Len Thomas

List of Publications by Year
in descending order

117 papers	9,399 citations	57758 44 h-index	42399 92 g-index
131 all docs	131 docs citations	131 times ranked	7423 citing authors

#	Article	IF	Citations
1	Distance software: design and analysis of distance sampling surveys for estimating population size. Journal of Applied Ecology, 2010, 47, 5-14.	4.0	1,621
2	State–space models of individual animal movement. Trends in Ecology and Evolution, 2008, 23, 87-94.	8.7	708
3	Estimating animal population density using passive acoustics. Biological Reviews, 2013, 88, 287-309.	10.4	495
4	Retrospective Power Analysis. Conservation Biology, 1997, 11, 276-280.	4.7	333
5	Flexible and practical modeling of animal telemetry data: hidden Markov models and extensions. Ecology, 2012, 93, 2336-2342.	3.2	311
6	Estimating cetacean population density using fixed passive acoustic sensors: An example with Blainville's beaked whales. Journal of the Acoustical Society of America, 2009, 125, 1982-1994.	1.1	257
7	Spatial models for distance sampling data: recent developments and future directions. Methods in Ecology and Evolution, 2013, 4, 1001-1010.	5.2	256
8	A general discrete–time modeling framework for animal movement using multistate random walks. Ecological Monographs, 2012, 82, 335-349.	5.4	222
9	Design and Analysis of Line Transect Surveys for Primates. International Journal of Primatology, 2010, 31, 833-847.	1.9	219
10	Improving Estimates of Bird Density Using Multiple- Covariate Distance Sampling. Auk, 2007, 124, 1229-1243.	1.4	207
11	First direct measurements of behavioural responses by Cuvier's beaked whales to mid-frequency active sonar. Biology Letters, 2013, 9, 20130223.	2.3	200
12	Understanding the population consequences of disturbance. Ecology and Evolution, 2018, 8, 9934-9946.	1.9	186
13	The importance of statistical power analysis: an example from Animal Behaviour. Animal Behaviour, 1996, 52, 856-859.	1.9	172
14	IMPROVING ESTIMATES OF BIRD DENSITY USING MULTIPLE- COVARIATE DISTANCE SAMPLING. Auk, 2007, 124, 1229.	1.4	169
15	Monitoring Long-Term Population Change: Why are there so Many Analysis Methods?. Ecology, 1996, 77, 49-58.	3.2	152
16	Statistical modelling of individual animal movement: an overview of key methods and a discussion of practical challenges. AStA Advances in Statistical Analysis, 2017, 101, 399-438.	0.9	122
17	Metapopulation consequences of site fidelity for colonially breeding mammals and birds. Journal of Animal Ecology, 2005, 74, 716-727.	2.8	118
18	Estimating the Encounter Rate Variance in Distance Sampling. Biometrics, 2009, 65, 225-236.	1.4	115

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19	An interim framework for assessing the population consequences of disturbance. Methods in Ecology and Evolution, 2015, 6, 1150-1158.	5.2	114
20	Inferences About Landbird Abundance from Count Data: Recent Advances and Future Directions. , 2009, , 201-235.		111
21	Embedding Population Dynamics Models in Inference. Statistical Science, 2007, 22, .	2.8	105
22	Cetacean population density estimation from single fixed sensors using passive acoustics. Journal of the Acoustical Society of America, 2011, 129, 3610-3622.	1.1	99
23	Novel survey method finds dramatic decline of wild cotton-top tamarin population. Nature Communications, 2010, 1, 30.	12.8	98
24	A guide to state–space modeling of ecological time series. Ecological Monographs, 2021, 91, e01470.	5.4	97
25	A method for detecting whistles, moans, and other frequency contour sounds. Journal of the Acoustical Society of America, 2011, 129, 4055-4061.	1.1	91
26	From echolocation clicks to animal density—Acoustic sampling of harbor porpoises with static dataloggers. Journal of the Acoustical Society of America, 2012, 131, 550-560.	1.1	90
27	Modelling the biological significance of behavioural change in coastal bottlenose dolphins in response to disturbance. Functional Ecology, 2013, 27, 314-322.	3.6	89
28	Passive acoustic monitoring of the decline of Mexico's critically endangered vaquita. Conservation Biology, 2017, 31, 183-191.	4.7	87
29	Evidence for density-dependent changes in body condition and pregnancy rate of North Atlantic fin whales over four decades of varying environmental conditions. ICES Journal of Marine Science, 2013, 70, 1273-1280.	2.5	85
30	Decline towards extinction of Mexico's vaquita porpoise (*Phocoena sinus*). Royal Society Open Science, 2019, 6, 190598.	2.4	82
31	A UNIFIED FRAMEWORK FOR MODELLING WILDLIFE POPULATION DYNAMICS+. Australian and New Zealand Journal of Statistics, 2005, 47, 19-34.	0.9	81
32	Extinction is Imminent for Mexico's Endemic Porpoise Unless Fishery Bycatch is Eliminated. Conservation Letters, 2017, 10, 588-595.	5.7	79
33	Dose-response relationships for the onset of avoidance of sonar by free-ranging killer whales. Journal of the Acoustical Society of America, 2014, 135, 975-993.	1.1	78
34	Field Trials of Line Transect Methods Applied to Estimation of Desert Tortoise Abundance. Journal of Wildlife Management, 2001, 65, 583.	1.8	73
35	Long–term trends in carnivore abundance using distance sampling in Serengeti National Park, Tanzania. Journal of Applied Ecology, 2011, 48, 1490-1500.	4.0	65
36	Passive acoustic monitoring of beaked whale densities in the Gulf of Mexico. Scientific Reports, 2015, 5, 16343.	3.3	65

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37	Marine mammals and sonar: Dose–response studies, the risk–disturbance hypothesis and the role of exposure context. Journal of Applied Ecology, 2018, 55, 396-404.	4.0	64
38	Understanding the combined effects of multiple stressors: A new perspective on a longstanding challenge. Science of the Total Environment, 2022, 821, 153322.	8.0	64
39	Changes in spatial and temporal distribution and vocal behavior of Blainville's beaked whales (*Mesoplodon densirostris)* during multiship exercises with mid–frequency sonar. Marine Mammal Science, 2011, 27, E206.	1.8	62
40	The Importance of Analysis Method for Breeding Bird Survey Population Trend Estimates. Conservation Biology, 1996, 10, 479-490.	4.7	58
41	Basin-scale distribution of harbour porpoises in the Baltic Sea provides basis for effective conservation actions. Biological Conservation, 2018, 226, 42-53.	4.1	57
42	Cost-effective abundance estimation of rare animals: Testing performance of small-boat surveys for killer whales in British Columbia. Biological Conservation, 2009, 142, 1542-1547.	4.1	51
43	A Risk Function for Behavioral Disruption of Blainville's Beaked Whales (Mesoplodon densirostris) from Mid-Frequency Active Sonar. PLoS ONE, 2014, 9, e85064.	2.5	51
44	Monte Carlo Inference for State–Space Models of Wild Animal Populations. Biometrics, 2009, 65, 572-583.	1.4	48
45	Applying distance sampling to fin whale calls recorded by single seismic instruments in the northeast Atlantic. Journal of the Acoustical Society of America, 2013, 134, 3522-3535.	1.1	48
46	Passive Acoustic Monitoring for Estimating Animal Density. Acoustics Today, 2012, 8, 35.	1.0	47
47	Line Transect Sampling of Primates: Can Animal-to-Observer Distance Methods Work?. International Journal of Primatology, 2010, 31, 485-499.	1.9	46
48	Estimating minke whale (*Balaenoptera acutorostrata*) boing sound density using passive acoustic sensors. Marine Mammal Science, 2013, 29, 142-158.	1.8	46
49	Point transect sampling with traps or lures. Journal of Applied Ecology, 2006, 43, 377-384.	4.0	45
50	REVIEW Assessing North Atlantic right whale health: threats, and development of tools critical for conservation of the species. Diseases of Aquatic Organisms, 2021, 143, 205-226.	1.0	44
51	Estimating resource acquisition and at–sea body condition of a marine predator. Journal of Animal Ecology, 2013, 82, 1300-1315.	2.8	42
52	Statistical ecology comes of age. Biology Letters, 2014, 10, 20140698.	2.3	40
53	Inter-annual and seasonal trends in cetacean distribution, density and abundance off southern California. Deep-Sea Research Part II: Topical Studies in Oceanography, 2015, 112, 143-157.	1.4	39
54	The Effect of Animal Movement on Line Transect Estimates of Abundance. PLoS ONE, 2015, 10, e0121333.	2.5	39

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55	Population‐level consequences of seismic surveys on fishes: An interdisciplinary challenge. Fish and Fisheries, 2019, 20, 653-685.	5.3	38
56	An Efficient Acoustic Density Estimation Method with Human Detectors Applied to Gibbons in Cambodia. PLoS ONE, 2016, 11, e0155066.	2.5	36
57	Roaring and repetition: How bowhead whales adjust their call density and source level (Lombard) Tj ETQq1 1 0.784314 rgBT /Overlock of America, 2020, 147, 2061-2080.	1.1	34
58	dsmextra: Extrapolation assessment tools for density surface models. Methods in Ecology and Evolution, 2020, 11, 1464-1469.	5.2	33
59	Fin whale density and distribution estimation using acoustic bearings derived from sparse arrays. Journal of the Acoustical Society of America, 2018, 143, 2980-2993.	1.1	32
60	Spatially explicit capture–recapture methods to estimate minke whale density from data collected at bottom-mounted hydrophones. Journal of Ornithology, 2012, 152, 445-455.	1.1	31
61	Passive acoustic density estimation of sperm whales in the Tongue of the Ocean, Bahamas. Marine Mammal Science, 2012, 28, E444.	1.8	31
62	Comparing methods suitable for monitoring marine mammals in low visibility conditions during seismic surveys. Marine Pollution Bulletin, 2018, 126, 1-18.	5.0	31
63	Modelling the population size and dynamics of the British grey seal. Aquatic Conservation: Marine and Freshwater Ecosystems, 2019, 29, 6-23.	2.0	31
64	A path reconstruction method integrating dead-reckoning and position fixes applied to humpback whales. Movement Ecology, 2015, 3, 31.	2.8	29
65	Gauging allowable harm limits to cumulative, sub-lethal effects of human activities on wildlife: A case-study approach using two whale populations. Marine Policy, 2016, 70, 58-64.	3.2	28
66	Last call: Passive acoustic monitoring shows continued rapid decline of critically endangered vaquita. Journal of the Acoustical Society of America, 2017, 142, EL512-EL517.	1.1	28
67	Incorporating movement into models of grey seal population dynamics. Journal of Animal Ecology, 2006, 75, 634-645.	2.8	27
68	Beaked whale (Mesoplodon densirostris) passive acoustic detection in increasing ambient noise. Journal of the Acoustical Society of America, 2011, 129, 662-669.	1.1	27
69	Monitoring population‐level responses of marine mammals to human activities. Marine Mammal Science, 2016, 32, 1004-1021.	1.8	27
70	Spatio-temporal variation in click production rates of beaked whales: Implications for passive acoustic density estimation. Journal of the Acoustical Society of America, 2017, 141, 1962-1974.	1.1	27
71	A hierarchical model for spatial capture–recapture data: comment. Ecology, 2011, 92, 526-528.	3.2	25
72	Modeling the Diving Behavior of Whales: A Latent-Variable Approach with Feedback and Semi-Markovian Components. Journal of Agricultural, Biological, and Environmental Statistics, 2014, 19, 82-100.	1.4	25

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73	Effects of a seismic survey on movement of free-ranging Atlantic cod. Current Biology, 2021, 31, 1555-1562.e4.	3.9	25
74	Acoustic detection probability of bottlenose dolphins, <i>Tursiops truncatus</i>, with static acoustic dataloggers in Cardigan Bay, Wales. Journal of the Acoustical Society of America, 2013, 134, 2596-2609.	1.1	24
75	Tracking marine mammals in 3D using electronic tag data. Methods in Ecology and Evolution, 2015, 6, 987-996.	5.2	24
76	Efficient abstracting of dive profiles using a broken-stick model. Methods in Ecology and Evolution, 2015, 6, 278-288.	5.2	22
77	Delphinid echolocation click detection probability on near-seafloor sensors. Journal of the Acoustical Society of America, 2016, 140, 1918-1930.	1.1	21
78	Understanding the Population Consequences of Acoustic Disturbance for Marine Mammals. Advances in Experimental Medicine and Biology, 2016, 875, 417-423.	1.6	20
79	Acoustic detection range and population density of Cuvier's beaked whales estimated from near-surface hydrophones. Journal of the Acoustical Society of America, 2021, 149, 111-125.	1.1	19
80	Mixture Models for Distance Sampling Detection Functions. PLoS ONE, 2015, 10, e0118726.	2.5	19
81	Estimating abundance of cryptic but trappable animals using trapping point transects: a case study for Key Largo woodrats. Methods in Ecology and Evolution, 2012, 3, 695-703.	5.2	17
82	Estimating effective detection area of static passive acoustic data loggers from playback experiments with cetacean vocalisations. Methods in Ecology and Evolution, 2018, 9, 2362-2371.	5.2	16
83	Using dose–response functions to improve calculations of the impact of anthropogenic noise. Aquatic Conservation: Marine and Freshwater Ecosystems, 2019, 29, 242-253.	2.0	14
84	Using density surface models to estimate spatio-temporal changes in population densities and trend. Ecography, 2020, 43, 1079-1089.	4.5	14
85	From physiology to policy: A review of physiological noise effects on marine fauna with implications for mitigation. Proceedings of Meetings on Acoustics, 2016, , .	0.3	13
86	The effects of acoustic misclassification on cetacean species abundance estimation. Journal of the Acoustical Society of America, 2013, 134, 2469-2476.	1.1	11
87	Spatial variation in maximum dive depth in gray seals in relation to foraging. Marine Mammal Science, 2014, 30, 923-938.	1.8	11
88	Estimation bias under model selection for distance sampling detection functions. Environmental and Ecological Statistics, 2017, 24, 399-414.	3.5	11
89	Varying-Coefficient Stochastic Differential Equations with Applications in Ecology. Journal of Agricultural, Biological, and Environmental Statistics, 2021, 26, 446-463.	1.4	11
90	Changes in the Movement and Calling Behavior of Minke Whales (Balaenoptera acutorostrata) in Response to Navy Training. Frontiers in Marine Science, 2021, 8, .	2.5	11

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91	The importance of prior choice in model selection: a density dependence example. Methods in Ecology and Evolution, 2013, 4, 25-33.	5.2	10
92	Modelling the broadband propagation of marine mammal echolocation clicks for click-based population density estimates. Journal of the Acoustical Society of America, 2018, 143, 954-967.	1.1	10
93	High site-fidelity in common bottlenose dolphins despite low salinity exposure and associated indicators of compromised health. PLoS ONE, 2021, 16, e0258031.	2.5	10
94	Using a State-Space Model of the British Song Thrush Turdus philomelos Population to Diagnose the Causes of a Population Decline. , 2009, , 541-561.		10
95	Estimating the abundance of the critically endangered Baltic Proper harbour porpoise (<i>Phocoena) Tj ETQq1 1 0.784314 rgBT /Overloc	1.9	10
96	The Challenges of Analyzing Behavioral Response Study Data: An Overview of the MOCHA (Multi-study) Tj ETQq0 0 0 rgBT /Overlock 10 2016, 875, 399-407.	1.6	9
97	Estimating group size from acoustic footprint to improve Blainvilleâ€™s beaked whale abundance estimation. Applied Acoustics, 2019, 156, 434-439.	3.3	9
98	An Expert Elicitation of the Effects of Low Salinity Water Exposure on Bottlenose Dolphins. Oceans, 2021, 2, 179-192.	1.3	9
99	Modeling population effects of the <i>Deepwater Horizon</i> oil spill on a longâ€lived species. Conservation Biology, 2021, , .	4.7	9
100	Accurate Epigenetic Aging in Bottlenose Dolphins (Tursiops truncatus), an Essential Step in the Conservation of at-Risk Dolphins. Journal of Zoological and Botanical Gardens, 2021, 2, 416-420.	1.8	8
101	An Approximate Bayesian Method Applied to Estimating the Trajectories of Four British Grey Seal (Halichoerus grypus) Populations from Pup Counts. Journal of Marine Biology, 2011, 2011, 1-7.	1.0	7
102	The Development and Use of a Method to Fill Time Gaps in Migration Counts. Condor, 2012, 114, 513-522.	1.6	7
103	Techniques for Estimating the Size of Low-Density Gopher Tortoise Populations. Journal of Fish and Wildlife Management, 2017, 8, 377-386.	0.9	7
104	Alternative method for assessment of southwestern Atlantic humpback whale population status. PLoS ONE, 2021, 16, e0259541.	2.5	7
105	An Assessment of the Population of Cotton-Top Tamarins (Saguinus oedipus) and Their Habitat in Colombia. PLoS ONE, 2016, 11, e0168324.	2.5	6
106	Surveying abundance and stand type associations of Formica aquilonia and F. lugubris (Hymenoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 T Entomology, 2012, 109, 47-53.	1.2	6
107	Quantifying the response of Blainville's beaked whales to U.S. naval sonar exercises in Hawaii. Marine Mammal Science, 2022, 38, 1549-1565.	1.8	5
108	Discreteâ€space continuousâ€time models of marine mammal exposure to Navy sonar. Ecological Applications, 2022, 32, e02475.	3.8	4

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109	Grey Seals Red in Tooth and Claw: How Darwin Helps Model Their Population. Significance, 2009, 6, 108-112.	0.4	3
110	Effects of Model Formulation on Estimates of Health in Individual Right Whales (Eubalaena glacialis). Advances in Experimental Medicine and Biology, 2016, 875, 977-985.	1.6	3
111	Calibrating models of cancer invasion: parameter estimation using approximate Bayesian computation and gradient matching. Royal Society Open Science, 2021, 8, 202237.	2.4	3
112	A comparison of three methods for estimating call densities of migrating bowhead whales using passive acoustic monitoring. Environmental and Ecological Statistics, 0, , 1.	3.5	3
113	Estimating Key Largo woodrat abundance using spatially explicit capture-recapture and trapping point transects. Wildlife Society Bulletin, 2016, 40, 331-338.	1.6	2
114	Concepts: Estimating Abundance of Prey Species Using Line Transect Sampling. , 2017, , 89-120.		2
115	A fine-scale marine mammal movement model for assessing long-term aggregate noise exposure. Ecological Modelling, 2022, 464, 109798.	2.5	2
116	Model predicts catastrophic decline of common bottlenose dolphin (*Tursiops truncatus*) population under proposed land restoration project in Barataria Bay, Louisiana, USA. Marine Mammal Science, 0, , .	1.8	2
117	Assessing the Role of Sampling Uncertainty When Predicting Behavioral Responses of Tagged Cetaceans Exposed to Naval Sonar. Frontiers in Marine Science, 2021, 8, .	2.5	1