

## Culminating Project Ecozone/National Project

Each student is to design a Travel Brooklet for one of Canada's National Parks and the Ecozone that it is located in. In addition to work of a descriptive nature, students must use appropriate maps, graphs, pictures, and organizers. In analyzing the natural, social, and economic factors that contribute to the characteristics of the selected region, each student will also make predictions and plans for the future.

**Due:** \_\_\_\_\_

**Special Note:** Families studying a potential tourist destination would not be interested in soil profiles and growing seasons, but would be interested in other aspects of Ecozones like good climate conditions, attractive scenery, special wildlife and popular recreational activities.

### Information to be Included

#### **Part A: Rationale**

- Explain the purpose for the existence of the National Parks System in Canada.
- Explain the purpose for the existence of your chosen national park.

#### **Part B: Location**

- Location of the ecozone and national park within Canada.
- Include one political map and one national park map accompanied by a description of the location of your park.

#### **Part C: Landforms**

- Describe the physical geography of the landscape found in the Ecozone and national park.
- Describe the processes involved in shaping the landscape.
- Include pictures to highlight the features of the landscape found in your region.

#### **Part D: Climate**

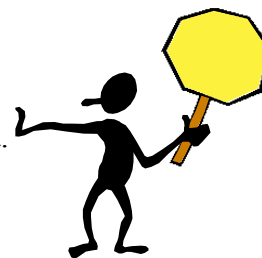
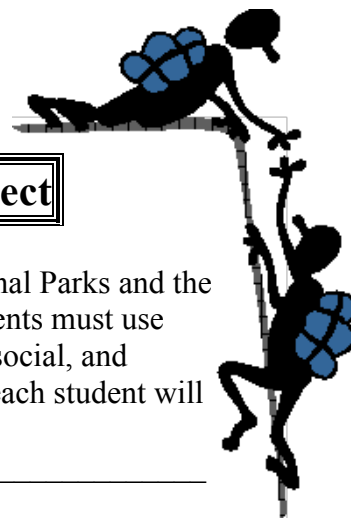
- Description of the climate found in the Ecozone region.
- Acquire a climate graph statistic representative of the area.
- Provide a climate graph analysis for the region.

#### **Part E: Vegetation**

- Provide a description of the vegetation found in the national park and Ecozone.
- Highlight the relationship between climate, soils, and vegetation.
- Provide photographs to highlight this component.

**Example:** When visiting the Northern Arctic Ecozone, you will experience 24 hours of daylight and see the tundra's hundreds of species of lichens and mosses. In the very short Arctic summer, you will see unlimited views of Arctic Poppies, etc.

**Example:** What will draw you to the Pacific Maritime Ecozone are the amazing temperate rainforests and plenty of precipitation.



**Part F: Wildlife**

- Describe the wildlife that can be found living in your national park. Try to describe at least **five** of the most commonly found creatures that live in the area.
- Research any particular adaptations the animals have for living in the area.
- Provide photographs to illustrate your descriptions.

**Part G: Recreational Activities**

- Research any recreational activities that are available in the national park and the Ecozone.
- What do people do for fun in your national park and Ecozone?

**Part H: Human/Economic Activities**

- Describe the settlement patterns, major cities in your Ecozone region.
- Describe the economy and types of industry found there.
- Highlight the settlement patterns/human activities that would attract tourists to your Ecozone.

*Example:* Early human activity in the Hudson Bay Plains included fur trading. Today the historic old forts are a popular tourist destination. Towns like Churchill and Moosonee are popular locations for those who enjoy fishing and the great outdoors.

**Part I: Future Human Environmental Interactions**

- The government has allocated one billion dollars to be spent on economic development and environmental protection in your Ecozone. Write a proposal to the minister of the environment outlining the issues/problems that you are faced with, and you believe the money should most wisely be spent.
- *Note:* Since each Ecozone has its own unique characteristics, each will have its own problems/changes occurring that will be managed.

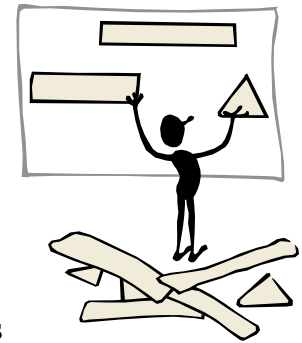
*Example:* Pollutants that might need to be monitored and managed or banned.  
 Urban growth/encroachment  
 Should natural resources be developed even though there are implications on the environment (mining and wastes, forestry and clear-cutting)  
 Development versus conservation/preservation

Try to incorporate any maps diagrams or pictures into your writing. This will make your descriptive sections more appealing. Also, include a small caption at the bottom of any map diagram or picture to explain what they are trying to show the reader.

## Referencing Sourced Material/Bibliography

- You must properly reference sourced written material that came from someone else and include a bibliography on a separate piece of paper at the end of your assignment.
- An example sheet is included in this package to show you how to write these.
- If you are caught copying your assignment will get a **zero**.

## Support Materials



### Handouts found on (<http://www.geography.amscotta.com>):

- Ecozones/National Parks of Canada List
- National Park Information Sheet – information on specific park
- Assignment Outline – requirements of the assignment
- Blank climate graphs and information sheet on how to acquire the statistics
- Blank political map of Canada
- Referencing and Bibliography

### References:

- Each student will have a particular National Park to do
- A handout of that particular National Park will be provided to the student, which basically helps them get started with the project.
- Each sheet will have the particular website from which to start gathering information.
- It is a good idea to e-mail or phone (with your parents permission due to applicable long distance charges) the park you are doing to try and get an information package about your national park by mail. Just remember it might take four weeks or more for it to come by mail.

### Previous Project Examples:

- Projects from the previous year will be circulated when the assignment is first assigned to the class to give the students an idea what the finished product would look like.

### Internet Addresses:

- Provided by the specific national park handout given to each student.
- Example: National Parks of Canada Web Page: [http://www.pc.gc.ca/index\\_e.asp](http://www.pc.gc.ca/index_e.asp)
- Additional web pages will be posted on *E-Class* in the *Term Project* category.

### Textbook:

- *Making Connections: Canada's Geography*, Prentice Hall Ginn Canada, Scarborough Canada, 1999.

### Library Books:

- Students will have access to library books, newspapers, magazines, multimedia CD's, etc.



## Term Project Component Due Dates

Component	Date
* Get a folder for your term project	
National park selections	
* Download national park information sheet * Download ecozone information sheet	
* Print blank political map * Print blank climate graph	
* Print the rough draft outline from the geography website	
* Complete the political map of Canada	
* Print climate graph statistics for your national park	
* Complete climate graph analysis	
* Complete rough notes for parts A, B and C	
* Complete rough notes for parts D, E and F	
* Complete rough notes for parts G, H and I	
* Complete presentation notes/outline	
* Project due date	

## Climate Graph Instruction Sheet

- Type the following link using Internet Explorer to get the Climate Statistics.
- The pictures below show the screens you will see once you link to the web site.
- The box and arrows explains what you need to do on the web site.

[http://www.climate.weatheroffice.ec.gc.ca/climate\\_normals/index\\_e.html](http://www.climate.weatheroffice.ec.gc.ca/climate_normals/index_e.html)

- Type the name of a city or town located near your park in the location box and press the search button to get the climate statistics for that place.

The screenshot shows the 'Canadian Climate Normals or Averages 1971-2000' page. The search section includes a 'Province' dropdown menu set to 'ALL' and a 'Search' button. Below this is an 'OR' section with a 'Location' text input field and a 'Search' button. A red box highlights the 'Location' field and the 'Search' button, with an arrow pointing to the 'Search' button. The box contains the text: **Type the name of a city or town located near your park here and press the search button.**

Below the search section, there is a link for '1961-1990 Climate normals & averages' and a '[Format for print]' link. At the bottom, there is a footer with the following information:

- Created : 2002-06-21
- Modified : 2004-02-25
- Reviewed : 2004-02-25
- Url of this page : [http://www.climate.weatheroffice.ec.gc.ca/climate\\_normals/index\\_e.html](http://www.climate.weatheroffice.ec.gc.ca/climate_normals/index_e.html)

## Climate Graph Instruction Sheet

- After pressing the Search button you should get something similar to this screen.
- There is quite a bit of information on this web page. You only need to copy and include the *Daily Average Temperature (°C)* and the *Precipitation (mm)* as indicated by the arrows below in the example.
- Create a chart with the information and draw you climate graph.

**TORONTO \*  
ONTARIO**

Latitude: 43° 40' N Longitude: 79° 24' W Elevation: 112.50 m  
Climate ID: 6158350 WMO ID: 71266 TC ID:

\* This station meets [WMO standards](#) for temperature and precipitation.

Normals from  to

January-June January-December+Year July-December

Temperature:	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Code
Daily Average (°C)	-4.2	-3.2	1.3	7.6	14.2	19.2	22.2	21.3	17.0	10.6	4.8	-0.9	9.2	A
Standard Deviation	2.7	2.5	2.0	1.5	1.9	1.4	1.2	1.2	1.1	1.5	1.4	2.5	0.8	A
Daily Maximum (°C)	-1.1	-0.2	4.6	11.3	18.5	23.5	26.4	25.3	20.7	13.8	7.4	1.8	12.7	A
Daily Minimum (°C)	-7.3	-6.3	-2.0	3.8	9.0	14.8	17.0	17.3	13.2	7.3	2.2	-3.7	5.6	A
Extreme Maximum (°C)	16.1	14.4	26.7	32.2	34.4	36.7	40.6	38.9	37.8	30.0	23.9	19.9		
Date (yyyy/dd)	1967/25	1976/25	1946/28	1842/22	1962/18+	1964/30	1936/08+	1018/13	1953/02	1963/07	1950/01	1982/03		
Extreme Minimum (°C)	-32.8	-31.7	-26.7	-15.0	-3.9	-2.2	3.9	4.4	-2.2	-8.9	-20.6	-30.0		
Date (yyyy/dd)	1850/10	1855/05+	1868/03	1923/01	1854/06+	1842/10+	1843/12	1855/18+	1842/22+	1844/31	1875/30	1933/20		
Precipitation:														
Rainfall (mm)	29.1	26.2	42.0	63.2	73.3	71.5	67.5	79.6	83.4	64.7	67.3	41.9	700.8	A
Snowfall (cm)	38.2	26.6	22.0	6.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	32.2	133.1	A
Precipitation (mm)	61.2	50.5	66.1	69.6	73.3	71.5	67.5	79.6	83.4	64.7	75.7	71.0	834.0	A
Average Snow Depth (cm)	7	7	3	0	0	0	0	0	0	0	0	3	2	A
Median Snow Depth (cm)	7	6	2	0	0	0	0	0	0	0	0	2	1	A
Snow Depth at Month-end (cm)	7	5	0	0	0	0	0	0	0	0	1	4	1	A
Extreme Daily Rainfall (mm)	63.5	43.4	43.7	59.7	68.6	63.5	98.6	93.5	87.0	86.0	70.5	49.5		
Date (yyyy/dd)	1843/31	1855/13	1881/19	1850/03	1894/21	1957/28	1897/27	1905/15	1843/14	1954/15	1861/02	1870/05		
Extreme Daily Snowfall (cm)	39.9	45.7	40.6	21.1	7.6	0.0	0.0	0.0	0.0	12.2	30.5	48.3		
Date (yyyy/dd)	1906/23	1846/20+	1870/27	1901/20	1875/01	1840/01+	1840/01+	1840/01+	1840/01+	1969/21	1950/24	1944/11		
Extreme Daily Precipitation (mm)	52.3	52.6	43.7	59.7	68.6	63.5	98.6	93.5	87.0	86.0	70.5	49.5		
Date (yyyy/dd)	1932/01	1965/25	1881/19	1850/03	1894/21	1957/28	1897/27	1905/15	1843/14	1954/15	1861/02	1870/05		
Extreme Snow Depth (cm)	65.0	38.0	29.0	19.0	3.0	0.0	0.0	0.0	0.0	13.0	20.0	41.0		
Date (yyyy/dd)	1999/15	1971/14+	2001/06	1979/09	1963/01	1955/01+	1955/01+	1955/01+	1955/01+	1969/21	1997/16	1977/12		
Days with Maximum Temperature:														
<= 0 °C	16.6	14.1	7.0	0.53	0.0	0.0	0.0	0.0	0.0	0.0	1.5	10.2	50.0	A
> 0 °C	14.4	14.1	24.0	29.5	31.0	30.0	31.0	31.0	30.0	31.0	28.5	20.8	315.3	A
> 10 °C	0.60	0.50	5.0	16.6	29.6	30.0	31.0	31.0	30.0	24.3	8.2	1.5	208.2	A

## Citing Sources

- Whenever you refer to material from another source, whether book, journal, article, motion picture, or recording, you must acknowledge your source. Include in parentheses after the citation only what is essential to guide the reader to the correct entry in your bibliography. Often, all that will be needed is the last name of the author, followed by the page number.

### **Example:**

The Roman Empire was one of the greatest empires ever to exist. “In the second century of the Christian Era, the empire of Rome comprehended the fairest part of the earth, and the most civilized portion of mankind” (Gibbon, p. 31). Many conquests made the empire substantially wealthy.

## Bibliography

### **Books**

- Take all information for the note, reference and bibliographic entry from the title page

#### **(a) One Author**

Bentley, Laura J. The Young Scientist: Resources to Explore. Don Mills, Ontario: Addison-Wesley Publishers, 1991.

#### **(b) Two Authors**

Cheffins, Ronald K., and Patricia A. Johnson. The Revised Canadian Constitution: Politics as Law. Toronto: McGraw-Hill Ryerson, 1986.

#### **(c) Three or More Authors**

Lean, Geoffrey, and others. Atlas of the Environment. New York: Prentice-Hall Press, 1990.

### **Journal Article**

- Provide a full description of a journal article. Include the following data in this order:
  - author’s name (if given)
  - title of the article (in quotation marks)
  - name of the journal (underlined)
  - volume and issue number
  - date and page number(s)

Moore, Maureen. “Colliding Cultures.” The Canadian Journal of Sociology. 14, 3 (Summer 1989): 335-350.

**Magazine Article**

- Provide a full description of a magazine article. Include the following data in this order:
- author's name (if given)
  - title of the article (in quotation marks)
  - name of the magazine (underlined)
  - date of issue (day month year)
  - page number(s)

**(a) Author Given**

Came, Barry. Colliding Cultures: the claims of Quebec Natives Clash with the Provinces's Need to Develop its Hydro Potential." **Maclean's**, 12 August 1991, p. 10-12

**(b) No Author Given**

"A Composer in His Time." The UNESCO Courier, July 1991, p. 34-35

**Newspaper Article**

- Give the name of the newspaper. If the city name is not part of the name of the newspaper, give it in brackets (for example: The Global and Mail (Toronto)). Since many newspapers are made up in sections that have separate pagination, include the section designation and page number.

**(a) Author Given**

Emid, Albert. "Winning Fund Concentrates on Small Firms." The Globe and Mail (Toronto), 21 November 1991, p. C1-C2.

**(b) No Author Given**

Pam Am Grounded, Ending Era in the United States." The Toronto Star, 5 December 1991, p. B1, B3.

**Pamphlet, Brochure, Fact Sheet, Leaflet, etc.****(a) Author Given**

Acker, Geraldine. What to Eat and Why. University of Illinois, 1989.

**(b) No Author Given**

Changing Climate: A Guide to the Greenhouse Effect. Washington, D.C.: World Resources Institute, 1991

**Website**

- Website. title of article, author, year.

www.geography/canada.ca. The Geography of Canada. Mark Wallace, 1996.



## Term Project Checklist

- Title page with picture included
- Table of contents included
- Pages are numbered
- Part A (Rationale) is completed
- Part B (Location) is completed
- Part C (Landforms) is completed
- Part D (Climate) is completed
- Part E (Vegetation) is completed
- Part F (Wildlife) is completed
- Part G (Recreational Activities) is completed
- Part H (Human/Economic Activities) is completed
- Part I (Future Human Interactions) is completed
- Two maps are included in the Locations (part B) section
- Climate graph and analysis is included in the Climate (part D) section
- Spelling and grammar checked
- Referenced material is properly sourced
- Bibliography is included