

quartz diorite, and hornblende-biotite granodiorite of the Washabuck pluton. Associated with the pluton are late-stage coarse-grained hornblendite dykes. The MHf in the southwestern block is intruded by unfoliated medium- to coarse-grained hypidiomorphic hornblende-biotite granite and associated aplitic dykes named the Grass Cove granite. Similar granite occurs in the northeastern block as large dykes in the MHf and Washabuck pluton. All igneous units contain metasedimentary xenoliths of the MHf, and like the MHf, are cut by numerous mafic dykes.

Regional metamorphic grade in the MHf is relatively low, and reaches only biotite grade; however, close to the margins of the plutonic units, grade has increased to produce cordierite-biotite assemblages. This increase in grade has imparted a gneissic appearance to the metamorphic rocks by accentuating the bedding but it is clearly related to contact metamorphism. No gneissic or migmatitic rocks were observed.

Because of lithological similarity to the Blues Brook and Malagawatch formations, the MHf is considered to be part of the Neoproterozoic George River Metamorphic Suite. The similarity of the Washabuck pluton and Grass Cove granite to dated igneous units in the Creignish Hills and North Mountain areas suggest similar Late Neoproterozoic ages for these units. These correlations indicate that the basement blocks on the Washabuck Peninsula are part of the Bras d'Or terrane. Geochemical comparisons are in progress and will help provide detailed correlations.

Geology of the Washabuck Peninsula, central Cape Breton Island, Nova Scotia

DARIN WASYLIK

*Department of Geology, Acadia University,
Wolfville, NS B4P 2R6, Canada*

The Washabuck Peninsula lies in the central part of Cape Breton Island in the area between Iona, Baddeck, and Whycomagh in Bras d'Or Lake. Recent geological mapping on the peninsula, at a scale of 1:10 000, confirms the presence of pre-Carboniferous basement blocks with lithological similarities to other Neoproterozoic basement blocks in the Bras d'Or terrane. These basement blocks are unconformably overlain by Carboniferous sedimentary rocks of the Horton Group and in fault contact with Carboniferous sedimentary rocks of the Windsor Group.

The oldest stratified rocks in the basement blocks, named the Maskells Harbour formation (MHf), occur in two separate areas. In the northeast the formation consists of interbedded quartzofeldspathic metasandstone and metasiltstone with thin minor quartzite and marble; however, the block in the southwest consists dominantly of calcitic to dolomitic marble interbedded with minor quartzite. The MHf in the northeastern block is intruded by unfoliated, medium-grained diorite,