

## **David Tallmon**

UAF School of Fisheries and Ocean Sciences

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### **CURRENT POSITION**

**Affiliate Assistant Professor**, School of Fisheries and Ocean Sciences, UAF.

**Affiliate Assistant Professor**, Institute of Arctic Biology, UAF.

**Assistant Professor**, Biology Program, University of Alaska Southeast.

### **EDUCATION**

Ph.D. 2001 Organismal Biology and Ecology, University of Montana.

M.S. 1996 Organismal Biology and Ecology, University of Montana.

B.A. 1992 Biology, UC Santa Cruz.

### **Research Experience**

NSF International Research Fellow, Reading, UK, and Grenoble, FR. (11/02-02/04).

Post-doctoral Research Ecologist, Redwood Sciences Lab, USFS. (10/01-10/02)

NSF Graduate Research Trainee, University of Montana. (1996-2001)

## Peer-Reviewed Publications

Tallmon, D.A., A. Koyuk, G. Luikart, and M.A. Beaumont. OneSamp: a program to estimate effective population size using approximate Bayesian computation. Accepted in *Molecular Ecology Notes*.

England, P., J.-M. Cornuet, P. Berhier, D.A. Tallmon, and G. Luikart. 2006. Estimating effective population size from linkage disequilibrium: severe bias in small samples. *Conservation Genetics* 7:303 - 308.

Lind, A.J., H. H. Welsh, D.A. Tallmon. 2005. Population density and survival rates of the Pacific coast garter snake (*Thamnophis atratus*): lessons from a long-term capture-recapture study. *Ecological Applications* 15:294-303.

Bellemain, E., J.E. Swenson, D. Tallmon, S. Brunberg, P. Taberlet. 2005. Estimating population size of elusive animals with DNA from hunter-collected feces: four methods for brown bears. *Conservation Biology* 19:150-161.

Tallmon, D.A., and L.S. Mills. 2004 Edge-effects and isolation: red-backed voles revisited. *Conservation Biology* 18:1658-1664.

Tallmon, D.A., G. Luikart, and R.S. Waples. 2004. The alluring simplicity and complex reality of genetic rescue. *Trends in Ecology and Evolution* 19:489-496.

Tallmon, D.A., M. A. Beaumont, G.H. Luikart. 2004. Effective population size estimation using approximate Bayesian computation. *Genetics* 167:977-988.

Tallmon, D.A., E. Bellemain, J. Swenson, P. Taberlet. 2004. Genetic monitoring of brown bear effective population size and immigration. *Journal of Wildlife Management* 86(4):960-965.

Luikart, G.H., P. England, D.A. Tallmon, S. Jordan, P. Taberlet. 2003. The power and promise of population genomics: from genotyping to genome-typing. *Nature Reviews Genetics* 4:981-994.

Tallmon, D.A., E. Jules, N. Radke, L.S. Mills. 2003. Of mice and men and trillium: cascading effects of

forest fragmentation. *Ecological Applications* 13:1193-1203.

Mills, L. S., M. K. Schwartz, D. A. Tallmon, and K. P. Lair. 2003. Measuring and interpreting changes in connectivity for mammals in coniferous forests. p. 587-613 In C.J. Zabel and R.G. Anthony, editors. *Mammal Community Dynamics in Western Coniferous Forests: Management and Conservation Issues*. Cambridge University Press.

Tallmon, D.A., H. M. Draheim, L. S. Mills, F. W. Allendorf. 2002. Insights into fragmented vole populations from combined genetic and demographic data. *Molecular Ecology* 11:699-708.

Newman, D. and D.A. Tallmon. 2001. Beneficial fitness effects of gene flow into recently isolated populations. *Conservation Biology* 15:1054-1063.

Tallmon, D.A., W.C. Funk, W.W. Dunlap, and F.W. Allendorf. 2000. Genetic differentiation of long-toed salamander populations. *Copeia* 2000:27-35.

Mills, L.S., J.C. Citta, K. Lair, M.K. Schwartz, and D.A. Tallmon. 2000. Estimation of population size using DNA sampling methods. *Ecological Applications* 10:283-294.

Funk, W. C., D.A. Tallmon, and F.W. Allendorf. 1999. Small effective population size in the long-toed salamander. *Molecular Ecology* 8:1633-1640.

Mills, L.S., and D.A. Tallmon. 1999. The role of genetics in understanding forest fragmentation. p 171-186. In Rochelle, J. A., L. A. Lehmann, and E. Wisniewski, editors. *Forest Fragmentation: wildlife and management implications*. Brill Publications, Leiden, Boston, Koln.

Schwartz, M. K., D.A. Tallmon, and G.H. Luikart. 1999. DNA-based Ne estimation: many markers, much potential, uncertain utility. *Animal Conservation* 2:320-322.

Jules, E.S., E.J. Frost, L.S. Mills, and D.A. Tallmon. 1999. Ecological consequences of forest fragmentation: case studies from the Siskiyou region. *Natural Areas Journal* 19:368-378.

Schwartz, M. K., D.A. Tallmon, and G.H. Luikart. 1998. A review of DNA-based effective and census population size estimators. *Animal Conservation* 1:293-299.

### **Academic Awards & GRANTS**

Portugal NSF. 2008-2010. (co-PI w/ many others)

NSF-Major Research Instrumentation. 2005-08.

National Park Service Grant. 2007-08.

North Pacific Research Board. 2007-08. (Hoferkamp co-PI)

ADF&G Research Grant. 2007-08.

National Park Foundation. 2007-08. (co-PI w/Whiteley)

USFWS Research Grant. 2007.

IPY Post-doctoral Fellowship 2006-08 (co-PI w/ Gharrett, Whieteley)

Alaska Fisheries Development Foundation Research Grant. 2006. (co-PI w/Tamone)

UAS Chancellors Special Project Fund. 2004-05, 2005-06 (Pyare co-PI).

LICOR Genomics Education Matching Fund. 2005.

Alaska NSF EPSCoR Award. 2004-06.

International Whaling Commission. 2003-04.

NSF International Research Post-doctoral Fellowship. 2002-04.

NSF Graduate Research Trainingship. 1996-2001.

Student Award Finalist. Society for Conservation Biology Meetings, Hilo, HI. 2001.

## **Research Skills**

Computer Programming Abilities – C, R.

DNA Techniques Markers, Instruments, and Analyses .

Mark-Recapture Software – MARK, RDSURVIV, Capture.

Extensive Field Experience, including various terrestrial and aquatic sampling methods.

## **PROFESSIONAL ASSOCIATIONS**

American Fisheries Society

Ecological Society of America

Society for Conservation Biology

Society for the Study of Evolution

Wildlife Society of America

Occasional Reviewer for:

*The American Naturalist, Conservation Biology, Copeia, Conservation Genetics, Fish Biology, Genetics, Heredity, Journal of Mammalogy, Molecular Ecology, Nature, National Science Foundation Panels, Northwest Science.*