

## NATURE RESERVES

# Lyal Island Nature Reserve

### *Dr. John Agnos and Asa Danard Sanctuary*

Imagine your favourite sections of the upper Bruce Peninsula without any roads or buildings and you will have a good picture of Lyal Island. The island, the Federation's second largest nature reserve, covers 305 hectares and is located roughly 2 km off the west shore of the Bruce Peninsula at Stokes Bay. It is completely undeveloped, with the exception of an automatic navigation light on the island's west shore.

The nature reserve is named in honour of both Dr. John Agnos and Mr. Asa Danard. Dr. Agnos was a passionate naturalist and well-respected physician who wished to establish a nature reserve with Ontario Nature but died tragically before his dream was realized. His sisters, Georgia Agnos Velos and Mary Agnos Hontos, fulfilled his wishes by making significant financial contributions towards the island's purchase. Asa Danard had owned the property since 1944, until its purchase by the Nature Conservancy of Canada on behalf of the Federation in 1996. Danard also made a significant financial contribution to protect the island as a nature reserve.

Human impacts on the island are not extensive, being primarily associated with timber cutting in the 1800s and the establishment and subsequent demolition of a manned lighthouse station on the island's west shore. The lack of cottage development has increased the island's allure as a natural heritage preservation site. This, combined with the island's size, diversity, and representative landforms and vegetative communities, makes it an important addition to the Federation's nature reserve system.

Lyal Island is designated as a provincial Life Science Area of Natural and Scientific Interest (ANSI). It is a microcosm of the natural features that are representative of the coastal portions of the Bruce Peninsula's Lake Huron side. Included in these features are dolostone rockland forests and wetlands, rich dry and wet meadows and groves, dolostone pavements, coastal shoreline shingle ridges and a single peatland pond.

Several features merit special mention. Exposure of Lyal Island to the forces of Lake Huron over the centuries has led to the development of shingle beaches on the island. These shingle beaches occur as a series of parallel ridges that extend several hundred metres inland. Inland, the Guelph formation dolostone is exposed as flat to gently swelling pavements. This

bedrock provides habitat for the many coastal herbs that are distinctive to the Bruce Peninsula.

While muck or fibric organics are a common occurrence in depressions within the dolostone pavements, deep deposits of peat are rare on the island. However, surrounding the pond on the island's southern portion is a quaking fibric peat mat which supports a distinctly boreal vegetation occurring nowhere else on the island.

The coastal dolostone plain environment encompasses virtually all of the shoreline around the island with only local, protected bays having deeper sand deposits. This narrow zone possesses many distinctive features including a host of significant plant species and a consistent community structure.

Also of special note is the abundance of Massasauga rattlesnakes, a provincially and federally listed species at risk.

### ***How to get there***

Lyal Island is located about 2 km off shore on the Lake Huron side of the Bruce Peninsula, in Stokes Bay. The reserve can only be accessed by boat and there are no trails on the island.