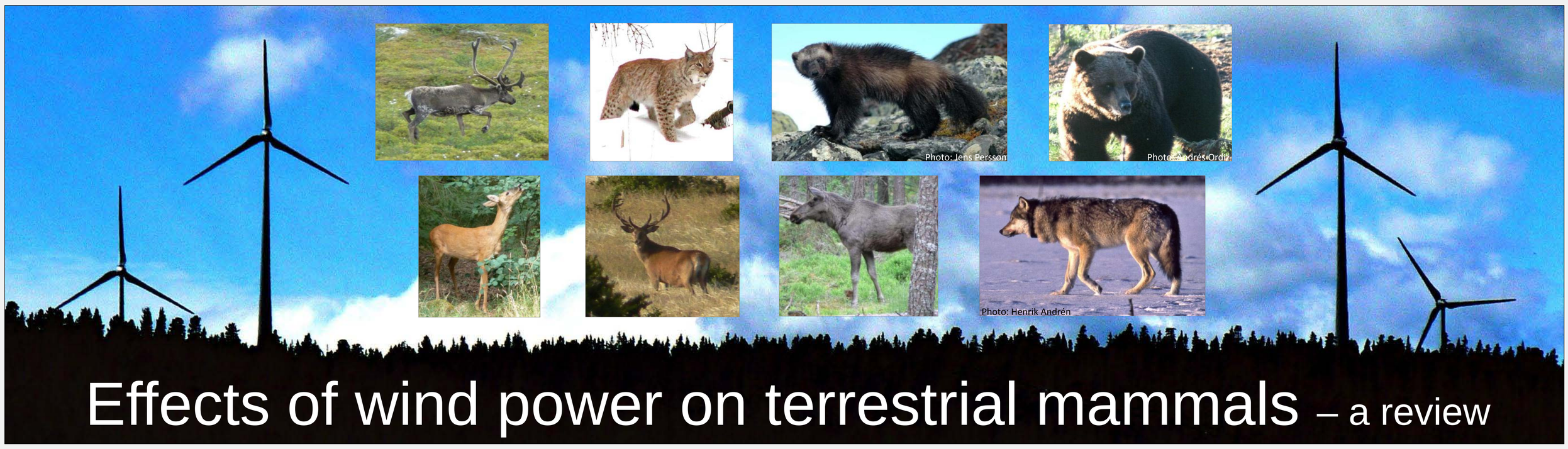

Effects of wind power on terrestrial mammals – a review

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Background

- Most new on-shore wind parks are located in remote areas (forests and mountains)
- Growing concern for the effects on terrestrial mammals – but little is known

Method

- Review of scientific and "grey" literature
- Extrapolation from knowledge in related fields

Results

- Ungulates and large carnivores may be disturbed by
  i. construction work (temporary disturbance)
  ii. human recreation facilitated by new road networks
  iii. power lines (but results are inconclusive)
- Effects of noise and visual impacts are largely unknown
- Disturbance may cause a loss of available habitat
- Habituation to disturbance may occur, but is species-, individual- and sitespecific, and can not be presupposed
- Roadsides and power line corridors may also provide forage = positive potential
- Wind power development may despite a limited geographical extent have population level effects

Management implications

- Great need of:
  i. research addressing wind farm infrastructures
  ii. assessment of cumulative effects of multiple wind plants
  iii. scientifically sound monitoring programmes to improve the knowledge base

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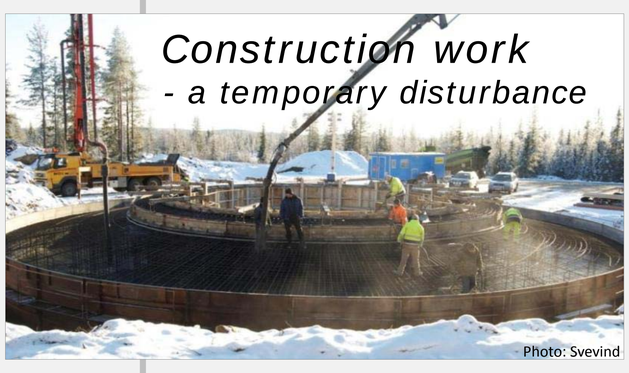
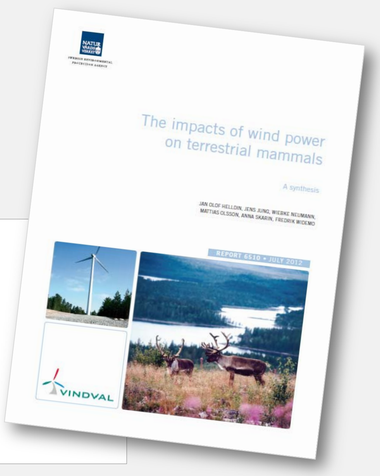
in brief

New on-shore wind farms are mainly located in remote, roadless areas



...which can lead to loss of available habitat

Power line corridors and roadsides can also provide forage



Project report:

Helldin et al. (2012)
The impacts of wind power on terrestrial mammals – a synthesis. *Swedish EPA report no 6510*

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