



Dendrology

FORS 2319

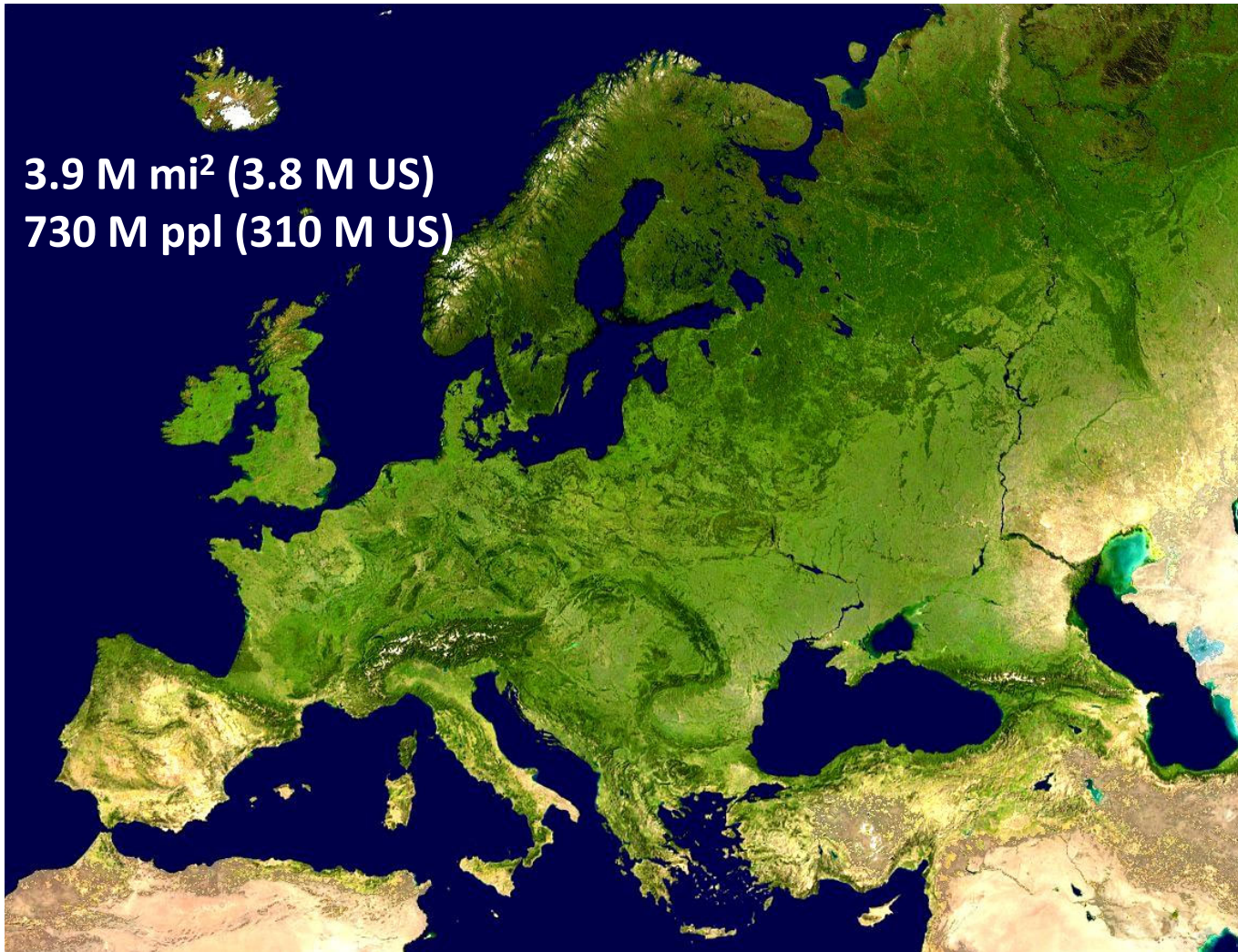


Instructor: Dr. Jeremy Stovall

Lecture 14:

Trees of Europe





ALTITUDES.

Source: USGS HYDRO1K
(1 km hydrologically correct Digital Elevation Model).



Meters:



Netherlands avg. 36 ft.

18,510 ft. Mt. Elbrus

Mt. Ranges:

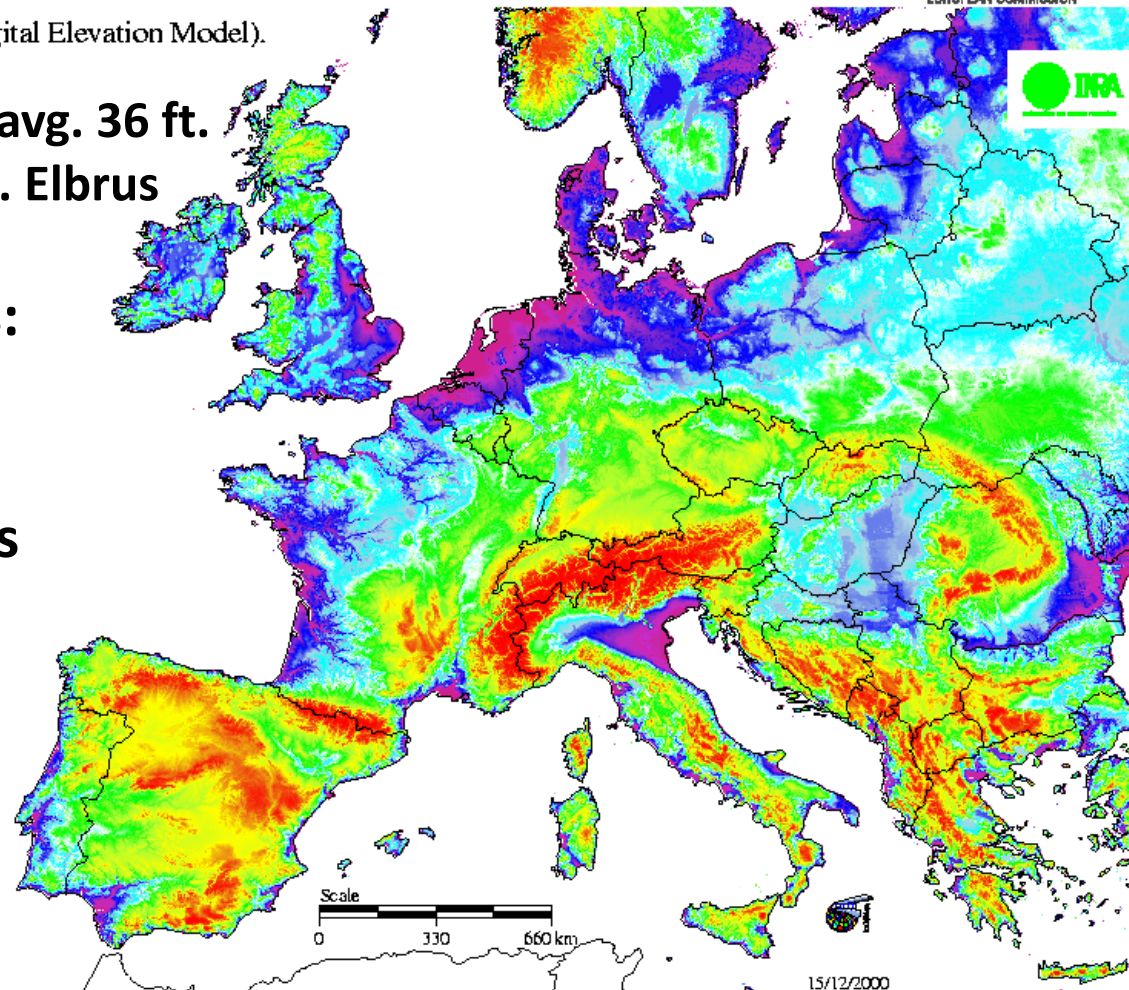
Pyrenees

Alps

Carpathians

Balkans

Caucasus



Climate

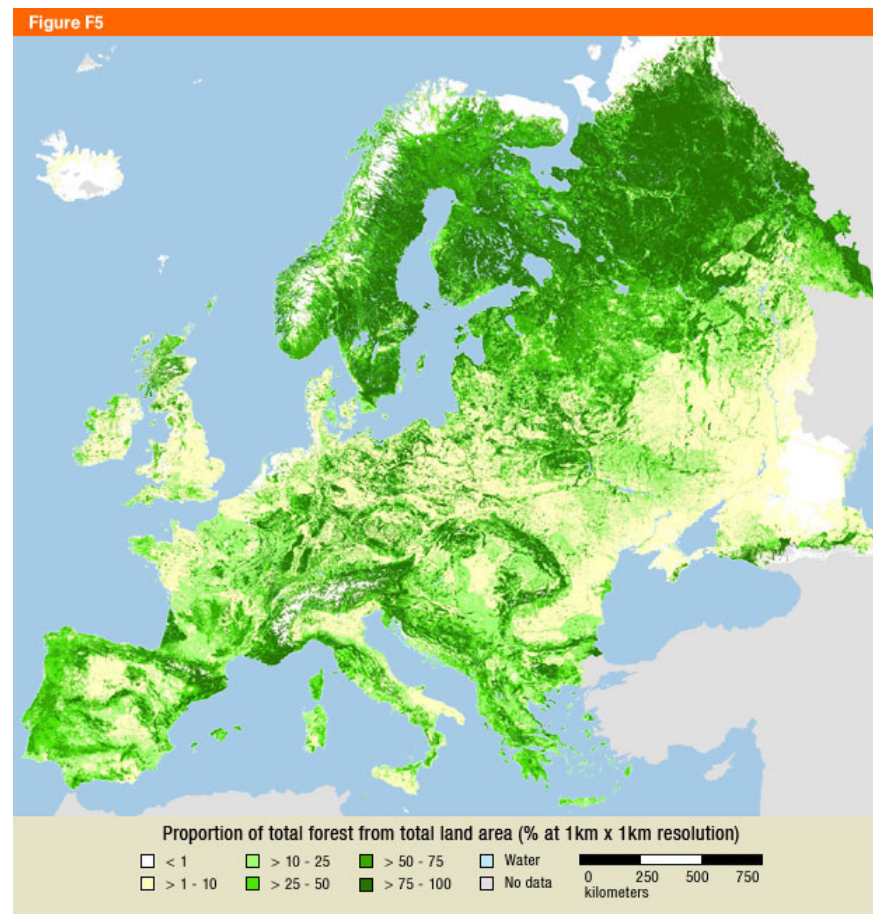


Forested Area

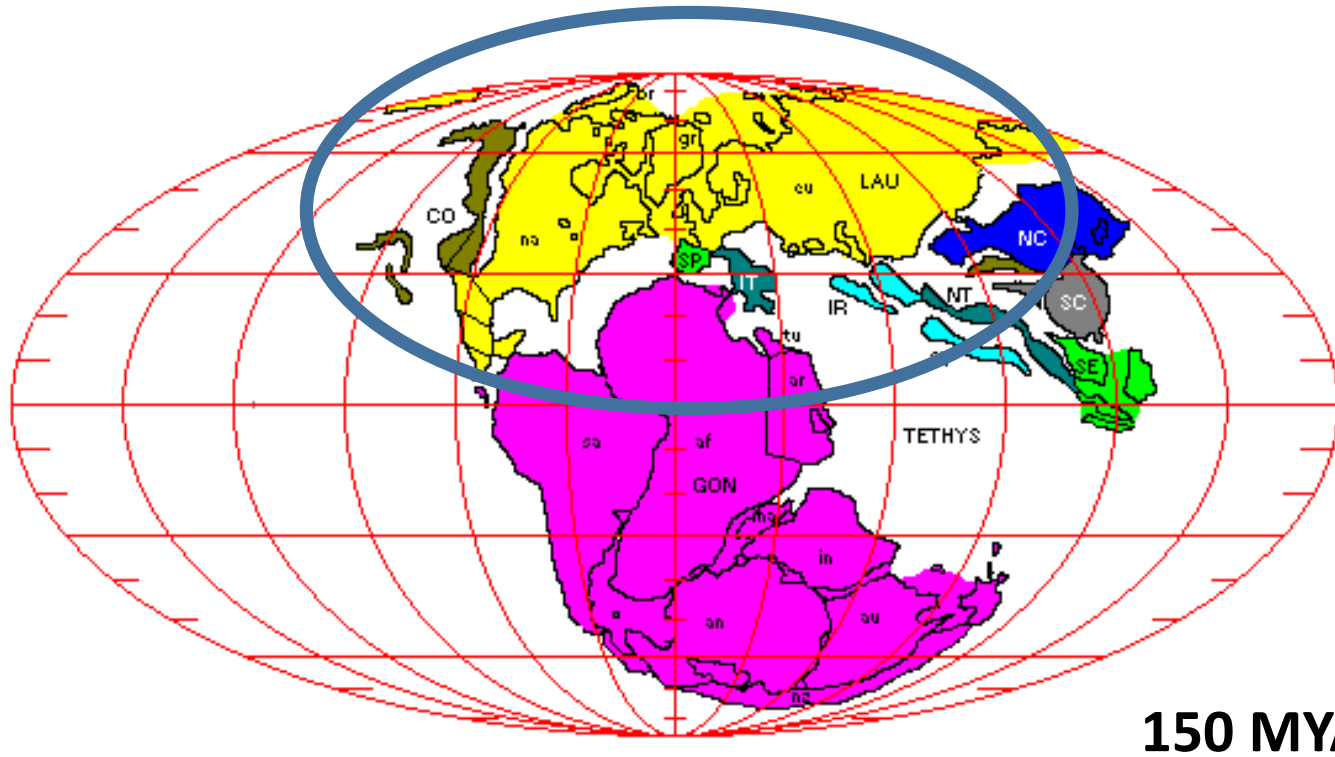
~2 M mi² forested
~50% land area

Heavily impacted,
but aggrading

Restricted mostly to:
Urban forests
Mountains
Non-ag land
Remote areas



Why are genera mostly same as ours?



Norway spruce

Pinaceae *Picea abies*

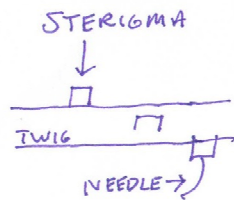


Conifer Needles

SPIKEY SPRUCES

PICEA
PRICKLY

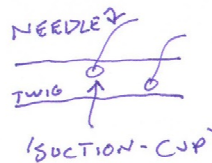
◻ ← NEEDLE
CROSS-SECTION →



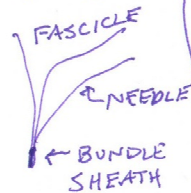
FRIENDLY FIRS ABIES

AMICABLE

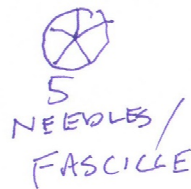
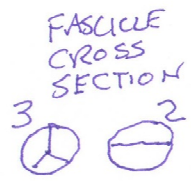
→ ○



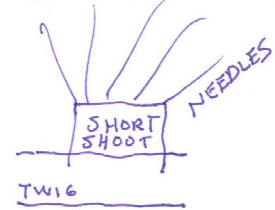
PINES PINUS



MODIFIED
SHORT
SHOOT



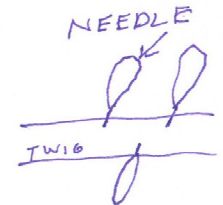
LARCHES LARIX



LOOKS
LIKE
URCHIN

DECIDUOUS

HEMLOCKS TSUGA

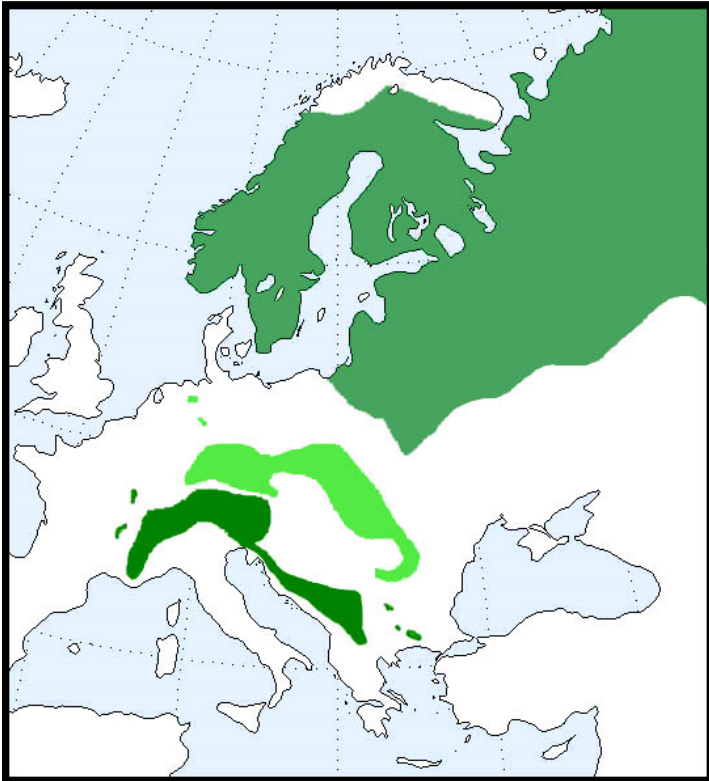


SMALL
($< \frac{1}{4}$ INCH)

BUT HAS
TINY PETIOLE
LIKE BROAD-
LEAF

Norway spruce

Pinaceae *Picea abies*



Norway spruce

Pinaceae *Picea abies*

- Oldest living tree →
- On 3000 ft mt in Sweden
- Stem only 600 years old
 - 13 ft tall
- Roots 9550 years old
 - Carbon dated
 - Stem dies, roots sprout
 - Repeat as needed

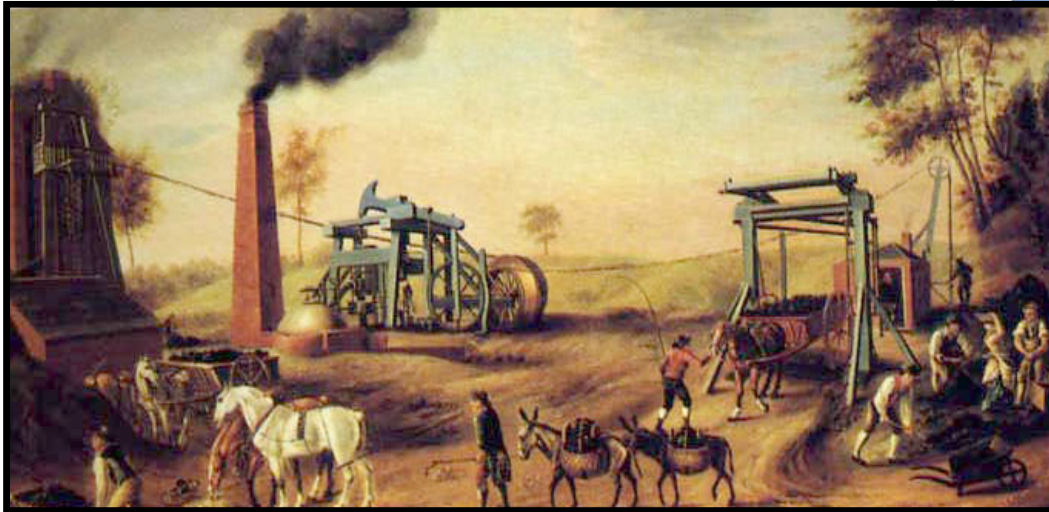
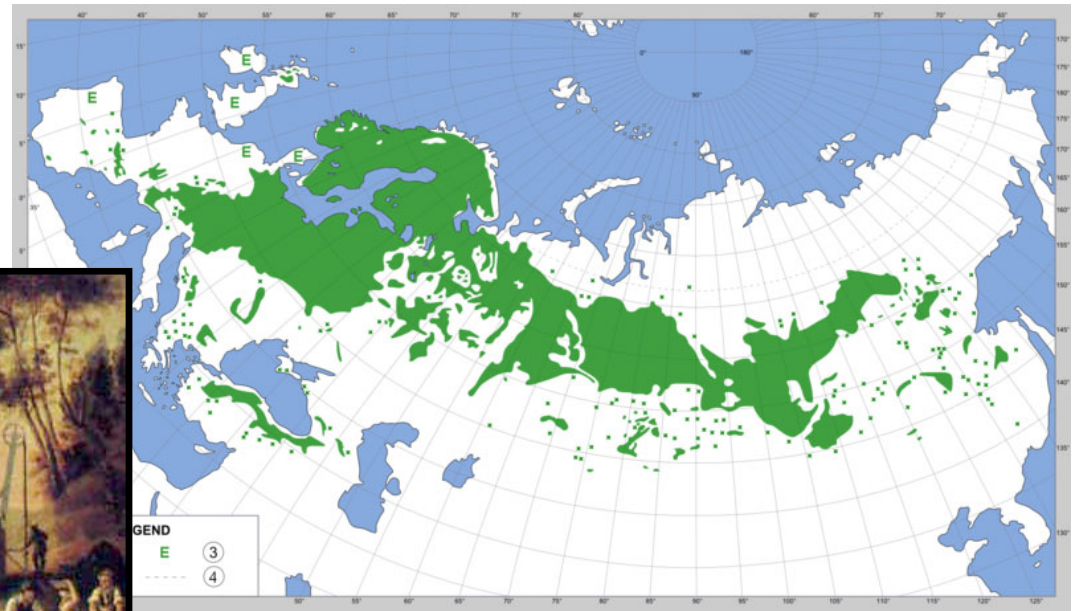


Scots pine
Pinaceae *Pinus sylvestris*



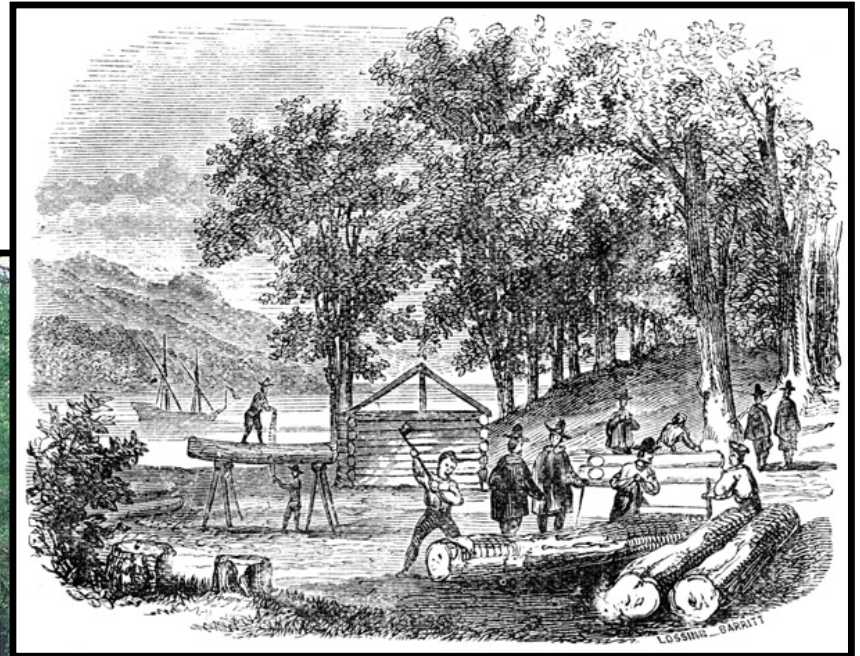
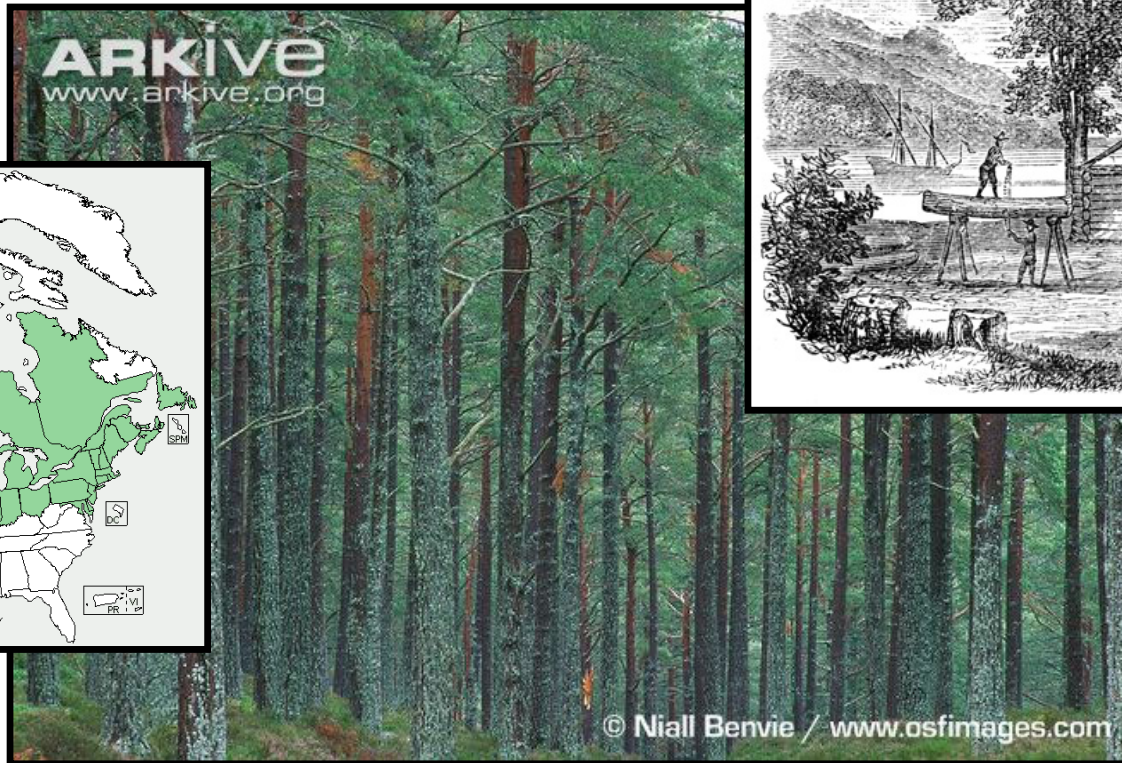
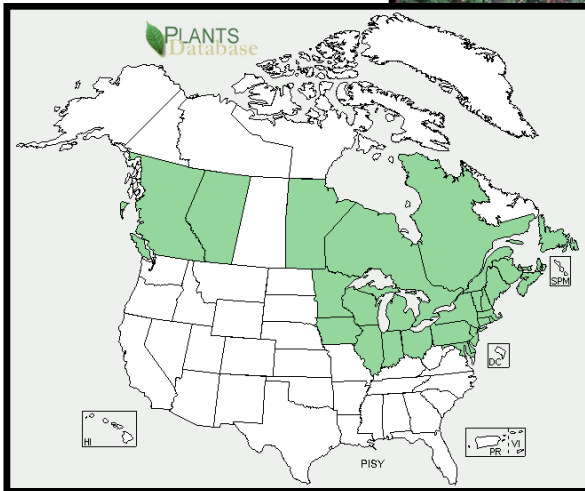
Scots pine

Pinaceae *Pinus sylvestris*



Scots pine

Pinaceae *Pinus sylvestris*



Scots pine

Pinaceae *Pinus sylvestris*

40-year-old Scot's pine seed orchard in Jilin Province, China, underplanted with Korean spruce



Endangered 'Beauty Pine' in China; a local provenance of *P. sylvestris*



Austrian pine
Pinaceae *Pinus nigra*

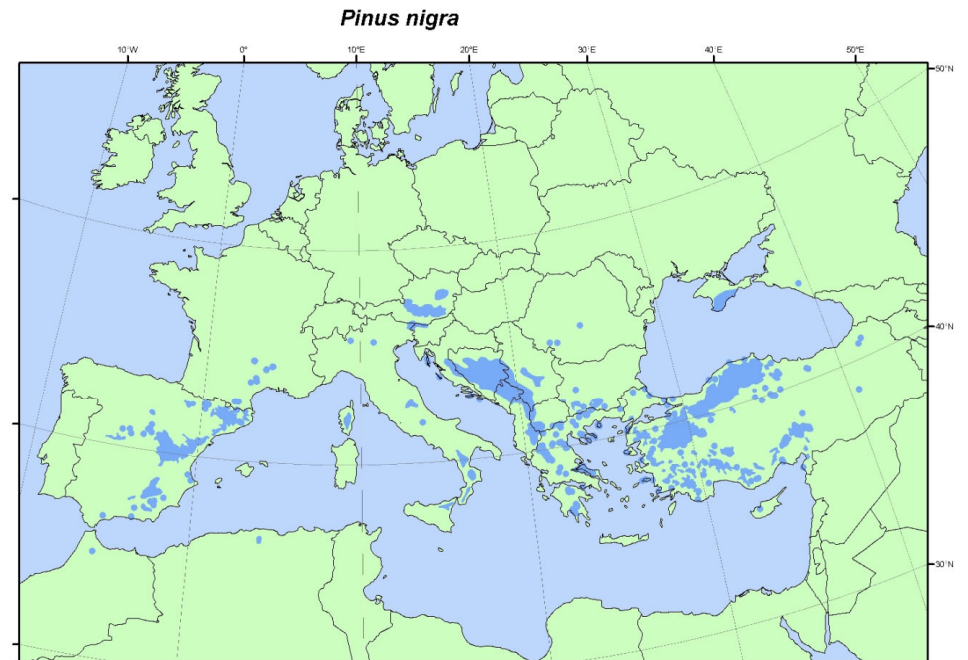


Austrian pine

Pinaceae *Pinus nigra*

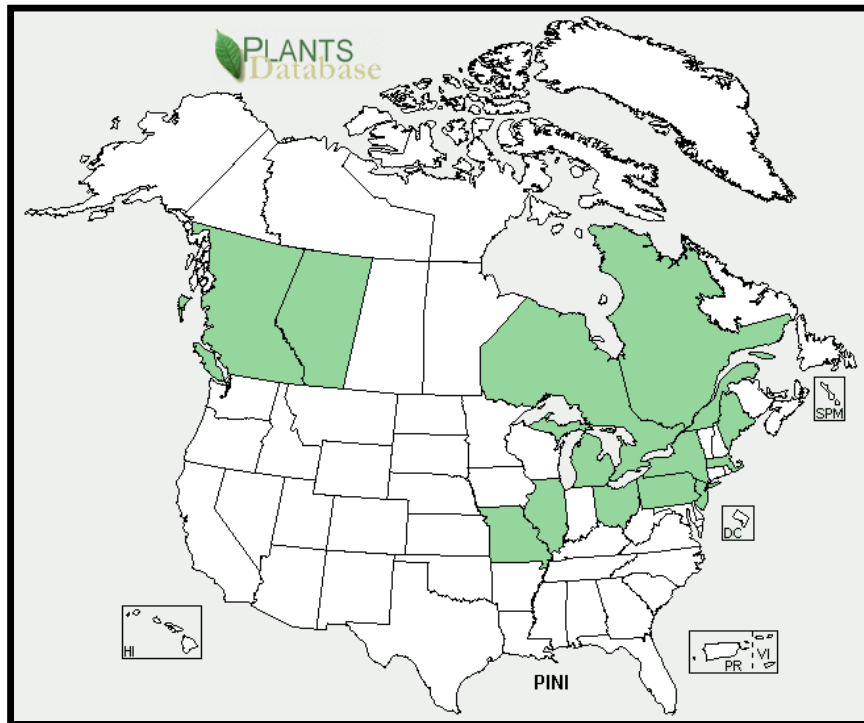


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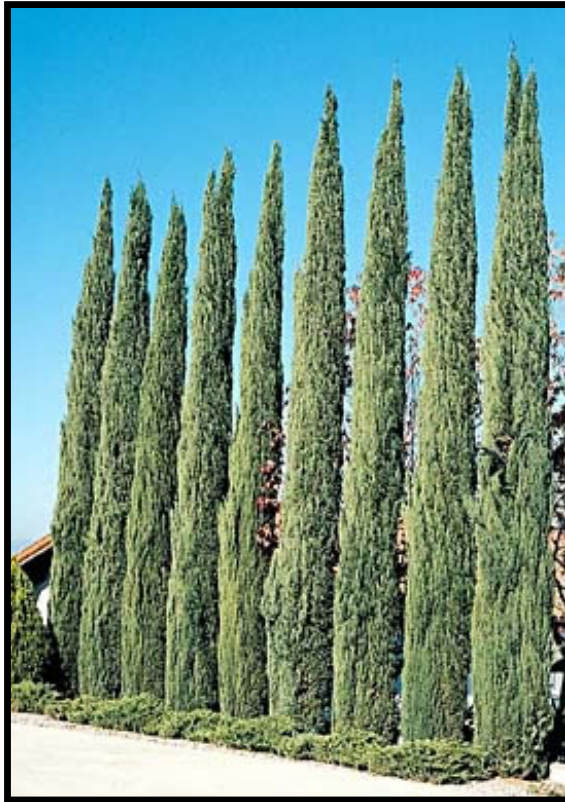
Austrian pine

Pinaceae *Pinus nigra*



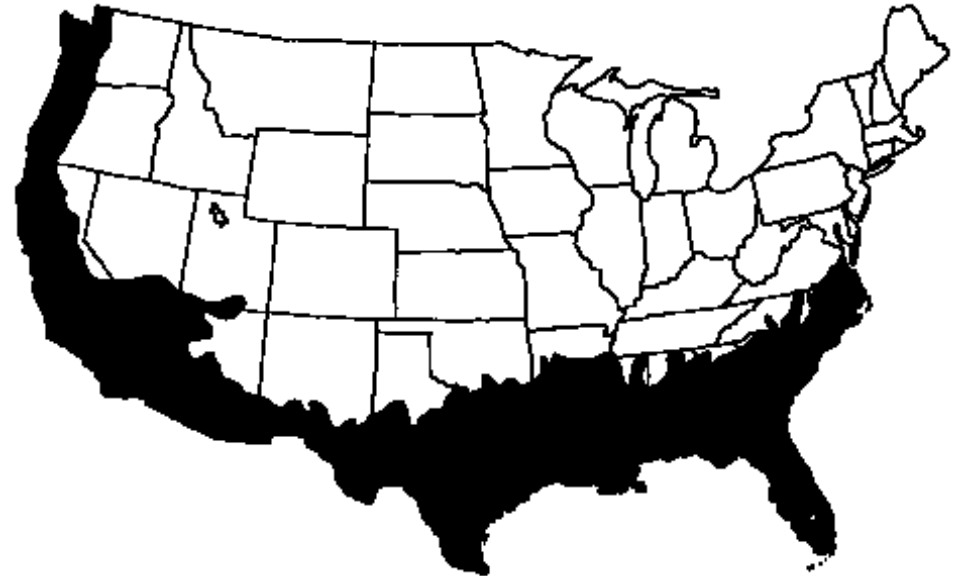
Italian cypress

Cupressaceae *Cupressus sempervirens*



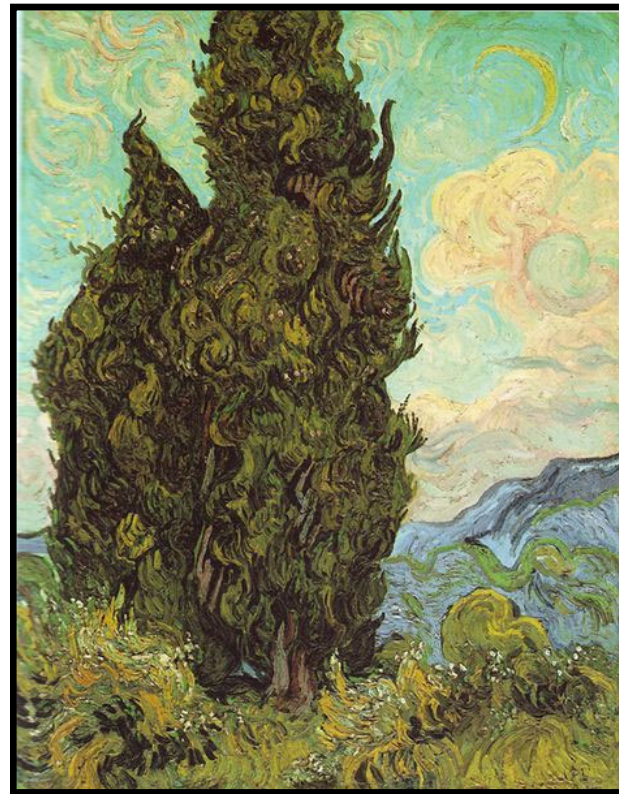
Italian cypress

Cupressaceae *Cupressus sempervirens*



Italian cypress

Cupressaceae *Cupressus sempervirens*



English yew

Taxaceae *Taxus baccata*



English yew

Taxaceae *Taxus baccata*



English yew

Taxaceae *Taxus baccata*



- ~6 feet long
- 60 – 185 lb draw weight
- 180 – 250 yd effective range
- Shoot 6 arrows per minute

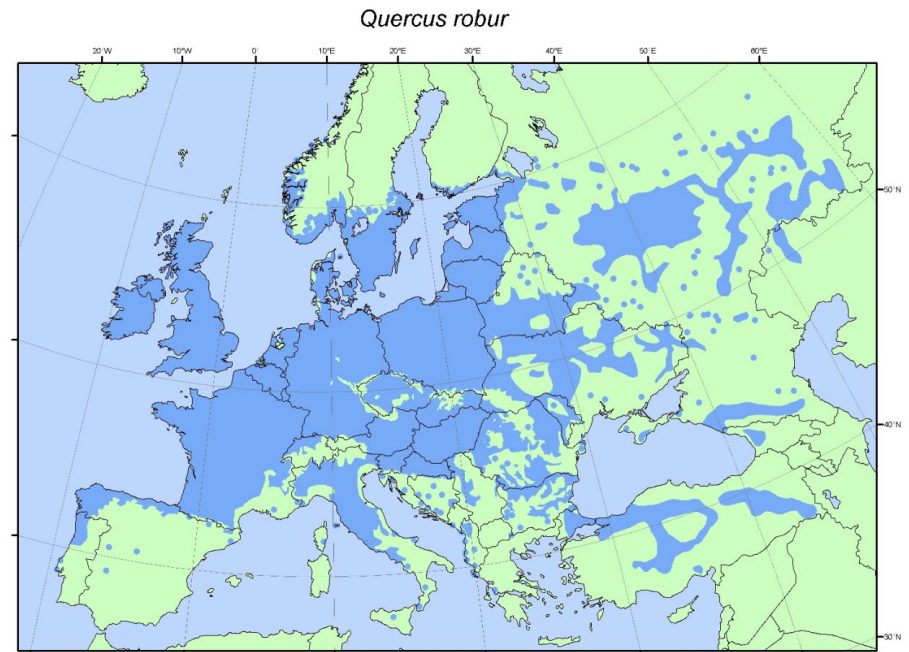
pendunculate oak
Fagaceae *Quercus robur*



pendunculate oak Fagaceae *Quercus robur*



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This distribution map, showing the natural distribution area of *Quercus robur* was compiled by members of the EUFORGEN Network

Citation: Distribution map of Pedunculate oak (*Quercus robur*) EUFORGEN 2009, www.euforgen.org.

First published online on 10 November 2004 - Updated on 24 July 2008

pendunculate oak
Fagaceae *Quercus robur*

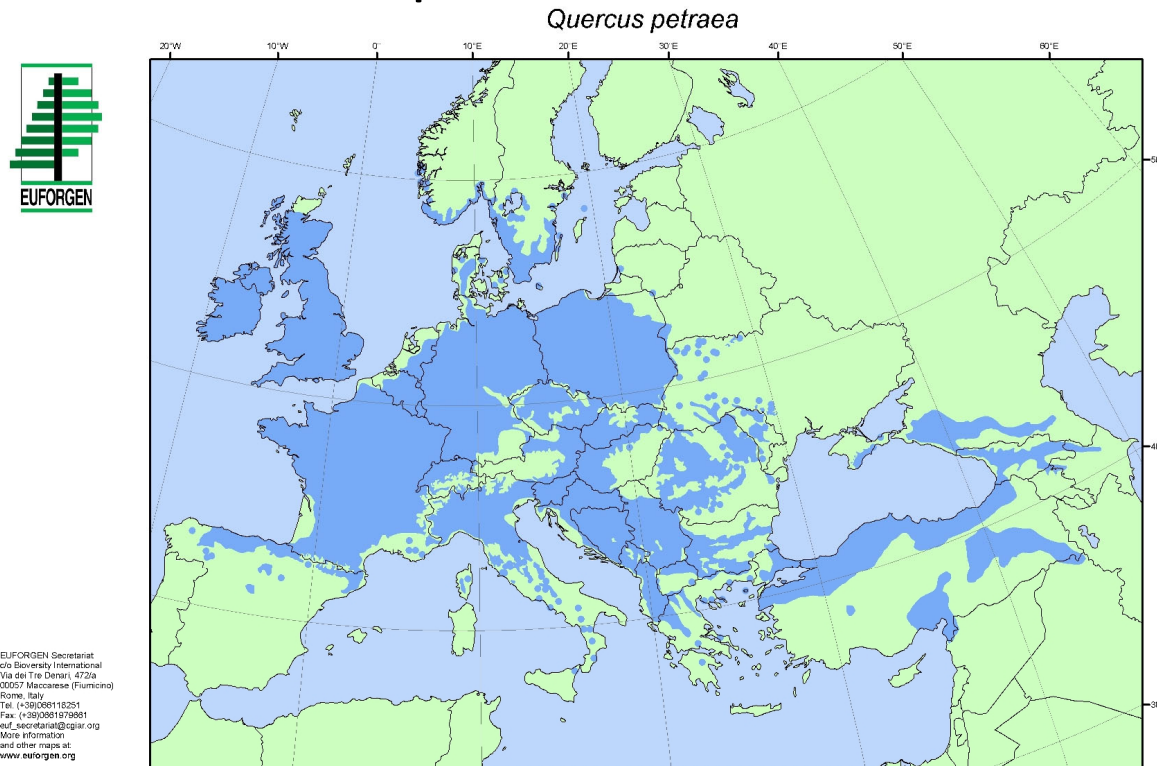


sessile oak
Fagaceae *Quercus petraea*



sessile oak

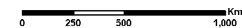
Fagaceae *Quercus petraea*



This distribution map, showing the natural distribution area of *Quercus petraea* was compiled by members of the EUFORGEN Networks

Citation: Distribution map of Sessile oak (*Quercus petraea*) EUFORGEN 2009, www.euforgen.org.

First published online on November 2004 - Updated on 24 July 2008



sessile oak
Fagaceae *Quercus petraea*



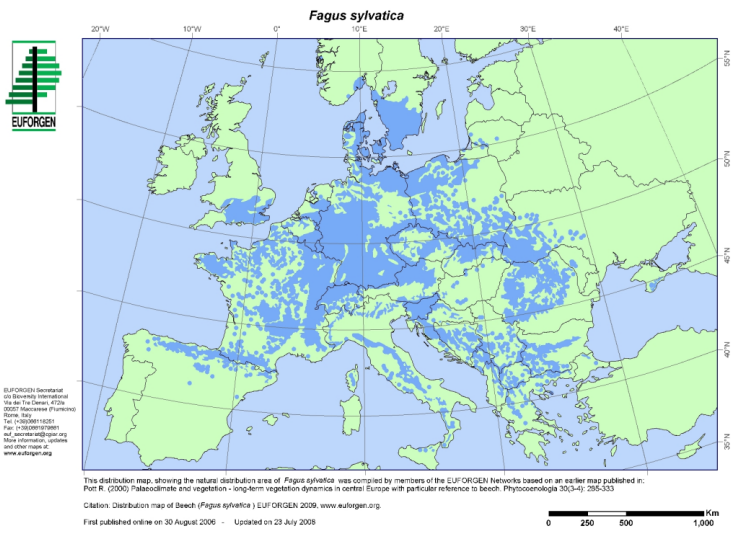
European beech

Fagaceae *Fagus sylvatica*



European beech

Fagaceae *Fagus sylvatica*



European beech
Fagaceae *Fagus sylvatica*



European white birch

Betulaceae *Betula pendula*

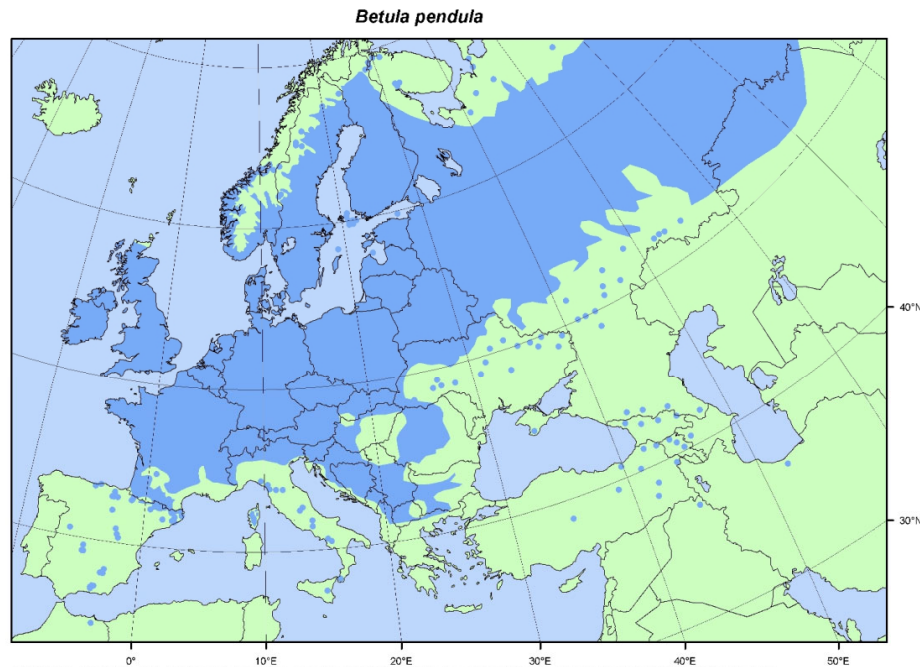


European white birch

Betulaceae *Betula pendula*



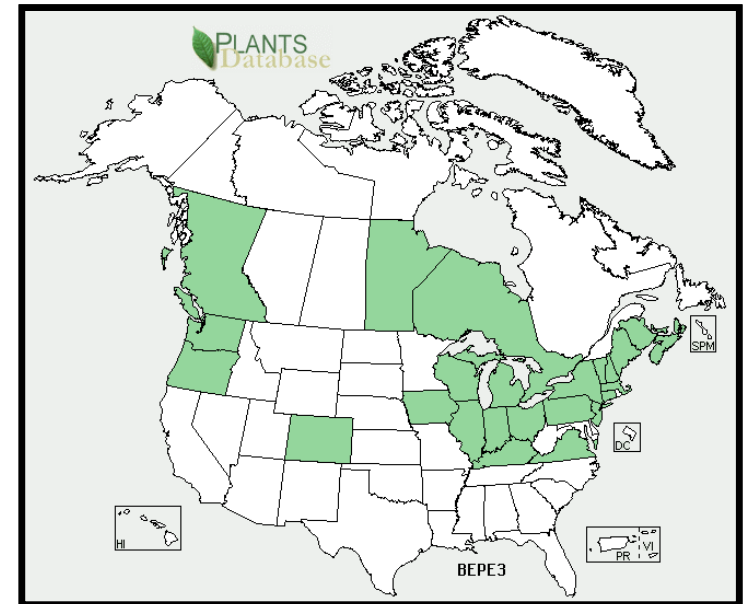
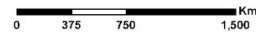
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This distribution map, showing the natural distribution area of *Betula pendula*, was compiled by members of the EUFORGEN Networks

Citation: Distribution map of silver birch (*Betula pendula*) EUFORGEN 2009, www.euforgen.org

First published online on 10 December 2009



European white birch

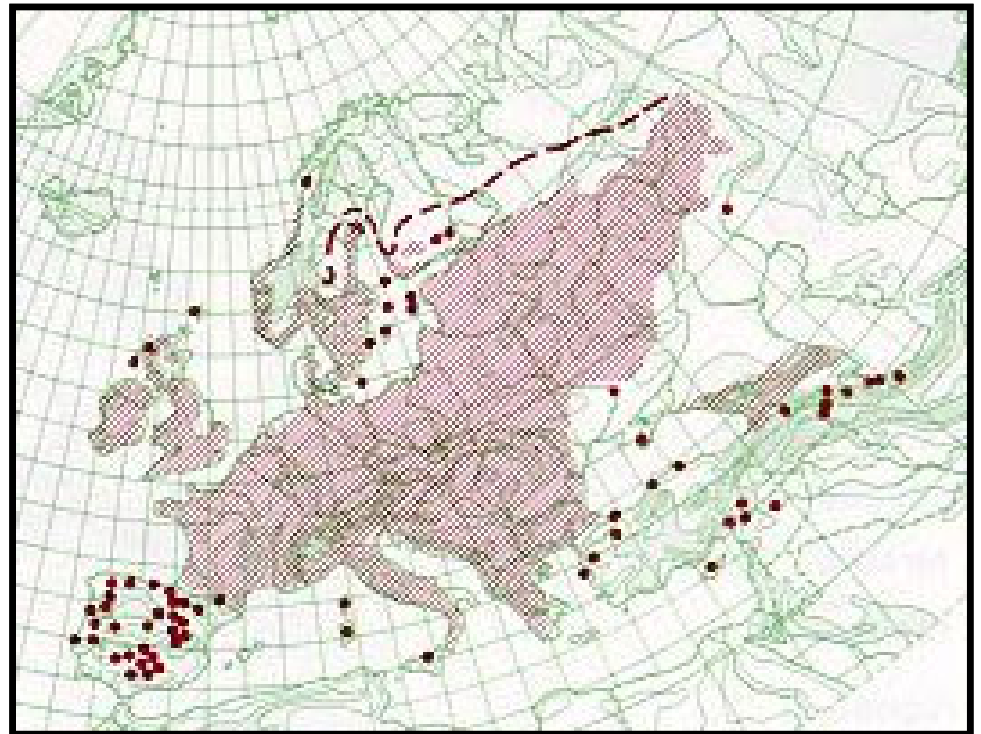
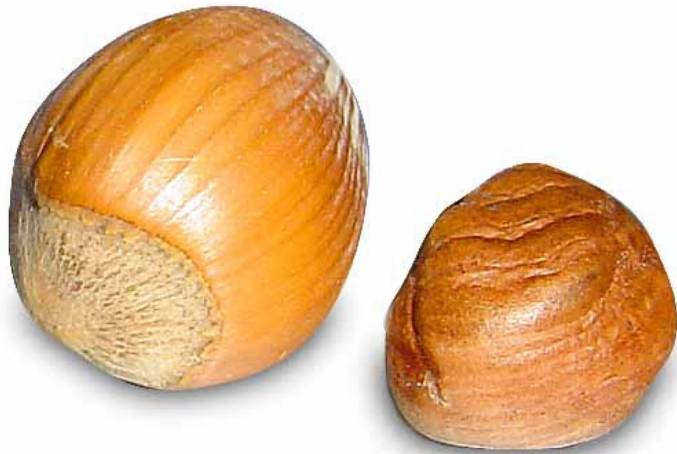
Betulaceae *Betula pendula*



common hazel
Betulaceae *Corylus avellana*



common hazel
Betulaceae *Corylus avellana*

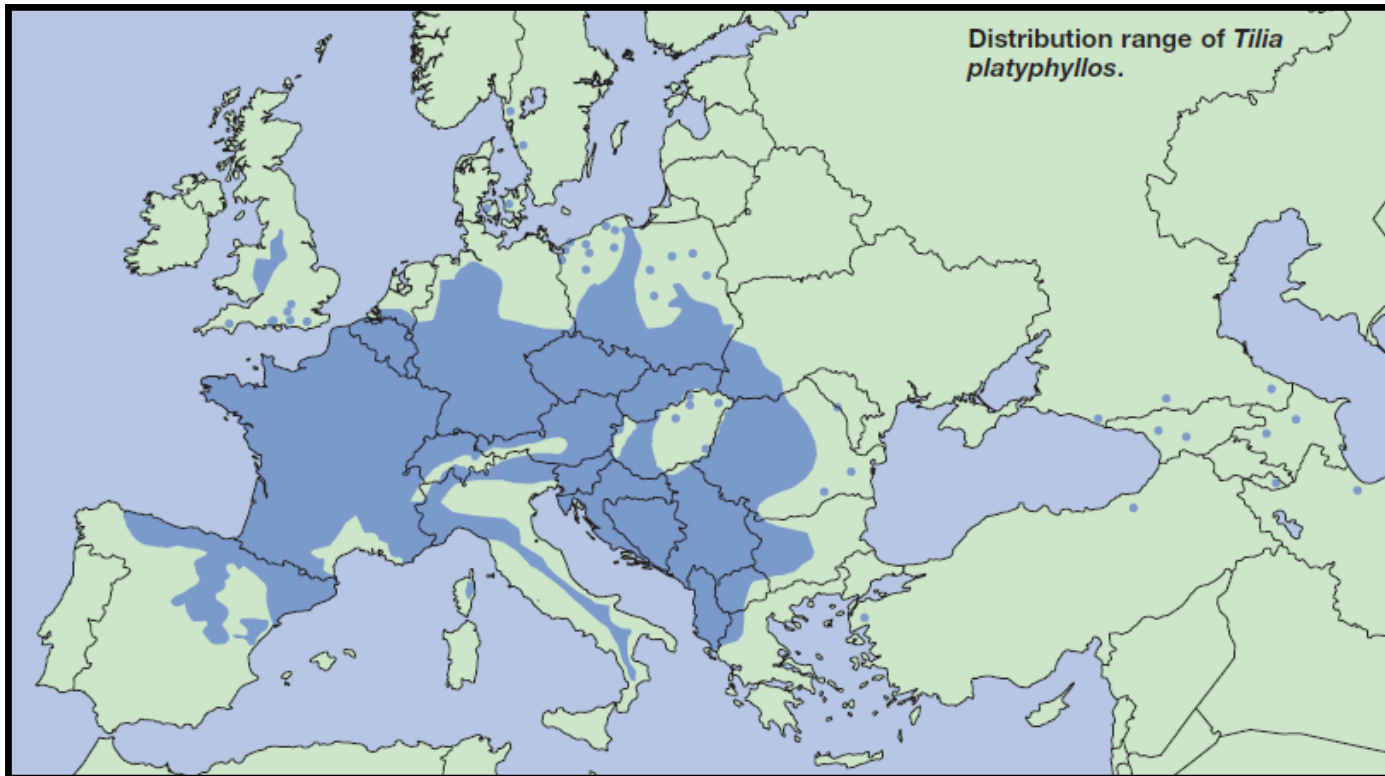


largeleaf linden
Tiliaceae *Tilia platyphyllos*



largeleaf linden

Tiliaceae *Tilia platyphyllos*



largeleaf linden
Tiliaceae *Tilia platyphyllos*



littleleaf linden
Tiliaceae *Tilia cordata*



Norway maple
Aceraceae *Acer platanoides*

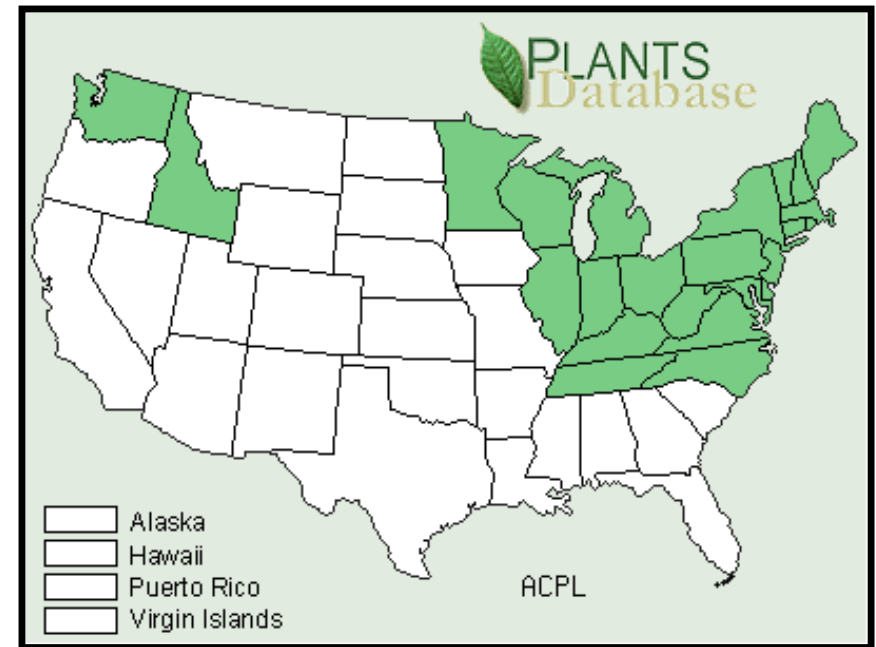
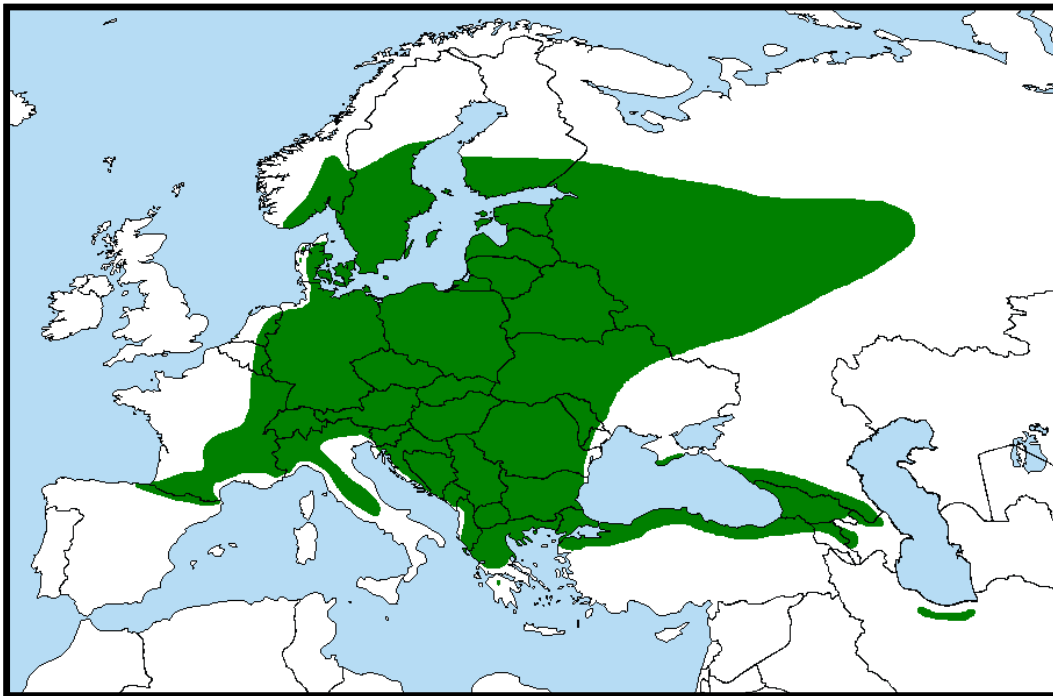


Norway maple
Aceraceae *Acer platanoides*

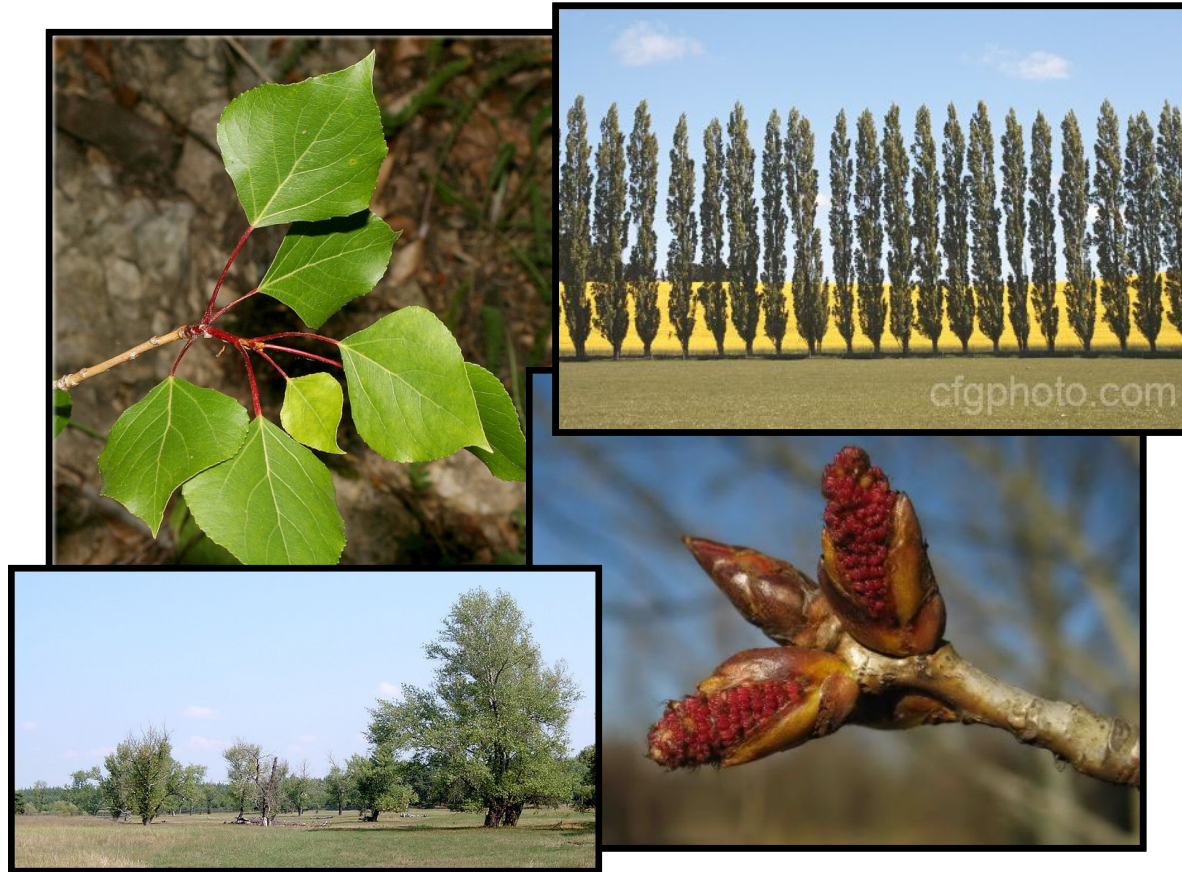


Norway maple

Aceraceae *Acer platanoides*

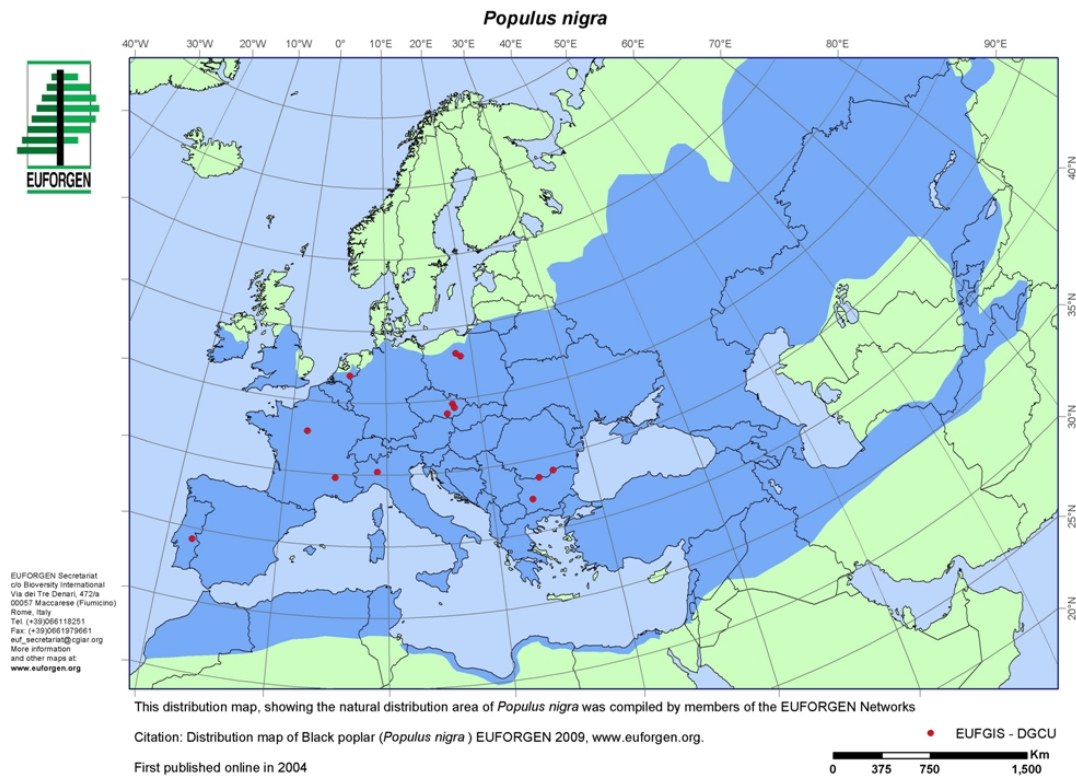


Lombardy poplar
Salicaceae *Populus nigra*



Lombardy poplar

Salicaceae *Populus nigra*



Lombardy poplar
Salicaceae *Populus nigra*



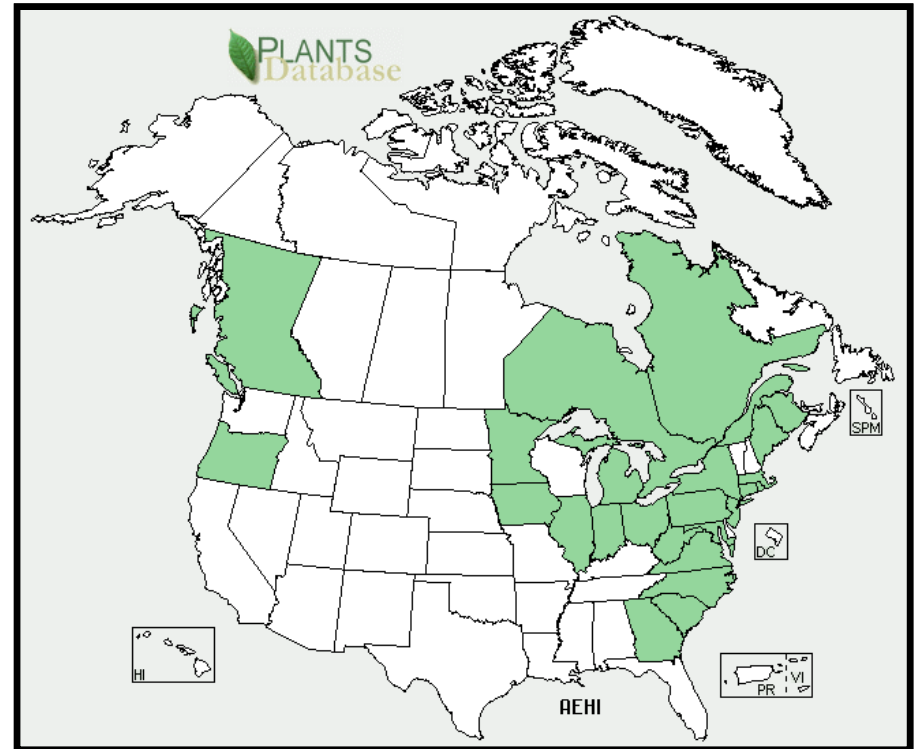
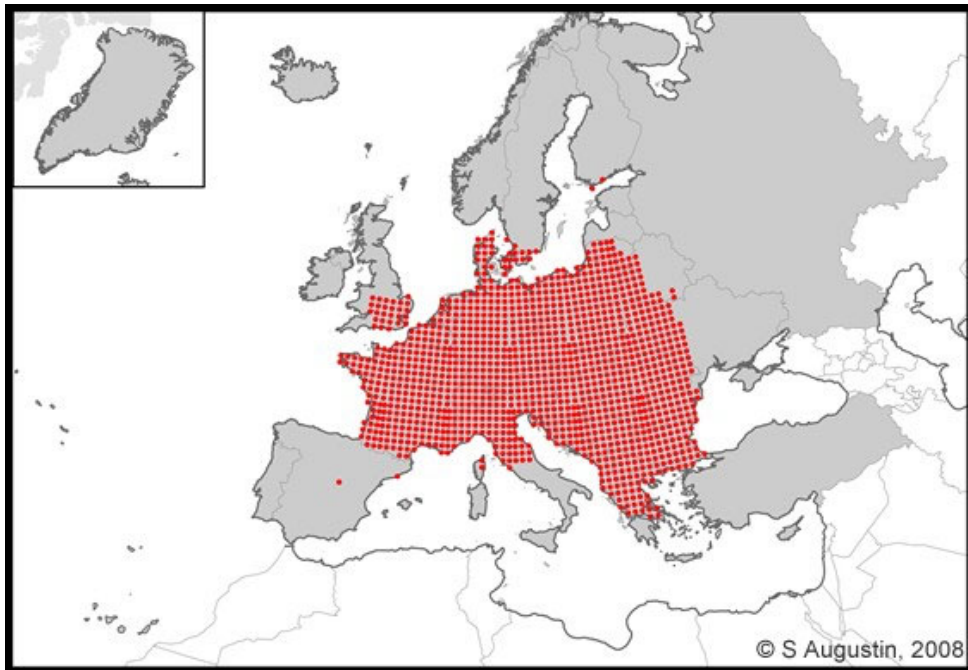
horse chestnut

Hippocastanaceae *Aesculus hippocastanum*



horse chestnut

Hippocastanaceae *Aesculus hippocastanum*



horse chestnut

Hippocastanaceae *Aesculus hippocastanum*



briar root
Ericaceae *Erica arborea*



briar root
Ericaceae *Erica arborea*



briar root
Ericaceae *Erica arborea*

