Lawrence D Harder

List of Publications by Year
in descending order

123 papers	11,838 citations	31949 53 h-index	29127 104 g-index
125 all docs	125 docs citations	125 times ranked	7690 citing authors

#	Article	IF	Citations
1	Wild Pollinators Enhance Fruit Set of Crops Regardless of Honey Bee Abundance. Science, 2013, 339, 1608-1611.	6.0	1,767
2	The Global Stock of Domesticated Honey Bees Is Growing Slower Than Agricultural Demand for Pollination. Current Biology, 2009, 19, 915-918.	1.8	794
3	Mating cost of large floral displays in hermaphrodite plants. Nature, 1995, 373, 512-515.	13.7	497
4	Evolutionary Options for Maximizing Pollen Dispersal of Animal-Pollinated Plants. American Naturalist, 1989, 133, 323-344.	1.0	444
5	EXPANDING THE LIMITS OF THE POLLEN-LIMITATION CONCEPT: EFFECTS OF POLLEN QUANTITY AND QUALITY. Ecology, 2007, 88, 271-281.	1.5	409
6	Darwin's beautiful contrivances: evolutionary and functional evidence for floral adaptation. New Phytologist, 2009, 183, 530-545.	3.5	340
7	Evolution and Development of Inflorescence Architectures. Science, 2007, 316, 1452-1456.	6.0	333
8	Global growth and stability of agricultural yield decrease with pollinator dependence. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5909-5914.	3.3	310
9	Ecology and evolution of plant mating. Trends in Ecology and Evolution, 1996, 11, 73-79.	4.2	288
10	The comparative biology of pollination and mating in flowering plants. Philosophical Transactions of the Royal Society B: Biological Sciences, 1996, 351, 1271-1280.	1.8	269
11	Pollen Dispersal and Mating Patterns in Animal-Pollinated Plants. , 1996, , 140-190.		223
12	Pollen Removal by Bumble Bees and Its Implications for Pollen Dispersal. Ecology, 1990, 71, 1110-1125.	1.5	180
13	Consumptive emasculation: the ecological and evolutionary consequences of pollen theft. Biological Reviews, 2009, 84, 259-276.	4.7	178
14	Morphology as a Predictor of Flower Choice by Bumble Bees. Ecology, 1985, 66, 198-210.	1.5	171
15	Effects of nectar concentration and flower depth on flower handling efficiency of bumble bees. Oecologia, 1986, 69, 309-315.	0.9	159
16	Flower handling efficiency of bumble bees: morphological aspects of probing time. Oecologia, 1983, 57, 274-280.	0.9	151
17	Function and Evolution of Aggregated Pollen in Angiosperms. International Journal of Plant Sciences, 2008, 169, 59-78.	0.6	148
18	Behavioral responses by bumble bees to variation in pollen availability. Oecologia, 1990, 85, 41-47.	0.9	146

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19	A Clarification of Pollen Discounting and Its Joint Effects with Inbreeding Depression on Mating System Evolution. American Naturalist, 1998, 152, 684-695.	1.0	139
20	Floral adaptation and diversification under pollen limitation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 529-543.	1.8	138
21	The Ecology of Mating and Its Evolutionary Consequences in Seed Plants. Annual Review of Ecology, Evolution, and Systematics, 2017, 48, 135-157.	3.8	137
22	The Functional Significance of Poricidal Anthers and Buzz Pollination: Controlled Pollen Removal From Dodecatheon. Functional Ecology, 1994, 8, 509.	1.7	133
23	Floral evolution and male reproductive success: Optimal dispensing schedules for pollen dispersal by animal-pollinated plants. Evolutionary Ecology, 1994, 8, 542-559.	0.5	129
24	The mating consequences of sexual segregation within inflorescences of flowering plants. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 315-320.	1.2	124
25	The evolution of staminodes in angiosperms: patterns of stamen reduction, loss, and functional re-invention. American Journal of Botany, 2000, 87, 1367-1384.	0.8	122
26	Adaptive plasticity of floral display size in animal-pollinated plants. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 2651-2657.	1.2	121
27	Floral and inflorescence effects on variation in pollen removal and seed production among six legume species. Functional Ecology, 2005, 19, 245-254.	1.7	119
28	Beyond floricentrism: The pollination function of inflorescences. Plant Species Biology, 2004, 19, 137-148.	0.6	117
29	Pollen Removal From Tristylous Pontederia Cordata: Effects of Anther Position and Pollinator Specialization. Ecology, 1993, 74, 1059-1072.	1.5	107
30	The interplay between inflorescence development and function as the crucible of architectural diversity. Annals of Botany, 2013, 112, 1477-1493.	1.4	107
31	Coordinated species importation policies are needed to reduce serious invasions globally: The case of alien bumblebees in South America. Journal of Applied Ecology, 2019, 56, 100-106.	1.9	99
32	Why are Bumble Bees Risk Averse?. Ecology, 1987, 68, 1104-1108.	1.5	98
33	Effects of Flower Number and Position on Self-Fertilization in Experimental Populations of Eichhornia paniculata (Pontederiaceae). Functional Ecology, 1994, 8, 526.	1.7	96
34	When mutualism goes bad: densityâ€dependent impacts of introduced bees on plant reproduction. New Phytologist, 2014, 204, 322-328.	3.5	95
35	Size-Dependent Resource Allocation and Costs of Reproduction in Pinguicula Vulgaris (Lentibulariaceae). Journal of Ecology, 1996, 84, 195.	1.9	90
36	Response of traplining bumble bees to competition experiments: shifts in feeding location and efficiency. Oecologia, 1987, 71, 295-300.	0.9	87

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37	The Energy Cost of Bee Pollination for Pontederia cordata (Pontederiaceae). Functional Ecology, 1992, 6, 226.	1.7	85
38	Pollen fates and the limits on male reproductive success in an orchid population. Biological Journal of the Linnean Society, 2005, 86, 175-190.	0.7	85
39	Measurement and estimation of functional proboscis length in bumblebees (Hymenoptera: Apidae). Canadian Journal of Zoology, 1982, 60, 1073-1079.	0.4	84
40	Sexual reproduction and variation in floral morphology in an ephemeral vernal lily, Eyythronium americanum. Oecologia, 1985, 67, 286-291.	0.9	80
41	An Evaluation of the Physiological and Evolutionary Influences of Inflorescence Size and Flower Depth on Nectar Production. Functional Ecology, 1990, 4, 559.	1.7	79
42	Non-equilibrium dynamics and floral trait interactions shape extant angiosperm diversity. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152304.	1.2	79
43	GENDER VARIATION INSAGITTARIA LATIFOLIA(ALISMATACEAE): IS SIZE ALL THAT MATTERS?. Ecology, 2001, 82, 360-373.	1.5	75
44	Reproductive Uncertainty and the Relative Competitiveness of Simultaneous Hermaphroditism versus Dioecy. American Naturalist, 2003, 162, 220-241.	1.0	74
45	Development of aquatic insect eggs in relation to temperature and strategies for dealing with different thermal environments. Biological Journal of the Linnean Society, 1996, 58, 221-244.	0.7	73
46	THEORETICAL CONSEQUENCES OF HETEROGENEOUS TRANSPORT CONDITIONS FOR POLLEN DISPERSAL BY ANIMALS. Ecology, 1998, 79, 2789-2807.	1.5	73
47	Direct and indirect responses to selection on pollen size in Brassica rapa L.. Journal of Evolutionary Biology, 2001, 14, 456-468.	0.8	71
48	Heteromorphic Incompatibility and Efficiency of Pollination in Two Distylous Pentanisia Species (Rubiaceae). Annals of Botany, 2004, 95, 389-399.	1.4	70
49	Unilateral incompatibility and the effects of interspecific pollination for <i>Erythronium americanum</i> and <i>Erythronium albidum</i> (Liliaceae). Canadian Journal of Botany, 1993, 71, 353-358.	1.2	63
50	THE BUMBLE BEES OF EASTERN CANADA. Canadian Entomologist, 1988, 120, 965-987.	0.4	62
51	Mammal pollinators lured by the scent of a parasitic plant. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 2303-2310.	1.2	61
52	Pollen load, capsule weight, and seed production in three orchid species. Canadian Journal of Botany, 1994, 72, 249-255.	1.2	60
53	Inflorescence architecture and wind pollination in six grass species. Functional Ecology, 2004, 18, 851-860.	1.7	58
54	CORRELATED EVOLUTION OF FLORAL MORPHOLOGY AND MATING-TYPE FREQUENCIES IN A SEXUALLY POLYMORPHIC PLANT. Evolution; International Journal of Organic Evolution, 2004, 58, 964-975.	1.1	56

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55	EFFECTS OF REPRODUCTIVE COMPENSATION, GAMETE DISCOUNTING AND REPRODUCTIVE ASSURANCE ON MATING-SYSTEM DIVERSITY IN HERMAPHRODITES. Evolution; International Journal of Organic Evolution, 2008, 62, 157-172.	1.1	56
56	Pollen-size comparisons among animal-pollinated angiosperms with different pollination characteristics. Biological Journal of the Linnean Society, 1998, 64, 513-525.	0.7	54
57	Variation in Pollination: Causes and Consequences for Plant Reproduction. American Naturalist, 2009, 174, 382-398.	1.0	54
58	S<scp>izeâ€number tradeâ€offs and pollen production by</scp> P<scp>apilionaceous legumes</scp>. American Journal of Botany, 1995, 82, 230-238.	0.8	53
59	Native pollen thieves reduce the reproductive success of a hermaphroditic plant, Aloe maculata. Ecology, 2010, 91, 1693-1703.	1.5	53
60	What do foraging hummingbirds maximize?. Oecologia, 1984, 63, 357-363.	0.9	50
61	The evolution of polymorphic sexual systems in daffodils (Narcissus). New Phytologist, 2005, 165, 45-53.	3.5	49
62	The effects of floral design and display on pollinator economics and pollen dispersal. , 2001, , 297-317.		48
63	Floral traits mediate the vulnerability of aloes to pollen theft and inefficient pollination by bees. Annals of Botany, 2012, 109, 761-772.	1.4	45
64	Economic motivation for plant species preferences of pollen-collecting bumble bees. Ecological Entomology, 1997, 22, 209-219.	1.1	44
65	Manipulation of Bee Behavior by Inflorescence Architecture and Its Consequences for Plant Mating. American Naturalist, 2006, 167, 496-509.	1.0	43
66	Invasive bees and their impact on agriculture. Advances in Ecological Research, 2020, 63, 49-92.	1.4	42
67	Effect of Pollination Success on Floral Longevity in the Orchid Calypso bulbosa (Orchidaceae). American Journal of Botany, 1995, 82, 1131.	0.8	38
68	Foraging currencies for non-energetic resources: pollen collection by bumblebees. Animal Behaviour, 1997, 54, 911-926.	0.8	37
69	VESTIGIAL ORGANS AS OPPORTUNITIES FOR FUNCTIONAL INNOVATION: THE EXAMPLE OF THE PENSTEMON STAMINODE. Evolution; International Journal of Organic Evolution, 2001, 55, 477.	1.1	37
70	Functional associations of floret and inflorescence traits among grass species. American Journal of Botany, 2005, 92, 1862-1870.	0.8	37
71	The size of individual Delphinium flowers and the opportunity for geitonogamous pollination. Functional Ecology, 2006, 20, 1115-1123.	1.7	37
72	Phenological associations of withinâ€•and amongâ€plant variation in gender with floral morphology and integration in protandrous <i>Delphinium glaucum</i>. Journal of Ecology, 2012, 100, 1029-1038.	1.9	37

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73	The population ecology of male gametophytes: the link between pollination and seed production. Ecology Letters, 2016, 19, 497-509.	3.0	36
74	Functional differences of the proboscides of short- and long-tongued bees (Hymenoptera, Apoidea). Canadian Journal of Zoology, 1983, 61, 1580-1586.	0.4	34
75	Choice of Individual Flowers By Bumble Bees: Interaction of Morphology, Time and Energy. Behaviour, 1988, 104, 60-76.	0.4	34
76	Variation in ovule and seed size and associated sizeâ€“number tradeâ€offs in angiosperms. American Journal of Botany, 2007, 94, 840-846.	0.8	34
77	Aloe inconspicua: The first record of an exclusively insect-pollinated aloe. South African Journal of Botany, 2008, 74, 606-612.	1.2	32
78	Lunar Phase Modulates Circadian Gene Expression Cycles in the Broadcast Spawning Coral <i>Acropora millepora</i>. Biological Bulletin, 2016, 230, 130-142.	0.7	32
79	Short-Term Energy Maximization and Risk-Aversion in Bumble Bees: A Reply to Possingham Et Al.. Ecology, 1990, 71, 1625-1628.	1.5	30
80	Consequences of preformation for dynamic resource allocation by a carnivorous herb, Pinguicula vulgaris (Lentibulariaceae). American Journal of Botany, 1999, 86, 1136-1145.	0.8	30
81	Consequences of Multiple Inflorescences and Clonality for Pollinator Behavior and Plant Mating. American Naturalist, 2014, 184, 580-592.	1.0	30
82	Floral variation in Eichhornia paniculata (Spreng.) Solms (Pontederiaceae) II. Effects of development and environment on the formation of selfing flowers. Journal of Evolutionary Biology, 1992, 5, 83-107.	0.8	29
83	Gender Variation in Sagittaria latifolia (Alismataceae): Is Size All That Matters?. Ecology, 2001, 82, 360.	1.5	29
84	New strategies for increasing heterozygosity in crops: Vicia faba mating system as a study case. Euphytica, 2005, 143, 51-65.	0.6	28
85	Bumble-bee learning selects for both early and long flowering in food-deceptive plants. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 1538-1543.	1.2	26
86	Size-number trade-offs and pollen production by Papilionaceous legumes. , 1995, 82, 230.		25
87	The dynamic mosaic phenotypes of flowering plants. New Phytologist, 2019, 224, 1021-1034.	3.5	24
88	Geographic variation in the growth of domesticated honey-bee stocks. Communicative and Integrative Biology, 2009, 2, 464-466.	0.6	23
89	Diverse ecological relations of male gametophyte populations in stylar environments. American Journal of Botany, 2016, 103, 484-497.	0.8	23
90	Evolutionary and Ecological Consequences of Multiscale Variation in Pollen Receipt for Seed Production. American Naturalist, 2015, 185, E14-E29.	1.0	21

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91	Sterile flowers increase pollinator attraction and promote female success in the Mediterranean herb Leopoldia comosa. Annals of Botany, 2013, 111, 103-111.	1.4	20
92	Flies (Diptera) as pollinators of two dioecious plants: behaviour and implications for plant mating. Canadian Entomologist, 2007, 139, 235-246.	0.4	18
93	Inflorescence characteristics as functionâ€valued traits: Analysis of heritability and selection on architectural effects. Journal of Systematics and Evolution, 2017, 55, 559-565.	1.6	18
94	Heritable allometric variation in bumble bees: opportunities for colony-level selection of foraging ability. Journal of Evolutionary Biology, 1995, 8, 725-738.	0.8	17
95	Questions about floral (dis)integration. New Phytologist, 2009, 183, 247-248.	3.5	17
96	Winter use of montane forests by porcupines in southwestern Alberta: preferences, density effects, and temporal changes. Canadian Journal of Zoology, 1980, 58, 13-19.	0.4	16
97	The evolution of floral nectaries in Disa (Orchidaceae: Disinae): recapitulation or diversifying innovation?. Annals of Botany, 2013, 112, 1303-1319.	1.4	16
98	Mating consequences of contrasting hermaphroditic plant sexual systems. Evolution; International Journal of Organic Evolution, 2018, 72, 2114-2128.	1.1	16
99	The nature of interspecific interactions and coâ€diversification patterns, as illustrated by the fig microcosm. New Phytologist, 2019, 224, 1304-1315.	3.5	16
100	The functional significance of synchronous protandry in Alstroemeria aurea. Functional Ecology, 2004, 18, 467-474.	1.7	15
101	Influences on the density and dispersion of bumble bee nests (Hymenoptera: Apidae). Ecography, 1986, 9, 99-103.	2.1	14
102	Demandâ€driven resource investment in annual seed production by a perennial angiosperm precludes resource limitation. Ecology, 2013, 94, 51-61.	1.5	14
103	Effects of defoliation and shading on the physiological cost of reproduction in silky locoweed Oxytropis sericea. Annals of Botany, 2012, 109, 237-246.	1.4	13
104	Using a â€œtime machineâ€• to test for local adaptation of aquatic microbes to temporal and spatial environmental variation. Evolution; International Journal of Organic Evolution, 2015, 69, 136-145.	1.1	13
105	THE RESPONSE OF LARVAL GROWTH RATE TO TEMPERATURE IN THREE SPECIES OF COENAGRIONID DRAGONFLIES WITH SOME COMMENTS ON<i>LESTES DISJUNCTUS</i>(ODONATA: COENAGRIONIDAE,) Tj ETQq1 1 0.784314 rgBT /Ov	1.5	11
106	The mating consequences of rewarding vs. deceptive pollination systems: Is there a quantityâ€“quality tradeâ€off?. Ecological Monographs, 2017, 87, 91-104.	2.4	11
107	The costs and benefits of pollinator dependence: empirically based simulations predict raspberry fruit quality. Ecological Applications, 2018, 28, 1215-1222.	1.8	11
108	HOW DEPRESSED? ESTIMATES OF INBREEDING EFFECTS DURING SEED DEVELOPMENT DEPEND ON REPRODUCTIVE CONDITIONS. Evolution; International Journal of Organic Evolution, 2012, 66, 1375-1386.	1.1	10

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109	The consequences of demandâ€driven seed provisioning for sexual differences in reproductive investment in <i>Thalictrum occidentale</i> (Ranunculaceae). Journal of Ecology, 2015, 103, 269-280.	1.9	10
110	The influences of progenitor filtering, domestication selection and the boundaries of nature on the domestication of grain crops. Functional Ecology, 2021, 35, 1998-2011.	1.7	9
111	Age composition of some vespertilionid bats as determined by dental annuli. Canadian Journal of Zoology, 1978, 56, 355-358.	0.4	8
112	Pollen-size comparisons among animal-pollinated angiosperms with different pollination characteristics. Biological Journal of the Linnean Society, 1998, 64, 513-525.	0.7	7
113	VESTIGIAL ORGANS AS OPPORTUNITIES FOR FUNCTIONAL INNOVATION: THE EXAMPLE OF THE PENSTEMON STAMINODE. Evolution; International Journal of Organic Evolution, 2001, 55, 477-487.	1.1	6
114	Flower orientation influences the consistency of bumblebee movement within inflorescences. Annals of Botany, 2016, 118, 523-527.	1.4	6
115	Behavioural responses by a bumble bee to competition with a nicheâ€constructing congener. Journal of Animal Ecology, 2022, 91, 580-592.	1.3	6
116	Physical tidepool characteristics affect age- and size-class distributions and site fidelity in tidepool sculpin (<i>Oligocottus maculosus</i>). Canadian Journal of Zoology, 2018, 96, 1326-1335.	0.4	5
117	Does acoustic priming â€˜sweeten the potâ€™ of floral nectar?. Ecology Letters, 2020, 23, 1550-1552.	3.0	4
118	Mechanisms of Male-Male Interference during Dispersal of Orchid Pollen. American Naturalist, 2021, 197, 250-265.	1.0	4
119	Habitat effects on reproductive phenotype, pollinator behavior, fecundity, and mating outcomes of a bumble beeâ€“pollinated herb. American Journal of Botany, 2022, 109, 470-485.	0.8	4
120	The truth about honeybees. New Scientist, 2009, 204, 26-27.	0.0	3
121	Tracking Pollen Fates in Orchid Populations. Springer Protocols, 2018, , 227-239.	0.1	3
122	No statistical evidence that honey bees competitively reduced wild bee abundance in the Munich Botanic Gardenâ€"a comment on Renner et al. (2021). Oecologia, 2022, 198, 337.	0.9	1
123	VARIATIONS ON A THEME-THE ECOLOGY AND EVOLUTION OF WITHIN-PLANT DIVERSITY. Evolution; International Journal of Organic Evolution, 2010, 64, 2184.	1.1	0