

US & Canada:  
**Heartland**  
(Ch.12)



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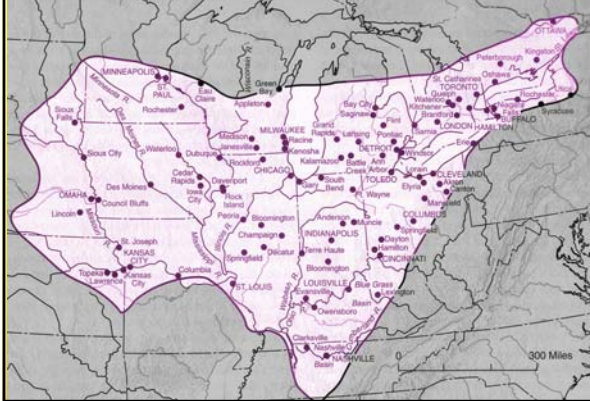
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What states and provinces are part of the region?



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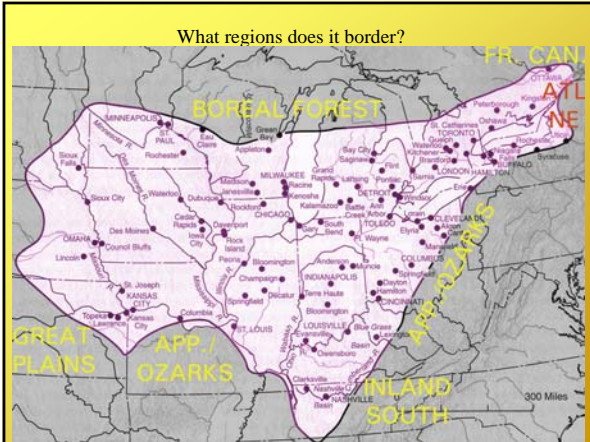
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What regions does it border?



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## Overview

- Relatively flat area
- Most populated region
- Generally culturally homogeneous; “average” North American
- Agricultural and industrial core areas

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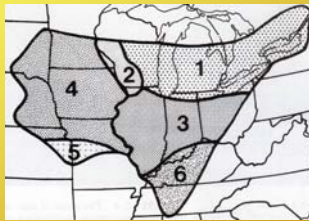
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## Physical setting

- Flat to undulating
- Some bluffs
- Differentiated between glaciated and unglaciated landscapes
- Glaciers dramatically smoothed landscape, improved soil



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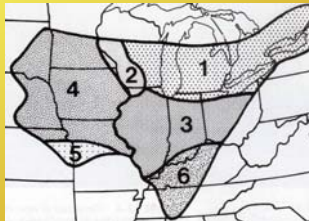
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## Great Lakes (1)

- Large and small lakes
- Evidence of glaciation



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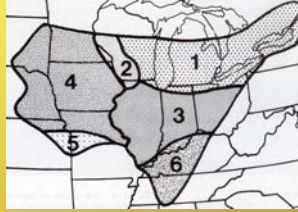
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### Till Plains (3, 4)

- Flat areas with significant glacial sediment deposit
- More time passed since last glacial retreat, so better drained (fewer lakes)



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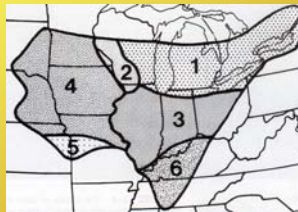
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### Unglaciaded areas (2,5, 6)

- Driftless Area (2)
  - Rough terrain
- Osage Plateau (5)
  - Very flat sedimentary rock
- Interior low plateaus (6)
  - Rolling hills
  - River valleys



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### Climate

- Significant seasonal shifts
- Wetter west, drier east
- Snow common, especially north
- Flooding common, especially Mississippi River Valley
- Severe weather, especially in spring

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## Lake Effect Snow



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## Climate comparison

	Akron	Buffalo	Minneapolis	Louisville
Jan Temp	33 / 17	30 / 17	20 / 2	41 / 24
Jul Temp	82 / 61	80 / 61	83 / 62	88 / 68
Rainfall	38 in.	38 in.	26 in.	44 in.
Snowfall	45 in.	92 in.	49 in.	17 in.

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## Landscape

- Prairie originally from Illinois westward
  - Mostly grasses, some smaller trees
- Forests elsewhere
  - Conifers near the northern edge
  - Hardwoods elsewhere

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## Early settlement

- Native presence 10,000 years
- Fairly spread out, mostly somewhat sedentary
- “Mound Builders”



St. Paul, Minnesota

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## French exploration

- Sought fur trade
- Colonized through St. Lawrence and Mississippi Rivers
- Early settlements around 1700 near Detroit and in Illinois
- St. Louis (1764)

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## British / American

- Original “Native reserve”
- Late 1780s: American settlement began in earnest



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## Westward push

- Following War of 1812, most natives sent west of Mississippi River
- Cleveland 1796, Chicago 1817, Milwaukee 1840, Kansas City 1853
- Once Great Plains settled, westward migration focused there and much of the boom in this region subsided

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## Direct migration

- To Heartland increased after around 1880
- Many northern and eastern Europeans
  - Minnesota: Scandinavians
  - Milwaukee: Germans
  - Cleveland: Germans, Slovenians

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## Present population

- Some urban areas experiencing decent growth:
  - Minneapolis (17%), Madison (16%), Indianapolis (16%), Nashville (25%)
- Others not
  - St. Louis (4%), Cleveland (3%), Detroit (5%), Toledo (0%)
- Very rapid growth in Canada
  - Especially Toronto and Ottawa

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## Population numbers

State/Metro Area	2000	1990	Change
Ohio	11353	10847	+5%
Michigan	9938	9295	+7%
Indiana	6080	5544	+10%
Illinois	12419	11430	+9%
Iowa	2926	2776	+5%
Kentucky	4041	3685	+10%
Missouri	5595	5117	+9%
Wisconsin	5363	4891	+10%
Minnesota	4919	4375	+12%
Toronto	4907		+26%
<b>US &amp; Canada</b>	<b>312,600</b>	<b>276,700</b>	<b>+13%</b>

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## Agriculture

- #1 producer of crops on continent
- Half of US ag. employment is in Heartland
- Farm size increasing, farm population decreasing

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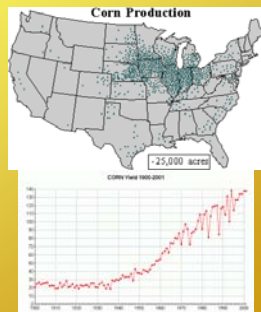
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## Corn (Maize)

- Half of world's output
- Perfect conditions
- Productivity increased over time
  - Genetic and technological improvements mean crop rotation not necessary



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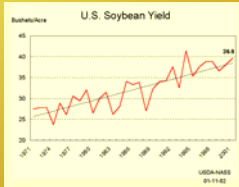
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## Soybeans

- Almost identical region to corn
- High yield per acre
- Increased dramatically in 20<sup>th</sup> century
- US now produces 50 percent of world crop
- All of Canadian soybeans grown north of Lake Erie



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## Livestock



- Beef Cattle
  - More in western Heartland, older prairie
- Dairy Cattle
  - Wisconsin, Minnesota, western New York
  - Areas less suited for agriculture
- Hogs
  - Losing importance to southern states

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## Mineral industries

- Relatively lesser importance
- Some Coal, Natural Gas, Oil
  - Illinois, Kentucky, S. Indiana, parts of Ohio
  - 10 percent of US coal output
- Limestone
  - Indiana

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## Manufacturing

- Next to agriculture, mainstay of Heartland
- In severe decline across Midwest
- Most cities with some specialization
  - Cars in Detroit
  - Rubber in Akron
  - Beer in Milwaukee

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## The auto industry

- Largest employer in Heartland
  - 22 percent of Michigan's workforce, \$44.7B in wages
  - 11 percent of Ohio's workforce
  - 10 percent of Kentucky's workforce
- All top-10 states in this region exc. California, though many jobs moved south
- 90% of Canadian auto jobs in Ontario (Windsor #1)

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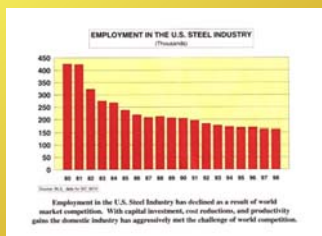
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## Steel industry

- 4 of top 5 states: Ill., Ind., Ohio, Mich.
- Hamilton, Ont., main steel center
- Significant decline due to foreign competition



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## Rubber / plastics industry

- Ohio #1 state (100,000 workers)
  - 1/3<sup>rd</sup> of nations rubber/plastic machinery
- Michigan #3, Illinois #4
- Shift over time from tire manufacturing to specialized rubber / plastic products

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## Transportation

- Important in original settlement
  - Great Lakes/St. Lawrence
  - Ohio/Missouri/Mississippi Rivers
- Flat terrain makes transportation easy
- Strategic location near center of country and population base makes region vital

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## Waterways

- Rivers
  - Made much more navigable with dams/locks
  - All major cities developed along these rivers
- Canals
  - Built in 19<sup>th</sup> century as connectors between rivers
  - Ohio & Erie canal dramatically transformed Ohio's economy
  - Erie Canal in NY world's most used inland canal

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## Rails and roads

- Rails
  - Originally connected waterways
  - Took over prominence after Civil War
  - Recent consolidation: mostly for bulk materials (agriculture, building materials)
- Roads
  - Took over for rails after mid-1900s
  - Earliest Toll Roads in Penn., Ohio, Indiana

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## Cities

- Many major metropolitan areas
  - 16 with over 1 million people
- Anchored by Chicago and Toronto
- Second tiers of cities that are more regional centers (e.g. Cleveland, Detroit)
- Third tiers of cities (e.g. Akron, Rochester)

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## Chicago

- “Second city”
- Metro area 8 million
- Incorporated in 1833
- Transportation hub
- Second largest manufacturing center, heavy machinery and industry



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## Chicago Stockyards

- Set up to facilitate transfers between east and west
  - First live animals
  - Later, refrigerated meat
- 475 acres, 130 miles of rail track
- In 1900, processed 82 percent of US meat
- Key immigrant job



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## Toronto

- French settlement 1615
- Torched by US 1813
- Premier financial and corporate center in Canada
- Over 4.5 million people – 15% of Canada
- Very diversified economy
- Major center of within-Canada migration and international migration



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## Detroit

- Third biggest manufacturing center in US
- Auto industry
  - Top 3 employers
  - Ford: almost 60,000
- Largest Arab-American community
- Center city most in decline (lost over 1,000,000 people)
- Metro area over 4 million

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## Minneapolis – St. Paul

- Diverse cities
  - St. Paul: eastern, historic
  - Minneapolis: western, grid-based
- Diversified employment
  - Food: GM, Pillsbury
  - Retail: Target, Best Buy, Mall of America
  - Hi tech industry: 3M
- One of fastest growing regions
- Unemployment rate less than 2% before recession

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## Other metros over 1,000,000

- Ottawa
  - Government city
- Industrial and financial cities
  - Buffalo, Cincinnati, Cleveland, Columbus, Grand Rapids, Indianapolis, Kansas City, Milwaukee, Nashville, Rochester, St. Louis

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## Outlook

- Important to the nations
  - Major economic area of Canada
  - Main industrial and agricultural area of US
- Corporate agriculture
  - Fewer employed in this sector
- Growth in urban areas
  - Some cities flourishing more than others

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