# M Jay Ver Hoef

List of Publications by Year
in descending order



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|---|---|---|---|
| 112 papers | 6,621 citations | 81900 39 h-index | 71685 76 g-index |
| 137 all docs | 137 docs citations | 137 times ranked | 7220 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | QUASI-POISSON VS. NEGATIVE BINOMIAL REGRESSION: HOW SHOULD WE MODEL OVERDISPERSED COUNT DATA?. Ecology, 2007, 88, 2766-2772. | 3.2 | 840 |
| 2 | Accounting for uncertainty in ecological analysis: the strengths and limitations of hierarchical statistical modeling. Ecological Applications, 2009, 19, 553-570. | 3.8 | 423 |
| 3 | Life-History Consequences of Maternal Condition in Alaskan Moose. Journal of Wildlife Management, 2000, 64, 450. | 1.8 | 286 |
| 4 | Spatial statistical models that use flow and stream distance. Environmental and Ecological Statistics, 2006, 13, 449-464. | 3.5 | 225 |
| 5 | The NorWeST Summer Stream Temperature Model and Scenarios for the Western U.S.: A Crowdâ€Sourced Database and New Geospatial Tools Foster a User Community and Predict Broad Climate Warming of Rivers and Streams. Water Resources Research, 2017, 53, 9181-9205. | 4.2 | 187 |
| 6 | Slow climate velocities of mountain streams portend their role as refugia for cold-water biodiversity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4374-4379. | 7.1 | 182 |
| 7 | Modelling dendritic ecological networks in space: an integrated network perspective. Ecology Letters, 2013, 16, 707-719. | 6.4 | 180 |
| 8 | Who Invented the Delta Method?. American Statistician, 2012, 66, 124-127. | 1.6 | 172 |
| 9 | A Moving Average Approach for Spatial Statistical Models of Stream Networks. Journal of the American Statistical Association, 2010, 105, 6-18. | 3.1 | 168 |
| 10 | Constructing and fitting models for cokriging and multivariable spatial prediction. Journal of Statistical Planning and Inference, 1998, 69, 275-294. | 0.6 | 161 |
| 11 | Applications of spatial statistical network models to stream data. Wiley Interdisciplinary Reviews: Water, 2014, 1, 277-294. | 6.5 | 139 |
| 12 | Multivariable spatial prediction. Mathematical Geosciences, 1993, 25, 219-240. | 0.9 | 132 |
| 13 | Spatial autoregressive models for statistical inference from ecological data. Ecological Monographs, 2018, 88, 36-59. | 5.4 | 128 |
| 14 | A mixedâ€model movingâ€average approach to geostatistical modeling in stream networks. Ecology, 2010, 91, 644-651. | 3.2 | 115 |
| 15 | A General Framework for the Analysis of Animal Resource Selection from Telemetry Data. Biometrics, 2008, 64, 968-976. | 1.4 | 109 |
| 16 | MONITORING THE TREND OF HARBOR SEALS IN PRINCE WILLIAM SOUND, ALASKA, AFTER THE EXXON VALDEZ OIL SPILL. Marine Mammal Science, 1999, 15, 494-506. | 1.8 | 101 |
| 17 | Geostatistical modelling on stream networks: developing valid covariance matrices based on hydrologic distance and stream flow. Freshwater Biology, 2007, 52, 267-279. | 2.4 | 91 |
| 18 | Passive acoustic monitoring of the decline of Mexico's critically endangered vaquita. Conservation Biology, 2017, 31, 183-191. | 4.7 | 87 |

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|---|---|---|---|
| 19 | Climate change and caribou: effects of summer weather on forage. Canadian Journal of Zoology, 2002, 80, 664-678. | 1.0 | 86 |
| 20 | STARS: AnArcGISToolset Used to Calculate the Spatial Information Needed to Fit Spatial Statistical Models to Stream Network Data. Journal of Statistical Software, 2014, 56, . | 3.7 | 84 |
| 21 | Decline towards extinction of Mexico's vaquita porpoise ( Phocoena sinus ). Royal Society Open Science, 2019, 6, 190598. | 2.4 | 82 |
| 22 | Spaceâ€"time zeroâ€inflated count models of Harbor seals. Environmetrics, 2007, 18, 697-712. | 1.4 | 81 |
| 23 | The sequential megafaunal collapse hypothesis: Testing with existing data. Progress in Oceanography, 2006, 68, 329-342. | 3.2 | 80 |
| 24 | Extinction is Imminent for Mexico's Endemic Porpoise Unless Fishery Bycatch is Eliminated. Conservation Letters, 2017, 10, 588-595. | 5.7 | 79 |
| 25 | SEROLOGIC SURVEY FOR TOXOPLASMA GONDII IN SELECTED WILDLIFE SPECIES FROM ALASKA. Journal of Wildlife Diseases, 2000, 36, 219-224. | 0.8 | 77 |
| 26 | A Modelâ€Based Approach for Making Ecological Inference from Distance Sampling Data. Biometrics, 2010, 66, 310-318. | 1.4 | 73 |
| 27 | When to be discrete: the importance of time formulation in understanding animal movement. Movement Ecology, 2014, 2, 21. | 2.8 | 73 |
| 28 | Distribution and density of moose in relation to landscape characteristics: effects of scale. Canadian Journal of Forest Research, 2005, 35, 2233-2243. | 1.7 | 72 |
| 29 | Blackbox Kriging: Spatial Prediction without Specifying Variogram Models. Journal of Agricultural, Biological, and Environmental Statistics, 1996, 1, 297. | 1.4 | 69 |
| 30 | A Bayesian hierarchical model for monitoring harbor seal changes in Prince William Sound, Alaska. Environmental and Ecological Statistics, 2003, 10, 201-219. | 3.5 | 69 |
| 31 | Flexible Spatial Models for Kriging and Cokriging Using Moving Averages and the Fast Fourier Transform (FFT). Journal of Computational and Graphical Statistics, 2004, 13, 265-282. | 1.7 | 69 |
| 32 | MOVEMENTS OF SATELLITE-TAGGED SUBADULT AND ADULT HARBOR SEALS IN PRINCE WILLIAM SOUND, ALASKA. Marine Mammal Science, 2001, 17, 835-861. | 1.8 | 68 |
| 33 | Estimating multispecies abundance using automated detection systems: iceâ€associated seals in the Bering Sea. Methods in Ecology and Evolution, 2014, 5, 1280-1293. | 5.2 | 65 |
| 34 | Longâ€term recovery patterns of arctic tundra after winter seismic exploration. Ecological Applications, 2010, 20, 205-221. | 3.8 | 57 |
| 35 | Spatial models for spatial statistics: some unification. Journal of Vegetation Science, 1993, 4, 441-452. | 2.2 | 52 |
| 36 | Predicting Parturition Rate of Caribou from Autumn Body Mass. Journal of Wildlife Management, 1994, 58, 674. | 1.8 | 48 |

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|---|---|---|---|
| 37 | Multiscale ordination: a method for detecting pattern at several seales. Plant Ecology, 1989, 82, 59. | 1.2 | 47 |
| 38 | Identifying essential summer habitat of the endangered beluga whale Delphinapterus leucas in Cook Inlet, Alaska. Endangered Species Research, 2012, 16, 135-147. | 2.4 | 43 |
| 39 | Sampling and geostatistics for spatial data. Ecoscience, 2002, 9, 152-161. | 1.4 | 42 |
| 40 | Implications of ignoring telemetry error on inference in wildlife resource use models. Journal of Wildlife Management, 2011, 75, 702-708. | 1.8 | 41 |
| 41 | Haul-Out Behavior of Harbor Seals (Phoca vitulina) in Hood Canal, Washington. PLoS ONE, 2012, 7, e38180. | 2.5 | 41 |
| 42 | SEROLOGIC SURVEY FOR BRUCELLA SPP., PHOCID HERPESVIRUS-1, PHOCID HERPESVIRUS-2, AND PHOCINE DISTEMPER VIRUS IN HARBOR SEALS FROM ALASKA, 1976â€“1999. Journal of Wildlife Diseases, 2006, 42, 290-300. | 0.8 | 40 |
| 43 | Using spatiotemporal statistical models to estimate animal abundance and infer ecological dynamics from survey counts. Ecological Monographs, 2015, 85, 235-252. | 5.4 | 40 |
| 44 | On the relationship between conditional (CAR) and simultaneous (SAR) autoregressive models. Spatial Statistics, 2018, 25, 68-85. | 1.9 | 40 |
| 45 | An animal movement model incorporating home range and habitat selection. Environmental and Ecological Statistics, 2008, 15, 27-38. | 3.5 | 39 |
| 46 | Spatial patterns of cadmium and lead deposition on and adjacent to National Park Service lands in the vicinity of Red Dog Mine, Alaska. Science of the Total Environment, 2005, 348, 211-230. | 8.0 | 36 |
| 47 | Spatial Heterogeneity in Eight Central Texas Grasslands. Journal of Ecology, 1995, 83, 919. | 4.0 | 34 |
| 48 | SEROLOGIC SURVEY FOR PHOCID HERPESVIRUS-1 AND -2 IN MARINE MAMMALS FROM ALASKA AND RUSSIA. Journal of Wildlife Diseases, 1997, 33, 459-465. | 0.8 | 34 |
| 49 | A spatial hierarchical model for abundance of three ice-associated seal species in the eastern Bering Sea. Statistical Methodology, 2014, 17, 46-66. | 0.5 | 34 |
| 50 | Comparing spatial regression to random forests for large environmental data sets. PLoS ONE, 2020, 15, e0229509. | 2.5 | 34 |
| 51 | Uncertainty and Spatial Linear Models for Ecological Data. , 2001, , 214-237. | | 34 |
| 52 | Can We Accurately Characterize Wildlife Resource Use When Telemetry Data Are Imprecise?. Journal of Wildlife Management, 2010, 74, 1917-1925. | 1.8 | 33 |
| 53 | A Comparison of the Spatial Linear Model to Nearest Neighbor (k-NN) Methods for Forestry Applications. PLoS ONE, 2013, 8, e59129. | 2.5 | 32 |
| 54 | Scalable population estimates using spatial-stream-network (SSN) models, fish density surveys, and national geospatial database frameworks for streams. Canadian Journal of Fisheries and Aquatic Sciences, 2017, 74, 147-156. | 1.4 | 31 |

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|---|---|---|---|
| 55 | SSN: AnRPackage for Spatial Statistical Modeling on Stream Networks. Journal of Statistical Software, 2014, 56, . | 3.7 | 31 |
| 56 | Parametric Empirical Bayes Methods for Ecological Applications. , 1996, 6, 1047-1055. | | 30 |
| 57 | CATCH PER UNIT EFFORT FOR MOOSE: A NEW APPROACH USING WEIBULL REGRESSION. Journal of Wildlife Management, 2005, 69, 1112-1124. | 1.8 | 30 |
| 58 | Antler Size of Alaskan Moose Alces Alces Gigas: Effects of Population Density, Hunter Harvest and Use of Guides. Wildlife Biology, 2007, 13, 53-65. | 1.4 | 30 |
| 59 | Spatial sampling on streams: principles for inference on aquatic networks. Environmetrics, 2014, 25, 306-323. | 1.4 | 30 |
| 60 | SEROLOGIC SURVEY FOR TOXOPLASMA GONDII IN LYNX FROM INTERIOR ALASKA. Journal of Wildlife Diseases, 2001, 37, 36-38. | 0.8 | 29 |
| 61 | 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 |
| 62 | SEROLOGIC SURVEY FOR SELECTED DISEASE AGENTS IN WOLVES (CANIS LUPUS) FROM ALASKA AND THE YUKON TERRITORY, 1984â€“2000. Journal of Wildlife Diseases, 2004, 40, 632-638. | 0.8 | 27 |
| 63 | Spatial methods for plot-based sampling of wildlife populations. Environmental and Ecological Statistics, 2008, 15, 3-13. | 3.5 | 27 |
| 64 | Spatial modelling and prediction on river networks: up model, down model or hybrid?. Environmetrics, 2010, 21, 439-456. | 1.4 | 27 |
| 65 | Spatially structured statistical network models for landscape genetics. Ecological Monographs, 2019, 89, e01355. | 5.4 | 27 |
| 66 | SEROLOGIC SURVEY FOR TOXOPLASMA GONDII IN GRIZZLY BEARS FROM ALASKA. Journal of Wildlife Diseases, 1997, 33, 267-270. | 0.8 | 25 |
| 67 | Habitat selection and seasonal movements of young bearded seals (Erignathus barbatus) in the Bering Sea. PLoS ONE, 2018, 13, e0192743. | 2.5 | 25 |
| 68 | Robustness of closeâ€kin markâ€“recapture estimators to dispersal limitation and spatially varying sampling probabilities. Ecology and Evolution, 2020, 10, 5558-5569. | 1.9 | 25 |
| 69 | Impacts on Distribution, Abundance, and Productivity of Harbor Seals. , 1994, , 97-118. | | 25 |
| 70 | Spatial modeling of haul-out site use by harbor seals in Cook Inlet, Alaska. Marine Ecology - Progress Series, 2007, 341, 257-264. | 1.9 | 24 |
| 71 | The Torgegram for Fluvial Variography: Characterizing Spatial Dependence on Stream Networks. Journal of Computational and Graphical Statistics, 2017, 26, 253-264. | 1.7 | 23 |
| 72 | DIFFERENTIAL MOVEMENTS BY HARBOR SEAL PUPS IN CONTRASTING ALASKA ENVIRONMENTS. Marine Mammal Science, 2005, 21, 671-694. | 1.8 | 22 |

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| 73 | Iterating on a single model is a viable alternative to multimodel inference. Journal of Wildlife Management, 2015, 79, 719-729. | 1.8 | 22 |
| 74 | Coarse-Scale Distribution Surveys and Occurrence Probability Modeling for Wolverine in Interior Alaska. Journal of Wildlife Management, 2010, 74, 1894-1903. | 1.8 | 19 |
| 75 | Seasonal sea ice dynamics drive movement and migration of juvenile bearded seals Erignathus barbatus. Marine Ecology - Progress Series, 2018, 600, 223-237. | 1.9 | 19 |
| 76 | Validation and comparison of geostatistical and spline models for spatial stream networks. Environmetrics, 2015, 26, 327-338. | 1.4 | 18 |
| 77 | Fast computing of some generalized linear mixed pseudo-models with temporal autocorrelation. Computational Statistics, 2010, 25, 39-55. | 1.5 | 17 |
| 78 | Natural and human effects on harbor seal abundance and spatial distribution in an Alaskan glacial fjord. Marine Mammal Science, 2015, 31, 66-89. | 1.8 | 17 |
| 79 | Evaluation of the spatial linear model, random forest and gradient nearest-neighbour methods for imputing potential productivity and biomass of the Pacific Northwest forests. Forestry, 2015, 88, 131-142. | 2.3 | 17 |
| 80 | Kriging models for linear networks and nonâ€Euclidean distances: Cautions and solutions. Methods in Ecology and Evolution, 2018, 9, 1600-1613. | 5.2 | 17 |
| 81 | SEROLOGIC SURVEY FOR CANINE CORONAVIRUS IN WOLVES FROM ALASKA. Journal of Wildlife Diseases, 2001, 37, 740-745. | 0.8 | 16 |
| 82 | Trends in spatial patterns of heavy metal deposition on national park service lands along the Red Dog Mine haul road, Alaska, 2001â€“2006. PLoS ONE, 2017, 12, e0177936. | 2.5 | 12 |
| 83 | Relationship between horizontal pattern and vertical structure in a chalk grassland. Plant Ecology, 1989, 83, 147-155. | 1.2 | 11 |
| 84 | Bayesian spatio-temporal models for stream networks. Computational Statistics and Data Analysis, 2022, 170, 107446. | 1.2 | 11 |
| 85 | SEROLOGIC SURVEY FOR TRICHINELLA SPP. IN GRIZZLY BEARS FROM ALASKA. Journal of Wildlife Diseases, 1997, 33, 474-479. | 0.8 | 10 |
| 86 | PREVALENCE OF SOBOLIPHYME BATURINI IN MARTEN (MARTES AMERICANA) POPULATIONS FROM THREE REGIONS OF ALASKA, 1990â€“1998. Journal of Wildlife Diseases, 2004, 40, 452-455. | 0.8 | 9 |
| 87 | Estimating Abundance from Counts in Large Data Sets of Irregularly Spaced Plots using Spatial Basis Functions. Journal of Agricultural, Biological, and Environmental Statistics, 2015, 20, 1-27. | 1.4 | 9 |
| 88 | Case history of the Fortymile Caribou Herd, 1920-1990. Rangifer, 1994, 14, 11. | 0.6 | 9 |
| 89 | PREVALENCE OF TRICHINELLA NATIVA IN LYNX (FELIS LYNX) FROM ALASKA, 1988â€“1993. Journal of Wildlife Diseases, 1995, 31, 314-318. | 0.8 | 8 |
| 90 | Trichinella sp. in Wolves from Interior Alaska. Journal of Wildlife Diseases, 1999, 35, 94-97. | 0.8 | 8 |

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| 91 | SHORT-TERM IMPACTS OF MILITARY OVERFLIGHTS ON CARIBOU DURING CALVING SEASON. Journal of Wildlife Management, 2005, 69, 1133-1146. | 1.8 | 8 |
| 92 | GEOGRAPHIC PATTERN OF SERUM ANTIBODY PREVALENCE FOR BRUCELLA SPP. IN CARIBOU, GRIZZLY BEARS, AND WOLVES FROM ALASKA, 1975â€“1998. Journal of Wildlife Diseases, 2006, 42, 570-577. | 0.8 | 8 |
| 93 | Mammalâ€eating killer whales and their preyâ€”trend data for pinnipeds and sea otters in the North Pacific Ocean do not support the sequential megafaunal collapse hypothesis. Marine Mammal Science, 2009, 25, 737-747. | 1.8 | 8 |
| 94 | A Bayesian hierarchical model of Antarctic fur seal foraging and pup growth related to sea ice and prey abundance. Ecological Applications, 2012, 22, 668-684. | 3.8 | 8 |
| 95 | Using hidden Markov chains and empirical Bayes change-point estimation for transect data. Environmental and Ecological Statistics, 1997, 4, 247-264. | 3.5 | 7 |
| 96 | A Bayesian Analysis of Abundance, Trend, and Population Viability for Harbor Seals in Iliamna Lake, Alaska. Risk Analysis, 2018, 38, 1988-2009. | 2.7 | 7 |
| 97 | Calibrating and adjusting counts of harbor seals in a tidewater glacier fjord to estimate abundance and trends 1992 to 2017. Ecosphere, 2020, 11, e03111. | 2.2 | 7 |
| 98 | Species density models from opportunistic citizen science data. Methods in Ecology and Evolution, 2021, 12, 1911-1925. | 5.2 | 7 |
| 99 | Discretized and Aggregated: Modeling Dive Depth of Harbor Seals from Ordered Categorical Data with Temporal Autocorrelation. Biometrics, 2012, 68, 965-974. | 1.4 | 6 |
| 100 | Spatially Estimating Disturbance of Harbor Seals (Phoca vitulina). PLoS ONE, 2015, 10, e0129798. | 2.5 | 6 |
| 101 | Relationship between horizontal pattern and vertical structure in a chalk grassland. , 1990, , 147-155. | | 6 |
| 102 | A comparison of designâ€based and modelâ€based approaches for finite population spatial sampling and inference. Methods in Ecology and Evolution, 2022, 13, 2018-2029. | 5.2 | 6 |
| 103 | Practical considerations for experimental designs of spatially autocorrelated data using computer intensive methods. Statistical Methodology, 2012, 9, 172-184. | 0.5 | 5 |
| 104 | SSNdesignâ€”An R package for pseudo-Bayesian optimal and adaptive sampling designs on stream networks. PLoS ONE, 2020, 15, e0238422. | 2.5 | 5 |
| 105 | Application of a Bayesian hierarchical model to estimate trends in Atlantic harbor seal (<scp>Phoca vitulina vitulina</scp>) abundance in Maine, U.S.A., 1993â€“2018. Marine Mammal Science, 2022, 38, 500-516. | 1.8 | 5 |
| 106 | Adjusting a finite population block kriging estimator for imperfect detection. Environmetrics, 2021, 32, . | 1.4 | 4 |
| 107 | A linear mixed model formulation for spatio-temporal random processes with computational advances for the product, sum, and productâ€“sum covariance functions. Spatial Statistics, 2021, 43, 100510. | 1.9 | 4 |
| 108 | Body size of female calves and natality rates of known-aged females in two adjacent Alaskan caribou herds, and implications for management. Rangifer, 2003, 23, 203. | 0.6 | 2 |

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|---|---|---|---|
| 109 | When to be discrete: the importance of time formulation in understanding animal movement. Movement Ecology, 2014, 2, 21. | 2.8 | 1 |
| 110 | Modeling growth of mandibles in the Western Arctic caribou herd. Rangifer, 2001, 21, 29. | 0.6 | 1 |
| 111 | Collaboration with Nlaka'pamux communities to examine metal deposition on soapberry in interior British Columbia. Ecosphere, 2021, 12, . | 2.2 | 1 |
| 112 | Comment on article by Gelfand et al. Bayesian Analysis, 2006, 1, 99. | 3.0 | 0 |