

## Regional Landscape Studies

- ✓ NORTHLANDS
- **NORTHEAST COAST**
- ☐ MEGALOPOLIS
- ☐ CANADA'S CORE
- ☐ AMERICA'S HEARTLAND
- ☐ APPALACHIA and the OZARKS
- ☐ THE SOUTH
- ☐ PLAINS and PRAIRES
- ☐ MOUNTAINS and PLATEAUS
- ☐ DESERT SOUTHWEST
- ☐ NORTH PACIFIC COAST
- ☐ HAWAII

◀◀◀For each region:

1. Know its physical geography.
2. Identify its unique characteristics.
3. Be able to explain the human imprint.
4. Discuss its sequence occupancy and economic development.

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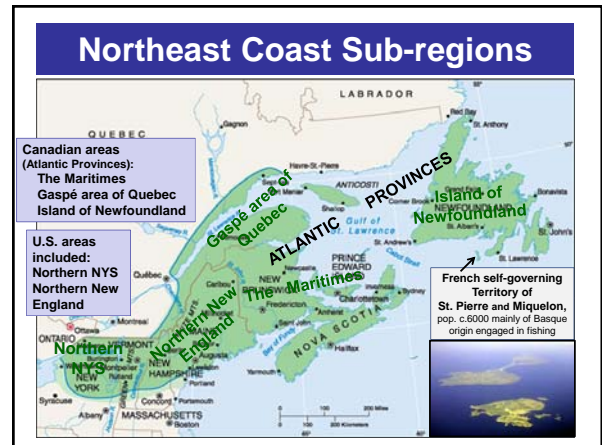
## Regional Landscapes of the United States and Canada

# NORTHEAST COAST

with Interior Areas

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### NORTHEAST COAST

When you think about this region, what images come into your mind?

- Rocky coastline
- Fishing
- Lighthouses
- Mountains
- Skiing
- Maple syrup
- Moose
- Pine trees
- Cold and damp

Maine  
NEW HAMPSHIRE  
VERMONT  
PAKED  
Greetings from  
NEW BRUNSWICK  
Greetings from  
PRINCE EDWARD ISLAND, CANADA

### NORTHEAST COAST

NOVA SCOTIA  
NEW BRUNSWICK  
Icebergs, Cod & Beer  
A Postcard from Newfoundland  
Greetings from  
PRINCE EDWARD ISLAND, CANADA

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## Overview

Historical atlas  
pp 15, 16, 21,  
and 24.

- ❖ **Harsh physical geography** (cold, damp, windy, snowy, foggy, stormy)
- ❖ **Low population** (headcount/density); small cities. **Rural in character with c.2 mil people**
  - Long history of European contact: French; Scot/Irish
  - Largest cities: Halifax (400K), St. Johns (200K), Moncton (140K)
- ❖ **Major marine gateway to North America** but very far from major population and economic centers.

- ✓ **Historic fishing, lumber, and mining areas.**
- ✓ Porous international boundary allowed for cultural/-economic blending.
- ✓ **Present-day economy in decline** with hope from off-shore oil exploration and tourism.
- ✓ **US area has a thriving all-season recreation industry** that the Canadian area doesn't have.

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## Canadian Area Labeled "Bypassed" - Why?

1. It is in a **"transportation shadow."**  
(An area of limited development located near an area of much greater accessibility.) **Ships/airplanes go through it NOT to it!**
2. **Climate and topography not good for farming.**
3. **Became depopulated and isolated** when settlement moved inland and westward to better areas.
4. **Difficult interaction with the rest of N. America.**  
**Poor links to other areas.** There is better access to the interior from East Coast harbors (Boston to Baltimore, esp. from NYC).
5. **No pull factor.**  
Few large urban areas. Limited industry and tourism. Canada's **main east coast port** is at Montreal, far inland of this area.

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## Landscapes of the Northeast Coast

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## FOG

Landscape characteristic of the Northeast Coast

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## Foggy Landscape

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## ICEBERGS

N. American iceberg zone crosses the North Atlantic shipping lanes

Remember the Titanic!

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## Physical Setting of the Northeast Coast

- Centered on Gulf of St. Lawrence
- Mountainous terrain
- Shallow continental shelf
- Junction of major ocean currents
- Affected by maritime air masses

**Physical Setting**

Scotian Shelf, Labrador Sea, Gulf of St. Lawrence, Primary Storm Tracks, Shelf Slope Front, Gulf Stream, Shallow water areas

**Physiographic Regions of N. America**

Arcitic Coastal Plain, Canadian Shield, Coastal Lowlands, Great Appalachian System, Coastal Plain

This area was first thought to be the gateway to the Pacific Ocean.

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## Climate

Humid Continental, Cool Summer Climate (Dfb)

- **Air Mass Conflict Zone:**
  - Polar, continental, and maritime air masses meet here
  - Generally cool, wet yr-round
    - Marine influence minimized
- **Labrador Current is cold.**
  - Hugs the coast.
  - Chills coastal areas vs. those of inland locations.
  - Creates cloud banks and fog when it interacts with warm air.
- **Precipitation**
  - Substantial and evenly distributed throughout the year.
  - Snow is common (100 in. annually; 3-5 months snow covered ground).
  - Fog is prevalent.
  - Area of "Nor'easters"

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## Nor'easters

PERFECT STORM Oct. 28- Nov 2, 1991

March 2014 with hurricane force winds

Typical Nor'easter Feb., 2013

Area of nor'easters including the "Perfect Storm" of Oct-Nov.1991 and "snow-icane" of March, 2014.

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## Physiography

- **Appalachian Highlands:** ancient mountain ranges created by folding dominate the area
  - **Green Mountains, VT:** c.4,600 ft., glaciated
  - **White Mountains, NH and ME:** c.6,500 ft., highest summits not glaciated
  - **Appalachian Highlands of the Atlantic Provinces:** c.2,200 ft., rounded peaks
- **Adirondack Mountains, NYS:** an eroded geologic dome that is still growing
  - **High Peaks:** 5000+ ft high.
  - Carved by both continental and mountain glaciers.
  - Geologically part of the Canadian Shield, **not** the Appalachians.
  - The **Thousand Islands** in the St. Lawrence River is the link between them.

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## Adirondack Uplift

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

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

**ADIRONDACK UPLIFT**

1 Adirondack area before doming began

2 Adirondack doming begins

3 The greatest breached dome

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## Physiography

The **LOWLANDS support settlement.**

- 1) **Connecticut River Valley** (between VT and NH)
- 2) **Aroostook Valley** (No. Maine)
- 3) **Lake Champlain Lowland** (between NY and VT)
- 4) **Nova Scotia Isthmus** (between NB and Appalachian E. NS.)
- 5) **Various coastal lowlands/river valleys** (extending inland from the Atlantic and Gulf of St. Lawrence)

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## Physiography

**COASTAL ZONE**  
**Extremely rugged and a barrier to use.**

- ✓ Rocky, indented shoreline.
- ✓ Fjords with steep slopes.
- ✓ Many harbors (protected inlets) but few beaches.
  - Difficult access to dry land.
- ✓ Large range tidal range.
- ✓ Tidal bores (true tidal waves) occur 2x daily.
- ✓ Fog poses a danger especially along a rocky shoreline.
- ✓ Icebergs/ice floes become trapped in northern inlets.

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## Coastal Areas



Nova Scotia



Maine



Newfoundland fjord



Lighthouses dot the coast.

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## Coastal Areas



Gros Morne NP, Newfoundland




Gaspé Peninsula, Quebec




St. John's Harbor, Newfoundland

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## Daily Tidal Range



At Low Tide



Pier at High Tide

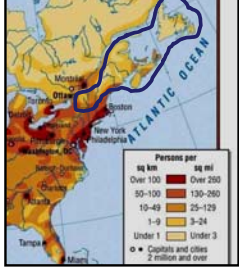


Pier at Low Tide

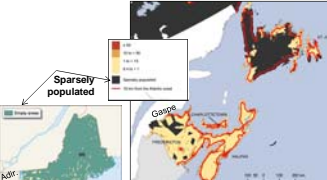
The Bay of Fundy has the world's greatest tidal range = 50+ ft difference.  
[https://search.yahoo.com/search\\_ylt=A2kLtdZU1R9TeusAT7ubvZk47?b=of+fundy+tides&lang=1&cop=miss&ei=UTF-8&fr=yfp-t-901-1](https://search.yahoo.com/search_ylt=A2kLtdZU1R9TeusAT7ubvZk47?b=of+fundy+tides&lang=1&cop=miss&ei=UTF-8&fr=yfp-t-901-1)

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## Population Density



Persons per sq mi  
 Over 100 Over 200  
 50-100 130-200  
 10-49 25-129  
 1-9 3-24  
 Under 1 Under 3  
 • Capitals and cities  
 2 million and over



Sparsely populated

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

50% urban (small town), 50% rural.  
 Low per capita incomes.



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## Exploration and Settlement

- First area to be visited by Europeans.
- Vikings arrived in the late 900s.
- “Age of Discovery” explorations started in the late 1400s.

Cabot (1497)  
 Verrazano (1524)  
 Cartier (1534)  
 Champlain (1603)

Check maps in historical atlas, pp. 15-16.

<http://www.davidrumsey.com/> 24

## Early Settlers and Activities

- **Earliest European settlements** (early 1600s).
- **Colonial economy** was based on **fishing and lumber**.
  - **Fish**, especially 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
      - Lumbering was centered in Maine
- **St. Lawrence River Valley** was used as a gateway to interior North America by French.

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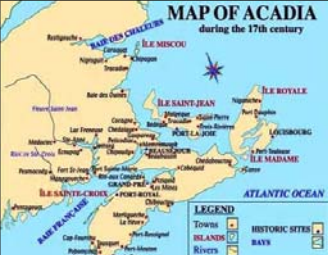
## ACADIA in the 1600s

**Acadians: Unique culture group** who are descendants of 17<sup>th</sup> cent. French peasant colonists of "La Cadie," a colony founded by Champlain.

Viewed as "poor" by French colonial authorities and left to fend for themselves. **No wealthy land owners among them** (reflected in land pattern).

**First group to consider themselves "North American":** They revolted against the French **and** the British.

See pp 21-22 in historical atlas.



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## Acadians

- Good relations with Indians because they stayed coastal.
- Diked salty tidal marshland to create "fresh water" areas.
- Did not try to recreate the landscape of France in Canada.


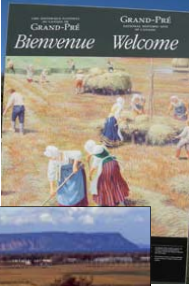





- British captured French colony; Acadians resisted Anglicization.
- Brought it Scottish Protestants to counter French Catholics.
- ❖ **After 1755 Britain forcefully dispersed c.11,000 Acadians to other colonies and the West Indies.**
- Many Acadians settled along the Gulf Coast (Spanish area).
- Phonetically, **Cadien** became **Cajun** in English.

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## Acadians

**Gran-Pré National Historic Site:** tells the story of the Acadians in Nova Scotia.

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## Agriculture in the Atlantic Provinces and No. New England



- **Colonial agriculture** was mainly subsistence.
  - Declined in the 1800s with the opening of western land and the rise of industrial employment in cities.
- **Present trends**
  - **Less than 10% of the area is farmed.** (c.50% in early 1900s)
  - **Specialize in single crop/activity:** apples, potatoes, dairying.

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## Major Agricultural Areas




- Prince Edward Island**
  - Fairly diverse area
  - Seed potatoes major crop
- St. John–Aroostook Valley**
  - Potatoes with large-scale mechanization
- Annapolis River Valley**
  - Traditional apple area
- Lake Champlain Lowland**
  - Dairying
  - Apples

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## Agricultural Activities




Vermont dairy farm



New Brunswick apple orchard




Maine potato farm



Farming on Prince Edward Island

## Fishing




- ✓ Fish provide a source of food and protein esp. when farming is poor.
- ❖ Fishing has always been important to this area. (French fisherman spent months off the coast in the 1500s after Cabot's report of cod.)
- Canada is a world leader in fish exports, most coming from its Atlantic Provinces.
- New England has a fishing/fish-eating/fisherman tradition.
- ❖ There are 2 principal fishing areas: **Georges Bank** and the **Grand Banks**


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## Fishing Grounds

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

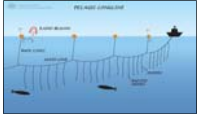


## Overfishing

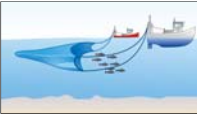


- ❖ **Overfishing:** the practice of catching fish at a rate that exceeds fish reproduction.
  - Fish population decreases in number and size.
- Modern fishing fleets have the technological means to threaten the ocean's fish supply with extinction.

**Geopolitical/economic dilemma:** If the oceans outside of national boundaries remain unregulated "commons," then no government or the UN can regulate catch limits and fish populations will decrease drastically.



Long-line Fishing



Trawling


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## Forest Landscape

The forests of this region were important to a wood-starved Europe in colonial times.

- repair of wooden sailing ships
- source of building supplies
- source of fuel.

By the end of the 1800s, most of the forests of northern NYS and New England were cut down.




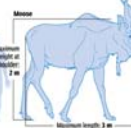

Today the forests are used as a source of pulpwood, especially in Maine and the Maritimes.

Wood-related jobs are important to over half the manufacturing jobs here.

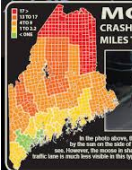

Controversy in Maine over the designation of "Katahdin Woods and Waters National Monument" in August, 2016.

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## MOOSE



An example of human-environment interaction!!

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## Mining

- **Metallic minerals:**
  - Adirondacks
  - Labrador
- **Coal in Nova Scotia**
- **Building stone:**
  - Granite (Vermont, Maine)
  - Marble (Vermont)
- **Petroleum and natural gas:**
  - Hibernia field (1999) off the coast of Newfoundland in the Grand Banks


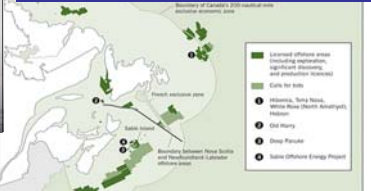
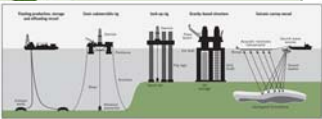
## Tar Ponds Toxic Site

- ❖ **Tar ponds of Sydney, NS called Canada's "Love Canal"**
- Toxic material from steel making (located on a coal field) collected for c.100 yrs
- Leached into the ground and flowed into Sydney Harbour, contaminating surrounding areas.
- Site has been remediated to rid it of toxic material and convert it into a recreational area.






## Oil and Gas Drilling on the Grand Banks

The Canadian Report may be accessed at:  
[http://www.cesr-bva.gc.ca/internet/English/parl\\_quest\\_201212\\_01\\_e\\_37710.html](http://www.cesr-bva.gc.ca/internet/English/parl_quest_201212_01_e_37710.html)

Conflict with fishing interests and conservation movements.

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## Prospects for Change in the Economic Landscape

- ❖ **Northern New England**
  - Northward expansion of **Megalopolis**.
  - **New manufacturing** facilities, esp. high tech
  - **Tourism:**
    - Four-season attractions
    - Second-home owners; retirees
    - Easy access from East Coast cities

- ❖ **Eastern Canada:**
  - Seeks to spur **tourism** with scenery and history themes.
  - Invigoration through government-sponsored **economic programs**.
  - **Distance** and **isolation** from populated areas is **still a problem** to economic development.

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NEXT

## MEGALOPOLIS: The Urban Landscape

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