

A. N. Arnason

PUBLICATIONS:

(a) Books or contributions to books:

- [6] Schwarz, C.J. and A. N. Arnason. 2007. Jolly Seber Models in Mark. In Program Mark – A Gentle Introduction 5th ed. E. Cooch and G. White, Eds. Chapter 14, 52 pp. Available online at:
<http://www.phidot.org/software/mark/docs/book/>
- [5] Arnason, A. N., C. J. Schwarz, and G. Boyer. 1998. POPAN-5: A data maintenance and analysis system for mark-recapture data. Scientific report, Department of Computer Science, Nov. 1998 viii+318p.
- [4] Arnason, A.N. 1988. Some perceived needs in sampling methodology for biomonitoring. Appendix A in: D.R. Marmorek, D.P. Bernard and J. Ford [eds.] *Biological monitoring for acidification effects: U.S.-Canadian Workshop*. U.S. EPA, Environ. Res. Lab., Corvallis, Oregon.
- [3] Arnason, A.N. and C.J. Schwarz. 1987. *POPAN-3: Extended ANALYSIS and TESTING features for POPAN-2*. Charles Babbage Research Centre, St. Norbert, Manitoba, 87 pp.

a supplement to:

- [2] Arnason, A.N. and L. Baniuk. 1978. *POPAN-2: A Data Maintenance and Analysis System for Mark-recapture Data*. Charles Babbage Research Centre, Winnipeg, viii+267pp.
- [1] Arnason, A.N. and G.A.F. Seber, Joint editors of: Statistical Inference from Capture Data on Closed Populations (by D.L. Otis, K.P. Burnham, G.C. White and D.R. Anderson), *Wildlife Monographs*, No.62, 1978. 135 pp.

(b) Refereed journals -- full articles:

- [37] Hettinga, P., A. N. Arnason, M. Manseau, D. Cross, K. Whaley, P. J. Wilson. 2012. Estimating size and trend of the North Interlake woodland caribou population using fecal-DNA and capture-recapture models. *To appear: Journal of Wildlife Management* .
- [36] R. Maani, S. Camorlinga, N. Arnason. 2012 A Parallel Method to Improve Medical Image Transmission", *Journal of Digital Imaging*: 25(1): 101-109.
- [35] Arnason, A. N., and E. Cam. 2004. Multi-state models: metapopulation and life history analyses. *Animal Biodiversity and Conservation*, 27.1:93-95.

- [34] F. Azzedin, M. Maheswaran and A.N. Arnason. 2003. A synchronous co-allocation mechanism for grid computing systems. *Cluster Computing* 7: 39-49
- [33] A. N. Arnason and C. J. Schwarz. 2002. POPAN-6: exploring convergence and estimate properties with SIMULATE. *Journal of Applied Statistics*. 29:649-668 (proceedings of Euring 2000).
- [32] Gabor, T. S., J.R. Longcore, H.R. Murkin and N. Arnason. 2000. Comparison of helicopter and ground surveys of waterfowl broods in southern Ontario. *Northeast Wildlife Journal*. 55:11-19.
- [31] Schwarz, C. J., and A. N. Arnason. 2000. The estimation of age-specific breeding probabilities from capture-recapture data. *Biometrics*. 56, 59-64.
- [30] A. N. Arnason and C. J. Schwarz. 1999. Using POPAN-5 to analyse banding data. *Bird Study* 46, S157-168. (proceedings of Euring 97)
- [29] Schwarz, C. J., and A. N. Arnason. 1996. A general methodology for the analysis of capture-recapture experiments in open populations. *Biometrics*, 52, 860-873
- [28] Arnason, A.N., C.W. Kirby, C.J. Schwarz and J. R. Irvine. 1996. Computer analysis of data from stratified mark-recovery experiments for estimation of salmon escapements and other populations. *Canadian Technical Report of Fisheries and Aquatic Sciences*. 2106: 37p.
- [27] A. N. Arnason and C. J. Schwarz. 1995. POPAN-4: Enhancements to a system for the analysis of mark-recapture data from open populations. *Journal of Applied Statistics*. 22:785-800.
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- [24] Arnason, A.N., M.H. Papst and G.E. Hopky. 1992. Modelling the increase in variance in fish weight. *Canadian Journal of Fisheries and Aquatic Sciences*. 49, 2-16.
- [23] Papst, M.H., T.A. Dick, A.N. Arnason, and C.E. Engel. 1992. Effect of rearing density on the early growth and variation in growth of young Arctic charr, *Salvalinus alpinus* (L.) *Aquaculture and Fisheries Management*. 23, 41-47

- [22] Arnason, A.N., C.J. Schwarz and J.M. Gerrard. 1991. Estimating closed population size from sightings of marked and unmarked animals. *Journal of Wildlife Management*. 55, 716-730.
- [21] Chan, R., A.N. Arnason and C.M. Laucht. 1989. Simulation of fixed hierarchical routing in telephone networks. *Congressus Numerantium*. 69, 33-54.
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- [14] Leslie, W.D. and A.N. Arnason. 1985. Procedural languages applied to complex scheduling problems: SIMSCRIPT and hospital slating. *Congressus Numerantium*. 46, 159-172.
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- [1] Pielou, E.C. and A.N. Arnason. 1966. Correction to one of MacArthur's species abundance formulas. *Science.* 151(3710):592.

(c) Refereed letters, conference contributions or invited papers:

- [23] Maani, R., S. Camorlinga, N. Arnason. Transforming medical imaging applications into collaborative PACS-based telemedical systems", SPIE Medical Imaging, vol. 7967, pp. 79670D-79670D-10, 2011.
- [22] Maani, R., S. Camorlinga, N. Arnason, R. Eskicioglu. 2010 A practical fast method for medical imaging transmission based on the DICOM protocol. SPIE Medical Imaging, vol. 7628, pp. 76280M-76280M-11, 2010. (Recognized as one of the top ten student papers)
- [21] Hettinga, P., Micheline Manseau, Neil Arnason, Mark Ball, Taryne Chong, Laura Thompson, Paul Wilson, Kent Whaley, Dale Cross, Vicki Trim. 2008. Use of Fecal Genotyping to Estimate Population Demographics in the North Interlake Woodland Caribou Herd. North American Caribou Workshop (NACW)

- [20] Zhou, X.Y., A. N. Arnason and S.A. Ehikioya. 2005. A proxy-based communication protocol for mobile agents: protocols and performance. Proceedings of the 2004 IEEE conference on Cybernetics and Intelligent Systems. Singapore, December 2004 pp. 53-58 vol 1.
- [19] Boyer, G., and A. N. Arnason. 2002. Application of simulation and mean value analysis to a repair facility model for finding optimal staffing levels. In Proceedings of the 2002 Winter Simulation Conference E. Yücesan, C.-H. Chen, J. L. Snowdon, and J. M. Charnes, eds pp. 1871-9
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- [17] Dinzey, W., C.M. Laucht, and A.N. Arnason. 1995. Comparison by simulation of fixed and dynamic routing telephone networks while under the influence of overload. *Proceedings of Wescanex 95*, Sponsored by IEEE Canada, Winnipeg, May 1995, 52-55.
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- [14] Papst, M.H., A.N. Arnason and G.E. Hopky. 1992. A model for predicting variability in fish growth within rainbow trout populations. Refereed poster, International Symposium on the Rainbow Trout, sponsored by *Aquaculture* and the University of Stirling. Stirling, Scotland, September 1990. (Abstract) *Aquaculture*. 100,102
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- [12] Laucht, C.M. and A.N. Arnason. 1987. Simulation of dynamically controlled routing in telephone networks. *Proc. CIPS Congress '87: "Technology for People"*, sponsored by the Canadian Information Processing Society. Winnipeg, May 1987, 393-398.
- [11] Scuse, D.H., A.N. Arnason, R. Zak and S. Bannatyne. 1987. The design of application development environments. *Proc. CIPS Congress '87:*

"Technology for People", sponsored by the Canadian Information Processing Society. Winnipeg, May 1987, 35-44.

- [10] Arnason, A.N. and D.H. Scuse. 1986. Design and implementation of a computerized decision support system for hatchery management. *Proc. IFAC Symposium on Automation and Data Processing in Aquaculture*, sponsored by the International Federation of Automatic Control and the European Aquaculture Society. Trondheim, Norway, August 1986, (T8)1-11.
- [9] Laucht, C.M. and A.N. Arnason. 1986. An overview of NAPLPS/TELIDON applications at the University of Manitoba. *Proc. 4th Annual CIPS Edmonton Computer Conference*, sponsored by the Canadian Information Processing Society and the U. of Alberta. Edmonton, October, 1986, 9 pp.
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- [4] Arnason, A.N. 1974. Some problems in the application of migration models to animal and human populations. Abstract of a talk given at the Conference on Spatial Processes, Newcastle-on-Tyne, May 1974. *Advances in Applied Probability*. 7:456-457.
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(d,e) Non-refereed publications:

(ii) Posters and Published Abstracts:

- [2] Maani, Rouzbeh, Sergio Camorlinga, Neil Arnason. 2010. Parallel Medical Imaging Transmission. Poster Presentation at the Society for Imaging Informatics in Medicine- SIIM 2010 Annual Meeting, Minneapolis, June 2010 (awarded second place for excellence of a scientific exhibit)
- [1] Arnason, A.N. and C.J. Schwarz. 1984. Log-linear models in the analysis of mark-recapture data. Abstract of a talk given at the Joint (ASA, Biometrics) Statistical Meeting, Philadelphia, August, 1984. Published in *Program & Abstracts*, p.52.

(iii) Scientific Reports, Department of Computer Science, University of Manitoba:

- [8] Pundi, V.S. and A. N. Arnason. 2008. Synthetic Data Generator for Smart Homes. Technical Report, Department of Computer Science, University of Manitoba. 11 pp.
- [7] Chan, Y.K., A.N. Arnason and C.M. Laucht. 1988. The route generation pre-processing program for a Fixed Hierarchical Routing telephone network. *Scientific Report*, Number 88-111, Department of Computer Science, University of Manitoba, 41pp.
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- [1] Arnason, A.N. 1971. Statistical projection of the Manitoba population in age cohorts by towns, municipalities and regions with estimates of immigration. *Scientific Report*, Number 39, Department of Computer Science, University of Manitoba, 24 pp + 600 pp computer listing of projections.
- (iv) Manuals and Computer Software Systems:
- [16] Arnason, A. N., L. Shar, and G. Boyer. 1998. RUNPOPAN: Installation and user's manual for running POPAN-5 on IBM PC microcomputers under Windows 3.1/32S, 95, or NT. Scientific report, Department of Computer Science, May. 1998, ii+36p. (see also under books)
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- [14] Arnason, A. Neil, Chris Kirby, Lai Shar, Carl Schwarz and James Irvine. 1995. SPAS (Stratified Population Analysis System). Software release on Internet web site: <http://www.cs.umanitoba.ca/~popan> June 19, 1995 (5 pp. Readme.txt + associated freeware files).
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- [12] Arnason, A.N., D.W. Miller and C. Lapkowski. 1992. *POPAN-PC: installation and user's manual for running POPAN-3 on IBM-PC microcomputers under DOS or Windows 3.* ii+34pp.
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- (v) Consulting reports (final).
- [4] G. B. Ayles, M. Dubé, and D. Rosenberg. 2004. Oil Sands Regional Aquatic Monitoring Program Scientific Peer Review of the Five-Year Report (1997-2001). Submitted to the RAMP Steering Committee, February 13, 2004. 123 pp. (contributed critiques of, and recommendations for, statistical analyses throughout the report)
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- (vi) Theses supervised.
- [7] Maani, Rouzbeh. 2010. Transforming Medical Imaging Applications into Collaborative PACS-based Telemedical Systems. M.Sc. thesis, Department of Computer Science, University of Manitoba, Winnipeg, MB, August 2010 (supervised by A. N. Arnason and S. Camorlinga).
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