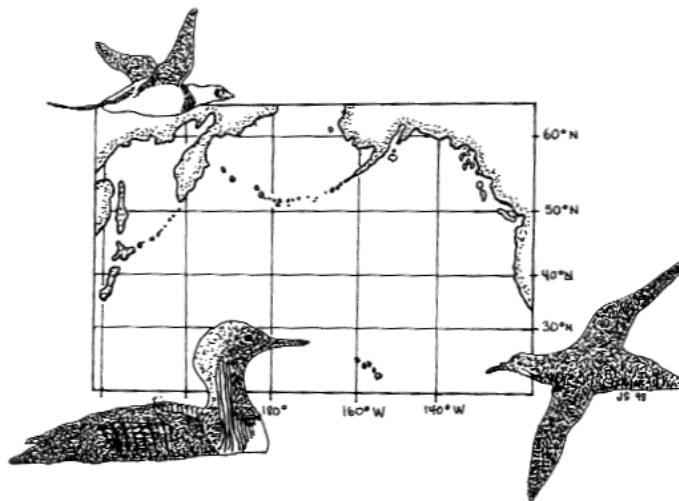


LASKEEK BAY CONSERVATION SOCIETY

REPORT FROM THE 1998 FIELD SEASON



1. SUMMARY

This report highlights the research and educational activities of the Laskeek Bay Conservation Society's ninth field season on East Limestone Island.

This year, 30 dedicated volunteers helped field staff at E. Limestone during the 14-week season. All core activities, such as Ancient Murrelet adult and chick banding, burrow monitoring, and seabird and marine mammal surveys were continued. We began a student internship program for young people interested in a career in science. Also, a local high school student came to Limestone Island for a work-experience project. The Society is now a partner in the newly formed Research Group on Introduced Species (RGIS), which will examine the ecological effects of introduced species on native species of Haida Gwaii.

We found that Ancient Murrelets occupied fewer burrows, and almost half of the seventeen breeding pairs abandoned their nests after laying eggs. A songbird population study, directed by RGIS, resulted in the banding of 269 birds on Limestone Island. Preliminary results suggest that songbirds have fewer surviving young here than on islands without introduced deer.

In long term species monitoring, scientific results are often slow to appear. However, we see the rewards when unusual events, like El Niño, occur and comparisons can be made between years with different ecological conditions. Next year marks a decade of research and education on East Limestone Island and we look forward to again working with our volunteers and research partners.

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2. EDUCATIONAL PROGRAM

Laskeek Bay Conservation Society provides a unique opportunity for people interested in natural history to participate in ecological research. Volunteers stay at the field camp for at least one week to help collect biological data and participate in monitoring projects. Local school groups and visitors also come to the island, for shorter periods of time, to learn about seabird life history, coastal old-growth ecology and bird banding. They primarily help out with the annual departure of Ancient Murrelet chicks.

2.1 LIMESTONE ISLAND FIELD STATION

After nine years, the small, cedar shake cabin continues to provide staff and volunteers with a home and work centre. Minor improvements have been made each year to increase our comfort or working efficiency but essentially it remains unchanged. Situated on the eastern side of the island, it provides an excellent vantage point to watch for marine life in the Hecate Strait and Laskeek Bay.

2.1.1 Society staff and Board of Directors

Returning staff, Colin French and Joanna Smith, worked for 13 weeks in camp. Our administrator, Greg Martin, works throughout the year managing the affairs of the Society. There are ten volunteer directors.

2.1.2 Volunteer Program

This year, 30 volunteers contributed 302 days at the Limestone Island camp. Each volunteer is provided with an orientation of the field camp, as well as necessary field training to enable them to do the research and monitoring activities alongside staff or independently. The average length of stay was 10 days, although most people volunteered for one week; two people came for two weeks and two came for three weeks. Five volunteers were from Haida Gwaii, 19 from British Columbia or Alberta and the remaining six from England, Switzerland, Czech Republic, or Australia.

One of our volunteers this year was Carla Russ, a Grade 12 work-experience student from Queen Charlotte School. Carla came to Limestone Island for one week and helped with monitoring, data entry, camp maintenance and trail repair. Carla made a positive contribution to the camp and we look forward to having other work-experience students in the future.

2.1.3 Student Internship Program

We started an internship program this year, designed to provide a young person with experience in zoological research and conservation biology. The first student was Charlie Cornwallis, from Oxfordshire, England, who attends the University of Sheffield. Charlie volunteered for 54 days on East Limestone Island and five days on Reef Island. Charlie assisted staff with research projects, natural history interpretation and volunteer training. The program was a great success due to Charlie's willingness to learn new skills, his existing skill level and enthusiastic approach to the volunteer program.

2.1.4 Project Limestone

Since 1991, small groups of students have come to East Limestone Island to gain hands-on experience with scientific study. *Project Limestone* students come from secondary schools throughout Haida Gwaii on trips organized by their teachers. The students camp at Vertical Point on Louise Island. During the afternoon of their first day, the group visits Limestone Island to become familiar with our research activities and to learn about the life history of Ancient Murrelets. They are given an orientation to the chick catching and banding areas so that later that night, they can return to help us weigh and band the two-day old murrelets on their way to sea.

Two school groups came this year: Queen Charlotte School Kayak Club and Queen Charlotte School Grade 12 Biology Class. Both classes have been involved for many years and were led by Kevin Borserio and Sheila Douglas, the founders of *Project Limestone*. In all, 11 students and four adults came to learn more about Ancient

Murrelets and the natural history of Haida Gwaii, contributing 27 volunteer days to Limestone Island.

Over the years, *Project Limestone* has involved dozens of local students, many of them Haida, bringing these curious young adults to a field camp where they will help for a few nights. Founder, Kevin Borserio, says that the “Project is an established part of school culture”, allowing youth to participate in an environmental project that they would normally be excluded from.

2.1.5 Tour Groups and other visitors

Beginning in mid-May, visiting East Limestone Island is a highlight for commercial tour operators because guests are able to participate in seabird research and watch the Ancient Murrelet chick departure. The sailing vessels, Island Roamer and Maple Leaf have brought groups to East Limestone Island for many years and this year brought 66 visitors ashore. Guests and crew are given a guided tour of the island in the afternoon, to learn about a magnificent old-growth forest that supports a thriving seabird colony. The groups return to the island just before dark and make their way to the banding station to help catch and weigh chicks. These visitors gave generously with donations and by purchasing t-shirts to show their support of the Society’s commitment to education and research.

We also had visits from Parks Canada Wardens and individuals on private sailboats.

2.1.6 Collaborating Scientists

Laskeek Bay Conservation Society is a research partner with a newly formed scientific group, the Research Group on Introduced Species (RGIS). Sean Sharpe, Dr. Jean-Louis Martin and Dr. Tony Gaston are the primary investigators of this five-year project, which focuses on the role that introduced species play in the changing ecology of the islands. RGIS had a field camp on Reef Island from 2 May until 10 July, with four to eight people in camp. RGIS researchers worked occasionally on E. Limestone Island during the field season.

2.2 EDUCATIONAL INITIATIVES

2.2.1 Map and Species List for Volunteers

A map of the island, complete with trails, numbered sapsucker trees, and plant and bird lists on the reverse side, was created over the winter to provide volunteers with more information once they arrived on the island. All volunteers found the map very useful and it became a souvenir of their stay on Limestone Island. The map could be improved next year by making the trails to scale, putting the map on waterproof paper to make it more durable and editing the plant list to make finding common plants easier.

2.2.2 *Insect Collection*

The insect collection has grown to include 76 specimens and continues to serve as a valuable educational tool, increasing the awareness of the different species that inhabit E. Limestone Island. Two notable additions to the collection were a White-lined Sphinx Moth, *Hyles lineata*, the most northerly coastal record in B.C. and a caddisfly. The insect collection will eventually be housed at the Haida Gwaii Museum at Qay ‘Illnagaay in Skidegate.

3. SCIENTIFIC MONITORING

Long-term monitoring programs are rare, especially outside of the government, and the Laskeek Bay area has one of the longest, continuously run data sets for seabird research in British Columbia. In addition to seabirds, the Society monitors marine mammals, the effects of introduced species, cavity nesting birds and the rare plants that live on the limestone bedrock. The scientific and education components of the Society are tightly interwoven, allowing volunteers to participate in a community based conservation project on a remote, offshore island. Research questions and sampling protocols are established by a Scientific Advisory Panel. All studies are carefully considered for their value to both science and the Society’s education goal of providing information about local ecosystems to the people of Haida Gwaii and visitors to the islands.

3.1 ANCIENT MURRELET RESEARCH

Ancient Murrelets continue to be “blue-listed” in B.C. and designated as “vulnerable” by the Council on the Status of Endangered Wildlife in Canada (COSEWIC). This means that populations are thought to be declining throughout their range and may become endangered unless the factors responsible for the decline, such as introduced species, are addressed. Haida Gwaii contains about half of the world’s Ancient Murrelet breeding population, and colonies within the archipelago are at risk because of introduced raccoons and rats.

3.1.1 *Adult Banding*

Adult Ancient Murrelet survivorship is measured from year to year with a banding program during the breeding season. We use a large knock-down net in three locations, two on the east side of the island and one on the north. Adults were caught from 27 March to 12 April, 1998 and then from 17 May to 4 June, when nesting was almost over. Banding is stopped in mid-April to minimize disturbance during egg-laying. The total number of murrelets caught over 13 nights was 296, slightly less than last year (Table 1; excluded from the table are 39 birds caught more than once).

Table 1. Distribution of breeding and non-breeding adult Ancient Murrelets caught in 1998, with a comparison to 1997 totals. Birds are considered breeders if they are caught before 15 April, caught after May 1 with a brood patch greater than 19mm, or if they are in burrows with eggs or chicks. Breeding status is unknown if birds are caught between 15 - 30 April or when brood patches are 10 - 19mm.

		< 15 Apr.	mid- season	after 1 May, 1998			TOTAL	compare to
		Breeder	Unknown	Non-breeder	Unknown	Breeder	1998	1997
NEW	Net [∇]	32	0	102	12	16	162	201
	Burrow	0	0	0	0	5	5	8
RETRAP	Net	79	1	18	3	19	120	118
	Burrow	0	0	0	0	9	9	13
TOTAL		111	1	120	15	49	296	340

[∇] includes birds caught on the ground

Studies on Reef Island between 1984-1989 found that Ancient Murrelets typically return to breed at two or three years of age and will generally breed each year thereafter. Therefore, when we recover adults that were banded as early as 1989 on East Limestone Island, they are now between 12 and 13 years old. Among re-trapped adults banded as chicks, 40 percent of those 2-3 years old, and 83 percent of those seven years or older, were breeding. No chicks banded in 1993 have been recovered and only a few have been seen from 1991 and 1992 (El Niño years).

Table 2. The number of Ancient Murrelet adults caught in 1997 and 1998 that were banded in previous years either as adults or chicks, with numbers of breeders indicated in parentheses.

YEAR BANDED	Total recaptured	1997		Total recaptured	1998	
		No. banded as ADULTS	No. banded as CHICKS		No. banded as ADULTS	No. banded as CHICKS
1989	7 (6)	7 (6)	None banded	3 (2)	3 (2)	none banded
1990	14 (14)	12 (12)	2 (2)	13 (12)	10 (10)	3 (2)
1991	13 (13)	12 (12)	1 (1)	7 (7)	6 (6)	1 (1)
1992	13 (12)	12 (11)	1 (1)	5 (4)	5 (4)	0
1993	7 (7)	7 (7)	0	7 (6)	7 (6)	0
1994	14 (8)	7 (5)	7 (3)	8 (8)	6 (6)	2 (2)
1995	9 (5)	7 (5)	2 (0)	11 (9)	9 (8)	2 (1)
1996	54 (51)	54 (51)	0	40 (36)	37 (35)	3 (1)
1997				32 (23)	32 (23)	0
1998						
TOTAL	131 (116)	119 (109)	13 (7)	126 (107)	115 (100)	11 (7)

3.1.2 Chick Banding

This year, the same system of clear, plastic funnels was used to catch the Ancient Murrelet chicks on their way to sea. Most of the chicks were banded with the same black, spray-painted stainless steel bands but for the first time, we also tried green, plastic bands at the end of the season. Funnels were monitored from 7 May - 23 June, and both the start and end of chick departures were determined. The first chicks appeared on 11 May, peaked on 20 May with 55 chicks, and stopped on 22 June (Table 3). Chicks departed for 43 nights this year, the longest departure spread since 1995.

Table 3. A comparison of 1997 and 1998 chick departures, two years that have used the same time protocol for chick banding.

Variable	1997	1998
Date monitoring started	8 May	7 May
Date monitoring ended	12 June	23 June
No. of total days	35	48
First night of chicks	11 May	11 May
peak date (No.)	24 May (41)	20 May (55)
Last night of chicks	11 June	22 June
No. days with chicks	31	43
Number of chicks banded	527	495*

* includes 53 chicks that were banded with green, non-numbered bands.

We used the number of chicks that departed between 2300 and 0200 to compare chick numbers between years to compare chick numbers between years (Table 4). The average number of chicks captured during 1990 and 1997 was 567 (± 93), hence, the number of chicks banded in 1998 was slightly lower than the average.

Table 4. Numbers of chicks caught and banded in funnels between 1990-1998, with three different sampling protocols.

Protocol	Year	Total chicks	Chicks 2300 to 0200	Chicks after 0200 hrs	Comments
2300-0200 +	1990	873	751	122	
2300-0200 +	1991	562	459	103	raccoon
2300-0200 +	1992	674	610	64	El Niño
2300-0200 +	1993	653	567	86	Raccoon
2300-0200 +	1994	618	570	48	
2300-0200 +	1995	617	540	77	
2300-0200	1996	672 ^Δ	588	0	
2300-0230	1997	527	456	71	
2300-0230	1998	495	440	55	El Niño
TOTALS		5691	4981	710	

^ΔTotal number extrapolated by $y = x \div 0.875$

3.1.3 Burrow Monitoring

Twigs were set up inside the entrance of previously monitored burrows on 5 April. The first eggs appeared on 7 April and the last one was found on 16 May (Table 5). Seventeen burrows were occupied this year and slightly greater than 50 percent of breeding pairs fledged one or two chicks. We saw a high rate of nest abandonment this year, almost half of all breeding pairs, and all eggs laid after 30 April were deserted (n=4).

Table 5. Occupancy and fledging success of Ancient Murrelet burrows on East Limestone Island 1996-98.

	1996	1997	1998
Original burrows monitored	89	72	62
New burrows found	2	16	12
Potentially useable burrows	74	56	64
Burrows occupied (% occupancy)	28 (38 %)	21 (38 %)	17 (27 %)
Fledge 2 chicks	22 (93 %)	14 (71 %)	6 (52 %)
Fledge 1 chick	4	1	3
Nest abandonment - 1 egg	2	6	6
Nest abandonment - 2 egg	0	0	2

We recaptured seven banded previously in burrows banded five new adults and found two murrelets that had been banded as chicks - a total of 14 marked birds. Four birds moved burrows from the previous year (three females and one male). Two breeding pairs successfully fledged two chicks for the sixth and ninth year running. We managed to get six recordings of calls made by departing murrelet families. In three instances, we knew the identity of both adults.

3.1.4 Gathering Ground Counts

Gathering ground counts were done from 18 April to 16 June, using a spotting scope in the same place as other years. Mean (\pm SE) monthly counts for April, May and June were: 34 (\pm 19; n=12), 57 (\pm 13; n=28), and 22 (\pm 6; n=13), respectively. The highest count for each month was: 102 on 27 Apr., 206 on 12 May and 84 on 8 June. Five evenings were missed due to weather or other camp activities.

3.2 MARINE SURVEYS

Surveys for marine birds and mammals continued as part of our monitoring efforts in the Laskeek Bay area. During these surveys, we count seabirds along established transects with seals and sealions counted at seasonal haul-outs.

3.2.1 Seabird Surveys

In 1998, seven inshore surveys and six, additional offshore surveys east into Hecate Strait were completed. During two sea surveys, adult and chick Ancient Murrelets were seen on the water near Reef Island, and on one occasion, an adult was seen feeding two chicks.

Seventeen species of birds were counted: six auks, four gulls, two loons and ducks, and one species each of shearwater, phalarope, storm-petrel and cormorant. Marine mammals like Steller's Sea Lions and Harbour Seals were seen on each transect, and we occasionally saw a Minke Whale or Harbour Porpoise.

All bird counts will be summarized. Particular attention is paid to the Marbled Murrelet because it is provincially "red-listed" and designated as "threatened" in Canada by COSEWIC. On transects that have been completed each year (i.e. excluding the new ones into Cumshewa Inlet), Marbled Murrelet numbers peaked on 16 June with 666 birds, the most since 1993 (183 - 1997; 492 - 1996; 275 - 1995; 635 - 1994 and; 1686 - 1993).

3.2.2 Marine Mammal Surveys

Marine mammal watches were conducted from the usual location on Lookout Point. Thirty-one watches were done between 14 April and 6 July, resulting in 26.5 hours of observation, a 75% increase over last years effort.

Non-breeding Steller's Sea Lions were counted at the Skedans and Reef Island haul-outs. From the beginning of April to early May, sea lions were primarily found at the Skedans Islands and reached a maximum on 6 May with 72 animals. From mid-May onward, most of the sea lions were found on the rocks SE of Reef Island. Peak numbers were more than double those counted last year: 735 on 26 May, 1998 versus 300 on 18 June, 1997.

Orcas, or killer whales, were seen in Laskeek Bay on three occasions. The pods were photographed each time so that Graeme Ellis, a whale biologist at the Pacific Biological Station, could possibly identify individuals.

3.2.3 Black Oystercatcher Census and Banding

Black Oystercatchers were late in nesting this year and many adults were still on eggs when camp closed. Nest surveys from 6 - 22 June found eggs or empty nests at most of the established nest sites on the Skedans Islands, Cumshewa Island, Lost Islands and Limestone Island. Two chicks were banded on Low Island and one on Reef Island.

3.2.4 Glaucous-winged Gull Colony Census

Glaucous-winged Gull nests were counted at five islands from 9 - 22 June and 329 nests contained 1-3 eggs, a record since our counts began in 1993. More gulls were found nesting on the Lost Islands again this year, with a concomitant decline at Kingsway Rock (Table 6).

Table 6. Glaucous-winged Gull colonies in Laskeek Bay, censused 1993-98. Totals do not include Cumshewa Island because it was added in 1994.

Colony	1992	1993	1994	1995	1996	1997	1998
Lost Islands	120	140	165	145	175	226	293
Kingsway Rock	94	79	82	56	46	36	22
Skedan's Islands	18	20	12	11	1	8	5
Low Island	1	4	2	1	6	0	9
<i>TOTAL</i>	233	234	261	213	228	270	329
Cumshewa Island	-	-	7	4	2	6	2

3.3 TERRESTRIAL PLANTS AND ANIMALS

3.3.1 Songbird Banding and Species Counts

Monitoring breeding songbird populations was a major project for us this year, in partnership with the Research Group on Introduced Species (RGIS). We banded birds on East Limestone and Vertical Point, using aluminum and colour band combinations. The main intention of the trapping was to see what proportion of the birds were juveniles, as this provides a measure of reproductive success of the local population. The trapping was simultaneously conducted on islands with vegetation that had been severely impacted by deer (Louise, Limestone, Reef), on islands with intact vegetation (Low Island) and on islands with (Louise, Limestone) and those without (Reef, Low) introduced Red squirrel. The objective of the research is to tease out the influence of both deer and squirrel on the demography of forest birds and ultimately to better understand the impact of these introduced species on the forest birds. On E. Limestone Island, seven nets were set up near the freshwater spring in previously used mist-net lanes. Birds were banded from 11 May to 2 July, with a break from 17 May- 2 June while birds were incubating eggs. Banding on Vertical Point was shared with the research crew on Reef Island, and nine nets were monitored from 20 June - 4 July. From a total of 749 captures we caught 269 birds from 12 species on East Limestone and 64 birds from 14 species on Vertical Point. Data analysis will be handled by Dr. Jean-Louis Martin, and his student Georges Yau, at the Centre National de la Recherche Scientifique, in France. Preliminary results show a dramatic increase in song bird productivity and abundance on deer free Low Island suggesting that song bird productivity may be driven more by deer's impact on the vegetation than by nest predation by squirrel.

A daily checklist of birds resulted in 74 species this year, with the daily maximum on 27 April with 38 species. The Peregrine Falcons raised at least two chicks at their nest on the south cliffs and the Sharp-shinned Hawks had another successful brood from their nest along the main trail. Two Fork-tailed Storm-Petrels pairs were found breeding on Cassin's Tower. We heard Cassin's Auklets on several nights and found evidence of nesting, but no auklet chicks were found on the colony. Northern Saw-whet Owls were heard in April and May, on both the north and east side of the island.

3.3.2 Red-breasted Sapsucker Nest Surveys

On East Limestone island, Red-Breasted Sapsuckers continue to be the most common cavity nester but four other cavity nesting species were found this year. Thirteen sapsucker nests, three Chestnut-backed Chickadee, two Brown Creeper, one Hairy Woodpecker and one Northern Flicker nest were found. The sapsuckers started to excavate nests on 11 April, the first chicks appeared on 25 May and chicks fledged from 13 - 23 June. With the observations from chick rearing and departure, we may be able to work backwards to determine egg laying dates and incubation times.

3.3.3 Introduced Animals

Sitka Black-tailed Deer live on E. Limestone Island. At the beginning of the field season, an RGIS research team including Gwenaël Vourc'h, a Masters of Science student from the University of Montpellier, France, her supervisor JL Martin, Tarmo Poldmaa and her field assistant Gillian Austin, conducted 31 days of research on Limestone and Louise Islands, to examine whether deer prefer to feed on local or mainland Western red cedar and salal. Gwenaël placed mainland population cedar seedlings, cedar branches and salal branches among island-grown cedar and salal, in study plots accessible to deer. The objective was to see whether deer would show a preference for local vegetation as a consequence of reduced chemical defense in island plants resulting from an adaptation to the absence of deer over the past 6000 years. Samples of mainland and island-grown vegetation were then analyzed in a lab to determine whether the preferred plants had less chemicals in them that would make them more palatable for deer. Results show that deer prefer local cedar and that there is, in island cedar, a consistent reduction of chemical compounds known to have a negative effect on plant digestibility.

Later in the season, RGIS and LBCS constructed three 15m x 15m exclosures along the main trail on East Limestone Island, to demonstrate the recovery of the forest understory in the absence of deer browsing.

Ten squirrel surveys were done from 15 May to 28 June, to quantify their distribution within the island's diverse habitats. In total, 24 squirrels were seen on the surveys, but only four were within the 20m radius study plots. Observations of squirrels increased over the season. As in previous years, most squirrels were on the Main Trail.

There was no evidence found of raccoon presence on E. Limestone Island this season. A single midnight, spotlight survey was done to scan the shores of Limestone and Louise Islands for raccoons. One raccoon was seen on Vertical Point but it was not removed because we could not obtain the appropriate permit.

3.3.4 Plant Inventory

Some of the plants on East Limestone Island are of local significance because they are only associated with limestone bedrock, a substrate found on East and West Limestone Islands and with limited distribution elsewhere on Haida Gwaii. This year, we found a few more populations of some of the less common plants, usually on inaccessible cliffs. A new species was found this year that has not been recorded for Haida Gwaii,

Chimaphila menziesii., and has been added to the Ministry of Environment's plant database. Many species appeared more abundant this year, probably because deer browsing levels were lower than last year. The total number of plants inventoried for East Limestone Island (including some mosses and lichens) currently sits at 120.

4. CONCLUSION

We were extremely busy this year, with our time carefully divided among many interesting ecological projects. Ancient Murrelets, sea surveys and censusing other nesting seabirds in Laskeek Bay, and introduced species research were our core projects. We also started an intensive songbird banding project, completed a record number of hours at the lookout, found new plants and continued to develop our interpretive program. We enjoyed two, wonderful visits from *Project Limestone* school students and had many interesting people visit us from all over the world. The successful completion of our projects was made possible because of the many, long hours contributed by Charlie Cornwallis, the other hard-working volunteers that came to Limestone Island and the Board of Director's that search for funding and keep the Society alive. Thank-you and we look forward to sharing next year with you.

5. ACKNOWLEDGMENTS

Established in 1990, the Laskeek Bay Conservation Society is a grass-roots, non-profit organization based in Haida Gwaii, B.C. The Society relies heavily on volunteers to keep it going. Our goal is to continue increasing the awareness and understanding of the marine and terrestrial ecosystems of Haida Gwaii via our research and education programs. With the generous contributions from the following groups and individuals, we were able to continue our scientific monitoring and education program this year:

- W. Alton Jones Foundation for their continued financial assistance to our interpretive program;
- Canadian Wildlife Service (National Research Centre, Ottawa, and Pacific and Yukon Region, Delta) for financial assistance and long-term equipment loans;
- South Moresby Forest Renewal Account (SMFRA) for financial assistance for RGIS projects;
- Gwaii Trust for their grant to *Project Limestone*, our program for Haida Gwaii secondary students;
- Ministry of Environment, Lands and Parks, Skeena Region, for permission to conduct research in the Wildlife Management Area;

We also thank the following individuals or groups who gave generously of their time to the Society, making life easier for us in the field:

- Tony Gaston for his valuable scientific advice and continued excitement for Ancient Murrelets;
- Jean - Louis Martin, Tony Gaston, Rob Kelly, Isabel Butler, Tarmo Poldmaa and Georges Yau for their help to develop the songbird banding project on Limestone Island;
- Greg Wiggins, SMFRA coordinator;
- Tarmo Paldmaa for his outstanding assistance during an emergency in the field;
- Graeme Ellis for providing us with a camera and film to document individual killer whales;
- the Haida Gwaii Watchmen at Skedans, Linda and Stefan, for their kind and generous hospitality;
- Crew and guests of the vessels Island Roamer and Maple Leaf for generously supporting our project with their visits and t-shirt purchases, and welcoming us aboard for many wonderful meals;
- Nathalie Macfarlane, Haida Gwaii Museum, for continuing to provide a venue to promote the Society's work;
- Joelle Fournier for her cheerful assistance in the office at the end of the season;
- Greg Martin for numerous hours of volunteer time to keep the Society going;
- LBCS Directors for the innumerable volunteer hours they have donated to the Society to maintain and develop the scientific and educational projects;
- all of the volunteers who participated in the Limestone Island camp, purchased t-shirts, made donations, or helped out in town and;
- Charlie Cornwallis who worked extremely hard, each and every day, bringing laughter and unbounded enthusiasm to Limestone Island - Colin and I couldn't possibly thank him enough.

Finally, thank you to the owners, staff and crew of South Moresby Air Charters, Harbour Air, m/v Wanderlust and m/v Western Flyer for their professional services in transporting gear and people to and from the camp throughout the season.

Thank you all and please come and celebrate our tenth year with us in 1999!

Report prepared by Jo Smith, interpreter / biologist and edited by LBCS

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