Multifunctional Mountain Forestry

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Land use in Tyrol

Land use
Area of Tyrol = 12.647 km²

- 515,000 ha forest (41%)
- Unproductive (24%)
- Alpine meadows (23%)
- Roads and building area (10%)
- Agriculture (10%)

Area of Tyrol = 12,647 km²

515,000 ha forest
41%

unproductive
24%

roads and building area
2%

alpine meadows
23%

agriculture
10%
Cultural landscape since many centuries
Forest area in Tyrol 1961-2002

anual increase of forest area about 800 ha
Forest area in the Stubai Valley 1952
Forest functions

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
Productive function of forests
Timber and fuelwood production

Timber production in tyrolean forests

increment: 1.7 Mio efm/a
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
WASSER und Luft

facts
functions
forest condition
challenges
Recreation and forestry
Recreation and forestry

- facts
- functions
- forest condition
- challenges
Forest condition

- bark beetle
- forest pasture
- air pollution
- sport
- 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

- Blößen, Lücken
- Sträucher
- WL
- HL
- beech
- P. cembra
- pine
- larch
- fir
- spruce

Waldfläche [%]

<table>
<thead>
<tr>
<th>Year</th>
<th>spruce</th>
<th>fir</th>
<th>larch</th>
<th>P. cembra</th>
<th>beech</th>
<th>pine</th>
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Blößen, Lücken:
- spruce (green)
- fir (red)
- larch (yellow)
- P. cembra (purple)
- beech (light green)
- pine (dark green)
Influence factors on the young growth in the northern alps 2007
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!