

## **Stalking the Haida Gwaii slug** A new-found species in the Queen Charlotte Islands

For millions of years, it crept along unnoticed in the mountains and rainforests of the Queen Charlotte Archipelago (Haida Gwaii). Then in 2002, scientists discovered the Haida Gwaii slug while they were doing a biological survey. This newfound species is just the latest of the wonders uncovered on the islands, which are often called "Canada's Galapagos".

## An exciting discovery

The eureka moment came in July, 2002, when biologists Kristiina Ovaska and Lennart Sopuck were conducting surveys for terrestrial gastropods (slugs and snails) on Graham Island.

At first, the scientists thought that the new critter was an unknown species of jumping slug. Jumping slugs are named for the quick, thrashing movements they make when disturbed. While they don't leap into the air, their rapid movements are startling and unexpected of a slug. It turned out, however, that this slug was totally new, representing a new genus in fact. The proposed scientific name for the new species is *Staala gwaii*, which means Island Slug in Haida, the native language of the islands.

"It was pretty exciting," says Kristiina. Finding a new species is a rare treat for a biologist. She and Lennart have since located the Haida Gwaii slug at several sites in Gwaii Haanas National Park Reserve and Haida Heritage Site on Moresby Island, the second largest island of the archipelago. Their aim is to provide new information on the distribution of species considered rare or at risk of extinction, and to describe their habitat use.

## Splendid isolation

The discovery of this slug marks the beginning of a new chapter in the continuing biological saga of Haida Gwaii. The islands are known as Canada's Galapagos because they are home to species and sub-species of mammals, birds, fish, invertebrates, and plants that are found nowhere else on earth, much like the Galapagos Islands of the tropical Pacific.



Haida Gwaii is known as "Canada's Galapagos" because it is home to species and sub-species found nowhere else on earth. © Parks Canada, Lynch, W., 1998.



The Haida Gwaii slug is a newly discovered genus of gastropod. © Parks Canada, Kristiina Ovaska, 2004.



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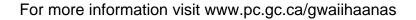
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There are two reasons for this: isolation and glaciers, or, in this case, a lack of glaciers. The archipelago is off Canada's west coast, more than 60 km from the nearest point on the mainland. Because of the ocean barrier, the islands' plants and animals were unable to interbreed with organisms from elsewhere. As well, parts of the islands were never glaciated. Therefore, the ecosystem developed over a period of time much longer than the rest of North America. The flora and fauna were able to evolve independently. And many distinct varieties and forms of plants and animals survive to this day.

The Haida Gwaii slug, which seems to favour sub-alpine meadows and mountain slopes, "appears to be of an ancient lineage," say Kristiina and Lennart. Genetic evidence suggests that the new slug split off from its nearest known relatives, the jumping slugs, several million years ago. Its habitat includes several plants that occur only on the Queen Charlotte Islands.





The Haida Gwaii slug is found in a variety of habitats in Gwaii Haanas. © Parks Canada, Kristiina Ovaska, 2004.



