

Academic Books

- 1 1966 Translation from the French of Abraham Moles' *Information Theory and Esthetic Perception*. Urbana: University of Illinois Press. 217 pp. ISBN-10: 0252724852, ISBN-13: 978-0252724855.
- 2 1967 *A Model of Simple Competition*. Annals of the Computation Laboratory 41. Cambridge, MA: Harvard University Press. 138 pp. ASIN/ISBN: B0006BOGEO. <https://doi.org/10.4159/harvard.9780674430495>
- 3 1971 *Casual Groups of Monkeys and Men: Stochastic Models of Elemental Social Systems*. Cambridge, MA and London, England: Harvard University Press. 175 pp. ISBN-13: 9780674099814, ISBN: 0674099818. <https://doi.org/10.4159/harvard.9780674430556>
- 4 1978 *Food Webs and Niche Space*. Monographs in Population Biology 11. Princeton, NJ: Princeton University Press. 190 pp. ISBN-13: 978-0-691-08202-8. <https://doi.org/10.12987/9780691209449>
- 5 1986 (J. E. Cohen, Harry Kesten, Charles M. Newman, editors) *Random Matrices and Their Applications*. Contemporary Mathematics 50. Providence, RI: American Mathematical Society. 358 pp. ISBN-10: 0-8218-5044-X, ISBN-13: 978-0-8218-5044-2.
- 6 1990 (J. E. Cohen, Frédéric Briand, Charles M. Newman) *Community Food Webs: Data and Theory*. Biomathematics 20. Heidelberg, New York: Springer-Verlag. 308 pp. ISBN-10: 3540511296, ISBN-13: 978-3540511298.
- 7 1993 (Hiroya Kawanabe, J. E. Cohen, Keiji Iwasaki, editors) *Mutualism and Community Organization: Behavioural, Theoretical, and Food-Web Approaches*. Oxford: Oxford University Press. 426 pp. ISBN-10: 0198540272, ISBN-13: 978-0198540274.
- 8 1995 *How Many People Can the Earth Support?* New York: W. W. Norton. 532 pp. ISBN: 0-393-03862-9. 1996 paperback ISBN: 978-0-393-31495-3. 1998 Japanese translation *Shin-Jinkou-Ron [New Principle of Population]* by Nanako Shigesada, Hiromi Seno, Fugo Takasu. Tokyo: Nosan Gyosan Bunka Kyokai. ISBN: 4-540-97056-9. 1998 Italian translation *Quante persone possono vivere sulla terra?* by Nanni Negro. Bologna: Il Mulino. ISBN 88-15-06380-3. **Olivia Schieffelin Nordberg Prize "for excellence in writing in the population sciences," March 1997**
- 9 1998 (J. E. Cohen, J. H. B. Kemperman, Gh. Zbaganu) *Comparisons of Stochastic Matrices, with Applications in Information Theory, Statistics, Economics and Population Sciences*. Boston, Basel, Berlin: Birkhäuser. 158 pp. **Gheorghe Lazăr Prize of Romanian Academy, December 2000** <https://link.springer.com/book/9780817640828>.
- 10 1999 (J. E. Cohen, Nina V. Fedoroff, editors) *Colloquium on Plants and Population: Is There Time?* Washington, DC: National Academy Press. 145 pp. ISBN-10: 0-309-06427-9, ISBN-13: 978-0-309-06427-9. DOI: <https://doi.org/10.17226/9619> <https://www.nap.edu/catalog/9619/nas-colloquium-plants-and-population-is-there-time>
- 11 2005 (Eric Stallard, Kenneth G. Manton, J. E. Cohen) *Forecasting Product Liability Claims: Epidemiology and Modeling in the Manville Asbestos Case*. New York, Heidelberg: Springer-Verlag. xxx+394 pp. ISBN: 0-387-94987-9.
- 12 2006 (J. E. Cohen, David E. Bloom, Martin Malin, editors) *Educating All Children: A Global Agenda*. 616 pp. MIT Press, Cambridge, MA. <https://mitpress.mit.edu/search-result-list/?keyword=educating+all+children>. ISBN-10: 0-262-53293-X, ISBN-13: 978-0-262-53293-8.
- 13 2010 (J. E. Cohen, Martin Malin, editors) *International Perspectives on the Goals of Universal Basic and Secondary Education*. 307 pp. Routledge, New York, London. HB ISBN: 978-0-415-99766-9.

Nonacademic Book

- 1992 (Betsy Devine, J. E. Cohen) *Absolute Zero Gravity: Science Jokes, Quotes and Anecdotes*. New York: Simon and Schuster. 162 pp. ISBN10: 0671740601.

Joel E. Cohen is sole author if no authors are shown.

Academic Publications-Papers

R = research E = expository A = abstract B = book review

- E 1 1961 Some relationships between music and mathematics. *Music Educators Journal* 48(1):104-109, September-October.
- R 2 1961 Groups as machines. *Mathematics Student Journal* 9(1):5-6, November.
- R 3 1962 Information theory and music. *Behavioral Science* 7(2):137-163, April.
- R 4 1962 Further properties of third order determinants. *Mathematics Magazine* 35(5):304, November.
- R 5 1963 The Dred Scott decision: background and implications. *Negro History Bulletin* 27(4):145-155, January.
- E 6 1963 The critic at Harvard: ideals in college music criticism. *Music Educators Journal* 49(5):119-120, April-May.
- R 7 1964 Twisted determinants that sum to zero. *Mathematics Magazine* 37(4):267-269, September.
- R 3a 1964 Teorie informaci a hudba. In: *Nové cesty hudby*, pp. 180-215. Czech translation by Jan Rychlik. Prague: Dilia.
- R 8 1965 Diurnal cycles and maze learning in planarians. *Worm Runner's Digest* 7(1):20-24, April.
- E 9 1965 Love in a test tube. In: "The New Psychology," *Harvard Review* 3(2):49-56, spring.
- A 10 1966 (G. B. Schaller, J. J. Spillett, J. E. Cohen, R. C. De) The status of the large mammals in the Keoladeo Ghana Sanctuary, Rajasthan. *International Union for the Conservation of Nature Bulletin* N. S. 20:7, July-September.
- E 11 1967 Around the world in data ways. *Harvard Alumni Bulletin* 11 February, pp. 16-32.
- R 12 1967 (J. J. Spillett, J. E. Cohen, R. C. De) The large mammals of the Keoladeo Ghana Sanctuary, Rajasthan. *Journal of the Bombay Natural History Society* 63(3):602-607.
- R 13 1968 On estimating the equilibrium and transition probabilities of a finite-state Markov chain from the same data. *Biometrics* 24(1):185-187, March.
- R 14 1968 Alternate derivations of a species-abundance relation. *American Naturalist* 102:165-172, March-April.
- R 14.1 1968 Interval graphs and food webs: a finding and a problem. RAND Document 17696-PR, 30 August 1968. RAND Corporation, Santa Monica, CA.
- A 15 1969 Grouping in a vervet monkey troop. *Proceedings of the Second International Congress of Primatology, Behavior* ed. C. R. Carpenter, 1:274-278. Basel: S. Karger.
- A 16 1969 Animal aggregations revisited. *Biometrics* 25(1):191, March.
- E 17 1969 Contributions to section, "Mr. Joel Cohen's Visit." In: D. C. McClelland, D. G. Winter, *Motivating Economic Achievement: Accelerating Economic Development through Psychological Training*, pp. 188-192. New York: Free Press.
- R 18 1969 Natural primate troops and a stochastic population model. *American Naturalist* 103:455-477, September-October; 104:218, March-April.
- E 19 1970 Men, models, and mathematics. *Harvard Bulletin* 72(11):19-23.
- R 20 1970 A Markov contingency-table model for replicated Lotka-Volterra systems near equilibrium. *American Naturalist* 104:547-560, November-December.
- B 21 1970 Book review: *Introduction to Mathematical Ecology* by E. Pielou. *American Scientist* 58:699, November-December.
- R 22 1971 Legal abortions, socioeconomic status, and measured intelligence in the United States. *Social Biology* 18:55-63, March.
- B 23 1971 Book review: *Game Theory in the Behavioral Sciences* ed. I. Buchler, H. Nutini. *Quarterly Review of Biology* 46(1):98-99, March.
- B 24 1971 Mathematics as metaphor. Book review: *Dynamical System Theory in Biology* by R. Rosen. *Science* 172:674-675, 14 May.

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R = research E = expository A = abstract B = book review

- R 25 1971 Estimation and interaction in a censored 2 x 2 x 2 contingency table. *Biometrics* 27:379-386, June; 28:1141, December 1972.
- B 26 1971 Book review: *Mathematical Sciences and Social Sciences* ed. W. Kruskal. *American Scientist* 59(4):500-501.
- R 27 1971 Social grouping and troop size in yellow baboons. *Proceedings of the Third International Congress of Primatology* 3:58-64. Basel: S. Karger.
- R 28 1972 Markov population processes as models of primate social and population dynamics. *Theoretical Population Biology* 3(2):119-134, June.
- R 29 1972 Aping monkeys with mathematics. In: *Functional and Evolutionary Biology of the Primates* ed. R. H. Tuttle, pp. 415-436. Chicago: Aldine-Atherton.
- R 30 1972 When does a leaky compartment model appear to have no leaks? *Theoretical Population Biology* 3(4):404-405, December.
- R 31 1973 Selective host mortality in a catalytic model applied to schistosomiasis. *American Naturalist* 107:199-212, March-April.
- E 32 1973 Turning the tables. In: *Statistics by Example: Exploring Data* ed. F. Mosteller et al., pp. 87-90. Reading, MA: Addison Wesley.
- E 33 1973 Independence of amoebas. In: *Statistics by Example: Weighing Chances* ed. F. Mosteller et al., pp. 71-74. Reading, MA: Addison Wesley.
- E 34 1973 Mathematics and myth. *Society for Industrial and Applied Mathematics News* 6(3):2-3, June.
- R 35 1973 Heterologous immunity in human malaria. *Quarterly Review of Biology* 48(3):467-489, September.
- R 36 1974 Some potential economic benefits of eliminating mortality due to schistosomiasis in Zanzibar. *Social Science and Medicine* 8:383-398.
- B 37 1974 Book review: *Mathematical Models of Conception and Birth* by M. C. Sheps, J. A. Menken. *Journal of the American Statistical Association* 69:1046-1047, December.
- R 38 1975 Childhood mortality, family size and birth order in pre-industrial Europe. *Demography* 12(1):35-55, February.
- R 39 1975 (J. E. Cohen, H. K. MacWilliams) The control of foot formation in transplantation experiments with *Hydra viridis*. *Journal of Theoretical Biology* 50:87-105, January.
- R 40 1975 (R. F. Sturrock, J. E. Cohen, G. Webbe) Catalytic curve analysis of schistosomiasis in snails. *Annals of Tropical Medicine and Parasitology* 69:133-134.
- R 41 1975 The size and demographic composition of social groups of wild orangutans. *Animal Behaviour* 23(3):543-550, August.
- R 42 1975 Livelihood benefits of small improvements in the life table. *Health Services Research* 10(1):82-96, spring.
- A 43 1975 An ergodic theorem for the age structure of large populations in Markovian environments. *Mathematische Modelle in der Biologie*, Tagungsbericht 23, Mathematisches Forschungsinstitut Oberwolfach, June.
- A 44 1975 Stochastic ergodicity of population age structure. *Advances in Applied Probability* 7(3):466-467, September.
- B 45 1975 Book review: *The Genetical Structure of Populations* by K. Mather. *Quarterly Review of Biology* 50(4):454, December.
- E 46 1976 Irreproducible results and the breeding of pigs; or nondegenerate limit random variables in biology. *BioScience* 26(6):391-394, June.
- R 47 1976 Ergodicity of age structure in populations with Markovian vital rates, I: Countable states. *Journal of the American Statistical Association* 71(354):335-339, June.
- B 48 1976 Book review: *Ecological Diversity* by E. C. Pielou. *American Scientist* 64(3):339, May-June.

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Academic Publications-Papers

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- E 49 1976 Schistosomiasis—a human host-parasite system. Chap. 13 in: *Theoretical Ecology: Principles and Applications* ed. R. M. May, pp. 237-256. Oxford: Blackwell Scientific; Philadelphia: Saunders.
- R 50 1976 (Peter D'Eustachio, J. E. Cohen, Gerald M. Edelman) Variation and control of specific antigen-binding cell populations in individual fetal mice. *Journal of Experimental Medicine* 144:259-265, July.
- R 51 1976 The distribution of the chi-squared statistic under clustered sampling from contingency tables. *Journal of the American Statistical Association* 71(355):665-670, September.
- B 52 1977 Is a primate like a rose? Book review: *Proceedings from the Symposia of the Fifth Congress of the International Primatological Society* ed. S. Kondo, M. Kawai, A. Ehara, S. Kawamura. *Contemporary Psychology* 22(4):269-270.
- R 53 1977 Ergodicity of age structure in populations with Markovian vital rates, II: General states. *Advances in Applied Probability* 9:18-37, March.
- R 54 1977 (J. E. Cohen, Peter D'Eustachio, Gerald M. Edelman) The specific antigen-binding cell populations of individual fetal mouse spleens: repertoire composition, size and genetic control. *Journal of Experimental Medicine* 146:394-411, August.
- E 55 1977 Mathematical models of schistosomiasis. *Annual Review of Ecology and Systematics* 8:209-233. Palo Alto: Annual Reviews.
- R 56 1977 Ergodicity of age structure in populations with Markovian vital rates, III: Finite-state moments and growth rates; illustration. *Advances in Applied Probability* 9:462-475, September.
- R 57 1977 Food webs and the dimensionality of trophic niche space. *Proceedings of the National Academy of Sciences U.S.A.* 74(10):4533-4536, October.
- R 58 1977 Ratio of prey to predators in community food webs. *Nature* 270:165-167, 10 November.
- B 59 1978 Book review: *Applied Mathematical Demography* by Nathan Keyfitz. *Society for Industrial and Applied Mathematics News* 11(1):5-8, February.
- R 60 1978 A Markov chain with a given stationary distribution. *American Statistician* 32(1):39, February.
- R 61 1978 Derivatives of the spectral radius as a function of nonnegative matrix elements. *Mathematical Proceedings of the Cambridge Philosophical Society* 83(2):183-190, March-April.
- B 62 1978 Book review: *Regulation of Parasite Populations* ed. Gerald W. Esch. *Quarterly Review of Biology* 53(1):77, March.
- B 63 1978 Book review: *Ecosystem Modeling in Theory and Practice* ed. Charles A. S. Hall, John W. Day, Jr. *American Scientist* 66(4):500, July.
- R 64 1978 (J. E. Cohen, Peter D'Eustachio) An affine linear model for the relation between two sets of frequency counts. *Biometrics* 34:514-516, September.
- R 65 1978 (Barbara R. Jasny, J. E. Cohen, Igor Tamm) The organization of DNA replication in a mammalian cell line. In: *DNA Synthesis: Present and Future. Proceedings of the NATO Advanced Study Institute on DNA Synthesis* ed. I. Molineaux, M. Kohiyama, pp. 175-188. New York: Plenum.
- R 66 1979 (J. E. Cohen, János Komlós, Thomas Mueller) The probability of an interval graph, and why it matters. In: *Relations between Combinatorics and Other Parts of Mathematics* ed. D. K. Ray-Chaudhuri, *Proceedings of Symposia in Pure Mathematics* 34:97-115. Providence, RI: American Mathematical Society.
- R 67 1979 The cumulative distance from an observed to a stable age structure. *Society for Industrial and Applied Mathematics Journal of Applied Mathematics* 36(1):169-175, February.

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- R 68 1979 (J. E. Cohen, Barbara R. Jasny, Igor Tamm) The spatial distribution of initiation sites for mammalian DNA replication: a statistical analysis. *Journal of Molecular Biology* 128:219-245, 25 February.
- R 69 1979 Long-run growth rates of discrete multiplicative processes in Markovian environments. *Journal of Mathematical Analysis and Applications* 69:243-251.
- E 70 1979 (Peter D'Eustachio, J. E. Cohen, Gerald M. Edelman) The ontogeny of antigen-binding cells. In: *Developmental Immunobiology; Proceedings of the Fifth Irwin Strasburger Memorial Seminar on Immunology* ed. G. W. Siskind, S. D. Litwin, M. E. Weksler, pp. 133-158. New York: Grune, Stratton.
- A 71 1979 Ergodic theorems of population dynamics. *Rocky Mountain Journal of Mathematics* 9(1):27, Winter.
- A 72 1979 Graph theoretic models of food webs. *Rocky Mountain Journal of Mathematics* 9(1):29-30, Winter.
- E 73 1979 Ergodic theorems of demography. *Bulletin of the American Mathematical Society* N.S. 1(2):275-295, March.
- E 74 1979 Malaria, a moving target. *New York Times* Op-Ed page 21, July 1.
- B 75 1979 Book review: *Time and Man* by L. R. B. Elton, H. Messel. *BioScience* 29(9):545, September.
- R 76 1979 Random evolutions and spectral radius of a non-negative matrix. *Mathematical Proceedings of the Cambridge Philosophical Society* 86(2):345-350, September.
- R 77 1979 Contractive inhomogeneous products of non-negative matrices. *Mathematical Proceedings of the Cambridge Philosophical Society* 86(2):351-364, September.
- R 78 1979 (J. E. Cohen, Burton Singer) Malaria in Nigeria: constrained continuous-time Markov models for discrete time longitudinal data on human mixed-species infections. In: *Some Mathematical Questions in Biology* ed. Simon A. Levin, 12:69-133. Providence: American Mathematical Society.
- R 79 1979 Comparative statics and stochastic dynamics of age-structured populations. *Theoretical Population Biology* 16(2):159-171, October.
- R 80 1979 (Igor Tamm, Barbara R. Jasny, J. E. Cohen) Initiation sites for replication of mammalian cell DNA. In: *Specific Eukaryotic Genes* ed. J. Engberg, H. Klenow, V. Leick, *Alfred Benzon Symposium* 13:221-226. Amsterdam: Munksgaard.
- R 81 1980 Publication rate as a function of laboratory size in a biomedical research institution. *Scientometrics* 2(1):35-52.
- R 82 1979 Random evolutions in discrete and continuous time. *Stochastic Processes and Their Applications* 9:245-251.
- R 83 1980 (Burton Singer, J. E. Cohen) Estimating malaria incidence and recovery rates from panel surveys. *Mathematical Biosciences* 49:273-305; 1982, 62:151-152.
- R 84 1980 (Steve Sommer, J. E. Cohen) The size distribution of proteins, mRNA, and nuclear RNA. *Journal of Molecular Evolution* 15:37-57.
- R 85 1980 Convexity properties of products of random non-negative matrices. *Proceedings of the National Academy of Sciences U.S.A.* 77(7):3749-3752, July.
- R 86 1980 (Barbara R. Jasny, J. E. Cohen, I. Tamm) Effects of reovirus infection on the spatial and temporal organization of DNA replication in L cells. *Chromosoma* 79:207-214.
- R 87 1980 (Louis Molineaux, John Storey, J. E. Cohen, Anthony Thomas) A longitudinal study of human malaria in the West African savanna in the absence of control measures: relationships between different *Plasmodium* species, in particular *P. falciparum* and *P. malariae*. *American Journal of Tropical Medicine and Hygiene* 29(5):725-737, September.

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- E 32a 1980 Turning the tables. Japanese translation by Masayasu Murakami et al., pp. 91-95. Tokyo: Baifukan.
- E 33a 1980 Independence of amoebas. Japanese translation by Masayasu Murakami et al., pp. 191-195. Tokyo: Baifukan.
- E 49a 1980 Schistosomiasis: Ein Parasit-Wirt-System des Menschen. German translation by Odwin Hoffrichter, Klaus Peter Sauer. Chap. 13 in *Theoretische Oekologie* ed. R. M. May, pp. 213-230. Weinheim, Germany: Verlag Chemie.
- E 49b 1980 Chinese translation, pp. 238-259. Beijing, China: Academica Press.
- B 88 1980 Book review: *Population Dynamics: Alternative Models* by B. G. Murray. *American Scientist* 68:694, November-December.
- B 89 1980 Book review: *Compartmental Analysis of Ecosystem Models* ed. J. H. Matis, B. C. Patten, G. C. White. *Quarterly Review of Biology* 55(4):453-454, December.
- R 90 1981 Convexity of the dominant eigenvalue of an essentially non-negative matrix. *Proceedings of the American Mathematical Society* 81(4):657-658, April.
- B 91 1981 Book review: *Reversibility and Stochastic Networks* by F. P. Kelly. *Technometrics* 23(2):206-207, May.
- R 92 1981 Publication rate as a function of laboratory size in three biomedical research institutions. *Scientometrics* 3(6):467-487, November.
- R 93 1981 A geometric representation of a stochastic matrix: theorem and conjecture. *Annals of Probability* 9(5):899-901, October.
- A 94 1981 Some trees are not interval graphs. (Letter to the Editor) *Bulletin of Mathematical Biology* 43(6):717.
- R 95 1982 The asymptotic probability that a random graph is a unit interval graph, indifference graph, or proper interval graph. *Discrete Mathematics* 40(1):21-24, June.
- A 96 1982 The invariant distribution of Markovian products of random matrices. *Institute of Mathematical Statistics Bulletin* 11(4):185, May.
- A 97 1982 Eigenvalue inequalities for random evolutions. *Institute of Mathematical Statistics Bulletin* 11(4):193, May.
- B 98 1982 Book review: *Geometry of Biological Time* by A. T. Winfree. *Bulletin of the American Mathematical Society* 7(1):280-283, July.
- R 99 1982 (J. E. Cohen, S. Friedland, T. Kato, F. P. Kelly) Eigenvalue inequalities for products of matrix exponentials. *Linear Algebra and Its Applications* 45:55-95, June. International Institute for Applied Systems Analysis, Laxenburg, Austria, RR-83-23.
- R 100 1982 (J. E. Cohen, Peter H. Sellers) Sets of non-negative matrices with positive inhomogeneous products. *Linear Algebra and Its Applications* 47:185-192.
- R 101 1982 Multiregional age-structured populations with changing rates: weak and stochastic ergodic theorems. In: *Multidimensional Mathematical Demography* ed. K. C. Land, A. Rogers, pp. 47-503. New York: Academic.
- E 102 1983 How is the past related to the future? *Annual Report* 1982, pp. 59-71. Stanford, CA: Center for Advanced Study in the Behavioral Sciences.
- A 103 1983 (J. E. Cohen, Charles M. Newman) The stability of large random systems. *Institute of Mathematical Statistics Bulletin* 12(4):184-27, July.
- R 104 1983 Recent progress and problems in food web theory. In: *Current Trends in Food Web Theory* ed. D. L. DeAngelis, W. M. Post, G. Sugihara. ORNL-5983:17-24. Oak Ridge, TN: Oak Ridge National Laboratory.
- E 105 1984 Demographic doomsday deferred. *Harvard Magazine* 86(3):50-51, January-February.
- B 106 1983 Book review: *Finite Markov Processes and Their Applications* by M. Iosifescu. *Mathematical Biosciences* 64:299-301.

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Academic Publications-Papers

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- R 107 1983 (J. E. Cohen, S. W. Christensen, C. P. Goodyear) A stochastic age-structured population model of striped bass (*Morone saxatilis*) in the Potomac River. *Canadian Journal of Fisheries and Aquatic Sciences* 40:2170-2183, December.
- R 108 1984 Statistical theory aids inference in scientometrics. *Scientometrics* 6(1):27-32, January.
- R 109 1984 (Frédéric Briand, J. E. Cohen) Community food webs have scale-invariant structure. *Nature* 307:264-266, January.
- R 110 1984 (J. E. Cohen, Charles M. Newman) The stability of large random matrices and their products. *Annals of Probability* 12(2):283-310, May.
- R 111 1984 (J. E. Cohen, Frédéric Briand) Trophic links of community food webs. *Proceedings of the National Academy of Sciences U.S.A.* 81:4105-4109, July.
- R 112 1984 Eigenvalue inequalities for random evolutions: origins and open problems. In: *Inequalities in Statistics and Probability* ed. Y. L. Tong, Institute of Mathematical Statistics Lecture Notes--Monograph Series 5:41-53.
- B 113 1984 Book review: *Biomathematics of Malaria* by Norman T. J. Bailey. *Statistics in Medicine* 3(1):93-95, January-March.
- B 114 1984 Book review: *Population and Development: Challenges and Prospects* ed. P. M. Hauser. *American Journal of Sociology* 90(2):472-474, September.
- E 115 1984 Demography and morbidity: a survey of some interactions. In: *Population and Biology* ed. Nathan Keyfitz, pp. 199-221. Liege, Belgium: Ordina Editions.
- A 116 1985 (J. E. Cohen, C. M. Newman) When will a large complex system be stable? *Journal of Theoretical Biology* 113:153-156, March 7.
- R 117 1985 (J. E. Cohen, S. Friedland) The game-theoretic value and the spectral radius of a nonnegative matrix. *Proceedings of the American Mathematical Society* 93(2):205-211.
- E 118 1985 Ergodicity. Markov chain models. Transition matrix. In: Roland Pressat, *Dictionary of Demography* ed. Christopher Wilson, pp. 72, 135-136, 223, 304 pp. Oxford: Basil Blackwell.
- R 119 1985 (C. P. Goodyear, J. E. Cohen, S. W. Christensen) Maryland striped bass: recruitment declining below replacement. *Transactions of the American Fisheries Society* 114(1):146-151.
- E 120 1985 Mathematical demography: recent developments in population projections. *Proceedings of the 20th General Congress of the International Union for the Scientific Study of Populations*, Florence, June, 1985. Paper 22.1, pp. 179-189.
- R 121 1985 Can fitness be aggregated? *American Naturalist* 125(5):716-729.
- R 122 1985 (C. C. Heyde, J. E. Cohen) Confidence intervals for demographic projections based on products of random matrices. *Theoretical Population Biology* 27(2):120-153, April.
- R 123 1985 (J. E. Cohen, Charles M. Newman) A stochastic theory of community food webs: I. Models and aggregated data. *Proceedings of the Royal Society (London) series B* 224:421-448.
- R 124 1985 (J. E. Cohen, Charles M. Newman, Frédéric Briand) A stochastic theory of community food webs: II. Individual webs. *Proceedings of the Royal Society (London) series B* 224:449-461.
- R 125 1985 (Charles M. Newman, J. E. Cohen, Claude Kipnis) Neo-Darwinian evolution implies punctuated equilibria. *Nature* 315(6018):400-401, May.
- A 126 1985 Measuring the uncertainty of population forecasts: a comparison of two approaches. *Advances in Applied Probability* 17:246-247.
- R 127 1986 An uncertainty principle in demography with application to the unisex issue. *American Statistician* 40(1):32-39, February.

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R = research E = expository A = abstract B = book review

- R 128 1986 Population forecasts and confidence intervals for Sweden: a comparison of model-based and empirical approaches. *Demography* 23(1):105-126, February; 25(2):315, May 1988.
- R 129 1986 Connectivity of finite anisotropic random graphs and directed graphs. *Mathematical Proceedings of the Cambridge Philosophical Society* 99(2):315-330, March.
- R 130 1986 (Robert A. Desharnais, J. E. Cohen) Life not lived due to disequilibrium in heterogeneous age-structured populations. *Theoretical Population Biology* 29(3):385-406, June.
- R 131 1986 Perturbation theory of completely mixed matrix games. *Linear Algebra and Its Applications* 79:153-162.
- R 132 1986 (J. E. Cohen, Frédéric Briand, Charles M. Newman) A stochastic theory of community food webs: III. Predicted and observed lengths of food chains. *Proceedings of the Royal Society (London) series B* 228:317-353.
- R 133 1986 (Charles M. Newman, J. E. Cohen) A stochastic theory of community food webs: IV. Theory of food chain lengths in large webs. *Proceedings of the Royal Society (London) series B* 228:355-377.
- B 134 1986 Use of the common denominator: Reviews of *IMA Journal of Mathematics Applied in Medicine and Biology* and *Communications in Statistics - Stochastic Models*. *Nature* 323:375, 25 September.
- R 135 1986 (J. E. Cohen, John Hajnal, Charles M. Newman) Approaching consensus can be delicate when positions harden. *Stochastic Processes and Their Applications* 22:315-322.
- B 136 1986 A life of the immeasurable mind. Book review: *Enigmas of Chance* by Mark Kac. *Annals of Probability* 14(4):1139-1148.
- B 137 1987 Old diseases in New World. Book review: *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* by Alfred W. Crosby. *Wall Street Journal* 209(13):32, 20 January.
- B 138 1987 The dangers of abstraction. Book review: *Descartes' Dream: The World According to Mathematics* by Philip Davis, Reuben Hersh. *Wall Street Journal* 209(74):29, 16 April.
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- R 140 1987 (J. E. Cohen, Roger D. Nussbaum) Arithmetic-geometric means of positive matrices. *Mathematical Proceedings of the Cambridge Philosophical Society* 101(2):209-219, March.
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- E 469 2024 Can Earth support 4 billion people sustainably and well? *N-IUSSP International Union for the Scientific Study of Population Online News Magazine* 2024-01-22 <https://www.niussp.org/environment-and-development/can-earth-support-4-billion-people-sustainably-and-well/>

Joel E. Cohen is sole author if no authors are shown.

Academic Publications-Papers

R = research E = expository A = abstract B = book review

- R 470 2024 (Uri Sela, Joel M. Corrêa da Rosa, Vincent A. Fischetti, J. E. Cohen) Quantifying how much host, pathogen, and other factors affect human protective adaptive immune responses. *Frontiers in Immunology, Microbial Immunology* 15:1330253, pp. 1-9. DOI: 10.3389/fimmu.2024.1330253
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- E 2024 Population and climate change: global overview. In: *Routledge Handbook of Climate Change and Society*, 2d ed., Steven R. Brechin, editor. Routledge, New York.
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