Grapevine Article

I'm going to comment on two minor ways to access the internet, both relying on radio transmission. They are: by tethering a cell phone, or by using a satellite-based service, in our case, Xplornet.

Cell phones are now common. Most people have them, but some areas of Denman, and most of Hornby, have no cell phone coverage. For people in these areas, tethering is not a possibility. If you have cell phone reception, you can tether your cell phone to access the internet.

How to tether a cell phone varies from phone to phone, and from operating system to operating system. In the settings for the phone, you select tethering, and the phone then becomes a Wi-Fi hotspot. It sends and receives signals from the cell phone provider, and sends and receives radio (Wi-Fi) signals to and from the computer. The speeds vary a lot, but can approach those of Telus' Smart Hubs. They can be better than the speeds reported by those who responded to our survey.

This is an expensive option. It's getting cheaper, but it's still by far the most expensive option. Some cellphone plans offer 10 GB of data. The prices vary, with the very cheapest offering all the usual phone services, plus 10 GB of data for $65.00/month. If you are only emailing and browsing, not video streaming, you can probably get by with 4 GB/month of data. Some seasonal residents rely on this option, especially some who travel a lot. In my opinion, it doesn't really qualify as internet access. It's so expensive and there's so much you can't do that it is just inadequate.

Xplornet is a service based on sending data to a satellite, which communicates with a group station, which is tied into the fiber-optic trunk system. The satellite is in a geosynchronous orbit, approximately over the equator. Geosynchronous is the technical term, which means that the satellite circles the earth at the speed of the earth's rotation, staying stationary over a small area of the earth. It is at an angle of approximately 30 degrees to the horizon. To achieve good transmission/reception you need a clear line of sight from the antenna to the satellite. The signal can be obstructed by trees or buildings. The antenna is aimed at a relatively small object, and needs a stable mounting. The frame of a building works, a post in the ground works, but a tree may not. They flex in the wind, and the signal can be disrupted. Towers can be built and that may work, but add to the cost. To sum up, ground conditions determine the feasibility of this option. There can be too many tall trees to make it possible. If the satellite's orbit was more northern, ideally directly overhead, there wouldn't be a problem.

The speed of this system is approximately 24 Mbps downloading and 8 Mbps uploading. This is far below the minimum level recommended by the CRTC. But so are all our other options. Fiber optic is the technology that offers the best speeds. Data costs for the Xplornet system are the highest, except for tethering. It also is subject to latency, a term for noticeable delay. We're used to systems responding when we click, and this system doesn't always. That's latency. It's also subject to weather disturbances. The radio signal has to make a long journey to the satellite, then to earth, and then back. Nonetheless, this system is much better than nothing, or tethering a cell phone, and for many people, the only option.

The Hornby Internet Committee is currently conducting a survey of the Hornby residents. Please complete this by going to https://www.surveymonkey.com/r/RGDJ9HC. If you live on Denman, and didn't complete the survey we conducted, please complete this one. These surveys are important. The federal and provincial governments want to see evidence of community support and involvement. We need their (our) money and these surveys help build our case.