

PROTECTION FORESTS

CHALLENGES AND SOLUTIONS OF THE ÖBF

26. & 27.09.2019

PROTECTIVE FUNCTIONS OF FORESTS IN A CHANGING CLIMATE | INNSBRUCK |
NORBERT PUTZGRUBER



**ÖSTERREICHISCHE
BUNDESFORSTE**

OVERVIEW

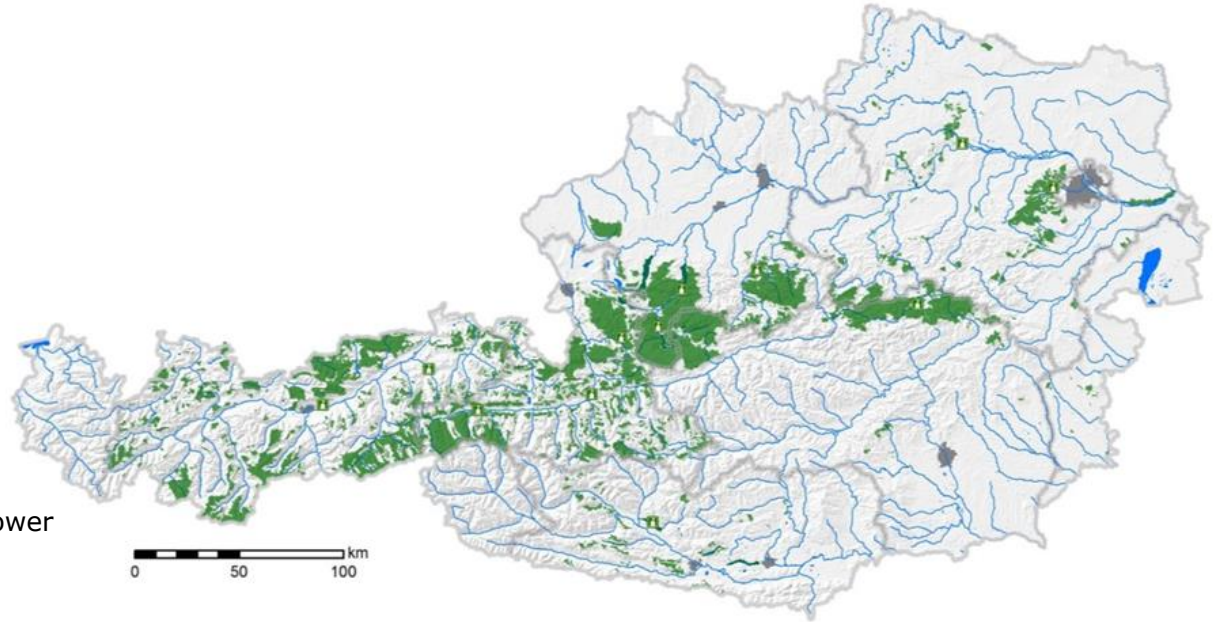


- › Protection forest at the Österreichische Bundesforste (ÖBf)
- › General conditions
- › State of forest
- › Forest management and hunting

FROM MOUNT ARLBERG IN THE WEST TO THE DANUBE WETLANDS IN THE EAST

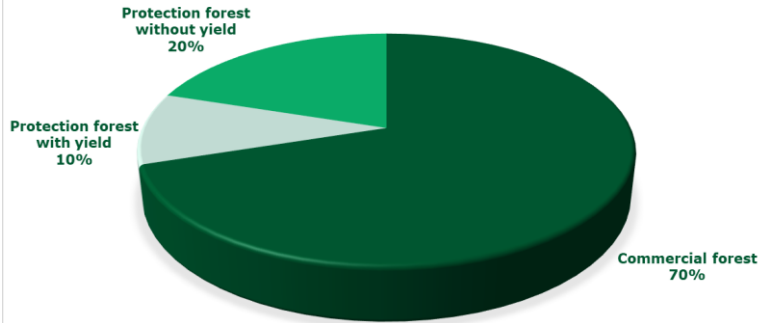
We maintain and cultivate

- › approx. **10%** of **land area**
 - › approx. **15%** of **forest area**
 - › approx. **70%** of **lakes**
 - › Revenue: **EUR 224.5 million**
 - › Employees: **1,025**
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- › **Decentralised structure**
 - › 12 forest management units
 - › 2 national park units
 - › Headquarters in Purkersdorf, Lower Austria

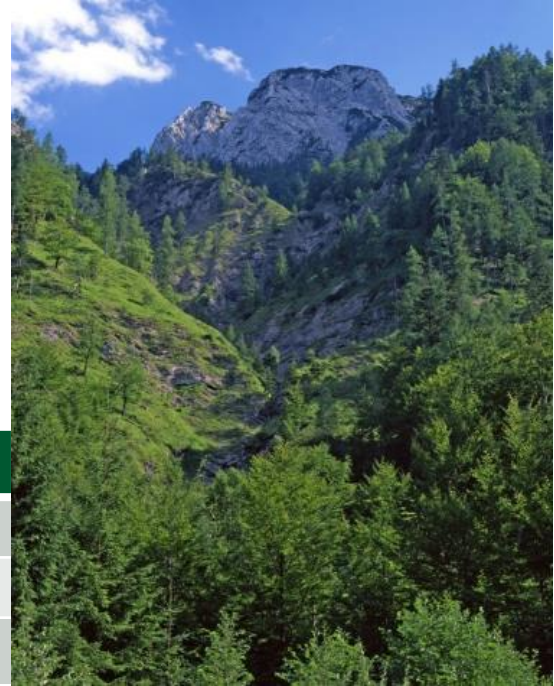


PROTECTION FOREST AT THE ÖSTERREICHISCHE BUNDESFORSTE (ÖBF)

BREAKDOWN OF FOREST AREA ÖBF AG

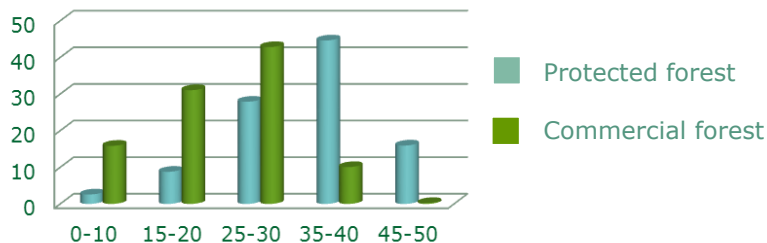


Austrian forest inventory data	Protection forest area
Throughout Austria	20.5%
Bundesforste	30%
Small-scale forests & businesses	16%

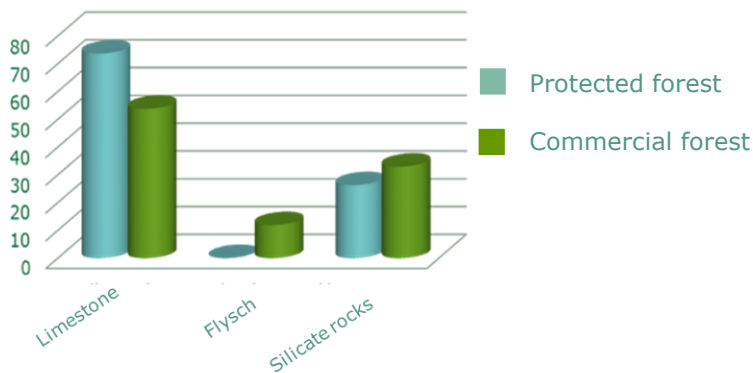
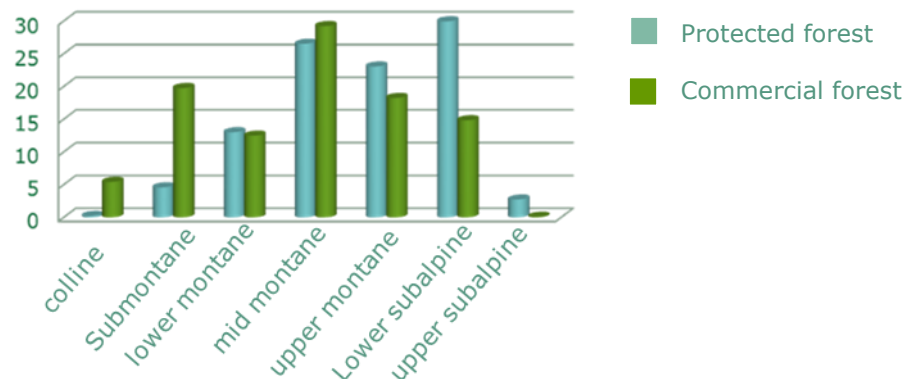


ÖBF'S PROTECTION FORESTS ARE LARGELY INCREASING IN SIZE

Steep locations



Higher locations

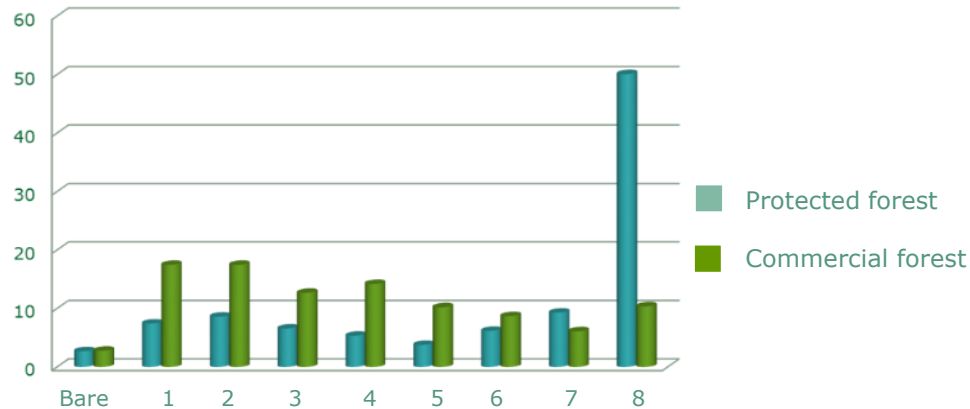


Shallow and medium-deep carbonate sites

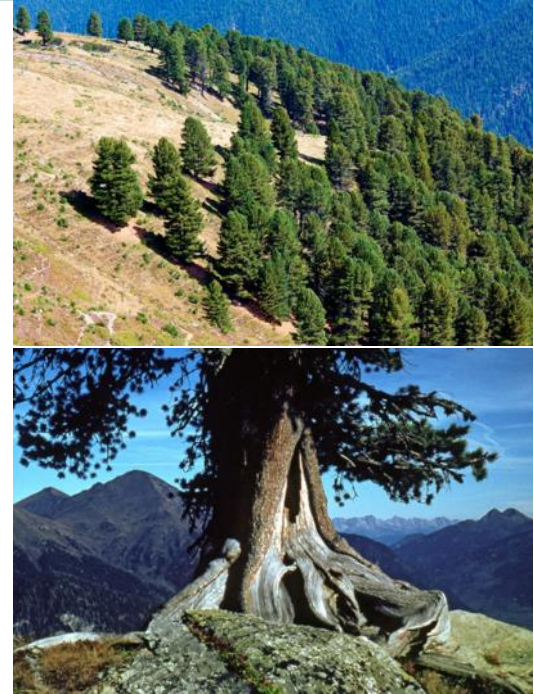
Commercial forest	27%
Protection forest	37%

AGE-CLASS STRUCTURE (ÖBF AG)

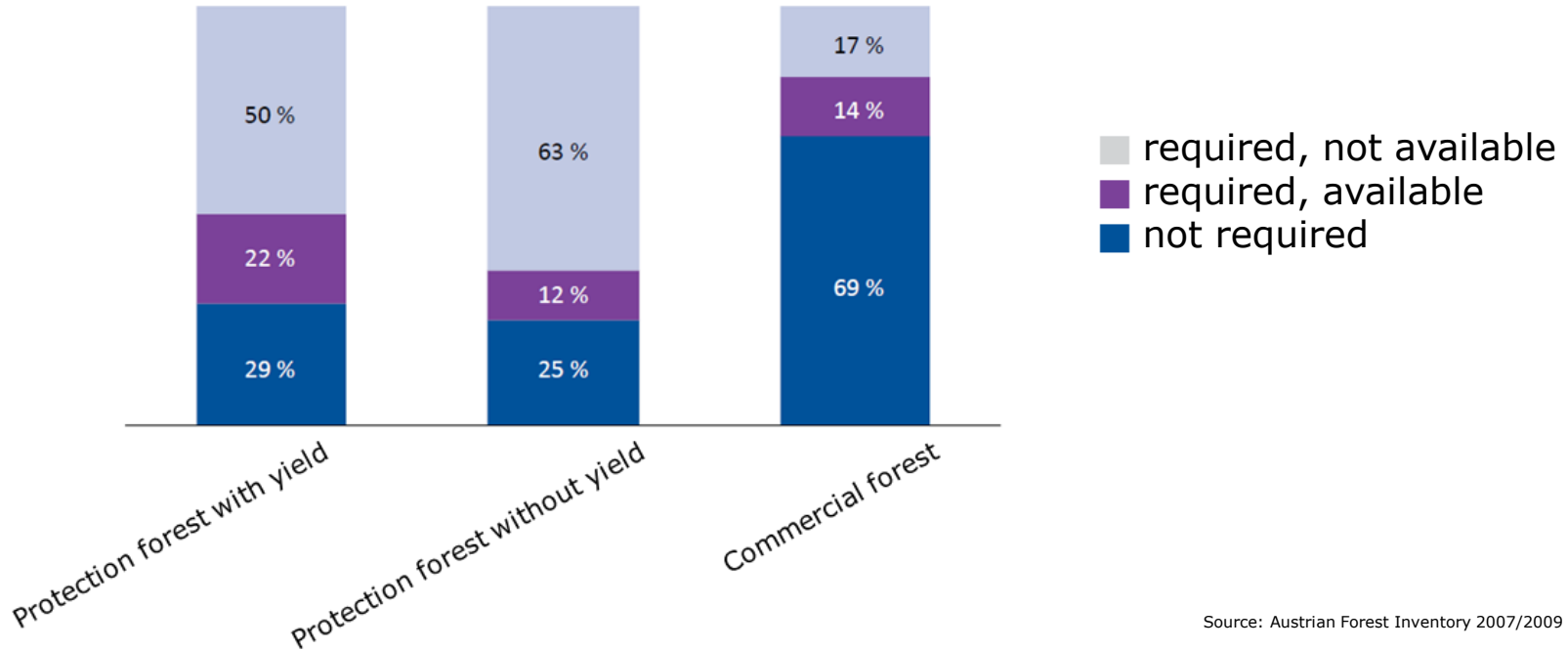
Forest area %



The protection forest is overaged.



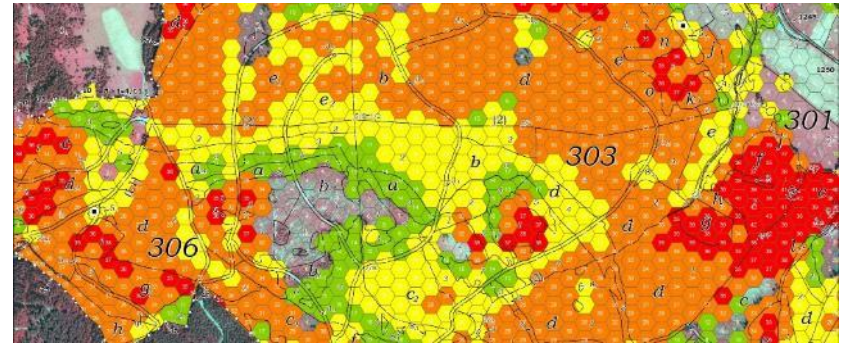
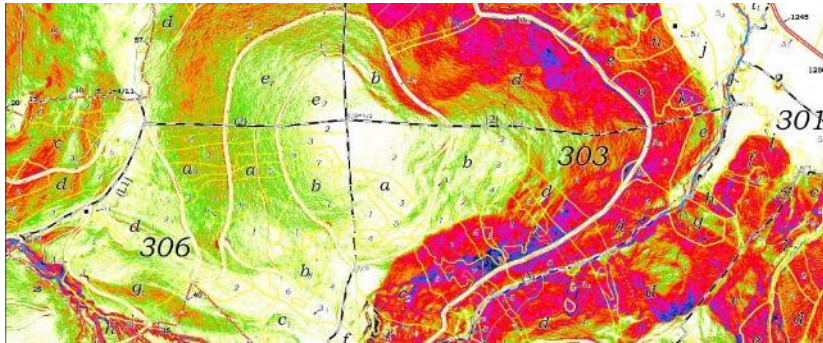
REGENERATION OF PROTECTION AND COMMERCIAL FOREST AT ÖBF AG



Source: Austrian Forest Inventory 2007/2009




REMOTE SENSING





FOREST MANAGEMENT MEASURES

- 
- › The growing targets are aligned with the protection target.
 - › Natural regeneration is preferred to afforestation, since afforestation in these areas is very difficult and it takes a long time for a secure stock.
 - › The forest stands must be taken care of in good time.
 - › The choice of harvesting method must take into account the needs of the protection forest.



HUNTING MEASURES



- › Communication of ÖBf hunting objectives to hunting clients, authorities and hunting community
- › Promotion of efficient hunting strategy and method
- › Adaptation of red deer and roe deer wintering concepts
- › Forestry support to hunting operation
- › Management of outdoor activities, especially in winter
- › Taking back of wildlife damage centres run by owners, use of professional hunters

ASSESSMENT OF URGENCY

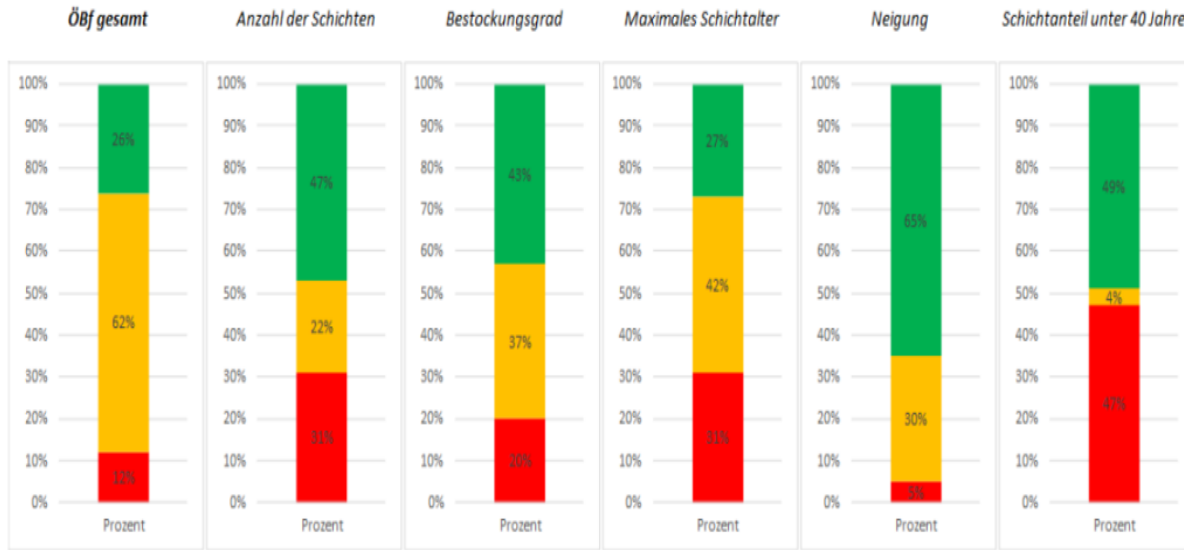
- › To assess the urgency for improving protection forests, all protection forest stands are recorded based on their location in a traffic light scheme. The following parameters are used for this:
 1. Number of layers
 2. Stand density
 3. Age
 4. Steepness
 5. Layer up to 40 years

CLASSIFICATION OF PROTECTION FORESTS ACCORDING TO NEED FOR RESTORATION

- › Green: The protection effect is secured for the next 20 years, there is no immediate need for action. The protection forest is stable, well layered, not overaged, or natural regeneration occurs.
- › Yellow: The protection effect still prevails, but negative developments are visible. There is an indirect need for forestry/hunting action within the next 20 years. The stands begin to age, structures disintegrate, natural regeneration does not take place.
- › Red: The protection effect is visibly decreasing. Several negative factors can have an effect. There is a need for action within the next ten years. The ageing stands are disintegrating without regeneration, the terrain is difficult.

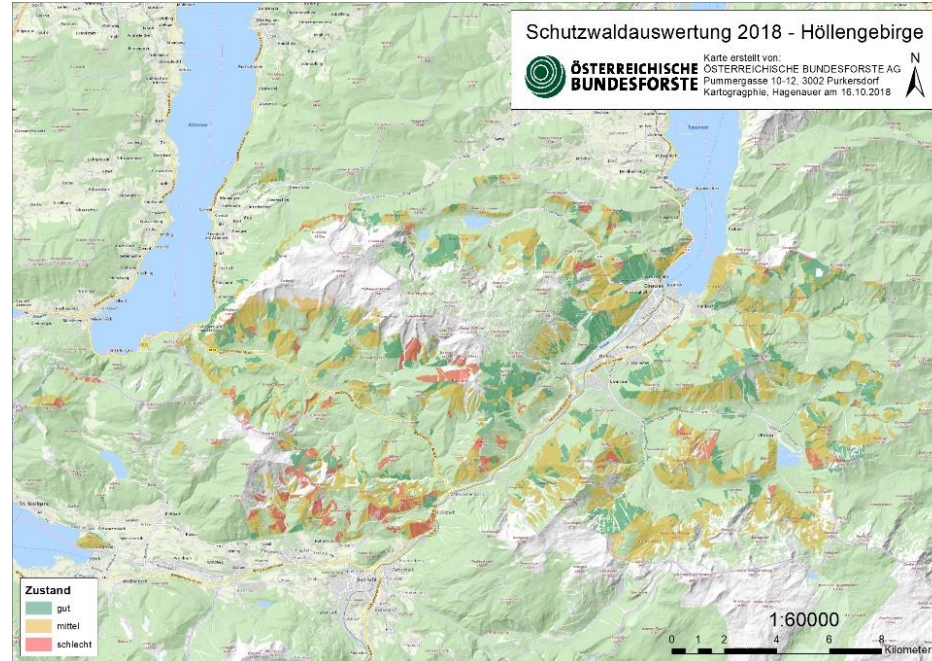
ASSESSMENT OF PROTECTION FOREST

Auswertung Schutzwald



- > It is easy to see that the lack of regeneration is the main factor for classification in the red zone. Some 12% of protection forest areas are located in the red zone and must be given priority treatment in the coming years.
- > 62% of the forest falls into the yellow zone, and 26% into the green zone.

MAP DEPICTION OF PROTECTION FOREST ACCORDING TO TRAFFIC LIGHT SYSTEM





CONCLUSIONS

- › The protection forest is overaged and often lacks the necessary regeneration.
- › The protection forest must be managed on a small scale, even if the level of development is low.
- › In many cases there is a lack of regeneration because of the high numbers of cloven-hoofed game.

THANK YOU FOR YOUR ATTENTION.

