

# Europe

Physical Geography

# III. Climate

- A. European climates are mostly temperate (mid-latitude) and humid.
  - 1. Marine west coast – southern Norway to northern Spain
    - a. Highly influenced by the Gulf Stream & the North Atlantic Drift currents that keep the climate mild and rainy.; good for agriculture.
  - 2. Mediterranean – along the coastlines of the Mediterranean Sea (Spain, France, Italy, Balkans, & Greece)
  - 3. Humid continental – severe winters and very cold temperatures in the interior; hot with thunderstorms in summer.



- **B. Nearly all of Russia and the former Republics lie above 40°N latitude.**
  - **1. The interior of the Asian continent has places far from the moderating effects of the oceans. Thus areas here have extremely cold winters and hot summers, this is called continentality.**
  - **2. Precipitation decreases as you move inland.**

The annexation of Crimea by Russia in March 2014 has been declared invalid in a resolution passed by the United Nations General Assembly



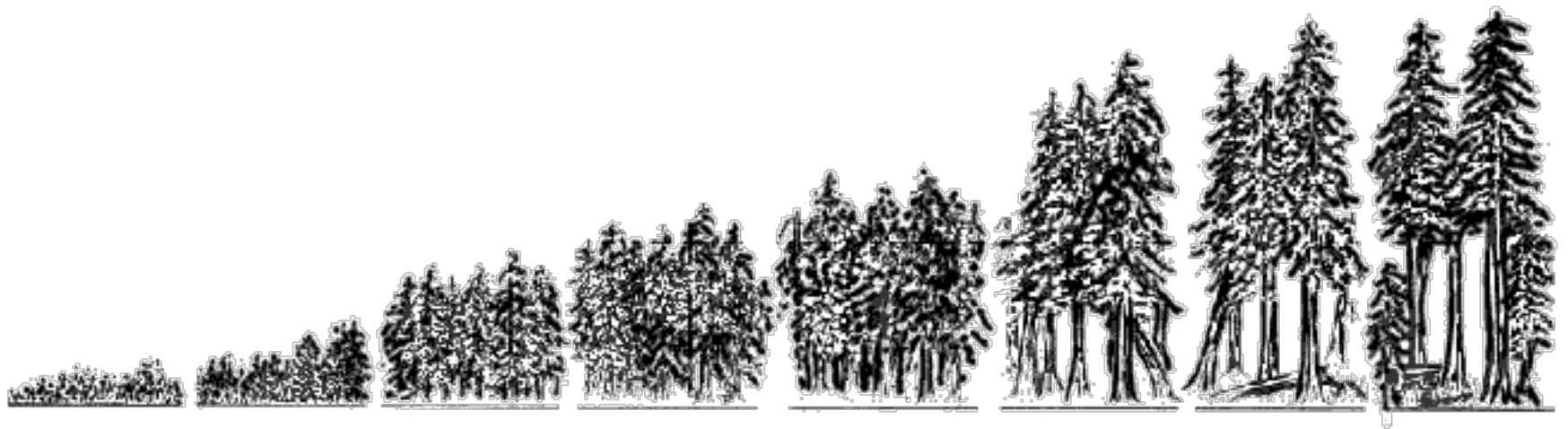
0 250 500 Miles  
0 250 500 Kilometers

Dry/Arid	Mild Temperate	Continental	Polar/Highland
BSk	Csa	Dsa	ET
BWk	Cfa	Dsb	EF
	Cfb	Dsc	
		Dsd	
		Dwa	
		Dwb	
		Dwc	
		Dwd	
		Dfa	
		Dfb	
		Dfc	
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# IV. Natural Resources

## ▪ A. Europe

- 1. Temperate forest biome dominates.
- 2. Little to no “old growth forests” left in Europe (by 1600 AD) due to the land being settled about 5000 years ago (Neolithic farmers, Roman empire, Germanic & Slavic tribes..etc...).
  - a. This is what will lead W. Europe to explore & colonize, the need for raw materials/resources
- 3. Soils are very fertile including type called “loess.”
  - a. Loess is soil built up from windblown glacial debris.
  - b. Much of Europe’s land was covered by ice age glaciers and its topography reflects this event.
- 4. Ports along the North, Baltic, and Mediterranean Sea have driven trade. Fishing in these seas as well as the North Atlantic add to local economies and have caused conflicts.



**1 Year**  
**Bare Soil**  
**& Herbs**

**15 Years**  
**Shrubs &**  
**Seedlings**

**30 Years**  
**Saplings**  
**& Shrubs**

**60 Years**  
**Young Forest**

**100 Years**  
**Mature Forest**

**200 Years**  
**Old Growth**

**500 Years**

**750 Years**







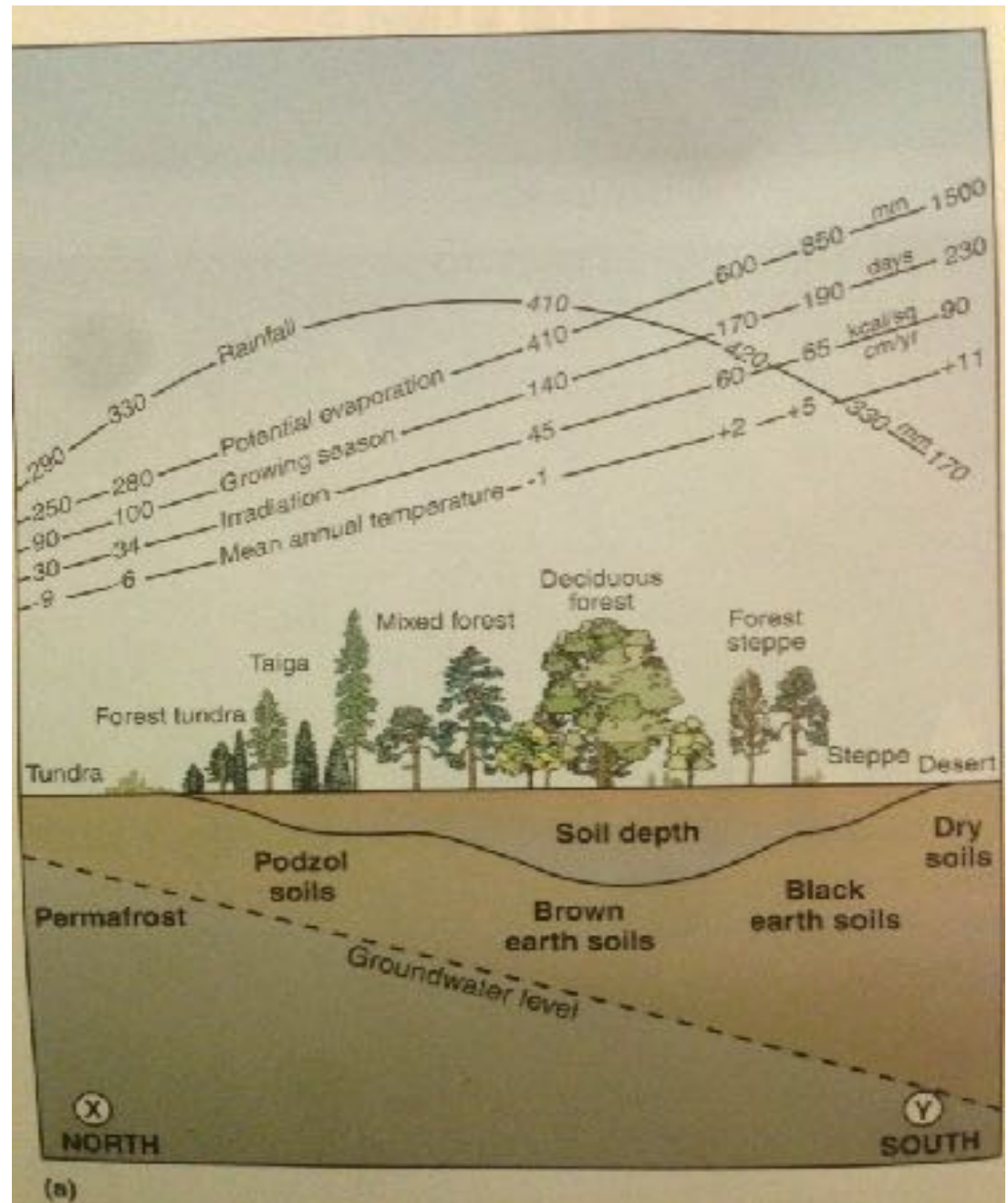
- **B. Russia**
  - **1. Steppes – temperate grasslands of Asia**
  - **2. Chernozems – black earth soils**

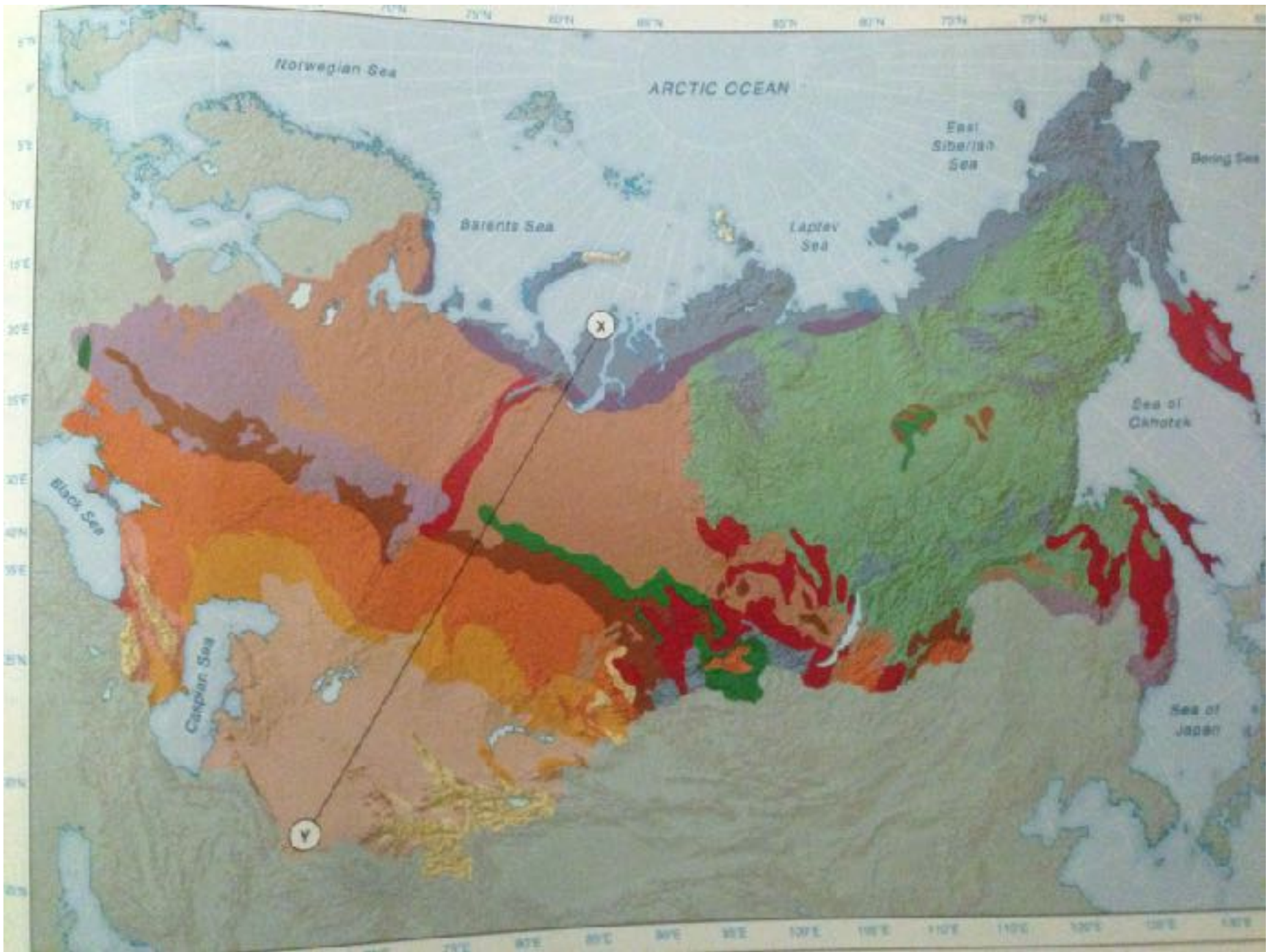


- 3. Taiga – boreal forest; coniferous; Siberia



- 4. Podzol soil – hard, impedes (slows down) drainage
- 5. Permafrost – permanently frozen soil





# V. Environmental Issues

## ■ A. Europe

- 1. The Industrial Revolution beginning in the late 1800s led to massive pollution of the rivers and air in Europe.
  - a. Fish kills in many rivers
    - *See next 3 slides for b. - c.*
  - d. Temperature inversions are common in river valleys such as the Po, the Seine, and the Tagus in Portugal.

- b. Winter smoke fogs (smog) due to domestic & industrial coal burning. Europe has abundant coal & peat resources.



...Chim-chimney chim-chimney  
chim-chim chiroo....



- (1) What is peat? Peat is partially decayed plant matter in clay form used for cheap fuel....it will be lignite coal in about 300 million years...

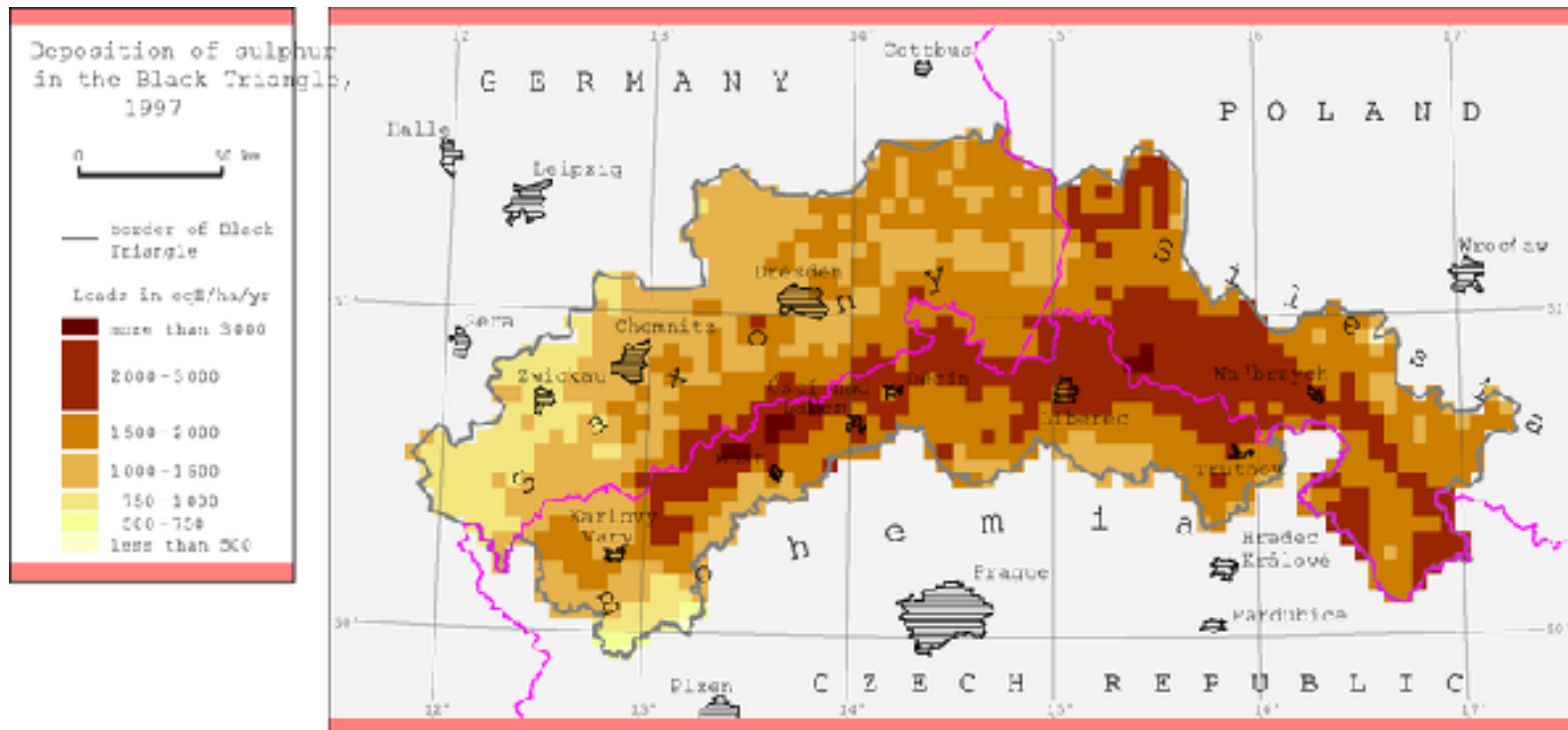


# The Bog People





- c. Forest decimated by acid rain (Germany's Black Forest). Called "acid deposition" in an area called the "Black Triangle" along the Czech, Polish and East German borders (during their Communist era)





## ■ B. Russia

- 1. Environmental damage of the tundra, forest (taiga), and desert areas are a serious issue for Russia & its neighboring countries.
  - a. During the Communist era, it was taught that nature should be transformed to serve human needs. This led to rapid industrialization in 1930s without much thought about the environment.
    - (1) There are frequent oil pipeline breaks & leakages due to inefficient construction practices.
    - (2) Mining in western Siberia has caused the land, water and air to be highly polluted with noxious gases and acid rain.



(b)

- (3) Nuclear contamination from the Chernobyl accident in 1986, the Kyshtym incident in 1957, and substandard nuclear waste storage and removal put these areas, the Urals, and the coasts of the Arctic as some of the most polluted places in the world.



# Lake Karachai - the most contaminated place in the world





- (4) The degradation of the Aral Sea.
- (5) Oil, toxic waste, and phosphates from fertilizers threaten the Caspian & Black Seas



(a)



(b)