

GIS and inventory of the Boreal Forest

By: Cindy Nicholson (rough draft, photos and more will be added)

The use of GIS (Geographic Information System/Science⁽¹⁾) is becoming an increasingly integral management component for Saskatchewan's Boreal Forests. GIS is not restricted to use in boreal (northern) forests, as it is also used for a wide range of applications such as: mapping the spread of a flu outbreak, ecosystem modeling, determining the best location for a new building, etc. The advent of GPS (Global Positioning Systems) has greatly increased the development of GIS. GIS is a data-intensive discipline, so having computers/servers with high amounts of RAM and storage space is important...this is less of an issue with today's computers than of computers even a few years ago. The capabilities of GIS are still being discovered and developed as computers become more and more powerful. In addition, people are becoming more aware of GIS and its potential and are continually developing new ideas and methods and putting GIS to the test.

One feature to note is that yes, as all your math teachers have been telling you, math is important! GIS could be considered a math-dependent discipline so you'll need to at least like numbers a little bit to be successful in GIS. There is no need to be a calculus wizard, but you will need to at least understand coordinate pairs (known in the math world as the Cartesian coordinate system), along with understandings statistics. The amount of math, depends on your interest in GIS...do you want to be a cartographer, GIS Analysts, or GIS-programmer, etc? It also helps to be a bit of a computer geek, since GIS relies so heavily on computers and the other kinds of technical stuff computer geeks love J

Geographic Information System refers to mapping software, while Geographic Information Science refers to the theory behind the development, use and application of geographic information systems (mapping software), along with hardware, people/users, and geospatial data (the "science" behind GISystems).