

Ruth Joy PhD

• • • ASSISTANT PROFESSOR • • •

School of Environmental Science, Simon Fraser University, 8888 University Drive, Burnaby, BC, Canada, V5A 1S6

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Education

Simon Fraser University

Burnaby, BC

PHD STATISTICS

2010 - 2013

- Advisor: Dr. Richard Routledge
PhD Thesis: Methodology for analysing at-sea dive behaviour of a marine mammal

Simon Fraser University

Burnaby, BC

MSc STATISTICS

2000 - 2002

- Advisor: Dr. Richard Routledge
MSc Thesis: Assessing infilling methods for missing data in spawning salmon estimates

University of Victoria

Victoria, BC

BSc BIOLOGY (Co-Op)

1991 - 1996

Professional Experience

- 2023+ **Assistant Professor**, School of Environmental Science, SFU
- 2021-2023 **Assistant Professor Practitioner**, School of Environmental Science, SFU
- 2022-2027 **Adjunct Professor**, Faculty of Graduate Studies (Computer Science), Dalhousie University
- 2020-2025 **Adjunct Professor**, Department of Statistics and Actuarial Science, SFU
- 2014-2020 **Senior Marine Mammal Consultant**, SMRU Consulting, St Andrews University, Scotland
- 2010-2013 **PhD Student**, Department of Statistics and Actuarial Science, SFU
- 2002-2010 **Biostatistician**, Institute for the Oceans and Fisheries, University of British Columbia
- 2000-2002 **MSc Student**, Department of Statistics and Actuarial Science, Simon Fraser University
- 1996-2000 **Biologist**, Ministry of Environment, Nanaimo Regional Office, British Columbia

Research Experience

University of St Andrews University, SMRU Consulting Ltd.

Vancouver, BC

POSITION: SENIOR RESEARCH SCIENTIST

2014 - 2020

University of British Columbia, Institute for the Oceans and Fisheries

Vancouver, BC

POSITION: BIOSTATISTICIAN

2002 - 2005; 2008 - 2010

University of British Columbia, Centre for Excellence in HIV/AIDS

Vancouver, BC

POSITION: BIOSTATISTICIAN

2005 - 2008

Academic Awards

- 2024 **Dean's Award for Excellence in Graduate Supervision**, Faculty of Graduate Studies, SFU
- 2024 **Dean's Award of Excellence in Graduate Student Mentorship**, Faculty of Environment, SFU
- 2022 **Dean's Award of Excellence in Research**, Faculty of Environment, SFU

Grants & Scholarships

MORE THAN \$7 MILLION IN RESEARCH GRANTS AWARDED TO RUTH JOY AND COLLABORATORS

2025-2026	MITACS , Awarded to MSc student, Lauren Laturnus, Port of Vancouver ECHO Program	\$90,000
2025-2026	Mitlenatch Cormorant and Gull Research , BC Parks	\$5,000
2025-2026	Institutional Research Infrastructure Support (IRIS) , VPRI Office, Simon Fraser University	\$100,000
2025-2026	Digital Research Alliance of Canada , Resources for Research Groups competition	\$20,826
2025-2031	NSERC CREATE Grant , Government of Canada	\$1.65 million
2025-2026	Embassy of France in Canada Travel Fund ,	\$5,000
2024-2026	Provincial Long-Term Ecological Monitoring Contract , BC Parks	\$77,000
2024-2027	CANSSI Collaborative Research Team Grant , Awarded to UBC: A. Bouchard-Côté & T. Campbell, SFU: L. Wang & R. Joy	\$210,000
2024-2025	MITACS , Awarded to MSc student, J. McNeilly, Raincoast Conservation Foundation	\$15,000
2024	MITACS , Awarded to MSc student, L. Laturnus, ECHO Program, Port of Vancouver	\$10,000
2024-2026	Liber Ero Postdoc , Awarded to Peter Thompson, Liber Ero Fellowship Program	\$170,000
2024	MITACS Globalink , Awarded to Andrea Mendez-Bye, MITACS Student Mobility	\$6,000
2023-2024	Saturna Island - Analysis of Conservation Measures , Transport Canada	\$90,400
2023-2024	Oil Spill Response, Conservation and Protection , Fisheries and Oceans Canada	\$51,750
2023-2025	MITACS , Awarded to MSc student A. Houweling, JASCO Applied Sciences	\$95,000
2022-2026	Canada Nature Fund , Fisheries and Oceans Canada	\$1.5 million
2022-2026	France Canada Research Fund and PhD Student Grant , French Embassy and Ministry of Higher Education, Research and Innovation	\$112,000
2022-2024	NSERC MITACS Alliance Grant , ECHO Program, Vancouver Fraser Port Authority	\$70,000
2022-2023	Environment and Climate Change Canada , Canadian Wildlife Service	\$36,209
2022	MITACS , Awarded to MSc student, J. Cormier, City of Port Moody	\$15,000
2022-2023	Ocean and Freshwater Science Contribution Grant , Fisheries and Oceans Canada	\$70,000
2021-2026	NSERC Discovery Grant , with Discovery Launch Supplement	\$152,500
2021-2024	NSERC DND Grant Supplement , Department of National Defence	\$120,000
2021	Habitat Conservation Trust Fund , BC Ministry of Environment and Climate Change	\$52,000
2021	MITACS , MSc student K. Baril, Saturna Island Marine Research and Education Society	\$15,000
2021	MITACS , MSc student A. Gheibi, Port of Vancouver ECHO Program	\$15,000
2021	MITACS , MSc students M. Bouvier & V. Rani, CETUS Research and Conservation Society	\$30,000
2020-2022	Ocean and Freshwater Science Contribution Grant , Fisheries and Oceans Canada	\$970,000
2020	Canadian Wildlife Service Equipment Grant , Environment and Climate Change Canada	\$35,000
2019-2022	Ocean and Freshwater Science Contribution Grant , Fisheries and Oceans Canada	\$1.1 million
2019-2020	MITACS , Awarded to MSc student L. Quayle, SMRU Consulting Ltd	\$60,000
2017-2020	Habitat Conservation Trust Foundation , Public Assistance Fund	\$7,000
2016-2019	National Geographic Society Waitt Grant , Waitt Foundation	\$15,000
2014-2016	Elevate Post-doctorate Fellowship , MITACS	\$120,000
2006-2009	Canadian Institute of Health Research Grant (R111) , Health Canada	\$143,550

GRADUATE SCHOLARSHIPS TO RUTH JOY

2010-2013	Hakai Network Research Scholarship , PhD award, Tula Foundation
2010-2012	Canadian Graduate Scholarship , PhD award, NSERC
2010-2012	Provost Award of Distinction , PhD award, Simon Fraser University
2000-2002	Canadian Graduate Scholarship , MSc award, NSERC
2000	Graduate Entrance Scholarship , MSc award, Simon Fraser University

Graduate Student and Postdoc Supervision ---

POSTDOCTORAL FELLOWS

2024 +	Peter Thompson , School of Environmental Science	SFU
2023 +	Bruno Padovese , School of Environmental Science	SFU
2024 - 2025	Kaitlin Palmer , School of Environmental Science	SFU
2020 - 2023	Paul Nguyen Hong Duc , Co-supervised, School of Math and Statistics, Carlton U	SFU
2019 - 2022	Marine Randon , Department of Statistics	SFU

GRADUATE STUDENTS

2024 +	Dylan Smyth , MSc Co-supervised with Marine Biology, U Algarve	SFU
2024 +	Lauren Laturnus , MSc Co-supervised with Biological Science, SFU	SFU
2024 +	Teng-Wei Lin , PhD Statistics	SFU
2023 +	Andrea Mendez-Bye , PhD Co-supervised with Ecology Dept, U La Rochelle	SFU
2023 +	Lindsay Lalach , MSc Co-supervised with Biological Sciences	SFU
2021 +	Fábio Frazão , PhD Co-supervised with Statistics and Mathematics	Dalhousie U
2024-2025	Mathias Pouly , MSc Co-supervised with Biology Dept, U Strasbourg	SFU
2023-2025	April Houweling , MSc Statistics	SFU
2024-2025	Marius Clabaux , MSc Co-supervised with Marine Ecology and Applied Data-Sciences	U Bretagne-O
2024-2025	Clément Grandidier , MSc Co-supervised with Math, Biology and Computer Science	INSA Lyon
2022-2024	Janine McNeilly , MSc Ecological Restoration	SFU
2022-2024	Sam Broadley , MSc Ecological Restoration	SFU
2022-2024	Mikayla Young , MSc Ecological Restoration	SFU
2022-2024	Rachel Fairfield Checko , MSc Ecological Restoration	SFU
2021-2023	Teng-Wei Lin , MSc Statistics	SFU
2021-2023	Joseph Cormier , MSc Ecological Restoration	SFU
2021-2023	Olivia Murphy , MSc Ecological Restoration	SFU
2021-2023	Rachel Stapleton , MSc Ecological Restoration	SFU
2020-2022	Kaitlin Baril , MSc Ecological Restoration	SFU
2020-2022	Madie Bouvier , MSc Ecological Restoration	SFU
2020-2022	Azadeh Gheibi , MSc Ecological Restoration	SFU
2020-2022	Varsha Rani , MSc Ecological Restoration	SFU
2020-2022	Rosalin Wilkin , MSc Ecological Restoration	SFU
2019-2021	Kathleen Meszaros , MSc Ecological Restoration	SFU
2019-2021	Macus Ong , MSc Ecological Restoration	SFU
2019-2021	Lucy Quayle , MSc Ecological Restoration	SFU
2018-2020	Okezi Akporuno , MSc Ecological Restoration	SFU
2018-2020	Madeleine Edmonds , MSc Ecological Restoration	SFU
2018-2020	Alex Harris , MSc Ecological Restoration	SFU

RESEARCH ASSISTANTS

2025	Hannah Berry , Ugrad summer Research Assistant (R.A.), School of Environmental Science	SFU
2025	Saniya Parmar , Ugrad summer R.A., School of Environmental Science	SFU
2025	Kassandra Chavarria Sosa , Ugrad summer R.A., School of Environmental Science	SFU
2024-2025	Dhanvi Desai , Ugrad summer R.A., Statistics	SFU
2024	Leah Egery-Haley , Ugrad R.A., School of Environmental Science	SFU
2023-2024	Olivia Murphy , Graduate R.A., School of Environmental Science	SFU
2023	Jessiquence Tang , Ugrad summer R.A., School of Environmental Science	SFU
2023	Claudia Cristescu , Ugrad R.A., School of Environmental Science	SFU
2023	Lauren McKay , Ugrad R.A., School of Environmental Science	SFU
2022-2024	Lauren Laturnus , Ugrad R.A., School of Environmental Science	SFU
2021-2022	Laurence Cojocar , Ugrad Co-op Student, Department of Statistics	SFU
2021	Lucy Quayle , Grad R.A., School of Environmental Science	SFU
2020-2021	Macus Ong , Grad R.A., School of Environmental Science	SFU
2020, 2021	Hoky Hsu , Ugrad Summer R.A., School of Environmental Science	SFU
2020-2021	Emma Cummings , Graduate R.A., School of Environmental Science	SFU

Graduate Student & Postdoc Awards

2025	April Houweling , Faculty of Environment's Excellence in Graduate Research & Engagement	SFU
2025	Lindsay Lalach , Biological Sciences Graduate Travel and Research Award	SFU
2024	April Houweling, Lauren Laturnus, Lucy Quayle with SGIWSN , The Nightingale Award in Ocean Engagement	Raincoast Conservation Foundation
2024	Lindsay Lalach , BISC Graduate Student Society Professional Development Grant	SFU
2024	Lindsay Lalach , Environmental Science Scholarship	SFU
2024	April Houweling , Environmental Science Scholarship	SFU
2024	Janine McNeilly , Faculty of Environment's Excellence in Graduate Research & Engagement	SFU
2024-2026	Peter Thompson , Liber Ero Postdoctoral Fellowship	SFU
2023	Janine McNeilly , Graduate Research Award in Environmental Science	SFU
2023	Samantha Broadley , Graduate Research Award in Environmental Science	SFU
2023	Fabio Frazao , Ocean Networks Canada, Roy Hyndman Ocean Observing Award	ONC
2023	Rachel Stapleton , Faculty of Environment Excellence in Graduate Research Award	SFU
2022	Rachel Stapleton , Rudy North Academic Bursary	BCIT
2021	Marine Randon , Best poster award at SFU Postdoc Research Day	SFU
2021	Marine Randon , Runner-up writing award at SFU Postdoc Research Day	SFU
2020	Joe Watson , Student presentation award, International Statistical Ecology Conference	ISEC
2020	Macus Ong , Runner-up photography award in BBC Photo Magazine, November 2020	BBC

Service

SERVICE TO THE DEPARTMENT, UNIVERSITY AND LOCAL COMMUNITY

- 2025 **Adjudication Committee, Dean of Graduate Studies' Awards for Excellence**, Member
- 2024-2025 **Undergraduate Committee Curriculum, School of Environmental Science**, Member
- 2024-2025 **Seminar Series Committee**, Member
- 2021-2025 **Ecological Restoration Graduate Program, School of Environmental Science**, Chair
- 2021-2024 **Coastal Marine Science and Management Ugrad Curriculum Committee**, Chair
- 2023-2024 **Justice, Equity, Diversity and Inclusivity Committee**, Member
- 2022-2025 **Frontiers in Marine Science, Marine Conservation and Sustainability**, Editorial Board
- 2022-2023 **BC NoiseTracker Technical Committee**, Member
- 2020-2023 **International Biometric Society, Western North American Region (WNAR)**, Board Member
- 2020-2023 **International Biometric Society, Western North American Region (WNAR)**, Board Member
- 2021-2026 **Pacific Wildlife Foundation**, Associate Member
- 1999-2025 **Breeding Bird Surveys/Breeding Bird Atlas**, Volunteer with Bird Studies Canada
- 1990-2024 **Christmas Bird Counts**, Volunteer with National Audubon Society
- 2007-2017 **Bat inventory for the Whistler Bioblitz**, Volunteer with Whistler Naturalists
- 2006-2017 **Public event: 'Wings on their Fingers'**, Volunteer with Meadowlark Nature Festival

CURRICULUM DEVELOPMENT

- 2021-2024 **Marine and Coastal Science and Management Program**,
Curriculum development for cross-disciplinary undergraduate degree

Teaching Experience

GRADUATE COURSES

- 2025 **EVSC 691: Ocean Bioacoustics**, Instructor
- 2018-2023 **EVSC 645: Environmental Data Analysis**, Instructor
- 2023 **INTE 7000: Acoustic Data Analysis**, Instructor
- 2019-2022 **ECO 611: Concepts of Restoration and the Biological Environment**, Instructor
- 2019 **ECO 600: Rewilding agricultural ecosystems**, Instructor

UNDERGRADUATE COURSES

- 2025 **EVSC 100: Introduction to Environmental Science**, Instructor
- 2024-2025 **EVSC 206 / 395: Coastal Marine Science**, Instructor
- 2021 - 2025 **EVSC 445: Environmental Data Analysis**, Instructor

Professional Development

CANADIAN SCIENCE ADVISORY SECRETARIAT (C-SAS) PEER REVIEW

- 2025 **C-SAS regional review for Department of Fisheries and Oceans**, "Seasonal distribution, density and abundance of at-risk cetacean species in the southern Salish Sea and on Swiftsure Bank"

PROFESSIONAL MEMBERSHIPS

The Association of Professional Biologists of B.C., Registered Professional Biologist since
Society of Marine Mammology, Member
Pacific Seabird Group, Member

since 1999

Peer-reviewed Publications

- Lin⁺, T.W., M.G. Dowd and **R. Joy**. 2025. Forecasting Trajectories of Southern Resident Killer Whales with Stochastic Movement Models Incorporating Direction Modification. *Ecological Modelling*.
- Palmer⁺, K.J., E. Cummings⁺, K. Frasier, F. Frazão⁺, A. Harris⁺, A. Houweling⁺, J. Kanes, H. Klinck, H. LeBlond, A.A. Leu, L. Laturnus⁺, C. Matkin, O. Murphy⁺, H. Myers, D. Olsen, B. Padovese⁺, J. Pilkington, L. Quayle⁺, A.R. Vuibert, K. Trounce, S. Veirs, V. Veirs, J. Wladichuk, H. Yurk, and **R. Joy**. 2025. Annotated *Orcinus orca* Acoustic Dataset for Detection and Ecotype Classification. *Nature: Scientific Data*.
- Frazão⁺, F., **R. Joy** and M. Dowd. 2025. Comparing acoustic representations for deep learning-based classification of underwater acoustic signals: a case study for orca (*Orcinus orca*) vocalizations. *Ecological Informatics*.
- Chimienti, M., A. Kato, V. Seydi, S. Schoombie, J.T. Hinke, **R. Joy**, D. Lidgard, C. Oosthuizen, Y.P. Papastamatiou, Y. Ropert-Coudert, A. Takahashi, J.-B. Thiebot, M. Visani, M. Coustaty, T. Jeanniard du Dot. 2025. Reviewing Seas of Data: Integrating Image-Based Bio-logging and Artificial Intelligence to Enhance Marine Conservation. *Methods in Ecology and Evolution*.
- Joy, R.**, K. Roessingh, K. Meszaros⁺, A. Miscampbell, C. Ritland, M. Hayes, G. Ivey, M. Petrula, J.B. Joy. 2025. Deciphering cryptic population structure in Western Sandhill Crane subspecies (*Antigone canadensis*) of the Pacific Flyway. *Ecology and Evolution*.
- Stapleton⁺, R., L.L.E. Cowen, G.T.W. McClelland, S.J.R. Broadley⁺, and **R. Joy**. 2025. Applying photogrammetry and multi-event modeling to determine effects of predation on seabird colony nest success. *Endangered Species Research*.
- Wilkin⁺, R., J. Anderson, I. Sahay, M. Ong⁺, S.J.R. Broadley⁺, M. Gonse⁺, G.T.W. McClelland, and **R. Joy**. 2025. Vantage point photography and deep learning methods save time in monitoring seabird nesting colonies. *Ornithological Applications*.
- Millikin, R.L., T. Manning, **R. Joy**, D. Henderson, M. Harrison, J. Komaromi, and B. Danielson. 2025. Evaluation of a drone to map and monitor critical habitat for the Sage Thrasher, *Oreoscoptes montanus*. *Drone Systems and Applications*.
- Duc⁺, P.N.H., Campbell, D.A., Dowd, M. and **R. Joy**. 2024. Functional data analysis to describe and classify southern resident killer whale calls. *Ecological Informatics*, p.102841. <https://doi.org/10.1016/j.ecoinf.2024.102841>
- Clarke, C.M.K., V. Rani⁺, E. Stredulinsky, S. Toews, M. Bouvier⁺, D. Smyth, **R. Joy**, S.J. Thornton. 2024. Assessing the efficacy of ecological reserves: killer whale beach rubbing behaviour and vessel disturbance. *Endangered Species Research*.
- Ryder, M., C. Booth, C. Oedekoven, T. Marques, **R. Joy**, and D. Harris. 2023. Passive acoustic monitoring power analysis: A tool for designing an acoustic monitoring program. In: Popper, A.N., Sisneros, J., Hawkins, A.D., Thomsen, F. (eds) *The Effects of Noise on Aquatic Life*. Springer, Cham.
- Randon⁺, M., M. Dowd, and **R. Joy**. 2022. A real-time data assimilative forecasting system for animal tracking. *Ecology*. pe3718.
- Joy, R.**, R. S. Schick, M. Dowd, T. Margolina, J. E. Joseph and L. Thomas. 2022. A fine-scale marine mammal movement model for assessing long-term aggregate noise exposure. *Ecological Modelling*. 493:109798.
- Watson, J., **R. Joy**, D. J. Tollit, S. J. Thornton, and M. Auger-Méthé. 2021. Estimating animal utilization distributions from multiple data types: A joint spatiotemporal point process framework. *Annals of Applied Statistics*. 15(4): 1872-1896.
- Williams, R., E. Ashe, L. Yruretagoyena, N. Mastica, M. Siple, J. Wood, **R. Joy**, R. Langrock, S. Mews, E. V. Finne. 2021. Reducing vessel noise benefits foraging in endangered killer whales. *Marine Pollution Bulletin*. 173:00-00.
- De Groot, K. L., A. N. Porter, A. R. Norris, A. C. Huang, and **R. Joy**. 2021. Seasonal patterns of bird-window collisions at a Pacific coast site and high vulnerability of the Varied Thrush (*Ixoreus naevius*) in winter. *Ornithological Applications*. 123(3): 1-15.
- Trounce, K., O. Robinson, A. MacGillivray, D. Hannay, J. Wood, D.J. Tollit, and **R. Joy**. 2020. The effects of vessel slowdowns on foraging habitat of the southern resident killer whales. *Proceedings of the Meetings on Acoustics (POMA)*. vol. 37, no. 1, p. 070009.
- Millikin, R., **R. Joy**, J. Komaromi, M. Harrison, P. Krannitz, N. Mahony, M. Vander Haegen. 2020. Critical habitat identification of peripheral Sage Thrashers under climate change. *Conservation Science and Practice*. 2(12), p.e290.
- Wilson, L.J., J. Harwood, C.G. Booth, **R. Joy**, and C.M. Harris. 2020. A decision framework to identify populations that are most vulnerable to the population level effects of disturbance. *Conservation Science and Practice*. 2(2), p.e149.
- Joy, R.**, D.J. Tollit, J. Wood, A. MacGillivray, Z. Li, K. Trounce and Orla Robinson. 2019. Benefits of vessel slowdowns on endangered southern resident killer whales. *Frontiers of Marine Science*, 6: 344-363.

- Tollit, D.J., **R. Joy**, J. Wood, A. Redden, C. Booth, T. Boucher, P. Porskamp and M. Oldreive. 2019. Effects of tidal turbine installation and operations on harbor porpoise in Minas Passage, Bay of Fundy. *The Journal of Ocean Technology*, 14: 22-48.
- Joy, R.**, J. Wood, C Sparling, D. J. Tollit, A. Copping, and B. McConnell. 2018. Harbor seal behavior and avoidance of an operational tidal turbine. *Marine Pollution Bulletin*, 136: 92-106.
- Malinka, C., D. Gillespie, J. MacAulay, **R. Joy**, and C. Sparling. 2018. First in-situ passive acoustic monitoring for marine mammals during operation of a tidal turbine. *Marine Ecology Progress Series*. 590: 247-266.
- Tollit, D.J., L. Fritz, **R. Joy**, K. Miller, A. Schulze, J. Thomason, W. Walker, T. Zeppelin, and T.S. Gelatt. 2017. Diet of endangered Steller sea lions in the Aleutian Islands: New insights from DNA detections and bio-energetic reconstructions. *Canadian Journal of Zoology*, 95(11): 853-868.
- Ainsworth, L.M., C.B. Dean, and **R. Joy**. 2016. Zero-inflated spatial models: application and interpretation. *International Symposium in Statistics 2015. Proceedings Volume on Advances and Challenges in Parametric and Non-parametric Analysis of Correlated Data*. Springer New York, NY. 75 - 96 pp.
- Joy, R.**, M.G. Dowd, B.C. Battaile, P.M. Lestenkof, J.T. Sterling, A.W. Trites, and R.D. Routledge. 2015. Linking northern fur seal dive behavior to environmental variables in the eastern Bering Sea. *Ecosphere*. 6 (5): 75. DOI 10.1890/ES14-00314.1
- Savo, V., **R. Joy**, G. Caneva, and W.C. McClatchey. 2015. Plant selection for ethnobotanical uses on the Amalfi Coast (Southern Italy). *Journal of Ethnobiology and Ethnomedicine*. 11(1): 58. DOI: 10.1186/s13002-015-0039-y.
- Muir, J.E., **R. Joy**, Y. Bychkov, K. Bröker, G. Gailey, V. VLadimirov, S. Starodymov and G. Gailey. 2015. Delineation of a coastal gray whale feeding area using opportunistic and systematic survey effort. *Endangered Species Research*. 29(2): 147-160.
- Muir, J.E., L. Ainsworth, **R. Joy**, R. Racca, Y. Bychkov, G. Gailey, V. VLadimirov, S. Starodymov, and K. Bröker. 2015. Distance from shore of gray whales during a seismic survey off Sakhalin Island, Russia. *Endangered Species Research*. 29(2), pp.161-178. DOI: 10.3354/esr00701
- Chatwin, T.A., **R. Joy**, and A.E. Burger. 2013. Set-back distances to protect nesting and roosting seabirds off Vancouver Island from boat disturbance. *Waterbirds*. 36 (1): 42–51.
- Fahlman, A., S.H. Loring, M. Ferrigno, C. Moore, G. Early, M. Niemeyer, B. Lentell, F. Wenzel, **R. Joy**, and M. Moore. 2011. Inflation and deflation pressure-volume loops in breath-hold diving marine mammals. *Journal of Experimental Biology*. 214: 3822-3828.
- Dowd, M., and **R. Joy**. 2011. Estimating behavioural parameters in animal movement models using a state-augmented particle filter. *Ecology*. 92: 568–575.
- Svärd C., A. Fahlman, D.A.S. Rosen, **R. Joy**, and A.W. Trites. 2009. Fasting affects the surface and diving metabolic rates of Steller sea lions (*Eumetopias jubatus*). *Aquatic Biology*. 8: (71-82).
- Joy, R.**, and J. Muir. 2009. Hybrid spatial approach for the estimation of a perimeter monitoring line in Report of the small specialist workshop to determine the perimeter monitoring line, IUCN Headquarters, Gland, Switzerland. 23-26 October 2009.
- Joy, R.**, E.F. Druyts, E.K. Brandson, V.D. Lima, C.A. Rustad, W. Zhang, E. Wood, J.S.G. Montaner, and R.S. Hogg. 2008. Impact of Neighborhood-Level Socioeconomic Status on HIV Disease Progression in a Universal Health Care Setting. *Journal of AIDS*. 47 (4): 500-505.
- Joy, R.**, D.J. Tollit, J. Laake and A.W. Trites. Using Feeding Trials and Computer Simulations to assess error and bias in scat analysis. 2006. In A.W. Trites, S. Atkinson, D.P. DeMaster, L.W. Fritz, T.S. Gelatt, L.D. Rea and K. Wynne (eds), *Sea Lions of the World*. Alaska Sea Grant College Program, University of Alaska, Fairbanks. pp. 205-222.
- Tollit, D.J., S.G. Heaslip, B.E. Deagle, S.J. Iverson, **R. Joy**, D.A. Rosen, and A.W. Trites. Estimating diet composition in sea lions: which technique to choose. 2006. In A.W. Trites, S. Atkinson, D.P. DeMaster, L.W. Fritz, T.S. Gelatt, L.D. Rea and K. Wynne (eds), *Sea Lions of the World*. Alaska Sea Grant College Program, University of Alaska, Fairbanks. pp. 293-307.
- Harris M., **R. Joy**, G. Larsen, M. Valyi, E. Walker, LW Frick, R.M. Palmatier, S.A. Wring, and J.S. Montaner. 2006. Enfuvirtide plasma levels and injection site reactions using a needle-free gas-powered injection system (Biojector). *AIDS*. 20(5):719-723.
- Palepu, A., M.W. Tyndall, **R. Joy**, T. Kerr, E. Wood, N. Press, R.S. Hogg, and J.S. Montaner. 2006. Antiretroviral adherence and HIV treatment outcomes among HIV/HCV co-infected injection drug users: the role of methadone maintenance therapy. *Drug and Alcohol Dependence*. 84(2):188-194.

- Moore, D., R. Copes, R. Fisk, **R. Joy**, K.Chan, and M. Brauer. 2005. Population health effects of air quality changes due to forest fires in British Columbia in 2003: Estimates from physician-visit billing data. *Canadian Journal of Public Health*. 97(2):105-8.
- Trites, A.W., and **R. Joy**. 2005. Dietary analysis from fecal samples: How many scats are enough? *Journal of Mammology*. 86(44), 704-712.
- Tollit, D.J., S.G. Heaslip, T.K. Zeppelin, **R. Joy**, K.A. Call, and A.W. Trites. 2004. A method to improve size estimates of walleye pollock and Atka mackerel consumed by pinnipeds using digestion correction factors applied to bones and otoliths recovered in scats. *Fishery Bulletin*, 102(3) 498-508.
- von Dadelszen, P., S. Kives, M.F. Delisle, R.D. Wilson, **R. Joy**, L. Ainsworth, L.A. Kharusi, M. Oskamp, J.F.R. Barrett, G. Ryan, D. Farine, and P.G.R. Seaward. 2003. Evaluation of predictors of latency, clinical chorioamnionitis, postpartum fever and neonatal infection in twin pregnancies complicated by preterm prelabor rupture of membranes. *Twin Research*. 6(4): 257-262.
- Buchanan, S., J. Fraser, T. Farrell, P. Gallagher, **R. Joy**, and R. Routledge. 2002. Reducing gillnet mortality of incidentally caught coho salmon. *North American Journal of Fisheries Management*. 22: 1270-1275.
- Hay, D.E., P.B. McCarter, **R. Joy**, M. Thompson, and K. West. 2001. Fraser River Eulachon Biomass Assessments and Spawning Distribution: 1995-2002. Canadian Science Advisory Secretariat Research Document – 2002/117. 58pp.
- van den Driessche, R.***, M. Mather, and T.A. Chatwin. 2001. Habitat Selection by bats in temperate old-growth forests, Clayoquot Sound, British Columbia. *Proceedings of the Species and Habitats at Risk Conference*. February 15-18, 1999. Ministry of Environment, Lands and Parks.
- Chatwin, T.A., and **R. van den Driessche***. 1996. Long-term effects of prescribed fire in a grassland ecosystem of central British Columbia. *Proceedings of the 61st North American Wildlife and Natural Resources Conference*, Tulsa, Oklahoma.
- van den Driessche, R.***, S.D. McConnell and T.D. Hooper. 1994. First confirmed breeding record for Upland Sandpiper, *Bartramia longicauda*, in British Columbia. *Canadian Field Naturalist*. 108: 89-91.
- McConnell, S.D., **R. van den Driessche***, T.D. Hooper, A. Roberts and G. Roberts. 1993. First sight and breeding record of Sprague's Pipit, *Anthus spragueii*, in British Columbia. *Canadian Field Naturalist*. 107: 222-223.

TECHNICAL & GOVERNMENT REPORTS (60)

** mentored student/postdoc; * My last name changed to Joy from van den Driessche*

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- Murphy⁺, O., L. Laturnus⁺, L. Egery-Haley⁺, D. Desai⁺, and **R. Joy**. 2024. How to effectively measure and enforce marine vessel noise disturbance for marine mammals: Underwater Noise Disturbance Literature Review. Technical report prepared by the School of Environmental Science, Simon Fraser University for the Fisheries and Oceans Canada, Conservation and Protection.
- Laturnus⁺, O., M. Murphy⁺, L. Egery-Haley⁺, D. Desai⁺, and **R. Joy**. 2024. How to effectively measure and enforce marine vessel speed regulations for marine mammals: Vessel Speed Literature Review. Technical report prepared by the School of Environmental Science, Simon Fraser University for the Fisheries and Oceans Canada, Conservation and Protection.
- Young⁺, M., R. Fairfield Checko⁺, O. Murphy⁺, L. Laturnus⁺, A. Gheibi⁺, K. Baril⁺, L. Quayle⁺ and **R. Joy**. 2024. Boundary Pass 2023 Land-based Cetacean Observations: ECHO Program 2022 Slowdown Evaluation. Technical report prepared by the School of Environmental Science, Simon Fraser University for the Vancouver Fraser Port Authority.

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- Laternus⁺, L., L. McKay⁺, C. Cristescu⁺, and **R. Joy**. 2024. How to effectively measure and enforce approach distances between marine mammals and vessels. Technical report prepared by the School of Environmental Science, Simon Fraser University for Fisheries and Oceans Canada, Conservation and Protection Program.
- Murphy⁺, O., R. Fairfield Checko⁺, M. Young⁺, L. Laternus⁺, T.-W. Lin⁺, B. Padovese⁺ and **R. Joy**. 2023. Analysis of Southern Resident Killer Whale Management Measures Surrounding Saturna Island. Technical report prepared by the School of Environmental Science, Simon Fraser University for Whale Protection Policy – West Coast Branch, Transport Canada.
- Murphy⁺, O., L. Laternus⁺, A. Gheibi⁺, K. Baril⁺, L. Quayle⁺ and **R. Joy**. 2022. Boundary Pass 2022 Land-based Cetacean Observations: ECHO Program 2022 Slowdown Evaluation. Technical report prepared by the School of Environmental Science, Simon Fraser University for the Vancouver Fraser Port Authority.
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- Roessingh, K., and **R. Joy**. 2019. Feathers for Phylogenetics: Divergence in Western Sandhill Cranes. Prepared for National Geographic Society.
- Wood, J., **R. Joy**, and D.J. Tollit. 2019. Southern Resident Killer Whale Habitat Use Phase II and Salmon Data Synthesis. Prepared by SMRU Consulting for the Ecosystem Sciences Division, Science Branch, Department of Fisheries and Oceans.
- Watson, J., M. Auger-Methe, **R. Joy**, J. Wood, D.J. Tollit and S. Thornton. 2019. Improving regional space use using effort-corrected sightings data. Prepared by SMRU Consulting for the Ecosystem Sciences Division, Science Branch, Department of Fisheries and Oceans.
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- Tollit, D. J., and **R. Joy**. 2018. Validation of diet reconstruction: Predation by harbour Seals on salmon smolts. Prepared for the Pacific Salmon Foundation.
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- Pickard, D., A.W. Hall, and **R. Joy**. 2016. Recommendations for improved implementation of the Forest and Range Evaluation Program (FREP) Sampling Design. Prepared for Ministry of Forests.
- Tollit, D.J., **R. Joy**, and J. Wood. 2016. A comparison of Southern Resident killer whale response to noise from commercial vessels and whale watch boats. Prepared for the ECHO Program of Port of Metro Vancouver.
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- Joy, R.** J. Wood, and B. Miller. 2015. The response of Chinese white dolphins to construction related to the Hong Kong-Zhuai-Macao bridge: a synopsis. Prepared for the Hong Kong Port.
- Wood, J., **R. Joy**, D.J. Tollit, and B. Miller. 2015. Killer Whale Behavioural Response Estimates to Commercial Vessel Traffic in the Western Juan de Fuca Strait. Prepared for Port Metro Vancouver.
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- van den Driessche, R.*** and T. Ethier. (eds.) 1997. Standardized inventory manual for components of British Columbia's Biodiversity (Vs 1.1): Small Mammals. Resources Inventory Committee, Ministry of Environment, Lands and Parks, Victoria, BC.
- van den Driessche, R.*** and T. Ethier. (eds.) 1997. Standardized inventory manual for components of British Columbia's Biodiversity (Vs 1.1): Macrofungi including the phyla Ascomycota and Basidiomycota. Resources Inventory Committee, Ministry of Environment, Lands and Parks, Victoria, BC.
- Ethier, T. and **R. van den Driessche***. (eds.) 1997. Standardized inventory manual for components of British Columbia's Biodiversity (Vs 1.1): Terrestrial Arthropods. Resources Inventory Committee, Ministry of Environment, Lands and Parks, Victoria, BC.

Invited Talks, Conference & Workshop Presentations _____

INVITED PRESENTATIONS

⁺ mentored student/postdoc

- Joy, R.** August 2025. *Statistics, Data Science, and AI to Enrich Whale Society and Conservation: A real-time forecasting system of whale movement in a busy commercial shipping corridor*. Invited Presentation at the Joint Statistical Meeting, Nashville, Tennessee.
- Joy, R.** July 2025. *Orcas on the Move: Forecasting movement of Southern Resident killer whales in the Salish Sea*. Invited Presentation at the Gordon Research Conference on Movement Ecology, Ventura, California.
- Joy, R.** June 2025. *WHALES NSERC CREATE : Whale Habitat & Acoustic Learning for Ecosystem Sustainability*. Pacific Ocean Neutrino Experiment (P-ONE) Collaboration Meeting. SFU Department of Physics.
- Padovese⁺, B., and F. Frazão⁺. May 2025. *Building an operational forecasting system for Southern Resident killer whales in the Salish Sea*. Invited Presentation to the Port of Vancouver, ECHO Program.

- Houweling⁺, A., **R. Joy** and R. Tibshirani. May 2025. *Machine Learning to Classify Southern Resident killer whale clicks in the Salish Sea*. Invited Presentation to the Port of Vancouver, ECHO Program.
- Lin⁺, T.-W., and P. Thompson⁺. February 2025. *HALLO: Building an operational forecasting system for southern resident killer whales*. Invited Presentation to the Port of Vancouver, ECHO Program.
- Joy, R.** November 2024. *Building an Operational Forecast System for Killer Whale Movement in the Salish Sea*. Department of Statistics Seminar Series, UBC.
- Murphy⁺, O., R. Fairfield Checko⁺, M. Young⁺, L. Laturnus⁺, T.-W. Lin⁺, B. Padovese⁺ and **R. Joy**. January 2024. *Analysis of Southern Resident Killer Whale Management Measures Surrounding Saturna Island*. Southern Resident Killer Whale Multi-Nation Tier II Meeting Hosted by Technical Whale Protection Policy – West Coast Branch, Transport Canada.
- Joy, R.** November 2023. *Orcas on the Move: Building an Operational Forecast System for SRKW Movement in the Salish Sea*. Department of Statistics Seminar Series, Simon Fraser University.
- Joy, R.** October 2023. *Eagle-eyed predators, Cormorant colonies and Balancing on bridges*. Pacific Wildlife Research Centre Seminar Series, Environment and Climate Change Canada.
- Joy, R.** September 2023. *Orcas on the Move: Building an Operational Forecast System for SRKW Movement in the Salish Sea*. School of Environmental Science Seminar Series, Simon Fraser University.
- Joy, R.** June 2023. *Forecasting Movement of Southern Resident Killer Whales in the Northeast Pacific*. Centre National de la Recherche Scientifique, Centre d'Études Biologiques de Chizé, Université de la Rochelle, France.
- Joy, R.** June 2023. *Forecasting Movement of Southern Resident Killer Whales in the Northeast Pacific*. École Nationale Supérieure de Techniques Avancées (ENSTA) Bretagne, France.
- Joy, R.** March 2023. *Orca Occupancy in the Salish Sea*. Vital Signs Workshop: Aligning Canada and US Metrics and Methods for Killer Whales of the Salish Sea.
- Joy, R.** February 2023. *Double-Crested Cormorants in the Salish Sea: Paradise Lost?* Les Ecologistes Seminar Series, Department of Biological Sciences, SFU.
- Joy, R.** November 2022. *Novel data inputs for forecasting movement of whales in the Salish Sea. Detecting and Monitoring Megafauna from Space: Exploring Opportunities for the Northeast Pacific*. Public Webinar, Ocean Decade Collaborative Center for the NE Pacific, Tula Foundation.
- Joy, R.**, S. Bergner, D. Campbell, M. Dowd, F. Frazão⁺, O. Kirsebom, P. Nguyen Hong Duc⁺, M. Randon⁺, A. Riera, S. Veirs, V. Veirs, J. Wladichuk⁺ and H. Yurk. December 2021. *Integrating visual and acoustic observations to build an 'intelligent' killer whale movement forecast system*. The Acoustical Society of America.
- Joy, R.** August 2021. *Challenges in building a Real-Time Forecast System for Movement of Whales Near Coastal Shipping Lanes*. SFU Big Data Hub: Advances in Marine Data Sciences Event.
- Joy, R.** December 2019. *Statistics in Science and Policy: A case study of the Southern Resident Killer Whales*. Departmental Seminar, Department of Statistics and Actuarial Science, SFU.
- Joy, R.** November 2019. *Statistics in Science and Policy: A case study of the Southern Resident Killer Whales*. Departmental Seminar, Department of Mathematics and Statistics, University of Victoria.
- Joy, R.** November 2018. *Managing Noise Disturbance in Southern Resident Killer Whale Habitat in the Salish Sea*. Pacific Wildlife Research Centre Seminar Series at Canadian Wildlife Service, ECCC.
- Joy, R.**, M.G. Dowd, B.C. Battaile, P.M. Lestenkof, J.T. Sterling, A.W. Trites, and R.D. Routledge. June 2016. *At-sea behaviour of northern fur seals in the Bering Sea*. International Statistical Ecology Conference.
- Joy, R.**, M.G. Dowd, B.C. Battaile, P.M. Lestenkof, J.T. Sterling, A.W. Trites, and R.D. Routledge. May 2015. *Methodology for analyzing at-sea dive behaviour of northern fur seals in the Bering Sea*. Peter Wall International Research Roundtable.
- Joy, R.** November 2014. *Statistical Interactions of Science with the Community*. Science World. Coastal Connections.

CONFERENCE CHAIR (1)

- Adrean, L. and **R. Joy**. February 2022. *Session Moderator, West Coast Offshore Wind Panel*. Pacific Seabird Conference.

ORGANISER OF ACADEMIC WORKSHOPS (1)

Joy, R., P. Nguyen Hong Duc⁺, F. Frazão⁺, and H. Yurk. *A workshop in harnessing the power of underwater hydrophone data for detecting whales in an era of Forecast Models, Machine Learning, Cluster-based Computing, and Citizen Science Engagement*. Simon Fraser University. August 2022

CONTRIBUTED PRESENTATIONS (144)

⁺ mentored student/postdoc; * Last name changed to Joy from van den Driessche

Mendez-Bye⁺, A. May 2025. *Climate change impacts on the vertical habitat use of the hooded seal in the Arctic*. Presentation to the Doctoral School at La Rochelle Université, Centre d'Etudes Biologiques de Chizé.

Houweling⁺, A., **R. Joy** and R. Tibshirani. May 2025. *Machine Learning to Classify Southern Resident Killer Whale Clicks in the Salish Sea*. European Cetacean Conference, Ponta Delgada, Portugal.

Joy, R., F. Frazão⁺, A. Houweling⁺, T.-W. Lin⁺, P. Nguyen Hong Duc⁺, B. Padovese⁺, K. Palmer⁺, M. Randon⁺ and P. Thompson⁺. November 2024. *Orcas on the Move*. 31st Annual Marine Mammal Symposium, UBC.

Thompson⁺, P., H. Yurk, M. Dowd, and **R. Joy**. November 2024. *Uncovering southern resident killer whale movement patterns using opportunistic sightings data*. 31st Annual Marine Mammal Symposium, UBC.

Lin⁺, T.-W., M. Dowd, and **R. Joy**. *Forecasting the trajectories of Southern Resident Killer Whales with stochastic continuous-time movement models*. Society of Marine Mammology Conference, Perth, Australia. November 2024.

Thompson⁺, P., H. Yurk, M. Dowd, and **R. Joy**. November 2024. *Uncovering southern resident killer whale movement patterns using opportunistic sightings data*. Society of Marine Mammology Conference, Perth, Australia. November 2024.

Mendez-Bye⁺, A., **R. Joy**, J. Vacquie-Garcia, M. Hammill, C. Hamilton, G. Stenson, L. Folkow, A. Blix, K. Kovacs, C. Lydersen, and T. Jeanniard du Dot. November 2024. *Tides of change: Hooded seal diving behaviours over the past 30 years under pressures of climate change*. Society of Marine Mammology Conference, Perth, Australia. November 2024.

Tollit, D.J., Z. Li, F. Wilder, A.O. MacGillivray, J. McIntyre, K. Trounce, **R. Joy**, and J. Wood. *Understanding the biological value of voluntary vessel slowdowns to Southern Resident killer whales in core Pacific Northwest habitat: Comparing new acoustic space metrics with behavioural response-based metrics*. Society of Marine Mammology Conference, Perth, Australia. November 2024.

Grandidier⁺, C., T. Jeanniard du Dot, and **R. Joy**. *An introduction to hooded seal ecology*. School of Environmental Science Seminar Series, SFU, Burnaby. October 2024.

Mendez-Bye⁺, A. T. Jeanniard du Dot, and **R. Joy**. *Assessing the effects of climate change on vertical habitat of hooded seals in the North Atlantic*. School of Environmental Science Seminar Series, SFU, Burnaby. October 2024.

Frazão⁺, F., O.S. Kirsebom, **R. Joy**, and M. Dowd. *Comparing acoustic representations for deep learning-based classification of underwater acoustic signals: a case study with Orca vocalizations*. International Conference on Underwater Acoustics. Bath, UK. July 2024.

Padovese⁺, B., and **R. Joy**. *An open-source deep learning model for Fin Whale classification*. Journées des Jeunes Bioacousticiens. Brest, France. June 2024.

Houweling⁺, A., and **R. Joy**. *Who clicked in the Salish Sea?* Journées des Jeunes Bioacousticiens. Brest, France. June 2024.

Padovese⁺, B., F. Frazão⁺, and R. Gehrmann, O. Kirsebom, and **R. Joy**. *From Stationary to Mobile listening platforms: Adapting deep learning models for North Atlantic right whale upcall detection*. Detection Classification Localisation Distance Estimation Conference, Rotherdam, The Netherlands. June 2024.

Frazão⁺, F., O.S. Kirsebom, B. Padovese⁺, **R. Joy**, and M. Dowd. *An open-source deep learning model for North Atlantic right whale gunshot identification*. DCLDE Conference, Rotherdam, The Netherlands. June 2024.

Frazão⁺, F., O.S. Kirsebom, A. Houweling⁺, J. Wladichuk⁺, J. Kanes, **R. Joy**, and M. Dowd. *Using a sequence deep learning model to increase the acoustic context of a killer whale detector*. 186th Meeting of the Acoustical Society of America, Ottawa, Canada. May 2024.

Broadley⁺, S. L. Lalach⁺, and **R. Joy**. *Bridging Success*. Pacific Seabird Conference, Seattle, Washington, February 2024.

Broadley⁺, S. *Bridging Success: Navigating the recovery of the Double-Crested Cormorant in the Strait of Georgia amid urban and ecological challenges*. IDEAS Symposium, SFU, February 2024.

Fairfield-Checko⁺, R. *Kelp Help! Do you see what I see?*. IDEAS Symposium, SFU, February 2024.

McNeilly⁺, J. *Sablefish are on the menu for Southern Resident Killer Whales, but at what cost?* IDEAS Symposium, SFU, February 2024.

- Murphy⁺, O., R. Fairfield Checko⁺, M. Young⁺, L. Laturnus⁺, T.-W. Lin⁺, B. Padovese⁺ and **R. Joy**. *Analysis of Southern Resident Killer Whale Management Measures Surrounding Saturna Island*. SFU Bi-weekly seminar series on Bioacoustics, Cetaceans and Advanced Computing. February 2024.
- Fairfield Checko⁺, R. *Multi-year marine mammal observations in and around the Saturna Island Interim Sanctuary Zone*. 31st B.C. Marine Mammal Symposium, November 2023.
- McNeilly⁺, J. *Sablefish are on the menu for Southern Resident Killer Whales, but at what cost?*. 31st B.C. Marine Mammal Symposium, November 2023.
- Young⁺, M. *Optimizing Techniques for Vessel Adherence Monitoring and Whale Detection in the Saturna ISZ*. 31st B.C. Marine Mammal Symposium, November 2023.
- Clarke, C.M.K., V. Rani⁺, E. Stredulinsky, S. Toews, M. Bouvier⁺, D. Smyth, **R. Joy**, S.J. Thornton. *A marine reserve reduces vessel presence, with implications for Northern Resident Killer Whale (*Orcinus orca*) beach rubbing behaviour*. Coastal Zones Canada Conference, Victoria, BC. June 2023.
- Stapleton⁺, R. *Monitoring nest success of Double-crested Cormorants within the Strait of Georgia*. 44th Annual Pacific Ecology and Evolution Conference, April 2023.
- Murphy⁺, O., and **R. Joy**. *Analysing marine vessel noise impacts on acoustic behaviour of endangered Southern Resident killer whale*. 44th Annual Pacific Ecology and Evolution Conference, April 2023.
- Stapleton⁺, R., L. Cowen, R. Wilkin, J. Cragg, A. Lenske, G. McClelland, and **R. Joy**. *Multi-event modelling shows variable nest success for the at-risk Double-crested Cormorant population within the Strait of Georgia*. Pacific Seabird Conference, Scripps Institute of Oceanography, California. February 2023.
- Wilkin⁺, R., J. Anderson, R. Stapleton⁺, J. Cragg, G. McClelland, A. Lenske, and **R. Joy**. *Deep Learning of orthomosaic images is an efficient tool for monitoring nest success of an urban seabird colony*. Pacific Seabird Conference, Scripps Institute of Oceanography, California. February 2023.
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- Bouvier⁺, M., V. Rani⁺, H. Yurk, C. Konrad Clarke, S.J. Thornton, and **R. Joy**. *Characterization of Northern Resident killer whale (*Orcinus orca*) call types and source levels during beach rubbing*. Salish Sea Ecosystem Conference. April 2022.
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- Frazão⁺, F., P. Nguyen Hong Duc⁺, O. Kirsebom, **R. Joy** and S. Matwin. *Comparing snapshot and sequence ANN: A study case with blue whales*. DCLDE Conference, On-line March 2022.
- Wilkin⁺, R., M. Ong⁺, L. Cojocar⁺, J. Anderson, J. Cragg, G. McClelland and **R. Joy**. *Machine learning as a tool for monitoring seabird nesting colonies*. Pacific Seabird Conference, On-line March 2022.
- Kirsebom, O.S., S. Bergner, D. Campbell, M. Dowd, F. Frazão⁺, **R. Joy**, P. Nguyen Hong Duc⁺, B. Padovese, M. Randon, A. Riera, S. Sakib, S. Veirs, V. Veirs, J. Wladichuk⁺, and H. Yurk. *Open-source deep learning models for acoustic detection and classification of orcas*. Detection, Classification, Localisation, and Density Estimation (DCLDE) International Workshop. Oahu, Hawaii. March 2022.
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- Meszaros⁺, K., K. Roessingh, and **R. Joy**. February 2021. *Birds of a feather: Non-invasive sampling reveals British Columbia's Sandhill Cranes don't all flock together*. Provincial Working Group 'Threat' Series.
- Yurk, H., S. Berger, M. Randon⁺, and **R. Joy**. February 2021. *Using big (acoustic) data, neural networks and artificial intelligence in the conservation of Southern Resident killer whales*. Invited by the Port of Vancouver ECHO Program.
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- Randon⁺, M., M. Dowd, and **R. Joy**. *Where are they going? A real-time forecasting system for animal tracking*. The 7th Annual SFU Post Doc Research Day. March 2021.
- Ong⁺, M., M. Randon⁺, T. Chatwin, J. Cragg, G. McClelland, and **R. Joy**. *Photogrammetric monitoring of Double-crested cormorants nesting sites on Ironworkers Memorial Bridge in Vancouver*. Pacific Seabird Conference. February 2021.
- Randon⁺, M., M. Dowd and **R. Joy**. December 2020. *A real time forecasting system to limit vessel disturbances on the endangered Southern Resident killer whales*. Fisheries and Oceans 'Science Talk' Series.
- Berger, S., and **R. Joy**. December 2020. *Using big data and A.I. in conservation of endangered killer whales*. Big Data and A.I.: GovTech Summit.
- Quayle⁺, L., and **R. Joy**. August 2020. *Observations in a Whale Sanctuary*. Saturna Island Marine Research and Education Society, SEATalk Series.
- Akporuno⁺, O., T. Reid, S. Chartrand, and **R. Joy**. *Assessing macro-benthic invertebrate communities in dendritic tidal channels of a berm impacted area of the Nanaimo River Estuary*. Salish Sea Ecosystem Conference.
- Cummings⁺, E., A. Harris⁺, K. Angadi, H. Yurk, R. Osborne, and **R. Joy**. *Developing a predictive movement model to decrease the ship strike risk in Southern Resident killer whale critical habitat*. Salish Sea Ecosystem Conference.
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- Joy, R.**, M.G. Dowd, B.C. Battaile, P.M. Lestenkof, J.T. Sterling, A.W. Trites, and R.D. Routledge. *Methodology for analyzing at-sea dive behaviour of northern fur seals in the Bering Sea*. 21st Conference of the Society for Marine Mammals, San Francisco, California. December 2015.
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- Roessingh, K. and **R. Joy**. *Sandhill Cranes of coastal British Columbia: Nesting habitat and foraging studies*. 16th Alaska Bird Conference, Juneau, Alaska. December 9-11, 2014.
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- Joy, R.**, and R.D. Routledge. *A hierarchical Bayes model for incorporating uncertainties in data from marine mammal at-sea foraging tracks*. Fall 2013 SFU-UBC Workshop in Statistics. Vancouver, Canada. October 2013.
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- Joy, R.**, and Z. Sun. *Impact of human disturbances on habitat selection and on calf survival for forest-dwelling caribou*. 41st annual meeting of the Statistical Society of Canada, Edmonton, Alberta, May 2013.

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