

CURRICULUM VITAE

ALEJANDRO DANIEL BUREN

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PERSONAL INFORMATION

Country of birth: Argentina

Date of birth: November 11th, 1978

EDUCATION

Doctor of Philosophy Candidate

Memorial University of Newfoundland, Psychology Department, Cognitive and Behavioural Ecology Program. Supervisor: William Montevecchi, Co-Supervisor: Mariano Koen-Alonso.

Master of Sciences

Memorial University of Newfoundland, Psychology Department, Cognitive and Behavioural Ecology Program. Supervisor: William Montevecchi, Co-Supervisor: Mariano Koen-Alonso.

Thesis title: 'Modeling the link between prey availability and diet: common murre and capelin interaction during the breeding season'.

Licentiate in biological sciences

Universidad Nacional de la Patagonia San Juan Bosco. Date of graduation: July 2004.

Defended the thesis: 'Diet of the beaked skate, *Dipturus chilensis*, off Patagonia during 2000-2001', under the direction of Dr. Enrique Crespo and Dr. Mariano Koen-Alonso.

PROFESSIONAL EXPERIENCE

1. Memorial University of Newfoundland, St. John's, NL, Canada. 2007.

Contract to design and develop relational database for a seabird research long term database.

2. Fisheries and Oceans Canada, St. John's, NL, Canada. 2006 & 2007.

Contracts to design, develop and populate the marine mammals relational database for the Newfoundland and Quebec Regions.

3. Centro Nacional Patagónico (CENPAT), Argentina. 2003-2004.

Skipper of research vessel dedicated to the study of small cetacean behavior and sample collection in the envelope of the Consultancy "Base line study and monitoring plan for marine mammals of the future National Park Monte León", given by contract to Dr. Enrique A. Crespo by the Argentinean National Parks Administration.

4. Centro Nacional Patagónico (CENPAT), Argentina. 2001-2004.

Active member of the Marine Mammals Laboratory. My duties included

- a. Work on board of commercial fishing vessels operating in Patagonia, with the aim of: evaluating the catch composition of non target species in the hake (*Merluccius hubbsi*) fishery, collecting samples of elasmobranches to be used in diet, age, reproduction, and parasitological studies and collecting samples of by-caught species with the aim of calculating allometric regressions.
- b. Marine mammals and elasmobranches diet studies
- c. Elasmobranches, cetaceans, pinnipeds and fish necropsies.
- d. Sea lions (*Otaria flavescens*) censuses in Patagonian rookeries.
- e. Small coastal cetaceans behavioural studies.

Note: The CENPAT is a Research Institute which depends on the Argentinean National Research Council.

LANGUAGES

Spanish (native language).

English:

- Nine years of study in a private institute.
- General English course at The Cambridge Centre for Languages Sawston Hall (England), in advanced level.
- Tests taken:
 - PET (Preliminary English Test), Cambridge University.
Mark: Pass with merit.
 - FCE (First Certificate in English), Cambridge University.
Mark: Certificate grade A.
 - TOEFL (Test of English as a foreign language)
Mark: 273/300

RESEARCH EXPERIENCE AND PUBLICATIONS.

Research experience

I have participated in the following projects:

1. DEPARTMENT OF FISHERIES AND OCEANS CANADA (DFO) SPECIES AT RISK PROGRAMME. 2006-2008. Estimating predation on Atlantic Cod by Seals off Newfoundland and in the northern Gulf of St. Lawrence. Principal Investigator: Dr. Garry Stenson.
2. INTERNATIONAL POLAR YEAR. 2007-2008. How Seabirds Can Help Detect Ecosystem Change in the Arctic. Principal Investigator: Dr. William Montevecchi.
3. NATURAL SCIENCE AND ENGINEERING RESEARCH COUNCIL. NSERC Strategic Project. 2003-2007. Importance of capelin (*Mallotus villosus*) biology in sustaining trophic interactions in the Northwest Atlantic. Principal Investigator: Dr. William Montevecchi.

4. AGENCIA NACIONAL DE PROMOCION CIENTIFICA Y TECNOLÓGICA (Argentinean National Agency for the Promotion of Science and Technology). 2004-2006. Dynamics of the groups of dolphins affected by human activities and their inclusion in a marine protected areas management framework. Principal Investigator: Dr. Enrique Alberto Crespo
5. Member of the Working Team of the Consultancy: Base line study and monitoring plan for marine mammals of the future National Park Monte León, consultancy given by contract to Dr. Enrique A. Crespo by the Argentinean National Parks Administration. Period: September 2003 to August 2004.
6. UNIVERSIDAD NACIONAL DE LA PATAGONIA SAN JUAN BOSCO: 2002-2004. Interactions between marine top predators and human activities in Patagonia. Director: Dr. Enrique A. Crespo. Co-director: Lic. Susana N. Pedraza.
7. AGENCIA NACIONAL DE PROMOCIÓN CIENTÍFICA Y TECNOLÓGICA (Argentinean National Agency for the Promotion of Science and Technology). 2000-2002. Interactions between Fisheries and marine mammals in the Patagonian-Fueguinian coast (01-04025 A). Principal Investigator: Dr. Enrique Alberto Crespo

Primary publications:

Submitted

1. A. Hedd., P.M. Regular, W.A. Montevecchi, **A.D. Buren**, C. Burke & D.A. Fifield (submitted). Going Deep: Murres Dive into Frigid Water for Aggregated, Persistent and Slow-moving Capelin. *Journal of Avian Biology*, in review 4 April 2008.

Published

2. G. K. Davoren, C. May, P. Penton, B. Reinfort, **A.D. Buren**, C. Burke, D. Andrews, W. A. Montevecchi, N. Record, B. deYoung, C. Rose-Taylor, T. Bell, J.T. Anderson, M. Koen-Alonso & S. Garthe. 2008. An ecosystem-based research program for capelin (*Mallotus villosus*) in the Northwest Atlantic: overview and results. *Journal of Northwest Atlantic Fishery Science*, 39: 35-48.
3. M.F. Grandi, **A.D. Buren**, E.A. Crespo, N.A. García, G.M. Svendsen & S.L. Dans. 2006. Record of a specimen of Shepherd's beaked whale (*Tasmacetus shepherdi*) from the coast of Santa Cruz, Argentina, with notes on age determination. *Latin American Journal of Aquatic Mammals*, 4(2): 97-100.

Secondary Publications, conference & workshops presentations

To be presented

4. **A.D. Buren**, M. Koen-Alonso & G.B. Stenson. 2008. Reconstructing diet composition using a multinomial regression approach. ICES/NAFO Symposium on the Role of Marine Mammals in the Ecosystem in the 21st Century. Dartmouth, Nova Scotia, Canada. 29 September – 1 October.
5. **A.D. Buren**, M. Koen-Alonso, K.S. Dwyer & G.B. Stenson. 2008. Is there room for competition among fish top predators and harp seals in the Northwest Atlantic (NAFO Div. 2J3KL)? ICES/NAFO Symposium on the Role of Marine Mammals in the Ecosystem in the 21st Century. Dartmouth, Nova Scotia, Canada. 29 September – 1 October.

6. KS Dwyer, **A.D. Buren** & M. Koen-Alonso. 2008. Diet of Greenland halibut in the Newfoundland Shelf, Northwest Atlantic, during 1978-2003: reflections of a changing ecosystem. 7th International Flatfish Symposium. Sesimbra, Portugal. 2-7 November.

Presented

- 7.A. Hedd., P.M.Regular, W.A.Montevecchi, C.Burke, **A.D.Buren** & D.A.Fifield. 2008. Going deep: Common Murres dive in sub-0 oC water for aggregated slow-moving capelin. Pacific Seabird Group Conference, Blaine, Washington, 27 February - 2 March
8. C.M.Burke, W.A. Montevecchi, M. Koen-Alonso, P. Penton & **A.D. Buren**. 2007. Flexible foraging by murres in the face of changing capelin availability. Pacific Seabird Group Conference, Blaine, Washington, 27 February – 2 March.
9. G.B. Stenson, M. Koen Alonso, **A.D. Buren** & D. McKinnon. The diet of harp seals, *Pagophilus groenlandica*, in a changing environment. 17th Biennial Conference on the Biology of Marine Mammals. November 2007. Cape Town, South Africa.
10. **A.D. Buren**, M. Koen-Alonso & G.B. Stenson. 2007. Harp seal diet in NL, multinomial regression approach. Seals Impact Workshop 1: International workshop to review the impacts of seals on Atlantic cod stocks in eastern Canadian waters, hosted by Fisheries and Oceans Canada. November 2007. Halifax, Nova Scotia, Canada.
- 11.**A.D. Buren**. 2006. Seabird conservation: shifting the focus toward ecosystems. *The Osprey*, 37(3): 75-77.
12. M. Koen-Alonso & **A.D. Buren**. 2006. Top predators' diet as indicator of ecosystem status: what do we need to make it work? DFO National Science Workshop. Mont-Joli, Quebec, November 21-23, 2006.
13. **A.D. Buren**, M. Koen-Alonso, W.A. Montevecchi, J.T. Anderson, B. deYoung & G.K. Davoren. 2006. Modeling trophic interactions between parental common murres and capelin off the northeast Newfoundland coast. ICES CM 2006 / L:05.
14. **A.D. Buren**, M. Koen-Alonso, W.A. Montevecchi, J.T. Anderson, B. deYoung & G.K. Davoren. 2006. Modeling trophic interactions between parental common murres and capelin off the northeast Newfoundland coast. ICES Annual Science Conference. 19-23 September 2006. Maastricht, the Netherlands.
15. **A.D. Buren**, M. Koen-Alonso, W.A. Montevecchi, J.T. Anderson, B. deYoung & G.K. Davoren. 2006. Modeling the link between prey availability and diet: Common murre (*Uria aalge*) and capelin (*Mallotus villosus*) interaction during the breeding season around Funk Island. NAFO Symposium: Environmental and Ecosystem Histories in the Northwest Atlantic – What Influences Living Marine Resources? 13-15 September 2006. Dartmouth, Nova Scotia, Canada
16. GK. Davoren, P. Penton, C. May, B. Reinfort, N. Record, B. deYoung, C. Burke, W.A. Montevecchi, D. Andrews, **A.D. Buren**, M. Koen-Alonso, J.T. Anderson, C. Rose-Taylor, T. Bell, and S. Garthe. 2006. The Importance of capelin (*Mallotus villosus*) in the Northwest Atlantic. NAFO Symposium: Environmental and Ecosystem Histories in the Northwest Atlantic – What Influences Living Marine Resources? 13-15 September 2006. Dartmouth, Nova Scotia, Canada.
- 17.**A.D. Buren**, M. Koen-Alonso, W.A. Montevecchi, J.T. Anderson, B. deYoung & G.K. Davoren. 2006. Modeling trophic interactions between parental common murres and capelin off the northeast Newfoundland coast. *In: Abstracts of the 2006 Fisheries and Marine Ecosystems*

(FAME) Graduate Student Conference: Integrating Science and Policy. Camp Alexandra, Crescent Beach, British Columbia, Canada.

18. **A.D. Buren**, M. Koen-Alonso & G. Stenson. Predator-prey interaction between harp seals and Atlantic cod: An exploration of sources of variation. ICES/GLOBEC Workshop on the Decline and Recovery of Cod Stocks throughout the North Atlantic, including tropho-dynamic effects. May 9-12, 2006. St John's, Newfoundland, Canada.
19. **A.D. Buren**. Modeling trophic interactions between parental common murre and capelin off the northeast Newfoundland coast. Workshop of the NSERC Strategic Project 'Importance of capelin (*Mallotus villosus*) biology in sustaining trophic interactions in the Northwest Atlantic'. April 18-21, 2006. St John's, Newfoundland, Canada.
20. **A.D. Buren**. Modelling a top predator's diet: the Common Murre. Workshop of the NSERC Strategic Project 'Importance of capelin (*Mallotus villosus*) biology in sustaining trophic interactions in the Northwest Atlantic'. March 1-4, 2005. St John's, Newfoundland, Canada.
21. G.K. Davoren, C. May, P. Penton, N. Record, B. deYoung, C.B. Burke, W.A. Montevecchi, **A.D. Buren**, D. Andrews, C. Rose-Taylor, T. Bell, M. Koen-Alonso & J.T. Anderson. 2005. Importance of capelin (*Mallotus villosus*) biology in sustaining trophic interactions in the Northwest Atlantic. Canadian Conference for Fisheries Research (CCFFR), January 2005, Windsor, Canada.
22. M. F. Grandi, **A.D. Buren**, E.A. Crespo, N.A. García, G.M. Svendsen & S.L. Dans. New record of a complete specimen of the Shepherd's Beaked Whale, *Tasmacetus shepherdi*, in Argentina and comments on the age determination. 'XIX Jornadas Argentinas de Mastozoología' (19th Argentinean Conference of Mammalogy). Puerto Madryn, Argentina, November 2004.
23. **A.D. Buren**, M. Koen-Alonso, S.N. Pedraza, E.A. Crespo, & N.A. García. 2003. Cambios en la dieta de la raya picuda (*Dipturus flavirostris*) en dos períodos de los últimos diez años. In: Abstracts of the V Jornadas Nacionales de Ciencias del Mar. December 8-12, 2003, Mar del Plata, Argentina. [Translation of the title: Changes in the diet of the beaked skate (*Dipturus flavirostris*) between two periods in the last ten years]

Participation in workshops, conferences, symposia and scientific meetings

1. Seals Impact Workshop 1: International workshop to review the impacts of seals on Atlantic cod stocks in eastern Canadian waters, hosted by Fisheries and Oceans Canada. November 2007. Halifax, Nova Scotia, Canada.
2. Wrap-up Workshop of the NSERC Strategic Project "Importance of capelin (*Mallotus villosus*) biology in sustaining trophic interactions in the Northwest Atlantic". March 2, 2007, Memorial University of Newfoundland, St. John's, Canada.
3. Meeting of a DFO ad hoc working group to discuss modelling approaches to assess cod-seals interactions. January 30-February 1, 2007, Mont-Joli, Quebec.
4. Review and Planning Workshop of the NSERC Strategic Project "Importance of capelin (*Mallotus villosus*) biology in sustaining trophic interactions in the Northwest Atlantic". April 18-19, 2006, Memorial University of Newfoundland, St. John's, Canada
5. Review and Planning Workshop of the NSERC Strategic Project "Importance of capelin (*Mallotus villosus*) biology in sustaining trophic interactions in the Northwest Atlantic". March 1-2, 2005, Memorial University of Newfoundland, St. John's, Canada.

6. XIX Annual Meeting of the Argentinean Society of Mammalogists (SAREM). November 8-11, 2004, Puerto Madryn, Argentina.
7. 5th National Conference on Marine Sciences [V Jornadas Nacionales de Ciencias del Mar]. Organized by Universidad Nacional de Mar del Plata. Mar del Plata, Argentina, December 8-12, 2003.
8. 4th National Conference on Marine Sciences [IV Jornadas Nacionales de Ciencias del Mar]. Organized by Centro Nacional Patagónico and Universidad Nacional de la Patagonia. Puerto Madryn, Argentina, September 11-15, 2000.

FELLOWSHIPS/SCHOLARSHIPS.

1. Fellow of the School of Graduate Studies, MUN. 2007.
2. MUN School of Graduate Studies Fellowship, 2007-2011.
3. MUN School of Graduate Studies Merit Award, 2007-2008.
4. University of British Columbia, Travel scholarship, 2006. Value: C\$D 600.
5. MUN School of Graduate Studies Fellowship, 2006
6. MUN School of Graduate Studies Fellowship, 2005.
7. Organization of the American States (OAS) Scholarship for Graduate Studies, 2005.
8. Universidad Nacional de la Patagonia San Juan Bosco. Lodging scholarship. From January, 2003 to December, 2003.
9. Universidad Nacional de la Patagonia San Juan Bosco. Lodging scholarship. From January, 2002 to December, 2002.
10. Universidad Nacional de la Patagonia San Juan Bosco. Lodging scholarship. From January, 2001 to December, 2001.
11. Ministry of Education Fellowship (Chubut Province, Argentina). From April 1st, 2003 to December 31st, 2003.
12. Ministry of Education Fellowship (Chubut Province, Argentina). From July 1st, 2002 to December 31st, 2002.

MEMBERSHIPS IN PROFESSIONAL OR LEARNED SOCIETIES.

1. Statistical Society of Canada. 2007.
2. Student representative to the Zonal Advisory Committee, Puerto Madryn Campus, Universidad Nacional de la Patagonia San Juan Bosco. 2003.
3. Student representative to the Zonal Advisory Committee, Puerto Madryn Campus, Universidad Nacional de la Patagonia San Juan Bosco. 2004.

Notes: The Zonal Advisory Committee is the governing body of the Puerto Madryn Campus. Student representatives are elected by their peers.

PAST TEACHING POSITIONS

1. 'BIOL 2100: Biology of Vertebrates'. Department of Biology, Memorial University. Winter Semester 2005.
2. 'BIOL 1002: Principles of Biology'. Department of Biology, Memorial University. Winter Semester 2005.
3. 'BIOL 2600: Principles of Ecology'. Department of Biology, Memorial University. Spring Semester 2004.
4. 'BIOL 1001: Principles of Biology'. Department of Biology, Memorial University. Spring Semester 2004.
5. 'BIOL 2100: Biology of Vertebrates'. Department of Biology, Memorial University. Winter Semester 2004.
6. 'Mathematics I'. Universidad Nacional de la Patagonia San Juan Bosco. April, 2004 to March, 2005.
7. 'Population ecology'. Universidad Nacional de la Patagonia San Juan Bosco. August, 2004 to December, 2004
8. 'Mathematics I'. Universidad Nacional de la Patagonia San Juan Bosco. April, 2003 to March, 2004.
9. 'Population ecology'. Universidad Nacional de la Patagonia San Juan Bosco. August, 2003 to November, 2003.
10. 'Genetics and evolution'. Universidad Nacional de la Patagonia San Juan Bosco. April, 2000 to February, 2001.

COURSES TAKEN

1. Introduction to Bayesian statistics and WinBugs. Memorial University of Newfoundland and Fisheries and Oceans Canada, St. John's, May 8-12, 2006.
2. 'BIOL 7932: Generalized Linear Models', given by Dr. D.C. Schneider from Memorial University, Canada.
3. 'The use of statistics in ecology: a critical view', given by Dr. Victor Cueto and Dr. Javier Lopez de Casenave from the University of Buenos Aires, Argentina.
4. 'Parameter estimation in non-linear models', given by Dr. Milo Adkison from the University of Alaska.
5. 'Utilization of isoenzymes as genetic markers', given by Lic. Adriana Latino from the Universidad Nacional de la Patagonia San Juan Bosco, Argentina.

ACTED AS REVIEWER FOR THE FOLLOWING JOURNALS

1. Journal of Applied Ecology (1)
2. ICES Journal of Marine Sciences (1)