



Mark Kaarremaa

# How were the Sensitive Ecosystem Maps created?

The creation of the Sensitive Ecosystem Maps for the Islands Trust Area was a multi-year process conducted in accordance with provincial mapping standards. The method that was followed involved six main steps.

## STEP 1: Aerial Photography

Aerial photographs of each Local Trust Area were flown between 2001 and 2007. The resulting photographs – long, narrow strips – were combined to produce an image called an orthophoto. This data collection was completed by Parks Canada, the Integrated Land Management Bureau, and professional consultants in accordance with the Resource Information Standards Committee *Standard for Terrestrial Ecosystem Mapping in BC*.



Laura Stringer



Mark Kaarremaa

## STEP 2: Photo Interpretation

Following completion of the aerial photography, the orthophoto images were reviewed and analyzed by consultants. Using a stereoscope to view the images and a Geographical Information System (GIS) program to layer information over top of the orthophotos, mappers were able to identify the vegetation types present. This information was combined with other existing information, including topographic and soil mapping data to determine ecosystem boundaries.

## STEP 3: Field Sampling

After initial orthophoto analysis, the consultants travelled to the mapped areas to verify interpretation and collect site-specific ecological data. This field sampling was conducted in accordance with the provincial *Field Manual for Describing Terrestrial Ecosystems*. Approximately 25% of the polygons were field checked across the Islands Trust Area.



Neil Dawe

## STEP 4: Draft Map Production

Following completion of field sampling, consultants entered the final data sets into a Geographic Information System (GIS) program. This specialized program labeled ecosystems across the Islands Trust landscape. The resulting information was analyzed to locate the most sensitive ecosystems in the islands and draft maps were produced.



## STEP 5: Community Input

The draft maps were presented to local communities for comment. Residents and local groups were asked to draw on local knowledge to help identify any errors or omissions in ecosystem identification.

## STEP 6: Map Revision

Following community input, the sensitive ecosystem maps were revised to reflect the feedback received from local residents and groups. The final maps were then published at a scale of 1:16,000.

## History of Ecosystem Mapping in the Islands Trust Area

The Sensitive Ecosystem Mapping project builds upon a long history of ecosystem mapping in the Trust Area. This initiative improves on two previous sensitive ecosystem mapping projects:

### Sensitive Ecosystems Inventory (SEI)

- Completed by the provincial and federal governments between 1993 and 1999
- Intended to increase awareness of existence of sensitive ecosystems
- Used aerial photos flown at a coarse scale of 1:20,000
- Interpretation did not include field sampling

### Islands Trust Ecosystem Mapping (ITEM)

- Completed by the Islands Trust Fund in 2004
- Intended to support development of the Trust Fund Board's first Regional Conservation Plan
- Like SEI, ecosystem types were identified at coarse scale of 1:25,000
- Interpretation did not include field sampling

To access detailed methodology reports for the Sensitive Ecosystem Mapping project, please visit [www.islandstrust.bc.ca](http://www.islandstrust.bc.ca) or call 1-250-405-5151 or 1-800-663-7867 (Enquiry BC).



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