

Laura McFarlane Tranquilla

Cognitive and Behavioural Ecology, Memorial University of Newfoundland
St. John's, NL, A1B 3X9, Canada
Phone: (709) 737-7668
Email: lat@alumni.sfu.ca

Education

- In progress* Ph.D. Candidate, Cognitive and Behavioural Ecology, Memorial University of Newfoundland, St. John's, N.L. (Dr. William Montevecchi, advisor)
- 2001 M.Sc. Department of Biological Sciences, Simon Fraser University, Burnaby, B.C. (Dr. Fred Cooke, advisor)
- 1997 B.Sc. (1st division). Biology Department, University of New Brunswick, Fredericton, N.B.

Professional Experience

- 2008-present **PhD Candidate**, Cognitive and Behavioural Ecology, Memorial University of Newfoundland, St. John's, N.L. (Dr. William Montevecchi, advisor).
- Hold a competitive NSERC scholarship for research toward my doctoral degree
 - Responsible for developing and administering all aspects of full-time research toward my dissertation, investigating winter distribution of seabirds in the western North Atlantic.
 - I work in association with a mutidisciplinary group including Memorial University, Environment Canada, and the International Polar Year program.
- 2007 **Land Use Policy Review**. *BC Conservation Federation and Canadian Wildlife Service (Supervisor: Dr. Elsie Krebs)*
- 2006 **Biology Technical Writing and Editing Consultant**
- *Department of Fisheries and Oceans Canada (Supervisor: Barbara Lucas)*. Wrote/edited document for Pacific North Coast Integrated Management Area.
 - *Canadian Wildlife Service (Supervisor: Dr. Bob Elner)*. Document: Management/control of urban Canada geese.
 - *Canadian Wildlife Service (Supervisor: Dr. Sean Boyd)*. CWS Technical Report and scientific manuscript (Cassin's Auklet radio telemetry at Triangle Island, BC).
 - *Rescan Environmental Service Ltd (Supervisor: Rachel Brock)*. Environmental assessment reports.
 - *BC Conservation Federation & Canadian Wildlife Service (Supervisor: Kathleen Moore)*. Edit Marine Areas of Interest in B.C and B.C. Seabird Atlas.
 - *BC. Conservation Federation & Canadian Wildlife Service (Supervisor: Dr. Michael Dunn)*. Best practices manual
- 2004 **Contractor**, *Canadian Wildlife Service (Supervisor: Dr. Douglas Bertram)*.
- Developed database for 10 years of research for Triangle Island Seabird Research Program.
 - Assemble, process, clean, and compile electronic and hard copies of datasets and comprehensive metadata.
- 2002-2004 **Research Associate & Field Coordinator**, *Triangle Island Research Program, Simon Fraser University (Supervisor: Dr. Mark Hipfner)*.

- Administration assistant for seabird research program: supervised field personnel; organized and transported equipment and personnel to remote field site (incl. logistics for helicopter and ship-based transport).
 - Field skills (i.e. character-building adventures): lived in cramped quarters; mediated field crew arguments; adept at nocturnal bird-banding (including waking up at 3 am to do so); climbed up steep cliffs and grubbed countless muddy auklet burrows; collected eggs; took blood samples; rode zodiac in high seas; data entry, bird banding, and daily/nightly monitoring of adult and juvenile Rhinoceros and Cassin's Auklets, Tufted Puffins, and Common Murres.
- 2003 **Contractor**, *Scott Islands Science Synopsis, Environment Canada (Supervisor: Dr. Michael Dunn)*
- Prepared science synopsis "10 years of research on seabirds on Triangle Island, British Columbia"; synopsis used in Marine Protected Area planning public forum.
- 2001-2004 **Research Associate**, *Marbled Murrelet Project, Simon Fraser University. (Supervisor: Dr. David Lank)*
- Consultation on research project design; data entry and analysis, organized long-term database.
 - Analysed data for and wrote 6 scientific papers on Marbled Murrelets (see 'publications').
 - Hiring, training, and supervision of field personnel; coordination of field equipment and supplies for large field camp operating over 5-month period each year.
- 1998–2001 **Graduate Student**, *Simon Fraser University, Burnaby, B.C. (Supervisor: Dr. Fred Cooke).*
- Designed and coordinated research project on ecology and physiology of Marbled Murrelets at sea.
 - Supervised and trained field crew (8 people) to be proficient in:
 - nocturnal at-sea capture (using zodiac and spotlight)
 - setup and bird extraction from floating mistnets
 - radio-tagging (subcutaneous attachment) and telemetry monitoring (on land, boat, and helicopter)
 - banding and blood-sampling of Marbled Murrelets
 - nocturnal marine navigation.
 - Extensive marine bird surveys (including transects and distance sampling) from small boats.
 - Trained in laboratory techniques (DNA analysis and physiological assays).
 - Analyzed data, wrote technical reports, manuscripts, and MSc. thesis.
- 1995 – 1997 **Research Assistant**, *Atlantic Cooperative Wildlife Ecology Research Network, University of New Brunswick, Fredericton, N.B. (Supervisor: Dr. Tony Diamond).*
- Mapped breeding songbird territories in blackfly-infested forests of New Brunswick; habitat vegetation surveys.
 - Extensive passerine mistnetting and banding (at habitat plots, MAPS and fall banding stations) and seabird banding experience (Machias Seal Island, NB.).
 - Organized meeting of the Society of Canadian Ornithologists.
 - Administration and coordination of field camps, created literature database (Procite).

Achievements & Awards

- 2007 Clara Mary Alice Tranquilla, b. 21 June
- 2004 Elliot Samuel Tranquilla, b. 20 December
- 2008 – 2010 NSERC (National Sciences and Engineering Research Council) Postgraduate Scholarship (\$63,000)
- 2009 Leslie M. Tuck Avian Ecology Scholarship (\$5,000)
- 2009 BC Housing Bursary (\$750)
- 1998, 1999 Simon Fraser University Graduate Fellowships (\$5,000 each)

1996 George Frederick Boyer Memorial Bursary
1994 New Brunswick Achievement Grant
1994 UNB Alumni Merit Award

Publications

Primary-authored publications

- McFarlane Tranquilla, L.A., A. Hedd, C. Burke, W.A. Montevecchi, P.M. Regular, G.J. Robertson, L.A. Stapleton, S. Wilhelm, D.A. Fifield, and A.D. Buren. High Arctic sea ice conditions influence marine birds wintering in Low Arctic regions. Submitted (June 2009) to *Global Change Biology*
- McFarlane Tranquilla, L.A., N.R. Parker, R.W. Bradley, D.B. Lank, E.A. Krebs, L. Loughheed, and C. Loughheed. 2005. Breeding chronology of Marbled Murrelets varies between coastal and inshore sites in southern British Columbia. *Journal of Field Ornithology* 76: 357-367.
- McFarlane Tranquilla, L.A., P.-W. Yen, R.W. Bradley, B. Vanderkist, D.B. Lank, N. Parker, M. Drever, L.W. Loughheed, G. Kaiser, and T.D. Williams. 2003. Do two murrelets make a pair? Breeding status and behaviour of Marbled Murrelet pairs captured at sea. *Wilson Bulletin* 115(4): 374-381.
- McFarlane Tranquilla, L.A., R.W. Bradley, N.A. Parker, D.B. Lank & F. Cooke. 2003. Replacement laying in Marbled Murrelets. *Marine Ornithology* 31: 75-81.
- McFarlane Tranquilla, L., T.D. Williams, and F. Cooke. 2003. Using vitellogenin to identify inter-annual variation in breeding chronology of Marbled Murrelets. *Auk* 120: 512-521.
- McFarlane Tranquilla, L.A., R.W. Bradley, D.B. Lank, T.D. Williams, L.W. Loughheed and F. Cooke. 2003. The reliability of brood patches in assessing reproduction status in the Marbled Murrelet: words of caution. *Waterbirds* 26:108-118.
- McFarlane Tranquilla, L., F. Huettmann, C. Loughheed, L.W. Loughheed, G. Kaiser and N. Parker. 2003. Sightings of vagrant Pacific alcids in Desolation Sound, BC, Canada. *Canadian Field Naturalist* 117: 53-56.

Co-authored publications

- Gutowsky, S., M.H. Janssen, P. Arcese, T. K. Kyser, D. Ethier, L. McFarlane Tranquilla, D. F. Bertram, M. Wunder and D.R. Norris. Concurrent declines in nestling diet quality and reproductive success of a threatened seabird over 150 years. *Endangered Species Research*. Accepted August 2009.
- Hipfner, J.M., L. McFarlane Tranquilla, and B. Addison. 2009. Evidence that both timing and parental quality affect breeding success in a zooplanktivorous seabird. *Auk* (Aug 2009; doi:10.1525/auk.2009.09135).
- Montevecchi, W.A., L. McFarlane-Tranquilla, A. Buren, C. Burke, D. Fifield, A. Hedd, P. Regular, P. Smith. 2009. Effects of Geolocators in Studies of Avian Movement Ecology. *Science E-letter*. <http://www.sciencemag.org/cgi/eletters/323/5916/896>
- Peery, Z., L.A. Hall, A. Sells, S.R. Beissinger, C. Mritz, M. Bérubé, M.G. Raphael, S.K. Nelson, R.T. Golightly, L. McFarlane-Tranquilla, S. Newman, P.J. Palsbøll. In Prep. (submitted to *Ecology Letters*).
- Hall, L.A., P.J. Palsbøll, S.R. Beissinger, J.T. Harvey, M. Bérubé, M.G. Raphael, S.K. Nelson, R.T. Golightly, L. McFarlane Tranquilla, S. Newman, and M. Z. Peery. Characterizing dispersal patterns in a threatened seabird population with limited genetic structure. *Molecular Ecology*. Accepted Sept 2009.
- Janssen, M., P. Arcese, T.K. Kyser, D.F. Bertram, L. McFarlane-Tranquilla, T.D. Williams, and D.R. Norris. Pre-breeding diet, condition, and timing of breeding in a threatened seabird, the Marbled Murrelet *Brachyramphus marmoratus*. *Marine Ornithology*, In Press.

- Hipfner, J.M., L. McFarlane Tranquilla, and B. Addison. 2008. Do marine birds use environmental cues to optimize egg production? An experimental test based on relaying propensity. *Journal of Avian Biology* 39: 611-618.
- Boyd, W.S., L. McFarlane Tranquilla, J.L. Ryder, S.G. Shisko, and D.F. Bertram. 2008. Variation in marine distributions of Cassin's Auklets breeding at Triangle Island, British Columbia. *Auk* 125:158-166.
- Zharikov, Y., D.B. Lank, F. Huettmann, R.W. Bradley, N. Parker, P. P.-W. Yen, L. McFarlane Tranquilla and F. Cooke. 2006. Habitat selection and breeding success in a forest-nesting Alcid, the marbled murrelet, in two landscapes with different logging histories in south-western Canada. *Landscape Ecol.* 21:107-120.
- Bradley, R.W., L.A. McFarlane Tranquilla, B.A. Vanderkist and F. Cooke. 2002. Sex differences in provisioning rate in chick rearing Marbled Murrelets. *Condor* 104:178-183.

Technical Reports:

- Kenyon, J.K., McFarlane Tranquilla, L., Morgan, K.H., Moore, K., and Jollymore, S. 2009. Atlas of Pelagic Seabirds off Canada's West Coast. Canadian Wildlife Service Technical Report 499. Environment Canada, Pacific and Yukon Region, Delta, BC.
- L. McFarlane Tranquilla, K. Truman, D. Johannessen, and T. Hooper. 2006. Appendix K: Marine Birds. In *Ecosystem Overview: Pacific North Coast Integrated Management Area (PNCIMA)*. Edited by B.G. Lucas, S. Verrin, and R. Brown. Can. Tech. Rep. Fish. Aquat. Sci. 2667: x + 101 p.
- McFarlane Tranquilla, L., J.L. Ryder, W.S. Boyd, S.G. Shisko, K. Amey, D.F. Bertram, and J.M. Hipfner. 2005. Diurnal Marine Distributions of Radio-tagged Cassin's Auklets and Rhinoceros Auklets Breeding at Triangle Island, B.C. Canadian Wildlife Service Technical Report Series Number 423.
- Lank, D.B., N. Parker, E.A. Krebs and L. McFarlane Tranquilla. 2003. Geographic distribution, habitat selection, and population dynamics with respect to nesting habitat characteristics of Marbled Murrelets *Brachyramphus marmoratus*. Unpublished report available from dlank@sfu.ca

Handbooks and Reports:

- McFarlane Tranquilla, L., D.W. Smith, G. Grigg and G. White. 2008. Canada Geese: Control and Management in Southwestern British Columbia. Revised edition [online]. Environment Canada, Canadian Wildlife Service, Pacific and Yukon Region. Delta, British Columbia. http://www.cws-scf.ec.gc.ca/publications/pyr/index_e.cfm
- McFarlane Tranquilla, L. A Review Of Provincial Land And Resource Management In British Columbia: Processes Impacting Wildlife, Habitat, And Incidental Take Of Migratory Birds. April 2007. Prepared for E.A. Krebs, Canadian Wildlife Service.
- McFarlane Tranquilla, L. 2003. Triangle Island: ten years of research at British Columbia's largest seabird colony. Prepared for Canadian Wildlife Service for distribution at Public Hearing Meetings for the proposed Scott Islands Marine Wildlife Area.

MSc Thesis:

- McFarlane Tranquilla, L. 2001. Using multiple methods to describe breeding, stress response, and disturbance of Marbled Murrelets (*Brachyramphus marmoratus*). MSc, Simon Fraser University, Burnaby, BC. 150 pp.

Selected Presentations

- 2008 Invited school workshop: "Cool it! How climate change is affecting ecosystems in British Columbia". 75-minute presentations to schools in BC's lower mainland.

- 2004 Do sea-surface temperatures influence breeding of Marbled Murrelets in British Columbia? Pacific Seabird Group, La Paz, Baja California Sur, Mexico.
- 2003-2004 Invited workshops: “Bird Beaks and Feet: exploring ecological niches”. Two day summer workshops in “The Science of Birds” series, children aged 7-11. Richmond Nature Park, Richmond, British Columbia.
- 2003 Annual variation and site variation of breeding chronology of Marbled Murrelets. Pacific Seabird Group, Parksville, British Columbia, Canada.
- 2002 Do two Marbled Murrelets make a pair? American Ornithologist’s Union/Society of Canadian Ornithologists conference, New Orleans, Louisiana, USA.
- 2002 Evidence and frequency of reneating in Marbled Murrelets. The Wildlife Society (northwestern), Spokane, WA; *and* Pacific Seabird Group, Santa Barbara, California, USA.
- 2001 Identifying breeding status of Marbled Murrelets in Desolation Sound, British Columbia; *and* Stress Response in Marbled Murrelets. Pacific Seabird Group, Lihue, Kaua’i.
- 2000 - 2001 School workshops, Let’s Talk Science Program, Simon Fraser University. Hour-long exploration of feeding ecology of birds, to school children, ages 5-6 and 13-14.

Major Service

- 2004 Volunteer for Organizing Committee, Pacific Seabird Group meeting, La Paz, Baja, Mexico
- 2003 Volunteer for Organizing Committee, Pacific Seabird Group meeting, Parksville, B.C.
- 2000-2001 Chair, Biology Graduate Student Caucus, Simon Fraser University
- 1999-2009 Member, Pacific Seabird Group
- 1999-2002 Member, American Ornithologist’s Union
- 1999-2002 Member, Society of Canadian Ornithologists

Certificates

- Restricted Marine Radio Operator’s Certificate (2000-no expiry).
- Canadian Coast Guard Pleasure Craft Operator Card (1999-no expiry).
- Wilderness First Aid (2003-2006) and CPR (Level C).
- Occupational First Aid Level 1 and Transportation Endorsement (2002-2004).
- St John Ambulance Safety Oriented First Aid, Emergency Level (2003-2005).