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ually crystallizing to form solid rock. And there are many of these anorthosites scattered across the Pre-Cambrian Shields of the world. There are huge areas up in Quebec and Labrador, and also in Australia and in Africa. In the old continental cores. ca. Before Africa and South America arrived and bumped into North America.

Nova Scotia's supposed to be relatively young, geologically. Why do we have these old rocks up in there? Eventually we twigged to the thought that maybe this is part of the Pre-Cambrian Shield that's been caught up or preserved in northern Cape Breton. And when we analysed the isotopes of the elements in the rock, we discovered that, lo and behold, it was very old. It gave an age of over a billion years.

So that rock is, indeed, part of the Pre-Cambrian Shield. Whether or not it's still connected to the Pre-Cambrian Shield, we don't know. Maybe it's been jostled around a little bit. But there are rocks that are very similar, near Stephenville in Newfoundland, and all the way up the Great Northern Peninsula of Newfoundland.

So that we feel fairly confident that we're dealing with something which was the edge of the ancient Pre-Cambrian continent of North America. If you go to the other side of Cape Breton altogether, we have an area which we call the Miramichi terrane. It stretches from Scatarie Island, right down through towards Sporting Mountain near West Bay. And everything south and east of a line which is the Macintosh Brook Fault. It lies just east of the Bois d'Arbres. Every-

(Cape Breton had) a mountain range thing south and east of that line is about 600 million years the height of the Himalayas old. And these rocks are pretty near identical, unit for 300-odd million years ago. unit, with rocks in the Avalon Peninsula of Newfoundland. And they also extend out through the Antigonish Highlands and the Cobequid Highlands to New Brunswick, and even down into New England. Cape Breton Auto Radiator Co

RADIATOR HOSES • REPAIRING • CLEANING • RECORDING r...o' _ . COMPLETE CYLINDER HEAD SERVICE _ _ . 518 Grand auto * truck * industrial Sydney Lake Road Complete Line of Gas Tanks 564-6362 • NOW DOING AUTOMOBILE AIR CONDITIONING • 0- Senior Citizens Secretariat HELP IS JUST A TOLL-FREE CALL AWAY

Similar rocks occur in old England, and Wales, and over in France, and out through Germany into Czechoslovakia. This looks like it was something else • on the other side of an ancient ocean. These rocks are rocks that were formed in a volcanic arc • somewhat like Japan today, perhaps. Some? thing that would be sitting off the edge of a continent, where a piece of the ocean floor is diving down underneath the continent's edge. And as it dives down it melts, and lava rises up to the surface and makes volcanoes. And we have many volcanic rocks. And in fact, at Louisbourg Harbour is one of the best places to see these volcanic rocks. You can see volcanic bombs, where great boulders of material erupted from volcanoes and landed in the muds and the sands around. You can even see the plop marks where they landed. You see volcanic glass • pumice, and all kinds of relics of volcanic material, exposed quite well in the Fortress of Louisbourg National Historic Park, and especially well across the harbour, from where you can look across to the park.

One of the widely-used services offered by the Senior Citizens' Secretariat is that



provided through the toll-free telephone line for seniors and persons who care for their needs. Our staff is trained to provide the answers to many of the questions that concern seniors, including those about pensions, home care services, community volunteer groups, home maintenance, housing and health. Moreover, our staff knows where to turn for answers to inquiries about problems with which they might not be totally familiar. It's a no-cost help line and information service established specifically for our older citizens, their families and their caregivers. We've devised a telephone number to match our mandate: For (4) twenty-four hour (24) service at no charge (00) to persons 65 years and over (65). When the bracketed numbers are put together they read 424-0065. That's us • easy to reach, easy to remember. Dial 1-424-0065 if calling from points outside the Halifax area.

>C Province of Nova Scotia Hon. Roland Thornhill, Chairman The Senior Citizens' Secretariat So that sort of sets a framework. These are the old parts of Cape Breton. Between them we have two more slivers of rock. We have the Bras d'Or terrane, which basically lies within and around the Bras d'Or Lakes, and extends up the eastern Cape Breton Highlands to Ingonish. And then we have the Aspy terrane, which is the youngest of them. And that extends from Cape North and Ingonish on the east, down through to Cheticamp and Mabou on the west. First of all, the older ones • they're about 550 million years old. This is the Bras d'Or terrane. This was another island arc, a bit younger than the Mira terrane that we talked about earlier. The Bras d'Or terrane is made up of the rocks that we find today in a subduction zone. This is a zone where one piece of the ocean floor is diving down underneath another piece of ocean floor. That's happening today, for example, around the islands of the Caribbean. Or some of the small island arcs like the Philippines, or the Marianas Islands in the west Pacific. And as one piece of ocean crust is pushed down underneath another piece of ocean crust, it melts. And volcanoes arise at the surface. And lots of magma gets ponded at great depth. And in fact if you travel from the junction of the Cabot Trail and Highway 312 at Jersey Cove or Barachois River, along the Cabot Trail and (inland) up the Wreck Cove Road to-