Matthew P Ayres

List of Publications by Year
in descending order

132	9,656	57758 44	39675 94
papers	citations	h-index	g-index

136	136	136	9195
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Impact of Stand and Landscape Management on Forest Pest Damage. Annual Review of Entomology, 2022, 67, 181-199.	11.8	21
2	Life-history strategies and virulence in the pinewood nematode. Physiological and Molecular Plant Pathology, 2022, 117, 101756.	2.5	1
3	Analytical approaches for evaluating passive acoustic monitoring data: A case study of avian vocalizations. Ecology and Evolution, 2022, 12, e8797.	1.9	12
4	Insect infestations and the persistence and functioning of oak-pine mixedwood forests in the mid-Atlantic region, USA. PLoS ONE, 2022, 17, e0265955.	2.5	2
5	Modeling the Sensitivity of Blacklegged Ticks (Ixodes scapularis) to Temperature and Land Cover in the Northeastern United States. Journal of Medical Entomology, 2021, 58, 416-427.	1.8	5
6	Aggressive tree killer or natural thinning agent? Assessing the impacts of a globally important forest insect. Forest Ecology and Management, 2021, 483, 118728.	3.2	9
7	Fine roots and mycorrhizal fungi accelerate leaf litter decomposition in a northern hardwood forest regardless of dominant tree mycorrhizal associations. New Phytologist, 2021, 230, 316-326.	7.3	35
8	Increasing shrub damage by invertebrate herbivores in the warming and drying tundra of West Greenland. Oecologia, 2021, 195, 995-1005.	2.0	2
9	Extreme climatic events affect populations of Asian chestnut gall wasps, <scp>Dryocosmus kuriphilus</scp>, but do not stop the spread. Agricultural and Forest Entomology, 2021, 23, 473-488.	1.3	8
10	Interactions between pinewood nematodes and the fungal community of pine trees. Fungal Ecology, 2021, 51, 101046.	1.6	7
11	Quantifying the nature and strength of intraspecific density dependence in Arctic mosquitoes. Oecologia, 2021, 196, 1061-1072.	2.0	2
12	Predicting non-native insect impact: focusing on the trees to see the forest. Biological Invasions, 2021, 23, 3921-3936.	2.4	5
13	Limited evidence that larger acorns buffer Quercus rubra seedlings from densityâ€dependent biotic stressors. American Journal of Botany, 2021, 108, 1861-1872.	1.7	2
14	Higher Soil Respiration Rate Beneath Arbuscular Mycorrhizal Trees in a Northern Hardwood Forest is Driven by Associated Soil Properties. Ecosystems, 2020, 23, 1243-1253.	3.4	13
15	Consumerâ€“resource dynamics in Arctic ponds. Ecology, 2020, 101, e03135.	3.2	9
16	Sublethal infection of different pine species by the pinewood nematode. Plant Pathology, 2020, 69, 1565-1573.	2.4	6
17	The Fire and Tree Mortality Database, for empirical modeling of individual tree mortality after fire. Scientific Data, 2020, 7, 194.	5.3	13
18	Seedling survival declines with increasing conspecific density in a common temperate tree. Ecosphere, 2020, 11, e03292.	2.2	10

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19	Comparison of methods to obtain and maintain cultures of the pinewood nematode, Bursaphelenchus xylophilus. Journal of Forest Research, 2020, 25, 101-107.	1.4	4
20	Northern forest winters have lost cold, snowy conditions that are important for ecosystems and human communities. Ecological Applications, 2019, 29, e01974.	3.8	51
21	Effect of Rising Temperature on Lyme Disease:Ixodes scapularisPopulation Dynamics andBorrelia burgdorferiTransmission and Prevalence. Canadian Journal of Infectious Diseases and Medical Microbiology, 2019, 2019, 1-15.	1.9	13
22	Evolutionary history predicts highâ€impact invasions by herbivorous insects. Ecology and Evolution, 2019, 9, 12216-12230.	1.9	28
23	Tree basal area and conifer abundance predict soil carbon stocks and concentrations in an actively managed forest of northern New Hampshire, USA. Forest Ecology and Management, 2019, 451, 117534.	3.2	14
24	Pine defenses against the pitch canker disease are modulated by a native insect newly associated with the invasive fungus. Forest Ecology and Management, 2019, 437, 253-262.	3.2	10
25	The global diversity of Deladenus siricidicola in native and non-native populations. Biological Control, 2019, 132, 57-65.	3.0	8
26	Attack rates ofSirex noctilioand patterns of pine tree defenses and mortality in northern Patagonia. Bulletin of Entomological Research, 2019, 109, 141-149.	1.0	11
27	Streams in an uninhabited watershed have predictably different thermal sensitivities to variable summer air temperatures. Freshwater Biology, 2018, 63, 676-686.	2.4	5
28	Old pests in new places: Effects of stand structure and forest type on susceptibility to a bark beetle on the edge of its native range. Forest Ecology and Management, 2018, 419-420, 206-219.	3.2	25
29	Roe deer prefer mixed-sex willow stands over monosexual stands but do not discriminate between male and female plants. Environmental and Experimental Botany, 2018, 146, 62-67.	4.2	9
30	Forest pests and their management in the Anthropocene. Canadian Journal of Forest Research, 2018, 48, 292-301.	1.7	33
31	Latitudinal patterns in temperature-dependent growth rates of a forest pathogen. Journal of Thermal Biology, 2018, 72, 39-43.	2.5	17
32	Spatial heterogeneity in the abundance and fecundity of Arctic mosquitoes. Ecosphere, 2018, 9, e02345.	2.2	11
33	Temperature affects phenological synchrony in a tree-killing bark beetle. Oecologia, 2018, 188, 117-127.	2.0	15
34	Spatioâ€temporal dynamics of a treeâ€killing beetle and its predator. Ecography, 2017, 40, 221-234.	4.5	13
35	Monochamus galloprovincialis and Bursaphelenchus xylophilus life history in an area severely affected by pine wilt disease: Implications for forest management. Forest Ecology and Management, 2017, 389, 105-115.	3.2	23
36	Longâ€term species loss and homogenization of moth communities in Central Europe. Journal of Animal Ecology, 2017, 86, 730-738.	2.8	49

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37	Pinewood nematode population growth in relation to pine phloem chemical composition. Plant Pathology, 2017, 66, 856-864.	2.4	15
38	Nonnative forest insects and pathogens in the United States: Impacts and policy options. Ecological Applications, 2016, 26, 1437-1455.	3.8	289
39	Breeding timed to maximize reproductive success for a migratory songbird: the importance of phenological asynchrony. Oikos, 2016, 125, 656-666.	2.7	52
40	Population biology of the European woodwasp,Sirex noctilio, in Galicia, Spain. Bulletin of Entomological Research, 2016, 106, 569-580.	1.0	17
41	Observed and anticipated impacts of drought on forest insects and diseases in the United States. Forest Ecology and Management, 2016, 380, 321-334.	3.2	318
42	Effects of defoliation and site quality on growth and defenses of Pinus pinaster and P. radiata. Forest Ecology and Management, 2016, 382, 39-50.	3.2	10
43	Signal diversification inOecanthustree crickets is shaped by energetic, morphometric, and acoustic trade-offs. Evolution; International Journal of Organic Evolution, 2015, 69, 1518-1527.	2.3	12
44	Population Dynamics of Bark Beetles. , 2015, , 157-176.		12
45	Geographically variable response of Dendroctonus ponderosae to winter warming in the western United States. Landscape Ecology, 2015, 30, 1075-1093.	4.2	42
46	In a warmer Arctic, mosquitoes avoid increased mortality from predators by growing faster. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151549.	2.6	99
47	Host Use Patterns by the European Woodwasp, Sirex noctilio, in Its Native and Invaded Range. PLoS ONE, 2014, 9, e90321.	2.5	28
48	Is climate warming more consequential towards poles? The phenology of Lepidoptera in Finland. Global Change Biology, 2014, 20, 16-27.	9.5	19
49	Geographical variation in seasonality and life history of pine sawyer beetles Monochamus spp: its relationship with phoresy by the pinewood nematode Bursaphelenchus xylophilus. Agricultural and Forest Entomology, 2014, 16, 196-206.	1.3	24
50	Predation risk shapes thermal physiology of a predaceous damselfly. Oecologia, 2014, 176, 653-660.	2.0	50
51	Disturbance Regimes and Stressors. Advances in Global Change Research, 2014, , 55-92.	1.6	12
52	Alternate attractors in the population dynamics of a treeâ€killing bark beetle. Population Ecology, 2013, 55, 95-106.	1.2	32
53	Foliar terpene chemistry of Pinus pinaster and P. radiata responds differently to Methyl Jasmonate and feeding by larvae of the pine processionary moth. Forest Ecology and Management, 2013, 310, 935-943.	3.2	7
54	Inferring controls on the epidemiology of beech bark disease from spatial patterning of disease organisms. Agricultural and Forest Entomology, 2013, 15, 146-156.	1.3	13

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55	Consequences of climate change for biotic disturbances in North American forests. Ecological Monographs, 2013, 83, 441-470.	5.4	351
56	Tropical phenology: biâ€annual rhythms and interannual variation in an Afrotropical butterfly assemblage. Ecosphere, 2013, 4, 1-28.	2.2	70
57	Interactive effects of defoliation and climate change on compensatory growth of silver birch seedlings. Silva Fennica, 2013, 47, .	1.3	7
58	Climate affects severity and altitudinal distribution of outbreaks in an eruptive bark beetle. Climatic Change, 2012, 115, 327-341.	3.6	124
59	Influence of temperature on the northern distribution limits of Scirpophaga incertulas Walker (Lepidoptera: Pyralidae) in China. Journal of Thermal Biology, 2012, 37, 130-137.	2.5	22
60	Disease ontogeny overshadows effects of climate and species interactions on population dynamics in a nonnative forest disease complex. Ecography, 2012, 35, 412-421.	4.5	15
61	Factors Influencing Bark Beetle Outbreaks After Forest Fires on the Iberian Peninsula. Environmental Entomology, 2011, 40, 1007-1018.	1.4	31
62	Impact of climatic variation on populations of pine processionary moth Thaumetopoea pityocampa in a core area of its distribution. Agricultural and Forest Entomology, 2011, 13, 273-281.	1.3	24
63	Subcontinental impacts of an invasive tree disease on forest structure and dynamics. Journal of Ecology, 2011, 99, 532-541.	4.0	36
64	Concordant population dynamics of Lepidoptera herbivores in a forest ecosystem. Ecography, 2011, 34, 772-779.	4.5	17
65	Environmental controls on the phenology of moths: predicting plasticity and constraint under climate change. Oecologia, 2011, 165, 237-248.	2.0	44
66	Temperature Alters the Relative Abundance and Population Growth Rates of Species Within theDendroctonus frontalis(Coleoptera: Curculionidae) Community. Environmental Entomology, 2011, 40, 824-834.	1.4	14
67	Disruptive Selection Maintains Variable Pheromone Blends in the Bark Beetle Ips pini. Environmental Entomology, 2011, 40, 1530-1540.	1.4	10
68	Phloem and xylem nitrogen variability in Quercus rubra attacked by Enaphalodes rufulus. Canadian Entomologist, 2011, 143, 380-383.	0.8	1
69	Speaking out: weighing advocacy and objectivity as a junior scientist. Frontiers in Ecology and the Environment, 2010, 8, 50-51.	4.0	2
70	Interannual dynamics of aerial and arboreal green spruce aphid populations. Population Ecology, 2010, 52, 317-327.	1.2	22
71	The distribution and abundance of animal populations in a climate of uncertainty. Oikos, 2009, 118, 1121-1126.	2.7	93
72	Responses of insect pests, pathogens, and invasive plant species to climate change in the forests of northeastern North America: What can we predict?This article is one of a selection of papers from NE Forests 2100: A Synthesis of Climate Change Impacts on Forests of the Northeastern US and Eastern Canada.. Canadian Journal of Forest Research, 2009, 39, 231-248.	1.7	393

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73	Isotopic studies of leaf water. Part 2: Between-age isotopic variations in pine needles. Geochimica Et Cosmochimica Acta, 2008, 72, 5189-5200.	3.9	6
74	ROLE OF PLANT ENEMIES IN THE FORESTRY OF INDIGENOUS VS. NONINDIGENOUS PINES. Ecological Applications, 2008, 18, 1171-1181.	3.8	21
75	Temperature Extremes, Density Dependence, and Southern Pine Beetle (Coleoptera: Curculionidae) Population Dynamics in East Texas. Environmental Entomology, 2008, 37, 650-659.	1.4	26
76	Temperature-dependent effects on mutualistic, antagonistic, and commensalistic interactions among insects, fungi and mites. Community Ecology, 2007, 8, 47-56.	0.9	67
77	Climatic effects on caterpillar fluctuations in northern hardwood forests. Canadian Journal of Forest Research, 2007, 37, 481-491.	1.7	33
78	Differential impacts of the southern pine beetle, Dendroctonus frontalis, on Pinus palustris and Pinus taeda. Canadian Journal of Forest Research, 2007, 37, 1427-1437.	1.7	13
79	Why does longleaf pine have low susceptibility to southern pine beetle?. Canadian Journal of Forest Research, 2007, 37, 1966-1977.	1.7	15
80	IMPACT OF MINIMUM WINTER TEMPERATURES ON THE POPULATION DYNAMICS OFDENDROCTONUS FRONTALIS. , 2007, 17, 882-899.		122
81	Synchrony's double edge: transient dynamics and the Allee effect in stage structured populations. Ecology Letters, 2007, 10, 564-573.	6.4	38
82	High individual variation in pheromone production by tree-killing bark beetles (Coleoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td	1.6	24
83	Effects of fire and mechanical wounding on Pinus resinosa resin defenses, beetle attacks, and pathogens. Forest Ecology and Management, 2006, 225, 349-358.	3.2	65
84	Antagonisms, mutualisms and commensalisms affect outbreak dynamics of the southern pine beetle. Oecologia, 2006, 147, 679-691.	2.0	143
85	Fitness consequences of pheromone production and host selection strategies in a tree-killing bark beetle (Coleoptera: Curculionidae: Scolytinae). Oecologia, 2006, 148, 720-728.	2.0	39
86	Seasonal Dynamics of Mites and Fungi and Their Interaction with Southern Pine Beetle. Environmental Entomology, 2006, 35, 22-30.	1.4	47
87	Effects Of Tree Phytochemistry On The Interactions Among Endophloedic Fungi Associated With The Southern Pine Beetle. Journal of Chemical Ecology, 2005, 31, 539-560.	1.8	71
88	Effects of available water on growth and competition of southern pine beetle associated fungi. Mycological Research, 2004, 108, 183-188.	2.5	26
89	High-resolution analysis of stem increment and sap flow for loblolly pine trees attacked by southern pine beetle. Canadian Journal of Forest Research, 2004, 34, 2387-2393.	1.7	32
90	Strong indirect interactions of Tarsonemus mites (Acarina: Tarsonemidae) and Dendroctonus frontalis (Coleoptera: Scolytidae). Oikos, 2003, 102, 243-252.	2.7	92

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91	Relative Suitability of Virginia Pine and Loblolly Pine as Host Species forDendroctonus frontalis(Coleoptera: Scolytidae). Environmental Entomology, 2003, 32, 668-679.	1.4	15
92	Linking Breeding and Wintering Ranges of a Migratory Songbird Using Stable Isotopes. Science, 2002, 295, 1062-1065.	12.6	270
93	Plasticity and Constraint in Growth and Protein Mineralization of Ectomycorrhizal Fungi under Simulated Nitrogen Deposition. Mycologia, 2002, 94, 921.	1.9	15
94	Plasticity and constraint in growth and protein mineralization of ectomycorrhizal fungi under simulated nitrogen deposition. Mycologia, 2002, 94, 921-32.	1.9	5
95	Climate Change and Forest Disturbances. BioScience, 2001, 51, 723.	4.9	1,682
96	Interactions between fire and bark beetles in an old growth pine forest. Forest Ecology and Management, 2001, 144, 245-254.	3.2	74
97	Resource partitioning and overlap in three sympatric species of Ips bark beetles (Coleoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.0	76
98	Title is missing!. Plant and Soil, 2001, 236, 251-262.	3.7	3
99	Environmental effects on constitutive and inducible resin defences of Pinus taeda. Ecology Letters, 2000, 3, 329-339.	6.4	222
100	Biology, demography and community interactions of Tarsonemus (Acarina: Tarsonemidae) mites phoretic on Dendroctonus frontalis (Coleoptera: Scolytidae). Agricultural and Forest Entomology, 2000, 2, 193-202.	1.3	50
101	Causes of cyclicity of Epirrita autumnata (Lepidoptera, Geometridae): grandiose theory and tedious practice. Population Ecology, 2000, 42, 211-223.	1.2	159
102	NITROGEN BUDGETS OF PHLOEM-FEEDING BARK BEETLES WITH AND WITHOUT SYMBIOTIC FUNGI. Ecology, 2000, 81, 2198-2210.	3.2	273
103	Assessing the consequences of global change for forest disturbance from herbivores and pathogens. Science of the Total Environment, 2000, 262, 263-286.	8.0	643
104	Cold Tolerance of Four Species of Bark Beetle (Coleoptera: Scolytidae) in North America. Environmental Entomology, 2000, 29, 421-432.	1.4	84
105	NITROGEN BUDGETS OF PHLOEM-FEEDING BARK BEETLES WITH AND WITHOUT SYMBIOTIC FUNGI. , 2000, 81, 2198.		1
106	Host-driven population dynamics in an herbivorous insect. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 10735-10740.	7.1	66
107	Climate and the northern distribution limits of Dendroctonus frontalis Zimmermann (Coleoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock	3.0	187
108	Jensenâ€™s inequality predicts effects of environmental variation. Trends in Ecology and Evolution, 1999, 14, 361-366.	8.7	649

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109	Understory herb assemblages 25 and 60 years after clearcutting of a northern hardwood forest, USA. Biological Conservation, 1999, 90, 203-215.	4.1	37
110	Effects of Atmospheric CO 2 , Light Availability and Tree Species on the Quality of Leaf Detritus as a Resource for Treehole Mosquitoes. Oikos, 1999, 84, 277.	2.7	20
111	Altitudinal patterns in host suitability for forest insects. Oecologia, 1998, 117, 133-142.	2.0	52
112	Loblolly pine responds to mechanical wounding with increased resin flow. Canadian Journal of Forest Research, 1998, 28, 596-602.	1.7	80
113	Global Change and Disturbance in Southern Forest Ecosystems. Ecological Studies, 1998, , 741-752.	1.2	1
114	DIVERSITY OF STRUCTURE AND ANTIHERBIVORE ACTIVITY IN CONDENSED TANNINS. Ecology, 1997, 78, 1696-1712.	3.2	244
115	Effects of variation in quality of leaf detritus on growth of the eastern tree-hole mosquito, Aedes triseriatus (Diptera: Culicidae). Canadian Journal of Zoology, 1997, 75, 706-718.	1.0	98
116	Field Performance of F 1 -Sterile Gypsy Moth Larvae (Lepidoptera: Lymantriidae) on Loblolly Pine and Sweetgum. Environmental Entomology, 1996, 25, 749-756.	1.4	9
117	Host Suitability, Predation, and Bark Beetle Population Dynamics. , 1995, , 339-357.		53
118	Local Adaptation to Regional Climates in Papilio Canadensis (Lepidoptera: Papilionidae). Ecological Monographs, 1994, 64, 465-482.	5.4	191
119	Temperature Effects on Growth and Molt of Nematus calais (Hymenoptera: Tenthredinidae). Environmental Entomology, 1994, 23, 719-725.	1.4	13
120	Within-Tree and Among-Tree Variation in Leaf Characteristics of Mountain Birch and Its Implications for Herbivory. Oikos, 1994, 70, 212.	2.7	61
121	Differential Use of Lauraceous Hosts by Swallowtail Butterflies, Papilio troilus and P. palamedes (Papilionidae). Oikos, 1992, 63, 244.	2.7	48
122	Cold tolerance of the pupae in relation to the distribution of swallowtail butterflies. Canadian Journal of Zoology, 1991, 69, 3028-3037.	1.0	63
123	Larval Adaptation to Lauraceous Hosts: Geographic Divergence in the Spicebush Swallowtail Butterfly. Ecology, 1991, 72, 1428-1435.	3.2	50
124	ALTERNATIVE FORMULATIONS OF THE MIXEDâ€MODEL ANOVA APPLIED TO QUANTITATIVE GENETICS. Evolution; International Journal of Organic Evolution, 1990, 44, 221-226.	2.3	67
125	Adult Nutrition Affects Male Virility in Papilio glaucus L.. Functional Ecology, 1990, 4, 743.	3.6	59
126	Development of Birch Leaves and the Growth Energetics of Epirrita Autumnata (Geometridae). Ecology, 1987, 68, 558-568.	3.2	118

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127	Molt as a Component of Insect Development: Galerucella sagittariae (Chrysomelidae) and Epirrita autumnata (Geometridae). Oikos, 1987, 48, 273.	2.7	56
128	Growth performance of Epirrita autumnata (Lepidoptera: Geometridae) on mountain birch: trees, broods, and tree x brood interactions. Oecologia, 1987, 74, 450-457.	2.0	50
129	Estimation of Soil Temperature from Climatic Variables at Barrow, Alaska, U.S.A.. Arctic and Alpine Research, 1985, 17, 425.	1.3	9
130	Emerging mosquitoes (Aedes nigripes) as a resource subsidy for wolf spiders (Pardosa glacialis) in western Greenland. Polar Biology, 0, , 1.	1.2	3
131	The impact is in the details: evaluating a standardized protocol and scale for determining non-native insect impact. NeoBiota, 0, 55, 61-83.	1.0	7
132	ï»¿Demography of an invading forest insect reunited with hosts and parasitoids from its native range. NeoBiota, 0, 72, 81-107.	1.0	1