

Report to file
Snow depth and density along the Dempster Highway, 1991 to 2006
Prepared by D. Cooley, 23Mar06

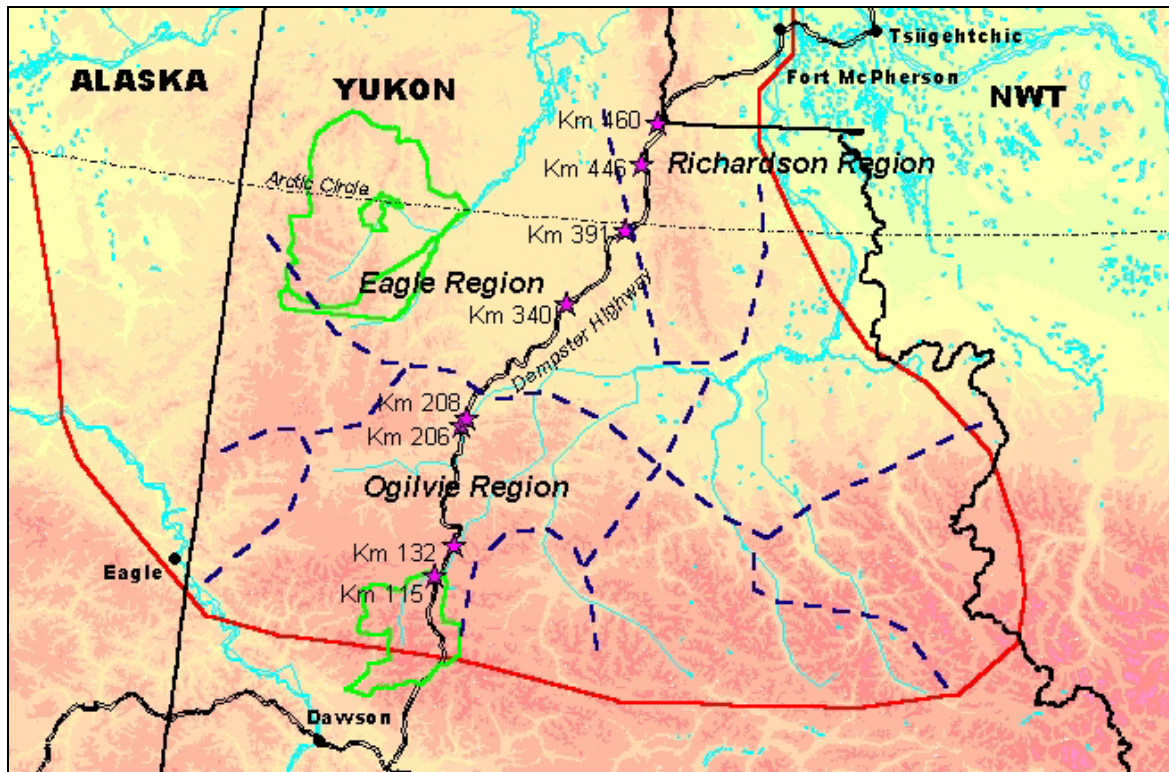
Introduction

In 1991, YTG set up 8 stations along the Yukon portion of the Dempster Highway in Porcupine Caribou range to monitor late winter snow accumulation and density over the long term. These stations were established in treed and open tundra terrain. Caribou winter use regions were defined in the early 1980's. The Dempster Highway passes through 3 of these regions (Richardson, Eagle and Ogilvie).

Methods

There are 8 stations measured annually in March (Figure 1). At each station, the observer moves off the highway far enough to escape the effects of the snow plows and drifts at the road. Depth is then measured to the nearest half centimeter. The snow trapped in the tube is then weighed to the nearest gram to record density as weight per volume of snow. Data are averaged by region.

Figure 1. Location of Dempster Highway snow stations

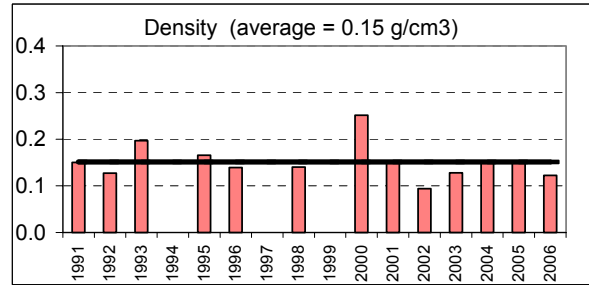
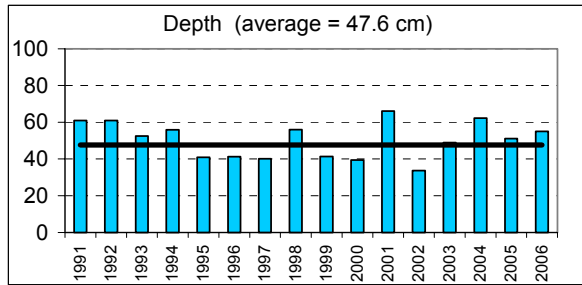


Results

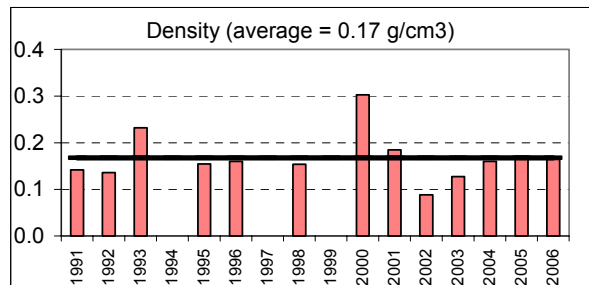
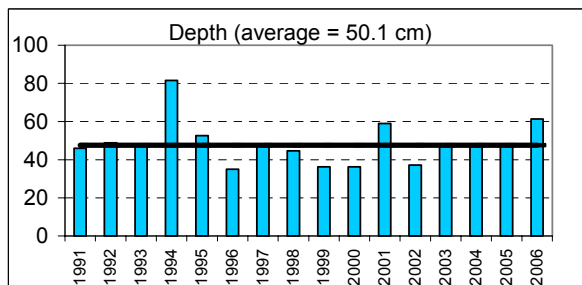
Snow weights were not recorded for stations north of Eagle Plains due to high winds at the time of field work. No ice layers were noted at any stations. Station # 8 at Kilometer 340 on Eagle Plains burned in the summer of 2005.

Summary of Dempster Snow Stations by region

Ogilvie Region



Eagle Region



Richardson Region

