

LEV R. GINZBURG
Abbreviated Resume

Home Phone: (631) 751-7268
Business Phone: (631) 751-4350
Fax: (631) 751-3435

11 Crane Neck Road
Setauket, NY 11733
lev@ramas.com

Born: Moscow, Russia
January 11, 1945
Citizenship: USA

Position Held

Applied Biomathematics, Setauket, New York

1982-present President and founder of Applied Biomathematics, a research and software company specializing in ecological risk and conservation biology. Its research has focused on developing new methods and making them available in software for problems in ecology, and public health. RAMAS[®] software is used by over 2,000 institutions and thousands of students in 50 countries.

Public Service

- Lectures:** About 5 per year at various national and international meetings.
Opening Address: How Planets Move and Populations Grow, Second International Symposium in Mathematical Ecology, Spain, September 5, 2003.
Senate Testimony: Consistency and Transparency of Endangered Species Listings, Testimony to the U.S. Senate Committee on Environmental and Public Works, Subcommittee on Fisheries, Wildlife, and Water, May 9, 2001.

Books

- Ginzburg, L.R. and Colyvan, M. 2004. *Ecological Orbits: how planets move and populations grow*. Oxford University Press, New York, NY.
Pastorok, R., Bartell, S., Ferson, S., and Ginzburg, L. R. (editors) 2001. *Ecological Modeling in Risk Assessment*. CRC Press, Boca Raton, FL.
Schultz, S. M., Dunham, A. E., Root, K. V., Soucy, S. L., Carroll, S. D., Ginzburg, L. R. 1999. *Conservation Biology with RAMAS EcoLab*. Sinauer Associates, Sunderland, MA.
Akçakaya, H.R., Burgman, M.A. and Ginzburg, L.R. 1997. *Applied Population Ecology: principles and computer exercises using RAMAS EcoLab*. Second edition by Sinauer Associates, Sunderland, MA 1999
Ginzburg, L. R. (editor). 1991. *Assessing Ecological Risks of Biotechnology*. Butterworth, Stoneham, Massachusetts.
Ginzburg, L. R. and Golenberg, E.M. 1985. *Lectures in theoretical population biology*. Prentice-Hall, New Jersey.
Ginzburg, L. R. 1983. *Theory of natural selection and population growth*. Benjamin/Cummings, Menlo Park, California.

Selected Articles (This abbreviated list omits over 100 articles).

- Jensen, C. X., and Ginzburg, L. R., 2005. Paradoxes or theoretical failures? The jury is still out. *Ecological Modeling* (in press).
- Ginzburg, L. R., and Jensen, C. X., 2004. Rules of thumb for judging ecological theories. *Trends in Ecology and Evolution*. 19(3):121-126.
- Hajagos, J.G., Inchausti, P. and Ginzburg, L.R., 2004. Variability of growth rates: conservative estimates of the risk of decline for mammals and birds. (in preparation).
- Ginzburg, L.R. and Akcakaya, H.R. 2003. Science and management investments needed to enhance the use of ecological modeling in decision-making. V. Dale, Ed., In *Ecological Modeling for Environmental Management*, Springer Verlag, New York. 249-262.
- Regan, H.M., Akcakaya, H.R., Ferson, S., Root, K.V., and Ginzburg, L. R. 2003. Treatments of Uncertainty and Variability in Ecological Risk Assessment of Single-species Populations. *Human and Ecological Risk Assessment* (in press).
- Colyvan, M. and Ginzburg, L.R. 2003. Laws of Nature and Laws of Ecology. *Oikos* 101: 649-653.
- Colyvan, M. and Ginzburg, L.R. 2003. The Galilean Turn in Population Ecology. *Biology and Philosophy*. 18: 401-414.
- Root, K.V., H.R. Akcakaya, L.R. Ginzburg. 2003. A Multispecies Approach to Ecological Valuation and Conservation. *Conservation Biology*. 17: 196-206.
- Dunning, D.J, Ross, Q.E., Munch, S., and Ginzburg, L.R. 2003. Measurement Error Affects Risk Estimates for Recruitment to the Hudson River Stock of Striped Bass. In *Defining and assessing adverse environmental impact from power plant impingement and entrainment of aquatic organisms*. Dixon, D. A., J. A. Veil, and J. Wisniewski (Editors). A. A. Balkema Publishers, Swets & Zeitlinger Publishers, The Netherlands, pp. 238-253.
- Ginzburg, L. R., Akcakaya, R., Ferson S., Bridges, T., Dortch, M., Kennedy, B. 2002. Bridging the gulf between ecologists and engineers: Approaches toward integrating physical-chemical and population-dynamic models, in National TMDL Science and Policy 2002 Conference Proceedings on CD-ROM, Water Environment Federation.
- Inchausti, P. and Ginzburg, L.R. 2002. Using the phase shift for assessing the causation of population cycles. *Ecological Modeling*, 152, 89-102.
- Ginzburg, L.R. and Akcakaya, H.R. 2001. Enhancing the use of Ecological Models in Environmental Decision Making. In Pastorok, R., et al (editors). 2001. *Ecological Modeling in Risk Assessment*. CRC Press, Boca Raton, FL.
- Abrams, P.A. and Ginzburg, L. 2000. The nature of predation: prey dependent, ratio dependent, or neither? *Trends in Ecology and Evolution* 15(8): 337-341.
- Goldwasser, L., Ferson, S., and Ginzburg, L.R. 2000. Variability and measurement error in extinction risk analysis: the northern spotted owl on the Olympic Peninsula. *Quantitative Methods for Conservation Biology*, Ferson, S. and Burgman, M. eds. Springer-Verlag, New York pp.169-187.
- Ginzburg, L.R. 1998. Inertial growth: population dynamics based on maternal effects. *Maternal Effects as Adaptations*, Mousseau, T.A. and Fox, C.W. eds. Oxford University Press, pp. 42-53
- Ginzburg, L.R. 1998. Assuming reproduction to be a function of consumption raises doubts about some popular predator-prey models. *Journal of Animal Ecology* 67: 325-327.
- Inchausti, P. and Ginzburg, L.R. 1998. Small mammal cycles in northern Europe: pattern and evidence for a maternal effect hypothesis. *Journal of Animal Ecology* 67: 180-194.
- Ginzburg, L. R. and Inchausti, P. 1997. Asymmetry of population cycles: abundance-growth representation of hidden causes of ecological dynamics. *Oikos* 80:435-447.
- Ferson, S. and Ginzburg, L.R. 1996. Different methods are needed to propagate ignorance and variability. *Reliability Engineering and Systems Safety* 54:133-144.
- Ginzburg, L.R., Janson, C. and Ferson, S. 1996. Judgment under uncertainty: evolution may not favor a probabilistic calculus. *The Behavioral and Brain Sciences* 19(1): 24-25.
- Akçakaya, H.R., Arditi, R. and Ginzburg, L.R. 1995. Ratio-dependent predation: an abstraction that works. *Ecology* 76(3): 995-1004.
- McCarthy, M.A., Ginzburg, L.R. and Akçakaya, H.R. 1995. Predator interference across trophic chains. *Ecology* 76(4): 1310-1319.

- Ginzburg, L.R. and Taneyhill, D.E. 1994. Population cycles of forest Lepidoptera: a maternal effect hypothesis. *Journal of Animal Ecology* 63:79-92.
- Ginzburg, L.R. 1992. Evolutionary consequences of basic growth equations. *Trends in Ecology and Evolution* 7:133; correspondence, *ibid.*, 314-17; further letters, *ibid.* 8(1993): 68-71
- Ginzburg, L.R. and Akçakaya, H.R. 1992. Consequences of ratio-dependent predation for steady state properties of ecosystems. *Ecology* 73(5): 1536-1543.
- Ginzburg, L.R., Ferson, S. and Akçakaya, H.R. 1990. Reconstructability of density dependence and the conservative assessment of extinction risk. *Conservation Biology* 4:63-70.
- Arditi, R. and Ginzburg, L.R. 1989. Coupling in predator-prey dynamics: ratio-dependence. *Journal of Theoretical Biology* 139:311-326.
- Ginzburg, L.R., Akçakaya, R. and Kim, J. 1988. Evolution of community structure: competition. *Journal of Theoretical Biology* 133:513-523.
- Ginzburg, L.R. 1986. The theory of population dynamics: back to first principles. *Journal of Theoretical Biology* 122:385-399.
- Ginzburg, L.R., Bingham, P.A. and Yoo, S. 1984. On the theory of speciation induced by transposable elements. *Genetics* 107:331-341.
- Levinton, J.S. and Ginzburg, L.R. 1984. Repeatability of taxon longevity in successive foraminifera radiations: a neutral theory of appearance and extinction. *Proceedings from National Academy of Science, USA*, 18:5478-5481.
- Turelli, M. and Ginzburg, L.R. 1983. Should individual fitness increase with heterozygosity? *Genetics* 104:191-209.
- Ginzburg, L.R., Slobodkin, L.B., Johnson, K. and Bindman, A.G. 1982. Quasiextinction probabilities as a measure of impact on population growth. *Risk Analysis* 2:171-181.