Roger Arditi

List of Publications by Year
in descending order

79 papers	5,281 citations	126907 33 h-index	88630 70 g-index
81 all docs	81 docs citations	81 times ranked	3328 citing authors

#	Article	IF	Citations
1	Coupling in predator-prey dynamics: Ratio-Dependence. Journal of Theoretical Biology, 1989, 139, 311-326.	1.7	1,207
2	Variation in Plankton Densities Among Lakes: A Case for Ratio-Dependent Predation Models. American Naturalist, 1991, 138, 1287-1296.	2.1	250
3	WHAT CAN STABLE ISOTOPES (Î´15N AND Î´13C) TELL ABOUT THE FOOD WEB OF SOIL MACRO-INVERTEBRATES?. Ecology, 2000, 81, 852-864.	3.2	242
4	Ratio-Dependent Predation: An Abstraction That Works. Ecology, 1995, 76, 995-1004.	3.2	237
5	Microbial Interactions within a Cheese Microbial Community. Applied and Environmental Microbiology, 2008, 74, 172-181.	3.1	228
6	About Deterministic Extinction in Ratio-dependent Predatorâ€"Prey Models. Bulletin of Mathematical Biology, 1999, 61, 19-32.	1.9	193
7	Detection, identification and geographical distribution of European corn borer larval parasitoids using molecular markers. Molecular Ecology, 2005, 14, 3267-3274.	3.9	182
8	Empirical Evidence of the Role of Heterogeneity in Ratio-Dependent Consumption. Ecology, 1992, 73, 1544-1551.	3.2	180
9	Parametric analysis of the ratio-dependent predator-prey model. Journal of Mathematical Biology, 2001, 43, 221-246.	1.9	161
10	Underestimation of mutual interference of predators. Oecologia, 1990, 83, 358-361.	2.0	155
11	Functional Responses and Heterogeneities: An Experimental Test with Cladocerans. Oikos, 1991, 60, 69.	2.7	150
12	Optimal Foraging on Arbitrary Food Distributions and the Definition of Habitat Patches. American Naturalist, 1988, 131, 837-846.	2.1	129
13	The biological control paradox. Trends in Ecology and Evolution, 1991, 6, 32.	8.7	123
14	Empirical Evidence of the role of Heterogeneity in Ratio-dependent Consumption. Ecology, 1993, 74, 2020-2020.	3.2	87
15	Credible, Parsimonious and Useful Predator-Prey Models: A Reply to Abrams, Gleeson, and Sarnelle. Ecology, 1995, 76, 1980-1985.	3.2	86
16	Selection on stability across ecological scales. Trends in Ecology and Evolution, 2015, 30, 417-425.	8.7	86
17	The Role of Prey Taxis in Biological Control: A Spatial Theoretical Model. American Naturalist, 2003, 162, 61-76.	2.1	85
18	Directed Movement of Predators and the Emergence of Density-Dependence in Predatorâ€"Prey Models. Theoretical Population Biology, 2001, 59, 207-221.	1.1	84

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19	Spatially mixed crops to control the stratified dispersal of airborne fungal diseases. Ecological Modelling, 2010, 221, 2793-2800.	2.5	65
20	Does mutual interference always stabilize predatorâ€“prey dynamics? A comparison of models. Comptes Rendus - Biologies, 2004, 327, 1037-1057.	0.2	64
21	The wolves of Isle Royale display scale-invariant satiation and ratio-dependent predation on moose. Journal of Animal Ecology, 2005, 74, 809-816.	2.8	63
22	Macroscopic Dynamic Effects of Migrations in Patchy Predator-prey Systems. Journal of Theoretical Biology, 1997, 185, 459-474.	1.7	62
23	Is dispersal always beneficial to carrying capacity? New insights from the multi-patch logistic equation. Theoretical Population Biology, 2015, 106, 45-59.	1.1	58
24	Assessing top-down and bottom-up control in a litter-based soil macroinvertebrate food chain. Oikos, 2000, 89, 524-540.	2.7	53
25	From pattern to process: identifying predator?prey models from time-series data. Population Ecology, 2001, 43, 229-243.	1.2	52
26	Logistic Theory of Food Web Dynamics. Ecology, 1995, 76, 336-343.	3.2	50
27	Identifying Predatorâ€“Prey Processes from Time-Series. Theoretical Population Biology, 2000, 57, 325-337.	1.1	49
28	Landscape refuges delay resistance of the European corn borer to Bt-maize: A demo-genetic dynamic model. Theoretical Population Biology, 2008, 74, 138-146.	1.1	47
29	Perspectives in mathematical modelling for microbial ecology. Ecological Modelling, 2016, 321, 64-74.	2.5	47
30	A Fragmented Population in a Varying Environment. Journal of Theoretical Biology, 1997, 185, 539-547.	1.7	46
31	Rheagogies: Modelling non-trophic effects in food webs. Ecological Complexity, 2005, 2, 249-258.	2.9	46
32	Emergence of donor control in patchy predator-prey systems. Bulletin of Mathematical Biology, 1998, 60, 1149-1166.	1.9	40
33	A Minimal Model of Pursuit-Evasion in a Predator-Prey System. Mathematical Modelling of Natural Phenomena, 2007, 2, 122-134.	2.4	36
34	Asymmetric dispersal in the multi-patch logistic equation. Theoretical Population Biology, 2018, 120, 11-15.	1.1	36
35	Clustering due to Acceleration in the Response to Population Gradient: A Simple Selfâ€Organization Model. American Naturalist, 2004, 164, 722-735.	2.1	33
36	Spatial heterogeneity and functional response: an experiment in microcosms with varying obstacle densities. Oecologia, 2010, 163, 625-636.	2.0	33

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37	Nonlinear Food Web Models and Their Responses to Increased Basal Productivity. , 1996, , 122-133.		32
38	Predator interference emerging from trophotaxis in predatorâ€"prey systems: An individual-based approach. Ecological Complexity, 2008, 5, 48-58.	2.9	29
39	Prey: predator ratio dependence in the functional response of a freshwater amphipod. Freshwater Biology, 2013, 58, 858-865.	2.4	26
40	A Unified Model of the Functional Response of Predators and Parasitoids. Journal of Animal Ecology, 1983, 52, 293.	2.8	25
41	A predator-prey model with satiation and intraspecific competition. Ecological Modelling, 1978, 5, 173-191.	2.5	23
42	The effect of a time-delay in a predator-prey model. Mathematical Biosciences, 1977, 33, 107-120.	1.9	21
43	Optimal release strategies for the biological control of aphids in melon greenhouses. Biological Control, 2009, 48, 12-21.	3.0	19
44	The perfect mixing paradox and the logistic equation: Verhulst vs. Lotka. Ecosphere, 2016, 7, e01599.	2.2	19
45	Relation of the Canadian lynx cycle to a combination of weather variables: A stepwise multiple regression analysis. Oecologia, 1979, 41, 219-233.	2.0	16
46	Modelling fluctuations and optimal harvesting in perch populations. Ecological Modelling, 1993, 69, 19-42.	2.5	16
47	Food web structure at equilibrium and far from it: is it the same?. Proceedings of the Royal Society B: Biological Sciences, 1995, 259, 217-222.	2.6	14
48	Avoiding fallacious significance tests in stepwise regression: a Monte Carlo method applied to a meteorological theory for the Canadian lynx cycle. International Journal of Biometeorology, 1989, 33, 24-26.	3.0	13
49	Optimal foraging in nonpatchy habitats. I. Bounded one-dimensional resource. Mathematical Biosciences, 1985, 76, 127-145.	1.9	12
50	Lakemaker: A general object-oriented software tool for modelling the eutrophication process in lakes. Environmental Software, 1995, 10, 43-64.	0.3	12
51	Detecting omnivory with Î´15N. Trends in Ecology and Evolution, 2001, 16, 20-21.	8.7	12
52	What Can Stable Isotopes (Î´ 15 N and Î´ 13 C) Tell about the Food Web of Soil Macro-Invertebrates?. Ecology, 2000, 81, 852.	3.2	11
53	Risk assessment of the harvested pike-perch population of the Azov Sea. Ecological Modelling, 2002, 149, 297-311.	2.5	11
54	Extinction risk assessment and optimal harvesting of anchovy and sprat in the Azov Sea. Journal of Applied Ecology, 1999, 36, 297-306.	4.0	10

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55	A spatial model of the development of pest resistance to a transgenic insecticidal crop: European corn borer on Bt maize. Biophysics (Russian Federation), 2007, 52, 52-67.	0.7	10
56	Ratio-dependent predation in a field experiment with wasps. Ecosphere, 2012, 3, art124.	2.2	10
57	Optimal Foraging in Nonpatchy Habitats. 2: Unbounded One-Dimensional Habitat. SIAM Journal on Applied Mathematics, 1987, 47, 800-821.	1.8	8
58	Scale Invariance Is a Reasonable Approximation in Predation Models: Reply to Ruxton and Gurney. Oikos, 1992, 65, 336.	2.7	8
59	Assessing superparasitism with a model combining the functional response and the egg distribution of parasitoids. Entomophaga, 1995, 40, 235-262.	0.2	8
60	Improving communications between theoretical ecologists, mathematical ecologists, and ecological modelers: response to the critique of our book How species interact. Theoretical Ecology, 2014, 7, 21-22.	1.0	6
61	Maximum sustainable yield of populations with continuous age-structure. Mathematical Biosciences, 1992, 110, 253-270.	1.9	5
62	An implicit approach to model plant infestation by insect pests. Journal of Theoretical Biology, 2007, 248, 164-178.	1.7	5
63	Comparison of spatially implicit and explicit approaches to model plant infestation by insect pests. Ecological Complexity, 2010, 7, 1-12.	2.9	5
64	Optimal Inspection Time in Foraging Strategies: a Model for Superparasitism in Insect Parasitoids. Animal Biology, 1997, 48, 121-144.	0.4	4
65	Maximum sustainable yield with continuous age structure and density-dependent recruitment. Mathematical Biosciences, 1994, 120, 99-126.	1.9	3
66	FOOD WEBS WITH PREDATOR INTERFERENCE. Journal of Biological Systems, 1995, 03, 323-330.	1.4	3
67	THE INFLUENCE OF DISPERSAL BEHAVIOUR ON METAPOPULATION VIABILITY. Journal of Biological Systems, 1996, 04, 277-290.	1.4	3
68	Central Place Foraging in Nonpatchy Habitats. Biometrical Journal, 1991, 33, 875-891.	1.0	2
69	The perfect mixing paradox and the logistic equation: Verhulst vs. Lotka: Reply. Ecosphere, 2017, 8, e01894.	2.2	2
70	A Model for the Functional Response of Parasitoids. Revue Suisse De Zoologie, 1980, 87, 887-893.	0.3	2
71	The Dimensions and Units of the Population Interaction Coefficients. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	2
72	Empirical Evidence of the role of Heterogeneity in Ratio-dependent Consumption. Ecology, 1993, 74, 2019.	3.2	1

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73	Direct Measurements of the Functional Response. , 2012, , 33-61.		0
74	Alternative Theories of Trophic Interaction. , 2012, , 8-32.		0
75	It Must Be Beautiful. , 2012, , 129-142.		0
76	The Ratio Dependence Controversy. , 2012, , 115-128.		0
77	How Gradual Interference and Ratio Dependence Emerge. , 2012, , 83-114.		0
78	Population Analysis System.Alan A. Berryman , Jeffrey A. Millstein. Quarterly Review of Biology, 1990, 65, 130-131.	0.1	0
79	POPSYS Series 2: Two-Species Analysis. Version 1.0. Alan A. Berryman. Quarterly Review of Biology, 1991, 66, 538-538.	0.1	0