

# CANADIAN GEOGRAPHIC IN THE CLASSROOM

Article 'TITANS of the Great Lakes'  
Issue July/August 2017



The physical size of Canada provides both tremendous opportunities and challenges. We are fortunate to have such a vast array of resources distributed throughout our vast land. These resources have helped to make Canada one of the most developed countries in the world. Yet, the sheer size of the country, along with the distribution of the resources and the population, makes transportation throughout the country difficult. Trying to effectively move 35,000,000 people, the natural resources we produce, and the finished products we use, throughout almost 10,000,000 km<sup>2</sup> is a massive challenge.

“TITANS of the Great Lakes” is a fascinating article that introduces students to life on the St. Lawrence and the Great Lakes Seaway. This waterway has played a huge role in the development of Canada ever since Indigenous peoples first used the system to travel throughout the central region of the country. Since then, countless immigrants have travelled towards their final destination through the waterway, and since the opening of the Seaway in 1959, millions of tons of cargo have passed through the Seaway.

This article should inspire students to learn more about one of Canada’s most important transportation links and engineering marvels. Several other articles published in previous *Canadian Geographic* issues, related to the Great Lakes St. Lawrence Seaway, can provide additional information about the waterway. Have students read this article, and perhaps look at a few older *Canadian Geographic* articles. Here are some recommended additional *Canadian Geographic* articles related to the Great Lakes – St. Lawrence Seaway:

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|--|----------------------------|
| A Sailor’s Life in a Great Lakes Freighter | December 1980/January 1981 |
| Seaway Odyssey: A Laker Voyage Epic        | October/November 1985      |
| East Meets West at Thunder Bay             | February/March 1991        |
| Inland Superhighway                        | July/August 2009           |
| Seaway’s Birthday                          | July/August 2009           |
| The Dredge Report                          | November/December 2002     |
| Great Lakes Takeover                       | March/April 2002           |
| Lake Erie’s “Dead Zone”                    | September/October 2003     |
| The Ills of Erie                           | September/October 2003     |
| Mapping the Ills of the Great Lakes        | July/August 2013           |

The following websites provide useful information:

[greatlakes-seaway.com](http://greatlakes-seaway.com)  
[greatlakes-seaway.com/en/pdf/resources\\_seawaymap\\_back.pdf](http://greatlakes-seaway.com/en/pdf/resources_seawaymap_back.pdf)

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## Some key questions for delving into the operation and importance of the Great Lakes – St. Lawrence Seaway:

- When was the Great Lakes – St. Lawrence Seaway created?
- With the creation of this system, large vessels could travel all the way from the Atlantic Ocean to ports in Lake Superior. Why was this considered to be advantageous compared to the method(s) previously used to transport goods in the area?
- Who administers the Seaway?
- In order to take a ship from the Atlantic Ocean to Lake Superior, how much elevation must be overcome?
  - ▷ How does the system allow the ships to overcome this challenge of increased elevation?
- How many ports are there in the system? (Canadian/American)
- What are the major products shipped on the Great Lakes and the St. Lawrence Seaway?
  - ▷ Sketch a flow map (proportional arrow map) that shows the points of origin and destinations for the major products shipped within the system.
- Ship traffic is often described as upbound or downbound. What direction does each term represent?
- Over the past few decades the size of cargo ships plying the world's oceans has increased tremendously. The same has not happened with ships using the Great Lakes – St. Lawrence Seaway. Why not?
  - ▷ Although they are not larger, the 'new' ships that use the system are much better than the older ones. How have they been improved?
- How has life aboard the freighters changed for sailors since the early 1980s?
- What are the significant challenges/problems associated with the use of the Great Lakes – St. Lawrence Seaway?
  - ▷ What is being done to overcome these challenges/problems?
- How did the creation of the Great Lakes – St. Lawrence Seaway affect the ports on the East coast of Canada such as Halifax and Saint John?
- Not only have oceangoing vessels become much larger over the past few decades, but containers has also become a mainstay of the shipping industry.
  - ▷ Why has the use of containers become so common?
  - ▷ How have these two changes affected the ship traffic at Canada's East coast ports and on the Seaway?



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After the students have examined the Great Lakes – St. Lawrence Seaway, encourage them to look at some other fascinating Canadian transportation ideas that have developed as a result of Canada's geography.

Canada is a world leader in the use and development of bush planes and Short Take-off and Landing planes (STOL) used on hundreds of lakes and small, often remote, airfields throughout Canada. There are 3 interesting articles in past issues of *Canadian Geographic* dealing with these planes and their importance in the development of Canada.

|   |               |
|---|---------------|
| The Fox Moth: Biplane that Became a Legend of the North | Oct/Nov 1990  |
| Norsemen : Tribute to a Great Bush Plane                | Aug/Sept 1985 |
| STOL Dash 7 Conquers the Toughest Geography             | Apr/May 1981  |

*Canadian Geographic* articles have also explored the use of airships to move large quantities of material to and from remote locations where traditional transportation systems are not available.

|                                     |               |
|-------------------------------------|---------------|
| Neither a bird nor a plane          | April 2012    |
| Sky Highway                         | May/June 2005 |
| Airships: The Key to Our Frontiers? | Feb/Mar 1983  |