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Collection/Office of Origin:	Speechwriting, White House Office of
Series:	Speech File Backup Files
Subseries:	Chron File, 1989-1993

OA/ID Number:	13664
Folder ID Number:	13664-010

Folder Title:
Capitol Square 4/24/89 [OA 6263]

Stack:	Row:	Section:	Shelf:	Position:
G	26	18	7	5

THE WHITE HOUSE

WASHINGTON

SCHEDULE OF THE PRESIDENT

FOR

BISMARCK, NORTH DAKOTA

APRIL 24, 1989

EVENT:

Staff Photo with North Dakota Centennial Commission
North Dakota Centennial Grove Celebration

DRESS:

Men - Business Suit
Women - Day Dress

CONTACT:

Presidential Advance Office
John G. Keller, Jr. - 202/456-7565

Trip Coordinator
Peggy Hazelrigg - 202/456-7565

Bismarck, North Dakota Signal - 701/224-8052

ADVANCE:

Rick Pharr -LEAD
Rick Hange -WHCA
Isaiah Mapp -USSS
Woody Lee -MIL AIDE
Terry Lang -AF I

WEATHER:

Partly Cloudy/mid 70s

SCHEDULE OF THE PRESIDENT

FOR

BISMARCK, NORTH DAKOTA

APRIL 24, 1989

3:45 pm (CDT) THE PRESIDENT arrives Bismarck Municipal Airport, Bismarck, North Dakota and proceeds to Motorcade.

Met by:

The Honorable George A. Sinner
Governor of North Dakota

Mrs. George A. Sinner (Jane)
Wife of Governor Sinner

The Honorable Kent Conrad (D-ND)
U.S. Senate

The Honorable Byron Dorgan (D-ND)
U.S. House of Representatives

The Honorable Marlin Haakenson
Mayor of Bismarck

Mrs. Marlin Haakenson (Barbara)
Wife of Mayor Haakenson

Mr. Layton Freborg
North Dakota Chairman GOP

Mr. Jim Schlosser
State Co-Chairman
North Dakota Bush/Quayle '88

Mr. Mike Unhjem
State Co-Chairman
North Dakota Bush/Quayle '88

Mrs. Renee Doan
Executive Director
Bush/Quayle '88

Ms. Shanda Doan
Daughter of Mrs. Doan

3:50 pm THE PRESIDENT boards Motorcade and departs Bismarck Municipal Airport en route North Dakota State Capitol Building.

MOTORCADE ASSIGNMENTS:

Lead	R. Pharr
Spare	T. McBride Doctor
LIMO	THE PRESIDENT
Follow Up	
Control	S. Studdert J. Keller Mil. Aide
Support	M. Fitzwater Official Photographer Medic
Staff I	
Staff Van	
Guest Van	
Press Van I	J. Allison
Press Van II	

(Drive Time: 10 Minutes)

GUEST AND STAFF INSTRUCTIONS:

Upon arrival, Guests and Staff will be escorted to Holding Room or Staff Viewing Area.

Upon conclusion of ceremony, Guests and Staff will be escorted to Motorcade.

4:00 pm — THE PRESIDENT arrives State Capitol Building and proceeds to Second Floor Great Hall.

4:02 pm — THE PRESIDENT arrives Second Floor Great Hall.

EVENT: STAFF PHOTO WITH NORTH DAKOTA CENTENNIAL COMMISSION

CLOSED PRESS

OFFICIAL PHOTOGRAPHER

4:03 pm — THE PRESIDENT begins participation in Staff Photo with North Dakota Centennial Commission.

4:06 pm — THE PRESIDENT concludes participation in Staff Photo and proceeds to Holding Room.

4:08 pm — THE PRESIDENT arrives Holding Room and Holds Briefly.

4:10 pm — THE PRESIDENT departs Holding Room and proceeds to Off-Stage Announcement Area.

4:12 pm THE PRESIDENT arrives Off-Stage Announcement Area.

EVENT: NORTH DAKOTA CENTENNIAL GROVE CELEBRATION

OPEN PRESS

RUFFLES AND FLOURISHES

OFF-STAGE ANNOUNCEMENT

HAIL TO THE CHIEF

REMARKS

TREE PLANTING CEREMONY

4:13 pm THE PRESIDENT is announced onto Stage and proceeds to Seat on Dais.

4:14 pm THE PRESIDENT is introduced for Remarks by The Honorable Thomas Kleppe, former Secretary of Interior.

4:15 pm THE PRESIDENT Remarks.

4:30 pm THE PRESIDENT concludes Remarks and, accompanied by Former Governor Link and Governor Sinner, proceeds to Capitol Lawn.

4:33 pm THE PRESIDENT arrives Capitol Lawn and begins participation in Tree Planting Ceremony.

4:38 pm — THE PRESIDENT concludes participation in Tree Planting Ceremony, departs Capitol Lawn, and proceeds to Holding Room.

4:43 pm — THE PRESIDENT arrives Holding Room.

5:02 pm — THE PRESIDENT departs Holding Room and proceeds to Motorcade.

5:05 pm — THE PRESIDENT boards Motorcade and departs State Capitol Building en route Bismarck Municipal Airport.

MOTORCADE ASSIGNMENTS:

Same as on Arrival.

(Drive Time: 10 Minutes)

5:15 pm — THE PRESIDENT arrives Bismarck Municipal Airport and proceeds to board Air Force One.

5:25 pm (CDT) — THE PRESIDENT departs Bismarck, North Dakota en route San Jose, California.

(Flying Time: 3 Hours 15 Minutes)
(Interchange: Yes)
(Time Change: Back 2 Hours)
(Food Service: Dinner)

Davis/Wallace
April 20, 7 p.m.
Draft: Three
Title: Bismarck

PRESIDENTIAL REMARKS: CAPITOL SQUARE
BISMARCK, NORTH DAKOTA
MONDAY, APRIL 24, 2:30 p.m.

Thank you ~~for . . .~~ . It's good to see you all . . . Governor (George) Sinner, ~~Senators (Quentin) Burdick and~~ (Kent) Conrad, Congressman (Bryan) Dorgan, Majority Leader (Bill) Heigarrd (High-gard), Minority Leader (John) Olson, Speaker (Bill) Kretschmar (Kretch-mar), Majority Leader (Richard) Kloubec (Clough-back). . . . Thank you all for inviting me to dedicate North Dakota's Centennial Grove.

((When I accepted your invitation to come to Bismarck, I had no idea you were going to put me to work . . . A sapling, they said. Mr. President, all you have to do is plant a sapling. No one told me that the sapling in question is twelve-feet tall . . .))

This hardy elm is a descendant of a tree planted on the White House lawn by John Quincy Adams. Now it and its seedlings will be a part of North Dakota, forever . . .

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April 20, 7 p.m.
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This hardy elm is a descendant of a tree planted on the White House lawn by John Quincy Adams. Now it and its seedlings will be a part of North Dakota, forever . . .

Just a few years before this state was carved out of the Dakota territory, a young man from New York City set aside a prominent career in politics to become a North Dakota rancher. Having lost his wife and mother in a single day, he came to these parts almost insane with grief. No tenderfoot, he worked the range in the harshest weather, always leading, never following. He wore a sheriff's badge, and roamed the Badlands to singlehandedly bring the worst characters to justice. In short, Teddy Roosevelt became a man in North Dakota. And he became something else -- a guardian of nature. When he went back East, and back to politics, Teddy Roosevelt took with him an understanding that the seemingly endless resources of the West were threatened by the unfettered exploitation of man. As President, Teddy Roosevelt wrote these words to school children on Arbor Day, 1907: "A people without children would face a hopeless future; a country without trees is almost as hopeless."

So let us honor the coming 100th birthday of North Dakota, and the memory of the nation's first environmentalist, by dedicating this Centennial Bur oak ((100 feet from podium at 3 o'clock)), along with this White House elm. Before the year 2000, your state will plant 100 million trees -- almost half as many trees in one state as there are Americans in the Union. May each tree add to the abundance of the good life in North Dakota, and cleaner air for North America . . .

This forestation effort is just one of 600 ambitious centennial projects North Dakotans are taking on. You are fulfilling the spirit of volunteerism, from projects to help senior citizens, to the building of local and community centers, to a memorial for the North Dakotans who fell in war.

This year, you are also honoring those who settled here before North Dakota became a state, by honoring their children -- the Sons and Daughters of the Pioneers, some 3,000 strong.

And let us especially remember, in word and deed, those great peoples and great cultures here well before anyone else -- the Native Americans of North Dakota. These Americans knew the plains when buffalo ranged in the millions. We can learn from them a special, poignant knowledge that nature, once violated, is forever altered.

Around the world there is a growing recognition that environmental problems respect no borders. In these first few months in office, we've begun to act -- on our own, and in concert with other nations -- to face up to this fundamental fact. We've agreed that **all** nations must together ban CFCs, and prevent global warming. And, as the world wakes up to these problems, North Dakota is already at work -- planting trees that exchange carbon dioxide for fresh oxygen. What a fitting way to

celebrate your centennial -- by getting ready for the **next** 100 years.

As you have shown, we do not have to accept as inevitable the spoiling of our air, our rivers, our wetlands and our forests. When North Dakotans celebrate their bicentennial, these two trees will be mammoth, almost 50 feet tall, as hardy and strong as the people they represent. Let them stand as a symbol of our commitment to a clean and healthy environment. May we always have the priceless resource of the outdoors for the enjoyment of our children and our children's children.

Thank you for asking me to help you here today with this wonderful celebration. I will watch with interest, and lend a hand where I can, as this tree grows and develops, just like the Peace Garden state.

Happy birthday North Dakota. God Bless you, and God Bless America.

# # #

Davis/Wallace
April 20, 7 p.m.
Draft: Three
Title: Bismarck

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BISMARCK, NORTH DAKOTA
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To Speechwriters

Date 4-19-89 Time 10:55

WHILE YOU WERE OUT

Mr Erling Sanness

of Bismark —

Phone 701/255-4528

Area Code Number Extension

TELEPHONED	X	PLEASE CALL	X
CALLED TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		URGENT	
RETURNED YOUR CALL			

Message Pres Bush is planning a trip to Bismark - He has a P.R. idea to write into his speech.

Sallie

Operator

AMPAD EFFICIENCY®

23-023

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So let us honor the coming 100th birthday of North Dakota, and the memory of the nation's first environmentalist, by planting this Centennial Bur oak. Before the year 2000, your state will plant 100 million trees -- almost half as many trees in one state as there are Americans in the Union. May each tree add to the abundance of the good life in North Dakota, and cleaner air for North America . . .

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But we do not have to accept as inevitable the spoiling of our air, our rivers, our wetlands and our forests. When North Dakotans celebrate their bicentennial, this native Bur oak will be a mammoth tree, almost 50 feet tall, as hardy and strong as the people it represents. Let it stand as a symbol of our commitment to a clean and healthy environment. May we always have the priceless resource of the outdoors for the enjoyment of our children and our children's children.

Thank you for asking me to help you here today with this wonderful celebration. I will watch with interest, and lend a hand where I can, as this tree grows and develops, just like the Peace Garden state.

Happy birthday North Dakota. God Bless you, and God Bless America.

# # #

THE WHITE HOUSE

WASHINGTON

April 20, 1989

INFORMATION

MEMORANDUM FOR THE PRESIDENT

FROM: MARK DAVIS

THROUGH: CHRISS WINSTON

SUBJECT: Bismarck

You will stop briefly in Bismarck, North Dakota, to dedicate a "centennial grove" in front of the capitol grounds. North Dakota is celebrating the year of its 100th birthday with 600 civic activities. The centerpiece program encourages North Dakotans to plant 100 million trees by the year 2000. For this brief speech, I suggest pursuing the environmental angle by drawing on the tradition of a former North Dakota rancher -- Teddy Roosevelt.

Davis/Wallace
April 19, 9 a.m.
Draft: Two
Title: Bismarck

PRESIDENTIAL REMARKS: (CAPITOL SQUARE)
BISMARCK, NORTH DAKOTA
(April 24, t.b.d.)

Thank you Tom . . . It's good to see you all . . . Governor (George) Sinner, Senators (Quentin) Burdick and (Kent) Conrad, Congressman (Bryan) Dorgan, Majority Leader (Bill) Heigarrd (High-gard), Minority Leader (John) Olson, Speaker (Bill) Kretschmar (Kretch-mar), Majority Leader (Richard) Kloubec (Clough-back) . . . Thank you all for inviting me to dedicate North Dakota's Centennial Grove.

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range in the harshest weather, always leading, never following. He wore a sheriff's badge, and roamed the Badlands to singlehandedly bring the worst characters to justice. In short, Teddy Roosevelt became a man in North Dakota. And he became something else -- a guardian of nature. When he went back East, and back to politics, Teddy Roosevelt took with him an understanding that the seemingly endless resources of the West were threatened by the unfettered exploitation of man. As President, Teddy Roosevelt wrote these words to school children on Arbor Day, 1907: "A people without children would face a hopeless future; a country without trees is almost as hopeless."

So let us honor the coming 100th birthday of North Dakota, and the memory of the nation's first environmentalist, by planting this Centennial Bur oak. Before the year 2000, your state will plant 100 million trees -- almost half as many trees in one state as there are Americans in the Union. May each tree add to the abundance of the good life in North Dakota, and cleaner air for North America . . .

This forestation effort is just one of 600 ambitious centennial projects North Dakotans are taking on. You are fulfilling the spirit of volunteerism, from projects to help senior citizens, to the building of local and community centers, to a memorial for the North Dakotans who fell in war.

This year, you are also honoring those who settled here before North Dakota became a state, by honoring their children -- the Sons and Daughters of the Pioneers, some 3,000 strong.

And let us especially remember, in word and deed, those great peoples and great cultures here well before anyone else -- the Native Americans of North Dakota. These Americans knew the plains when buffalo ranged in the millions. We can learn from them a special, poignant knowledge that nature, once violated, is forever altered.

But we do not have to accept as inevitable the spoiling of our air, our rivers, our wetlands and our forests. When North Dakotans celebrate their bicentennial, this native Bur oak will be a mammoth tree, almost 50 feet tall, as hardy and strong as the people it represents. Let it stand as a symbol of our commitment to a clean and healthy environment. May we always have the priceless resource of the outdoors for the enjoyment of our children and our children's children.

Thank you for asking me to help you here today with this wonderful celebration. I will watch with interest, and lend a hand where I can, as this tree grows and develops, just like the Peace Garden state.

Happy birthday North Dakota. God Bless you, and God Bless America.

# # #

Davis/Wallace
April 18, 3 p.m.
Draft: Two
Title: Bismarck

PRESIDENTIAL REMARKS: (CAPITOL SQUARE)
BISMARCK, NORTH DAKOTA
(April 24, t.b.d.)

Thank you Tom . . . It's good to see you all . . . Governor (George) Sinner, Senators (Quentin) Burdick and (Kent) Conrad, Congressman (Bryan) Dorgan, Majority Leader (Bill) Heigarrd (High-gard), Minority Leader (John) Olson, Speaker (Bill) Kretschmar (Kretch-mar), Majority Leader (Richard) Kloubec (Clough-back) . . . Thank you all for inviting me to dedicate North Dakota's Centennial Grove.

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# # #

!R CASS 2; EXIT;

Davis/Wallace
April 18, 3 p.m.
Draft: One
Title:Bismarck

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BISMARCK, NORTH DAKOTA
(April 24, t.b.d.)

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((When I accepted your invitation to come to Bismarck, I had no idea that you were going to put me to work. A sapling, they said. Mr. President, all you'll have to do is to plant a sapling. No one told me that in North Dakota saplings are seven-feet tall . . .))

Just a few years before President Benjamin Harrison created this state, a young man from New York City set aside a prominent career in politics to become a North Dakota rancher. He came to these parts almost insane with grief, having lost his ~~wife~~ and mother ~~to illness~~ in a single day. No tenderfoot, he worked the range in the harshest weather, always leading, never following. He wore a sheriff's badge, and roamed the Badlands to

singlehandedly bring the worst characters to justice. In short, Teddy Roosevelt became a man in North Dakota. And he became something else -- a guardian of nature. When he went back East, and back to politics -- Teddy Roosevelt took with him an understanding that the seemingly endless resources and resilience of the West were no match for the unfettered exploitation of man.

So let us honor the coming 100th birthday of North Dakota, and the memory of the nation's first environmentalist, by planting this Centennial Ash. In the next ten years, your state will plant 100 million trees -- almost half as many trees in one state as there are Americans in the Union. May each tree add to the abundance of the good life in North Dakota, and cleaner air for North America . . .

This forestation effort is just one of 600 ambitious projects North Dakotans are taking on. You are fulfilling the spirit of volunteerism, from projects to help senior citizens, to the building of local and community centers, to a memorial for the North Dakotans who fell in war.

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But we do not have to accept as inevitable the spoiling of our air, our rivers, our wetlands and our forests. When North Dakotans celebrate their bicentennial, this ash will be a mammoth tree, as sturdy and strong as the ~~state~~ people it represents. Let it stand as a symbol of our commitment ~~and mine~~ to a clean and healthy environment. May we always have the priceless resource of the outdoors for the enjoyment of our children and ~~theirs~~ OUR C's C.

Thank you for ~~having~~ Madis ~~me here today~~ you here today to help with this wonderful celebration. I will watch with interest, and lend a hand where I can, as this tree grows and develops, ~~as has~~ just like the great state of North Dakota.

Thank you. God Bless you, and God Bless America.

1989 APR 18 AM 11:14

Davis/Wallace
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Draft: One
Title:Bismarck

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Good Joke

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Sportfishing
- Nat'l Rodeo Assoc

North Dakota

Officially classed as one of the seven west north central states of the United States, North Dakota is a land of clear skies, seemingly endless grain farms, and vast cattle ranches. North Dakota is even more rural, more agricultural, and more sparsely populated than the six other states of the region, and has less manufacturing. Its terrain rises through three regions from east to west, incorporating parts of the two major physiographic provinces that separate the Appalachian and the Rocky Mountain systems.

The state's 70,665 square miles (183,022 square kilometres) according to the 1970 census had only 617,761 inhabitants, showing a decrease of 2.3 percent from 1960. The largest city, Fargo, had fewer than 55,000 inhabitants, and Bismarck, the centrally located capital, some 35,000.

Among the last regions of the American frontier to be settled, the area admitted in 1889 as the state of North Dakota had experienced comparatively little of the fighting, lawlessness, and gold-rush excitement that give other frontier areas a colourful or lurid history. Instead the region had developed first as the home of hunting and farming Indian peoples, then as a trade hinterland for white fur traders and for steamboats working the upper Missouri from St. Louis, and last as a rich farming land for settlers. The cool, subhumid climate of its location made it ideal for spring wheat and for cattle ranching. With white settlement, the area inevitably developed a way of life dependent on outside centres of population, industry, and economic power. With adaptation to the environment, however, the people of North Dakota developed also constructive reactions to the circumstances that made their state dependent. (For information on related topics, see the articles UNITED STATES; UNITED STATES, HISTORY OF THE; NORTH AMERICA; and GREAT PLAINS.)

THE HISTORY OF NORTH DAKOTA

The recorded history of North Dakota falls into three periods: the period of Indian trade, from about 1738 to 1871; the period of white settlement, from 1871 to 1915; and the period of adaptation, since 1915.

Explorers and traders. Although European goods were traded among the Indian peoples before his arrival, the first-known white visitor to North Dakota was Pierre Gaultier de Varennes, sieur de La Vérendrye, a native of Canada who visited a cluster of earthen-lodge villages near present-day Bismarck in 1738. Traders from Hudson Bay and Montreal began to come on a regular basis in the 1790s. The most famous visitors of the early years were Meriwether Lewis and William Clark, whose expedition made winter camp in 1804–05 near present-day Stanton.

In the 1820s and 1830s American traders made the upper Missouri country a hinterland to St. Louis. They brought in guns, kettles, blankets, and axes, as well as liquor and disease. The white man's goods made the Indians dependent on the traders, his liquor demoralized them, and his diseases killed them. In 1837 smallpox, carried up the Missouri by passengers aboard a steamboat of the American Fur Company, reduced the Mandan population from about 1,800 to 125 in a few months. Indian hostility grew when steamboat traffic increased after the discovery of gold in Montana in 1862 and when the United States Army built forts along the rivers. In 1876 Col. George A. Custer and the 7th Cavalry set out from Ft. Abraham Lincoln, south of present-day Mandan, for their fateful encounter with the Sioux and Cheyenne on the Little Bighorn River.

Pioneering and statehood. The fur trade declined in the 1860s, and white settlement began in earnest in 1871, when railroads reached the Red River from St. Paul and Duluth. A flood of pioneers took up land under the Homestead Act and turned to wheat farming. During the period known as the Dakota Boom (from 1878 to 1886), the many giant farms advertised the new country, and North Dakota wheat made Minneapolis, Minnesota, the milling centre of the nation in the 1880s. The Northern Pacific and Great Northern railroads vied with one another to reach the richest grain centres. Dependence on wheat unified the farmers and strengthened the populist revolt against eastern monopolistic practices. The Dakota Territory was divided in 1889, and both North and South Dakota were admitted to the Union on November 2, 1889.

Populist strength

The modern state. Revolt against outside exploitation reached a climax soon after the period of pioneer settlement ended in 1915. Controlling the state government after the 1918 election, the Nonpartisan League enacted a socialistic program that included a state-owned bank and a state-owned flour mill and grain elevator. The league soon lost political control, but the North Dakota Farmers Union (founded in 1927) launched a strong cooperative movement to control the selling of grain and the purchase of farm supplies. Such radical farm movements made many North Dakotans oppose American intervention in both world wars, because they identified participation with war profits for Wall Street.

From 1915 on, North Dakota's history is marked by continuing adaptations to the cool, subhumid grassland environment. The most important of these have been the ever-increasing mechanization of agriculture, the enlargement of farms, the loss of rural population, and the widespread use of the automobile. After World War II came rural electrification, soil conservation, and highway construction. In the 1950s North Dakota became an oil-producing state, while the 1960s brought air bases, missile sites, and antiballistic-missile installations. National and international trends as well as internal adaptations began to influence the state as never before.

THE NATURAL AND HUMAN LANDSCAPE

Surface features. North Dakota is part of two major physiographic provinces. The eastern half belongs to the Central Lowland that stretches westward from the Appalachians, while the western half is part of the Great Plains that reach to the Rocky Mountains. The state is like three broad steps rising westward: the Red River Valley lies 800 to 1,000 feet above sea level, the Drift Prairie from 1,300 to 1,600 feet, and the Missouri Plateau from 1,800 to 2,500 feet. The highest point in the state is White Butte, at 3,506 feet (1,069 metres). The Central Lowland portion comprises the Red River Valley, a flat, glacial lake bed extending from ten to 40 miles on either side of the Red River of the North, and the Drift Prairie, a rolling country covered with glacial drift. On the west, the Missouri Escarpment separates the Drift Prairie from the Great Plains. The North Dakota portion of the Great Plains is known as the Missouri Plateau. East and north of the Missouri River, it is covered with a thick layer of glacial drift. The Altamont Moraine in this area, one of the principal flyways for migrating wildfowl, is full of potholes, lakes, and sloughs. Like the Drift Prairie, this region has a young drainage system, for rivers are few wherever the great ice sheets covered the land.

River systems

Forty-one percent of North Dakota is drained by the systems of the Red and Souris rivers, whose waters flow eventually into Hudson Bay. The Missouri Plateau and the James River system form a part of the drainage of the Missouri, which flows into the Mississippi and thence into the Gulf of Mexico. West of the Missouri River the landscape has been shaped by running water that has carried away as much as 1,000 feet of sedimentary deposits. In some places, especially along the Little Missouri River, it has carved spectacular cliffs, buttes, and valleys that form a spectacular landscape known as the North Dakota Badlands.

Climate. Its location at the centre of the North American continent gives the state a continental climate: hot summers and cold winters, warm days in summer and cool nights, low humidity and low precipitation, and much wind and sunshine. The western part of the state has lower humidity, lower precipitation, and milder winters than the eastern half. For the state as a whole, the average precipitation is about 17 inches (432 millimetres). The southwestern counties, the warmest, have an annual mean temperature of about 42° F (6° C); the

Populist strength

northeastern counties, the coldest, about 38° F (3° C). The growing season ranges from 134 days at Williston, in the northwest, to 104 days at Langdon, in the northeast.

Vegetation, soils, and animal life. Before settlement, 95 percent of the state was covered by grass, for low precipitation, drought, and grass fires discouraged trees. Long-lived perennial grasses begin to grow early in the spring, produce seed quickly, and go into a dormant state in drought. They protect the soil from erosion and provide food for grazing animals. The heavy grass cover of the Red River Valley and the Drift Prairie formed black soils, while the lighter grass cover of the Missouri Plateau formed lighter, thinner, dark-brown soils. The North Dakota grassland was a natural habitat for great herds of buffalo and antelope. Belts of timber and brush along the rivers provided homes for white-tailed deer, elk, and bear. Small buffalo herds today are protected in parks.

Human habitation. The regions are reflected to some degree in the character of the people. The inhabitants of the Missouri Plateau tend to be more informal and Western in their manners and dress, whereas those of the Red River Valley tend, perhaps, to be more reserved and Eastern. The Drift Prairie is a transition zone in this respect, as it is in climate and in plant and animal life.

The typical landscape of North Dakota

North Dakota is a land of large farms and ranches: a vast, open country with few fences. There is an awesome beauty in the great fields and pastures, the big sky, the endless view of flat or rolling prairie with the black earth of the plowed land, the green blanket of a new crop, or the yellow cover of ripened grain. The clean, dry air and the bright sun give a wholesome look to the land, but the large holdings, averaging more than 1,000 acres in 1970, make the countryside seem lonely and almost uninhabited. Outside of municipalities in 1970 there were only about three persons per square mile. Some 45,000 farms, more than one-half the number existing in 1933, have been absorbed since that year into neighbouring holdings.

With the loss of farm population many small towns have disappeared also, while in others businesses and houses stand empty. The larger cities and towns provide a sharp contrast, with their new stores, public buildings, and housing developments and their air of vigour and prosperity. The sparsity of population affects not only the state's economy but also the character of the people, who tend to be friendly, spontaneously helpful, and straightforward. Distances create isolation, but the electronic media now keep North Dakotans well informed about happenings elsewhere.

THE PEOPLE OF NORTH DAKOTA

Ethnic groups. When white traders reached what was to become North Dakota, several Indian peoples lived in the region: Mandans, Hidatsas, and Arikaras along the Missouri River, Chippewas and Crees in the northeast, Assiniboins in the north, Yanktonai and Wahpeton Dakotas in the southeast, and Teton Dakotas and Crows in the west. The fur trade brought Frenchmen, Scots, Englishmen, Canadians, and Americans, and, by 1800 the Métis, of mixed white and Indian ancestry were an established element in the population.

River systems

The earliest white settlers included many Norwegians, Canadians, and Germans whose people had migrated earlier to Russia. By 1890 the foreign-born constituted about 43 percent of the population, a higher percentage than in any other state; and by the census of 1920, when settlement had been completed, only 32 percent of the white population was of native-born American parentage.

Some Indians in North Dakota, like Indians in other states, form a submerged group with more than their share of poverty, ill health, and alcoholism. Others, however, have succeeded as farmers, ranchers, and professional men or in politics or sports.

Demography. After 1930, the population declined in every decade except the 1950s. The 1970 population included nearly 16,000 Indians and 2,500 blacks.

Population losses

North Dakota's birthrate is close to the national average, but for many years North Dakota had one of the lowest death rates in the nation. It would have experienced a rapid growth in population but for the heavy emigration that since 1930 has been greater than the excess of births over deaths. By 1960 nearly half of the persons born in North Dakota and still living resided in other states. Only Wyoming and Arkansas had lost a larger percentage of their natives. The lack of a diversified economy and, hence, of economic opportunities continues to account for most of this loss.

Within the state a steady migration from the farms and villages to the towns and cities has continued. The percentage of the population living in places of 2,500 or more, the U.S. minimum standard of the Bureau of the Census for "urban population," increased from about 17 in 1930 to about 45 in 1970. During the 1960s some counties in the central and western parts of the state lost one-fourth or one-fifth of their population. The four most populous counties, however, contained nearly 40 percent of the state's people. The density of the population declines to the west, as does the rainfall. Thus, in 1970 the eastern tier of counties in the Red River Valley, which contains the two largest cities, Fargo and Grand Forks, had a density of 23.9 persons per square mile; the central tier, 8.9 persons; and the western tier, 4 persons.

Religious affiliations. North Dakotans are a church-going people. Probably less than 10 percent of the population of an age for confirmation are not confirmed church members. About one-half of them are Lutherans, about one-third are Roman Catholics, and most of the rest are Methodists, Presbyterians, and members of the United Church of Christ.

THE STATE'S ECONOMY

North Dakota's cool, subhumid climate and its location far from the nation's markets have shaped its economy. Among the west north central group of states to which it belongs, North Dakota has the lowest farm income, the smallest cities, the lowest rainfall and temperature, the shortest growing season, and the least manufacturing.

Agriculture. The state produces beef cattle, is second in the nation in production of wheat, rye, and oats, and is first in barley and flaxseed. It also sends dairy products, sugar beets, and potatoes to outside markets, from which it buys its automobiles and trucks, its farm machinery and equipment, its automotive fuels, its lumber and building materials, and its clothing and television sets and other consumer goods. In 1970 manufacturing accounted for only about 10 percent of the state's income, and its lignite, the largest supply of solid fuel in the United States, plays a minor role in its economic life. Wheat is the most important source of farm income, but the nation's annual per capita consumption of wheat flour dropped significantly during the 1960s.

Major crops

Although agricultural production largely pays for the things the state buys in outside markets, it employs only about a fifth of the labour force—about 45,000 in 1970 compared to about 160,000 in nonfarm employment. Statistics on personal income show the relative unprofitability of agriculture, with governmental disbursements far exceeding farm income. In 1971 North Dakota ranked 43rd among the states in per capita income. Farming's economic disadvantages contrast sharply with its rapid increase in efficiency since World War II, with increased mechanization and the decline in number but increase in size of farms.

Other sources of income. The discovery of oil at Tioga in 1951 made North Dakota by 1970 the 14th largest producer of crude petroleum in the nation. The production of electrical power increased over 750 percent from 1950 to 1968. In the 1950s and 1960s the economy was stimulated by substantial investment of government funds in Garrison Dam, in highway construction, in rural electrification, in air bases, and in missile installations. Federal expenditures are of continuing importance in the state, which ranked sixth among all states in government payments to farmers in 1968, although the state was only 26th in cash receipts from marketings of crops and livestock.

Transportation. Intrastate and interstate traffic moves primarily over east–west and southeast–northeast routes and secondarily over north–south routes. It flows to and

from the principal trading centres within the state, the nearest metropolis—Minneapolis–St. Paul, in Minnesota—and the Pacific Northwest, with Fargo the chief centre for intrastate traffic. North Dakota's transportation network includes more than 5,000 miles of rail lines, nearly 9,000 miles of hard-surfaced and 57,000 miles of gravelled highways, and three airlines providing scheduled service to seven cities. In 1969 North Dakotans owned one motor vehicle for each 1.5 persons—only Wyoming and Nevada had a higher proportion nationally—and in 1971 the state ranked sixth in the amount spent on highways for each $1,000 of personal income.

ADMINISTRATION AND SOCIAL CONDITIONS

Structure of government. To many observers, North Dakota suffers from too much government. The state government has the usual structure: a governor who is elected for a four-year term, nine elected heads of executive departments, a bicameral legislature of 49 senators and 98 representatives, and several levels of state courts. In addition, it has nearly 150 departments, boards, and agencies, two state-owned industries, and 18 public institutions. In 1967 North Dakota ranked first among the states in number of elected officials per 10,000 population and second in local governments per 100,000 population. By 1971 almost 44,000 persons, including teachers, were employed by state and local government. In 1971 North Dakota ranked 26th in property taxes per capita, 31st in all taxes per capita, but only 43rd in personal income per capita. In the 1960s many of the state's leaders believed that the constitution of 1889, a document of detailed legislation rather than an effective framework for government, had become outmoded. In 1970 the voters authorized a constitutional convention; the new and simpler document was defeated at the polls in 1972.

Extensiveness of governmental machinery

Politics. Voting trends usually favour Republican candidates, but many voters are independent. In the 11 presidential elections from 1928 through 1968, the Republican candidate carried the state eight times, and in the 1960s the voters regularly elected a Republican majority to the legislature and a Democratic governor.

Education. In the late 1960s, 58 percent of North Dakota's high school graduates went on to college, and 17 percent to vocational school. Between 1959 and 1969 the number of school districts was reduced by nearly three-fourths, the number of one-room rural schools by nine-tenths, and the number of high schools by more than 100. The consolidation has been effective in providing better schools, but many observers feel even further reduction is necessary. Many high schools remained too small to provide adequate programs, since enrollments ranged from as few as 18 to almost 3,000.

Higher education has expanded spectacularly. Enrollments more than doubled during the 1960s in the ten state institutions. More than half were in the two universities, the University of North Dakota, in Grand Forks (founded in 1883), and North Dakota State University, in Fargo (1890), which offer a full range of undergraduate and graduate work.

Health and welfare. North Dakotans receive excellent medical care despite the small population scattered over a large area. Few people live more than a two-hour drive from one of the centres. Although some towns of less than 1,000 population have a doctor, medical practice is concentrated in the four larger cities—Fargo, Bismarck, Grand Forks, and Minot—often in group practice in well-equipped clinics. The state has 60 general hospitals, a rehabilitation centre, five regional mental-health centres, and a state hospital for the mentally ill. The state health department and smaller health districts provide public health services. Colleges of medicine and nursing at the University of North Dakota train health personnel.

Economic assistance and social services are provided by the state public-welfare board, county welfare boards, and private welfare agencies, especially denominational groups. The state welfare board gives aid to aged, blind, and disabled persons and to dependent children; it also provides eight regional social-service centres. County welfare boards administer general assistance and medical aid for the aged. Welfare assistance for able-bodied men is a minor expenditure. More than two-thirds of the funds paid to or for welfare recipients are from federal sources, while most of the remainder is from the state. Most of the money for dependent children, the second most expensive program, goes to families broken by divorce, separation, or desertion, although in the state only 36 children out of every 1,000 received such aid, compared with 75 nationally.

CULTURAL LIFE AND INSTITUTIONS

The arts. The traditional North Dakota spirit of self-reliance and voluntary cooperation, except where internal or external pressures have dictated institutionalization, is reflected in the cultural life of the state. Without a large metropolitan centre, North Dakota's cities and towns with universities or colleges provide the main cultural leadership. The three symphony orchestras have headquarters in Fargo, Minot, and Grand Forks, though they make appearances throughout the state. The North Dakota Ballet is located in Grand Forks, where in 1971 the University of North Dakota established the state's first College of Fine Arts. Most of the community art associations, public concert associations, and community theatre groups are also located in college or university towns. A summer School of Fine Arts is held at the unique International Peace Garden, a large and beautiful park that virtually eliminates the border between North Dakota and Manitoba near the Turtle Mountain area.

Interlocking educatic and cultural activities

There is a fair amount of federal-assistance funding for arts projects in the state, but most other funds for the arts, apart from those expended by educational institutions, have had to come from public subscription. In 1971, however, the modest state appropriation made to the North Dakota Council on the Arts and Humanities, the agency through which federal funds for the arts are dispensed, was looked on as the beginning of a long-term state commitment to the arts.

Libraries. Among the weakest aspects of North Dakota's cultural life is library service. Because the larger part of the population lives in the country or in small villages, about half of the people have virtually no contact with library facilities. The libraries of the 13 towns with 5,000 or more population vary widely in their adequacy. Civic leaders have sought to meet the needs of the rural population with county and regional libraries. By 1968 there were eight county and four regional libraries, and 15 bookmobiles were operating. In 1969 the State Library Commission had nearly $1,000,000 to improve rural services, 80 percent of which was from federal funds.

Folk culture. Indigenous folk traditions continue within the state among the Sioux, or Dakota, peoples of Fort Totten and Standing Rock Indian Reservation, among the Plains Ojibwa (locally called Chippewa) people of the Turtle Mountain Reservation and area, and among the people of the Three Tribes—the Arikaras, the Hidatsas, and the Mandans—of Fort Berthold. Traditional music and dances, together with beadwork and other crafts, attract many art lovers. The strong, well-defined pottery of the Three Tribes is particularly sought after.

Indian arts and other ethnic activity

Scandinavian cultural traditions remain vigorous. Though none of the 50 Norwegian-language newspapers published, often briefly, between 1878 and 1955 survives, Norwegian language and literature are taught at the University of North Dakota and in several elementary schools. The Sons of Norway have more than 9,000 members in the state. Norwegian costumes, customs, and cookery are observed on many occasions but especially on Norwegian Independence Day, May 17. North Dakotans of Icelandic, Czech, and German ancestry also retain some ethnic customs, and in many families the ancestral languages are still spoken.

Recreations. The individualistic character of North Dakotans is reflected in their sports and pastimes. In 1970 the state issued more than 80,000 fishing and 200,000 hunting licenses, not counting those for taking fur-bearing animals. Snowmobiling was on the increase—18,000 new vehicles were registered in 1968–70—but ice skating, skiing, and ice hockey remained popular winter sports.

Communications. In 1978, 26 AM and 12 FM radio stations and 11 television channels operated within the state. Cable television, some of it relaying Canadian and educational channels, was established in almost 40 communities. There are ten daily newspapers in the state, but the 89 weeklies are only a remnant of the nearly 350 that existed in 1915.

Prospects. In the future, North Dakota will probably see the continuation of the two most important trends of the recent past: the decline of the population in the countryside and small towns and the growth of larger geographical units to provide regional services. The first makes the second an essential consequence. As the population becomes sparser, it is necessary to enlarge administrative areas to incorporate enough people and enough potential income to insure the efficient provision of services.

The small population and relative lack of economic and political power sometimes lead North Dakotans to compare their state unfavourably with richer, more populous, and better known parts of the world, and self-disparagement has almost become a native trait. If the winters are longer and the opportunities are more restricted than elsewhere, however, North Dakota by and large retains a cleaner environment and a closeness to and understanding of the land—qualities of life that in the early 1980s were increasingly longed for and sought after, especially in the crowded and polluted cities of other regions of the United States. How or in what direction North Dakota might contribute to satisfying these needs and wants of the American population remains an unknown but intriguing question for the future.

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(E.B.R./B.O'K.)

Northern Ireland

The geographical position of Northern Ireland holds the key to much of its unique social, economic, and political development—a process beset by such deep-rooted antagonisms as to make the strife-torn nation globally significant in the 1970s, perhaps because it seemed to mirror, in microcosm and in the Northern Hemisphere, many of the problems then afflicting evolving nation-states in other areas of the world.

The country—created a self-governing state within the United Kingdom by the Government of Ireland Act of 1920—lies in the northeast of the island of Ireland, itself located on that western continental periphery often characterized as Atlantic Europe. Northern Ireland is often referred to as the province of Ulster (and its inhabitants as Ulstermen), though it includes only six of the nine counties which made up that historic Irish entity. It occupies 5,452 square miles (14,120 square kilometres) of land, about a sixth of the whole of the island, and is separated from Scotland, another constituent country of the United Kingdom, by the narrow North Channel, which is at one point only 13 miles wide. Historically, this channel has been a link rather than a barrier, and from the earliest times it has witnessed a constant coming and going of peoples. This interchange gave the northern part of the island a distinctive regional character confirmed during the Industrial Revolution when the province emerged as a linen-manufacturing region, and later strengthened when a shipbuilding and engineering industry, based on imported raw materials, made Belfast a major city. The intrusive influences that brought about this cultural and economic transformation were attenuated in the west and south, and the political border with the Republic of Ireland is more of a compromise conveniently based on long-existing country borders than a clear-cut regional boundary. The political separation of Northern Ireland has merely confirmed its economic position as a region existing within the framework of the United Kingdom as a whole, serving as an extension of the larger unit's industrial resources. Although the cultural links of some of the people of Northern Ireland with the Republic of Ireland are strong—and much in evidence politically since 1968—it seems as though these ties are likely to suffer increasing erosion as state legislation follows economic trends, and progressively caters to educational and social needs along lines similar to those introduced in England, Scotland, and Wales (see also BRITAIN AND IRELAND, HISTORY OF; UNITED KINGDOM).

THE LAND

Relief and soils. Northern Ireland can be thought of topographically as a saucer centred on Lough (lake) Neagh, the upturned rim of which forms the province's highlands. Five of the six former counties—Antrim, Down, Armagh, Tyrone, and Londonderry—met at the Lough, and each had a highland region on the saucer's rim. To the north and east the Antrim Plateau tilts upward toward the coast. It reaches heights of between 1,000 and 1,500 feet (300 and 450 metres), terminating in an impressive cliff coastline of basalts and chalk, broken by a series of the glaciated valleys known as glens, which face Scotland and are rather isolated from the remainder of the province. The rounded landscape of drumlins—smooth mounds left by the ice of the final glaciation—in the southeast (former County Down) is punctuated by Slieve Croob (1,755 feet [535 metres]) and culminates in the Mourne Mountains, which rise to Slieve Donard (2,796 feet [852 metres]) within two miles of the sea. This impressive landscape of granite peaks is bounded by Carlingford Lough to the south.

Topography

The scenery in the region of former County Armagh is gentler, but the land rises to 1,894 feet in Slieve Gullion near the border with the Republic. West of Lough Neagh the land rises gently to the more rounded Sperrin Mountains, shared by the former counties of Londonderry and Tyrone: Sawel (2,240 feet [683 metres]) is the highest of several hills over 2,000 feet. The sixth county, Fermanagh, was focussed geographically on its own lake

North Dakota

Officially classed as one of the seven west north central states of the United States, North Dakota is a land of clear skies, seemingly endless grain farms, and vast cattle ranches. North Dakota is even more rural, more agricultural, and more sparsely populated than the six other states of the region, and has less manufacturing. Its terrain rises through three regions from east to west, incorporating parts of the two major physiographic provinces that separate the Appalachian and the Rocky Mountain systems.

The state's 70,665 square miles (183,022 square kilometres) according to the 1970 census had only 617,761 inhabitants, showing a decrease of 2.3 percent from 1960. The largest city, Fargo, had fewer than 55,000 inhabitants, and Bismarck, the centrally located capital, some 35,000.

Among the last regions of the American frontier to be settled, the area admitted in 1889 as the state of North Dakota had experienced comparatively little of the fighting, lawlessness, and gold-rush excitement that give other frontier areas a colourful or lurid history. Instead the region had developed first as the home of hunting and farming Indian peoples, then as a trade hinterland for white fur traders and for steamboats working the upper Missouri from St. Louis, and last as a rich farming land for settlers. The cool, subhumid climate of its location made it ideal for spring wheat and for cattle ranching. With white settlement, the area inevitably developed a way of life dependent on outside centres of population, industry, and economic power. With adaptation to the environment, however, the people of North Dakota developed also constructive reactions to the circumstances that made their state dependent. (For information on related topics, see the articles UNITED STATES; UNITED STATES, HISTORY OF THE; NORTH AMERICA; and GREAT PLAINS.)

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From 1915 on, North Dakota's history is marked by continuing adaptations to the cool, subhumid grassland environment. The most important of these have been the ever-increasing mechanization of agriculture, the enlargement of farms, the loss of rural population, and the widespread use of the automobile. After World War II came rural electrification, soil conservation, and highway construction. In the 1950s North Dakota became an oil-producing state, while the 1960s brought air bases, missile sites, and antiballistic-missile installations. National and international trends as well as internal adaptations began to influence the state as never before.

THE NATURAL AND HUMAN LANDSCAPE

Surface features. North Dakota is part of two major physiographic provinces. The eastern half belongs to the Central Lowland that stretches westward from the Appalachians, while the western half is part of the Great Plains that reach to the Rocky Mountains. The state is like three broad steps rising westward: the Red River Valley lies 800 to 1,000 feet above sea level, the Drift Prairie from 1,300 to 1,600 feet, and the Missouri Plateau from 1,800 to 2,500 feet. The highest point in the state is White Butte, at 3,506 feet (1,069 metres). The Central Lowland portion comprises the Red River Valley, a flat, glacial lake bed extending from ten to 40 miles on either side of the Red River of the North, and the Drift Prairie, a rolling country covered with glacial drift. On the west, the Missouri Escarpment separates the Drift Prairie from the Great Plains. The North Dakota portion of the Great Plains is known as the Missouri Plateau. East and north of the Missouri River, it is covered with a thick layer of glacial drift. The Altamont Moraine in this area, one of the principal flyways for migrating wildfowl, is full of potholes, lakes, and sloughs. Like the Drift Prairie, this region has a young drainage system, for rivers are few wherever the great ice sheets covered the land.

River systems

Forty-one percent of North Dakota is drained by the systems of the Red and Souris rivers, whose waters flow eventually into Hudson Bay. The Missouri Plateau and the James River system form a part of the drainage of the Missouri, which flows into the Mississippi and thence into the Gulf of Mexico. West of the Missouri River the landscape has been shaped by running water that has carried away as much as 1,000 feet of sedimentary deposits. In some places, especially along the Little Missouri River, it has carved spectacular cliffs, buttes, and valleys that form a spectacular landscape known as the North Dakota Badlands.

Climate. Its location at the centre of the North American continent gives the state a continental climate: hot summers and cold winters, warm days in summer and cool nights, low humidity and low precipitation, and much wind and sunshine. The western part of the state has lower humidity, lower precipitation, and milder winters than the eastern half. For the state as a whole, the average precipitation is about 17 inches (432 millimetres). The southwestern counties, the warmest, have an annual mean temperature of about 42° F (6° C); the

northeastern counties, the coldest, about 38° F (3° C). The growing season ranges from 134 days at Williston, in the northwest, to 104 days at Langdon, in the northeast.

Vegetation, soils, and animal life. Before settlement, 95 percent of the state was covered by grass, for low precipitation, drought, and grass fires discouraged trees. Long-lived perennial grasses begin to grow early in the spring, produce seed quickly, and go into a dormant state in drought. They protect the soil from erosion and provide food for grazing animals. The heavy grass cover of the Red River Valley and the Drift Prairie formed black soils, while the lighter grass cover of the Missouri Plateau formed lighter, thinner, dark-brown soils. The North Dakota grassland was a natural habitat for great herds of buffalo and antelope. Belts of timber and brush along the rivers provided homes for white-tailed deer, elk, and bear. Small buffalo herds today are protected in parks.

Human habitation. The regions are reflected to some degree in the character of the people. The inhabitants of the Missouri Plateau tend to be more informal and Western in their manners and dress, whereas those of the Red River Valley tend, perhaps, to be more reserved and Eastern. The Drift Prairie is a transition zone in this respect, as it is in climate and in plant and animal life.

The typical landscape of North Dakota

North Dakota is a land of large farms and ranches: a vast, open country with few fences. There is an awesome beauty in the great fields and pastures, the big sky, the endless view of flat or rolling prairie with the black earth of the plowed land, the green blanket of a new crop, or the yellow cover of ripened grain. The clean, dry air and the bright sun give a wholesome look to the land, but the large holdings, averaging more than 1,000 acres in 1970, make the countryside seem lonely and almost uninhabited. Outside of municipalities in 1970 there were only about three persons per square mile. Some 45,000 farms, more than one-half the number existing in 1933, have been absorbed since that year into neighbouring holdings.

With the loss of farm population many small towns have disappeared also, while in others businesses and houses stand empty. The larger cities and towns provide a sharp contrast, with their new stores, public buildings, and housing developments and their air of vigour and prosperity. The sparsity of population affects not only the state's economy but also the character of the people, who tend to be friendly, spontaneously helpful, and straightforward. Distances create isolation, but the electronic media now keep North Dakotans well informed about happenings elsewhere.

THE PEOPLE OF NORTH DAKOTA

Ethnic groups. When white traders reached what was to become North Dakota, several Indian peoples lived in the region: Mandans, Hidatsas, and Arikaras along the Missouri River, Chippewas and Crees in the northeast, Assiniboins in the north, Yanktonai and Wahpeton Dakotas in the southeast, and Teton Dakotas and Crows in the west. The fur trade brought Frenchmen, Scots, Englishmen, Canadians, and Americans. and, by 1800 the Métis, of mixed white and Indian ancestry were an established element in the population.

The earliest white settlers included many Norwegians, Canadians, and Germans whose people had migrated earlier to Russia. By 1890 the foreign-born constituted about 43 percent of the population, a higher percentage than in any other state; and by the census of 1920, when settlement had been completed, only 32 percent of the white population was of native-born American parentage.

Some Indians in North Dakota, like Indians in other states, form a submerged group with more than their share of poverty, ill health, and alcoholism. Others, however, have succeeded as farmers, ranchers, and professional men or in politics or sports.

Demography. After 1930, the population declined in every decade except the 1950s. The 1970 population included nearly 16,000 Indians and 2,500 blacks.

Population losses

North Dakota's birthrate is close to the national average, but for many years North Dakota had one of the lowest death rates in the nation. It would have experienced a rapid growth in population but for the heavy emigration that since 1930 has been greater than the excess of births over deaths. By 1960 nearly half of the persons born in North Dakota and still living resided in other states. Only Wyoming and Arkansas had lost a larger percentage of their natives. The lack of a diversified economy and, hence, of economic opportunities continues to account for most of this loss.

Within the state a steady migration from the farms and villages to the towns and cities has continued. The percentage of the population living in places of 2,500 or more, the U.S. minimum standard of the Bureau of the Census for "urban population," increased from about 17 in 1930 to about 45 in 1970. During the 1960s some counties in the central and western parts of the state lost one-fourth or one-fifth of their population. The four most populous counties, however, contained nearly 40 percent of the state's people. The density of the population declines to the west, as does the rainfall. Thus, in 1970 the eastern tier of counties in the Red River Valley, which contains the two largest cities, Fargo and Grand Forks, had a density of 23.9 persons per square mile; the central tier, 8.9 persons; and the western tier, 4 persons.

Religious affiliations. North Dakotans are a church-going people. Probably less than 10 percent of the population of an age for confirmation are not confirmed church members. About one-half of them are Lutherans, about one-third are Roman Catholics, and most of the rest are Methodists, Presbyterians, and members of the United Church of Christ.

THE STATE'S ECONOMY

North Dakota's cool, subhumid climate and its location far from the nation's markets have shaped its economy. Among the west north central group of states to which it belongs, North Dakota has the lowest farm income, the smallest cities, the lowest rainfall and temperature, the shortest growing season, and the least manufacturing.

Agriculture. The state produces beef cattle, is second in the nation in production of wheat, rye, and oats, and is first in barley and flaxseed. It also sends dairy products, sugar beets, and potatoes to outside markets, from which it buys its automobiles and trucks, its farm machinery and equipment, its automotive fuels, its lumber and building materials, and its clothing and television sets and other consumer goods. In 1970 manufacturing accounted for only about 10 percent of the state's income, and its lignite, the largest supply of solid fuel in the United States, plays a minor role in its economic life. Wheat is the most important source of farm income, but the nation's annual per capita consumption of wheat flour dropped significantly during the 1960s.

Major crops

Although agricultural production largely pays for the things the state buys in outside markets, it employs only about a fifth of the labour force—about 45,000 in 1970 compared to about 160,000 in nonfarm employment. Statistics on personal income show the relative unprofitability of agriculture, with governmental disbursements far exceeding farm income. In 1971 North Dakota ranked 43rd among the states in per capita income. Farming's economic disadvantages contrast sharply with its rapid increase in efficiency since World War II, with increased mechanization and the decline in number but increase in size of farms.

Other sources of income. The discovery of oil at Tioga in 1951 made North Dakota by 1970 the 14th largest producer of crude petroleum in the nation. The production of electrical power increased over 750 percent from 1950 to 1968. In the 1950s and 1960s the economy was stimulated by substantial investment of government funds in Garrison Dam, in highway construction, in rural electrification, in air bases, and in missile installations. Federal expenditures are of continuing importance in the state, which ranked sixth among all states in government payments to farmers in 1968, although the state was only 26th in cash receipts from marketings of crops and livestock.

Transportation. Intrastate and interstate traffic moves primarily over east–west and southeast–northeast routes and secondarily over north–south routes. It flows to and

from the principal trading centres within the state, the nearest metropolis—Minneapolis–St. Paul, in Minnesota—and the Pacific Northwest, with Fargo the chief centre for intrastate traffic. North Dakota's transportation network includes more than 5,000 miles of rail lines, nearly 9,000 miles of hard-surfaced and 57,000 miles of gravelled highways, and three airlines providing scheduled service to seven cities. In 1969 North Dakotans owned one motor vehicle for each 1.5 persons—only Wyoming and Nevada had a higher proportion nationally—and in 1971 the state ranked sixth in the amount spent on highways for each $1,000 of personal income.

ADMINISTRATION AND SOCIAL CONDITIONS

Structure of government. To many observers, North Dakota suffers from too much government. The state government has the usual structure: a governor who is elected for a four-year term, nine elected heads of executive departments, a bicameral legislature of 49 senators and 98 representatives, and several levels of state courts. In addition, it has nearly 150 departments, boards, and agencies, two state-owned industries, and 18 public institutions. In 1967 North Dakota ranked first among the states in number of elected officials per 10,000 population and second in local governments per 100,000 population. By 1971 almost 44,000 persons, including teachers, were employed by state and local government. In 1971 North Dakota ranked 26th in property taxes per capita, 31st in all taxes per capita, but only 43rd in personal income per capita. In the 1960s many of the state's leaders believed that the constitution of 1889, a document of detailed legislation rather than an effective framework for government, had become outmoded. In 1970 the voters authorized a constitutional convention; the new and simpler document was defeated at the polls in 1972.

Extensiveness of governmental machinery

Politics. Voting trends usually favour Republican candidates, but many voters are independent. In the 11 presidential elections from 1928 through 1968, the Republican candidate carried the state eight times, and in the 1960s the voters regularly elected a Republican majority to the legislature and a Democratic governor.

Education. In the late 1960s, 58 percent of North Dakota's high school graduates went on to college, and 17 percent to vocational school. Between 1959 and 1969 the number of school districts was reduced by nearly three-fourths, the number of one-room rural schools by nine-tenths, and the number of high schools by more than 100. The consolidation has been effective in providing better schools, but many observers feel even further reduction is necessary. Many high schools remained too small to provide adequate programs, since enrollments ranged from as few as 18 to almost 3,000.

Higher education has expanded spectacularly. Enrollments more than doubled during the 1960s in the ten state institutions. More than half were in the two universities, the University of North Dakota, in Grand Forks (founded in 1883), and North Dakota State University, in Fargo (1890), which offer a full range of undergraduate and graduate work.

Health and welfare. North Dakotans receive excellent medical care despite the small population scattered over a large area. Few people live more than a two-hour drive from one of the centres. Although some towns of less than 1,000 population have a doctor, medical practice is concentrated in the four larger cities—Fargo, Bismarck, Grand Forks, and Minot—often in group practice in well-equipped clinics. The state has 60 general hospitals, a rehabilitation centre, five regional mental-health centres, and a state hospital for the mentally ill. The state health department and smaller health districts provide public health services. Colleges of medicine and nursing at the University of North Dakota train health personnel.

Economic assistance and social services are provided by the state public-welfare board, county welfare boards, and private welfare agencies, especially denominational groups. The state welfare board gives aid to aged, blind, and disabled persons and to dependent children; it also provides eight regional social-service centres. County welfare boards administer general assistance and medical aid for the aged. Welfare assistance for able-bodied men is a minor expenditure. More than two-thirds of the funds paid to or for welfare recipients are from federal sources, while most of the remainder is from the state. Most of the money for dependent children, the second most expensive program, goes to families broken by divorce, separation, or desertion, although in the state only 36 children out of every 1,000 received such aid, compared with 75 nationally.

CULTURAL LIFE AND INSTITUTIONS

The arts. The traditional North Dakota spirit of self-reliance and voluntary cooperation, except where internal or external pressures have dictated institutionalization, is reflected in the cultural life of the state. Without a large metropolitan centre, North Dakota's cities and towns with universities or colleges provide the main cultural leadership. The three symphony orchestras have headquarters in Fargo, Minot, and Grand Forks, though they make appearances throughout the state. The North Dakota Ballet is located in Grand Forks, where in 1971 the University of North Dakota established the state's first College of Fine Arts. Most of the community art associations, public concert associations, and community theatre groups are also located in college or university towns. A summer School of Fine Arts is held at the unique International Peace Garden, a large and beautiful park that virtually eliminates the border between North Dakota and Manitoba near the Turtle Mountain area.

Interlocking educational and cultural activities

There is a fair amount of federal-assistance funding for arts projects in the state, but most other funds for the arts, apart from those expended by educational institutions, have had to come from public subscription. In 1971, however, the modest state appropriation made to the North Dakota Council on the Arts and Humanities, the agency through which federal funds for the arts are dispensed, was looked on as the beginning of a long-term state commitment to the arts.

Libraries. Among the weakest aspects of North Dakota's cultural life is library service. Because the larger part of the population lives in the country or in small villages, about half of the people have virtually no contact with library facilities. The libraries of the 13 towns with 5,000 or more population vary widely in their adequacy. Civic leaders have sought to meet the needs of the rural population with county and regional libraries. By 1968 there were eight county and four regional libraries, and 15 bookmobiles were operating. In 1969 the State Library Commission had nearly $1,000,000 to improve rural services, 80 percent of which was from federal funds.

Folk culture. Indigenous folk traditions continue within the state among the Sioux, or Dakota, peoples of Fort Totten and Standing Rock Indian Reservation, among the Plains Ojibwa (locally called Chippewa) people of the Turtle Mountain Reservation and area, and among the people of the Three Tribes—the Arikaras, the Hidatsas, and the Mandans—of Fort Berthold. Traditional music and dances, together with beadwork and other crafts, attract many art lovers. The strong, well-defined pottery of the Three Tribes is particularly sought after.

Indian arts and other ethnic activity

Scandinavian cultural traditions remain vigorous. Though none of the 50 Norwegian-language newspapers published, often briefly, between 1878 and 1955 survives, Norwegian language and literature are taught at the University of North Dakota and in several elementary schools. The Sons of Norway have more than 9,000 members in the state. Norwegian costumes, customs, and cookery are observed on many occasions but especially on Norwegian Independence Day, May 17. North Dakotans of Icelandic, Czech, and German ancestry also retain some ethnic customs, and in many families the ancestral languages are still spoken.

Recreations. The individualistic character of North Dakotans is reflected in their sports and pastimes. In 1970 the state issued more than 80,000 fishing and 200,000 hunting licenses, not counting those for taking fur-bearing animals. Snowmobiling was on the increase—18,000 new vehicles were registered in 1968–70—but ice skating, skiing, and ice hockey remained popular winter sports.

Communications. In 1978, 26 AM and 12 FM radio stations and 11 television channels operated within the state. Cable television, some of it relaying Canadian and educational channels, was established in almost 40 communities. There are ten daily newspapers in the state, but the 89 weeklies are only a remnant of the nearly 350 that existed in 1915.

Prospects. In the future, North Dakota will probably see the continuation of the two most important trends of the recent past: the decline of the population in the countryside and small towns and the growth of larger geographical units to provide regional services. The first makes the second an essential consequence. As the population becomes sparser, it is necessary to enlarge administrative areas to incorporate enough people and enough potential income to insure the efficient provision of services.

The small population and relative lack of economic and political power sometimes lead North Dakotans to compare their state unfavourably with richer, more populous, and better known parts of the world, and self-disparagement has almost become a native trait. If the winters are longer and the opportunities are more restricted than elsewhere, however, North Dakota by and large retains a cleaner environment and a closeness to and understanding of the land—qualities of life that in the early 1980s were increasingly longed for and sought after, especially in the crowded and polluted cities of other regions of the United States. How or in what direction North Dakota might contribute to satisfying these needs and wants of the American population remains an unknown but intriguing question for the future.

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(E.B.R./B.O'K.)

Northern Ireland

The geographical position of Northern Ireland holds the key to much of its unique social, economic, and political development—a process beset by such deep-rooted antagonisms as to make the strife-torn nation globally significant in the 1970s, perhaps because it seemed to mirror, in microcosm and in the Northern Hemisphere, many of the problems then afflicting evolving nation-states in other areas of the world.

The country—created a self-governing state within the United Kingdom by the Government of Ireland Act of 1920—lies in the northeast of the island of Ireland, itself located on that western continental periphery often characterized as Atlantic Europe. Northern Ireland is often referred to as the province of Ulster (and its inhabitants as Ulstermen), though it includes only six of the nine counties which made up that historic Irish entity. It occupies 5,452 square miles (14,120 square kilometres) of land, about a sixth of the whole of the island, and is separated from Scotland, another constituent country of the United Kingdom, by the narrow North Channel, which is at one point only 13 miles wide. Historically, this channel has been a link rather than a barrier, and from the earliest times it has witnessed a constant coming and going of peoples. This interchange gave the northern part of the island a distinctive regional character confirmed during the Industrial Revolution when the province emerged as a linen-manufacturing region, and later strengthened when a shipbuilding and engineering industry, based on imported raw materials, made Belfast a major city. The intrusive influences that brought about this cultural and economic transformation were attenuated in the west and south, and the political border with the Republic of Ireland is more of a compromise conveniently based on long-existing country borders than a clear-cut regional boundary. The political separation of Northern Ireland has merely confirmed its economic position as a region existing within the framework of the United Kingdom as a whole, serving as an extension of the larger unit's industrial resources. Although the cultural links of some of the people of Northern Ireland with the Republic of Ireland are strong—and much in evidence politically since 1968—it seems as though these ties are likely to suffer increasing erosion as state legislation follows economic trends, and progressively caters to educational and social needs along lines similar to those introduced in England, Scotland, and Wales (see also BRITAIN AND IRELAND, HISTORY OF; UNITED KINGDOM).

THE LAND

Relief and soils. Northern Ireland can be thought of topographically as a saucer centred on Lough (lake) Neagh, the upturned rim of which forms the province's highlands. Five of the six former counties—Antrim, Down, Armagh, Tyrone, and Londonderry—met at the Lough, and each had a highland region on the saucer's rim. To the north and east the Antrim Plateau tilts upward toward the coast. It reaches heights of between 1,000 and 1,500 feet (300 and 450 metres), terminating in an impressive cliff coastline of basalts and chalk, broken by a series of the glaciated valleys known as glens, which face Scotland and are rather isolated from the remainder of the province. The rounded landscape of drumlins—smooth mounds left by the ice of the final glaciation—in the southeast (former County Down) is punctuated by Slieve Croob (1,755 feet [535 metres]) and culminates in the Mourne Mountains, which rise to Slieve Donard (2,796 feet [852 metres]) within two miles of the sea. This impressive landscape of granite peaks is bounded by Carlingford Lough to the south.

Topography

The scenery in the region of former County Armagh is gentler, but the land rises to 1,894 feet in Slieve Gullion near the border with the Republic. West of Lough Neagh the land rises gently to the more rounded Sperrin Mountains, shared by the former counties of Londonderry and Tyrone: Sawel (2,240 feet [683 metres]) is the highest of several hills over 2,000 feet. The sixth county, Fermanagh, was focussed geographically on its own lake