

Regional Landscapes of the United States and Canada

The Bypassed East

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The Bypassed East



Sub-regions



Overview

- Harsh climate, rugged coastline and mountainous environment.
- Viking contact in Newfoundland in the 900s.
- Major marine gateway to N. America via the St. Lawrence River but far from major population centers.
- Low population, no major cities.
- Historic fishing and lumber industries.
- Agricultural economy in decline.
- “Metes and bounds” survey system.

Landscapes of the BYPASSED EAST



Foggy Landscape



Why “Bypassed”?

1. Its in a “***transportation shadow.***” An area of limited development located near an area of much greater accessibility.
In Canada, ships sail through it not to it!
2. **Climate** and **topography** not inviting for agricultural development.
3. **Isolated** as settlement pushed inland and westward (even though the area was settled early in history).
4. **Difficult interaction** with the rest of N. America:
There is better access to hinterland from harbors in Megalopolis (Boston to Baltimore).
5. **No urban pull factor.** Few large urban areas.
 - Canada’s main port is at **Montreal**, well inland of this area.
 - Limited industry. Tourism now on the rise.

Canadian Regional Terminology

The **Maritime Provinces** or **Canadian Maritimes**:

- **Three lightly populated Canadian provinces** (New Brunswick, Nova Scotia and Prince Edward Island) **that generally lie east of Quebec and border on the Atlantic O. and/or Gulf of St. Lawrence.**
- **Their combined total population** (1.8 mil) **is a bit larger than that of Manhattan** (1.6 mil).
- This area would be considered part of Lower Canada.

Atlantic Provinces:

- **The Maritime Provinces plus Newfoundland-and-Labrador Province.**

NE U.S. Dichotomy

- Northern New England vs. Southern New England
- Adirondack North Country vs. Upstate New York
 - Terms “New England” and “Upstate New York” form unified, *vernacular* regions in people’s *mental map*.
 - But there are more similarities between northern New England and the Adirondacks with Canada’s Atlantic Provinces than with the rest of their areas.
 - Similar physical geography.
 - Similar settlement history.
 - Lack of effective dividing U.S.–Canada boundary.

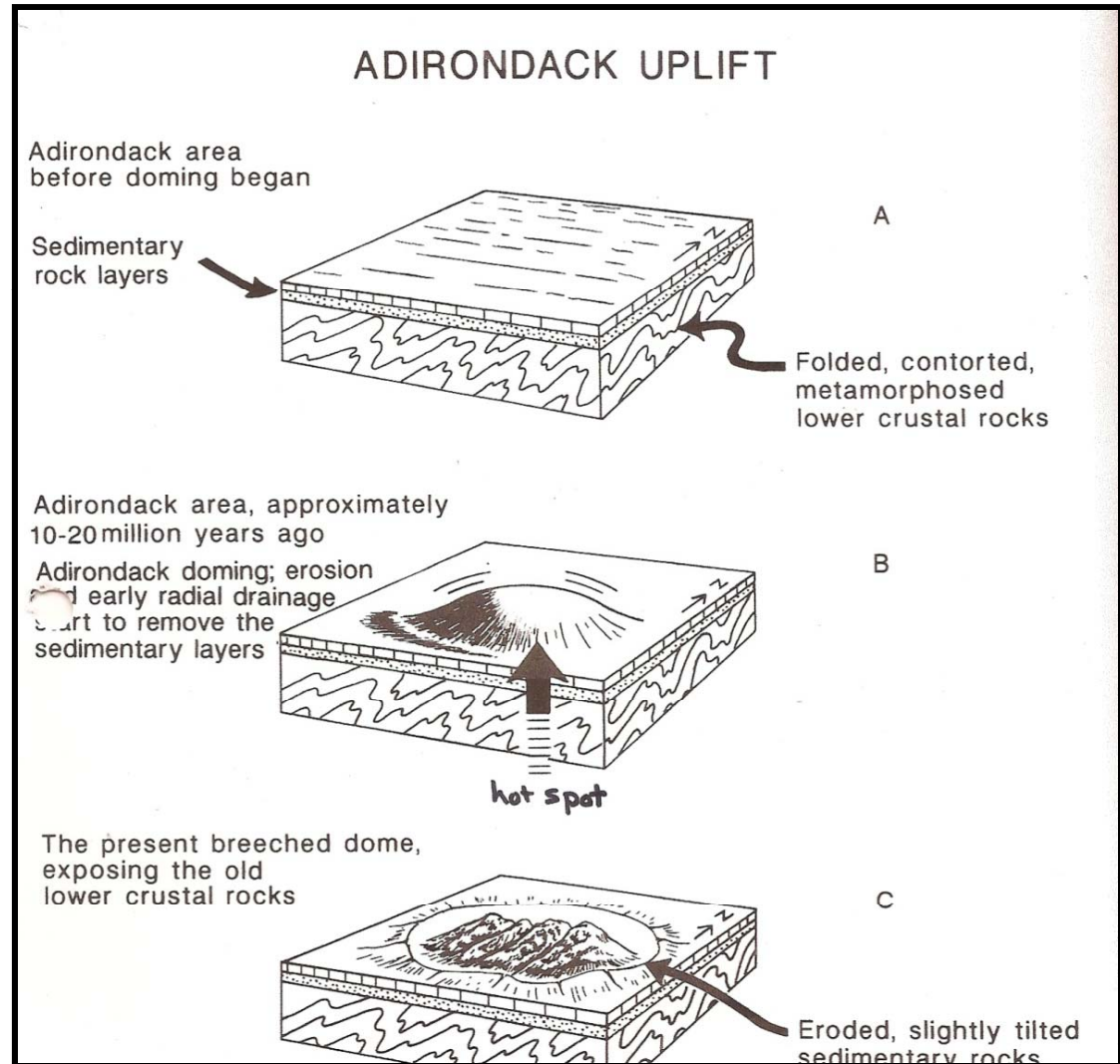
Phys. Geog.: Physiography

- **Appalachian Highlands**
 - **Green Mountains**, VT: c.4,600 ft., glaciated
 - **White Mountains**, NH and ME: c.6,500 ft, highest summits not glaciated
 - **Mountains of the Atlantic provinces**: c.2,200 ft., rounded peaks
- **Adirondack Mts.**, NY: c.5000 ft., carved by both continental and mountain glaciers
 - Geologically part of Canadian Shield, not the Appalachians.
 - Its an eroded dome structure that is still growing.

Adirondack Uplift

The Adirondack Mts. are **growing** because of doming over a hot spot.

The Appalachian Highlands are getting **shorter** because gradational forces are the main geologic activity.



Phys. Geog.: Physiography

The lowlands of the region support settlement.

- **Connecticut River valley** (between VT and NH)
- **Aroostook Valley** (northern Maine)
- **Lake Champlain Lowland** (between NY and VT)
 - northward extension of southern Appalachian Ridge and Valley system
- **Atlantic Provinces**: the neck of land between the Bay of Fundy and Prince Edward Island
- **Coastal Lowlands**: bordering the Atlantic and Gulf shorelines.

Phys. Geog.: Physiography

The coastal zone of this region is extremely rugged and a barrier to use.

- Mainly a rocky indented shoreline.
- Fjords with steep slopes are present.
- Many harbors but few beaches.
- The range between high and low tides is large.
- Tidal bores (true tidal waves) are visible 2x daily.
- Fog poses a navigational danger along a rocky shoreline.

Coastal Areas



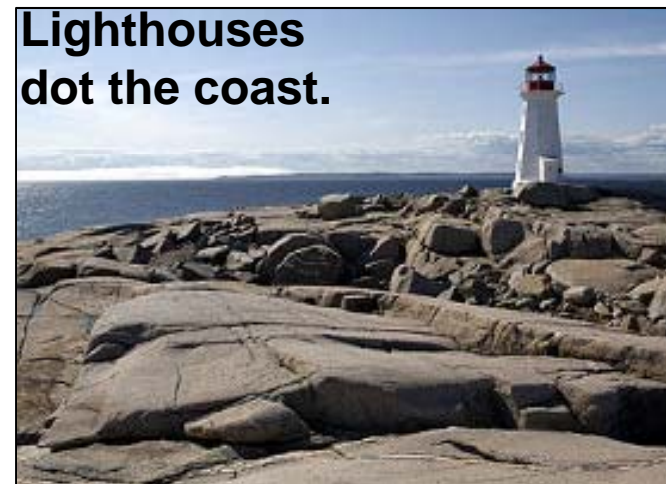
Nova Scotia



Maine



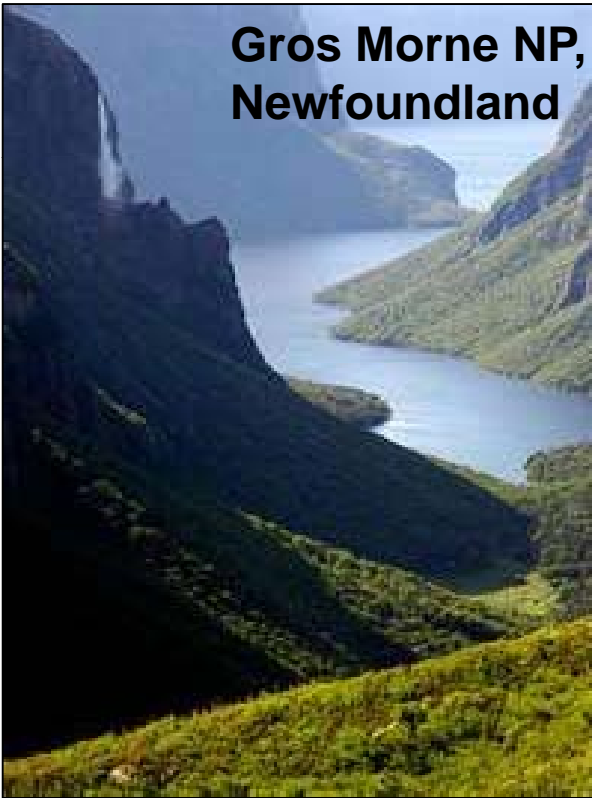
Newfoundland fjord



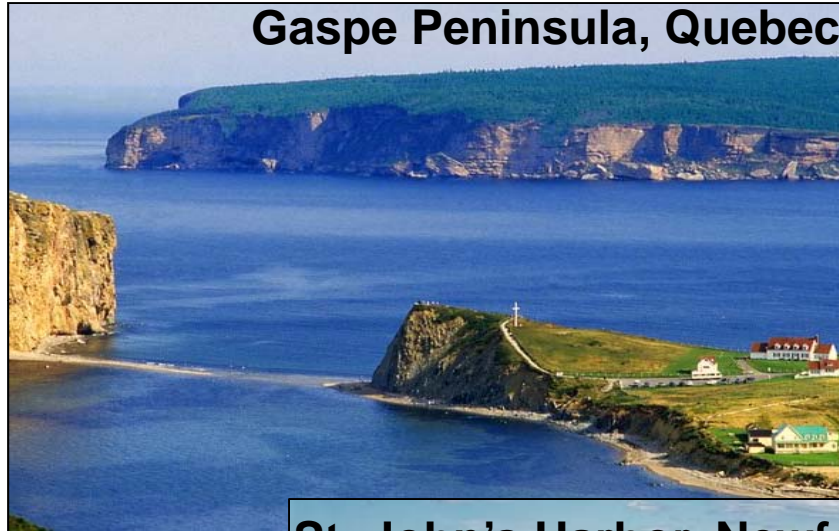
**Lighthouses
dot the coast.**

Coastal Areas

**Gros Morne NP,
Newfoundland**



Gaspe Peninsula, Quebec



St. John's Harbor, Newfoundland



Coastal Daily Tidal Range



The Bay of Fundy has the world's greatest tidal range = 50+ ft difference.

Bay of Fundy Tide Videos

- TIDAL RANGE
- http://www.youtube.com/watch?v=YiHP8EG_Wq4
- TIDAL BORE
- <http://www.youtube.com/watch?v=IRsFSZTfEWk&feature=related>

Phys. Geog.: Climate

Humid Continental Cool Summer Climate

- **Air Mass Conflict Zone:**

- Area where polar, continental, maritime air masses meet.
- Maritime impact minimized.
- Generally cool and wet year round.

- **Labrador Current**

- Cold, southward flowing current that hugs the coast.
- Moderates (chills) coastal temperatures vs. inland locations.
- Creates frequent cloud banks and fog along the coast where it interacts with warm Gulf Stream or warm air from the mainland.

- **Precipitation**

- Substantial and evenly distributed throughout the year.
- Snow is common (100 inches annually; 3–5 months snow covered ground).

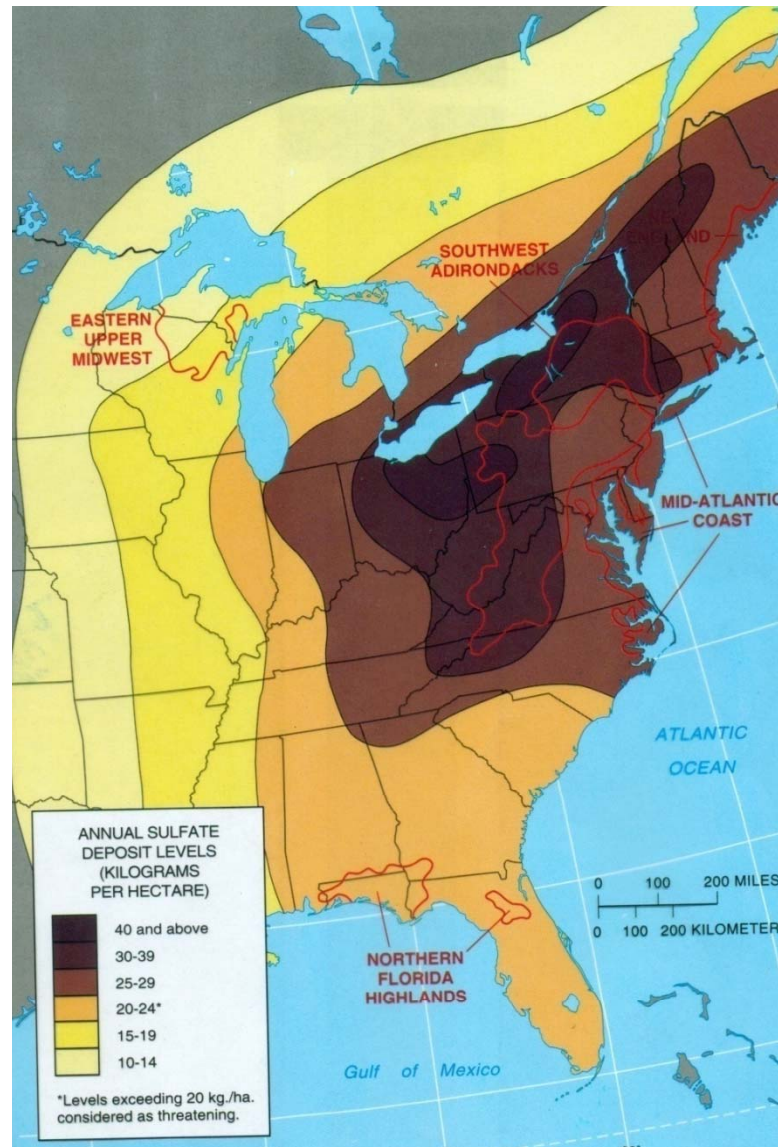
Acid Deposition Problem

Source areas are the industrial regions to the west.

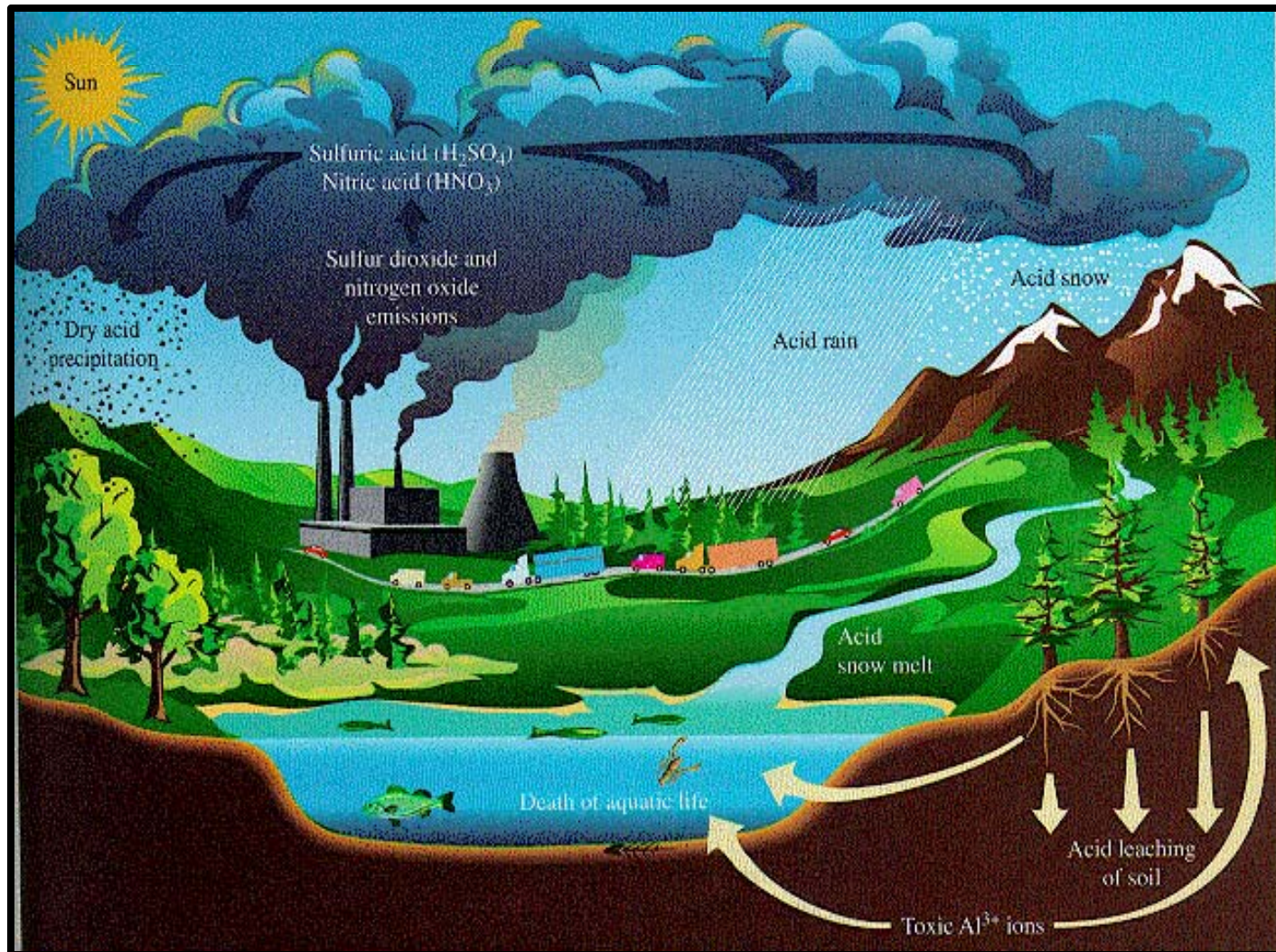
Pollution is carried by westerly winds.

Orographic precipitation is triggered by the high mountains of this region.

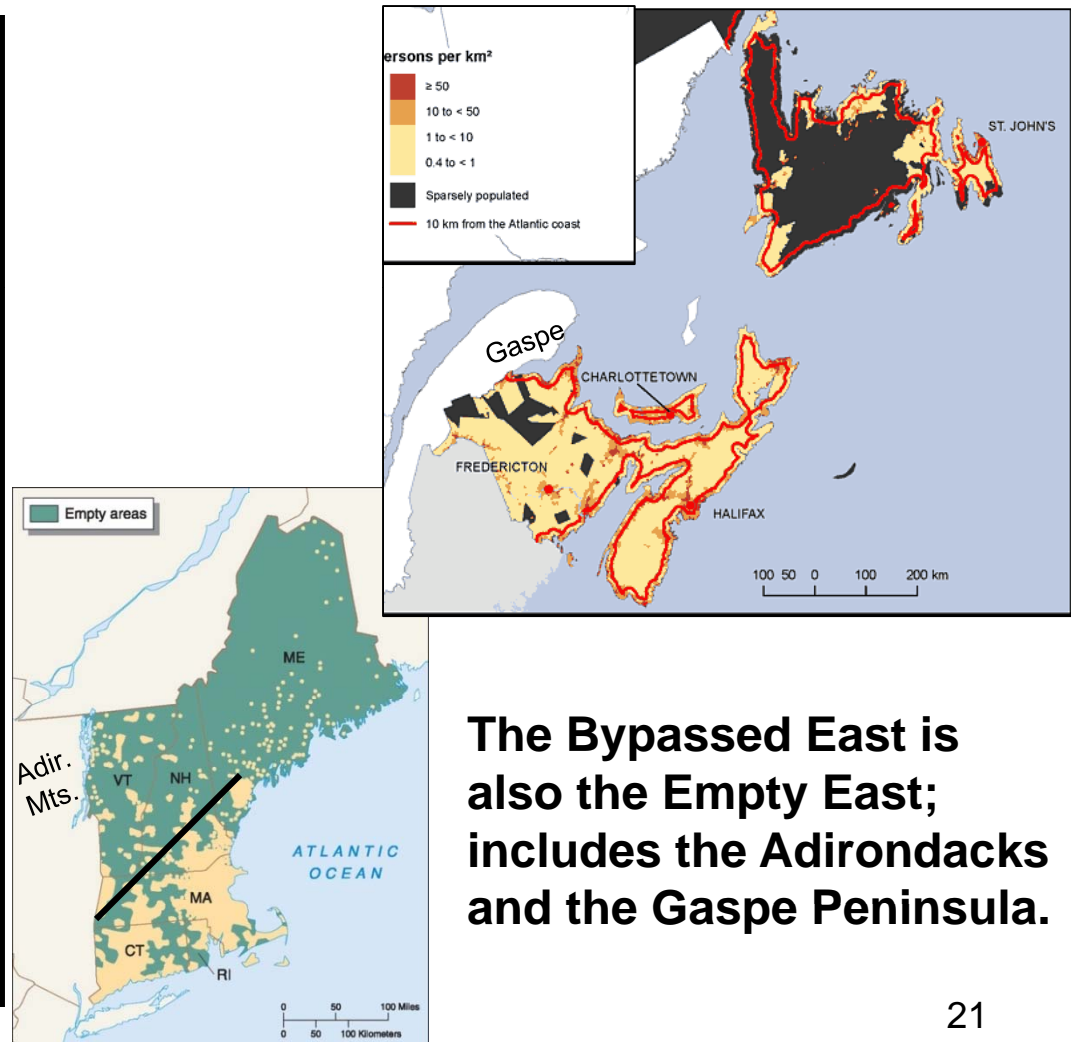
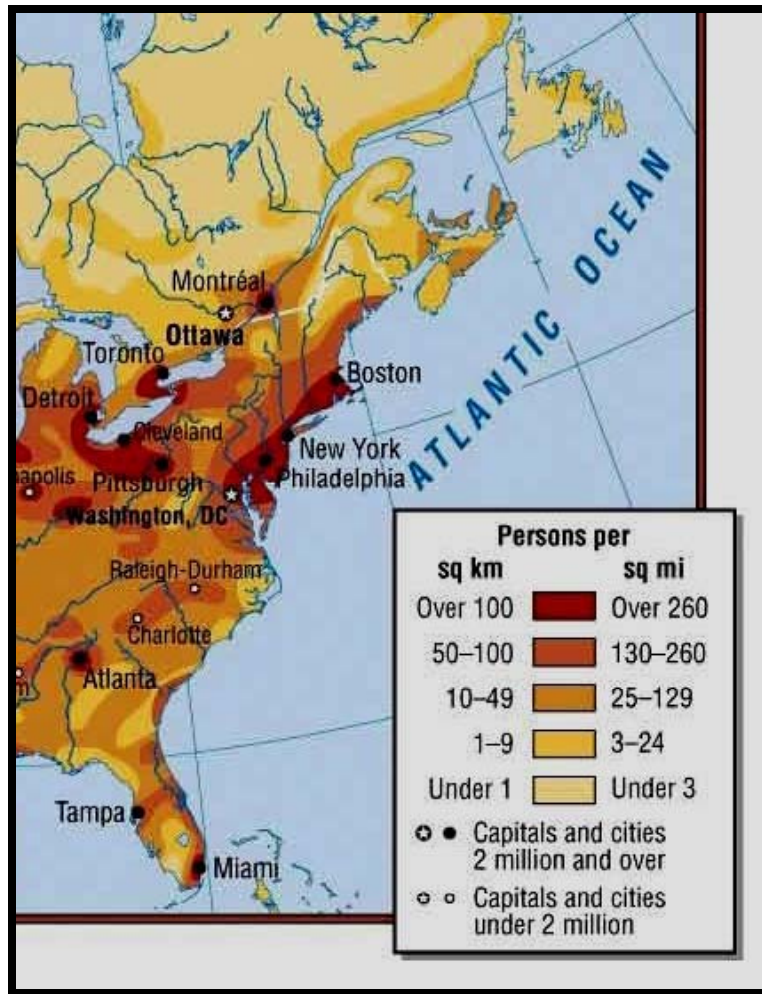
Low pH rain and snowfall adversely affect the area's ecology.



Acid Deposition Diagram



Low Population Density



The Bypassed East is also the Empty East; includes the Adirondacks and the Gaspe Peninsula.

Population Today

- **50% urban, 50% rural**
- **Relatively low per capita incomes** (higher incomes related to *urban* occupations); poorest and slowest growing economic region of Canada
- **Primary sector occupations dominant.**
 - Fishing, farming, mining and lumbering are low-paying
 - Manufacturing hindered by small local market
 - Transportation and regional access is poor
 - Development projects hope to stimulate area

Exploration and Settlement

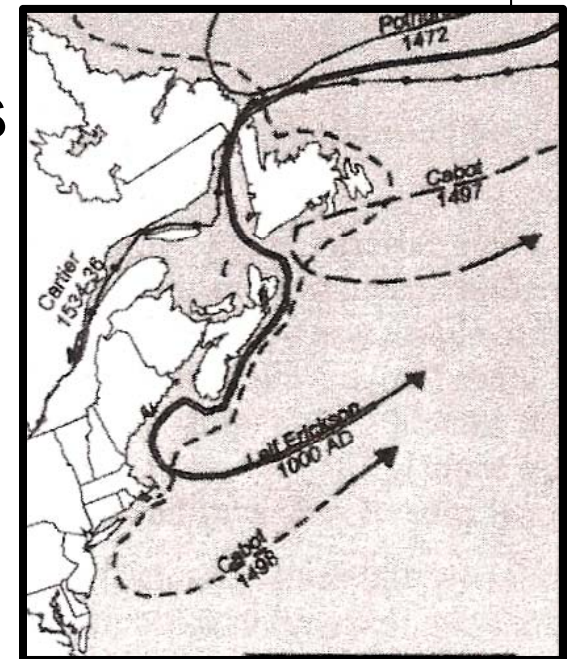
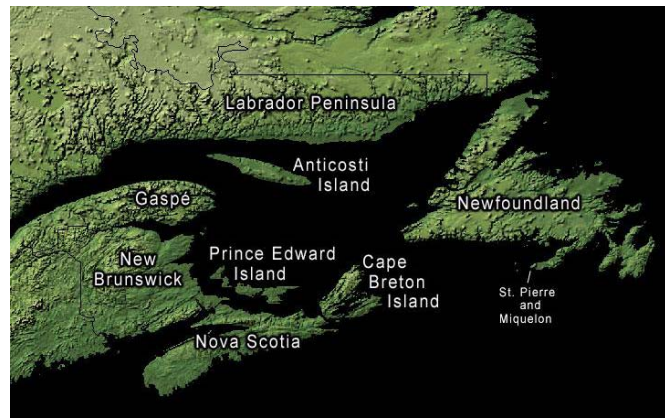
- **Vikings were first to arrive.**
- Evidence of settlement by Norsemen (900-1000 AD) has been found in Newfoundland.
- **“Age of Discovery” explorations started in the late 1400s.**

Cabot (1497)

Verrazano (1524)

Cartier (1534)

Champlain (1603)



L'Anse Aux Meadows NHP

Recreates the area of a Viking settlement in Newfoundland.



Early Settlers and Activities

- Earliest European settlements (early 1600s).
- French and English marked property lines differently (long lot vs. metes and bounds).
- Colonial economy was based on fishing and lumbering.
- Major commodities for export
 - **Fish**, esp. cod and haddock
 - **Trees**
 - Trees needed for the masts of naval ships
 - New England's white pine was prized
 - 190 feet tall, clear wood, light strong wood
 - Centered in Maine

Metes and Bounds Survey System

A system of land surveying brought by Europeans during colonial times.

A mete is visual feature in the landscape (like a tree, large rock, or river)

A bound is a straight survey line that connects metes.

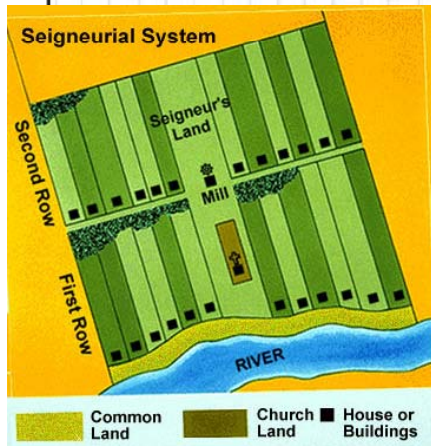
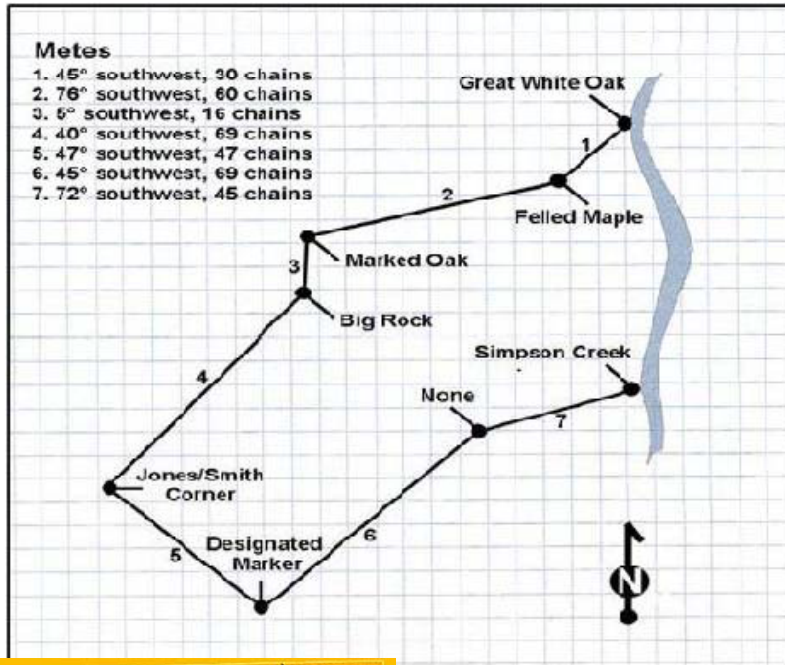
Combinations of “metes and bounds” are then used to define and enclose a property.

Metes and Bounds Survey System

The result is a landscape composed of parcels that vary in shape and size, and pose potential problems.

- Written descriptions may be open to multiple interpretations.
- Change in the physical landscape.
- The property may be inaccessible (not tied to roads or rivers).
- Fraudulent change in property lines.

Landscape pattern resulting from the Metes and Bounds Survey System



<<Compare to
French long-lot.>>



Agriculture

- **Early agriculture**
 - Was mainly subsistence
 - Declined with the opening of western land and the rise of industrial employment.
- **Present trends**
 - Less than 10% of New England is farmed, compared to about 50% c. 100 years ago
 - **Specialize in single crop** production

Major U.S. Agricultural Areas

St. John–Aroostook Valley

- Potatoes with large-scale mechanization
 - But:
 - Competition with Idaho and Oregon
 - Changing American diet

Lake Champlain Lowland

- Dairying
- Apples



Major Canadian Agricultural Areas

Prince Edward Island

- Fairly diverse area
- Seed potatoes major crop

Annapolis River Valley

- Traditional apple area
- Competition from places closer to market



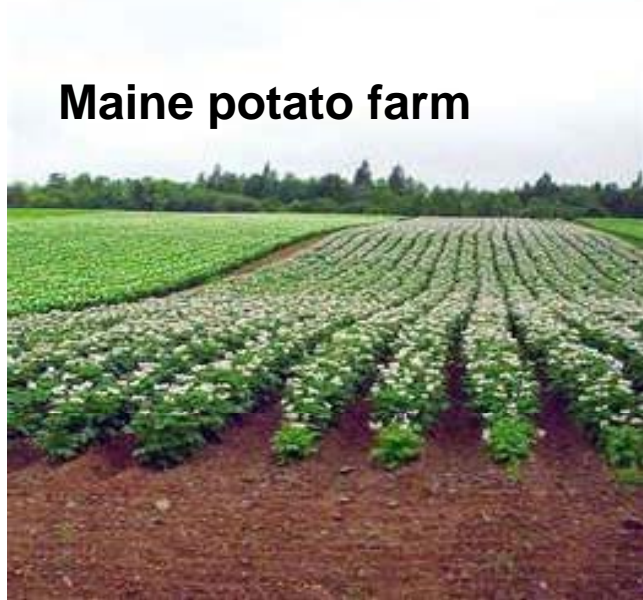
Agricultural Activities



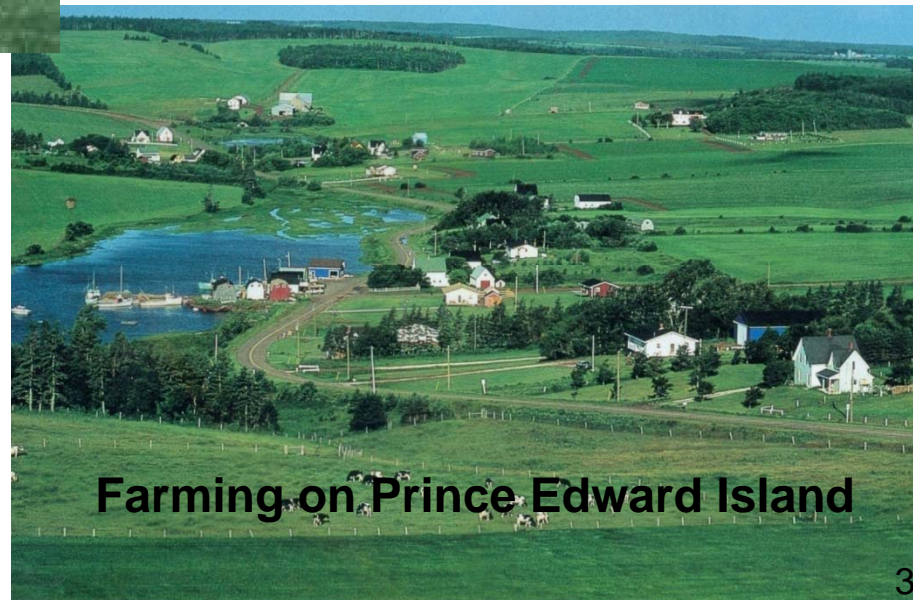
Vermont dairy farm



**New Brunswick
apple orchard**



Maine potato farm



Farming on Prince Edward Island

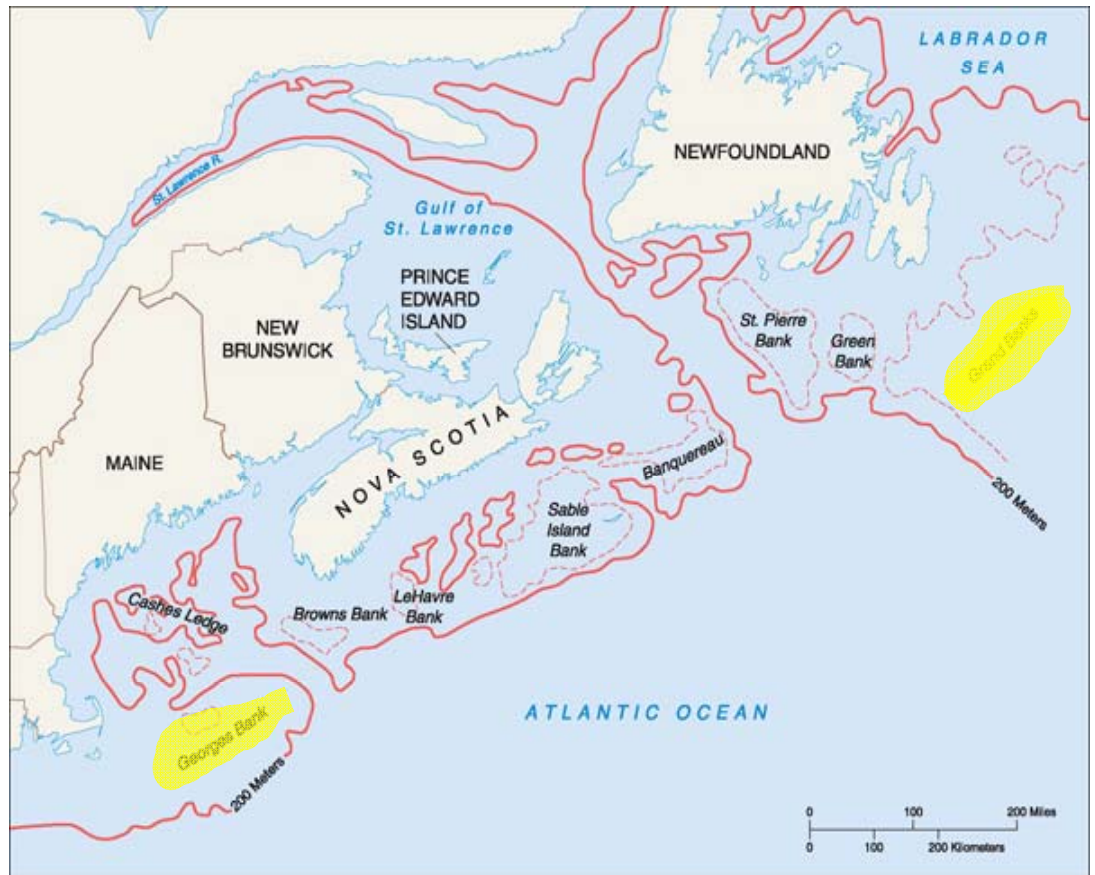
Fishing

- Fishing has always been economically important to this region.
- Canada is a world leader in fish exports, most coming from its Atlantic Provinces.
- New England has a long fishing/fish-eating tradition.
- There are 2 principal fishing areas:
 - Georges Bank
 - Grand Banks

Fishing Grounds

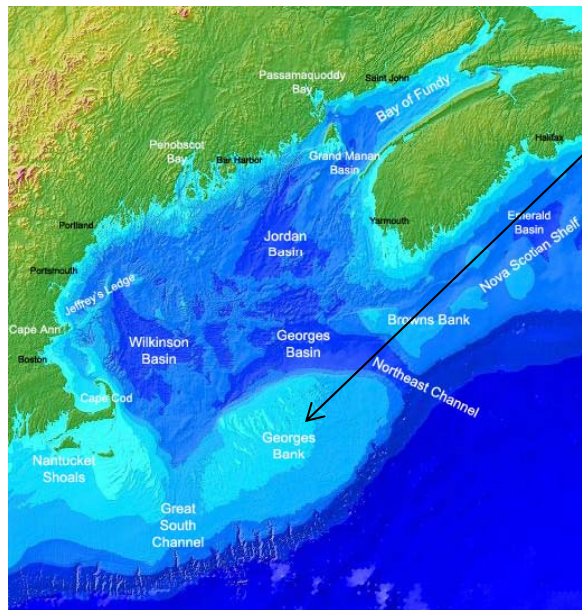


Shallow water and ocean currents of different temperature provides habitats for both cold water and warm water species.



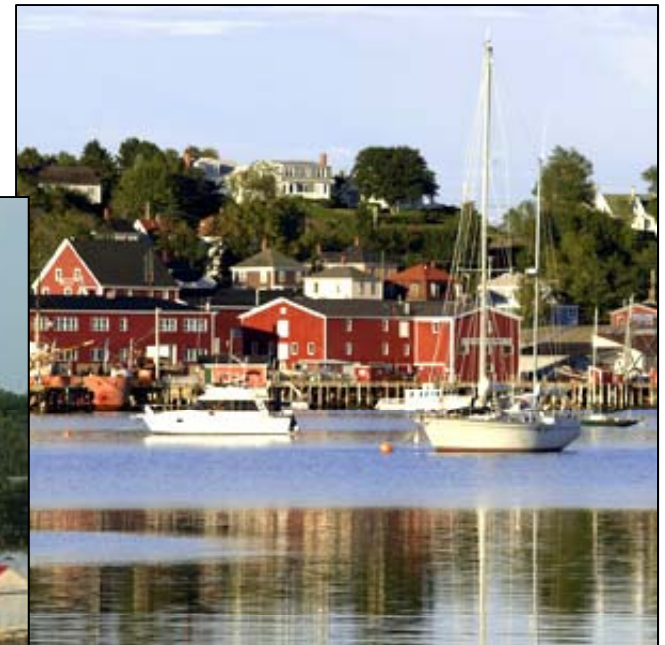
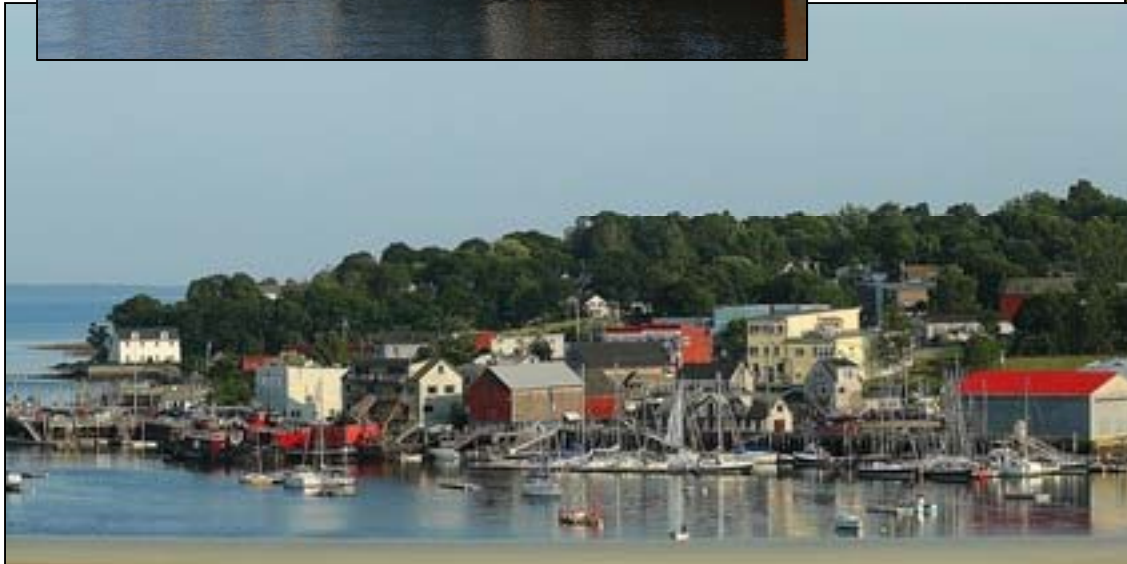
Fishing Grounds

- Extensive continental shelf extending from Newfoundland to Cape Cod.
- Juxtaposition of 2 very different marine ecosystems and associated mixing of ocean currents.



One of the world's most productive fisheries, now threatened by over-fishing and the possibility of offshore oil drilling.

Fishing Landscape

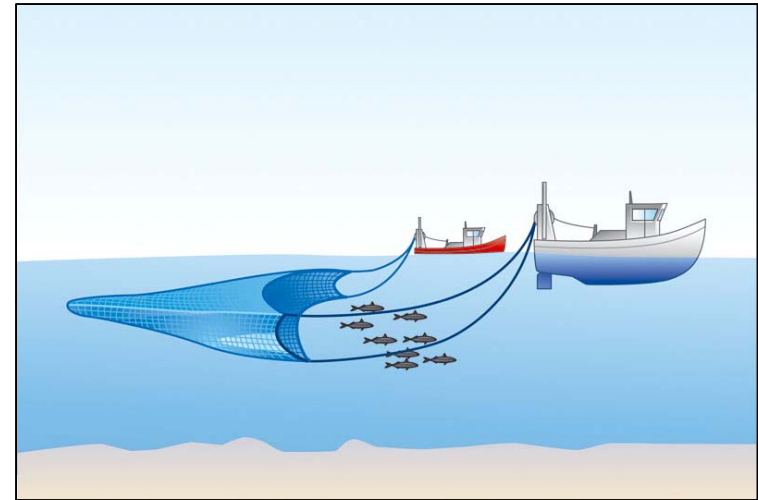
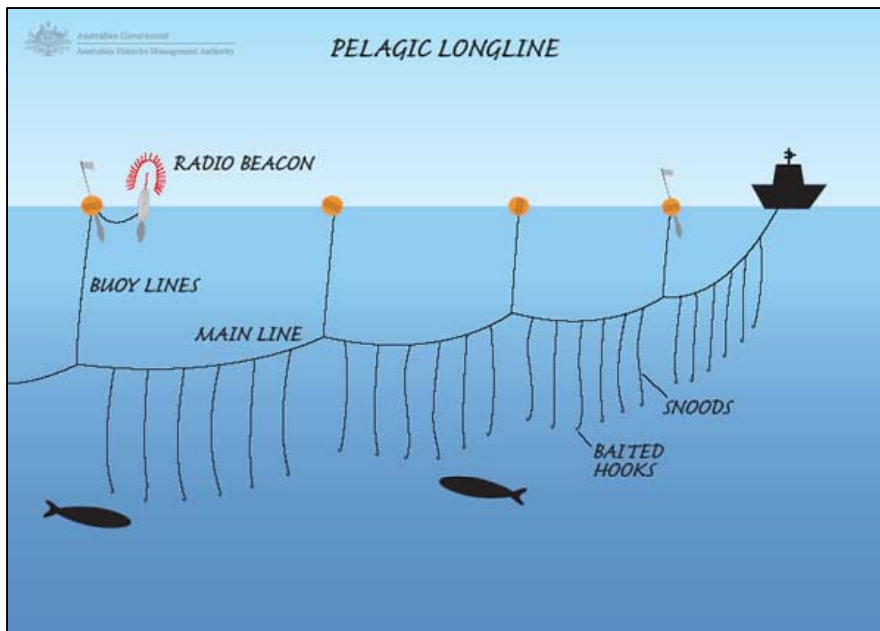


Over-fishing

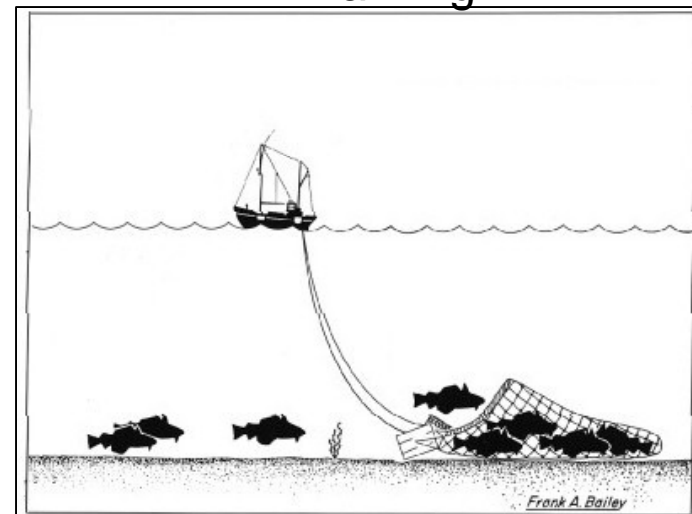
- **Fish provide a source of food and protein.**
- **Over-fishing** is the practice of catching fish at a rate that exceeds fish reproduction.
- The fish population decreases in number and size.
- **Modern fishing fleets have the technological means to threaten the ocean's fish supply with extinction.**
- If oceans outside of national boundaries are an unregulated "commons," then nobody can regulate catch limits and fish populations will decrease drastically.

Modern Commercial Fishing

Long-line Fishing



Trawling



Forestry

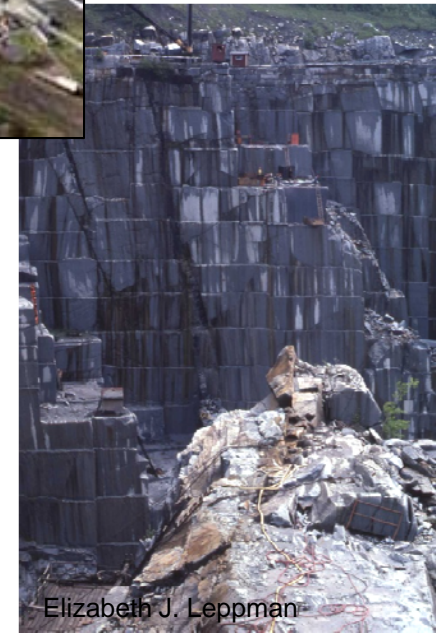
The forests of New England, the Adirondacks and the Atlantic Provinces were important to a wood-starved Europe in colonial times.

The trees insured the repair of wooden sailing ships and were both the major source of building construction supplies on land and for fuel.



Mining

- **Iron ore:**
 - Adirondacks
 - Labrador
- **Coal** in Nova Scotia
- **Building stone:**
 - Granite (Vermont, Maine)
 - Marble (Vermont)
- **Petroleum and natural gas:**
 - Hibernia field off Newfoundland



Marble quarry, Vermont
40

Future Prospects

- **Northern New England**
 - Expansion of Megalopolis northward
 - New manufacturing facilities
 - Tourism:
 - Four-season attractions
 - Second-home owners
 - Retirees
- **Eastern Canada:**
 - More distant from major markets for tourism
 - Effects of possible Quebec secession
 - Canadian Department of Regional Economic Expansion seeks to invigorate the area.