Adaptation in Swedish forestry: The case of private individual forest owners

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Adaptation to climate change

2000: "...adjustments in ecological-socio-economic systems in response to actual or expected climatic stimuli, their effects or impacts" (Smit et al. p. 225)

2006: "...local or community-based adjustments to deal with changing conditions within the constraints of the broader economic—social—political arrangements" (Smit and Wandel, p. 289).

Smit, B., Burton, I., Klein, R.J.T., Wandel, J., 2000. An anatomy of climate change and variability. *Climatic Change* 45, 223–251.

Smit, B., Wandel, J., 2006. Adaptation, adaptive capacity, and vulnerability. *Global Environmental Change* 16, 282–292.



The Swedish forest

A national resource with 354 323 forest owners and 238 862 forest estates

50% of the forest land owned by private individuals

Forest Statistical Year Book of Sweden 2004

Photo: Mattias Carlsson

Has adapted forest management to climate change

1999

11%

2004

21%



Blennow & Sallnäs (2002) *Scandinavian J. Forest Research 17: 472–479.*Blennow, *submitted*.



2004

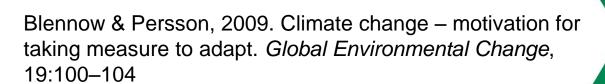
Has the climate change debate affected your forest management?

Yes (n=204)

No (n=875)

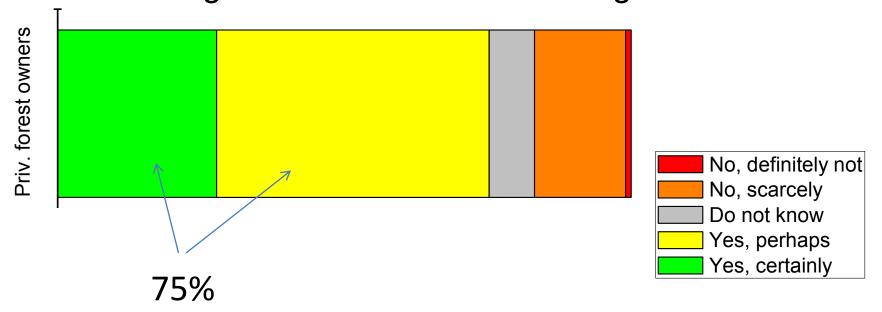
Total (n=1079)

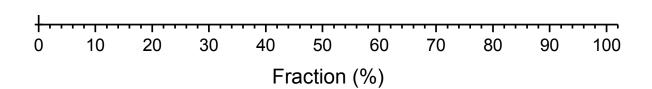






2004 strength of belief in climate change

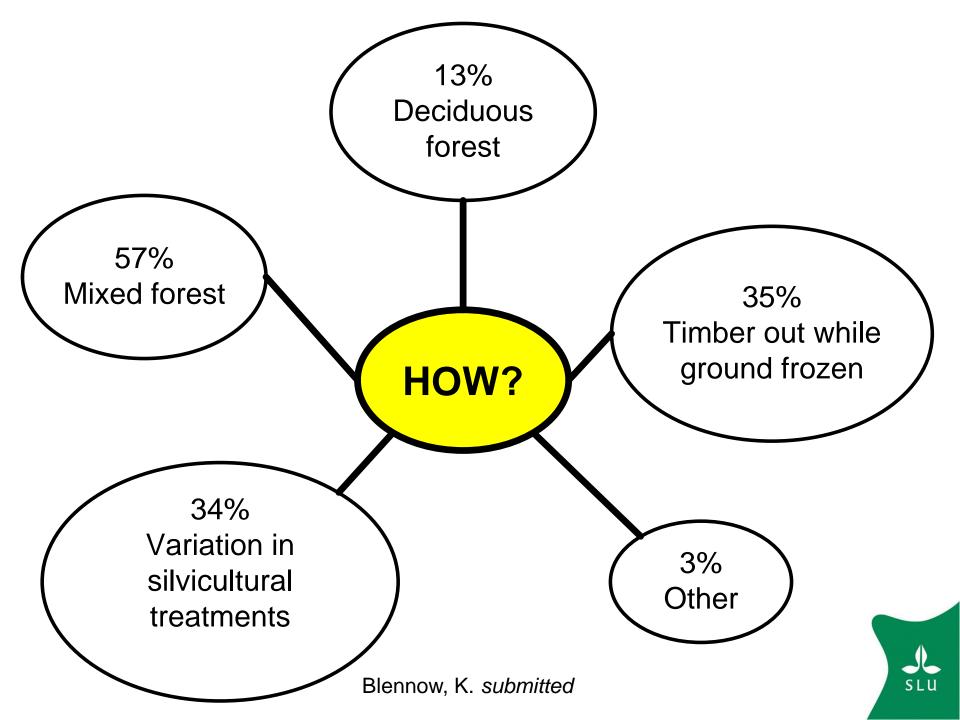




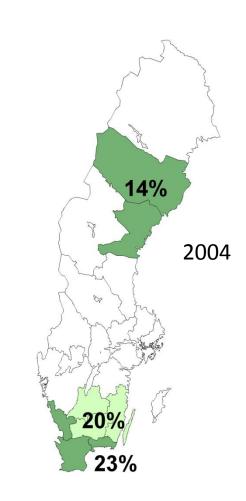
Swedish Environmental Protection Agency (2005)
Allmanhetens kunskaper och attityder till vaxthuseffekten, 21 pp.
Blennow & Persson (2009) Climate change - motivation for taking measure to adapt. Global Environmental Change, 19:100–104

Why has not the climate change debate affected your	Do you believe that the climate is changing to such an extent that it will substantially affect the forest?				
forest management?	No, definitely	No, scarcely	Don't know	Yes, perhaps	Yes, certainly
	not	(%)	(%)	(%)	(%)
	n=13	n=147	n=65	n=388	n=147
I do not believe that the					
climate is changing (n=71)	77	22	11	6	0
Too much uncertainty as to					
whether the climate is					
changing (n=175)	15	33	18	25	10
I have not thought about					
climate change and my own					
forest management (n=174)	8	22	35	23	18
Too much uncertainty as to					
what management measures					
reduce negative consequences					
of climate change (n=153)	0	11	14	19	36
I don't know how to modify					
my forest management					\ \
(n=187)	0	12	22	26	36
Total (n=760)	100	100	100	100	100

Blennow & Persson (2009) Global Environmetal Change, 19: 100-104



Has adapted forest management to climate change in 2004



- Why do private forest owners less strongly belive in climate change than Swedish citizens in general?
- What explains regional variation in adaptation?
- How do private forest owners learn about climate change and options for adaptation?
- Similarieties and differences between EU countries and influence of CC on forest owners life-style values

addressed in
EU 7th FP MOTIVE
(Models for adaptive management)

References:

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