Copper on Grand Manan

Many basaltic boulders below the cliffs show green to blue stains or thin coatings of minerals on fracture surfaces (see the photo in the section above). This is especially true beneath the cliffs of Seven Days Work, but they occur elsewhere too, such as along the trail near the top of Ashburton Head, and at Southwest Head. More interesting to collectors are the bits and pieces of native copper, some bright as a new penny and others with a gray-green oxidized surface, that have been picked out of the Seven Days Work member between lava flows. The Grand Manan Museum has a nice display of small pieces, and although I have not found any, I am told that people do still collect them along the west shore of Whale Cove. Why copper is concentrated by basalt is a mystery to me, but it seems to be true in many other places around the world as well as here.

An article in the Daily Telegraph on September 27, 1872 tells of “rich deposits of copper at Eel Brook” discovered by James Tatton, the property owner. The correspondent scrambled into the narrow ravine not far above the beach, where with Mr. Tatton he picked up 11 pieces of glittering copper out of the streambed. They expressed the belief of a solid bed of copper ore extending at least to Eel Pond and Long’s Eddy, which seems more than a bit speculative.

Eel Brook can be reached from the trail between Seven Days Work to Ashburton Head, or you can bushwhack up from Eel Brook Beach (see the excursion below).

According to J. G. Lorimer (1876), Moses Bagley found evidence of copper in the sediment near Sloop Cove in 1862, and a mine adit was opened near the beach in 1870. I spoke to his great-great-granddaughter in 2008, and she was quite aware of his discovery. The tunnel is reported to run 210 feet into the cliff, and presumably it followed the gently sloping contact between the siltstone and overlying basalt. It would have been easy digging in the soft shale and siltstone.
The ore-bearing sediment was called “grey copper,” and Lorimer cites a claim of 90% copper, which seems very unlikely. The English mining group abandoned it after the first year, which tells you something. In 1964 the Keevil Mining Corp. drilled several cores from above, down through the basalt and deep into the sediment beneath. Part of a core is on display in the Grand Manan Museum.

Very little copper was found, despite all the strong opinions that had been in its favor. Coring is expensive, but I am also told they did re-open the old mine to check for mineralization. Mineral companies have a budget for exploration, and they spend it. It is nice when they also tell us what was (or was not) found.

In June of 2010, we went around the island on the ketch Elsie Menota (used for Whales-n-Sails excursions), and we took numerous photographs along the western shore. The sediment beneath basalt is present along much of the western shoreline south of Money Cove, but it ends a little north of the location for Sloop Cove as labeled on the topographic map.

The prospect addit was probably not far north of “The Ladder” (which still exists on the wave-cut bank) between Sloop Cove and Dwellys Cove, and it is now covered by talus. Or perhaps the opening was deliberately filled in to prevent accidents. The good exposures at nearby Dwellys Cove have led me to use that name for the formation. The sediment has no special coloration other than light gray (photo above), but it would be nice to visit it for a close-up examination. This would be a long walk on the trail above and a dangerous scramble down The Ladder, so landing in a small boat might be worth the expense.