

Rock On In Haliburton County!!

by John Etches

Pardon the mineral puns, but Haliburton County is a multifaceted gem. The positive attributes of the County are almost too numerous to list. One aspect that I have come to know and love is the exceptional scenic beauty of the area. As a geologist and environmental educator, it has also become clear to me how closely the area's scenery is tied to both ancient, and more recent geological events.

When you think about it, the aesthetic appeal of any landscape can be attributed to the rise and fall of the land. The scenic beauty of landmarks such as Niagara Falls and the Rocky Mountains is largely due to the visual contrasts offered by the terrain. Other scenic elements such as thundering waterfalls and majestic forests complete the awesome beauty that we have come to enjoy. However, few of us reflect on the fact that these scenic elements are superimposed onto landscapes dictated by the geology underneath. The underlying bedrock provides the foundation upon which every scene on the planet is built. Even the flatness of the Prairies is defined by the geological history of the region.

In comparison with these large scale landscape features, the scenic strength of the Haliburton County is of a more intimate nature. Outcrop features found here often create isolated rooms of atmosphere that provide detail, contrast and variety to the scenery. Soaring uplands, shoreline cliffs and roadside rockcuts are also reminders that the Earth's crust is either exposed right at the surface or no more than a few metres beneath our feet in this part of the world. Every outcrop tells a story of crushing pressures, hellish temperatures and torturous events. Beautiful textures, patterns and minerals are frozen in the rocks for all to see.

One of my favourite wild places in the County is just off the shore of Sherborne Lake within the Frost Centre area. On a warm July day in 1984, I decided to explore up a small creek flowing into the lake. After only a short

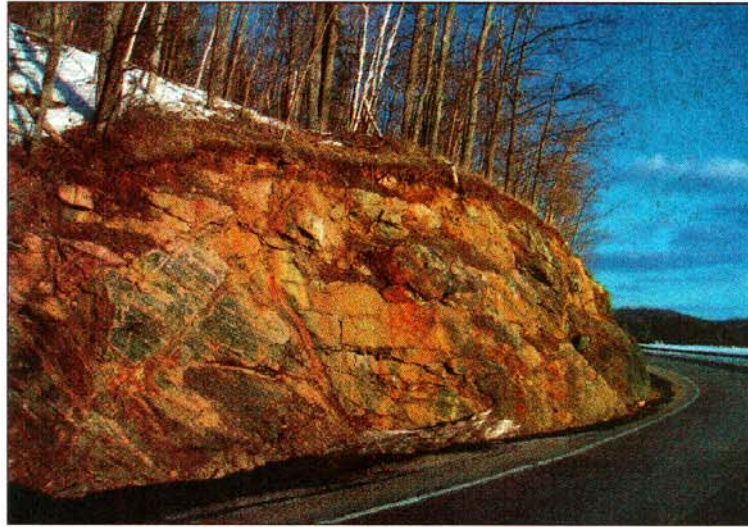


Photo Nicole Tuyten

distance, I stumbled upon what appeared to be the consequences of giants playing some powerful, violent game. Looming through the hemlocks was a great gash in the landscape. In a huge rock-sided chasm I found a jumble of gigantic boulders ranging in size from cars to small houses. In

the cave-like spaces between the boulders, I was surprised to find ice deep in the shadows. The staggering forces that conspired to create the Haliburton Highlands lay before me.

All landscape features are the result of geological processes. Of extreme importance to understanding the Haliburton landscape is the faulting that crisscrosses the bedrock. A fault is where the Earth's crust has fractured and then has shifted. This creates zones of broken, splintered rock. Millions of years later, continental glaciers moved across the land and cut deeply into these fault zones removing portions of the shattered bedrock. The result is a rugged terrain that possesses moderate but abrupt changes in topography. Along with the forests, it is this jagged character of the bedrock that gives Haliburton County its primordial feeling of wilderness.

Even the County's lakes can be attributed to local geology. Most of the lakes are places where two or more faults have intersected. The impenetrable nature of the bedrock of the Canadian Shield contributes by keeping water on the surface creating over 600 lakes and countless wetlands. In addition, soil depths are so shallow in the Haliburton Highlands that surface water has nowhere to hide. In contrast, the porous, fractured sandstone of the southwest United States allows surface water to soak into the ground contributing to a dry landscape.

Rock structures such as folds, faults and dykes are other visible pieces of the geological puzzle of the County available for all to see and enjoy. In particular, fold structures provide graphic evidence that the rocks were once buried to a depth

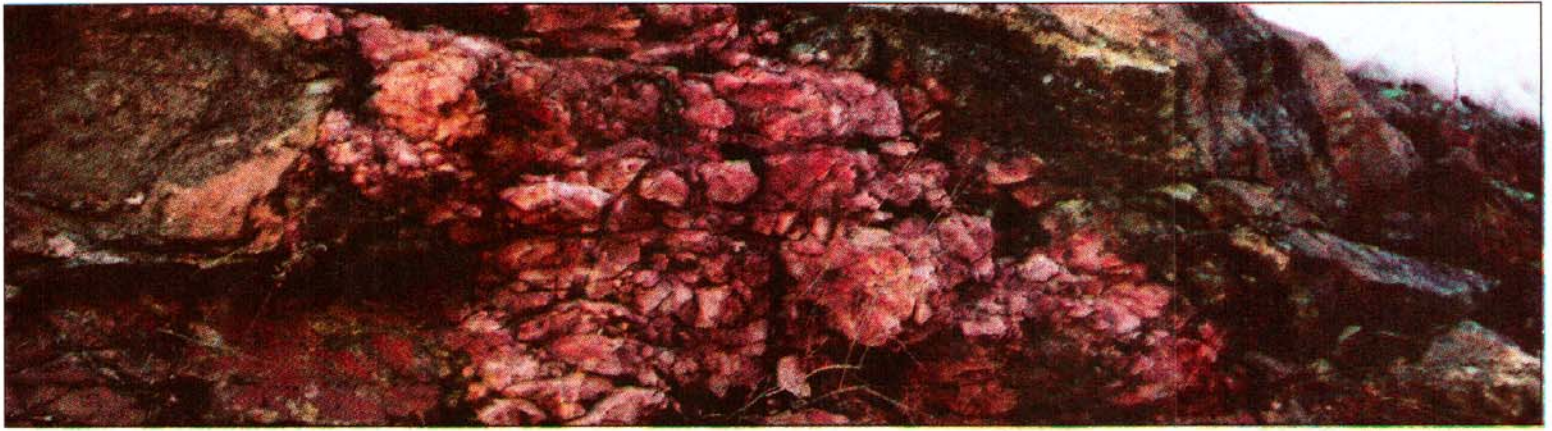


Photo Nicole Tuyten

of up to 15 kilometres. Look for fold structures in rockcuts throughout the Haliburton Highlands including south of Gooderham along County Road #507, or along Highway #35 between Carnarvon and Partridge Lake. Just outside of the County north of Dorset is a spectacular display of folding in the rockcuts about a kilometre north of Seabreeze Road.

The area's geological history has also resulted in a treasure trove of collectable minerals right across Haliburton County. The famous Bancroft mineral collecting area actually encompasses a good portion of the south eastern part of Haliburton County. Between Tory Hill and Gooderham is the famous Bear Lake Diggings collecting site. Gem quality apatite has been found there along with hornblende, sphene, orthoclase, augite, biotite and calcite. Permits are required for collecting at this site and are available from the Bancroft and District Chamber of Commerce in Bancroft. Call the Chamber for other permit vendors, updated rates and other collecting information; 1-866-848-9799.

To the west of Haliburton village along Highway #121, I witnessed a local mineral collector coax a magnificent, museum quality sphene crystal the size of a football from the crumbling calcite. In County rockcuts, I have found blue apatite, green scapolite, orange calcite, deep purple fluorite, pistachio green epidote, blood red garnet, and silvery molybdenite. Please exercise extreme caution if you choose to visit local rockcuts. Always keep in mind that you are on either municipal or provincial lands. It is advisable to find parking off of the road shoulders which are really only for road-side emergencies.

If you want to get down and dirty, get out to one of the hundreds if not thousands of identified mineral occurrences that are sprinkled across the County. Remember that land owner's permission is required to enter private property and to collect. Contact the Regional Geologist's office in Tweed for detailed information on known mineral occurrences, 613-478-3161, or visit the Ministry of Northern Development and Mines website at www.ermes.mndm.gov.on.ca

to search the ERMES database for mineral occurrences.

The most special mineral occurrence that I know of in Haliburton County is Greenmantle Farm near Wilberforce, owned by Sandra and Mark Bramham. On their property is one of perhaps only three places in the world where the mineral fluorrichterite is found. The minerals apatite, hornblende, tremolite, actinolite, orthoclase and quartz also occur on their property. The Bramhams are offering excellent interpretive tours of their property but do not allow any collecting.

To learn more, visit the Bramham's website at

www.mineraltours.net

To set up a tour, call 705-448-3948

or e-mail info@mineraltours.net

Great places to witness the bedrock-controlled scenery of Haliburton County are the trails developed by the Haliburton Highlands Trails and Tours Network and affiliated volunteers. For directions and maps of all the trails in Haliburton County, call the Haliburton Highlands Trails and Tours Network, 705-489-4049, or visit their website www.trailsandtours.com

From a minerals/geology tourism perspective, Haliburton County is a diamond in the rough. The landscape of the County provides opportunities for first class geology-based experiences to a varied audience. The Haliburton Highlands possesses yet another great reason to invite guests into our community.

Rock on!

John Etches

For mineral collecting information, please contact either the Haliburton Highlands Chamber of Commerce

1-877-811-6111, or the

Bancroft and District Chamber of Commerce

1-866-848-9799.