

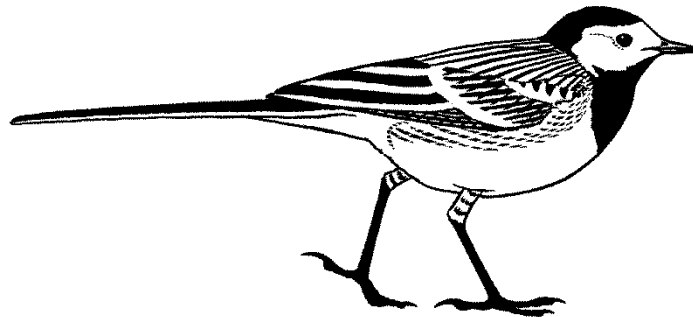
Tourism in a vulnerable environment

Plenary 3.1

Northern 5th European Conference of Travel Medicine
Bergen, 7th June 2014

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Reiseklinikken[®]



NETM5



The scientific committee has emphasized controversies and dilemmas in travel medicine in this conference

Is tourism a threat of the nature?

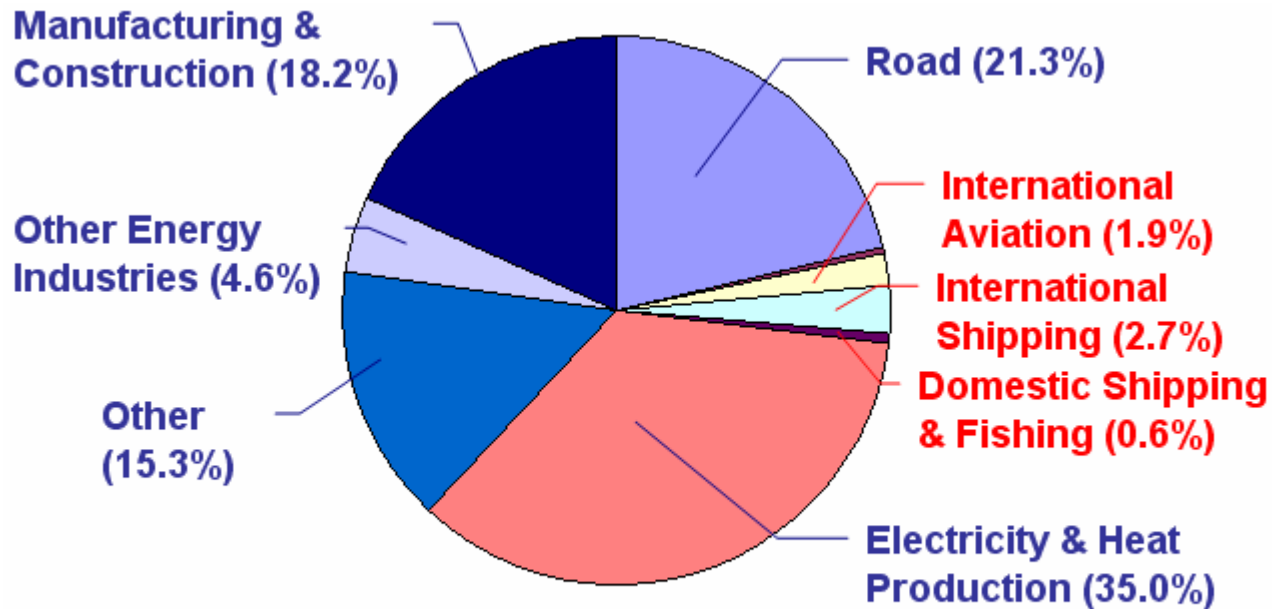
My conflicts of interest:

- I am a member of
 - The Green party
 - World Wide Fund for Nature
 - Rainforest foundation
 - Greenpeace
 - Future in our hands (FIVH)
 - Naturvernforbundet
- I have an economic interest in vaccinating travelers



A dilemma: We make a profit from an industry that contributes to global CO₂ emissions

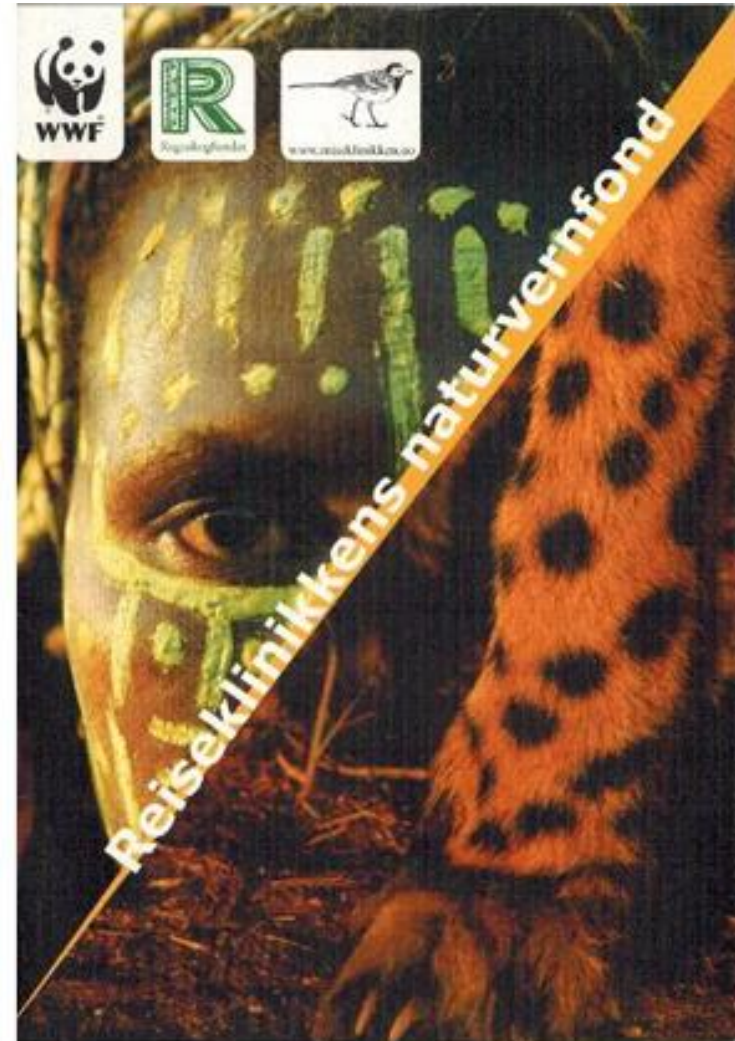
However, a relatively small contribution:



GLOBAL CO₂ EMISSIONS BY SECTOR

Our «indulgences», or «penance»: A nature conservation fund

- We collect money from our customers through «Reiseklinikkens naturvennfond» which is forwarded to World Wild Fund for Nature (WWF) and the Rainforest Foundation
- We promote responsible tourism by distributing brochures and by exhibiting items that are forbidden to buy in our reception



Advices concerning
responsible tourism should
be a natural part of a travel
medicine consultation

World Tourism Organization (UNWTO)

- The United Nations agency responsible for the promotion of
 - responsible
 - sustainable
 - universally accessible tourism.

UNWTO promotes tourism as a driver of economic growth, inclusive development and environmental sustainability



Tourism can, and should, be a positive factor for the host countries

- Rich people leave money in poor countries
- By spending money on watching the wildlife, the wildlife will have an economic value
- An incentive for preservation
- May reduce the conflict between the subsistence to the local people and wild predators



Products on the CITES list of endangered species



Bats

Birds (also eggs)

Primate parts

Parts of large carnivores,
skeleton, claws, fur

Ivory

Chinese
medicine
made from
endangered
species

Reptile
products

Fur from
large cats

Is tourism the main threat of temperate and arctic nature?

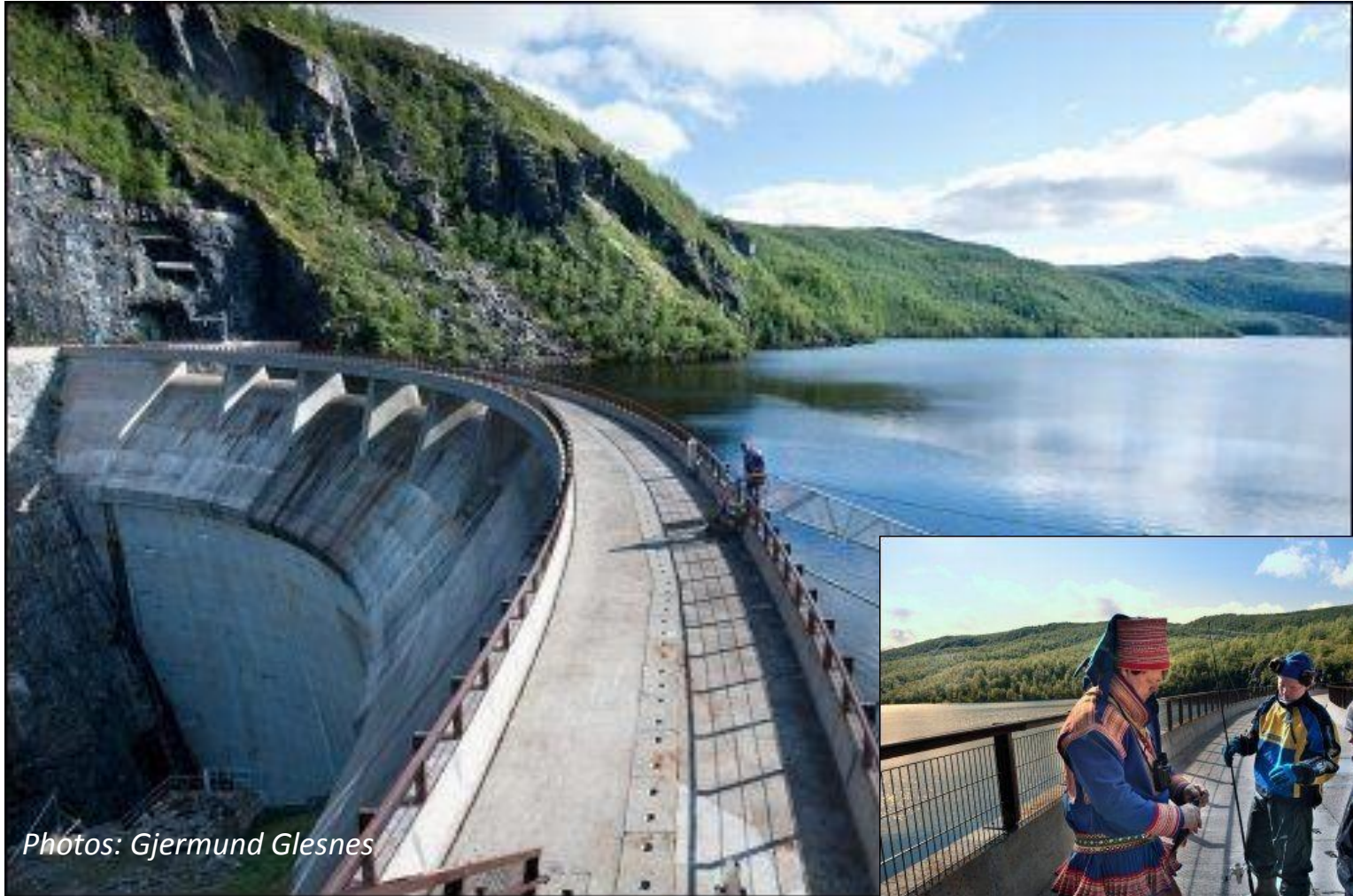


Photo: www.reineord.no

Lofoten is among the most beautiful places in the world, and with enormous fish resources.

It is also a place where the Norwegian government wants to start oil drilling as soon as possible

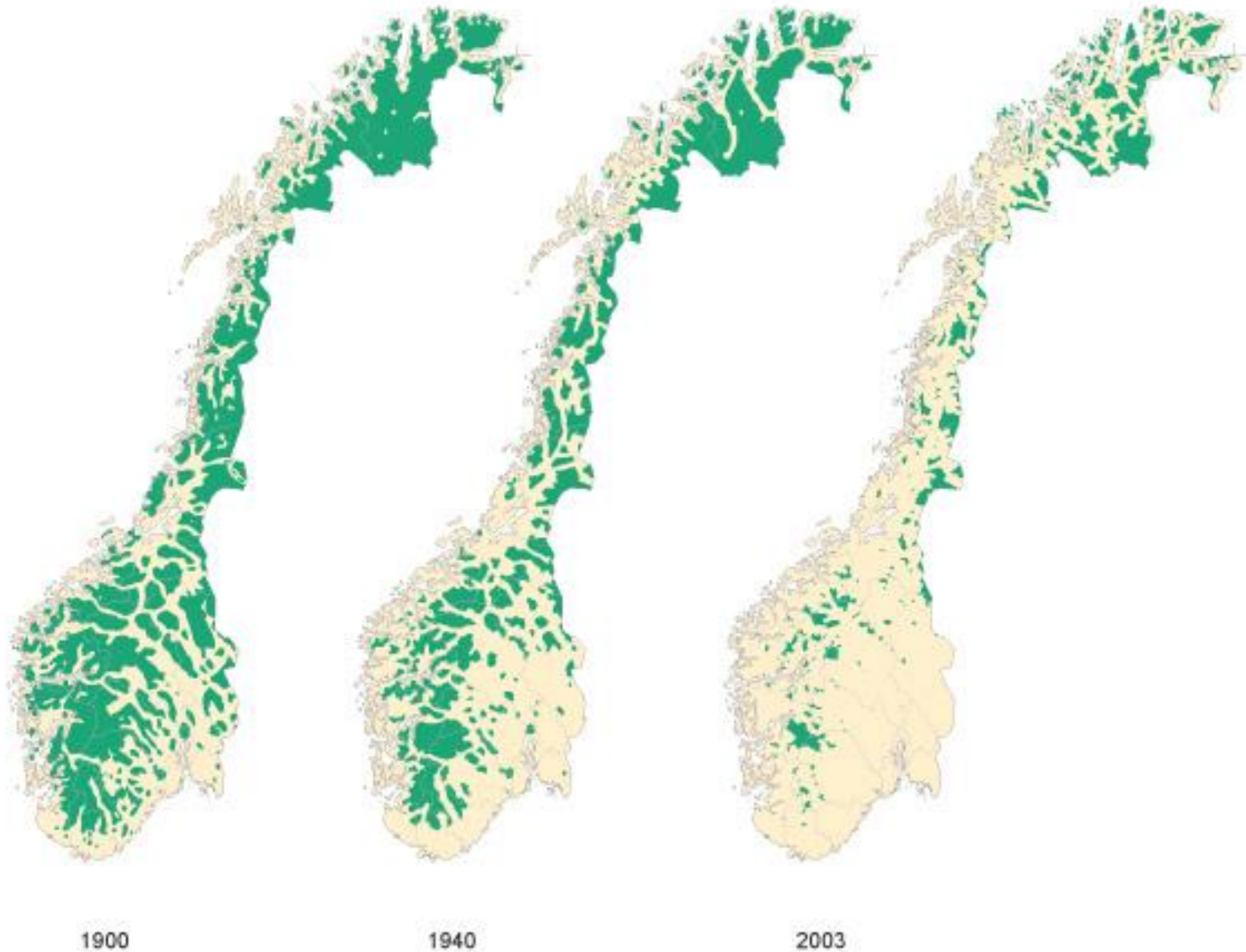
Norway is a huge producer of hydroelectric power



Photos: Gjermund Glesnes



Areas in Norway that are more than 5 km from the nearest road, building or electric power line



There are 415,000 holiday homes in Norway

In addition: a lot of houses are used as holiday homes



Modern architecture in the mountains



Images from Berntsen & Hågvar: «Norwegian nature – farewell»

People are allowed to build at the sea-shore





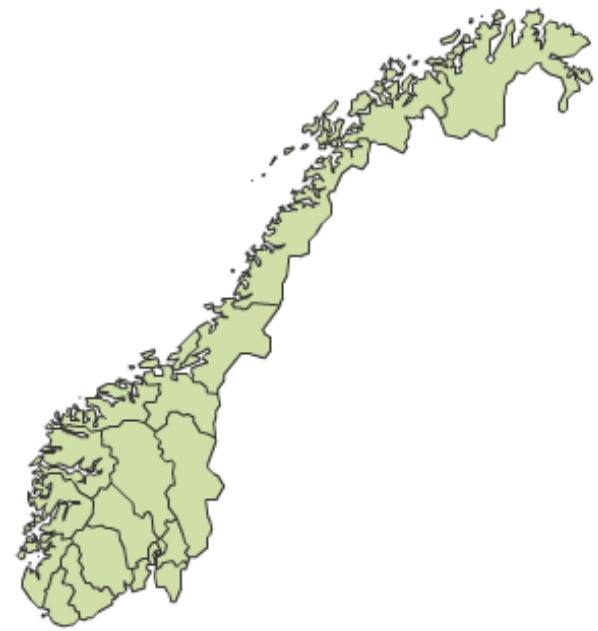
Photo: www.kulturverk.no

The Geirangerfjord

- Visited by 150 cruise ships per year
- UNESCO's world heritage list
- August 2009: The cruise ship «Spirit of Adventure» spilled oil, and polluted 100-200 meters of shore-line, i.e., a minor incident

Two weeks earlier:

- The dry-cargo ship «Full City» ran aground at Langesund, relasing 50-200 tons of fuel oil
- Enormous consequences for birds and the shoreline



Langesund,
Norway
2009

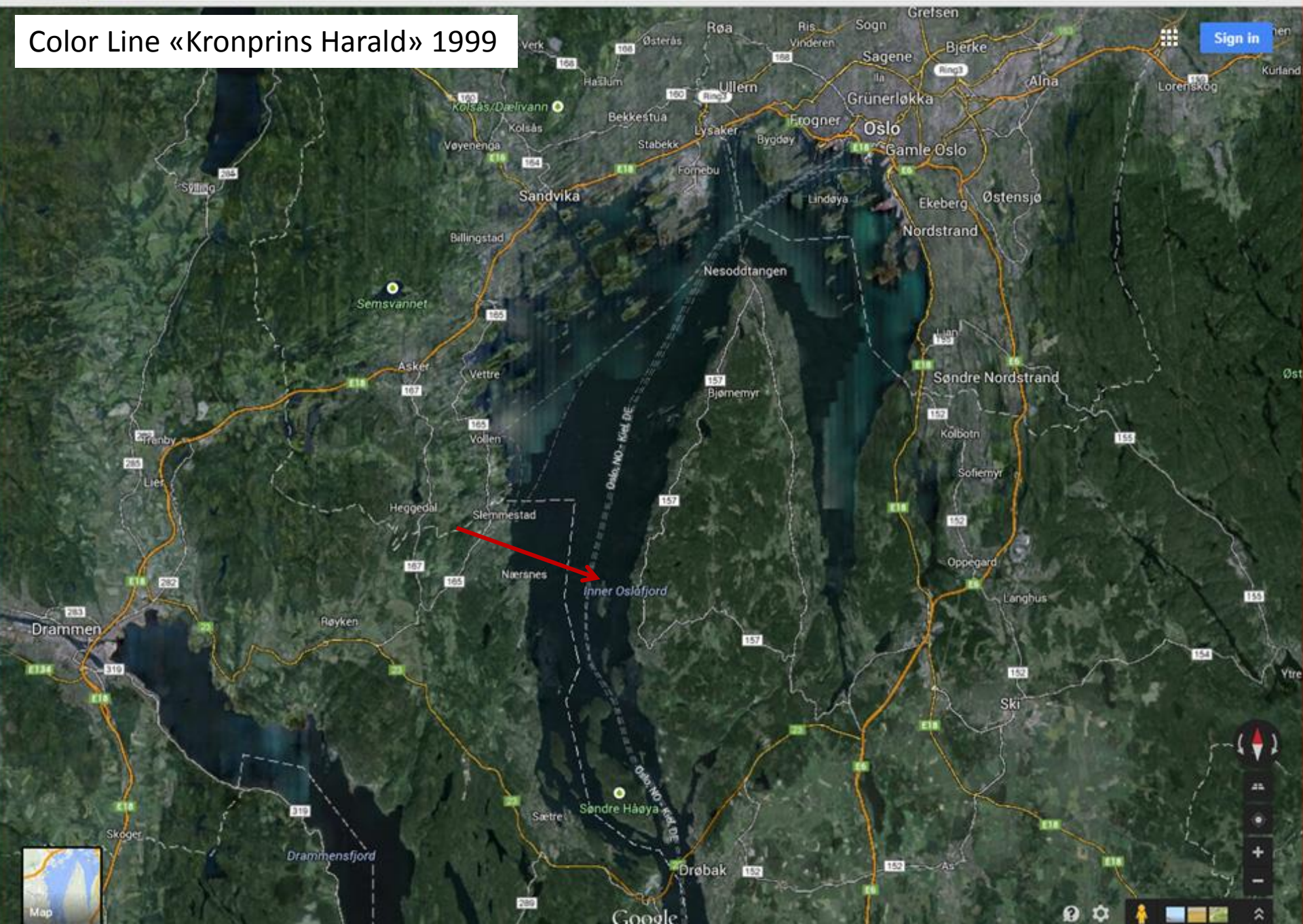


Photo: WWF

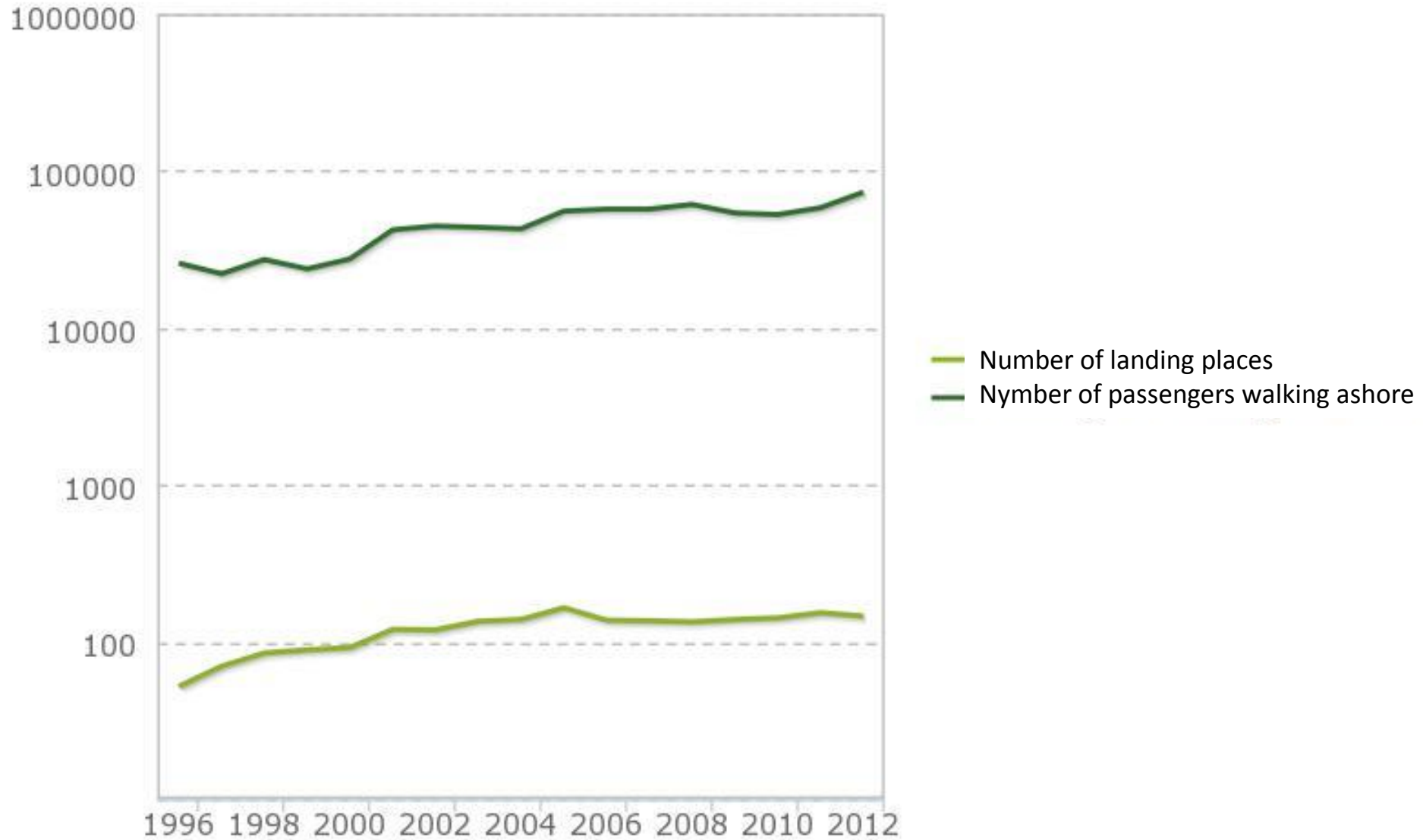
- Daily passenger ship arrivals:
 - Oslo-Kiel
 - Oslo-Copenhagen
 - Oslo-Fredrikshavn
- In addition: 130 cruise ships per year



Color Line «Kronprins Harald» 1999



Cruise traffic to Spitsbergen



Why do people go to Spitsbergen?









Global Arctic Programme

WWF Arctic Tourism Project

Working with tourism for Arctic conservation, 1995-2006

WWF believes that tourists coming to the Arctic can be “ambassadors” for arctic conservation, and that the tourism industry can adopt sustainable practices while remaining profitable.





Ten guiding principles of responsible tourism:

1. Make Tourism and Conservation Compatible
2. Support the Preservation of Wilderness and Biodiversity
3. Use Natural Resources in a Sustainable Way
4. Minimise Consumption, Waste and Pollution
5. Respect Local Cultures
6. Respect Historic and Scientific Sites
7. Arctic Communities Should Benefit from Tourism
8. Trained Staff Are the Key to Responsible Tourism
9. Make Your Trip an Opportunity to Learn About the Arctic
10. Follow Safety Rules

WWF report (2004):

“Cruise tourism on Svalbard – a risky business?”

- Major oil spills
 - Heavy fuel oil
 - Near the coast
 - During the most productive season
 - Limited oil response capacity
- Soot particles
- Sewage, garbage, waste water
- Disturbance of wildlife
- Degradation of landing sites

Conclusion:

Cruise tourism is not the main threat on Spitsbergen (Svalbard)

Counter-measures

- Ban heavy fuel oil
- Close the most vulnerable areas for tourism

A chinese billionaire, Huang Nubo, reportedly wants to build a chinese tourist resort in Austre Adventsfjorden, Spitsbergen



Photos: www.aftenposten.no

Other tourism activities on Spitsbergen

- Trekking
- Camping
- Snowmobile safari (permitted in some areas)
- Hunting

Some exotic health risks:

- Polar bear attacks (a firearm is mandatory!)
- Trichinosis
- *Echinococcus multilocularis*
- Rabies

Continental Northern Europe

Does hunting harm the nature?

- Some hunting is necessary for the management, to keep the biodiversity:
 - Manage the population of deer
 - Control invasive species
 - Interfere in the evolution, by for instance culling the fox population to give the arctic fox a better chance to survive



Photo: Wikipedia



Photo: Wikipedia

The only chance to see Norwegian wolves:



The wolf was eradicated in Scandinavia in the 1960

- Now there are about 30 wolves of Russian-Finnish origin in Norway
- Three breedings per year are permitted in Norway
- Some influx of wolves from Sweden, where there is 3-400 individuals

There is a high conflict level between farmers and conservationists

The Great auk, *Pinguinus impennis*

The last observation in 1852



Willow ptarmigan, *Lagopus lagopus*

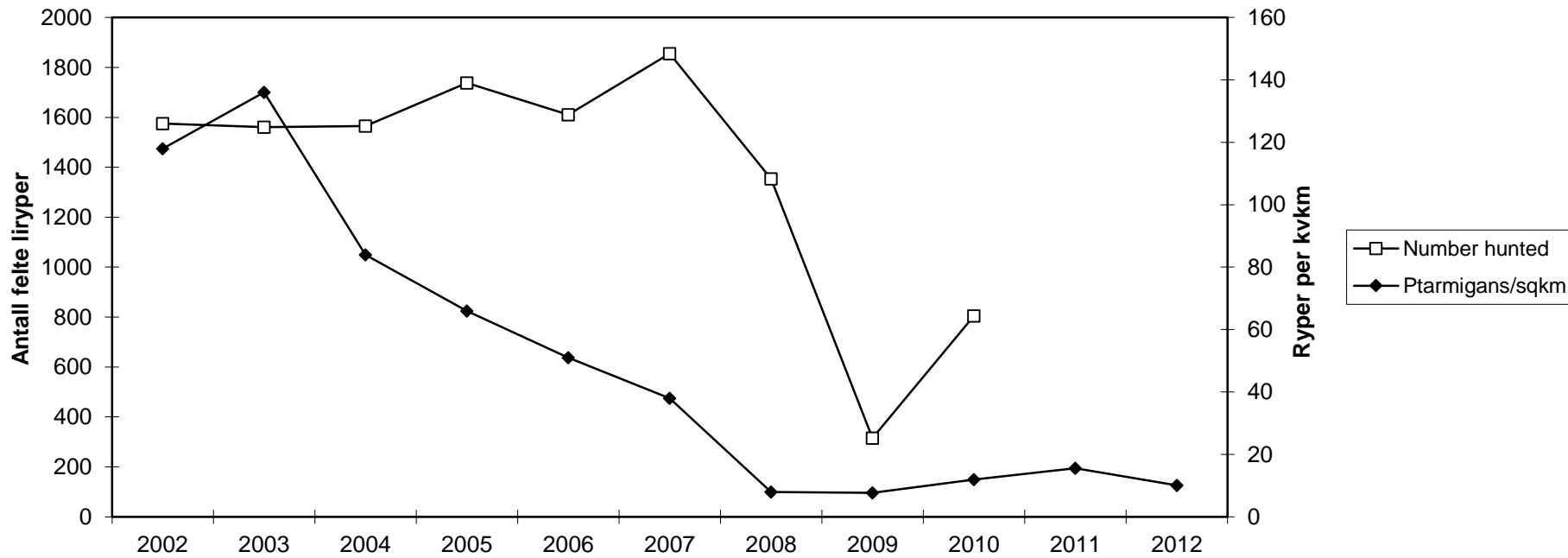
- A very popular game bird
- Common
- High potential of multiplication
- The last two years: very few individuals seen in Southern Norway



Photo: Wikipedia

Is hunting the cause of the decrease in ptamigan numbers?

Hunting statistics for Øystre Slidre, compared to ptamigan counting at Øvre Heimdalsvatn
Source: Årsmelding for Fjellstyret i Øystre Slidre 2010 and ptamigan counting by students at NATF100, UMB, Ås

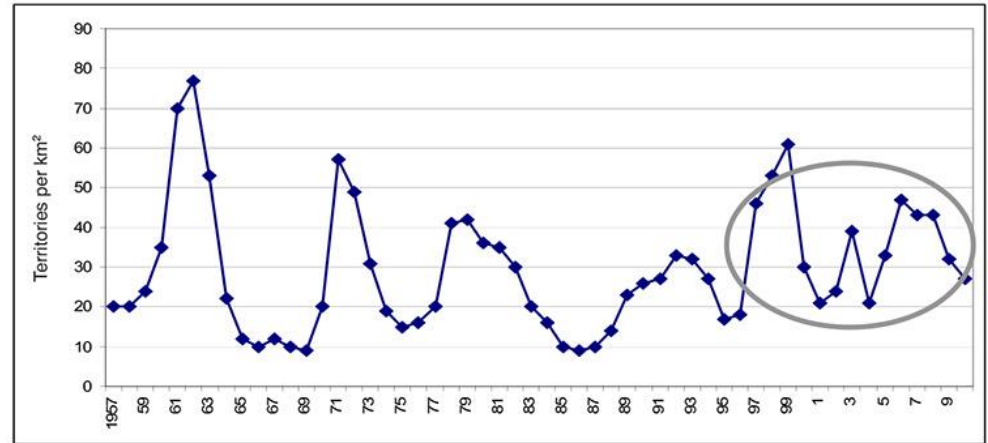


Ptarmigan populations fluctuate naturally:

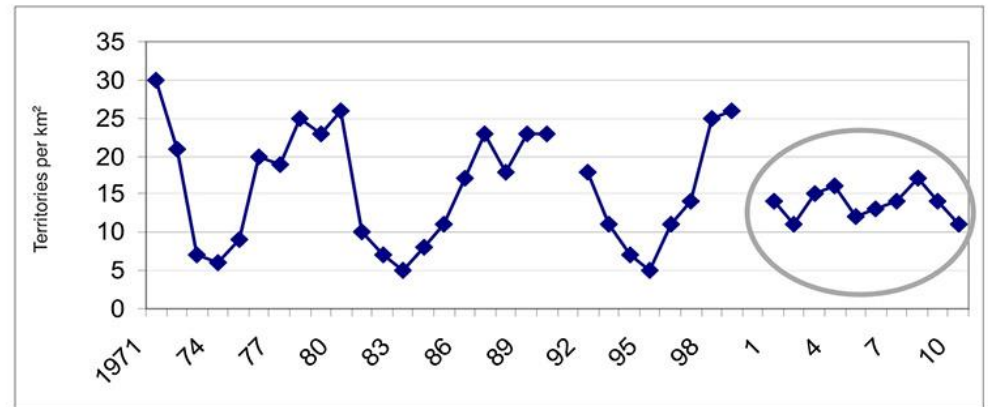
- Adult ptarmigans are food for
 - Gyrfalcon
 - Eagles
 - Snowy owls
- Eggs and chicks are food for
 - Arctic fox
 - Stoat



Photo: Wikipedia



S. Yukon Willow Ptarmigan



Mid-Yukon Willow Ptarmigan

Willow Ptarmigan population fluctuations showing regular 10-year cycles in abundance and the anomalous last decade. Data are from total spring ground counts of one km² plots in the Yukon, Canada.

In Norway 200,000-500,000 ptarmigans are shot every year

- How many red-listed predators could have survived if this harvesting had not taken place?



Snowy owl. Photo: Tore Wuttudal



Gyrfalcon

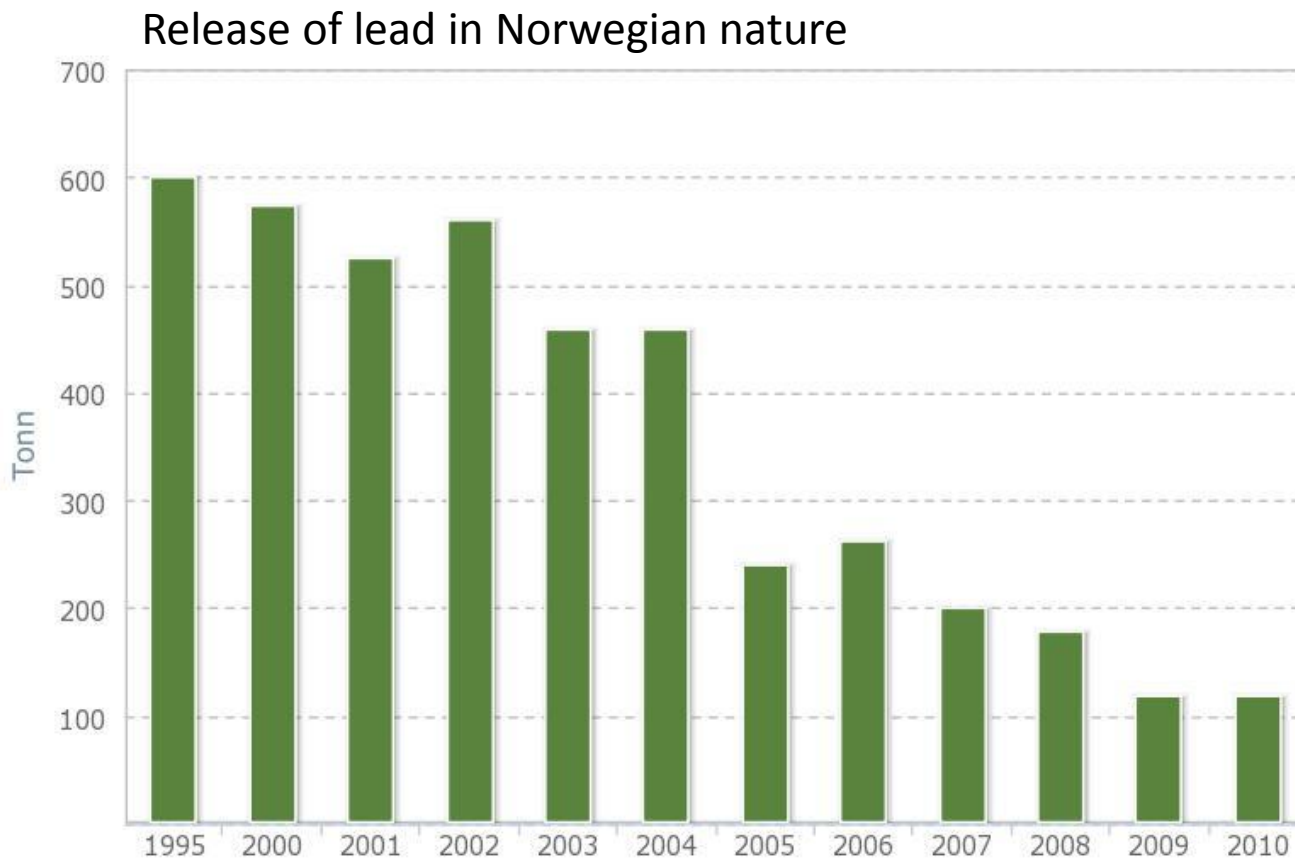
Hunting is permitted in all
Norwegian national parks
The parks are beautiful, but they are
«empty scenery»



Hunttable wildlife is too shy to be easily seen

Lead-shots are banned in Norway since 2005

Previously: 170 tons lead per year from shotguns



Source: Miljødirektoratet

Lisens: NL0D

Lead shot are hardly dangerous on the ground, but

- Wounded animals with lead shots will eventually be eaten by predators and scavengers. Pain et al. (2009) found lead in:
 - Golden eagle
 - Common buzzard
 - Goshawk
 - Sparrow hawk
 - Eagle owl
 - Long-eared owl

Norges jeger- og fiskerforbund

The Norwegian Association of Hunters and Anglers

- They have performed intensive lobbying to stop the banning of lead shots
- They will most likely succeed

The NJFF lobby in front of the parliament:



Photo: www.NJFF.no

«Soft» tourism

- Trekking
- Bicycling
- Canoeing
- Sailing



Trekking

- A cheap and environmentally friendly way of travelling in Norway
 - Stick to the trails* to avoid unnecessary disturbance of the wildlife
 - Use only dedicated campfires, and don't make a fire at times when it is forbidden
 - Bring your litter home
 - Keep dogs tied

* A special problem in orienteering: The participants will run shortcuts, with potential damage on the surface vegetation, and disturbing of the wildlife. Therefore orienteering should not take place when the wildfowls are breeding

Problem:

Damage of the surface, from bicycles and feet



Photo: Bjarne Røsjø



source: www.regjeringen.no

Canoeing and kayaking

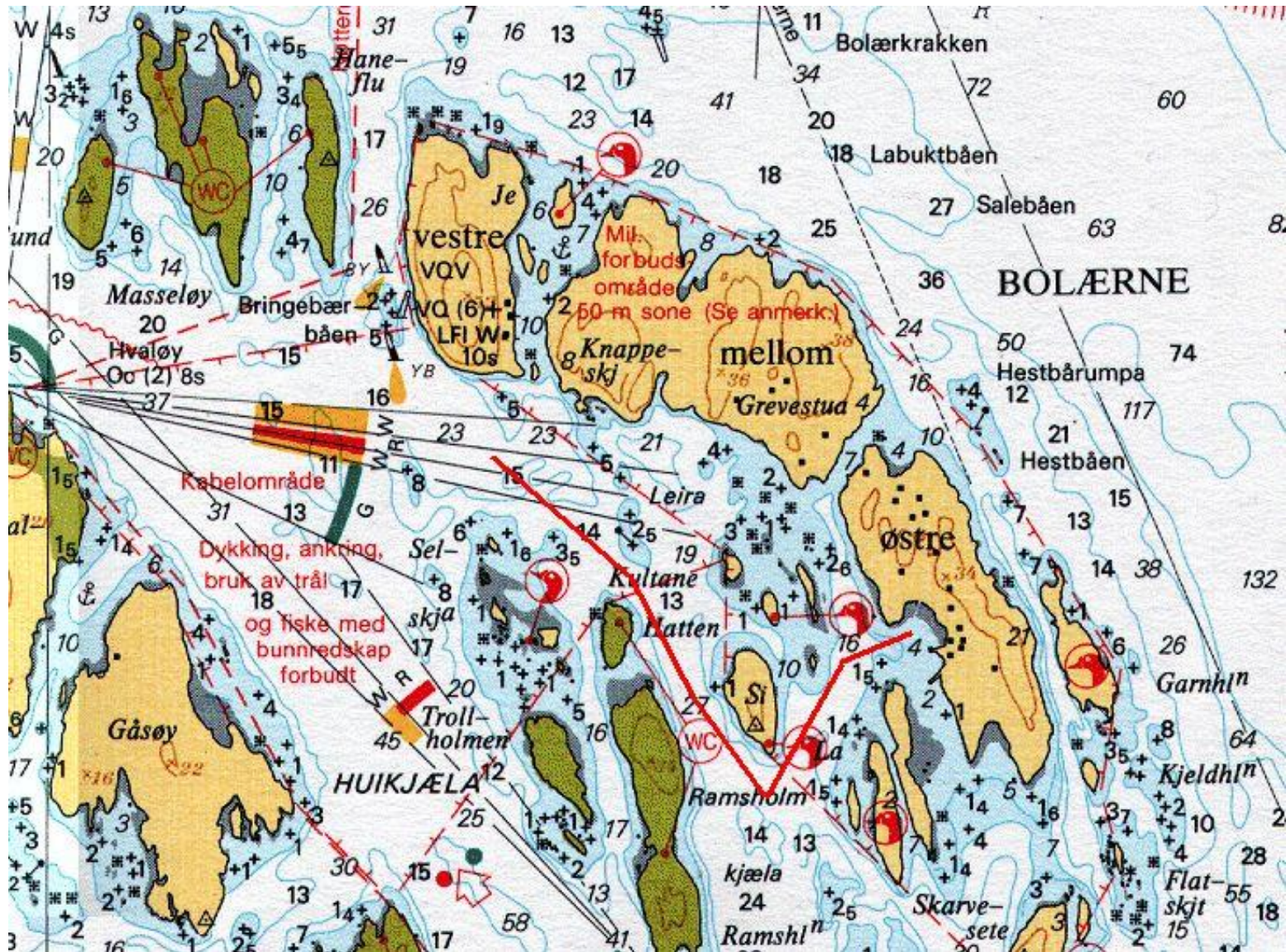
- Beware of the Crayfish plague
- An oomycete: *Aphanomyces astaci*
- Spread via waterways and by wet fishing gear, and possibly by small boats

Typical Norwegian wildlife tourists:





There are more than 400,000 small boats in the Oslo fjord
I.e., far more than the number of sea birds!



Source: Statens kartverk

Boat tourism

- Respect the restrictions on landing in the bird sanctuaries 15th April to 15th July
- Don't throw litter
- Don't release sewage less than 300 meters from the shore

The local population, and government, is a threat to the Norwegian nature:

- Oil drilling in vulnerable nature
- Construction work, not least for leisure purposes in vulnerable nature
- A high level of conflict between farmers and animal predators
- Norwegian hunters: **464 176 persons, owning 1 233 510 guns (a low estimate)** (Norwegian population: 5,1 million people)

Foreign
tourists are
not the
main threat
against
Norwegian
nature

