From the Mineral Inventory Files

The Western Extension of the Harrigan Cove Gold District

The Harrigan Cove Gold District is found just north of Highway #7 at the small community of Harrigan Cove, at the easternmost end of Halifax County (Fig. 1). The deposit is a typical example of one of the numerous, metasediment-hosted, lode-gold quartz vein deposits hosted in the province’s Cambro-Ordovician Meguma Supergroup, which underlies much of mainland Nova Scotia. Small in size, the district recorded a modest total historical Au production of 7,943 oz. Au from 13,778 tons milled, for an overall grade of 1.73 oz. Au/ton. Discovered in 1868, there wasn’t much development or mining until the 1890s. Most mining took place between 1900 and 1904, after which there was only sporadic Au production until 1916. Since then, the site has been essentially abandoned.

The district lies on the east-west Tangier-Harrigan Cove Anticline, which is also host to several other gold deposits, such as the Tangier Au District, the Moose Head mine and the Ecum Secum Au District. At Harrigan Cove, the main antiform, termed the North Anticline, is a west-plunging, broad, open fold. A smaller, secondary fold occurs along the North Anticline’s southern limb, however, and is named the South Anticline. This is a much tighter fold structure and is host to most of the main historically producing veins of the district. These veins occur as thick, bedding-concordant saddle veins along the crest of the anticline, and as thinner veins extending down from them along the southern limb of the fold. Similar to many Meguma Supergroup Au districts, most of the auriferous quartz veins occur within slate and metasiltstone units interbedded with thick beds of metawacke and quartzite. For example, the Boak Shaft (Fig. 1) pierces a series of nine saddles along its 30 m depth. Most of the mining at Harrigan Cove was shallow, in the order of 30 to 40 m depth, with the deepest workings only extending to 60 m.

Over the years there have been several concerted exploration efforts at Harrigan Cove by a host of companies and individuals, including Cominco in 1937, Munroe Archibald in the 1940s, Harry Ryan in the 1950s, Milmore Syndicate 1973, Quebec Uranium 1974, Harrigan Mining Associates 1979-1981, AquaGold Resources 1986-1987, Stay Gold Inc. 1995-1997, Gammon Lake Resources 1997, Annapolis Properties Corporation 2008-2009, Acadian Mining Corp. 2013 and Stay Gold Inc. again from 2012-2015. All of these exploration efforts found indications of gold and drill intersections that range from interesting to very promising. The continual return of exploration activity alone attests to the enticing potential this property shows.

I find the lack of exploration at one key area of the property to be particularly perplexing, however, this being the area immediately west of the Boak workings where there is a prominent, 60 m high drumlin.

Historically, at most of the Meguma Au districts where thick drift conditions were encountered, mining was dismissed as the mining techniques of the day would not allow it. These areas were ignored, even though the miners knew that the vein zones likely extended under them. Harrigan Cove is just one such example, but what is most surprising to me is that there has been very little modern exploration to determine if the vein packages present in the Boak workings continue under the drumlin (Fig 1). There has been some limited mining and exploration drilling to the west of the drumlin in the Eel Brook area, which showed modest results, but none to test under the drumlin itself. It’s highly unlikely that the promising auriferous vein packages occurring south of the Boak Shaft end abruptly toward the west. At least some, if not all, of the area that lies under the thick drumlin surely contains a strike extension of these veins, just waiting for someone to find them.

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Figure 1. The Harrigan Cove Gold District, showing major quartz veins, historical shafts and exploration drillholes.