

Discover Europe

Learn Video about Forests in Austria



eTwinning Project – HTL Rankweil

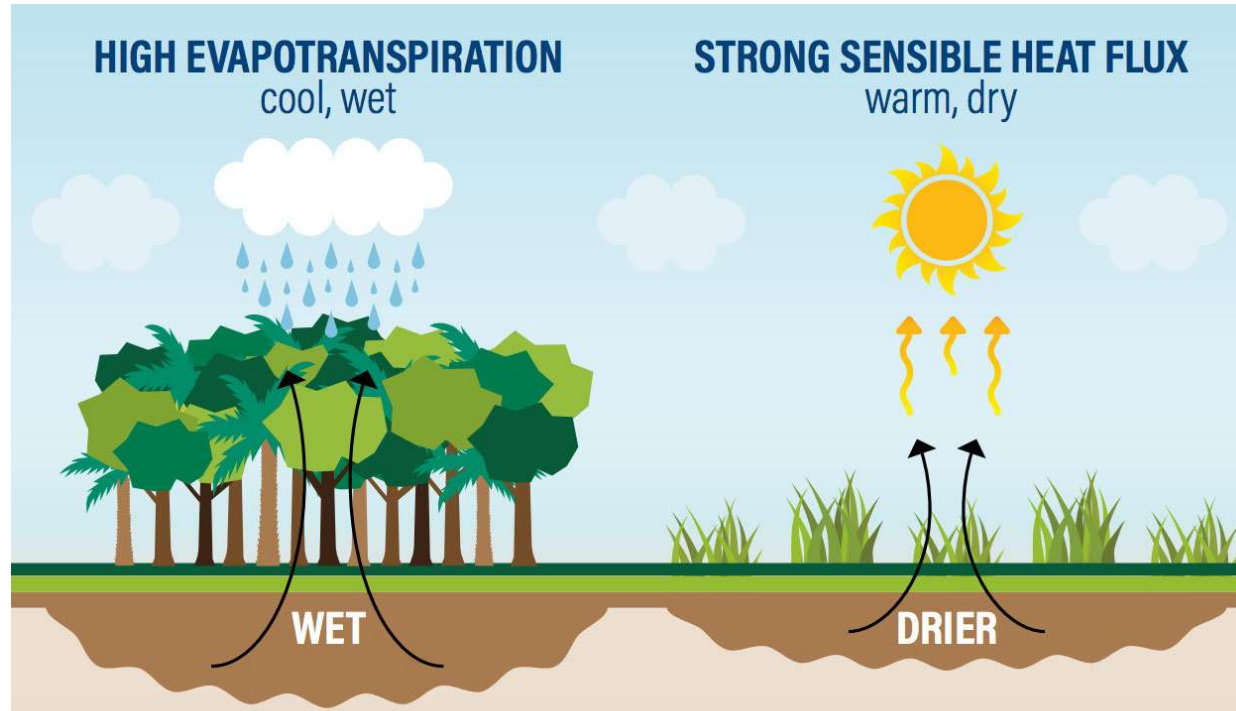
Prof. Mag. Hubert Winkler



Why are forests important?

- They create oxygen
- Natural habitat of various types of animals
- It effects the water cycle
- Important source of raw material
- It provides timber products like paper and furniture
- It provides non-timber products like medicines or herbs

Benefits of Forests



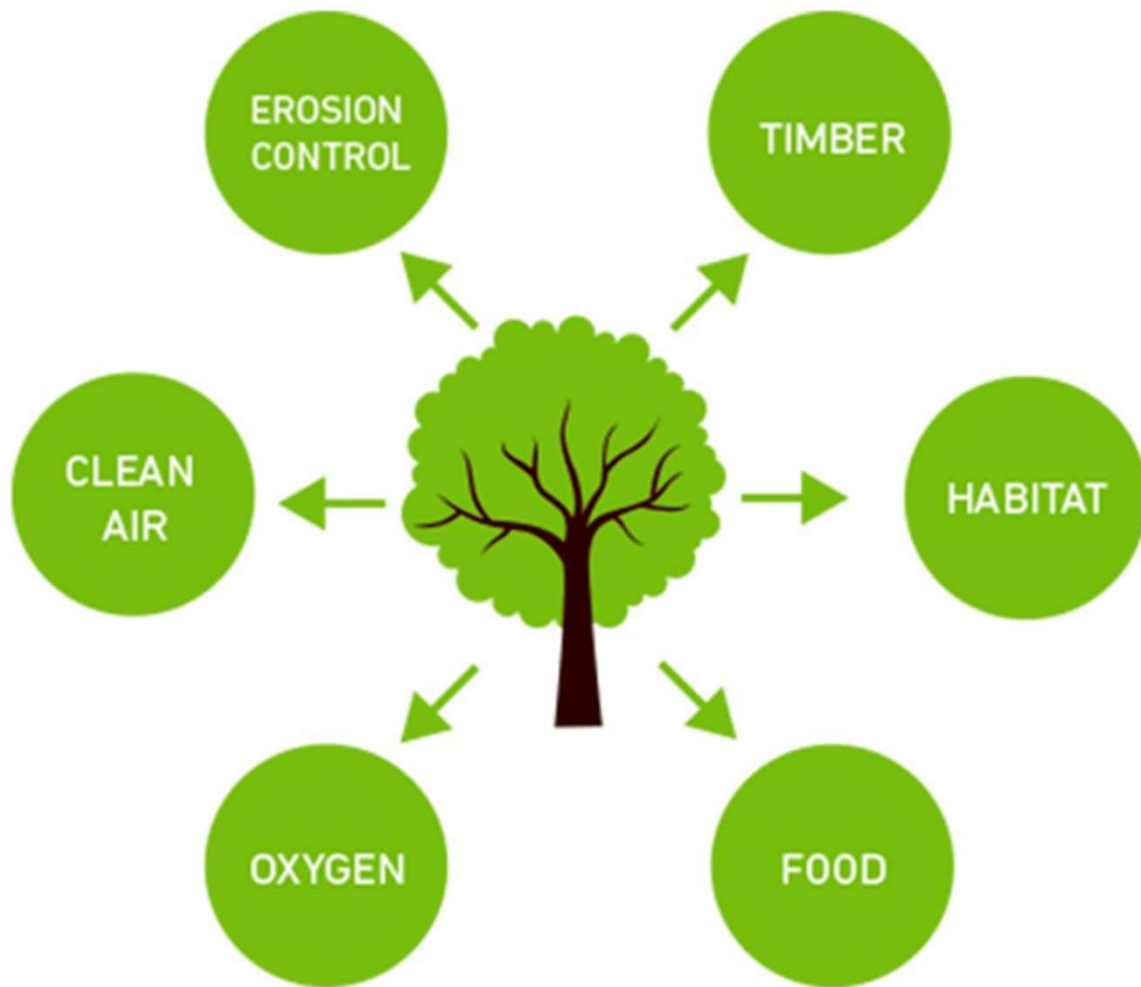
**Regulation of mass flows
(erosion control, protection against avalanches and mudflow)**

Conserve
biodiversity

Provide
social and
economic
benefits

Protect soil
and water
quality

Protect
cultural
heritage

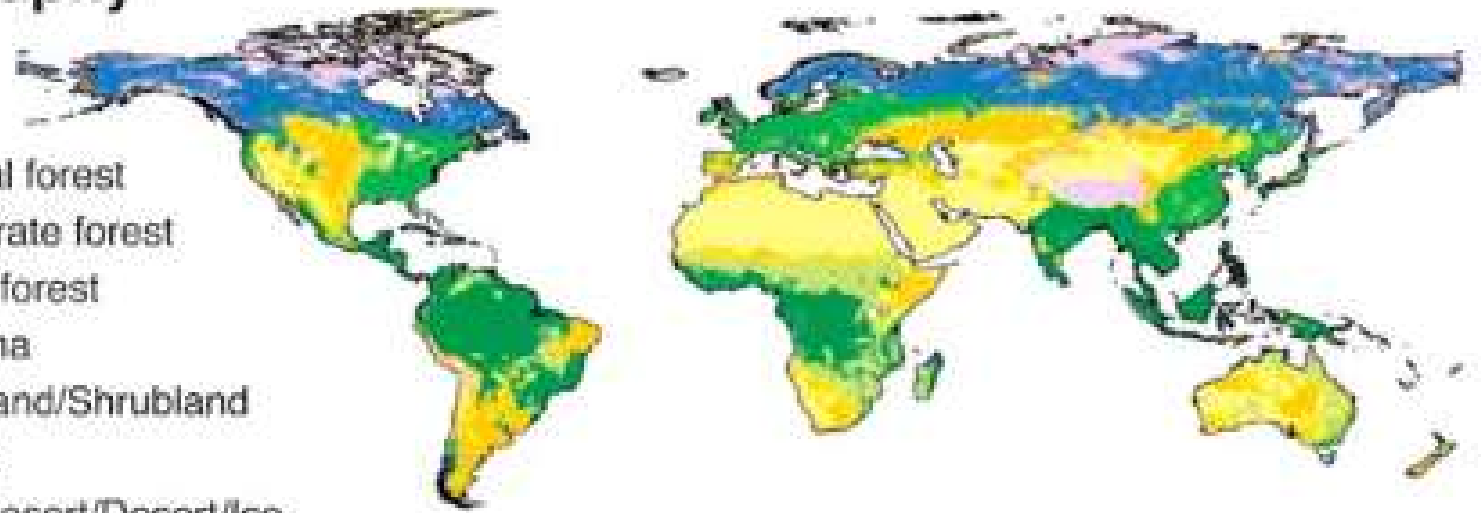


Forest act as carbon sinks, absorbing CO₂ from the atmosphere and storing carbon in their biomass and soils.

Biogeography

Natural
vegetation

- Tropical forest
- Temperate forest
- Boreal forest
- Savanna
- Grassland/Shrubland
- Tundra
- Semi-desert/Desert/Ice



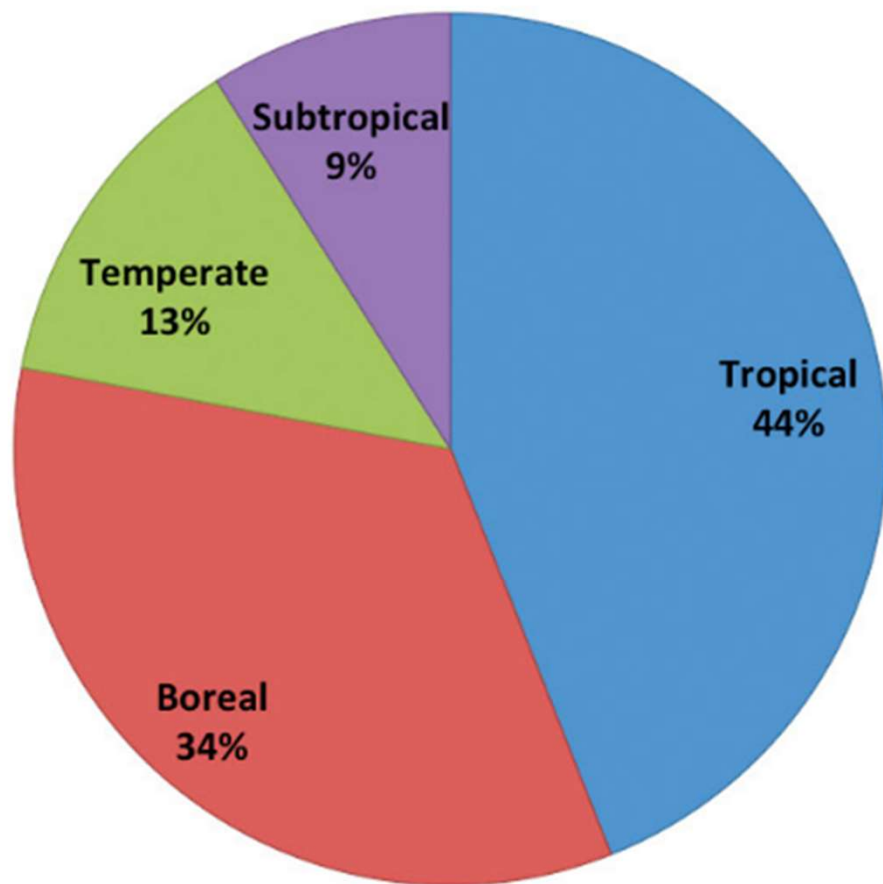
About **30%** of the world's
land surface is forest

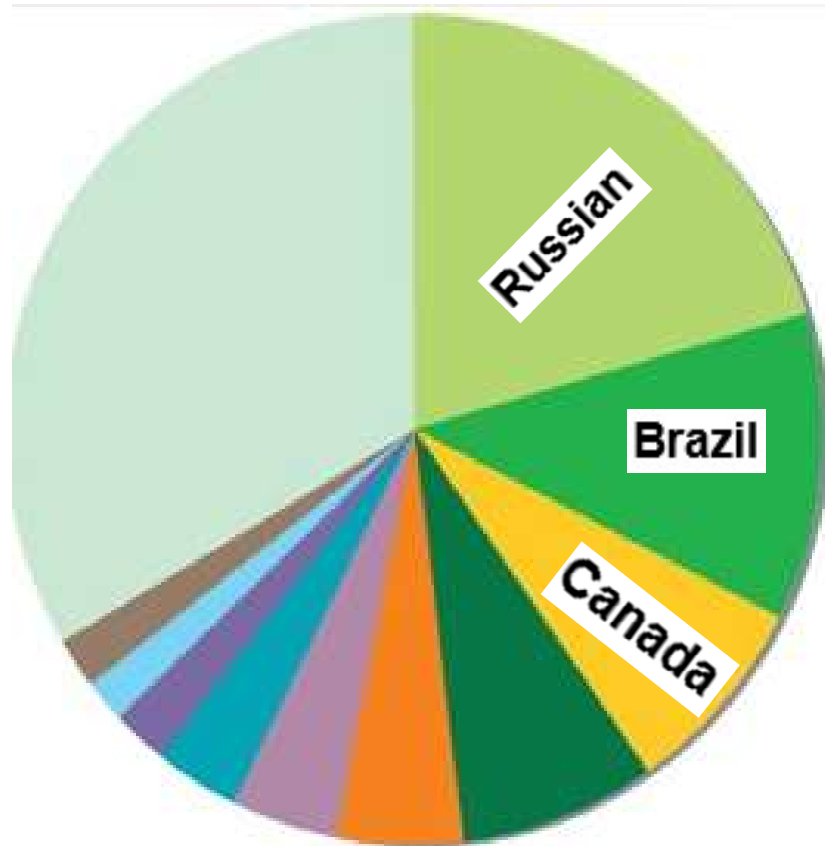
Forest Cover in the World by Climatic Domain

Temperate forests -
Austria, located in the European heartland,
lies within a temperate climatic zone.

Rainforests cover less than 2 percent
of Earth's total surface area,
they are home to 50 percent of Earth's
plants and animals.

Forest Cover by Climatic Domain 2005

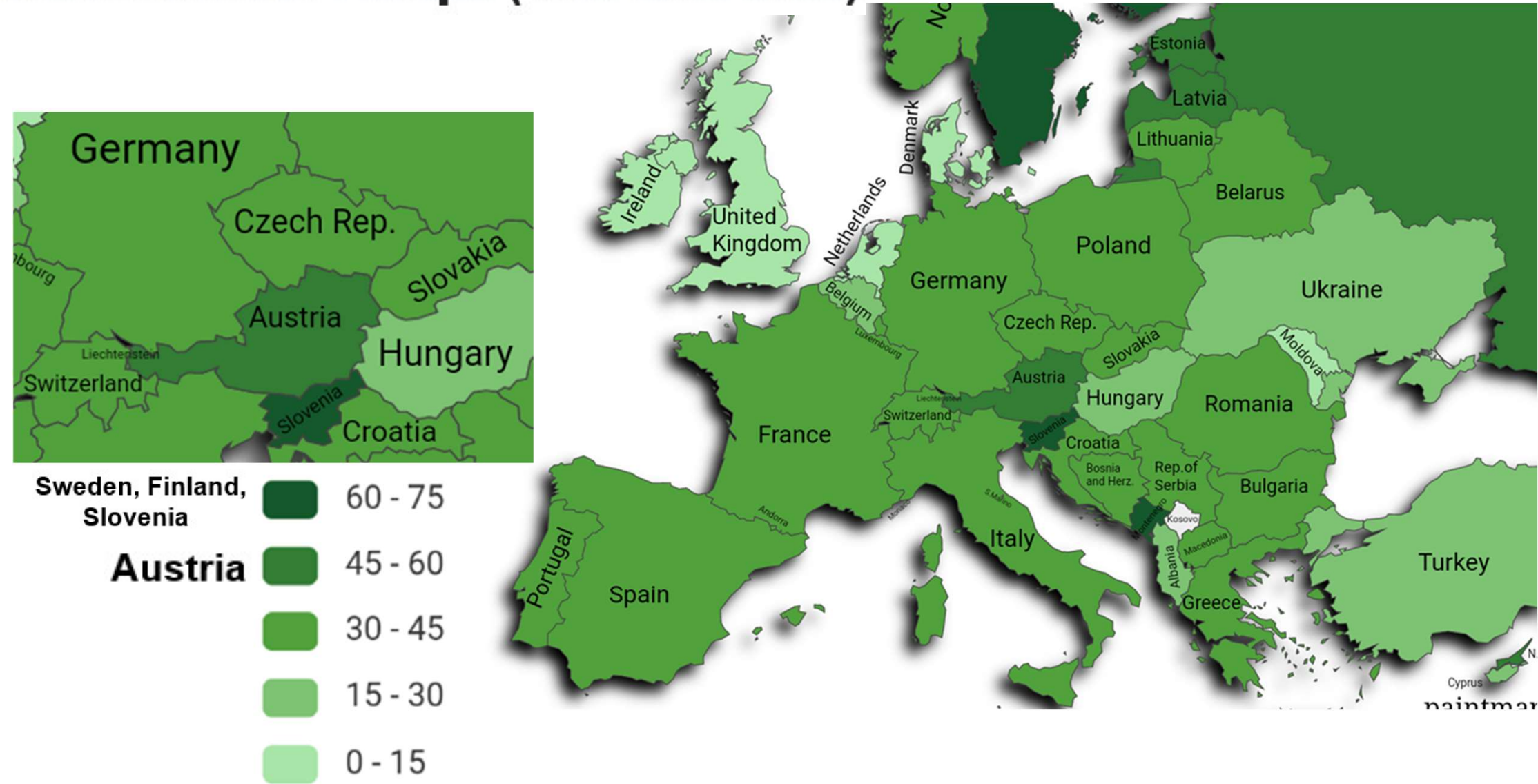




Ten countries with the largest forest area, 2005 (million ha)

Russian Federation	809	Indonesia	88
Brazil	478	Peru	69
Canada	310	India	68
United States	303	Others	1333
China	197		
Australia	164		
Democratic Republic of the Congo	134		

Forest area in Europe (% of land area)



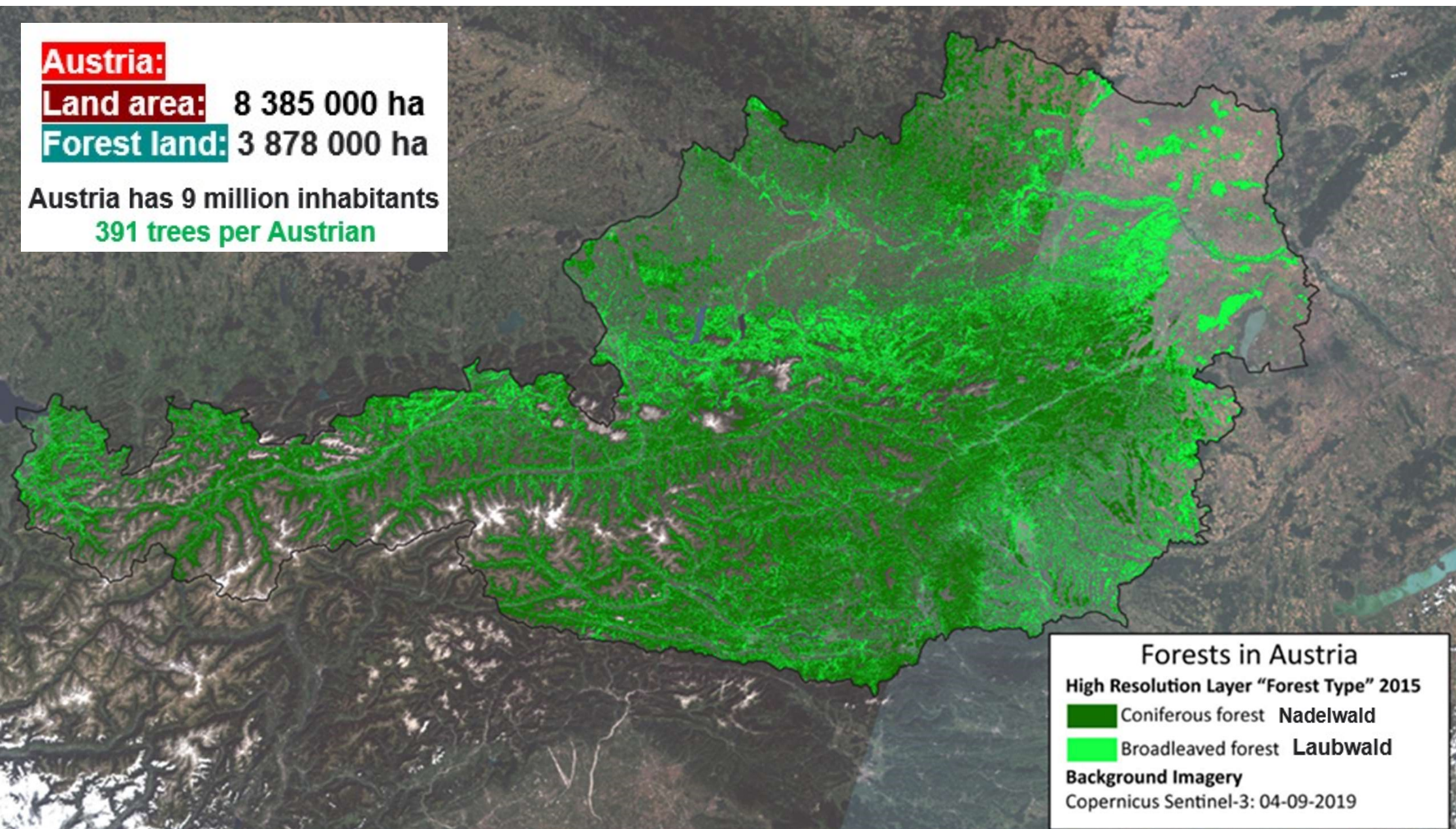
Austria:

Land area: 8 385 000 ha

Forest land: 3 878 000 ha

Austria has 9 million inhabitants

391 trees per Austrian



Forest area in Austria: 47,9 %

Coniferous woods: 80 %

Nadelwald

Broadleaved woods: 20 %

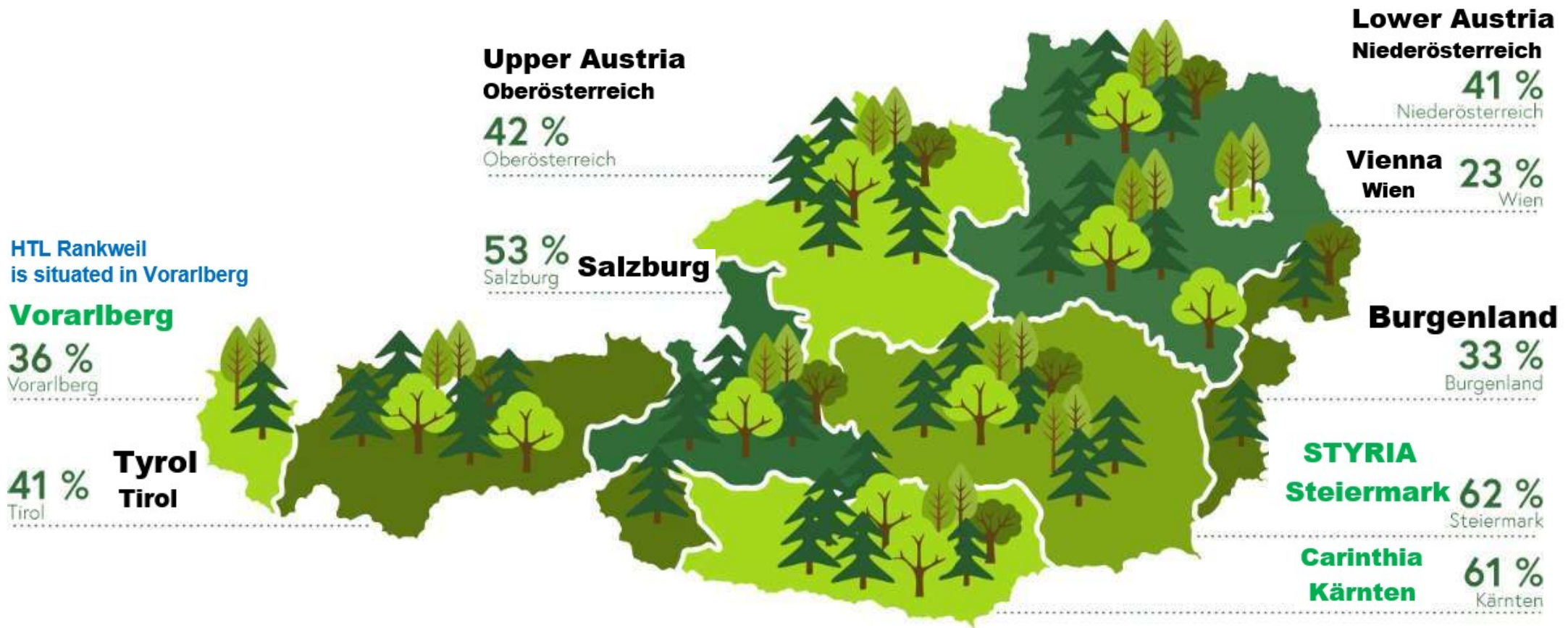
Laubwald

**Nearly half of the
Austrian state area
are forests**



Fast die Hälfte
der österreichischen
Staatsfläche
ist Wald.

Forest area per each of the 9 federal state



HTL Rankweil
is situated in Vorarlberg

Vorarlberg

36 %
Vorarlberg

41 %
Tirol

Upper Austria Oberösterreich

42 %
Oberösterreich

53 %
Salzburg

Lower Austria Niederösterreich

41 %
Niederösterreich

23 %
Wien

Burgenland

33 %
Burgenland

STYRIA
Steiermark 62 %
Steiermark

Carinthia
Kärnten 61 %
Kärnten

Waldfläche pro Bundesland

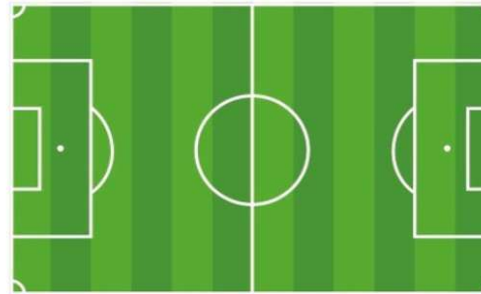
Austrian forests increase each year 3.400 ha



**This corresponds to the amount of
4762 football fields in one year**

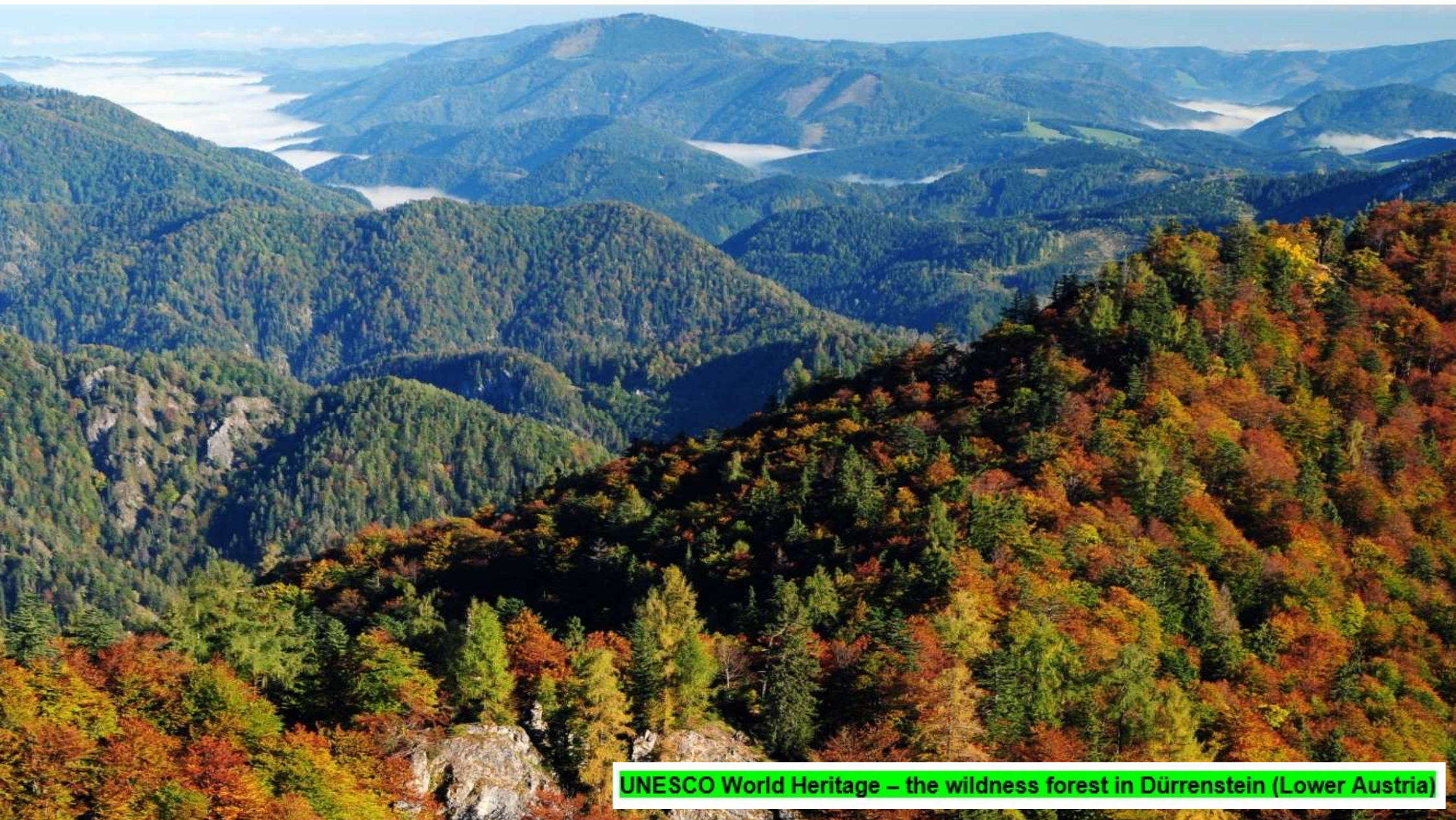


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+3.400 ha each year = **4.762 football fields**
Austrian forests are growing Fußballfelder

**The world lost 12 million hectares of tropical rainforest in one year,
an area equivalent of 30 football pitches every minute.**



UNESCO World Heritage – the wildness forest in Dürrenstein (Lower Austria)

Golden Eagle



Owl



Deer



Lynx



Biological Diversity

Golden Pheasant

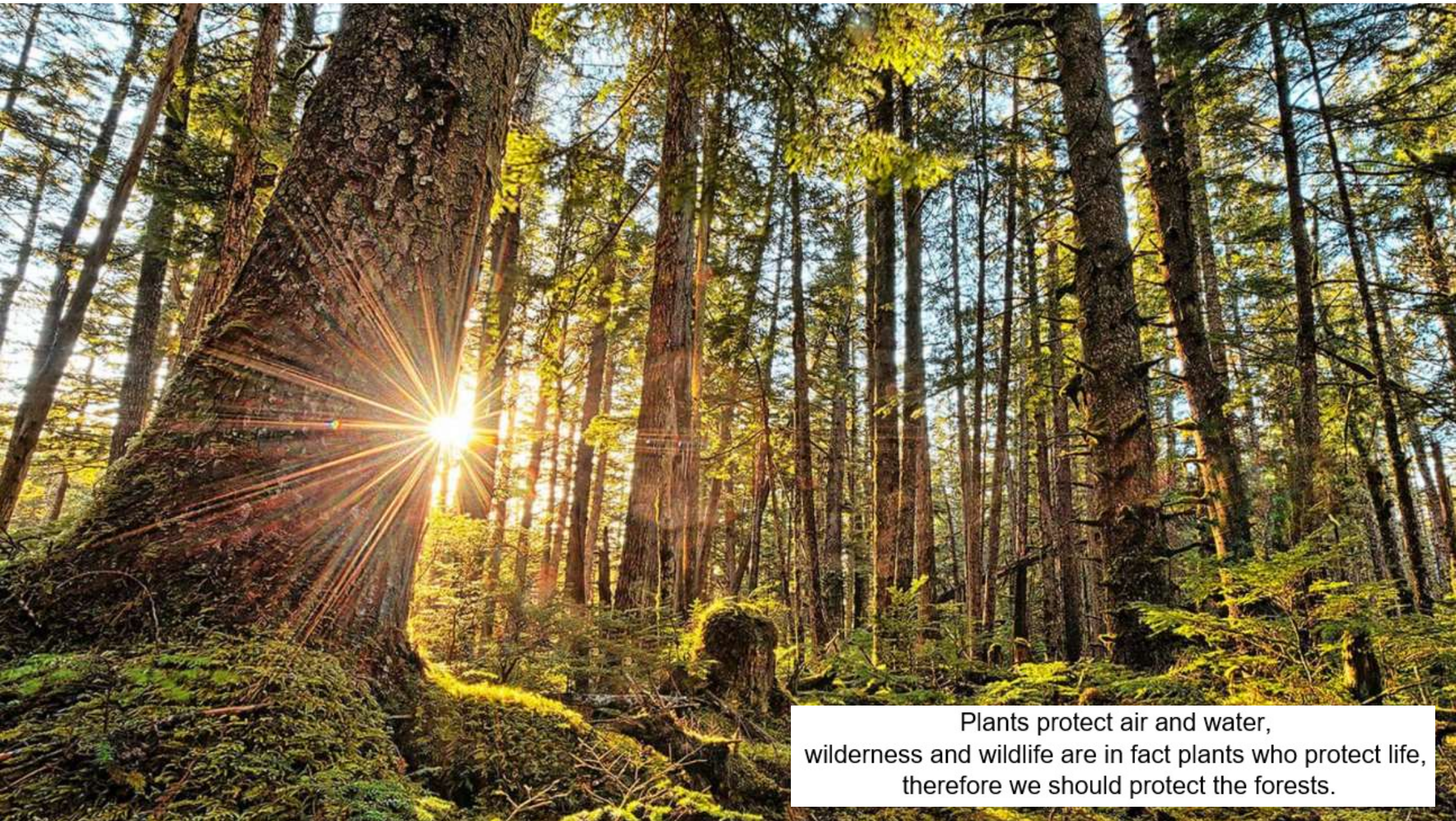


Fox



Badger



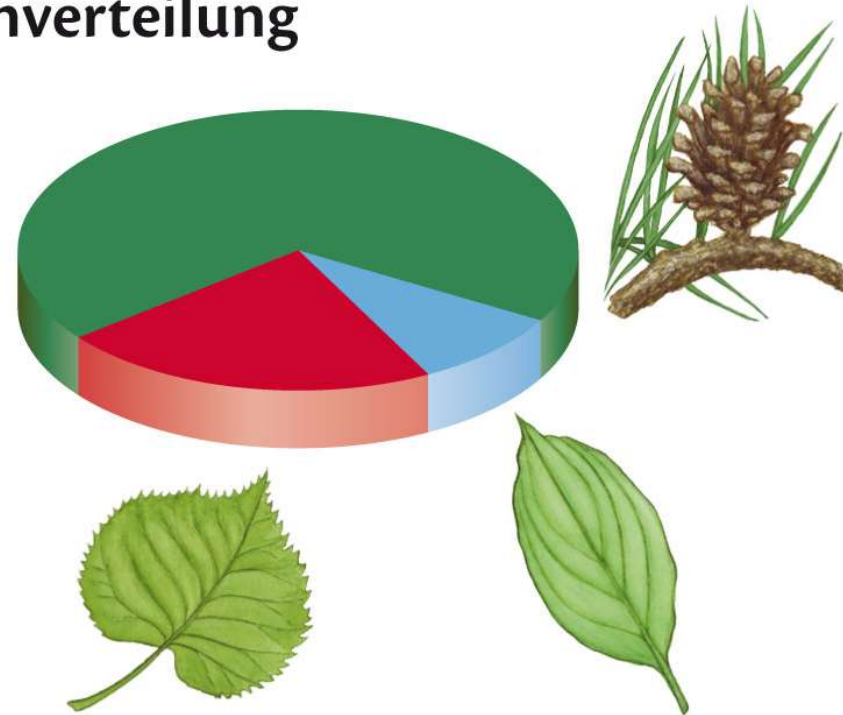


Plants protect air and water,
wilderness and wildlife are in fact plants who protect life,
therefore we should protect the forests.

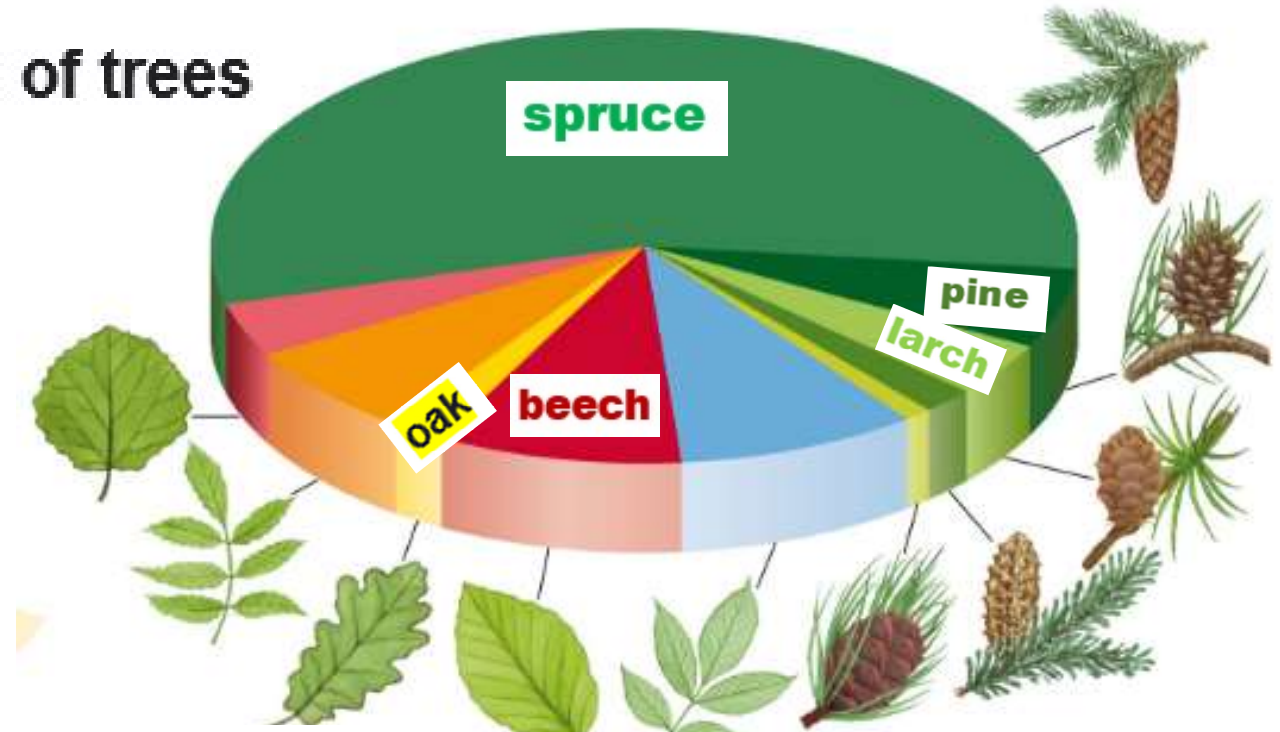
The most widely spread types of wood in Austria

Baumverteilung

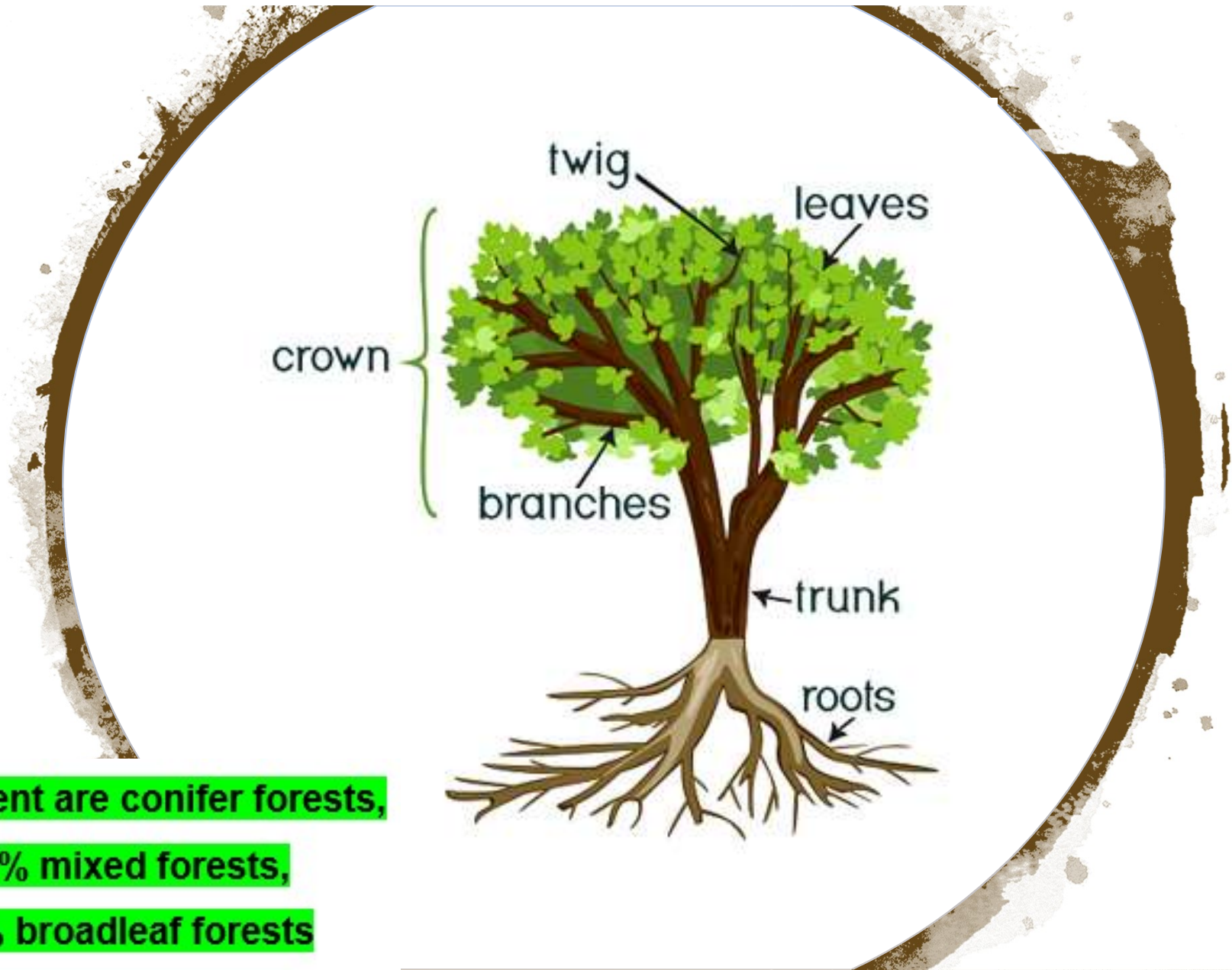
coniferous wood	■ Nadelholz 69 %
bushes / shrubbery	■ Sträucher 9 %
broadleaf wood	■ Laubholz 22 %



Common species of trees



coniferous trees		broadleaf trees	
spruce	Fichte 56 %	Rotbuche 9 %	beech
pine	Kiefer 6 %	Eiche 2 %	oak
larch	Lärche 4 %	sonstiges Hartlaubholz 7 %	(z. B. Esche)
	Tanne 2 %	sonstiges Weichlaubholz 4 %	(z. B. Weiden, Pappeln, Linden)
	sonstiges Nadelholz 1 %		
	Sträucher 9 %		



60 percent are conifer forests,

27% mixed forests,

13% broadleaf forests

Spruce Forests
softwood timber



Monoculture of spruces for the timber industry



Most of the forest land in Austria is divided into

- a) commercial forests (3.000.000 ha ... the biggest part)
- b) protective forests (286 000 ha)
- c) forests area out of production



Beech Forests

hardwood timber





**UNESCO World Natural Heritage beech forests
"National Park KALKALPEN" in Styria (Austria)**





Forest ownership: 85% of forests in Austria are private

- 53% small private forests (<200 ha)
- 32% private estates (>200 ha)
- 15% federal forests

The “bark beetle” in coniferous forests can causes extensive tree mortality, when the warming temperatures are increasing.

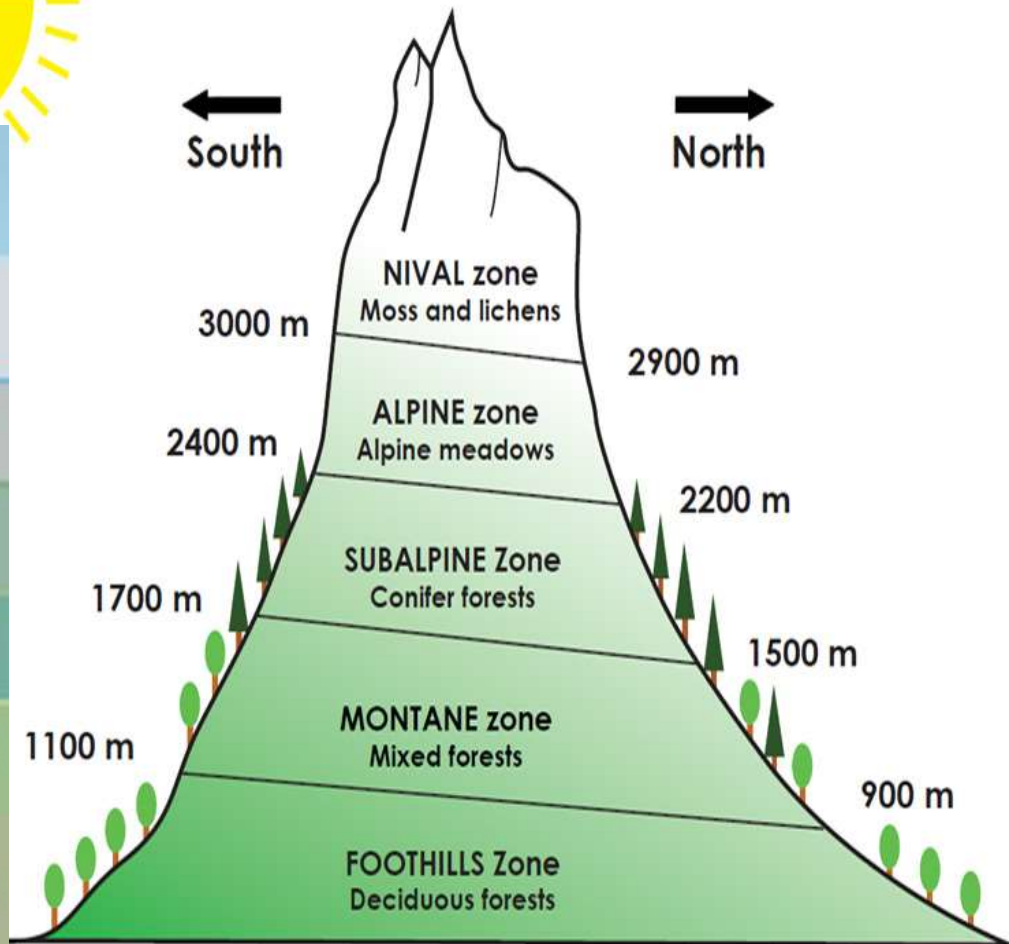
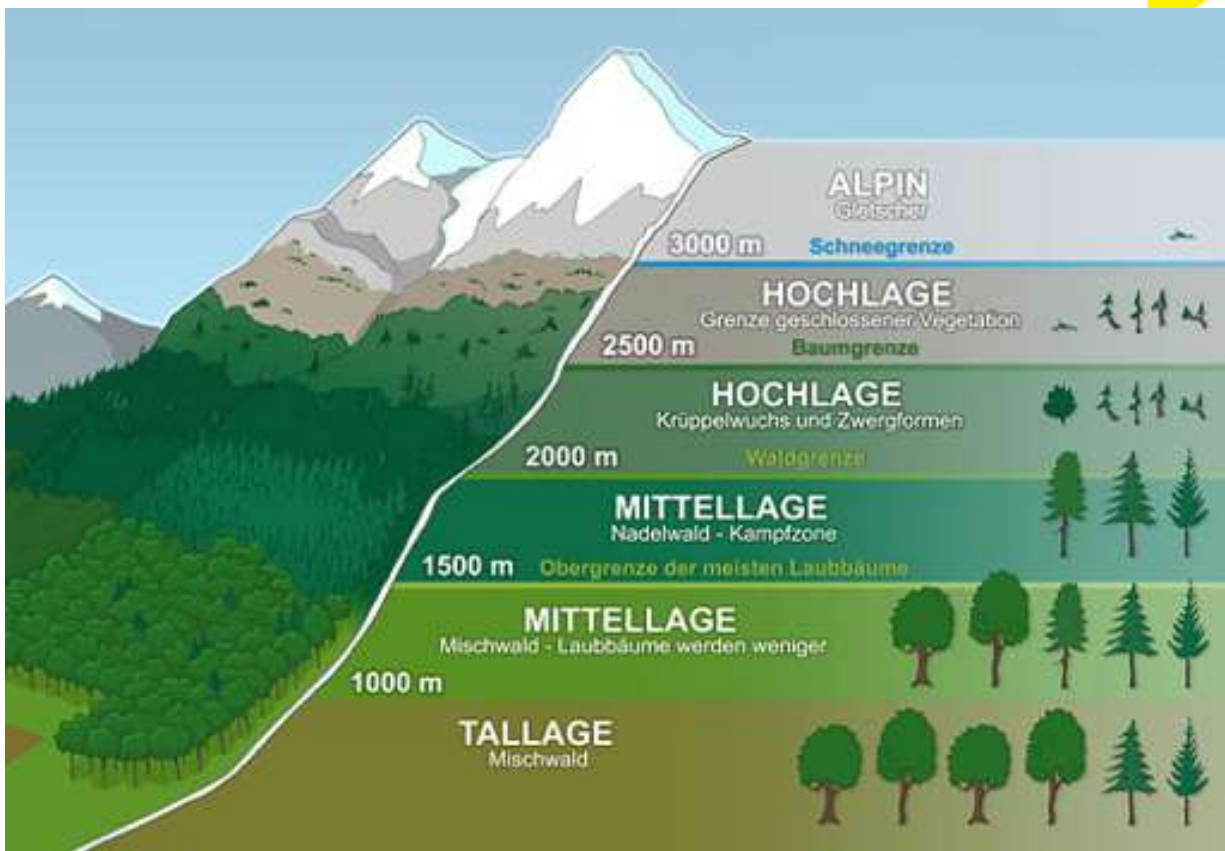


bark beetle / Borkenkäfer



The tree line (timberline) is approximately at 2500 metres in the Alps

The climatic forest line is approximately at 2000 metres in the Alps



Austrian houses with timber construction are popular.



**A traditional house in the Bregenzerwald
(Vorarlberg in Austria).**





The HoHo tower in Vienna, in the capital of Austria, is a hybrid construction from wood. It's the world's tallest wooden skyscraper with 84m.



**A magic wood in the region Waldviertel
in Lower Austria**



Region “Schloegen Oxbow” in Upper Austria,
where the River Danube makes 2 U – turns.





The Wachau is an Austrian valley with a picturesque landscape formed by the Danube river.

Typical landscape in the Austrian Alps.



“The most beautiful gift of nature is that it gives one pleasure to look around and try to comprehend what we see.”

Albert Einstein



Walsertal in Vorarlberg



Mixed forests with beech and spruce.