

A pebble identification guide for Nova Scotia, Canada

LYNN T. DAFOE, JENNIEFER BATES¹, D. PATRICK POTTER¹, AND MARTHA E. GRANTHAM²

1. Natural Resources Canada, Geological Survey of Canada (Atlantic), Bedford Institute of Oceanography, 1 Challenger Drive, Dartmouth, Nova Scotia B2V 2A4, Canada <lynn.dafoe@NRCan-RNCan.gc.ca> ¶

2. Natural Resources Education Centre, Middle Musquodoboit, Nova Scotia B0N 1X0, Canada

Nova Scotia's extensive shoreline creates abundant opportunities for studying various aspects of geology. High-energy beaches collect thick deposits of pebble- and cobble-sized material from a variety of sources, resulting in diverse and unique assemblages. Following the lead of pebble guides created in other provinces, an initial pebble identification guide was created in 2012. The goal of this guide is to provide a means of identifying, appreciating and understanding the origin of pebbles found on Nova Scotia beaches. There has been ongoing discussion within the AGS Education Committee to produce a second, refined version of the pebble guide for wider distribution. The audience for this guide would be elementary to high school students and the general public. Over the past few years, the guide has been primarily used as supplementary material for EdGEO courses. For this past year's EdGEO course (at the Atlantic Science Teachers Conference) on beaches, the guide was used for a playground pebble identification activity. The pebble guide highlights the three rock types (igneous, metamorphic and sedimentary) and has a range of photographs and simple illustrations. Other interesting finds such as veins, chert, small-scale folds, and man-made objects are also included. The vision for this guide is to be available in paper (ideally free) in a format similar to that of the highly successful Nova Scotia ROCKS brochure, in addition to an online version combined with simple activities.