

Coast of British Columbia



Concerning the North Pacific Coast . . .

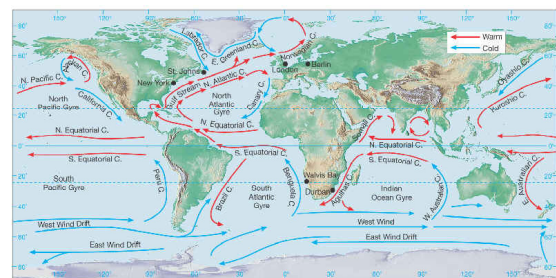
- A mild wet climate and rugged terrain.
- A testimony to tectonic and glacial activity.
- A heavily forested area with a traditional forestry economy under stress
- A handful of major metropolitan centers, of which Seattle and Vancouver are the most
- important linkages to Asian markets.
- A brief but intense summer tourist season.
- Problems with permafrost.

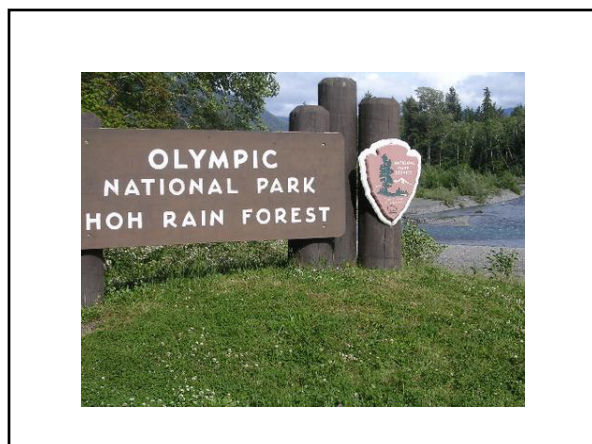
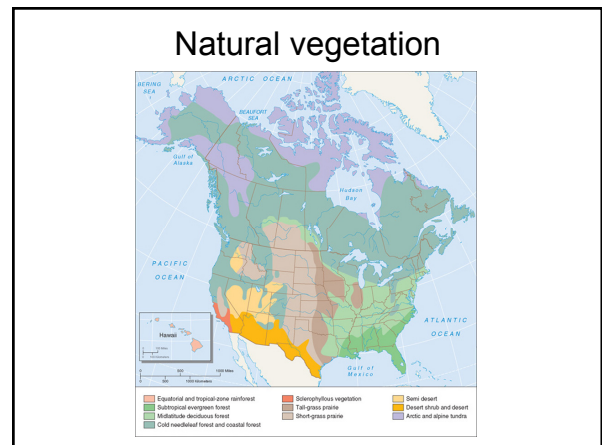
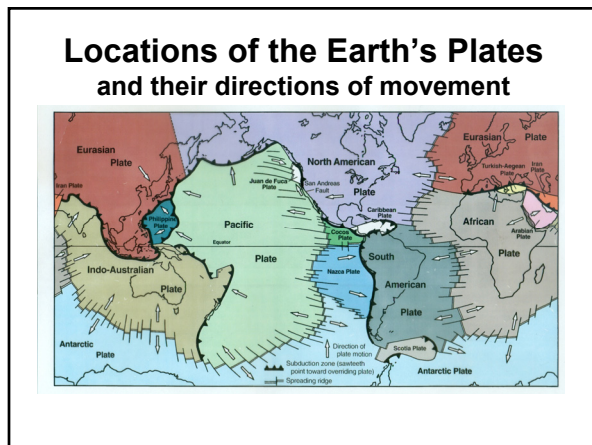
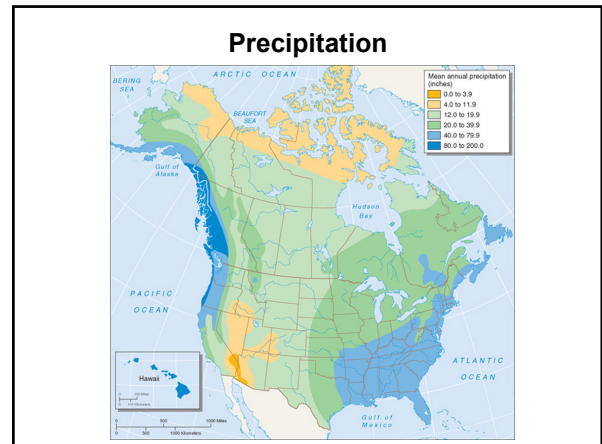
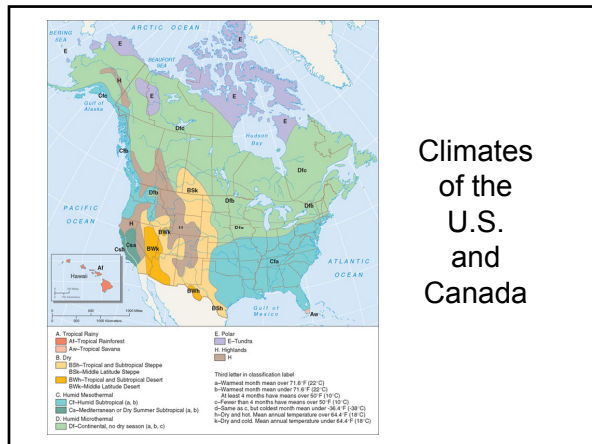
Marine West Coast Climate:
A climate that typically occurs on the west side of continents roughly between latitudes 40-60.

Marine West Coast Climate

- A relatively warm, moist climate that typically occurs on the west side of continents between latitudes 40-60.
- Conditions are the result of a warm ocean current offshore.
- For the latitudes in question, the climate is remarkably mild.

Ocean Surface Currents





**Hoh Rainforest
Olympic National Park, WA**



**Hoh Rain Forest
Olympic National Park, WA**



Redwoods National Park, CA



Prairie Creek Redwoods State Park
Home of the world's tallest tree (nearly 380 feet),
whose exact location is known to about 10 people.



Coast of Oregon



**Coast
of
Oregon**

Northwest coastal fjord



Alaskan fjord



Southern Alaska



Juneau, Alaska



Ketchikan, Alaska



Ketchikan



BC Ferry



B. C. Ferries



Alaska State Ferry



Alaska State Ferry



Alaska State Ferry



The Inside Passage



The **Inside Passage** is a system of deep and scenic navigable waterways between the mainland of British Columbia and southern Alaska, and the adjacent archipelago that was created by ice-age glaciers.

A portion of the Inside Passage



Cruise ship sailing the Inside Passage



Glacier Bay National Park and Preserve



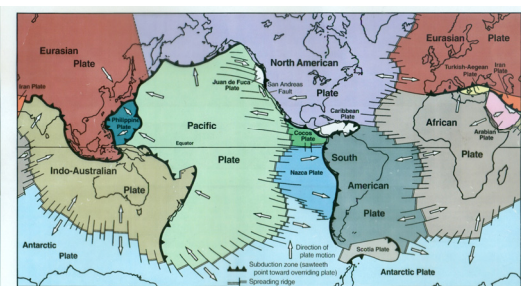
Glacier Bay National Park



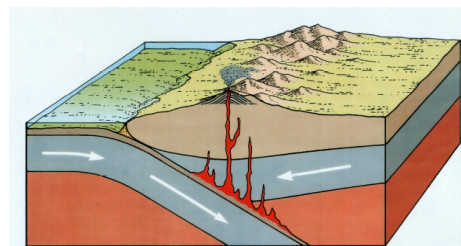
Cruise ship sailing the Inside Passage



Locations of the Earth's Plates and their directions of movement



Subduction: a tectonic process in which one plate is overridden by another



Mt. Lassen N.P.





**Mt. Lassen
ash cloud
(1915)
as seen from
Sacramento**

**Mt. Shasta
Volcanic Cone (14,162 ft.)**



Crater Lake National Park, Oregon



Crater Lake National Park



Mt. Hood from Downtown Portland



Seattle

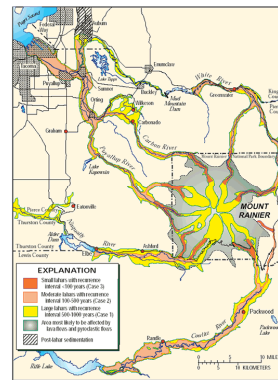


Lahar is a term of Indonesian origin describing massive fast-moving “mudflows” (consisting of volcanic ash, debris and water from rapidly melted snow and ice) that may occur after the eruption of a volcano.

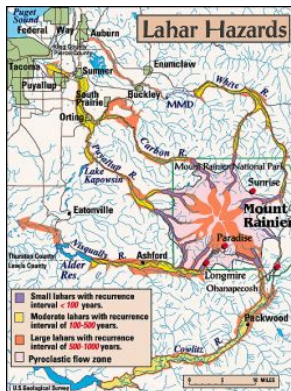
Lahar flow from Mount St. Helens



Lahar



Mt. Rainier Lahar map



Forestry in Oregon



**Transfer of recently cut timber
to logging truck**



Logging truck with heavy load



Logs being floated to mill



**Freighter takes on long
Prince Rupert, BC**



Lumber mill in Quesnel, BC



In seed tree cutting, several mature trees are left standing to generate seeds to produce the next generation of forest.



Clear cutting

Entire areas of forest are cut down, eventually to be replanted with hybrid seedlings



Clear cutting in California



Mt. Rainier with clear cut areas in foreground



An area that has been clear cut and is awaiting new seedlings



Forest Nursery



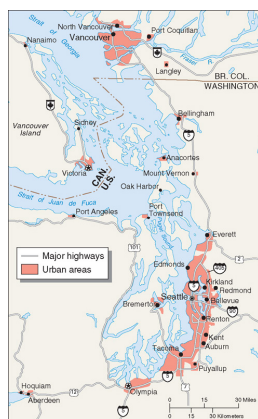
seedlings



Forest replanting



Vancouver, BC



Vancouver, BC





Port of Vancouver



Victoria, BC



Seattle

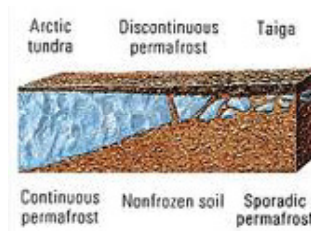


Port of Seattle

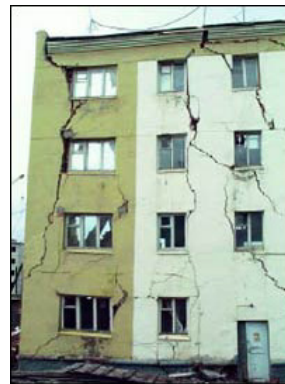


Permafrost is a permanently frozen layer of soil that underlies the arctic tundra. It poses serious problems for construction projects because any warmth may lead to melting of the permafrost, subsidence of the built object, and structural failure.

Permafrost Diagram



Permafrost cross-section



Building damage from thawing permafrost

Utility lines in a permafrost zone must be above ground



Trans-Alaska Pipeline



Valdez Oil Terminal

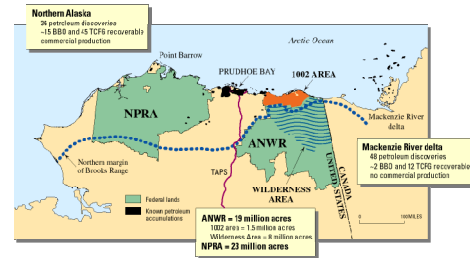


“North Slope Oil” is so-called because the oil fields lie north of the Brooks Mountain Range





Alaska's oil fields

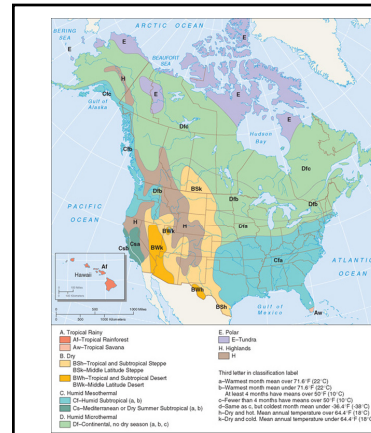


The Alaskan tundra (pipeline is faintly visible)



Tundra is a treeless arctic habitat characterized by cold, harsh winters, a short growing season, and possible frost during any month of the year. Vegetation includes low-growing grasses, an occasional stunted shrub, and mosses and lichens.

Location of the tundra biome



Climates
of the
U.S.
and
Canada

Arctic National Wildlife Refuge



Caribou, Pipeline and Oil Rig



Caribou Herd
Arctic National Wildlife Refuge

