

**ANNUAL REPORT of the
CENTRE FOR WILDLIFE ECOLOGY
2009-2010**



**Department of Biological Sciences
Simon Fraser University**

<http://www.sfu.ca/biology/wildberg/index.html>

Dr. Ronald C. Ydenberg, Director

I. HISTORY

Under the Migratory Birds Convention and Canada Wildlife Acts, the mandate of the Canadian Wildlife Service is to protect and conserve migratory bird populations. In the 21st century, this

III. PERSONNEL

A. Research Team

B. Steering Committee

<i>N e</i>	<i>Pos on</i>	<i>Aff on</i>
Elizabeth Elle	Assistant Professor	<i>F</i>
Arne Mooers	Assistant Professor	<i>F</i>
Robert Elner	Emeritus Scientist	<i>EC</i>
David Green	CWE faculty (non-voting)	<i>F</i>
Paul Kluckner	Regional Director, ECB PYR	<i>EC</i>
Barry Smith	Wildlife Research, Head	<i>EC</i>
Tony Williams	CWE faculty (non-voting)	<i>F</i>
Ron Ydenberg	CWE Director (non-voting)	<i>F</i>

visited Triangle in late July and early August to recheck the permanent monitoring plots established in 1989. This project is undertaken at 5- year intervals.

The 2009 season was fairly typical for a cold-water year in terms of the seabirds' phenology (slightly late), diet (lots of *Neoclinas* in Cassin's Auklet nestling diets) and breeding success (generally good). But it was also the second consecutive year in which Common Murres failed completely, due to constant harassment and predation by Bald Eagles and Glaucous-winged Gulls in the absence of a protective pair of Peregrine Falcons.

In addition, in 2009 we completed the second year of a project to band Rhinoceros Auklets at the large colonies at Pine Island (central coast) and Lucy Island (north coast). We also banded on SGang Gwayy, in Haida Gwaii in 2009. We plan to continue this project for several more years, in order to (1) obtain estimates of adult survival rates at these important colonies to enable us to assess the potential effects of mortality in gill-net fisheries on local Rhinoceros Auklet populations, (2) to quantify the extent of population genetic structuring in Rhinoceros Auklet colonies in BC and elsewhere, so as to identify management units for conservation; (3) to quantify geographic and intercolony variation in this species' diet and productivity, and (4) to quantify geographic and interannual variation in diets of Pacific sandlance, a key prey species for Rhinoceros Auklets at all BC colonies.

Graduate students:

Kyle Morrison defended his M.Sc. thesis in May 2009.

B. Integrated Shorebird Research

world population of ca. 1200 individuals. Master's student Marie-Hélène Burle spent 5 months conducting the first study of the species' biology on the atoll of Tahanea, including the transition from the non-breeding to the breeding season. The information on habitat usage, diet, and social behaviour is being used to support reintroduction planning for the species onto atolls where rats have or will be removed. Burle presented papers at the Wader Study Group meeting, in the Netherlands, and the 2010 SCO-AOU-COS meeting in San Diego.

Least Terns: CWE Research Associate Pat Baird conducted a one-year study to compare foraging areas and prey types of California least terns in San Diego in 2009, with the same types of data gathered in the late 1990's. She presented a paper on this research at the Pacific Seabird Group meeting in February 2010 at Long Beach, California. Researchers from UBC, the

D. Sea Duck Ecology

The sea duck research group, led by Dan Esler, cond

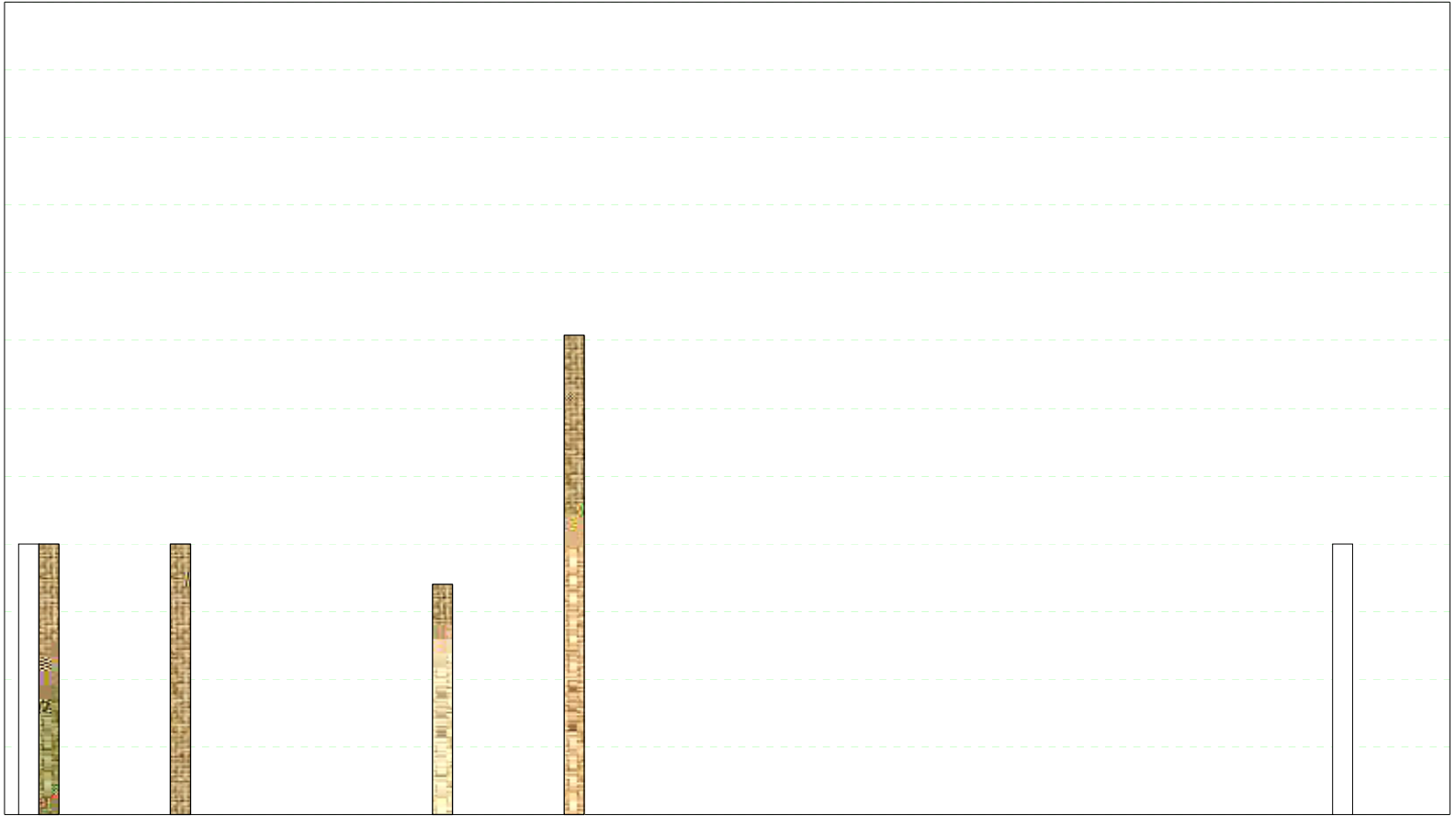
ungrazed sites (Harrison et al. in revision). Similarly, grazing induced changes to the vegetation had both positive (increased cover of species promoted by grazing) and negative effects (shorter vegetation) on nest survival of Vespers sparrows (Harrison et al. submitted) such that productivity did not differ in grazed and ungrazed sites. We also examined how grazing influenced vegetation and the avifauna in Douglas fir forest of the Cariboo Chilcotin. We found that grazing reduced ground vegetation height and reduced grass cover but led to increased numbers of shrub cover and saplings, but these changes had few impacts on the bird community (Whitehorne et al. in prep). Overall, this project suggests that rangeland can sustain grazing of the intensity currently observed in the Cariboo-Chilcotin since this level of grazing has limited impact on birds of the intermountain region of BC. However, grazed sites had a lower abundance of aerial insectivores than ungrazed sites (Whitehorne et al. in prep). This result warrants further attention given the observed declines of this avian guild.

VI FUNDING

Budget

During this fiscal year, 1 April 2009 to 31 March 2010, Simon Fraser University (the Centre for Wildlife Ecology) and Environment Canada (Science and Technology Division) signed a contract for a four year funding agreement. This Contribution Agreement, which was only finalized in March 2010, provided \$200,000 as core support for the research activities of the Centre for Wildlife Ecology this year, and will contribute the same amount for the next three years, 2010-2013.

The chart has been revised from the format of previous years to compare revenue projections (formulated for this third agreement) to actual revenue from Environment Canada, SFU and other industrial, provincial, federal and international sectors.



Centre for Wildlife Ecology Annual Financial Report

2009/2010

1 April 2009 - 31 March 2010

Scholarships, Fellowships, Grants for Students

PhD

Emerging Leaders in the Americas Program	Ariam Jimenez	\$10,000
NSERC	Samantha Franks, Holly Middleton, Lindsay Farrell	\$63,000
SFU Fellowships etc	Lindsay Farrell - President's Research Award	\$6,250
SFU Fellowships etc	Birgit Schwarz - Dept of Biological Sciences - Travel and Research Award	\$350
International	Birgit Schwarz - German Academic Exchange Service	\$10,180
International	Birgit Schwarz - Daimler Benz Foundation	\$7,020
Provincial	Birgit Schwarz - Pacific Century Graduate Scholarship	\$10,000

M Sc

SFU Fellowships etc	Danica Hogan - Graduate Entrance Scholarship	\$12,000
NSERC CGS-M	Danica Hogan	\$15,817
Ducks Unlimited	Danica Hogan	\$3,000
SFU Fellowships etc	Rachel Gardiner - GF	\$6,250
SFU Fellowships etc	Christine Rock - GF	\$6,250
IPS NSERC	Christine Rock - Summer and Fall	\$13,924
SFU Fellowships etc	Eric Palm - Special Graduate Entrance Scholarship - Fall and Spring	\$9,000
SFU Fellowships etc	Corey VanStratt - GF	\$6,250
SFU Fellowships etc	Martha Fronstin - Special Targeted Entrance Scholarship - Fall and Spring	\$9,000
Society of Canadian Ornithologists	Marie-Helene Burle - The Fred Cooke Award	\$10,000
NSERC CGS	Michaela Martin	\$10,208

General Funding for CWE

EC/Core	EC/CWS Annual Chair Funding (1st of 4 yrs)	\$200,000
SFU	Ydenberg RC SFU - VPR: Contribution to Centre for Wildlife Ecology (Lump sum for 2006 through 2011)	\$30,000

Provincial	Green DJ	BC Hydro/ Cooper Beaudesne and Associates Ltd.	\$73,425	
Other EC	Green DJ	Effects of priority pesticides on Wildlife - Owls	\$23,760	Other

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