

Mapping Out Your Next Wilderness Expedition

By Elaine Schiman

A website created for prospectors evolves into tool for outdoor enthusiasts

As president of the junior exploration company Cordilleran Minerals, Mark Lindsay of Whitehorse spends a good part of each summer exploring for minerals in the Yukon bush. By contrast, he spends most of each winter inside, working from his home office. But he's still found a way to go exploring each winter – virtually.

Lindsay is a big fan of the Yukon Geological Survey's Interactive Map Gallery, located on the Survey's website at www.geology.gov.yk.ca. "I use the Map Gallery pretty much every day, especially from November through February," says Lindsay. "That's when I'm doing my exploration planning for next year, and preparing reports on what we did last year. It's a very impressive and extremely useful website."

Lindsay isn't the only one who thinks so. The Yukon Geological Survey has had a lot of interest in its Map Gallery from prospectors and mining companies, and increasingly



from the general public as well. "It's a great resource for anyone who wants to spend time on the land or to learn about Yukon geography, geology, and land use," says Grant Abbott, the Survey's Chief Geologist. "The site isn't that widely-known yet, but from the enthusiasm shown by those who've seen it, we think it could have a much wider

audience."

Perhaps one of the Gallery's most useful functions is that it gives visitors the capability to create and print a customized map of any corner of the Yukon they choose. "Prospectors and geologists are our main users now," says Abbott. "But I can see a wide variety of people wanting to create their own maps - hikers, canoeists, trappers, hunters, outfitters. The Gallery is backed up by databases and references to publications and papers, which

makes it a valuable resource for anyone doing research, such as First Nations, land use planners, teachers, students and naturalists.”

The Map Gallery was set up about three years ago, to give prospectors and mining companies easy access to the information they needed to make exploration decisions. Much of the information in the Gallery is tailored for their use, such as up-to-date information on geophysics, geochemistry, mineral occurrences, mineral claims, who owns them and when they expire.

There is also a selection of other types of information of interest to a wider audience, such as topography, elevation, rivers, streams and lakes, roads and trails as well as the boundaries of First Nation lands, parks, protected areas and special management areas. You can even see all locations of earthquakes and their severity.

“There are 32 different sets of information, or ‘layers’ that you can combine in different ways, depending on your interests in an area,” says Olwyn Bruce, a Geographic Information Specialist with the Survey, who maintains the Gallery. “You can click on various layers of the map, to activate or de-activate them. That way, the map you build and print will only show what you want it to.”

Mark Lindsay is an expert at this. With a practiced hand guiding the computer mouse, he tours the Map Gallery, starting with the Regional Stream Geochemistry Map, a multi-coloured map of the Yukon that fills the entire computer screen. He picks an area he wants to “explore,” highlights it and clicks. Within a few seconds, a new map appears, showing a close-up view of the areas he selected. He zooms in again, and yet another map appears, this one showing even more detail of an even smaller area. He wants to see any occurrences of a number of metals, such as silver, gold, copper and mercury, so he uses the menu along the left side of the screen to select that information and “shut off” other types of information that he doesn’t need.

A number of black dots show up on the map, almost as if someone had spattered ink across the screen. These are “anomalies” that show enough mineralization to indicate the possible presence of a deposit. Later, he goes to another map in the Gallery which shows him magnetic readings for the same area, another important piece of the puzzle. By the time he’s done, he’s found a spot that just might be worth exploring and staking. He can then turn on the quartz claims layer to find out if it is staked. By clicking on a button he can “activate” that layer. Using the information tool he can click on a mineral claim and find out who owns it and when it expires.

“The Gallery has an incredible amount of data that you can use for assessing mineral potential,” says Lindsay. “When you see something you’re interested in on the map, you can click on it and call up detailed information on that area. Before I was using the Gallery, I had developed my own set of maps and data – all hard copies, boxes and boxes of them. But I don’t use most of that anymore, because nearly everything I need is here.”

Lindsay uses the Gallery for his work, but he can easily see the site becoming a popular tool for those with recreational interests in the outdoors. “The Yukon Mosaic layer gives you a kind of relief map, which shows mountains and valleys, lakes and streams. You might find a lake you want to try fishing at, or an area you want to try hiking into. And the topography will tell you how much of a challenge that hike might be.”

Like any computer tool, there’s a learning curve to travel before you get the most out of the site. The Survey has thus set up a Help menu to direct users through the Gallery and its functions.

“We have some very faithful users, such as Mark Lindsay,” says Abbott. “They’ve told us that they like the ease of access the Map Gallery gives them to information they need, no matter where they are in the world. Being on the web, the Gallery enhances awareness of Yukon geology, mineral potential and resources. We just want to make sure that local Yukoners also know about the Gallery and what it can do for them, no matter what kind of exploring they do in the Yukon’s wilderness.”

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