An aerial photograph of a mountain landscape. In the upper left, a steep, grey scree slope descends towards a dense forest. The forest is composed of various types of trees, including tall, thin evergreens and some deciduous trees with bright yellow autumn foliage. The terrain is rugged, with rocky outcrops visible through the trees. The overall scene is a mix of natural beauty and forest management.

Multifunctional Mountain Forestry

2.2.2010

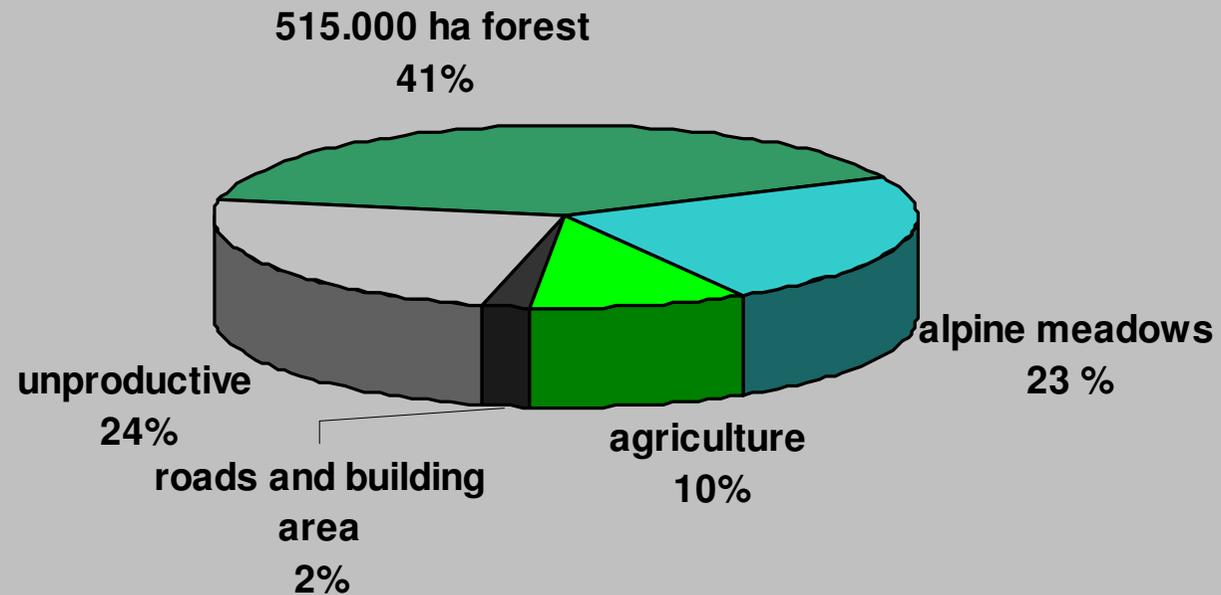
D.I. Kurt Ziegner, Regional Tyrolean Forest Service



Land use in Tyrol

Land use

Area of Tyrol = 12.647 km²



facts

functions

forest condition

challenges



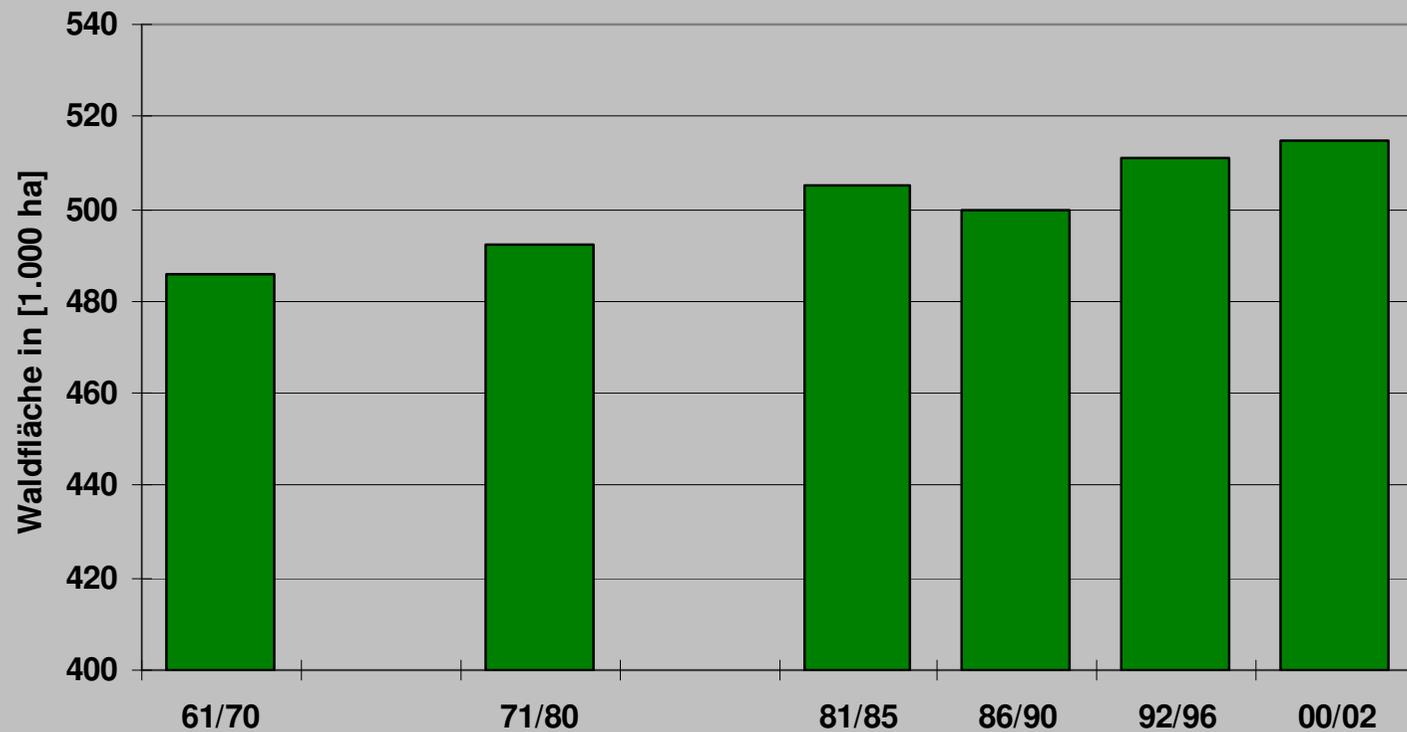
Cultural landscape since many centuries





Forest area

Forest area in Tyrol
1961-2002



Quelle: ÖWI

annual increase of forest area about 800 ha

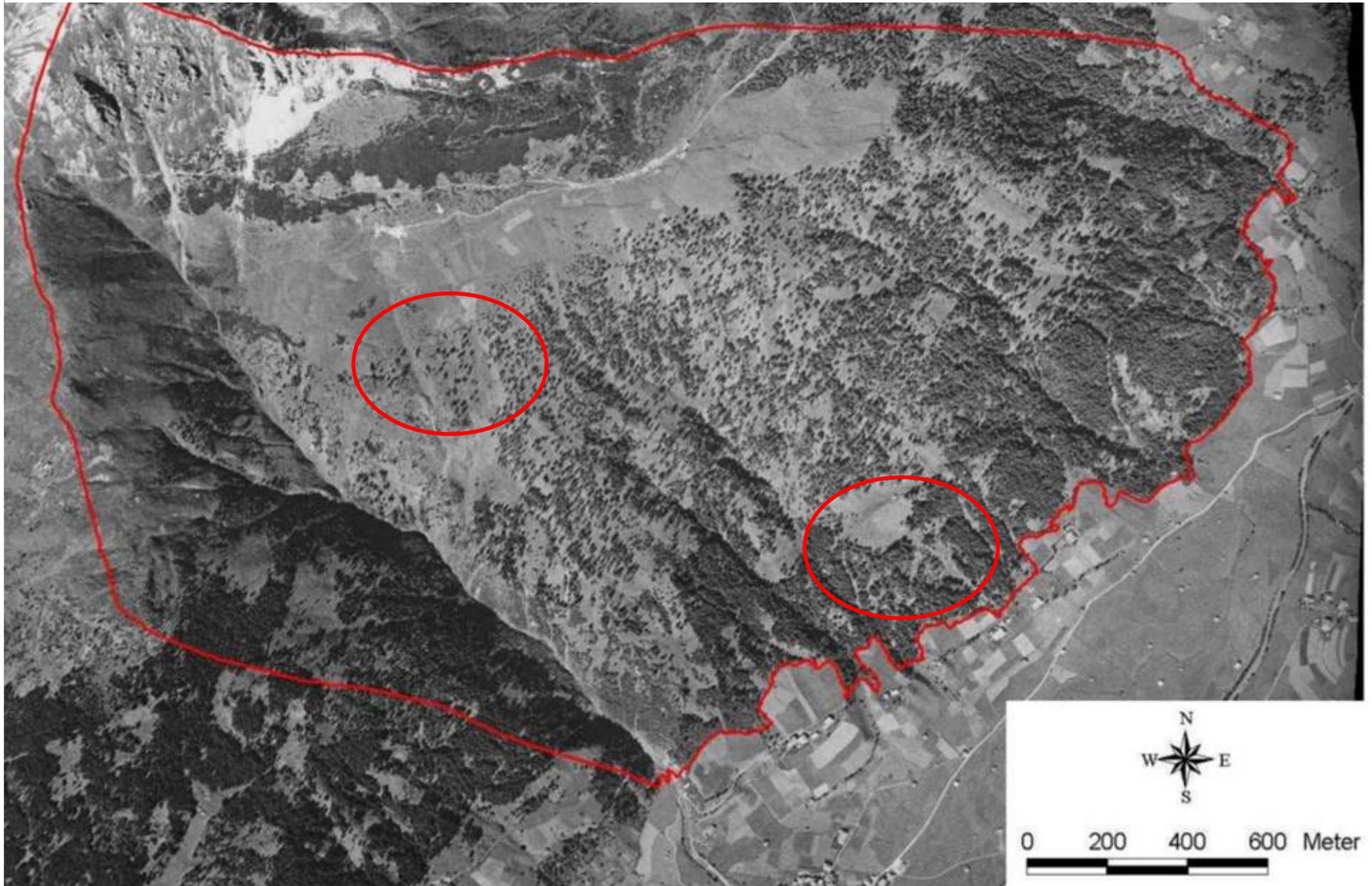
facts

functions

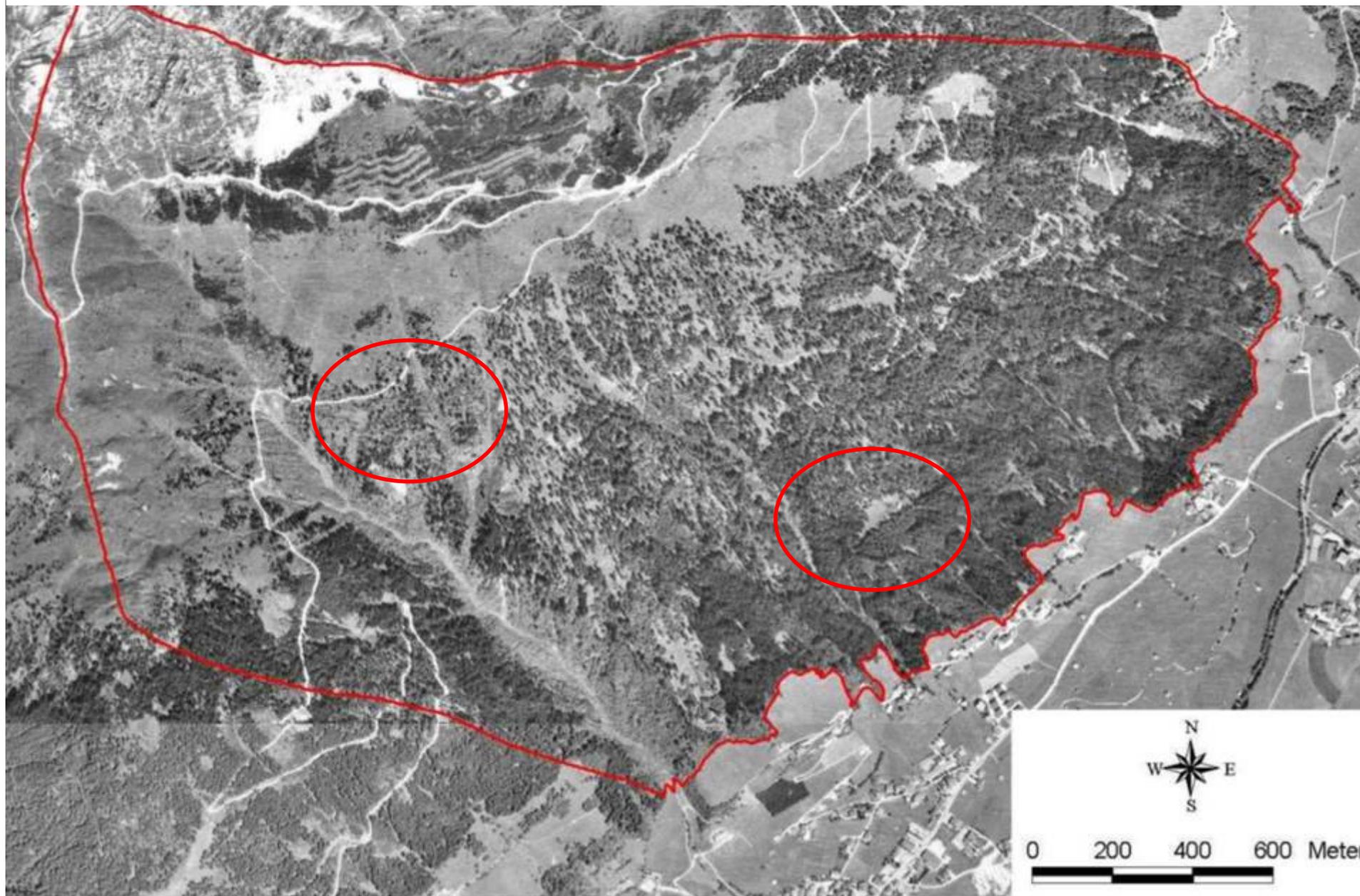
forest condition

challenges

Forest area in the Stubai Valley 1952



Forest area in the Stubai Valley 1996





Forest functions

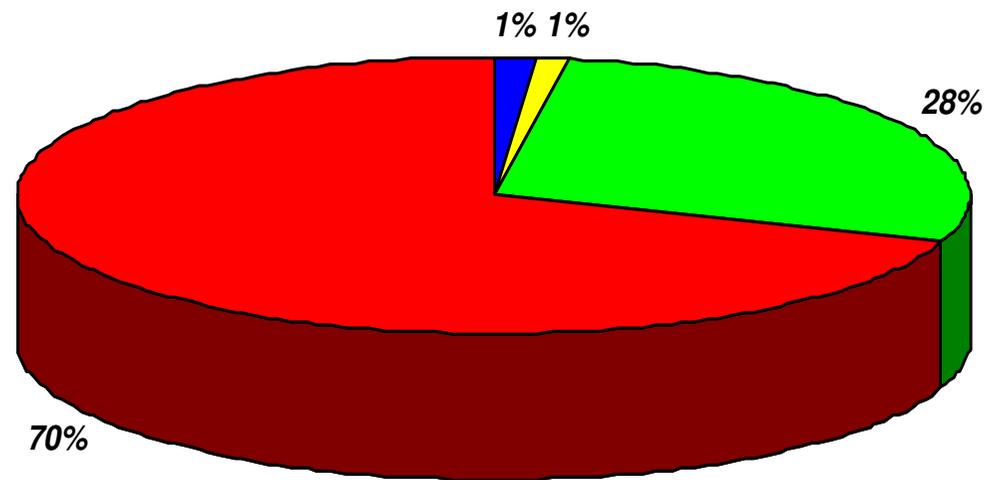
facts

functions

forest condition

challenges

Forest Development plan Tyrol



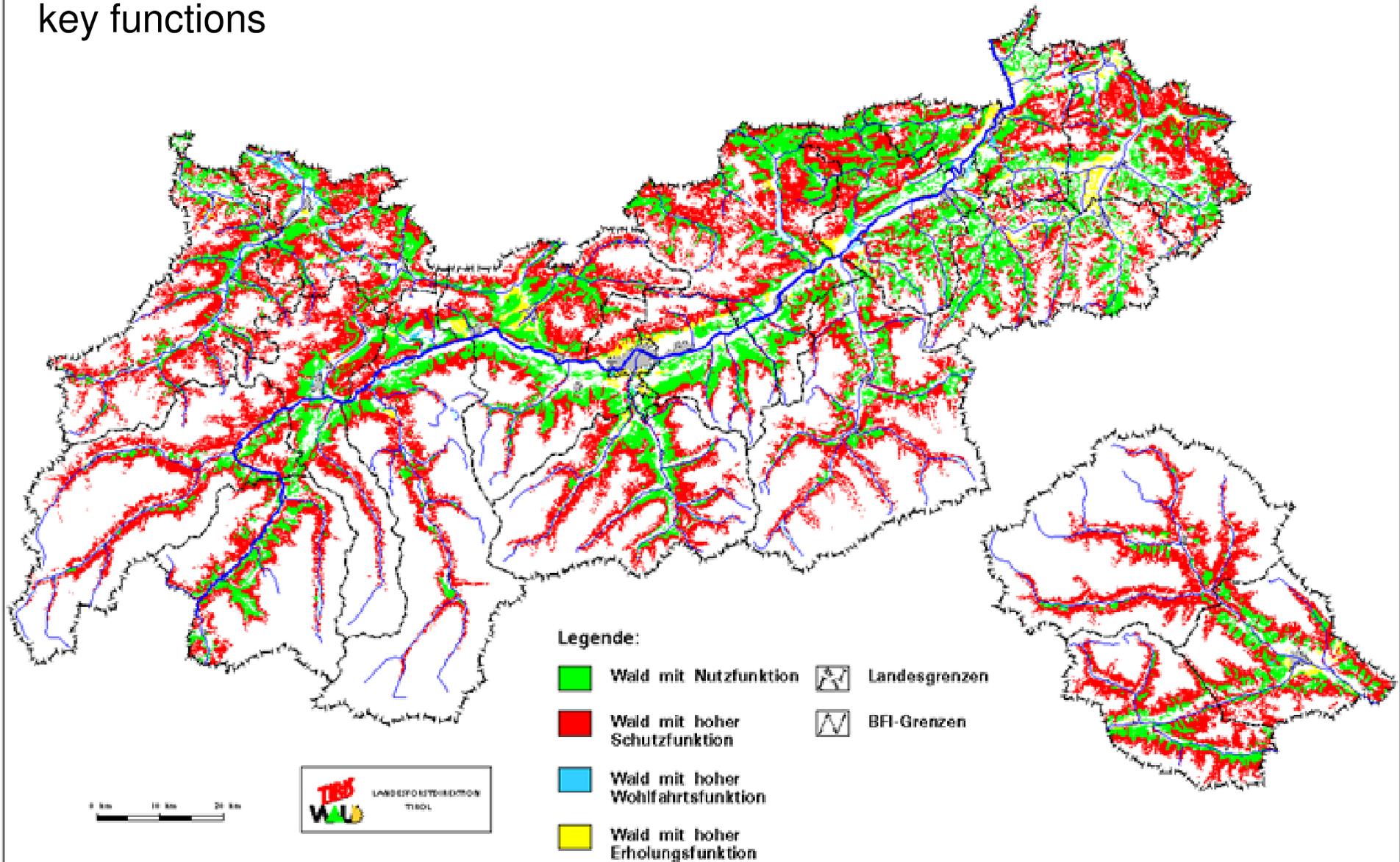
- protective function
- water&climate function
- recreational function
- economic function

*Datenstand WEP:
Sept. 2002*

*Bearbeitung:
Christoph Kovacs*

Forest-development plan of Tyrol

key functions



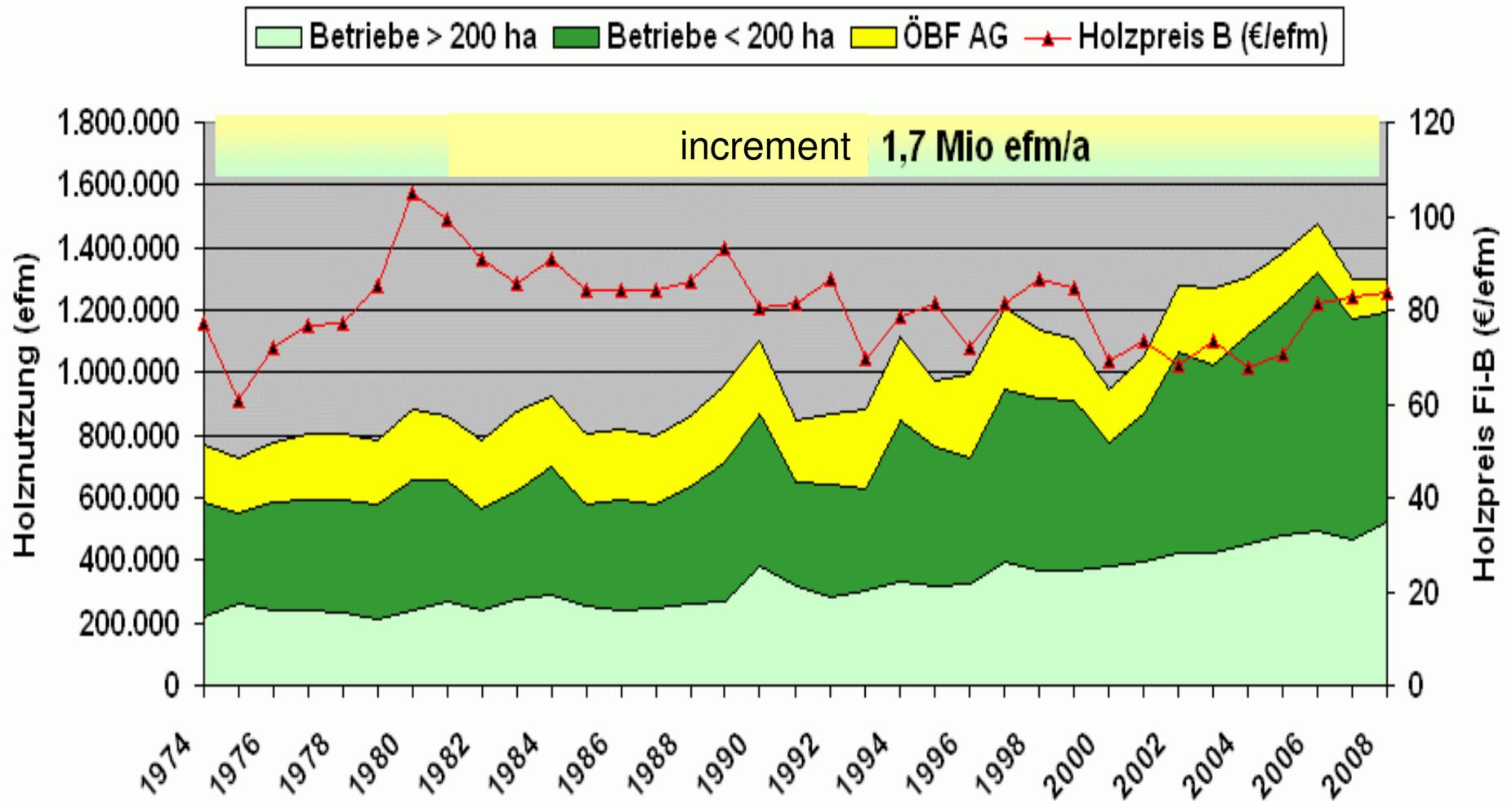
A logger is shown in a forest, wearing a white hard hat and a safety harness. He is focused on his work, holding a large, thick steel cable that is attached to a tree trunk. The background is a dense forest of green trees. The text "Productive function of forests" is overlaid in yellow on the image.

Productive function of forests



Timber and fuelwood production

timber production in tyrolean forests

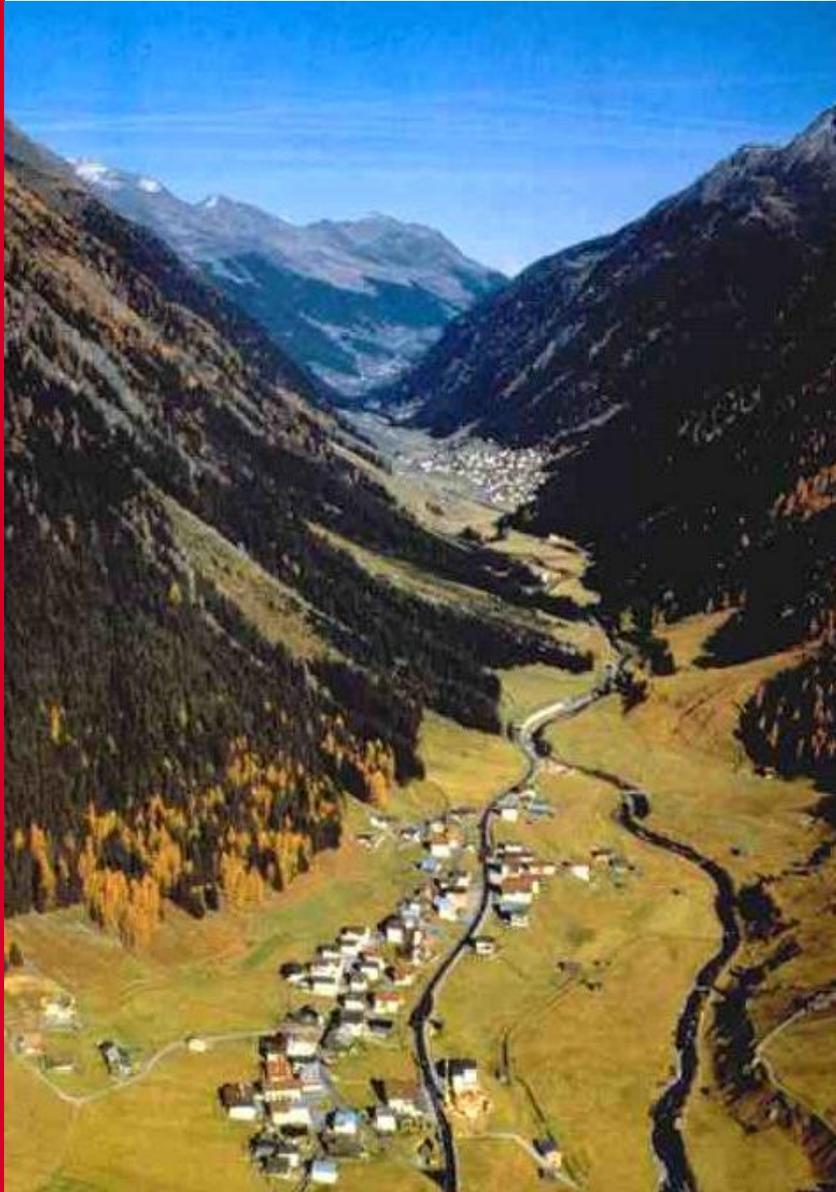




Protective function of forests



Protective function



„small country“ – less than 12% of the land area is suitable for permanent settlement

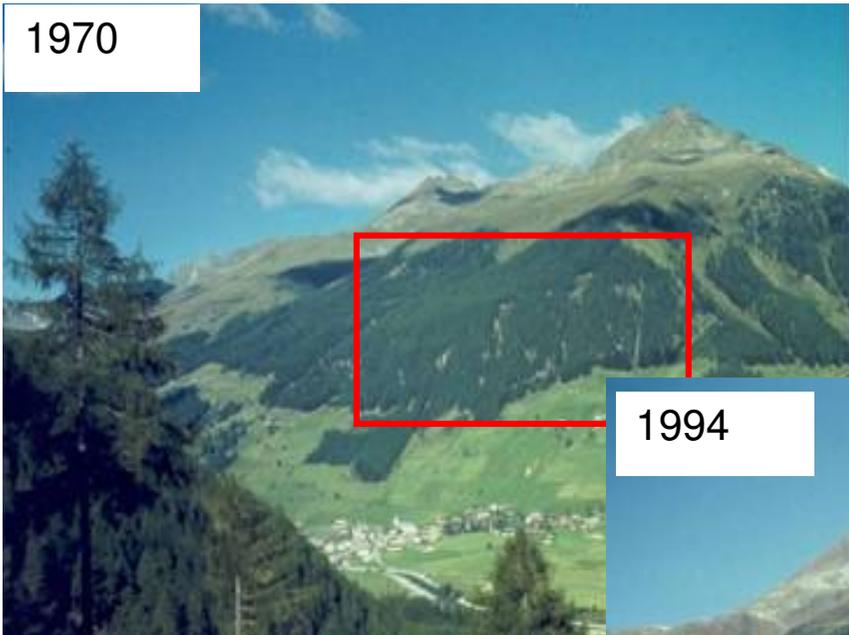
„dangerous country“ - 2.400 torrents and 1.700 avalanches

„high density“ - three times more inhabitants than 130 years ago

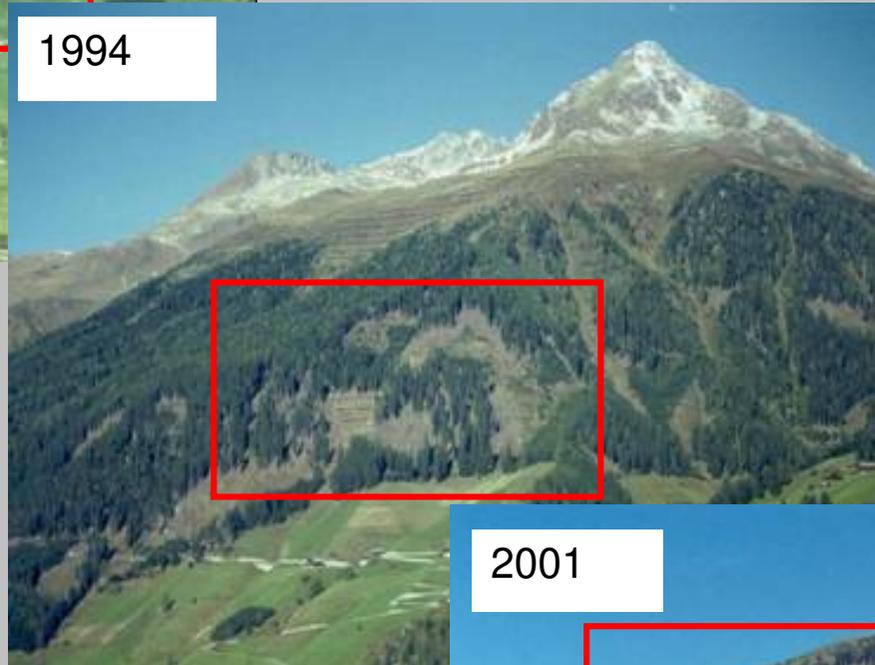
„tourisme industry“ – more than 40 billion overnight stays in one year

„sportive land“ - 1.200 cable cars and ap. 160.000 ski runners per day are on the tyrolean ski runs

1970



1994



2001



facts

functions

forest condition

challenges

Water and climate function of forests





facts

functions

forest condition

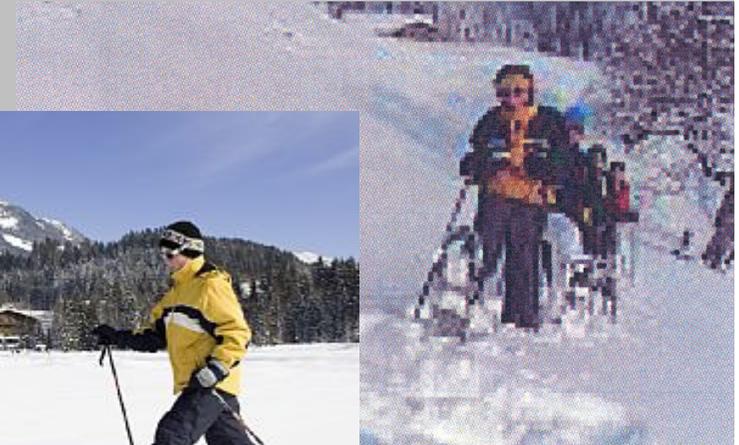
challenges

Recreation and forestry





Recreation and forestry



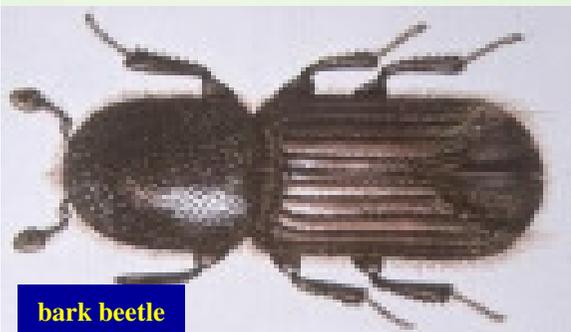
facts

functions

forest condition

challenges

Forest condition



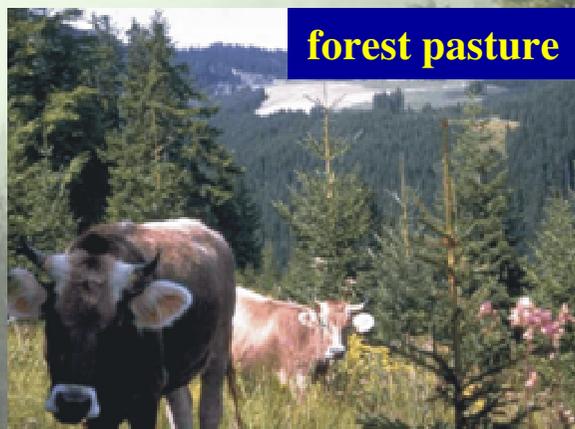
bark beetle



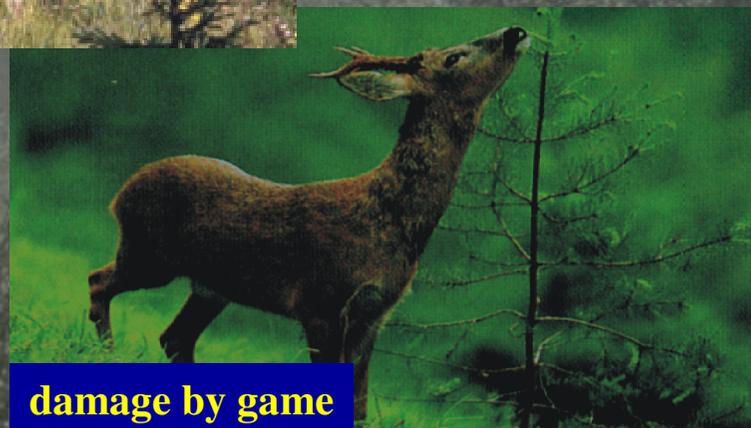
air pollution



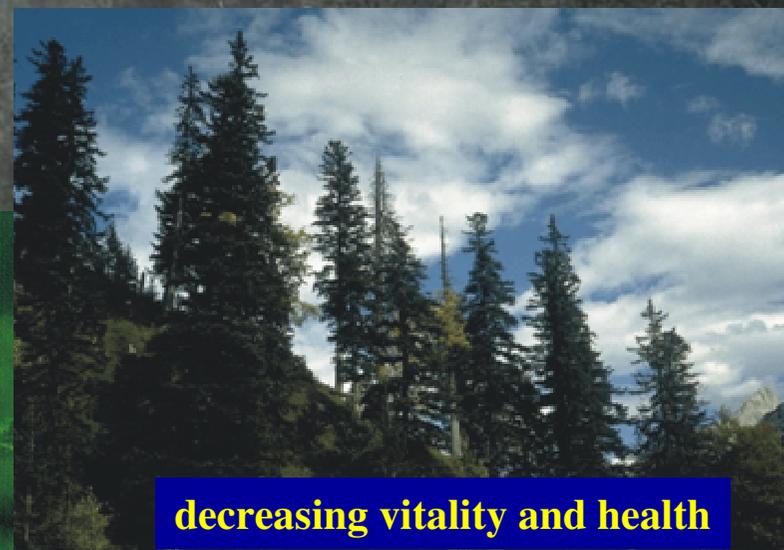
sport



forest pasture



damage by game

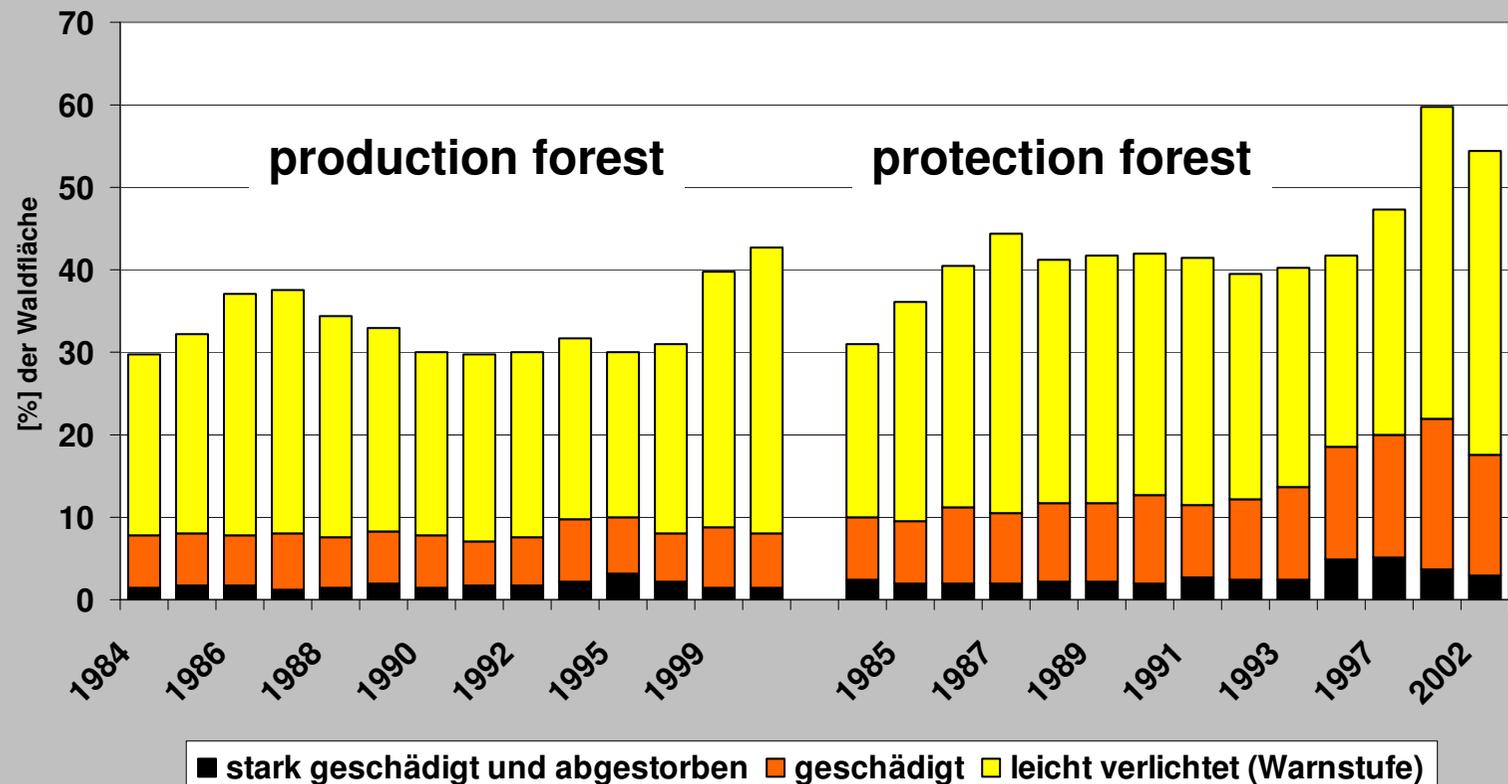


decreasing vitality and health



Vitality of tyrolean forests

Development of crown conditions in Tyrol



facts

functions

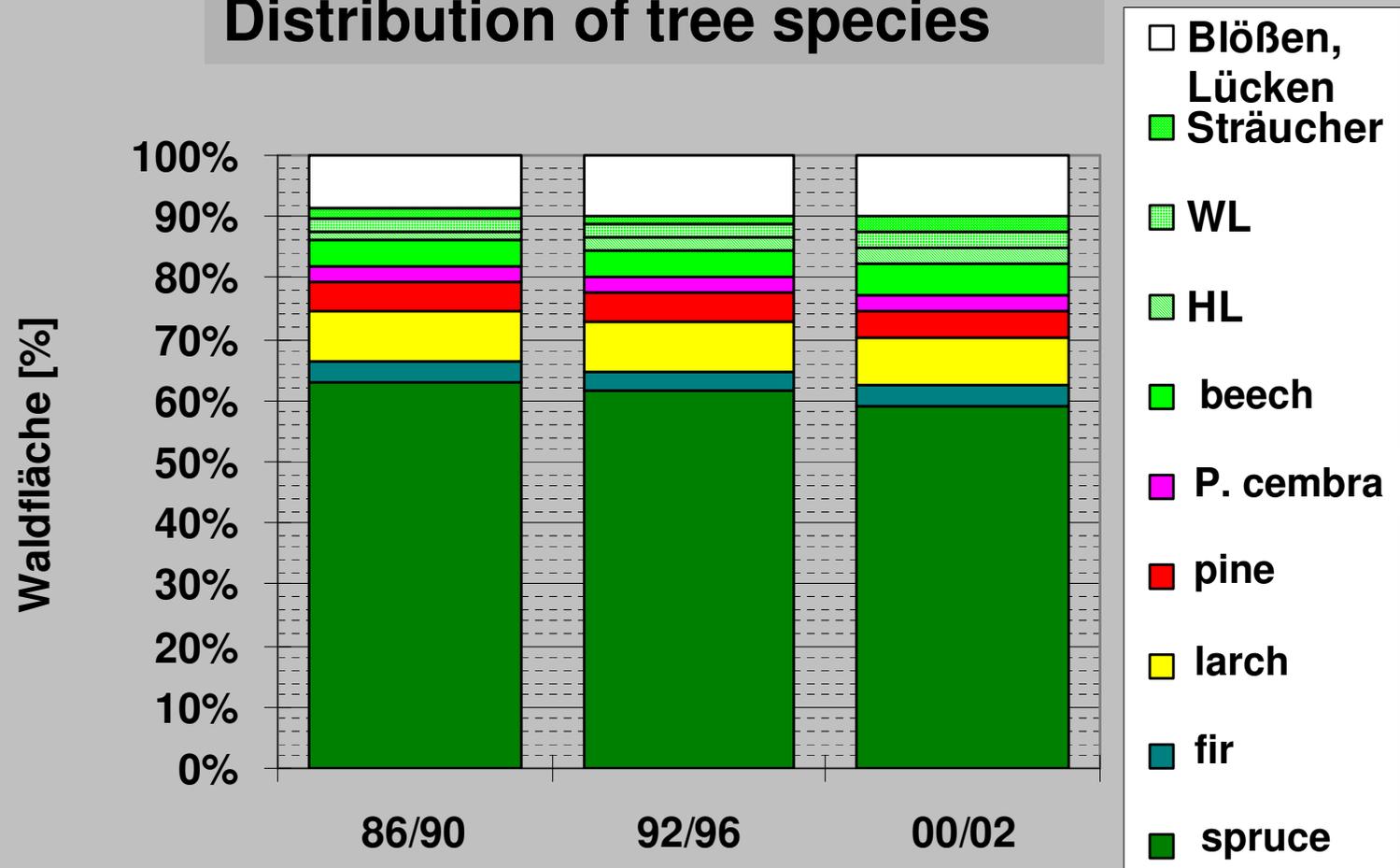
forest condition

challenges



mixed stands increasing

Distribution of tree species



facts

functions

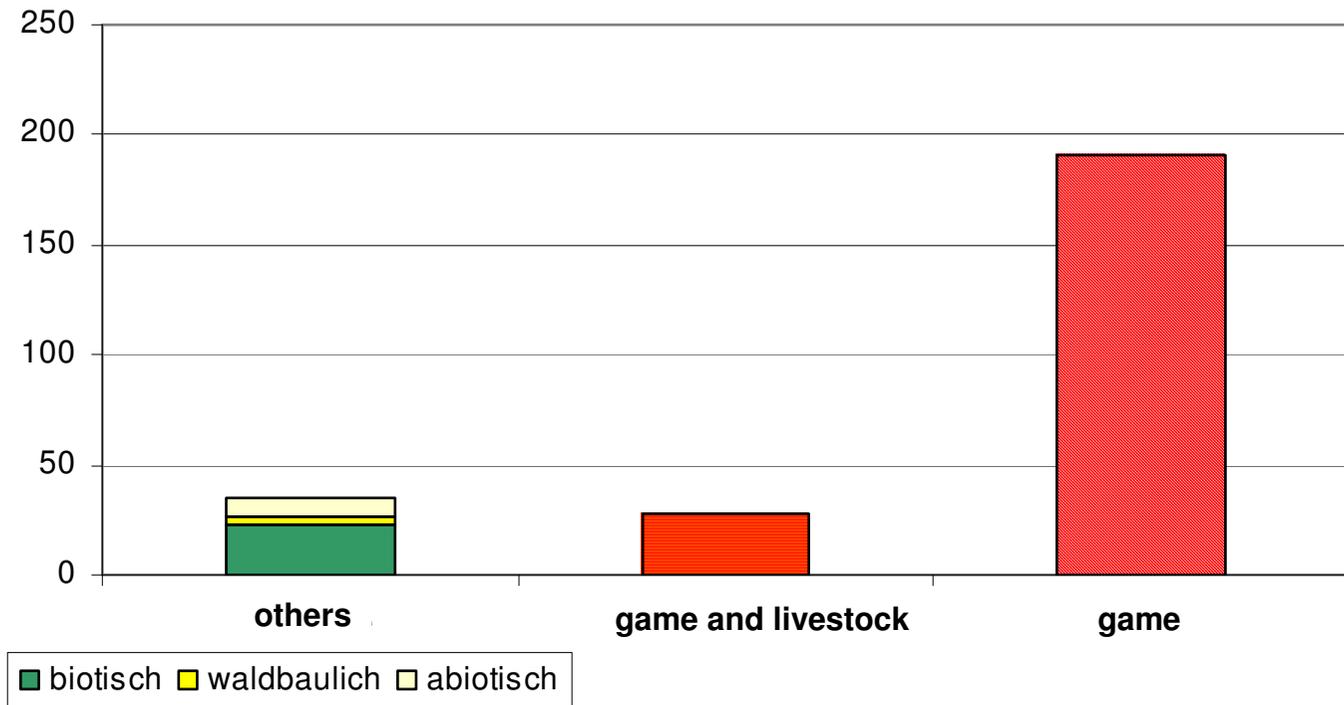
forest condition

challenges



Damages on the young growth

Influence factors on the young growth in the northern alps 2007



facts

functions

forest condition

challenges



new predators

- If new predators (like wolf and bear), with large living areas will be reestablished in a multi-functional used living space, it is very important to **think about the consequences** for other landusers
- Maybe problems with other land users will arise (for instance tourism)! A **cooperative communication** is absolutely necessary
- Small predators (as lynx) can be an enrichment for the Alps (as regulators), but only when the hunting community will adapt their rules
- **It is very important to discuss and cooperate with all land users!**