# Laskeek Bay Conservation Society: 10 Years of Experience With Long-Term Monitoring, Education, and Advocacy as a Volunteer Organization

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## ABSTRACT

Laskeek Bay Conservation Society, which was established 10 years ago, is a small volunteer organization based on Haida Gwaii that runs a field program and diverse long-term monitoring, research, and interpretation programs.

**Key words:** community, Haida Gwaii, Laskeek Bay Conservation Society, nonprofit, volunteer.

A few like-minded friends around a kitchen table started the Laskeek Bay Conservation Society 10 years ago on Haida Gwaii/Queen Charlotte Islands. Our initial focus was to continue the work of Dr. A. J. Gaston in monitoring the ancient murrelet population in the Laskeek Bay ecosystem. A decade later we are involved in several important projects to protect endangered species and their habitat on Haida Gwaii which includes several Red- and Blue-listed species such as the ancient murrelet, marbled murrelet, Cassin's auklet, and Peale's peregrine falcon. As well we are active partners in major programs to address the serious impact of introduced species (e.g., Sitka black-tailed deer, racoons, and red squirrels) on the native and endemic species of the Haida Gwaii Archipelago.

This paper briefly describes the area where Laskeek Bay Conservation Society (LBCS) works, and some of our long-term ecosystem monitoring programs and then turns to how LBCS has linked these programs to public education and involvement in the conservation of rare ecosystems.

We are a small volunteer organization based on Haida Gwaii. From early April to mid-July of each year we run a field program from our research station on 50-ha East Limestone Island, in the Laskeek Bay area. We carry out diverse long-term monitoring, research, and interpretation programs in the surrounding islands and waters of Laskeek Bay.

When we began LBCS, our intention was to continue a research project started by Dr. A. J. Gaston of the Canadian Wildlife Service (CWS) on ancient murrelets *(Synthliboramphus antiquus).* This beautiful little bird spends its life at sea, only coming to shore for a brief period each year to nest in the thousands beneath the roots of large trees on small offshore islands of Haida Gwaii, like Limestone and Reef in Laskeek Bay. About 60% of the world population of ancient murrelets nest on Haida Gwaii, the only nesting sites in Canada.

We felt that some of the interesting questions were only beginning to be asked. We wanted to turn this into a long-term study and talked of 25 years of monitoring to understand ancient murrelets and their interaction in the Laskeek Bay area. So, we convinced CWS and Canadian Parks Service to give us a couple of small contracts—LBCS was born.

We started doing long-term ecosystem monitoring to look at environmental changes and believed strongly that conservation-minded volunteers could do field work using low-technology methods. We felt that lack of accessible information was a barrier to incorporating raw data into working practice. We also were concerned that local communities had previously had little involvement in major research and inventory projects on Haida Gwaii. We did not find out the results of the projects and sometimes important management decisions that affected our communities were drawn from those projects.

So, LBCS set out with 4 purposes:

1. **To continue long-term monitoring of the marine and terrestrial ecosystems of the Haida Gwaii Archipelago.**

At the Limestone Island field station, staff researchers and trained volunteers continue to monitor the ancient murrelet population. This is one of the longest running population monitoring studies in Canada with 15 years of data. Dr. A. J. Gaston's book *The Ancient Murrelet* (Gaston 1992), and our annual scientific reports from 1990 to 1997 (Gaston 1991–98) describe fully the results of this work.

This data, combined with other research by the British Columbia Ministry of Environment, Lands and Parks (MELP) and CWS, led to the listing of the ancient murrelet as vulnerable nationally (Committee on the Status of

L. M. Darling, editor. 2000. Proceedings of a Conference on the Biology and Management of Species and Habitats at Risk, Kamloops, B.C., 15 - 19 Feb.,1999. Volume Two.
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Endangered Wildlife in Canada) and Blue-listed provincially (Hartman et al.1997). This listing is primarily due to the impacts of introduced raccoons and rats to the Haida Gwaii ecosystem and other environmental factors like oil spills.

Over the years, we have expanded monitoring activities to include other research projects. For example, our at-sea surveys of marbled murrelets are the longest running year-to-year survey/census of this endangered species. We feed statistics on marled murrelet into provincial and international databases. Other research projects we conduct are:

i) *Seabirds and shorebirds:* censusing black oystercatchers and gulls, monitoring Cassin's auklet nest sites in Laskeek Bay ecosystem.
ii) *Forest birds:* monitoring cavity nesters such as red-breasted sapsuckers and ravens. With other researchers we monitor songbirds before and after nesting to compare breeding success rates between islands on which squirrels have been introduced and those which are squirrel-free.
iii) *Other endangered species at risk:* peregrine falcon survey and nest site observation in Laskeek Bay ecosystem to monitor chick survival, fledgling success, and adult use of different nest sites.
iv) *Introduced species:* deer, raccoon, and squirrel and their impacts on native and endemic species and habitats. We collaborate on these projects with agencies such as Canadian Parks Service, CWS, MELP, and the Centre National de la Recherche Scientifique in France, and sit as a nongovernment organization (NGO) on the Working Group on Raccoon–Seabird Interactions (Martin and Daufresne 1996, Golumbia 2000, Harfenist et al. 2000).
v) *Marine mammals:* provide annual observation records and photos of orcas, Pacific white-sided dolphins, and humpback whales to researchers.
vi) *Rare and locally endemic plants and introductions:* An interesting phenomenon on Haida Gwaii is the general association between limestone rock and endemic and rare plants. Limestone rock is rare on Haida Gwaii, occurring only on a few islands, like Limestone Island, and at high elevations. A plant list begun in 1990 is updated annually. Deer are changing the plant community structure.

**2. To provide opportunities for volunteers and students to participate in biological field programs and to offer training for necessary field research skills.**

We assumed correctly that this training might lead to future employment or educational opportunities for local people. Volunteers gain experience and training by working with field staff monitoring the wildlife populations and learning data collection techniques. Some former volunteers now have jobs and careers in scientific research. In addition, we now have a student intern program for young people interested in a career in science.

**3. To promote better understanding of marine and terrestrial ecosystems and the local and global influences that threaten the native species.**

The purpose was simply to provide information about the biology of the Laskeek Bay ecosystem to locals and visitors, both at the field camp and in communities, through public outreach programs. A top priority is involving school children at the field camp and in their classrooms. While on Limestone Island, the volunteers and school children develop a deeper understanding of local island ecosystems, species, habitats at risk, and principles of environmental stewardship.

Our experience is that volunteers at Limestone Island become ambassadors in their own communities, sharing what they learned as participants, helping to change attitudes, and advocating conservation issues.

**4. To support and assist other programs aimed at improving knowledge through research and monitoring; and at promoting better decisions in management and conservation of ecosystems by being a local partner and source of advice for various federal and provincial agencies.**

We wanted to support and assist other programs on Haida Gwaii aimed at better management and conservation of species and habitats. In this regard, we wanted to be a local partner and a source of local advice for various federal and provincial government agencies and universities.

Ten years later, we have had successes in all 4 of our purposes.

1. We raised awareness by building a local support base via our volunteer and school programs.
2. We published information so that those people without a scientific background could understand. Tabloid newspapers were distributed throughout the local community.
3. In our case, an important issue turned out to be introduced species. Major environmental impacts are caused in our coastal zone by raccoons and rats that prey on seabird populations and from deer that eat vegetation, fundamentally changing the forest composition and habitats. We joined others in forming a coordinated research project on introduced species on island ecosystems called Research Group on Introduced Species (RGIS) which is now actively addressing these issues.
4. The government embarked on raccoon and deer control because a group of volunteers built a grass roots awareness promoting the need for management of the introduced species to protect the endemic species at risk.

LBCS used many strategies to accomplish our work over the last 10 years. We have the following strategies to offer to other NGOs for implementing in their own communities. This can effectively establish NGOs as active players in protecting rare and endangered species and habitats.

## STRATEGIES FOR AN EFFECTIVE NGO

### Involve volunteers

- As research assistants
- As ambassadors
- As board members
- As scientific advisors
- As interns

### Educate

- Train staff through employment
- Invest in youth (go into schools, have children come to projects)
- Advocate through information
- Base all education products on facts learned in research projects
- Develop methods manuals
- Reach eco-tourists

### Build partnerships

- Research scientists
- Government agencies
- Universities
- Museums
- A memorandum of understanding will clarify roles

### Get funding

- Foundations
- Corporate sponsors
- Local business
- Private donations
- In-kind donations
- Contract management fees
- Youth and intern scholarship programs

### Don't go beyond your resources

- Financial
- Area of operation, expertise, knowledge
- Volunteer abilities
- Nonconfrontational advocacy (don't burn bridges)
- Keep small and flexible (vs. large agencies)

### Build credibility

- Be financially accountable
- Register as a nonprofit society
- Train staff
- Plan
- Develop an office infrastructure
- Publish articles, papers
- Join committees
- Network

### Get your message out to a broad audience

- Newsletters
- Web sites
- Volunteers as ambassadors
- TV and news media
- Slide shows
- Public presentations with visiting experts or researchers

## CONCLUSION

The LBCS works with the ancient murrelet and other species at risk. While carrying out our initial goal we found that the preservation of the ancient murrelet was contingent on several converging factors in the habitat including other species coexisting in the same ecosystem. We decided to improve and increase local knowledge about island ecosystems and species at risk to increase community participation in local long-term management decisions. LBCS has found that an NGO can, through some of the previous strategies, especially by using volunteers, creating jobs, and supplying educational programs, be a link between government, academic research, and the public. When the public is involved in such an organization or receiving the educational programs, individuals will be better informed to take ownership of the issues and thus support sound management decisions.

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