

Climate Change in Yukon:

Ecological Impacts

Yukon has one of the greatest diversities of flora and fauna in all of North America. This is partly because the region was part of the Beringia – the land bridge for species moving from Asia to North America. Its biodiversity is also rich because large areas remained unglaciated during the last ice ages. Although it is difficult to measure how climate change is affecting these complex ecosystems, some of the impacts are apparent.

Species Shift

Some species are moving northward. For example, moose are moving north into new regions. Some migratory



birds arrive earlier in the spring, out of sync with other species.

Fish

The changing flow volumes, temperatures, and sediment load of rivers, which have all been linked to the impacts of climate change, affect fish habitat. Southern species of salmon are moving northward and many species of salmon have trouble swimming and spawning in rivers that are too warm.



Spruce Bark Beetle

Hotter and drier conditions cause more severe and persistent outbreaks of insect pests, such as the spruce bark beetle. The spruce bark beetle is a problem in Yukon, as milder winters and springs allow more of these pests to survive and breed. Over 350,000 Ha have been affected by the beetle in the spruce forests of southwest Yukon.



Tree Line

Most of Yukon is treed. In the mountains there is an alpine tree line. Studies show that especially on south facing slopes, this tree line is advancing up slope. Elders say that regions which were once bush are now becoming forested. As well the point at which the tree-line meets the tundra is moving northward.

Caribou

Although warmer weather generally favours caribou, other climate change impacts create hardships. Deeper snows and increased layers of ice on and in the snow create difficult conditions for foraging and travel. Earlier spring thaws and later winters result in changes to ice cover on lakes and rivers which also affect caribou travel patterns. An increased level of insect harassment in spring and summer is a hardship for the caribou that is also linked to climate change.

