

# **The Lands of the Russian Empire, Soviet Union, and Independent States (“Eurasia”):**

Diverse environments; natural  
resources; human settlement

# Introduction

- Last time – we discussed “what is environmental history?”
- Today, two parts:
  - 1. Lecture on the environment of Eurasia
  - 2. Seminar discussion on how people have adapted to this environment and whether it in any way “determined” the choices they made
- **DON'T FORGET TO SIGN THE ATTENDANCE SHEET!!!**

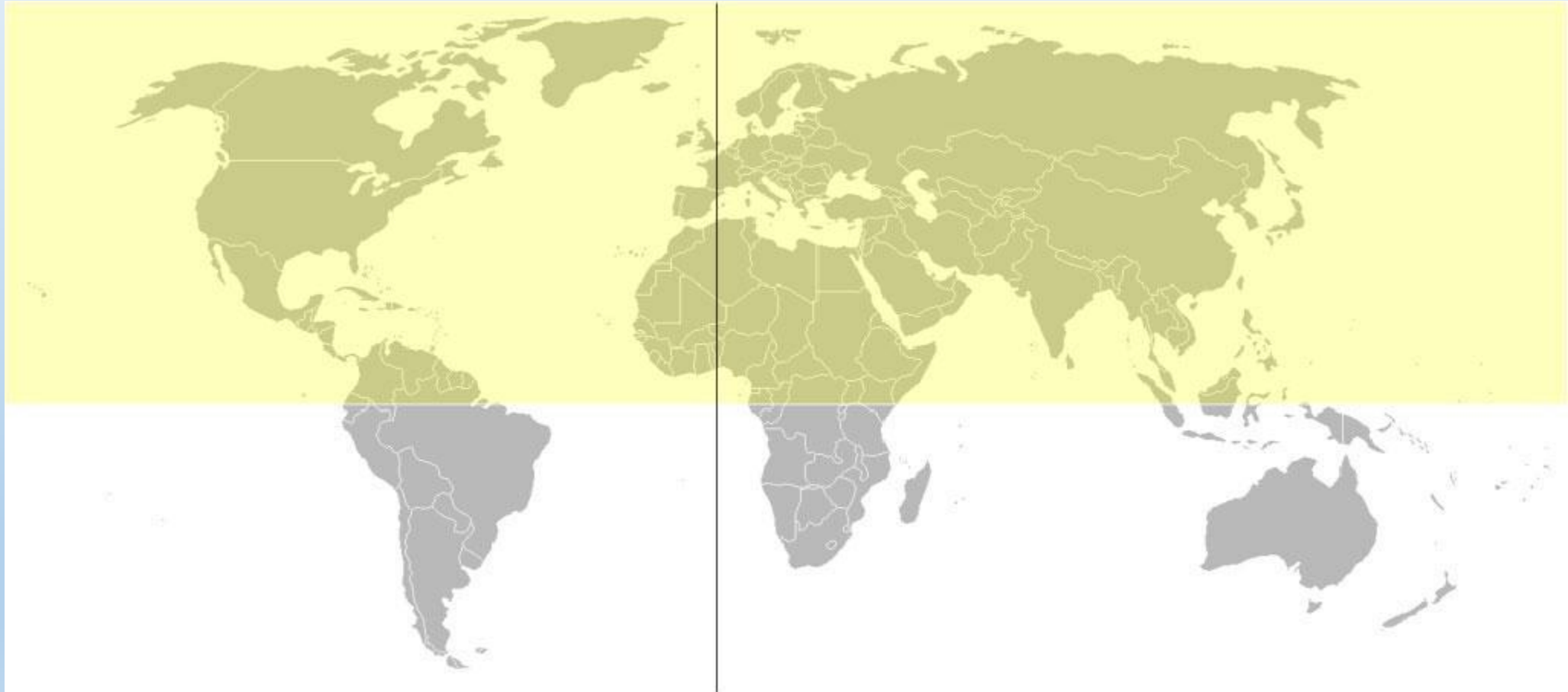
# SIZE

- Russian Empire at start C20 and Soviet Union covered about 1/6th land surface of the globe: by far the largest state on earth
- The independent states of Eurasia that emerged from collapse of Soviet Union in 1991 include some of largest in world:
- Russian Federation is still the largest: 1/7th land surface of globe
- Kazakhstan - 9th largest
- Russian Federation and Ukraine - 1st and 2nd largest states in Europe

# NORTHERLINESS

- Much of Eurasia is in north of northern hemisphere
- Global comparisons:
- Only Nordic countries (Scandinavia) and Canada are as far north
- Astana: 51 °North = southern Britain; southern Canada, e.g. Calgary
- Almaty, far to south, at 43 ° N, but = southern Europe, northern USA, northern Japan, North Korea
- Historic capitals of Russia – Moscow, St Petersburg – further North
- Moscow: 55 ° N = Edinburgh and Glasgow, Scotland; further north than Edmonton, Canada
- St Petersburg: 59 ° N = Helsinki, Stockholm, Oslo, Anchorage, Alaska.

# Northern hemisphere



# CONTINENTALITY

- Russia has coasts on Baltic and Black Seas in NW and SW, White Sea and Arctic Ocean in North, and Pacific Ocean in East
- Ukraine has coast on Black Sea
- BUT, most of Eurasia - long way from the seas and oceans
- Astana about 2000 km from Arctic Ocean; 3500 km from Baltic Sea; 5000 km from Pacific Ocean
- Distance from moderating influence of seas and oceans  
-> extremes of temperature, e.g. +/- 40 ° C in Kazakhstan  
(Nowhere in UK more than 113 km from sea!)

# TOPOGRAPHY

- Much of Eurasia, especially parts where most of population live - flat plains under 400 m above sea level.
- Major mountain ranges mostly along Southern and Southeastern periphery: Caucasus; Altai; Tian Shan; Pamir; Sayan; Yablonoi; Stanovoi
- As result of topography, most of Eurasia - sheltered from warmer air from the Indian and Pacific Oceans, but open to cold air from Arctic

# CLIMATE

Northerliness + continentality + topography = severe continental climate:  
long, cold winters; short, warm or hot summers

**Mean January temperatures** below 0° C almost everywhere

(except Crimea, Caucasus, S. Central Asia, +2-4°C)

Colder from SW to NE: Odesa, Ukraine -1°C; St Petersburg, -6°C; Samara, Russia, -10°C; Astana, -17°C; Verkhoyansk (E. Siberia), -48° C

*(UK, +5°C)*

**Frost-free days:** N Russia, N Siberia < 90; Moscow 135; only coasts of Black and Caspian Seas, Caucasus, Central Asia > half year frost-free

*(UK, c.300 days a year frost-free)*

**Mean July temperatures:** Odesa, +22°C; St Petersburg, +19°C; Samara, +22°C; Astana, +21°C; Tashkent, +29°C; Verkhoyansk, +17° C

*(UK, +16°C)*



# PRECIPITATION (RAIN + SNOW)

- highest in mountain regions along the periphery
- otherwise decreases from NW to SE
- Much of central and N Russia: 600-800 mm a year
- S and SE Russia and Ukraine: 300-600 mm a year
- Lower to SE, across steppes and Central Asian deserts, e.g.
- Astana – 300 mm a year
- Turkistan – 200 mm a year

BUT, year-by-year fluctuations, periodic droughts

# VEGETATION

Climate (heat and moisture) -> vegetation zones from N to S:

- Tundra
- Forest (taiga in north, mixed forest further south)
- Steppe (grassland)
- Desert (e.g. Karakum)







# NATURAL RESOURCES I

- The lands of Eurasia have provided resources for people
- Timber for construction (housing, carts, boats, implements) and fuel
- Vegetation to feed livestock (reindeer in tundra; sheep, goats, cattle, horses, camels in steppe)
- Soil for growing crops

But, tragedy for farmers in Eurasia:

The fertile *chernozem* formed because the rainfall was not high enough to wash out the minerals that make it fertile. But, the rainfall is not just low, but unreliable, with periodic droughts, causing crop failures

# NATURAL RESOURCES II

## Fossil fuels and minerals

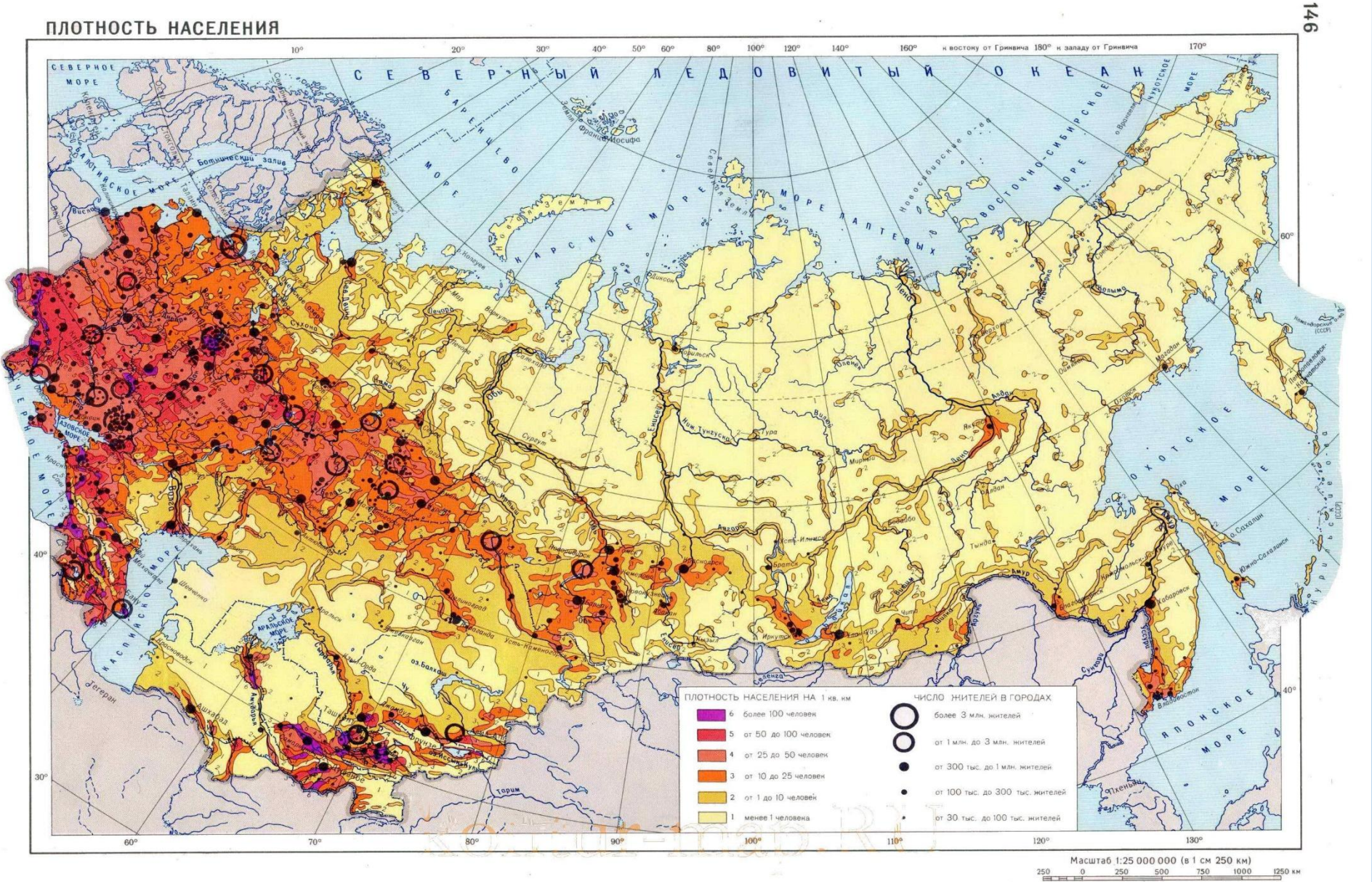
- Large reserves of coal in Kazakhstan around Karaganda; Kuzbass, southern Siberia; Donbas region of Ukraine
- Vast reserves of Oil and Gas in Kazakhstan, Siberia
- Metal ores, e.g. copper, iron, lead, manganese, zinc, nickel and many others in Kazakhstan, Russia (Urals, Siberia etc), Ukraine

Oil industry in Kazakhstan





# POPULATION DENSITY (late Soviet period)





# SETTLEMENT

- Map of population density shows distribution of population in late Soviet period, but also how population had spread out to settle the lands of Eurasia over previous centuries.
- C16-C17: centers of population around oases in Central Asia; South Caucasus; central part of Russia-in-Europe around Moscow and north of present-day Ukraine; but sparsely populated steppe and Siberia
- C18-C20: growing migration from European part of Russian Empire/Soviet Union to E and SE to settle land and exploit natural resources. Some voluntary, some forced. Different nationalities/ethnic groups came into contact (especially in Kazakhstan)
- Route of Trans-Siberian railway (built 1891-1916) clearly visible on map

# HUMAN SOCIETIES AND ENVIRONMENT IN EURASIA

- Reciprocal influences? (Environmental history)
- Or environmental determinism?
- Low productivity of land compared with E and S Asia and W Europe
- Low population densities  
(UK has over 3 x population of Kazakhstan, but less than 10% of size)
- Few natural frontiers (seas, impassable mountains, un-crossable rivers, impenetrable deserts) -> defence/security issues  
(Compare: UK is on islands; land border only with Republic of Ireland)



## Study questions:

1. In what ways have people supported themselves in this vast region, for example, nomadic pastoralism, agriculture etc?
2. What political systems have developed in the lands of Eurasia?
3. What arguments have been made that the “harsh” environment of the lands Eurasia “determined” the course of human history?
4. Do you find them convincing?
5. What other factors may explain the course of human history in this vast region?