

**Genetic diversity: source of variations that enable populations to adapt to environmental changes**



**Species diversity: important in maintaining structure of communities and food webs**



**Ecosystem diversity: provides life-sustaining services such as nutrient cycling and waste decomposition**

**Philippine eagle**



**Yangtze River  
dolphin**











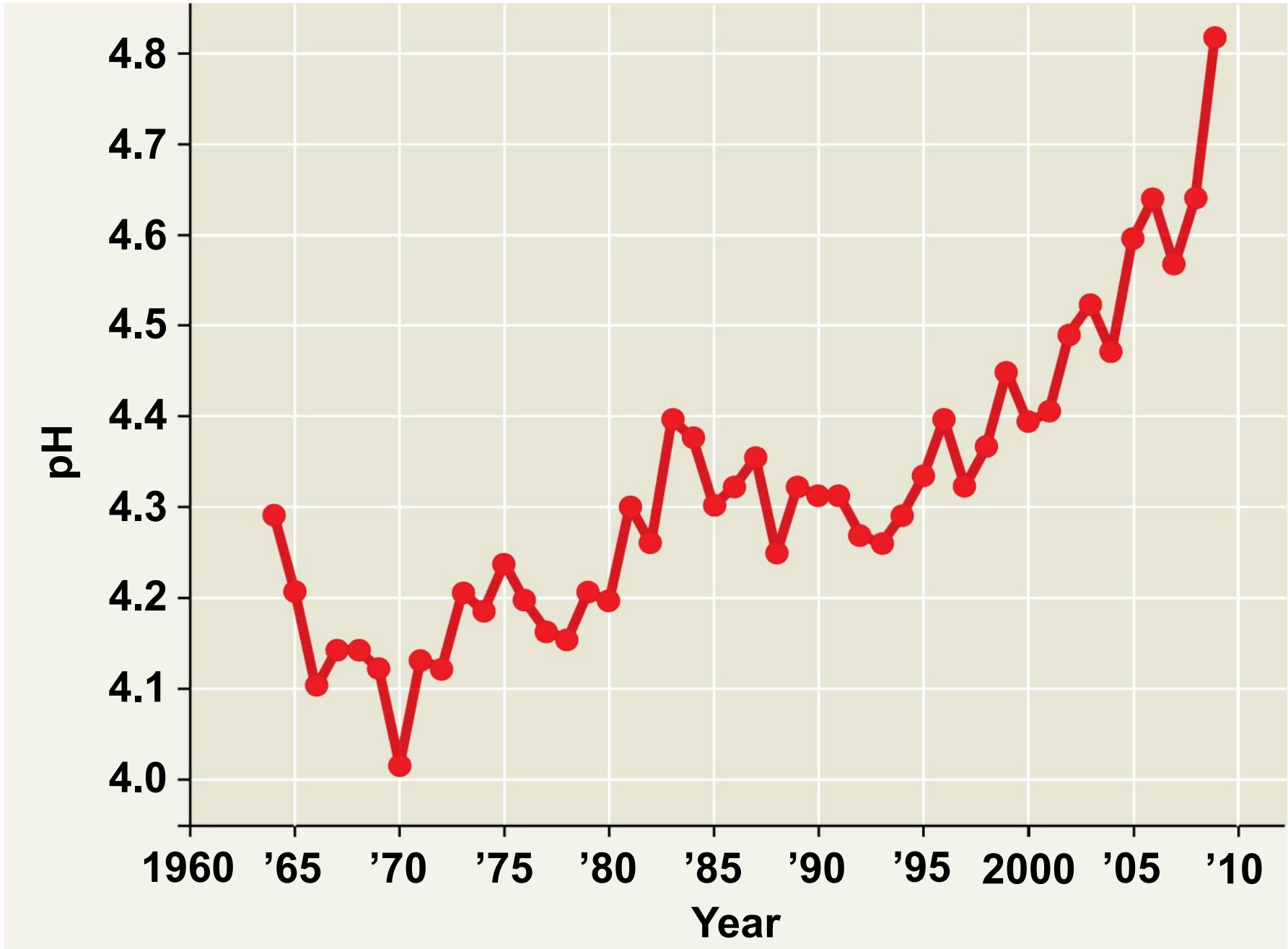




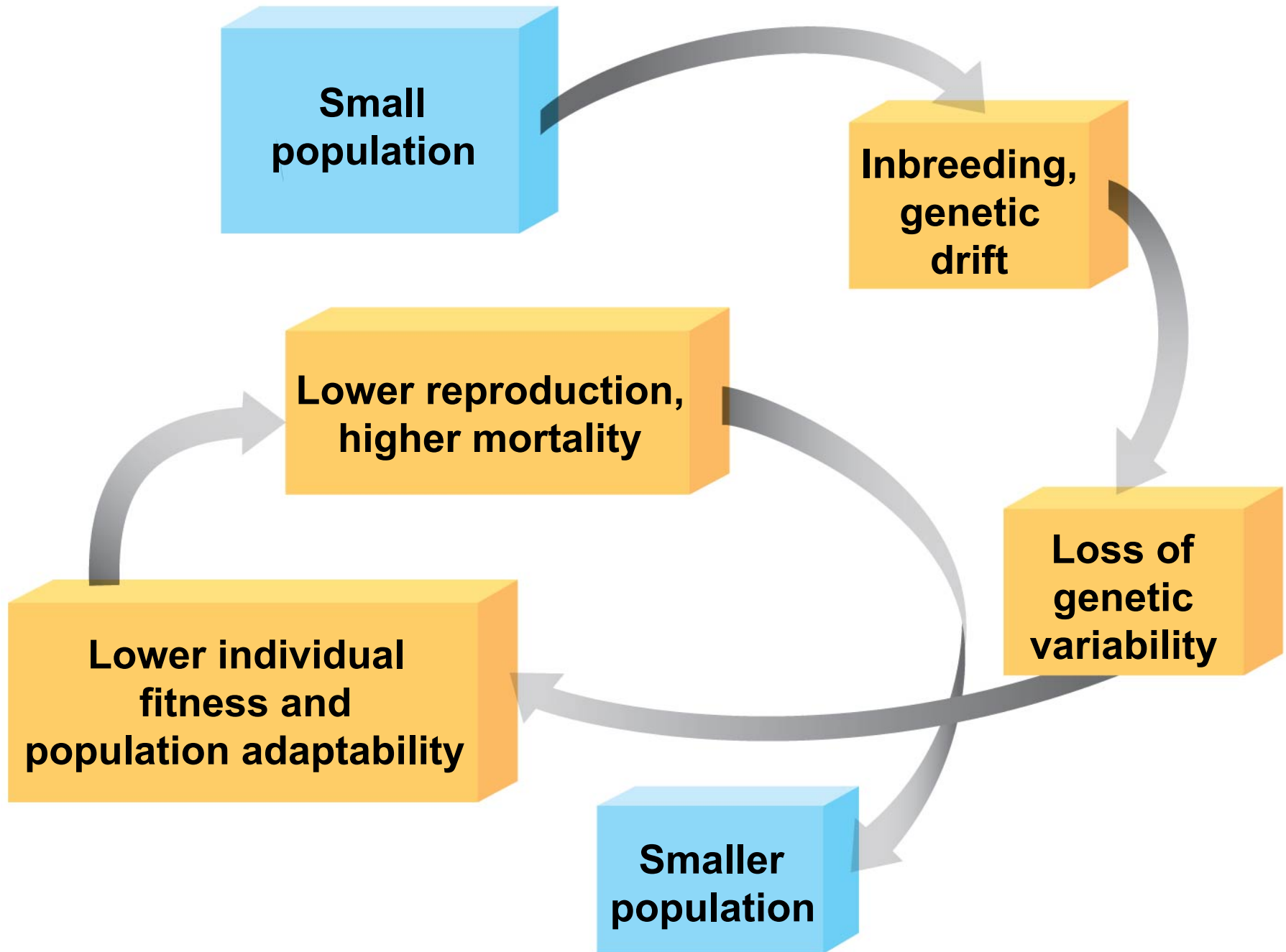






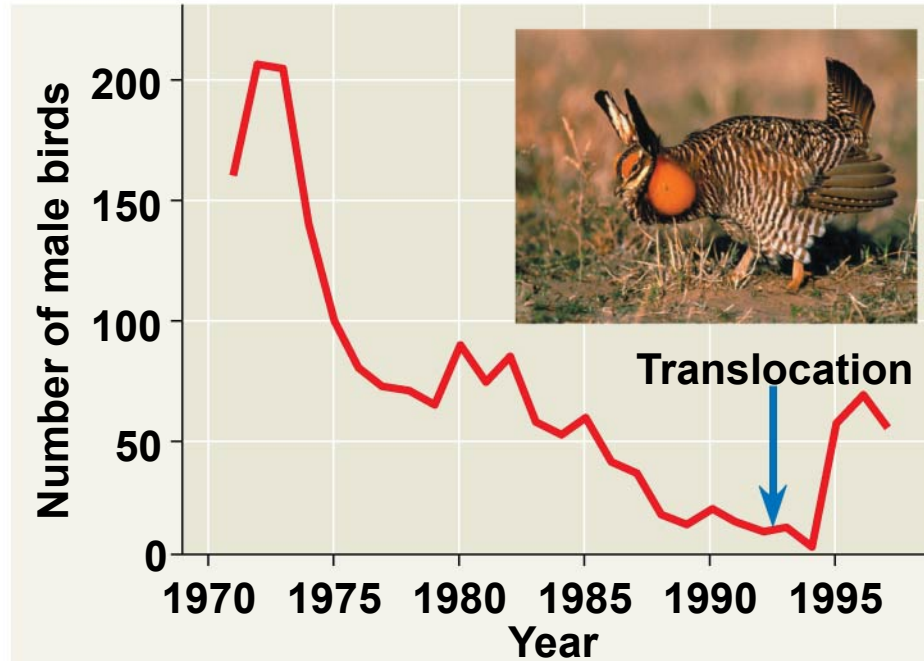




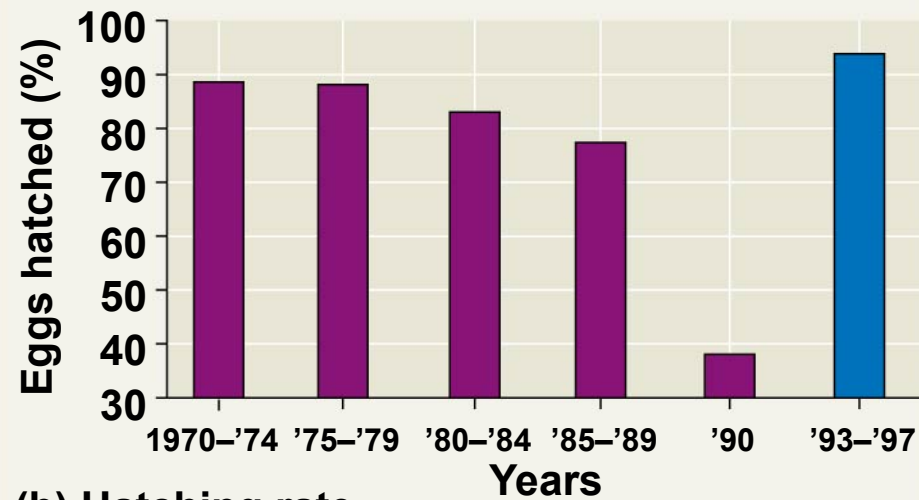




## Results



(a) Population dynamics



(b) Hatching rate





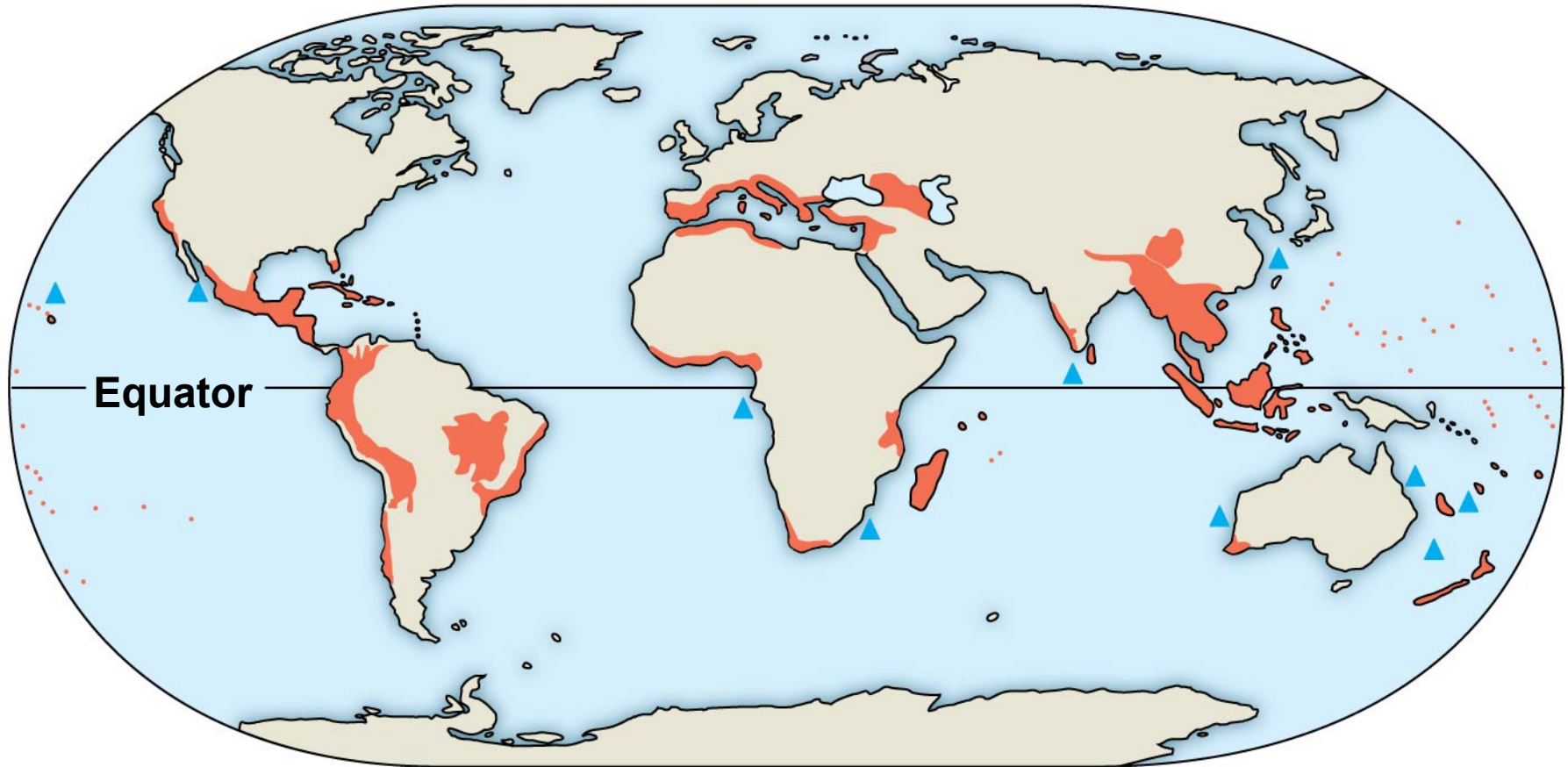






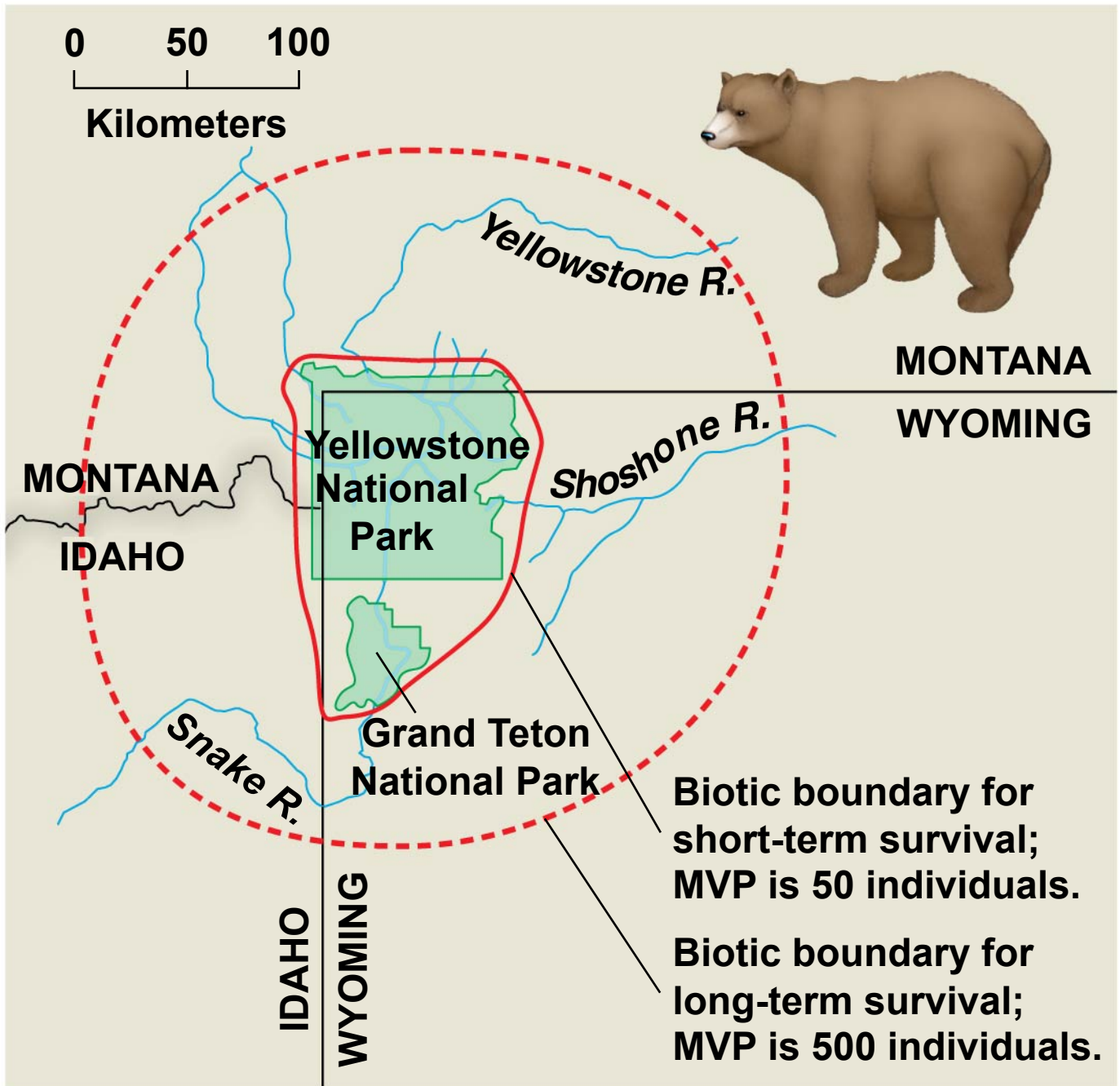






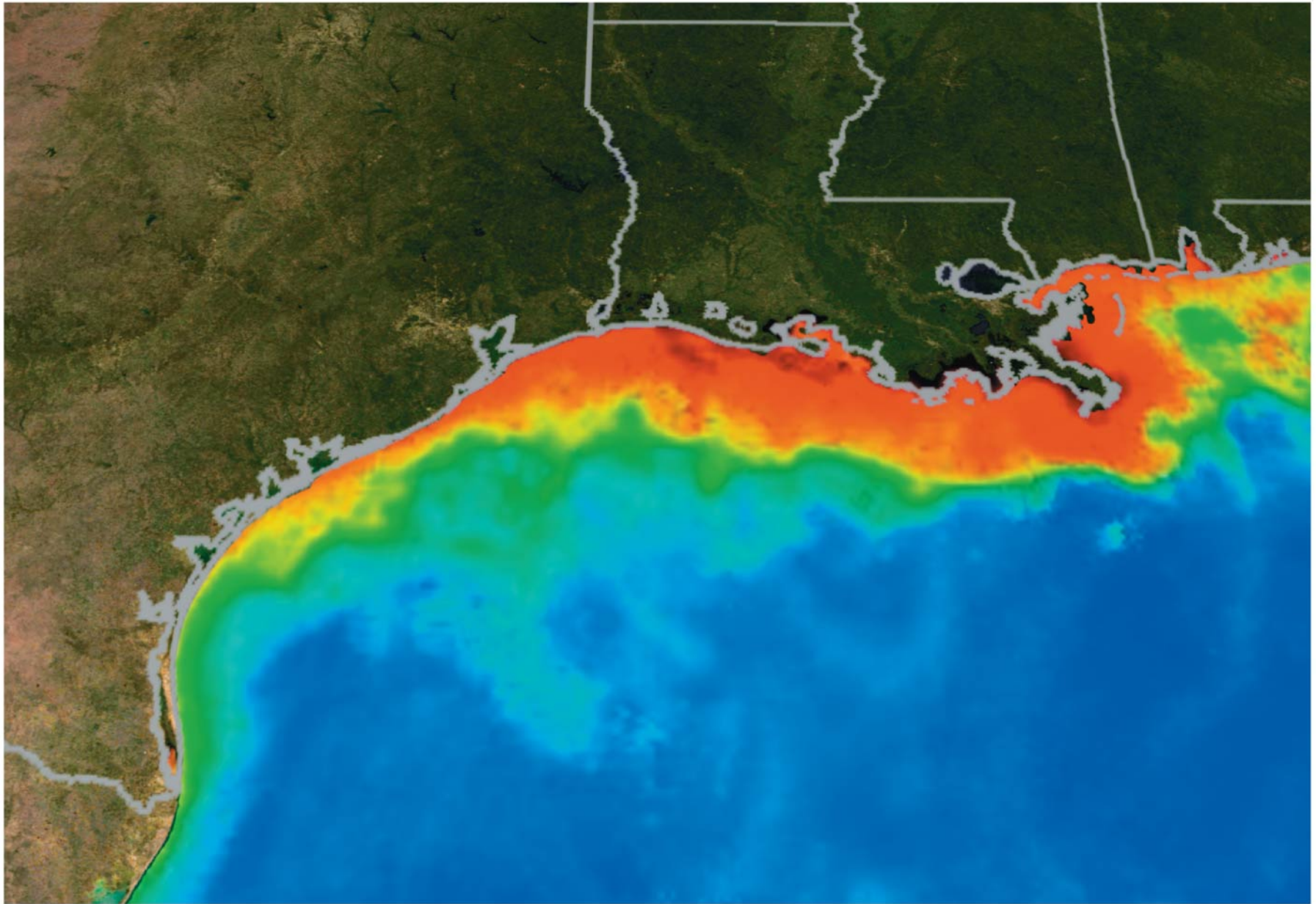
Earth's terrestrial (■) and marine (▲) biodiversity hot spots

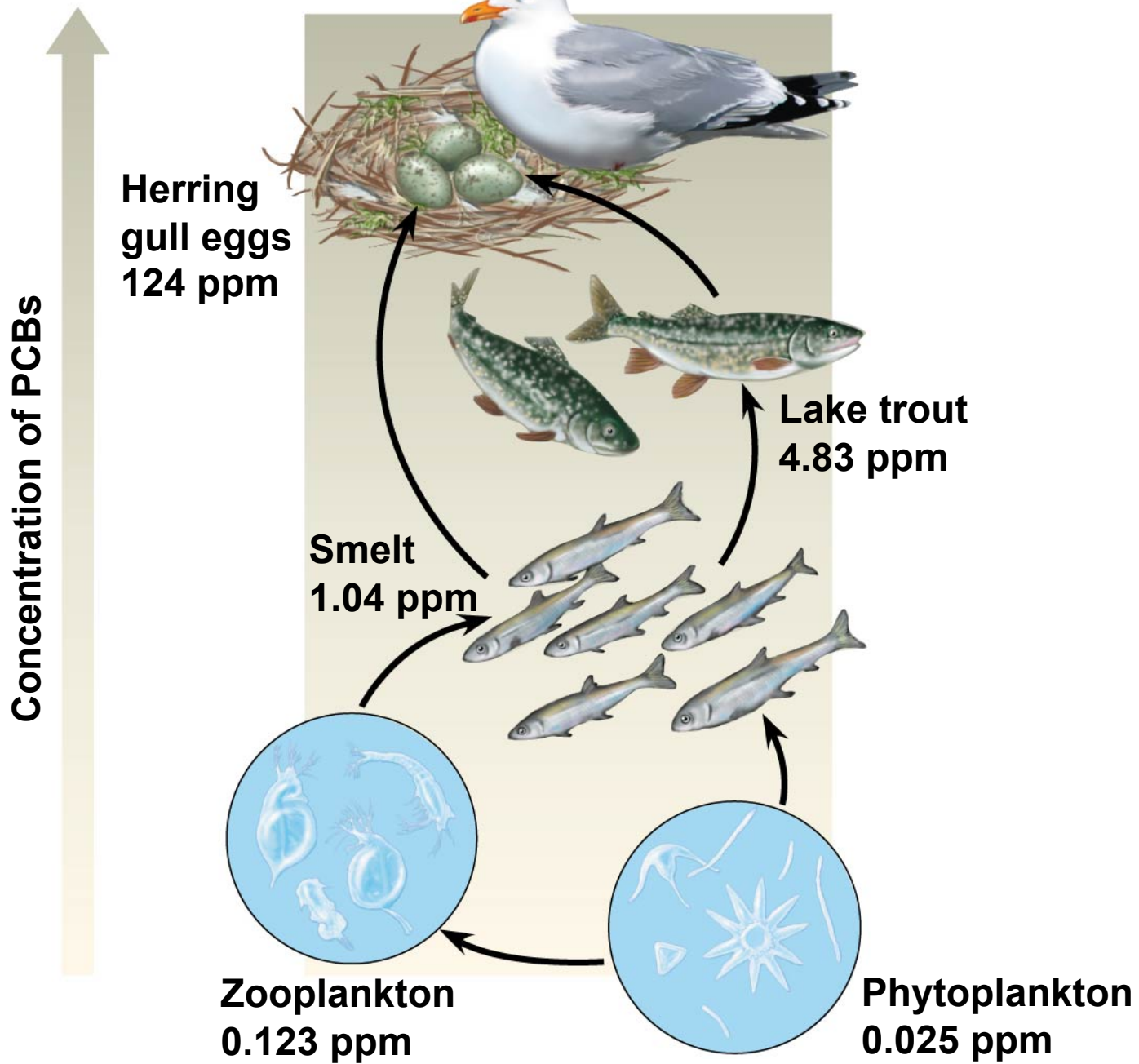




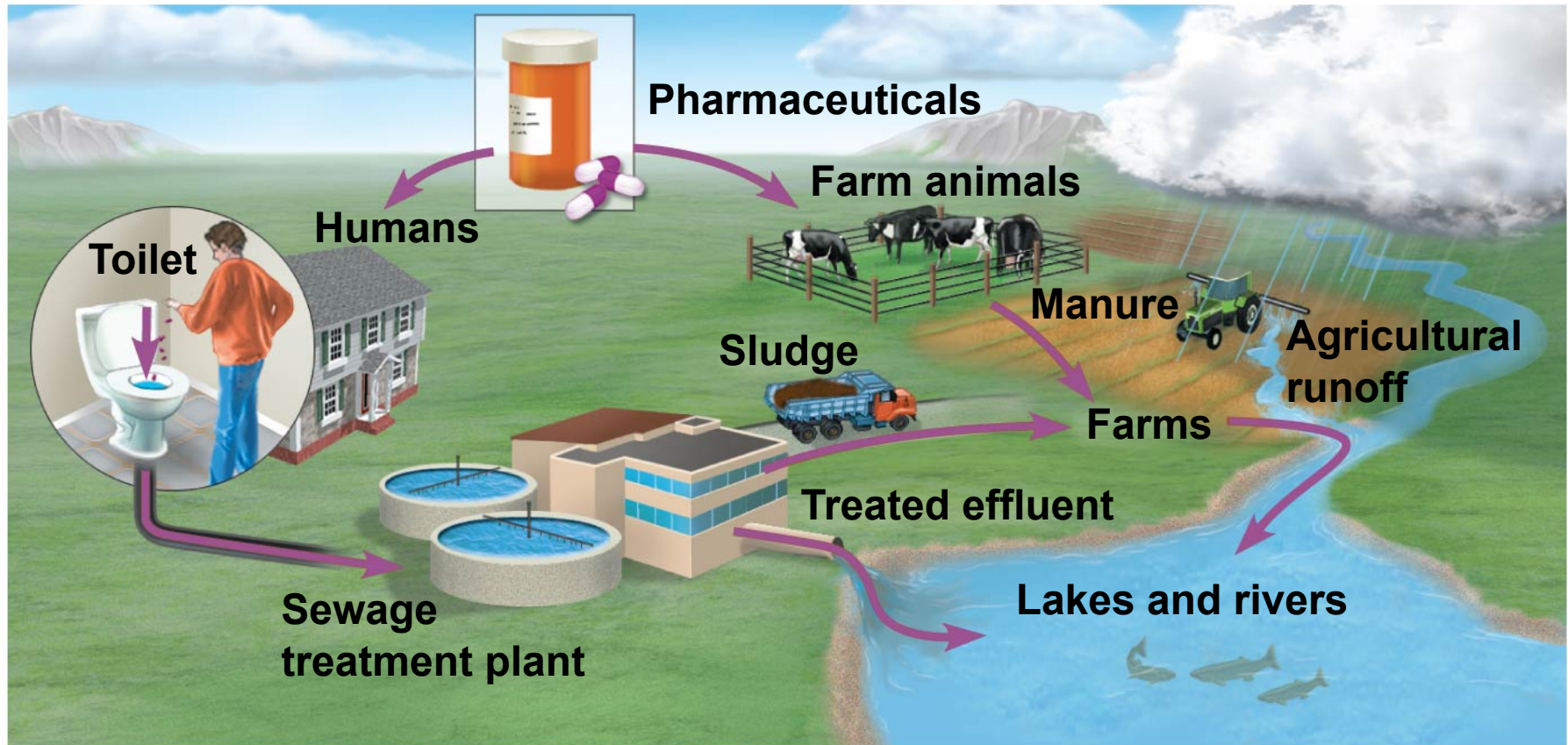


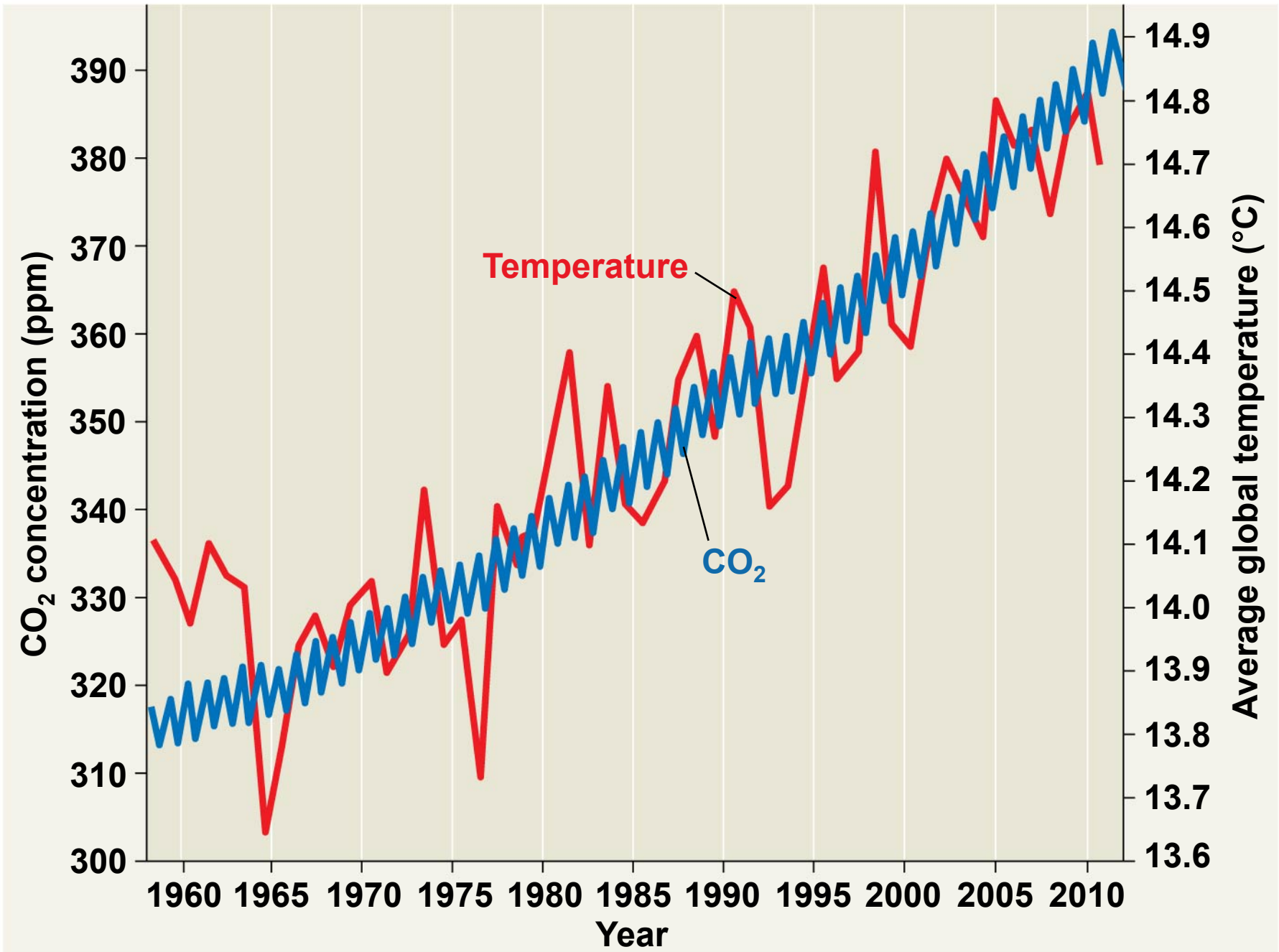




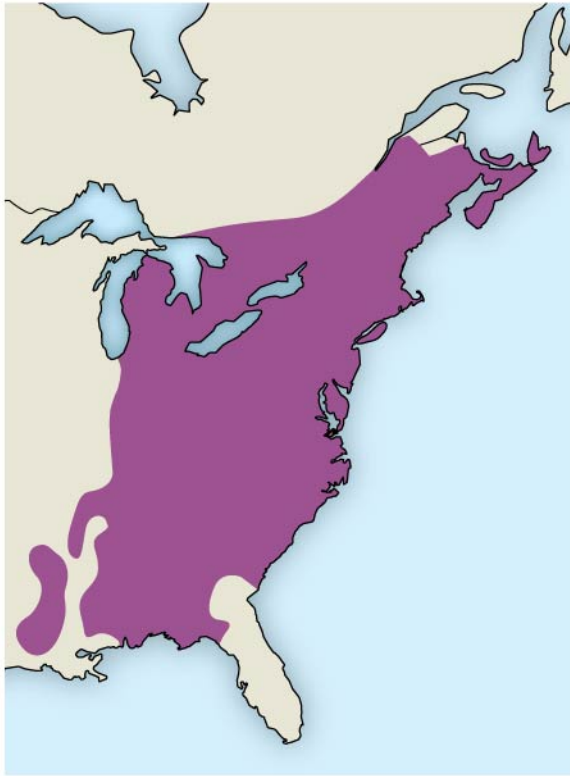




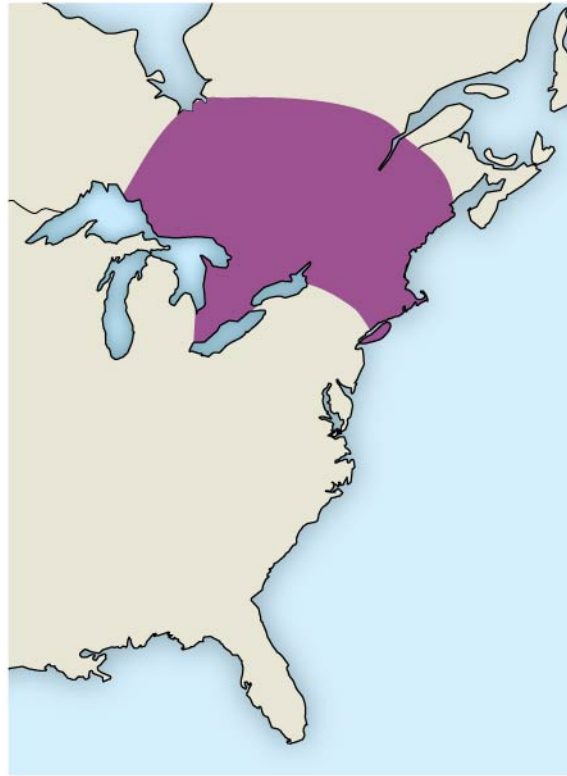




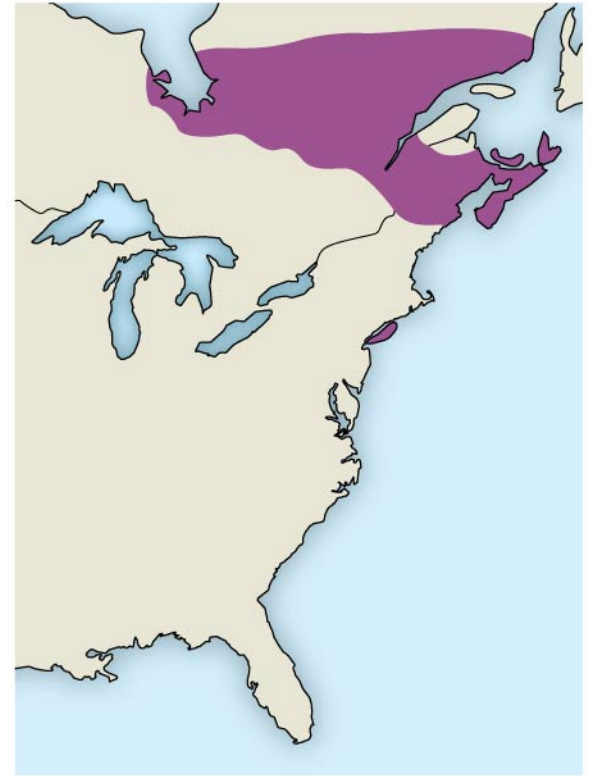




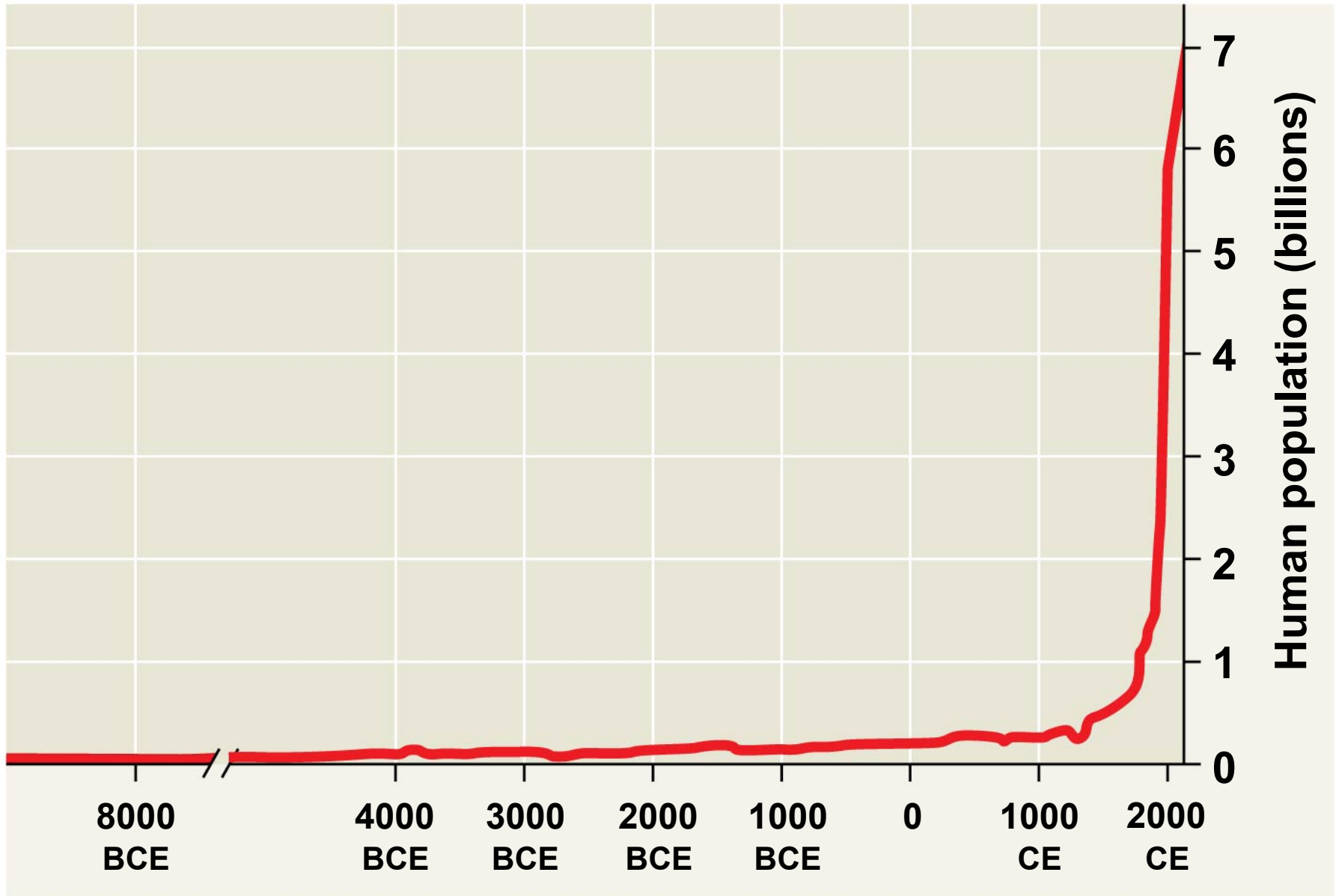
**(a) Current range**



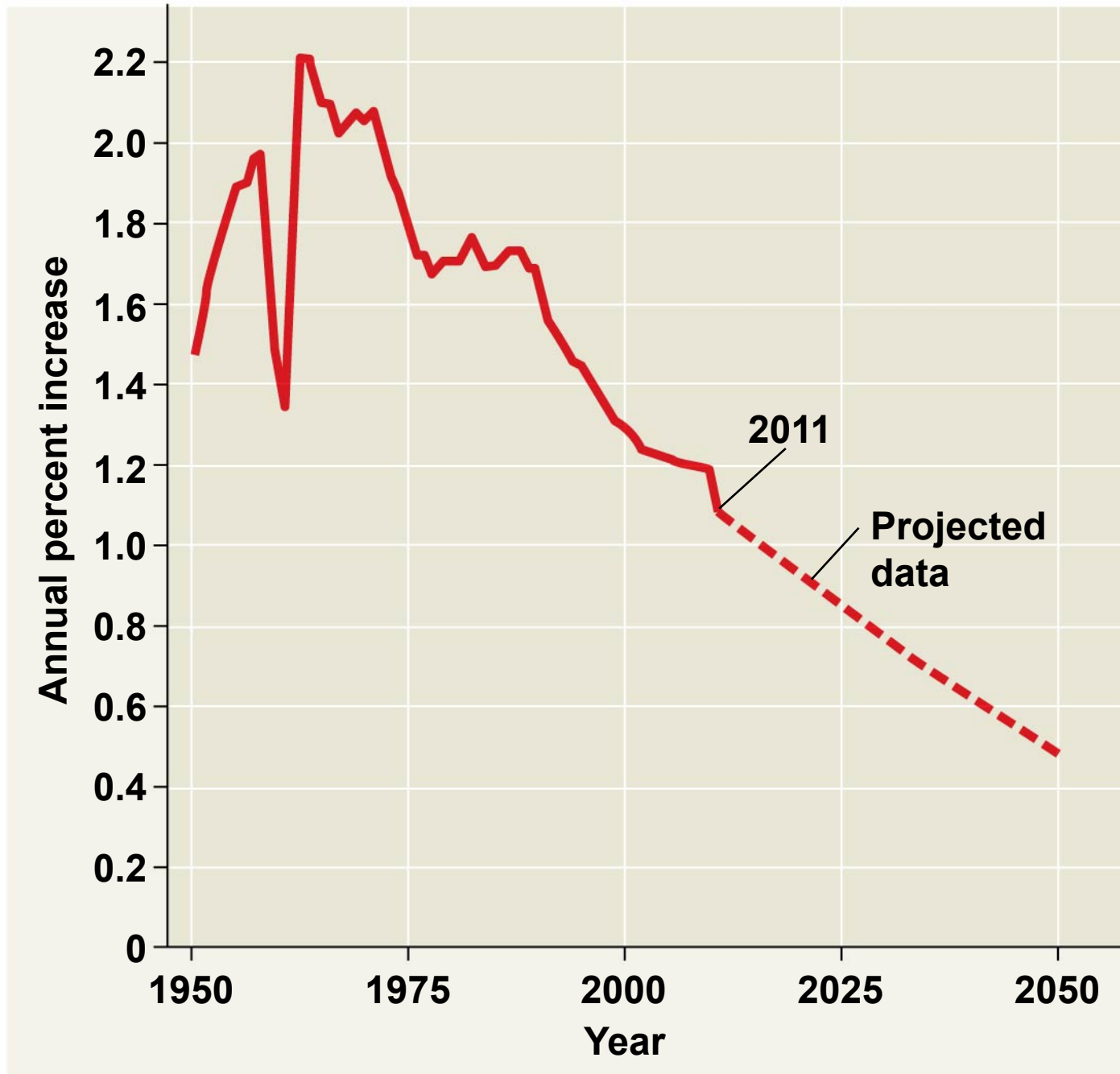
**(b) 4.5°C warming  
over next century**

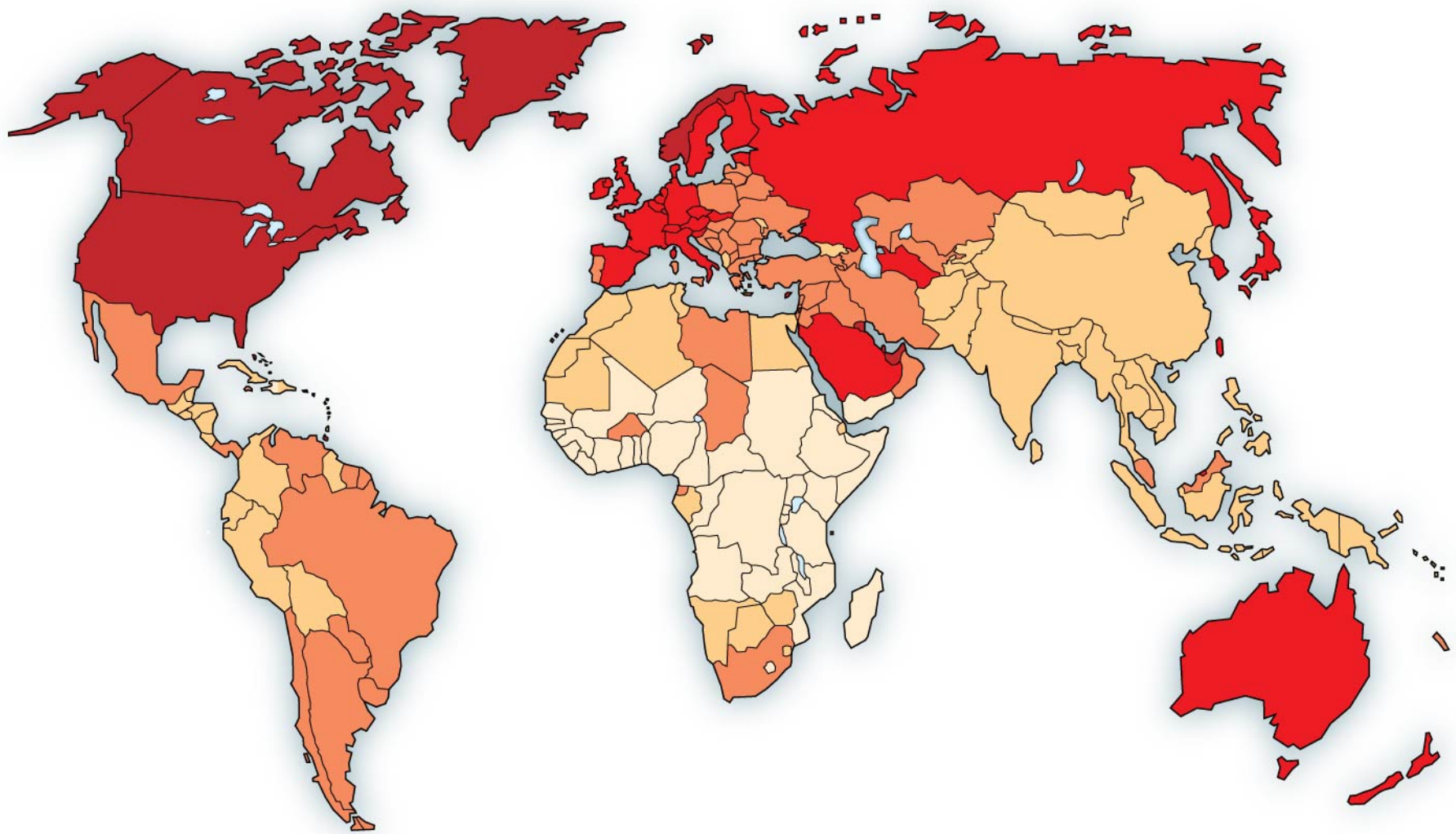


**(c) 6.5°C warming  
over next century**









Energy use (GJ): ■ > 300 ■ 150–300 ■ 50–150 ■ 10–50 ■ < 10