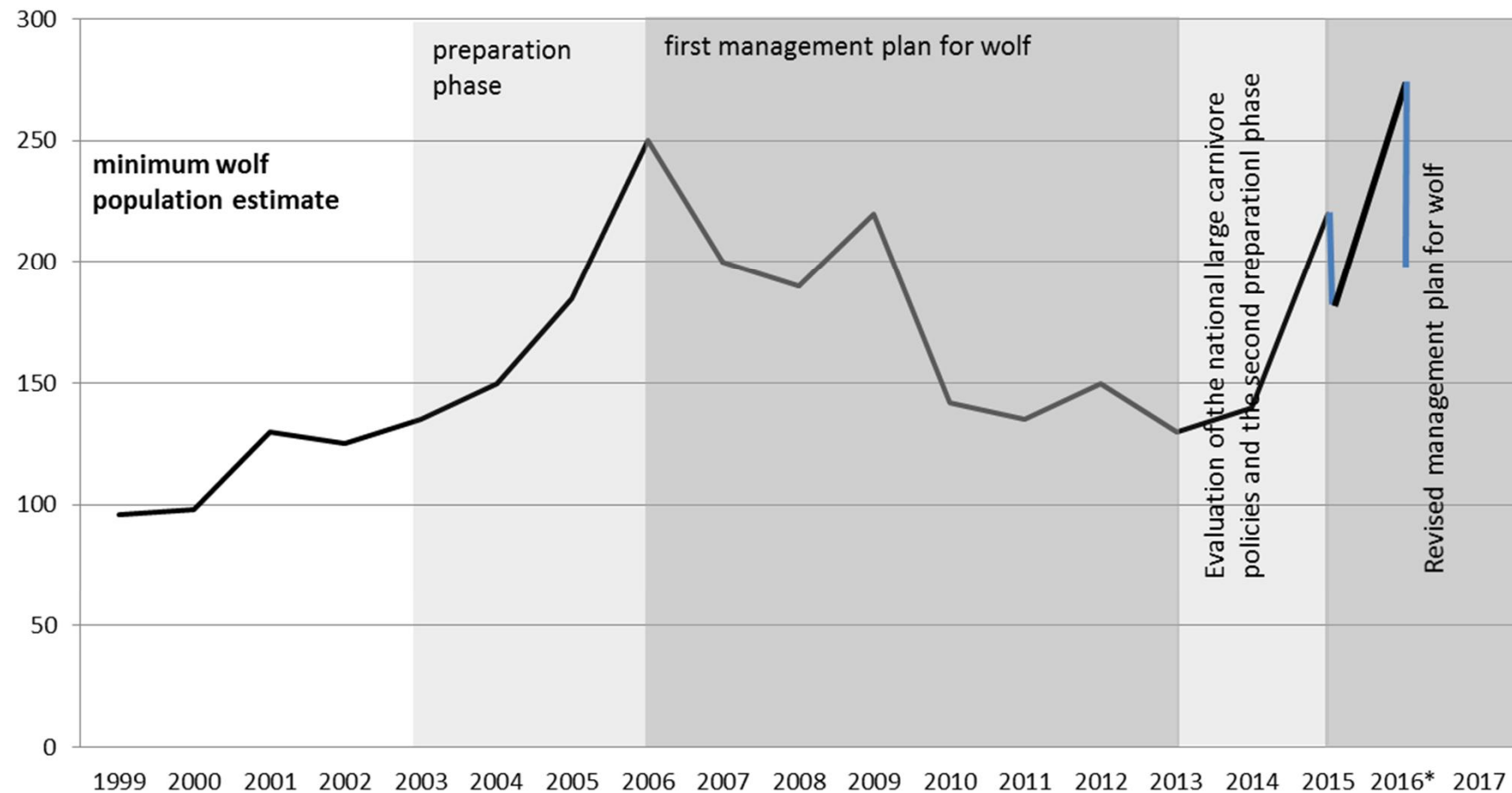


Figure 12. Reindeer found killed by each large carnivore species (axis 1y) and combined total of reindeer killed by all large carnivore species (axis 2y) during the period 2007–2012.

Pohja-Mykrä M & Kurki S (2014) Evaluation of the Finnish national policy on large carnivores, Reports 135. Ruralia Institute, University of Helsinki.

MINIMUM WOLF POPULATION ESTIMATE 1999-2016



Blue line = hunting quota plus other known human-caused mortality

NATIONAL MANAGEMENT PLANS FOR LARGE CARNIVORE SPECIES AND SOCIO-ECONOMIC RESEARCH (RURALIA INSTITUTE UNIVERSITY OF HELSINKI)

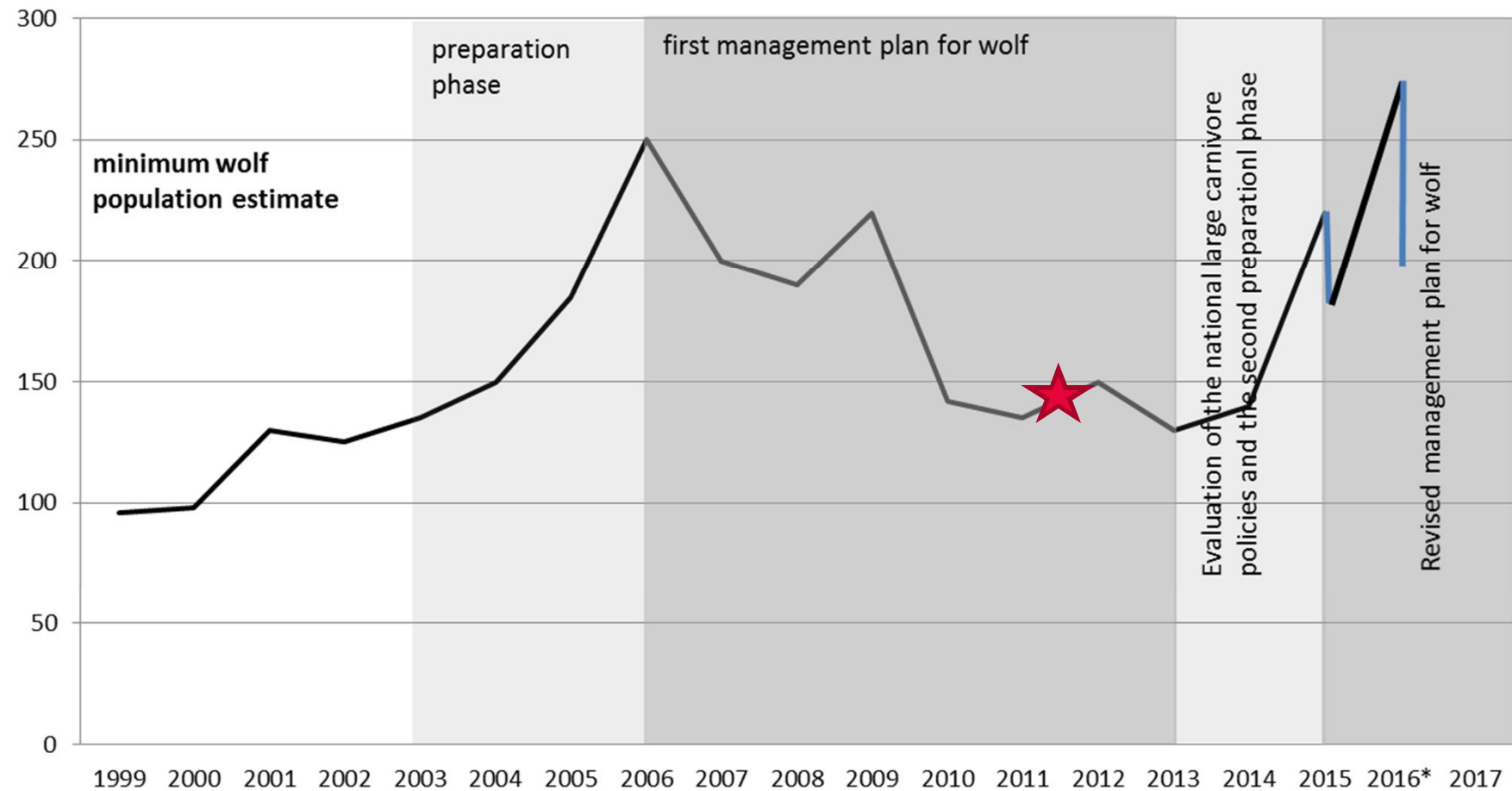




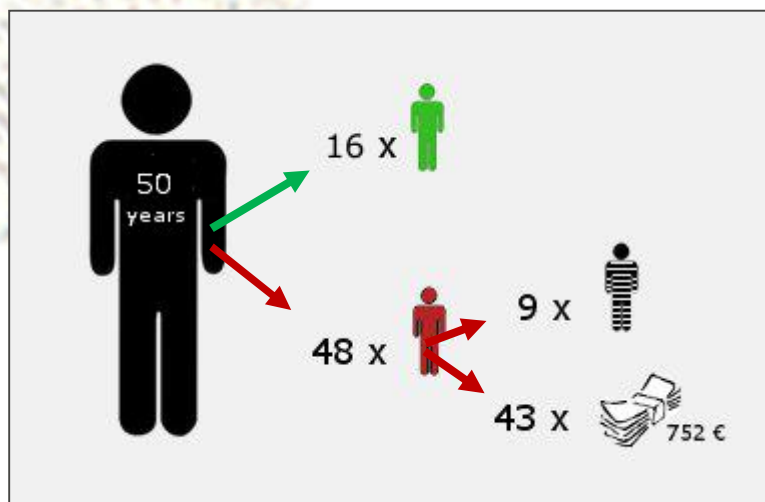
WOLF POLICIES AIM AT DECREASING THE ILLEGAL KILLING OF LARGE CARNIVORES

- Ø The indicative value of game animals was raised in 2010 to make the financial gains of committing a hunting offence less attractive. The amount of compensation to the state varies according to whether the animal was a juvenile or adult. The indicative value for wolverine is up to €16,500, for lynx up to €2,100, for bear up to €15,500 and for wolf up to €9,100.
- Ø An amendment to the Criminal Code in 2011 stipulates that any illegal killing of large carnivores will be treated as an aggravated hunting offence, and sentences were therefore tightened.
- Ø Traditional wolf hunting was ceased in 2007 (to meet the demands of Habitats Directive's strict protection).

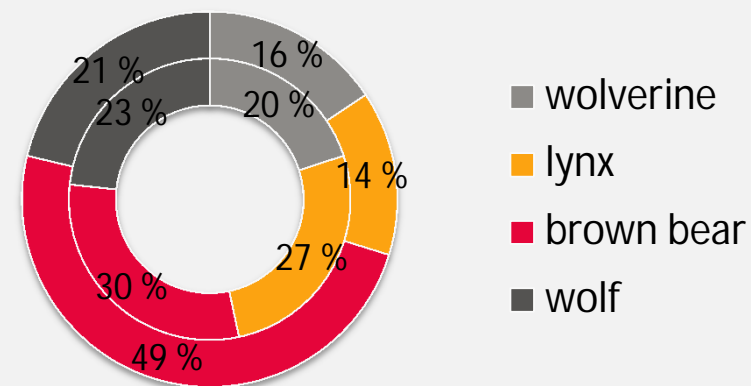
RESEARCH ON ILLEGAL KILLING STARTED



HUNTING VIOLATOR AND TARGET SPECIES



Ø Hunting violator is 50-years-old male (range 21-71).
 Ø At least 83 % are hunters.
 Ø At a time, 2.3 men (range 1-6) took part in illegal killing.



Frequency of large carnivore species during 2005-2010 in
 ü Police Records (n=141, outer circle)
 ü District Courts' Sentences (n=30, inner circle)

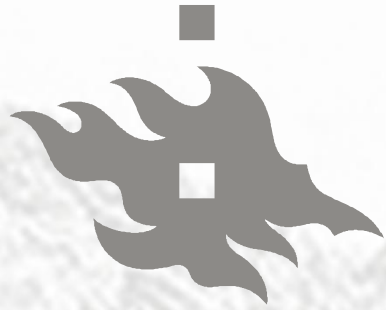
Pohja-Mykrä M (2016) Felony or act of justice? - Illegal killing of large carnivores as defiance of authorities, Journal of Rural Studies, Vol 44: 46-54



ILLEGAL KILLING AS A SOCIO-POLITICAL CRIME

Hunting violators' motives for illegally killing large carnivores. Data consists of 64 offenders from District Court sentences 2005-2010.

Motives	n	n %
disputes over LC policies	43	67
abetting a friend	11	17
self-protection	5	8
financial benefit	4	6
accident	1	2
<i>Total</i>	<i>64</i>	<i>100</i>



BACKGROUND AND MADE ASSUMPTIONS

- ü The perceived lack of legitimacy in conservation regimes is manifested in implicit and explicit forms.
- ü The illegal killing of large carnivores is committed as part of a social group.
- ü Hunting violators usually belong to the mainstream society, and are generally committed to the rules and laws of society, but they rationalize certain exceptions.
- ü Violators are affected and bound by moral and social sanctions in the community
- ü Rural protests against conservation policies are not expressed by hunting violators alone; socio-political crime is committed by the entire local community.



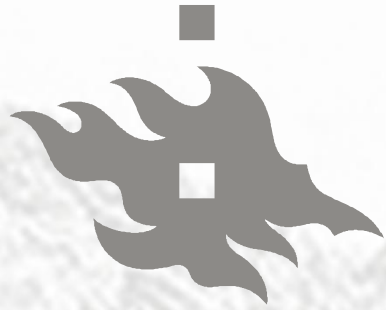
RESEARCH QUESTIONS

- ü How hunting violators negate the shame from the stigma and sanctions associated with violating the law?
- ü Sociopolitical illegal hunting as defiance of authorities?
- ü Do community members, i.e. the core group of hunting violators support illegal killing of large carnivores, and under what conditions is this support given?
- ü How these community members negate the shame from the stigma and sanctions associated with violating the law, and thus, how rural communities sustain alternative ways of regulating their world under pressure from conservation regimes?



COLLECTED DATA

- ü Official Statistics (2005-2010):
District Courts' Sentences (n=30) and Police records (n=141)
- ü Semi-structured interviews:
hunting violators (n=2) and game officials (n=2)
- ü Non-active role-playing with empathy based fictitious stories
 - Qualitative attitude analysis, argumentation analysis (N=148)
Women (n=48) and Hunters (n=100)
 - Neutralization of illegal acts (N=231)
Women (n=62) and Hunters (n=169)



RESULTS AND CONCLUSIONS IN SHORT

- ü Shared emotions, shared knowledge -> shared attitudes
- ü Strong community support for illegal killings

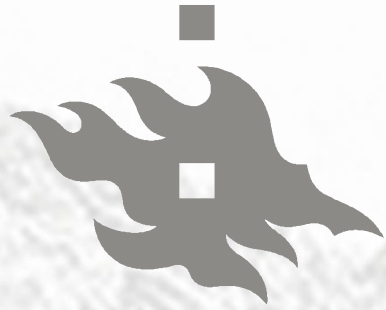
- Ø The wolf seems to be the main species involved in the conflict, and future research should emphasize its species-specific characteristics and their contribution to high levels of fear.
- Ø There is a need for a better understanding of biosecurity issues within human societies, and of the psychological processes involved in environmental conflicts.

Pohja-Mykrä M & Kurki S (2014) Strong Community Support for Illegal Killings Challenges Wolf Management. European Journal for Wildlife Research, 60(5): 759-770.



RESULTS AND CONCLUSIONS IN SHORT

- Ü Alienation of traditional rural life from society at large, community support for illegal hunting and the neutralization of the stigma and shame associated with the sanctions, all address rural defiance against the authorities and illegitimate conservation regimes applied at the EU level.
- Ø The use of defiance theory broadens our understanding of how conservation law enforcement strategies such as more punitive regimes may increase illegal killing and support for it instead of acting as a deterrent.
- Ø Illegal killing of wolves is a sign of increasing and powerful non-communicative resistance, and must be considered a serious signal of a need to bring new management tools to support successful conservation policies.



RESULTS AND CONCLUSIONS IN SHORT

- ü Neutralization techniques used to justify the illegal killing of large carnivores provide an insight into the discourses used to defend the rural identity and way of life, and to express rural protests toward conservation policies.
- ü Rural protest manifested by the core groups of hunting violators contests views as to how the conservation of large carnivores, more specifically wolves, should be conducted.
- Ø Voluntary compliance through informal social sanctions and the perceived legitimacy of the rules enforcing the law according to moral standards might be worth exploiting.
- Ø Support processes that will make hunting violators irrelevant to community welfare.



HUMAN-WOLF CONFLICT IN SHORT

In Finland, the wolf conflict has to do

- with local people's shared emotions and values towards conflict-prone species,
- with conflicting views with stakeholders,
- with the marginalization of local knowledge,
- with a distrust of the authorities, and
- with perceived normative and empirical socio-cultural legitimacy deficits in wolf conservation.



EVALUATION OF THE FINNISH NATIONAL POLICY ON LARGE CARNIVORES IN 2013

Ø Paradigm shift

"Interdependence of ecological, economic and social factors"

Ø Introduction of the theoretical concept of
'psychological ownership' into large carnivore policies



PSYCHOLOGICAL OWNERSHIP

By giving local people

Øcontrol over wolves

Øopen-access to wolf information, and

Øpossibility to invest one's self in wolf management,

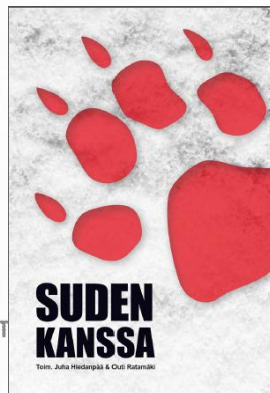
the human basic needs of

Øself-identity

Øefficacy in relation to their environment and the objects that belong to it, and

Øhaving a place in which to dwell,

are fulfilled.



HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

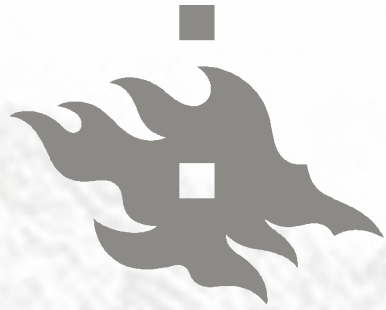


"I feel it is mine!" – Psychological ownership in relation to natural resources

A. Matilainen*, M. Pohja-Mykrä, M. Lähdesmäki, S. Kurki

University of Helsinki Ruralia Institute, Kampusranta 9, 00320 Seinäjoki, Finland





NATIONAL WOLF POLICIES

Ø FIRST NATIONAL PLAN FOR WOLF MANAGEMENT IN 2005

No mention of 'Illegal killing' at all.

Ø EVALUATION OF THE FINNISH NATIONAL POLICY ON LARGE CARNIVORES IN 2013

'Illegal killing' formed essential part of the evaluation. Paradigm shift.

Ø REVISED NATIONAL PLAN FOR WOLF MANAGEMENT IN 2014

Whole chapter about 'Illegal killing' of wolves.



DECREASING THE ILLEGAL KILLING OF WOLVES REVISED MANAGEMENT PLAN FOR WOLVES 2014

- ü "Each police department will appoint a wildlife contact person to coordinate the planning and implementation of supervision in the police department's area."
- ü "The police, the Border Guard and Forestry Services hunting wardens will work together to implement supervision projects."
- ü "Annual development seminars will be organised, in which the supervisory authorities in areas with wolf territories, the game administration and the large carnivore research sector will take part."
- ü "The hunting associations in areas with wolf territories will inform their members, landowners and local communities of their non-tolerance of illegal killing of wolves and their intention to report any suspected illegal acts to the police."
- ü "The game management associations in an area with a wolf territory will prepare annual plans for the supervision of hunting."



DECREASING THE ILLEGAL KILLING OF WOLVES REVISED MANAGEMENT PLAN FOR WOLVES 2014

Ü From the national survey in the wolf management plan:

"Those people who live within the wolf territories should have more influence on wolf issues compared to those people that live outside the wolf territories"

- 78 % of people living in municipalities with wolf territories agreed
- 73 % of people from the other municipalities agreed

Ø A key principle of the new approach to wolf population management is a **territory-based management** where people living and operating within the wolf territory should have more impact on wolf management.

Ø 59 concrete actions and 9 development projects, which are aimed at finding new solutions to the most central issues in the wolf conflict, and subsequently, to sustainable wolf management

- 29 actions have been carried out in 2015-2016
- 7 development projects have started (including the traditional wolf hunting)



PROS OF LEGAL (TRADITIONAL) HUNTING

Traditional wolf hunting / hunting with derogations based on population management

- ü leans toward responsive and deliberative governance of large carnivore management and conservation,
- ü with the aim of empowering local citizens in large carnivore management and policy by bringing to the fore their sense of nature and how it is to be used.
- ü It also addresses the importance of building trust between authorities/wildlife scientists and hunters (local populations),
- ü acknowledges the importance of local knowledge along with ecological-technological expertise, and
- ü fulfills both generic and socially generated motives and basic human needs, such as interaction with the living environment and effectance on objects that belong in it.



CHANGES DUE TO THE REVISED MANAGEMENT PLAN

- ü Positive change in local attitudes towards wolf
- ü Hunters are beginning to see a wolf as a valuable natural resource
- ü Hunting with dogs have increased from 60 % to 74 %, but wolves are seen as a smaller risk to dogs than before
- ü Acceptance for illegal killing in overall has been decreased
- ü More active co-operation between stakeholders due to the local co-operation groups at the wolf pack territory level
- ü Increased co-operation between locals and game management officials / game researchers
- ü Finnish wolf population has been increasing à results are positive on the population level and in terms of achieving the ecological sustainability



TAKK!

