

# Sean Connolly

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7916868/publications.pdf>

Version: 2024-02-01

132  
papers

18,601  
citations

36303

51  
h-index

14759

127  
g-index

140  
all docs

140  
docs citations

140  
times ranked

13719  
citing authors

#	ARTICLE	IF	CITATIONS
1	Reply to: Conclusions of low extinction risk for most species of reef-building corals are premature. <i>Nature Ecology and Evolution</i> , 2022, 6, 359-360.	7.8	0
2	Global warming decreases connectivity among coral populations. <i>Nature Climate Change</i> , 2022, 12, 83-87.	18.8	25
3	Interactive effects of multiple stressors vary with consumer interactions, stressor dynamics and magnitude. <i>Ecology Letters</i> , 2022, 25, 1483-1496.	6.4	30
4	Volatility in coral cover erodes niche structure, but not diversity, in reef fish assemblages. <i>Science Advances</i> , 2022, 8, .	10.3	7
5	The population sizes and global extinction risk of reef-building coral species at biogeographic scales. <i>Nature Ecology and Evolution</i> , 2021, 5, 663-669.	7.8	36
6	The Coral Reef Sentinels Program: A Mars Shot for Blue Planetary Health. <i>Marine Technology Society Journal</i> , 2021, 55, 118-119.	0.4	0
7	Natural experiments and long-term monitoring are critical to understand and predict marine host-microbe ecology and evolution. <i>PLoS Biology</i> , 2021, 19, e3001322.	5.6	17
8	The spatial footprint and patchiness of large-scale disturbances on coral reefs. <i>Global Change Biology</i> , 2021, 27, 4825-4838.	9.5	26
9	Coral adaptation to climate change: Meta-analysis reveals high heritability across multiple traits. <i>Global Change Biology</i> , 2021, 27, 5694-5710.	9.5	31
10	An Indo-Pacific coral spawning database. <i>Scientific Data</i> , 2021, 8, 35.	5.3	34
11	Emergent properties in the responses of tropical corals to recurrent climate extremes. <i>Current Biology</i> , 2021, 31, 5393-5399.e3.	3.9	65
12	Hierarchical modeling strengthens evidence for density dependence in observational time series of population dynamics. <i>Ecology</i> , 2020, 101, e02893.	3.2	12
13	Human exploitation shapes productivity-biomass relationships on coral reefs. <i>Global Change Biology</i> , 2020, 26, 1295-1305.	9.5	31
14	Long-term shifts in the colony size structure of coral populations along the Great Barrier Reef. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2020, 287, 20201432.	2.6	58
15	Partitioning colony size variation into growth and partial mortality. <i>Biology Letters</i> , 2020, 16, 20190727.	2.3	24
16	Marine reserves stabilize fish populations and fisheries yields in disturbed coral reef systems. <i>Ecological Applications</i> , 2019, 29, e01905.	3.8	15
17	The molecular biogeography of the Indo-Pacific: Testing hypotheses with multispecies genetic patterns. <i>Global Ecology and Biogeography</i> , 2019, 28, 943-960.	5.8	43
18	High-frequency sampling and piecewise models reshape dispersal kernels of a common reef coral. <i>Ecology</i> , 2019, 100, e02730.	3.2	7

#	ARTICLE	IF	CITATIONS
19	Global warming impairs stockâ€œrecruitment dynamics of corals. <i>Nature</i> , 2019, 568, 387-390.	27.8	378
20	Ecological memory modifies the cumulative impact of recurrent climate extremes. <i>Nature Climate Change</i> , 2019, 9, 40-43.	18.8	253
21	Global warming transforms coral reef assemblages. <i>Nature</i> , 2018, 556, 492-496.	27.8	1,173
22	Mechanism, Process, and Causation in Ecological Models: A Reply to McGill and Potochnik. <i>Trends in Ecology and Evolution</i> , 2018, 33, 305-306.	8.7	2
23	Spatial and temporal patterns of mass bleaching of corals in the Anthropocene. <i>Science</i> , 2018, 359, 80-83.	12.6	1,515
24	Negligible effect of competition on coral colony growth. <i>Ecology</i> , 2018, 99, 1347-1356.	3.2	19
25	Node selfâ€œconnections and metapopulation persistence: reply to Saura (2018). <i>Ecology Letters</i> , 2018, 21, 605-606.	6.4	0
26	Cumulative effects of cyclones and bleaching on coral cover and species richness at Lizard Island. <i>Marine Ecology - Progress Series</i> , 2018, 604, 263-268.	1.9	42
27	A unified model explains commonness and rarity on coral reefs. <i>Ecology Letters</i> , 2017, 20, 477-486.	6.4	23
28	Network theory and metapopulation persistence: incorporating node selfâ€œconnections. <i>Ecology Letters</i> , 2017, 20, 815-831.	6.4	21
29	Allometric growth in reef-building corals. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2017, 284, 20170053.	2.6	51
30	Enhancing student engagement to positively impact mathematics anxiety, confidence and achievement for interdisciplinary science subjects. <i>International Journal of Mathematical Education in Science and Technology</i> , 2017, 48, 1153-1165.	1.4	18
31	Global warming and recurrent mass bleaching of corals. <i>Nature</i> , 2017, 543, 373-377.	27.8	2,363
32	No change in subordinate butterflyfish diets following removal of behaviourally dominant species. <i>Coral Reefs</i> , 2017, 36, 213-222.	2.2	1
33	Process, Mechanism, and Modeling in Macroecology. <i>Trends in Ecology and Evolution</i> , 2017, 32, 835-844.	8.7	119
34	Aggression, interference, and the functional response of coral-feeding butterflyfishes. <i>Oecologia</i> , 2017, 184, 675-684.	2.0	5
35	Prevalence of multimodal species abundance distributions is linked to spatial and taxonomic breadth. <i>Global Ecology and Biogeography</i> , 2017, 26, 203-215.	5.8	16
36	A test of trophic cascade theory: fish and benthic assemblages across a predator density gradient on coral reefs. <i>Oecologia</i> , 2017, 183, 161-175.	2.0	38

#	ARTICLE	IF	CITATIONS
37	Uncoupling temperature-dependent mortality from lipid depletion for scleractinian coral larvae. <i>Coral Reefs</i> , 2017, 36, 97-104.	2.2	23
38	Flow and Coral Morphology Control Coral Surface pH: Implications for the Effects of Ocean Acidification. <i>Frontiers in Marine Science</i> , 2016, 3, .	2.5	33
39	Fishery consequences of marine reserves: short-term pain for longer-term gain. <i>Ecological Applications</i> , 2016, 26, 818-829.	3.8	36
40	A critique of claims for negative impacts of Marine Protected Areas on fisheries. <i>Ecological Applications</i> , 2016, 26, 637-641.	3.8	20
41	The Coral Trait Database, a curated database of trait information for coral species from the global oceans. <i>Scientific Data</i> , 2016, 3, 160017.	5.3	189
42	Synergistic Effects of Marine Reserves and Harvest Controls on the Abundance and Catch Dynamics of a Coral Reef Fishery. <i>Current Biology</i> , 2016, 26, 1543-1548.	3.9	25
43	Fecundity and the demographic strategies of coral morphologies. <i>Ecology</i> , 2016, 97, 3485-3493.	3.2	71
44	Integrating modelling of biodiversity composition and ecosystem function. <i>Oikos</i> , 2016, 125, 10-19.	2.7	32
45	Improving dynamic phytoplankton reserve-utilization models with an indirect proxy for internal nitrogen. <i>Journal of Theoretical Biology</i> , 2016, 404, 1-9.	1.7	1
46	Standard flow cytometry as a rapid and non-destructive proxy for cell nitrogen quota. <i>Journal of Applied Phycology</i> , 2016, 28, 1085-1095.	2.8	7
47	Nutrient utilization traits vary systematically with intraspecific cell size plasticity. <i>Functional Ecology</i> , 2016, 30, 1745-1755.	3.6	8
48	A Trait-Based Approach to Advance Coral Reef Science. <i>Trends in Ecology and Evolution</i> , 2016, 31, 419-428.	8.7	161
49	Multi-scale patterns and processes in reef fish abundance. , 2015, , 116-124.		11
50	Phylogenetic community structure when competition and environmental filtering determine abundances. <i>Global Ecology and Biogeography</i> , 2015, 24, 1390-1400.	5.8	17
51	Coupled dynamics of territorial damselfishes and juvenile corals on the reef crest. <i>Coral Reefs</i> , 2015, 34, 1-11.	2.2	29
52	Coral transplantation triggers shift in microbiome and promotion of coral disease associated potential pathogens. <i>Scientific Reports</i> , 2015, 5, 11903.	3.3	85
53	An experimentally validated nitrate-ammonium phytoplankton model including effects of starvation length and ammonium inhibition on nitrate uptake. <i>Ecological Modelling</i> , 2015, 317, 30-40.	2.5	11
54	Mechanical vulnerability explains size-dependent mortality of reef corals. <i>Ecology Letters</i> , 2014, 17, 1008-1015.	6.4	142

#	ARTICLE	IF	CITATIONS
55	Evidence for multiple stressor interactions and effects on coral reefs. <i>Global Change Biology</i> , 2014, 20, 681-697.	9.5	307
56	Global diversity of marine macroalgae: environmental conditions explain less variation in the tropics. <i>Global Ecology and Biogeography</i> , 2014, 23, 517-529.	5.8	80
57	Double Jeopardy and Global Extinction Risk in Corals and Reef Fishes. <i>Current Biology</i> , 2014, 24, 2946-2951.	3.9	47
58	Commonness and rarity in the marine biosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 8524-8529.	7.1	99
59	Increased local retention of reef coral larvae as a result of ocean warming. <i>Nature Climate Change</i> , 2014, 4, 498-502.	18.8	94
60	Farming behaviour of reef fishes increases the prevalence of coral disease associated microbes and black band disease. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2014, 281, 20141032.	2.6	84
61	How robust are estimates of coral reef shark depletion?. <i>Biological Conservation</i> , 2014, 176, 39-47.	4.1	38
62	Geographic ranges of reef corals (Cnidaria: Anthozoa: Scleractinia) in the Indo-Pacific. <i>Ecology</i> , 2013, 94, 1659-1659.	3.2	15
63	Faunal breaks and species composition of Indo-Pacific corals: the role of plate tectonics, environment and habitat distribution. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2013, 280, 20130818.	2.6	87
64	Understanding diversity-stability relationships: towards a unified model of portfolio effects. <i>Ecology Letters</i> , 2013, 16, 140-150.	6.4	329
65	Sensitivity of coral calcification to ocean acidification: a meta-analysis. <i>Global Change Biology</i> , 2013, 19, 282-290.	9.5	279
66	Relationships between temperature, bleaching and white syndrome on the Great Barrier Reef. <i>Coral Reefs</i> , 2013, 32, 1-12.	2.2	40
67	Effects of delayed settlement on post-settlement growth and survival of scleractinian coral larvae. <i>Oecologia</i> , 2013, 173, 431-438.	2.0	31
68	Rapid declines in metabolism explain extended coral larval longevity. <i>Coral Reefs</i> , 2013, 32, 539-549.	2.2	35
69	Effects of diversity-dependent colonization-extinction dynamics on the mid-domain effect. <i>Global Ecology and Biogeography</i> , 2013, 22, 773-783.	5.8	5
70	Synthesizing larval competence dynamics and reef-scale retention reveals a high potential for self-recruitment in corals. <i>Ecology</i> , 2013, 94, 650-659.	3.2	91
71	Fossil Record. , 2013, , 537-544.		0
72	Heterospecific Aggression and Dominance in a Guild of Coral-Feeding Fishes: The Roles of Dietary Ecology and Phylogeny. <i>American Naturalist</i> , 2013, 182, 157-168.	2.1	31

#	ARTICLE	IF	CITATIONS
73	What is macroecology?. <i>Biology Letters</i> , 2012, 8, 904-906.	2.3	47
74	A comparative analysis of alternative approaches to fitting species-abundance models. <i>Journal of Plant Ecology</i> , 2012, 5, 32-45.	2.3	8
75	Integrating physiological and biomechanical drivers of population growth over environmental gradients on coral reefs. <i>Journal of Experimental Biology</i> , 2012, 215, 968-976.	1.7	28
76	Nitrate-nitrite dynamics and phytoplankton growth: Formulation and experimental evaluation of a dynamic model. <i>Limnology and Oceanography</i> , 2012, 57, 1555-1571.	3.1	18
77	Effects of sex change on the implications of marine reserves for fisheries. , 2012, 22, 778-791.		18
78	Species Differences Drive Nonneutral Structure in Pleistocene Coral Communities. <i>American Naturalist</i> , 2012, 180, 577-588.	2.1	14
79	Fitness consequences of female multiple mating: A direct test of indirect benefits. <i>BMC Evolutionary Biology</i> , 2012, 12, 185.	3.2	21
80	Diversity and stability of herbivorous fishes on coral reefs. <i>Ecology</i> , 2012, 93, 891-901.	3.2	71
81	Food availability promotes rapid recovery from thermal stress in a scleractinian coral. <i>Coral Reefs</i> , 2012, 31, 951-960.	2.2	53
82	Risk spreading, connectivity, and optimal reserve spacing. <i>Ecological Applications</i> , 2012, 22, 311-321.	3.8	26
83	Biogeography and the structure of coral reef fish communities on isolated islands. <i>Journal of Biogeography</i> , 2012, 39, 130-139.	3.0	30
84	Dispersal-mediated coexistence under recruitment limitation and displacement competition. <i>Ecological Modelling</i> , 2012, 243, 133-142.	2.5	10
85	Calcification, Storm Damage and Population Resilience of Tabular Corals under Climate Change. <i>PLoS ONE</i> , 2012, 7, e46637.	2.5	82
86	Projecting Coral Reef Futures Under Global Warming and Ocean Acidification. <i>Science</i> , 2011, 333, 418-422.	12.6	1,001
87	Spatial variance in abundance and occupancy of corals across broad geographic scales. <i>Ecology</i> , 2011, 92, 1282-1291.	3.2	8
88	A simple approximation for larval retention around reefs. <i>Coral Reefs</i> , 2011, 30, 593-605.	2.2	14
89	The Future of Coral Reefsâ€™ Response. <i>Science</i> , 2011, 334, 1495-1496.	12.6	8
90	Population Growth Rates of Reef Sharks with and without Fishing on the Great Barrier Reef: Robust Estimation with Multiple Models. <i>PLoS ONE</i> , 2011, 6, e25028.	2.5	52

#	ARTICLE	IF	CITATIONS
91	Biotic and abiotic correlates of tissue quality for common scleractinian corals. <i>Marine Ecology - Progress Series</i> , 2011, 438, 119-128.	1.9	12
92	Effects of asymmetric dispersal on the coexistence of competing species. <i>Ecology Letters</i> , 2010, 13, 432-441.	6.4	60
93	Estimating dispersal potential for marine larvae: dynamic models applied to scleractinian corals. <i>Ecology</i> , 2010, 91, 3572-3583.	3.2	161
94	Early post-settlement mortality and the structure of coral assemblages. <i>Marine Ecology - Progress Series</i> , 2010, 408, 55-64.	1.9	148
95	Connectivity, biodiversity conservation and the design of marine reserve networks for coral reefs. <i>Coral Reefs</i> , 2009, 28, 339-351.	2.2	314
96	Connectivity, regime shifts and the resilience of coral reefs. <i>Coral Reefs</i> , 2009, 28, 949-957.	2.2	79
97	Effects of photoacclimation on the light niche of corals: a process-based approach. <i>Marine Biology</i> , 2009, 156, 2493-2503.	1.5	18
98	Patterns and causes of species richness: a general simulation model for macroecology. <i>Ecology Letters</i> , 2009, 12, 873-886.	6.4	286
99	Defining fundamental niche dimensions of corals: synergistic effects of colony size, light, and flow. <i>Ecology</i> , 2009, 90, 767-780.	3.2	54
100	Testing species abundance models: a new bootstrap approach applied to Indo-Pacific coral reefs. <i>Ecology</i> , 2009, 90, 3138-3149.	3.2	38
101	Survival dynamics of scleractinian coral larvae and implications for dispersal. <i>Coral Reefs</i> , 2008, 27, 529-539.	2.2	232
102	Multiple modes in a coral species abundance distribution. <i>Ecology Letters</i> , 2008, 11, 1008-1016.	6.4	66
103	INTERACTIONS BETWEEN MORPHOLOGICAL AND PHYSIOLOGICAL PLASTICITY OPTIMIZE ENERGY ACQUISITION IN CORALS. <i>Ecology</i> , 2008, 89, 1144-1154.	3.2	85
104	Climate-mediated mechanical changes to post-disturbance coral assemblages. <i>Biology Letters</i> , 2008, 4, 490-493.	2.3	50
105	REGIONAL VARIATION IN THE HIERARCHICAL PARTITIONING OF DIVERSITY IN CORAL-DWELLING FISHES. <i>Ecology</i> , 2008, 89, 2829-2840.	3.2	41
106	Bleaching, energetics, and coral mortality risk: Effects of temperature, light, and sediment regime. <i>Limnology and Oceanography</i> , 2007, 52, 716-726.	3.1	210
107	Coral reef diversity refutes the neutral theory of biodiversity. <i>Nature</i> , 2006, 440, 80-82.	27.8	234
108	Ecological consequences of major hydrodynamic disturbances on coral reefs. <i>Nature</i> , 2006, 444, 477-480.	27.8	285

#	ARTICLE	IF	CITATIONS
109	Scaling water motion on coral reefs: from regional to organismal scales. <i>Coral Reefs</i> , 2006, 25, 635-644.	2.2	58
110	Ongoing Collapse of Coral-Reef Shark Populations. <i>Current Biology</i> , 2006, 16, 2314-2319.	3.9	286
111	Energetic cost of photoinhibition in corals. <i>Marine Ecology - Progress Series</i> , 2006, 313, 1-12.	1.9	81
112	Environmental and geometric constraints on Indo-Pacific coral reef biodiversity. <i>Ecology Letters</i> , 2005, 8, 643-651.	6.4	165
113	Adaptive variation in coral geometry and the optimization of internal colony light climates. <i>Functional Ecology</i> , 2005, 19, 17-26.	3.6	88
114	Community Structure of Corals and Reef Fishes at Multiple Scales. <i>Science</i> , 2005, 309, 1363-1365.	12.6	140
115	Process-Based Models of Species Distributions and the Mid-Domain Effect. <i>American Naturalist</i> , 2005, 166, 1-11.	2.1	89
116	Environmental limits to growth: physiological niche boundaries of corals along turbidity-light gradients. <i>Oecologia</i> , 2004, 141, 373-384.	2.0	108
117	INDO-PACIFIC BIODIVERSITY OF CORAL REEFS: DEVIATIONS FROM A MID-DOMAIN MODEL. <i>Ecology</i> , 2003, 84, 2178-2190.	3.2	175
118	Climate Change, Human Impacts, and the Resilience of Coral Reefs. <i>Science</i> , 2003, 301, 929-933.	12.6	3,124
119	SPACE PREEMPTION, SIZE-DEPENDENT COMPETITION, AND THE COEXISTENCE OF CLONAL GROWTH FORMS. <i>Ecology</i> , 2003, 84, 2979-2988.	3.2	29
120	Comparative analysis of energy allocation to tissue and skeletal growth in corals. <i>Limnology and Oceanography</i> , 2002, 47, 1417-1429.	3.1	126
121	Global Ordovician faunal transitions in the marine benthos: ultimate causes. <i>Paleobiology</i> , 2002, 28, 26-40.	2.0	42
122	Biodiversity hotspots, centres of endemism, and the conservation of coral reefs. <i>Ecology Letters</i> , 2002, 5, 775-784.	6.4	311
123	Joint estimation of sampling and turnover rates from fossil databases: capture-mark-recapture methods revisited. <i>Paleobiology</i> , 2001, 27, 751-767.	2.0	67
124	Substrate affinities of higher taxa and the Ordovician Radiation. <i>Paleobiology</i> , 2001, 27, 768-778.	2.0	47
125	A LATITUDINAL GRADIENT IN RECRUITMENT OF INTERTIDAL INVERTEBRATES IN THE NORTHEAST PACIFIC OCEAN. <i>Ecology</i> , 2001, 82, 1799-1813.	3.2	263
126	Global Ordovician faunal transitions in the marine benthos: proximate causes. <i>Paleobiology</i> , 2001, 27, 779-795.	2.0	36



#	ARTICLE	IF	CITATIONS
127	A Latitudinal Gradient in Recruitment of Intertidal Invertebrates in the Northeast Pacific Ocean. Ecology, 2001, 82, 1799.	3.2	7
128	Fossil Record. , 2001, , 53-62.		0
129	THEORY OF MARINE COMMUNITIES: COMPETITION, PREDATION, AND RECRUITMENT-DEPENDENT INTERACTION STRENGTH. Ecological Monographs, 1999, 69, 277-296.	5.4	125
130	Increased recruitment of northeast Pacific barnacles during the 1997 El Niño. Limnology and Oceanography, 1999, 44, 466-469.	3.1	55
131	A Latitudinal Gradient in Northeast Pacific Intertidal Community Structure: Evidence for an Oceanographically Based Synthesis of Marine Community Theory. American Naturalist, 1998, 151, 311-326.	2.1	171
132	Macroecological Theory and the Analysis of Species Richness Gradients. , 0, , 279-309.		17