

WHAT'S THE WORD AROUND TOWN

JASPER ALBERTA

BY STEPHANIE LANE



PHYSICAL LANDFORMS

In Jasper there are two main landforms

- Mountains
- Glaciers

Jasper is located along the Rocky Mountains, which were created by tectonic activity. Two plates pushing against each other caused the land to buckle and be pushed upwards, thus creating the Rocky Mountain range.

The glaciers of Jasper are fed by the famous Columbia Icefield. During the summer, not all of the snow covering the field can melt, causing it to turn to ice. The ice forms "fingers," more commonly known as glaciers.



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ECONOMIC ACTIVITIES

The physical landforms of Jasper provide many ways for the town to earn money. The main economic activity in Jasper is tourism, which includes other economic activities.

During the winter you can enjoy snow shoeing and ice walking. In the summer there happens to be hiking, biking, and boating. Almost all year-round glacier tours are provided.

Hotels are a way that Jasper can also make money. The average cost for a hotel is around \$121 per night.



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CLIMATE



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Jasper is in the small area of Alberta that is part of the Cordillera Region. Because of this, Jasper receives lots of precipitation and snowfall. This is also because of the high elevation from the mountains. Jasper receives the most snow in January with an average of 38.1 cm. In June, Jasper receives its largest amount of rain of about 54.8mm.

Economic Activities

Skiing and snowboarding are popular activities in Jasper during the winter. In case of rain, Jasper has indoor activities such as multiple art galleries. They also have an indoor swimming pool and fitness center.

VEGETATION

Jasper's vegetation can vary in different parts of the park. In fact, all of Jasper is separated into three vegetation zones:

The Montane Zone

This zone occupies the valleys between the mountains. Multiple trees grow in this area such as Douglas Fir, White Birch and many more.

The Subalpine Zone

Made up of forests along the mountainsides. Subalpine Fir, Lodgepole Pine, and Engelman Spruce grow in this region.

The Alpine Zone

This zone contains many wildflowers located on mountaintops. Purple-Flowered Beardtongue and Yellow Blooms of the Mountain Avens grow there along with many others.

Economic Activities

Jasper has multiple campgrounds where one can get up close to Jasper's vegetation. There are also many wildlife tours through the forests of Jasper during the morning or night and in the winter.



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ENVIROMENTAL ISSUE



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THE ISSUE

Recently, Jasper and most of Alberta have been struggling with a pest infestation. The Mountain Pine Beetle arrived in 1999 but had only infested a few trees. Over time, the beetle spread and has now infected almost half of Jasper's forests.

The Mountain Pine Beetle enters a tree and spreads its larvae. The larvae use the nutrients in the tree to grow, causing the tree to become weak and die. The beetle also spreads a fungus which flourishes from the nutrients in the tree and can discolor and rot a tree.

The weakened trees can be susceptible to forest fires, a big issue for Jasper's protected ecosystem.

CONSIQUENCES

Jasper National Park's once green forests are now orange. The large amount of dead trees could easily catch fire and spread quickly. As well, the forests that house so many native and endangered species are thinning. The town is in a valley with only three evacuation routes in case of a fire. It would be difficult for citizens and visitors to safely get out.

CURRENT SOLUTIONS

Jasper has tried multiple methods to prevent a forest fire and to slow the infestation. The town has started to "thin" the forest by removing infested or dead trees. Jasper has also brought in carts with extra fire hoses and water.

Jasper has started to think of using more intense methods to remove the pests. They have thought of using pesticides and may even do a controlled burn in areas of the forest. They say that after a controlled burn, the forest will begin to regrow within 5-10 years.



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MY SOLUTION

I believe that the infestation problem can be solved naturally without harming the trees. This could help prevent another infestation in the future.

Lodgepole pine is common in the Cordillera Region and in Jasper. To protect itself from infestation it produces a resin toxic to most insects. However, the resin is not produced in large enough quantities to kill off the Mountain Pine Beetle. Jasper could use this resin to fight the infestation by concentrating it and using it on and around the trees.



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The beetles get stuck in the resin and are trapped. The resin reacts with the air and hardens, stopping the beetle from entering. It can also help heal a tree if it is damaged.