



Case Study: Drought

> Section A) The Dust Bowl Drought in Canada and the United States (1929-37)

Natural environmental changes can have dramatic effects on human, plant and wildlife populations. For instance, when a tornado hits, it can tear down houses, uproot trees and other plants, and pick up any animals in its path. It sometimes takes several years or longer for towns to be rebuilt and populations of animals and plants to recover.

Human influence can also cause environmental changes and social upheaval. In Europe, there have been many historical examples of forestry boom towns created using profits from lumber. These towns prospered for as long as the trees lasted. But once the forests were depleted, there was no more profit, and these towns were soon wiped out by economic collapse.

The Dust Bowl Drought in the 1930s is an example where environmental conditions and human influence combined to cause disastrous changes in the United States and Canada. Here, a severe dry spell, combined with poor farming practices, caused a major drought with horrible consequences to the land and people who lived on it.

Changes in weather are natural. But in the last century, we've learned that human activities have been largely responsible for driving massive changes in our climate that often have catastrophic environmental consequences.



Name: _____

1. The Dust Bowl Drought was a natural disaster that devastated farmers in the Canadian Prairies, all the way through the Great Plains to Texas during the 1930s.

Massive droughts came in waves throughout the '30s. Without rain, crops soon died, and farmers didn't have enough time to recover before the next drought hit. The dry topsoil turned to dust, which was lifted by the wind into clouds so thick they concealed the sun.

These terrible dust storms were called "black blizzards". Some were so severe that they carried dirt across the country and all the way to the Atlantic Ocean. In the United States, dirt rained down on cities like Chicago, Buffalo, Boston, New York City and Washington. One winter, the snow that fell in New England was red from the soil.

Hundreds of thousands of Canadian and American farmers helplessly watched as their livelihood dried up and blew away. Many were forced to give up their farms and moved east and west, looking for work.



"Black blizzard"

Canon



Name: _____

2. Although drought was the main cause of the “black blizzards”, some typical farming practices made the situation much worse.

By 1937, both the Canadian and American governments created soil conservation programs, encouraging farmers to improve their farming practices. Once the rains returned, these changes gradually helped to alleviate the damage caused by the Dust Bowl Drought.

Do some independent research to learn how the following three farming practices at that time helped create conditions for “black blizzards”:

i) Overfarming:

ii) No Grasslands Between Fields:

iii) Not Enough Crop Rotation:





Name: _____

3. Anne Bailey was a farmer's wife living in Saskatchewan during the Dust Bowl Drought.

In 1929, the drought hit and destroyed most of their crops within the year. Her husband joined many other farmers who migrated to the city for work. Bailey stayed on the farm with their children to keep the farm running as much as she could.

She described the first "black blizzard" that hit her farm:

"My son came running into the house greatly excited. 'Come quick, Mom,' he shouted, 'there's a big black cloud coming in the sky.' He ran out ahead of me and pointed to the western sky where sure enough there was the blackest, most terrifying cloud I have ever seen on the horizon. It was moving very quickly and the edge of it was rolling along.

Panic rose in me. What should I do? Where should we go? The house was sure to be blown away and our nearest neighbour was a mile away. At the rate the cloud was moving I could never make it as I would have to carry the baby. I shut the door tight, picked up the baby and yelling at the other two to follow, I ran for the dug-out barn. Already the shadow of the cloud was upon us.

When it was light enough for me to see the forms of the cattle, I knew it was safe to open the door, so once again I looked outside. ...Everything – land, air, sky – was a dull grey colour... Our feet sank in sand and we breathed and tasted sand. Such a mess."

Excerpt reproduced from *Canada: A People's History – The Dust Bowl*.
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Name: _____

4. Draw a comic strip that depicts Anne Bailey's experience during the "black blizzard", from first hearing about the storm, to what she saw after it had passed.

The "Black Blizzard"





> Section B) Riding The Rails

1. The On-To-Ottawa Trek, 1935

In the early 1930s, drought and the Great Depression drove thousands of young men to leave their families and ride freight trains to cities in search of work. With not enough jobs to be found, these young men wandered the city streets, idle, frustrated and hungry.

To prevent violence and riots, Prime Minister R.B. Bennett set up work camps for these men in Northern Ontario and in remote areas of British Columbia. The men who worked there called them "slave camps". For twenty cents a day, they performed back-breaking labour six-and-a-half days a week, digging ditches or building roads.

In 1932, relief camp workers formed a union. In the spring of 1935, they decided to go on strike, demanding proper wages, better food, clothing and shelter. They flooded the streets of Vancouver shouting "When do we eat?" and "Work and wages!" The federal government refused to negotiate, and workers decided to state their demands in Ottawa.

On June 3rd, 1935, the first group of workers hopped on boxcars in Vancouver, on their "On-to-Ottawa Trek". At each stop, they were joined by more "trekkers" and were offered food and shelter by women's groups, churches, unions and other supportive citizens.

By mid-June, over 2000 trekkers had reached Regina. And thousands more were waiting to join them in Winnipeg, Thunder Bay and Toronto. Prime Minister Bennett ordered the Canadian Pacific Railroad to ban trekkers as trespassers. Any trekker trying to travel east out of Regina was arrested. On July 1st, police arrived to arrest trek leaders, which resulted in the Regina Riot. By the end of the day, one policeman was killed and hundreds of trekkers and their supporters were shot, beaten or injured.

After the riot, union leader Arthur Evans met with the Prime Minister, but they argued fiercely and couldn't come to an agreement. The trek never made it further east than Regina. However, the On-To-Ottawa Trek became an important historical example of what can happen when workers are mistreated. It also helped prompt the Canadian government to provide more social assistance programs, unemployment insurance, and job creation programs.





Name: _____

2. Many of the men who traveled in freight trains in search of work were no older than 16 years old. On a blank piece of paper write a fictional journal entry about a young man riding the rails across Canada. What would it be like to leave your family, with no money in your pocket or food in your belly, and hop on a freight train to places unknown? What would he see and feel as he traveled across Canada? Who would he meet? What would he do for money and food?

> **Section C) The “Push/Pull” of Migration**

1. To ‘migrate’ means to move from one country or place to another. There are two types of migration: Emigration is the process of leaving your country or place to move elsewhere. Immigration is the process of settling in a new country or place.

Many environmental conditions can encourage people to flock (immigrate) to, or leave (emigrate from), an area of land. Identify the following environmental conditions as **“Push”** (meaning, they drive people from their homes) or **“Pull”** (meaning, they draw people to a new area) factors of migration.

- i) Drought: _____
- ii) Rich soil: _____
- iii) Tornado/hurricane: _____
- iv) River or open waterway: _____
- v) Deposits of gold: _____
- vi) Deposits of oil: _____
- vii) Flood: _____
- viii) Tsunami: _____
- ix) Fresh water resources: _____
- x) Earthquake: _____





Name: _____

2. Choose two of the environmental conditions listed on the previous page that **push** people from their homes. In the suitcases below, name each condition and do some research to describe one historical example of a place and time when that condition pushed people to leave their homes.

Condition: _____

Historical Example:

Condition: _____

Historical Example:





Name: _____

3. Choose two of the environmental conditions listed previously that **pull** people toward new homes. In the suitcases below, name each condition and do some research to describe one historical example of a place and time when that condition pulled people to new homes.

Condition: _____

Historical Example:

Condition: _____

Historical Example:

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Name: _____

> **Section D) Your Ideal Town**

As a class or in groups, design and draw your ideal town. You can use the community you live in as the basis, but add features that you think will attract immigrants. What are some of the features of the land or community that you think will be important to make your town popular with new immigrants? Remember to include water and access to water for your residents.





Answers: Case Study: Drought

Section A) The Dust Bowl Drought in Canada and the United States (1929-37)

2.

- **Overfarming:** The high price of wheat during World War I encouraged farmers to grow more wheat to increase their profits by plowing as much available land as they could, leaving few areas of grasslands between farms.
- **No Grasslands Between Fields:** Grasses protect soil from being blown by wind, and roots hold soil together in clumps and help to retain moisture. Without grasslands to keep the soil in place, over-plowed topsoil had no protection from the harsh sun and wind, so it dried up and blew away.
- **Not Enough Crop Rotation:** Different crops use the soil in different ways. For instance, hay keeps the soil clumped in large particles, while wheat breaks it down. For this reason, farmers rotate their crops to prevent the soil from breaking down too much. But in the '30s, the high price of wheat encouraged farmers to use almost all available land for wheat. This led the soil to break down. Small particles of soil are much lighter and therefore are easily picked up by the wind.

4. Open - Comic strip

Section C) The “Push/Pull” of Immigration

- i) Push
- ii) Pull
- iii) Push
- iv) Pull
- v) Pull
- vi) Pull
- vii) Push
- viii) Push
- ix) Pull
- x) Push

Canon



Answers: Case Study: Drought (continued)

2. A few possible examples (of many):

Drought:

- China in 1941-1943.
- Ethiopia in 1984 -1985.
- Present day Australia (currently experiencing its worst drought in history).

Rich soil:

- Canada in the 1800s.
- The United States in the 1800s.
- Fertile Crescent in the Middle East as early as 8000 B.C.

Tornado/Hurricane:

- Tri-State Tornado in Missouri, Illinois, and Indiana in 1925.
- The Great Natchez Tornado in Mississippi in 1940.
- East Pakistan in 1970.
- Bengal, India in 1737.
- Haiphong, Vietnam in 1881.

River or open waterway:

- St. Lawrence Seaway, United States and Canada (Iroquois, Algonquin and other aboriginal settlements in the area date back over 9000 years. European explorers arrived in the 1500s).
- The Nile River (first settled by the ancient Egyptians more than 3000 years ago).
- The Congo River (tribes relied on it for centuries before European settlers arrived in the 1870s).
- The Yangtze River (remains indicate that human rice fields existed here more than 6000 years ago).
- The Amazon (Spanish first explored here in 1500s. Before that, indigenous groups lived here for centuries, although many moved inland to escape enslavement).
- The Cape of Good Hope (Ancient human-made tools found here date back as far as 600,000 years ago. The first European explorers arrived in the 1400s, and were settling there by the 1600s.)

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Answers: Case Study: Drought (continued)

Deposits of gold:

- South Australia (rush between 1881-1892).
- Yukon/Klondike (rush began in 1897, lasted into the early 1900s).
- Alaska (rush began in 1849, lasted into the early 1900s).
- California (1848-1855).
- The Cariboo Gold Rush in British Columbia (1860s).

Deposits of oil:

- Alberta (present day).
- Texas (after 1925).
- Saudi Arabia (after 1970s).
- Russia (present day).
- Iran (after 1970s).
- Iraq (after 1970s).

Flood:

- Huang He (Yellow) River, China in 1642, 1887, 1931, or 1938.
- Ru River, Banquiao Dam, China in 1975.

Tsunami:

- Indian Ocean in 2004.
- Coast of Japan in 1896.

Fresh water resources:

- The Great Lakes (First Nations arrived over 10,000 years ago. European settlement occurred in the 17th century. Now, home to one-tenth of the population of the United States, and one-quarter of Canada's population).
- Ogallala Aquifer in Nebraska (first tapped for irrigation in 1911. Large scale use began in the 1930s to help alleviate Dust Bowl Drought. Irrigation has changed settlement and helped create America's breadbasket).
- Lake Victoria, Africa (The Bantu people settled here as early as 1000 A.D. Europeans "discovered" the lake in 1858.).

Canon



Answers: Case Study: Drought (continued)

- Lake Eyre, Australia (Though nomadic aboriginal groups have relied on and traveled through the basin for thousands of years, European settlement started in 1840 and became the town of Marree in 1883.)

Earthquake:

- Shaanxi Province, China in 1556.
- Tangshan, China in 1976.
- Aleppo, Syria in 1138.
- Damghan, Iran in 1956.

Section D) Your Ideal Town

Open

Canon