



CURRICULUM VITAE 2011

John M. Halley

Professor

Dept. Biological Applications & Technology

University of Ioannina

45110 Ioannina

Epirus, Greece.

+30 26510 07337 (Wk)

+30 6944 328099 (Mb)

jhalley@cc.uoi.gr

www.jmax.gr



I was born in Dublin, Ireland, 1961. My original degrees (University College Dublin, 1983; University College London, 1985 and 1989) were all in Electronic Engineering but since 1990 I have worked on problems associated with the environment, focusing on theoretical and applied ecology. My main research interests are in the application of mathematics and statistics to ecology and conservation. This has included population dynamics, population genetics, ecological time-series analysis and the application of fractals to ecological distributions. Recently, I have been working on novel methods for the interpretation of climate-change statistics and for the estimation of the rates of species loss due to rainforest clearance. Also, since taking up my post at Ioannina in 2007, I have become increasingly involved with field ecology as well as continuing in theoretical ecology. In both an educational and research capacity, I have also become interested in the biodiversity and conservation issues in the region of Epirus, Greece.

Employment since 1990

Dates	Place	Position
September 2012- 2007-2012	University of Ioannina (UI)	Professor of Ecology
	University of Ioannina (UI)	Assoc. Prof. of Functional Ecology
Sept 2003-Sept 2006	Technical Education Foundation (TEI): Moundania School of Fisheries & Aquaculture	Part-time lecturer
January 2001-	Aristotle University of Thessaloniki (AUn), School of Biolog	Part-time lecturer (MSc programs)
January 1999- December 2001		Research associate
January 1996 to December 1998	University of St. Andrews, Mathematical Institute	Lecturer
February 1990 to October 1995	Imperial College London, Centre for Population Biology	Research associate

Languages

English, Greek

Selected Participations

- Plenary Lecturer, Hellenic Ecological Society Conference, Patras 2010
- Plenary Lecturer, IAVS Conference, Chania 2009
- Invited participant, Smithsonian Biodiversity Science and Education Initiative (BSEI) 2005-2007
- Invited lectures at:
 - Institut Català de Ciències del Clima (IC3), Barcelona, Spain 2012
 - Aristotle-University of Thessaloniki, April 2004
 - University of Georgia, Seminar (Dept. of Plant Biology, October 2004
 - First Okazaki Conference on "Biology of extinction", Okazaki, Japan, January 2004
 - Duke University (Nicholas School of the Environment), November 2002
 - BAAS. (Charles Lyell 100th Anniversary lecturer), 1997

Funding ID: Successful and pending Grant Applications

Currently I am setting up a laboratory for ecology at the University of Ioannina and building a research time including postdoctoral researchers and PhD and diploma students. Most of these applications are to this end.

Year	Project and Funding Programme	Value
2011	• “Conservation through Religion: the Sacred Groves of Epirus” THALIS programme	€509,820
	• “Fungal responses under differing environmental regimes”, Postdoctoral Prog.: Epirus (ESPA 2007-13)	€140,000
2010	• “Population ecology and genetics of the genus <i>Campanula</i> at the core and margins of their distributions in montane areas of Greece” Herakleitos II Prog. (PhD)	€45,000
	• “Diversity and distribution patterns of Lepidoptera and Orthoptera in Greece and their responses to local and global climate change” Herakleitos II Prog. (PhD)	€45,000
	• Award under “Research Promotion Foundation's Framework Programme For Research, Technological Development And Innovation (RPF'S FP 2009-2010” (IIENEK/0609/34) (PhD student)	€105,000
2003	• “Developing Software for the Management of Vulnerable Populations Using Individual-based Population Models with Dynamics, Genetics and Behaviour” GSRT prog. Scientific and Technological Cooperation Between Related Organizations in Greece and other countries (with Duke University, USA)	€60,000
2001	• “Development of Fractal Sampling Techniques and Statistics For Natural Forest Distributions”, Joint British Council/GRST programme	£6,080

Teaching Activities and Experience

- Currently supervisor to 4 PhD students and 4 diploma students in my department at the University of Ioannina
- Course coordinator for my department's core modules in *General Ecology* and *Applied Ecology* and for the elective module *Practical Exercise* (where students of the department work for an industry, a hospital or a national park during Summer break). I also contribute to the Statistics and General Biology modules.
- I set up the elective module *Field Course in Ecology* (2012)
- Teaching on two MSc. Courses at Aristotle University of Thessaloniki. Topics include Modeling and Statistics for Conservation Biology and Time-series Analysis 2001-2012.
- Lecturer at SCB/Erasmus Greek Summer School in Conservation Biology, Papingo, 2010-2012

Publications.

- 52 Halley JM, Iwasa Y, Vokou D. Extinction Debt and Windows of Conservation Opportunity in the Brazilian Amazon – Comment. *Science*. **2013**; 339:271-c.
- 51 Halley JM, Sgardeli V, Monokrousos N. Species-Area Relationships and Extinction Forecasts. *Annals of the New York Academy of Sciences*. **2013**; 1296:50-61.
- 50 Halley JM, Iwasa Y. Neutrality without incoherence: a response to Clark. *TRENDS IN ECOLOGY & EVOLUTION*. **2012**; 27: 363.
- 49 Vokou D, Vareli K, Zarali E, , Zarali E, Karamanoli K, Constantinidou HI, Monokrousos N, Halley JM, Sainis I.. Exploring biodiversity in the bacterial community of the Mediterranean phyllosphere and its relationship with airborne bacteria. *MICROBIAL ECOLOGY*. **2012**; 64, 714-724
- 48 Veresoglou SD, Halley JM. A model that explains diversity patterns of arbuscular mycorrhizas. *ECOLOGICAL MODELLING*. 2012;231:146–152.
- 47 Lövei, Gábor L, Thomas M Lewinsohn, et al. **2012** Megadiverse developing countries face huge risks from invasives. *TRENDS IN ECOLOGY & EVOLUTION* 27(1): 2–3.
- 46 Koutsias N, Arianoutsou M, Kallimanis AS, et al. Where did the fires burn in Peloponnisos, Greece the summer of 2007? Evidence for a synergy of fuel and weather. *AGRICULTURAL AND FOREST METEOROLOGY*. **2012**;156:41–53.
- 45 Halley JM, Kugiumtzis D. Nonparametric testing of variability and trend in some climatic records. *CLIMATIC CHANGE*. **2011**;109(3-4):549–568.
- 44 Van Houtan KS, Halley JM. Long-Term climate forcing in loggerhead sea turtle nesting. *PLoS ONE*. **2011**;6(4).
- 43 Damialis A, Fotiou C, Halley JM, Vokou D. Effects of environmental factors on pollen production in anemophilous woody species. *TREES-STRUCTURE AND FUNCTION*. **2011**;25(2):253–264.
- 42 Halley JM, Iwasa Y. Neutral theory as a predictor of avifaunal extinctions after habitat loss. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*. **2011**;108(6):2316–2321.
- 41 Fotiou C, Damialis A, Krigas N, Halley JM, Vokou D. *Parietaria judaica* flowering phenology, pollen production, viability and atmospheric circulation, and expansive ability in the urban environment: impacts of environmental factors. *INTERNATIONAL JOURNAL OF BIOMETEOROLOGY*. **2011**;55(1):35–50.
- 40 Kati V, Poirazidis K, Dufrene M, et al. Towards the use of ecological heterogeneity to design reserve networks: a case study from Dadia National Park, Greece. *BIODIVERSITY AND CONSERVATION*. **2010**;19(6):1585–1597.
- 39 Van Houtan KS, Halley JM, van Aarde R, Pimm SL. Achieving success with small, translocated mammal populations. *CONSERVATION LETTERS*. **2009**;2:254–262.

- 38 Halley JM. Using models with long-term persistence to interpret the rapid increase of Earth's temperature. *PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS*. **2009**;388(12):2492–2502.
- 37 Kallimanis AS, Mazaris AD, Tzanopoulos J, et al. How does habitat diversity affect the species-area relationship? *GLOBAL ECOLOGY AND BIOGEOGRAPHY*. **2008**;17(4):532–538.
- 36 Kallimanis AS, Halley JM, Vokou D, Sgardelis SP. The scale of analysis determines the spatial pattern of woody species diversity in the Mediterranean environment. *PLANT ECOLOGY*. **2008**;196(1):143–151.
- 35 Damialis A, Halley JM, Gioulekas D, Vokou D. Long-term trends in atmospheric pollen levels in the city of Thessaloniki, Greece. *ATMOSPHERIC ENVIRONMENT*. **2007**;41(33):7011–7021.
- 34 Van Houtan KS, Pimm SL, Halley JM, Bierregaard, Jr. RO, Lovejoy TE. Dispersal of Amazonian birds in continuous and fragmented forest. *ECOLOGY LETTERS*. **2007**;10(3):219–229.
- 33 Halley JM. How do scale and sampling resolution affect perceived ecological variability and redness? In: Vasseur D, McCann K, eds. *IMPACT OF ENVIRONMENTAL VARIABILITY ON ECOLOGICAL SYSTEMS Systems*. Vol 2. Peter Yodzis Fundamental Ecology Series.; **2007**:17–40.
- 32 Kallimanis AS, Halley JM, Sgardelis SP. Scale dependence of the local-regional diversity relationship: empirical evidence from a woody plant community. *JOURNAL OF BIOLOGICAL RESEARCH-THESSALONIKI*. **2006**;6:221–226.
- 31 Kallimanis A, Kunin W, Halley J, Sgardelis S. Patchy disturbance favours longer dispersal distance. *EVOLUTIONARY ECOLOGY RESEARCH*. **2006**;8(3):529–541.
- 30 Kosmidis K, Halley J, Argyrakakis P. Language evolution and population dynamics in a system of two interacting species. *PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS*. **2005**;353:595–612.
- 29 Halley J, Stergiou K. The implications of increasing variability of fish landings. *FISH AND FISHERIES*. **2005**;6(3):266–276.
- 28 Halley J. Comparing aquatic and terrestrial variability: at what scale do ecologists communicate? *MARINE ECOLOGY-PROGRESS SERIES*. **2005**;304:274–280.
- 27 Matthiopoulos J, Halley J, Moss R. Socially induced red grouse population cycles need abrupt transitions between tolerance and aggression. *ECOLOGY*. **2005**;86(7):1883–1893.
- 26 Kallimanis A, Kunin W, Halley J, Sgardelis S. Metapopulation extinction risk under spatially autocorrelated disturbance. *CONSERVATION BIOLOGY*. **2005**;19(2):534–546.
- 25 Arntzen, J. W., Goudie, I., Halley, J. and Jehle, R. “Cost comparison of marking techniques in long-term population studies: PIT-tags versus pattern maps”. *Amphibia-Reptilia*, 25, 305-315, **2004**.
- 24 Yadav R, Halley J, Karamanoli K, Constantinidou H, Vokou D. Bacterial populations on the leaves of Mediterranean plants: quantitative features and testing of distribution models. *ENVIRONMENTAL AND EXPERIMENTAL BOTANY*. **2004**;52(1):63–77.
- 23 Halley J, Hartley S, Kallimanis A, et al. Uses and abuses of fractal methodology in ecology. *ECOLOGY LETTERS*. **2004**;7(3):254–271.
- 22 Halley J, Inchausti P. The increasing importance of 1/f-noises as models of ecological variability. *FLUCTUATION AND NOISE LETTERS*. **2004**;4(2):R1–R26.
- 21 Inchausti P, Halley J. On the relation between temporal variability and persistence time in animal populations. *JOURNAL OF ANIMAL ECOLOGY*. **2003**;72(6):899–908.
- 20 Vokou D, Douvli P, Blionis G, Halley J. Effects of monoterpenoids, acting alone or in pairs, on seed germination and subsequent seedling growth. *JOURNAL OF*

- CHEMICAL ECOLOGY*. **2003**;29(10):2281–2301.
- 19 Akcakaya H, Halley J, Inchausti P. Population-level mechanisms for reddened spectra in ecological time series. *JOURNAL OF ANIMAL ECOLOGY*. **2003**;72(4):698–702.
- 18 Halley J. Parameter drift stabilizes long-range extinction forecasts. *ECOLOGY LETTERS*. **2003**;6(5):392–397.
- 17 Inchausti P, Halley J. The long-term temporal variability and spectral colour of animal populations. *EVOLUTIONARY ECOLOGY RESEARCH*. **2002**;4(7):1033–1048.
- 16 Halley J, Inchausti P. Lognormality in ecological time series. *OIKOS*. **2002**;99(3):518–530.
- 15 Kallimanis A, Sgardelis S, Halley J. Accuracy of fractal dimension estimates for small samples of ecological distributions. *LANDSCAPE ECOLOGY*. **2002**;17(3):281–297.
- 14 Bliionis G, Halley J, Vokou D. Flowering phenology of *Campanula* on Mt Olympos, Greece. *ECOGRAPHY*. **2001**;24(6):696–706.
- 13 Inchausti P, Halley J. Investigating long-term ecological variability using the global population dynamics database. *SCIENCE*. **2001**;293(5530):655–657.
- 12 Halley J, Kunin V. Extinction risk and the 1/f family of noise models. *THEORETICAL POPULATION BIOLOGY*. **1999**;56(3):215–230.
- 11 Hewzulla D, Boulter M, Benton M, Halley J. Evolutionary patterns from mass originations and mass extinctions. *PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY OF LONDON SERIES B-BIOLOGICAL SCIENCES*. **1999**;354(1382):463–469.
- 10 Halley J, Iwasa Y. Extinction rate of a population under both demographic and environmental stochasticity. *THEORETICAL POPULATION BIOLOGY*. **1998**;53(1):1–15.
- 9 Halley J. Ecology, evolution and 1/f-noise. *TRENDS IN ECOLOGY & EVOLUTION*. **1996**;11(1):33–37.
- 8 Halley J, Robinson C, Comins H, Dighton J. Predicting straw decomposition by a four-species fungal community: A cellular automaton model. *JOURNAL OF APPLIED ECOLOGY*. **1996**;33(3):493–507.
- 7 Halley J, Thomas C, Jepson P. A model for the spatial dynamics of linyphiid spiders in farmland. *JOURNAL OF APPLIED ECOLOGY*. **1996**;33(3):471–492.
- 6 Halley J, Oldham R, Arntzen J. Predicting the persistence of amphibian populations with the help of a spatial model. *JOURNAL OF APPLIED ECOLOGY*. **1996**;33(3):455–470.
- 5 Halley J, Dempster J. The spatial population dynamics of insects exploiting a patchy food resource: A model study of local persistence. *JOURNAL OF APPLIED ECOLOGY*. **1996**;33(3):439–454.
- 4 Halley J, Lawton J. The JAEP ecology of farmland modelling initiative: Spatial models for farmland ecology. *JOURNAL OF APPLIED ECOLOGY*. **1996**;33(3):435–438.
- 3 Halley J, Comins H, Lawton J, Hassell M. Competition, Succession And Pattern In Fungal Communities - Towards A Cellular Automation Model. *OIKOS*. **1994**;70(3):435–442.
- 2 Hoelzel A, Halley J, O'Brien S, Et Al. Elephant Seal Genetic-Variation And The Use Of Simulation-Models To Investigate Historical Population Bottlenecks. *JOURNAL OF HEREDITY*. **1993**;84(6):443–449.
- 1 Halley J, Manasse R. A Population-Dynamics Model For Annual Plants Subject To Inbreeding Depression. *EVOLUTIONARY ECOLOGY*. **1993**;7(1):15–24.

II. Publications in Books

- 1 J. Halley and A.R. Hoelzel, "Simulation models of bottleneck events in natural populations", in *Molecular Genetic Approaches to Conservation*, by T.B. Smith and R.K. Wayne (Eds.), Oxford University Press, New York, **1996**.
- 2 J.M.Halley. "Ecological Population Dynamics and Fractals: A Quest for Appropriate Stochastic Processes" Proceedings 13th Conference on Non-linear dynamics: complexity and chaos (G. Pneumaticos, ed.), Athens **2002**.

III. Publications in other Fields

1. J.M. Halley, J. Midwinter, "Thermo-optic bistable devices: theory of operation in freestanding films", *J. Optical and Quantum Electron*, 18, 57-72, **1986**.
2. J.M. Halley, Midwinter, J., "Thermal analysis of optical elements and arrays on thick substrates with convection cooling", *J. Appl. Phys.*, 62, 4055-4064, **1987**.
3. E. Abraham, J.M. Halley, "Some calculations of temperature profiles in thin films with laser heating", *Appl. Phys. A*, 42, 279, **1987**.
4. J.M. Halley, J. Midwinter, "Pixellation of optically bistable elements", *J. Optical and Quantum Electron.*, 21 191-203, **1989**.
5. J.M. Halley, J. Midwinter, "Competitive instability in nonlinear Fabry-Perot etalons", in *IEEE J. Quantum Electron.*, 26, 348-360, **1990**.
6. P. Bayvel, J.M. Halley, R. Kadiwar, I.P. Giles, "Theoretical and experimental investigation of an all-fibre Brillouin laser", ECOC '88, the Fourteenth European Conference on Optical Communication, **1988**.
7. Halley, J.M., and Inchausti, P. *1/f* noise: an appropriate stochastic process for ecology. ICNF 2001: Proceedings of the 16th International Conference on Noise in Physical Systems and *1/f* Fluctuations. Ed. G. Bosman, pp797-800, **2001**. World Scientific, New Jersey.
8. Halley, J.M., "The initial-value spectrum of *1/f* noise: Notes on its importance and its estimation". Proceedings of ICNF **2003**: the 17th International Conference on Noise and Fluctuations, Prague. Published by CNRL, Brno, Czech Republic. ISBN 80-239-1005-1.

Academic Recognition

According to the ISI Web of Science in May 2012, my citations were 1231 (non-self). The *h-index* was 20. The largest number of citations for one paper was 200 (#I-9).

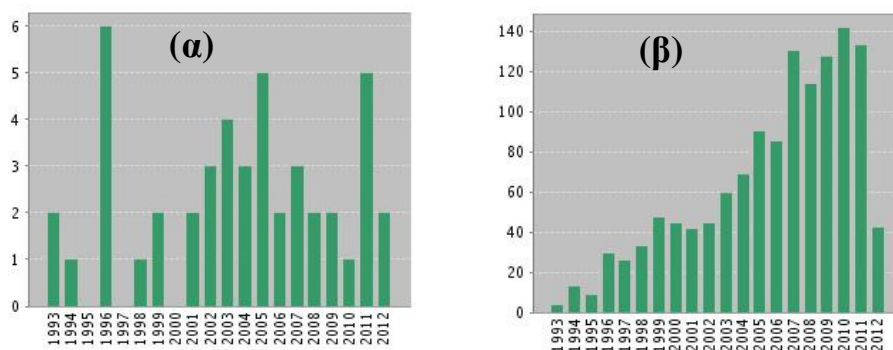


Figure 1. (α) Publications in ISI journals by year. (β) Citations by year (ISI Web of Knowledge, May 2012).

Other Relevant Activities

- Member of Society of Conservation Biology's Global Science & Publications Committee 2008-2012.
- Management Board: Hellenic Ecological society 2010-.
- Chairman, Organizing Committee for conference "Biodiversity and Productivity in Lake Pamvotis" Ioannina, 15th January 2011(<http://pamvotis.conf.offbit.gr/en>)