

May 29, 2023

Notice of Proceeding

File EA#1213-02 Mackenzie Valley Highway, GNWT-Infrastructure

RE: Retention of expert advisor John Nishi, EcoBorealis Consulting Inc.

Retention of expert advisor(s)

The Review Board (the Board) plans to retain an expert advisor¹ for the Mackenzie Valley Highway environmental assessment (EA). The expert advisor is John Nishi of EcoBorealis Consulting Inc. His area of expertise is in wildlife, with a focus on ungulates (hooved mammals).

Scope of participation in the proceeding

The expert advisor will help the Review Board to evaluate and analyze evidence and other specific activities as required throughout the Analysis phase of the environmental assessment. He may also help with further phases of the EA at the Review Board's discretion. Please see the expert advisor's curriculum vitae (attached) for more information about his qualifications and expertise.

Addressing concerns about conflict of interest or apprehension of bias

Review Board staff have exercised due diligence to ensure that the expert advisor is free from potential bias and conflict(s) of interest with respect to the proposed development considered by the Board in this proceeding. This includes requiring that the expert advisor disclose any relationships (either personal, corporate or through a subsidiary) with the developer and other interested parties involved in a proceeding.

If any party has questions or concerns about the qualifications of the expert, or the potential for conflict(s) of interest or apprehension of bias, please let Review Board staff know by June

¹ Expert advisor is used in this Notice of Proceeding in place of a "specialist", as referred to in Rule 16 of the Review Board's 2005 *Rules of Procedure*.

12, 2023. The Board will consider any comments before making a final decision on retaining John Nishi as an expert advisor.

Contact Information

If you have any comments, questions, or need more information, please contact Catherine Fairbairn, Senior Environmental Advisor at 867-766-7054 or cfairbairn@reviewboard.ca.

John S. Nishi

EcoBorealis Consulting Inc.
Box 39, Site 2, Rural Route 1
Millarville, AB. T0L 1K0
Office/Residence: (403) 931-2538
Mobile: (403) 835-8821
john@nishi.ca

EDUCATION

1993 Master of Science (M.Sc) – University of Alberta, Edmonton, AB.

- Department of Zoology
- Thesis: “Range ecology of an introduced population of reindeer on the Belcher Islands, Northwest Territories”

1990 Bachelor of Science (B.Sc.) – University of Alberta, Edmonton, AB.

- Department of Agriculture and Forestry
- Graduated with Distinction

PROFESSIONAL CERTIFICATION

- Professional Biologist (P.Biol.), Alberta Society of Professional Biologists
- Professional Agrologist (P.Ag.), Alberta Institute of Agrologists
- Alberta Trappers’ Association (Standard Trapper Education Course & Wolf Workshop, Dec 2018)

PROFESSIONAL EXPERIENCE

2007-Present President - EcoBorealis Consulting Inc.

After leaving the public sector, I established EcoBorealis Consulting Inc. to work in the private sector and provide technical services to government, private industry, and aboriginal clients on a broad array of wildlife and natural resource management issues. I have completed work independently and through collaborations with larger consulting companies. Projects have included design and execution of field research projects and aerial wildlife surveys, wildlife co-management planning, caribou range planning, land-use planning, reviews of environmental impact assessments, and serving as a subject-matter expert at public hearings and court cases. Recent wildlife-focussed projects are highlighted below.

Client	Selected Current & Recent Project(s): 2015 to present	Date
Silvacom Ltd., Edmonton, AB..	Assist in the development of fur-bearing species habitat models as required by a forest-timber harvesting project in northern Alberta	2023
Moccasin Flower Consulting Inc., an Endeavour Scientific Inc., Edmonton, AB., on behalf of Athabasca Region First Nations (ARFN) – Athabasca Chipewyan, Chipewyan Prairie Dene, Fort McKay, and Mikisew Cree First Nations	Develop draft recommendations for the Caribou, Multi-species & Conservation Working Group in the Wandering River Sub-regional Planning Area process https://www.alberta.ca/caribou-sub-regional-task-forces.aspx	2021 – present
Compass Resource Management Ltd., Vancouver, BC., and Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Cranbrook, B.C.	Consultation, engagement, and initial drafting of Kootenay Elk Stewardship Plan with BC Government staff	2021-present
HeadWater Group, ALCES Group, Wek’eezhii Renewable Resources Board & Department of Environment and Natural	Cumulative effects modelling and assessment of four barren-ground caribou herds (Bluenose-East, Bluenose-West, Cape Bathurst, and Tuktoyaktu Peninsula)	2019 – 2023

Resources, Government of the Northwest Territories, Yellowknife, NT		
Department of Culture and Lands Protection, Tłı̨chų Government, Behchoko, NT., and Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT	Wolf Management Technical Feasibility Assessment & Management Strategy Implementation	2016 – present
Department of Culture and Lands Protection, Tłı̨chų Government, Behchoko, NT.	Wildlife co-management (Joint Management Proposals; Barren-ground Caribou Technical Working Group; Ekwò Nàxoède K'è Monitoring Project, Wek'èezhii Boreal Caribou Range Planning, Mackenzie Wood Bison Working Group, Predator feasibility assessment, Wolf Management, Environmental assessment and review – Gahcho Kue Diamond Mine, Fortune Minerals, Tłı̨chų All Season Road, Ekati Point Lake Project	2009 – present
Mackenzie Valley Environmental Impact Review Board	Provide expertise on scoping phase of Pine Point Mine Project environmental assessment. Technical advisor to assist with assessing impacts of the proposed activities to boreal caribou and other ungulate wildlife at the proposed Pine Point mine.	2021
Compass Resource Management Ltd., Vancouver, BC, Ktunaxa Nation Council, and Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Cranbrook, B.,	Engagement of Ktunaxa Nation Council representatives on Kìtqà#ì (Elk) Stewardship Plan	2020 – 2021
Silvacom Ltd., Edmonton, AB., and Alberta Newsprint Company (ANC) Timber Ltd., Whitecourt, AB.	Provide subject matter expertise and commentary in relation to caribou habitat and alternative forest management strategies for the W15 Forest Management Unit FMU within the Little Smoky and A la Peche caribou ranges in Alberta.	2020 – 2021
ALCES Group & ʔehdzo Got'ìne Gots'è Nákedı (Sahtú Renewable Resources Board) Tulít'a, NT.	Exploring population dynamics of the northern shúhtazepe (<i>Rangifer tarandus caribou</i>) in the Mackenzie Mountains	2019 – 2020
Department of Environment, Yukon Government, Whitehorse, YK.	Review of mining project impacts & mitigations for thinhorn sheep	2018 - 2020
Compass Resource Management Ltd., Vancouver, BC & Government of the Northwest Territories, Yellowknife, NT.	Boreal Caribou Range Planning (Wek'èezhii and Southern NWT ranges)	2019 – 2020
Firelight Group, Edmonton, AB.	Develop prioritized list of recovery actions for Ronald Lake Bison Herd as per the Section 11 Conservation Agreement between Alberta and Canada	2019
Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT.	Bluenose-East and Bathurst Caribou Calving Ground Surveys (design, field execution and final reports)	2018 – 2019
Golder Associates Ltd., Calgary, AB.	Ronald Lake Bison Population Viability Modelling & Technical Review of Consultant Report	2018
Compass Resource Management Ltd., Vancouver, BC & Government of the Northwest Territories, Yellowknife, NT.	Bathurst Caribou Range Planning and stakeholder workshops	2015 – 2019
Government of Canada, Vancouver, BC.	Expert Witness – Bison-Vehicle Collisions	2015 – 2018
TECK Resources Ltd, Calgary, AB.	Contribute to development of Ronald Lake Bison Management Strategy	2016 – 2017
ConocoPhillips Corporation, and Canada's Oil Sands Innovation Alliance (COSIA), Calgary, AB.	Boreal Caribou Recovery Pilot Project (management planning guides and Aboriginal engagement workshops for caribou rearing facility)	2016 – 2017

Salmo Consulting Inc. (Silvacom Ltd. & Daishowa-Marubeni International Ltd), Calgary, AB	Chinchaga Boreal Caribou Range Planning (range characterization & modeling framework)	2016 – 2017
Alberta Conservation Association and Alberta Environment and Parks, Sherwood Park and Edmonton, AB.	Status of the American Bison (<i>Bison bison</i>) in Alberta (provincial status report)	2016 – 2017
Salmo Consulting Inc. (Canada's Oil Sands Innovation Alliance), Calgary, AB.	Caribou Fencing Pilot Project	2015 – 2016
Ktunaxa Nation Council, Cranbrook, BC.	Workshop and Independent Review of Southern Mountain Caribou Management Strategies	2015
Salmo Consulting Inc. (Canadian Boreal Forest Agreement - CBFA), Calgary, AB.	Methodological Framework for Boreal Caribou Action Planning	2015
S. Francis Consulting Inc. (Yukon Environment), Drumheller, AB.	Klaza Caribou & Carcross Caribou Herd Range Assessments	2014 – 2015

2007-2014 Wildlife and Landscape Biologist, ALCES Group - Associate

My focus was on the application of ALCES™ and its integration with other modelling tools to address land use and wildlife management issues in northern Canada. I have worked with ALCES Group members on several projects that are focused on cumulative effects of boreal caribou in northern Alberta (Athabasca Landscape Team) and the southern Northwest Territories, as well as migratory barren-ground caribou in the Canadian arctic. Additional projects included technical writing and modelling support for the Alberta Land-Use Framework Lower Athabasca Regional Plan (LARP), and conducting a cumulative effects assessment in the traditional territory of Fort McKay First Nation.

2006-2007 Senior Wildlife Biologist, Department of Environment & Natural Resources, Government of the Northwest Territories (GNWT)

My focus was on completing a variety of bison project files through data analysis and report write-up. I also assisted other GNWT biologists with projects on barren-ground caribou surveys as well as cumulative effects modelling on boreal caribou.

1998-2006 Bison Ecologist, South Slave Region, Department of Environment & Natural Resources, GNWT

I worked with communities and First Nations in the Dehcho, Akaitcho, and North and South Slave Regions on issues concerning northern bison and disease management (*i.e.*, wild herds endemic with bovine tuberculosis, brucellosis, and anthrax). Through collaboration with aboriginal communities, University researchers and other federal/provincial/territorial government agencies, my GNWT colleagues and I used a team approach to help understand and develop options for sustainable use and conservation of wood bison including development of disease eradication and genetic salvage techniques, and genetic conservation strategies. We established and operated a long-term wood bison genetic salvage and captive-breeding project. I also served on numerous territorial, national and international bison technical committees.

1993-1998 Regional Wildlife Biologist, Kitikmeot Region, Department of Renewable Resources, GNWT

I started my career in the central arctic and worked on various species including caribou (Peary and barren-ground herds – Dolphin and Union, Bluenose East, Bathurst, and Ahiak), muskoxen, grizzly bear, wolverine, polar bear, gyrfalcon, and peregrine falcon. I collaborated with community Hunters and Trappers' Committees / Associations / Organizations, GNWT biologists, and University researchers on wildlife research and management projects, environmental impact assessments, land-use planning, community consultation and conservation education. I also liaised with co-management groups including Nunavut Wildlife Management Board (NWMB), and Wildlife Management Advisory Council (WMAC-NWT).

PUBLICATIONS

REFEREED JOURNALS

- Adamczewski, J. Z., A. Gunn, K. G. Poole, A. Hall, **J. S. Nishi**, and J. Boulanger. 2015. What happened to the Beverly caribou herd after 1994? *Arctic*. 66: 407-421.
- Shury, T. K., **J. S. Nishi**, B. T. Elkin, and G. A. Wobeser. 2015. Tuberculosis and brucellosis in wood bison (*Bison bison athabascae*) in northern Canada: A renewed need to develop options for future management. *Journal of wildlife Diseases*. 51: 1-12.

- Gunn, A., K.G. Poole, J. Wierzbowski, **J.S. Nishi**, J. Adamczewski, D. Russell, and A. D'Hont. 2013. Have geographical influences and changing abundance led to sub-population structure in the Ahiak caribou herd, Nunavut, Canada? *Rangifer* 33: 35-58.
- Gunn, A., K. Poole, and **J.S. Nishi**. 2012. A conceptual model for migratory tundra caribou to explain and predict why shifts in spatial fidelity of breeding cows to their calving grounds are infrequent. *Rangifer Special Issue No. 20*: 259-267.
- Nielsen, O., D. Waltner-Toews, **J.S. Nishi**, and B. Hunter. 2012. Whither ecosystem health and ecological medicine in veterinary medicine and education. *Canadian Veterinary Journal*. 53: 747-753.
- Himsworth, C. G., B. T. Elkin, **J.S. Nishi**, A. S. Neimanis, G. A. Wobeser, C. Turcotte, and F. A. Leighton. 2010. An outbreak of bovine tuberculosis in an intensively managed conservation herd of wild bison in the Northwest Territories. *Canadian Veterinary Journal* 52: 593-597.
- Himsworth, C.G., B.T. Elkin, **J.S. Nishi**, T. Epp, K.P. Lyashchenko, O. Surujballi, C. Turcotte, J. Esfandiari, R. Greenwald, and F.A. Leighton. 2010. Comparison of test performance and evaluation of novel immunoassays for tuberculosis in a captive herd of wood bison naturally infected with *Mycobacterium bovis*. *Journal of Wildlife Diseases*. 46: 78-86
- Thundathil, J., D. Whiteside, B. Shea, D. Ludbrook, B. Elkin, and **J. Nishi**. 2007. Reproductive technologies in wood bison (*Bison bison athabasca*): implications for preserving genetic diversity. *Theriogenology*. 68: 93-99.
- Nishi, J.S.**, T.R. Ellsworth, N. Lee, D. Dewar, B.T. Elkin, D.C. Dragon. 2007. An outbreak of anthrax (*Bacillus anthracis*) in free-roaming bison in the Northwest Territories, June–July 2006. *Canadian Veterinary Journal*. 48: 37-39
- Lutze-Wallace, C., C. Turcotte, D.A. Stevenson, B. Elkin, M. Koller-Jones, **J. Nishi**, G. Wobeser. 2006. Isolation of *Mycobacterium bovis* from a wood bison in a wildlife conservation project in the Northwest Territories. *Canadian Veterinary Journal*. 42: 317-318.
- Nishi, J.S.**, T. Shury, and B.T. Elkin. 2006. Wildlife reservoirs for bovine tuberculosis (*Mycobacterium bovis*) in Canada: strategies for management and research. *Veterinary Microbiology*. 112: 325-338.
- Wilson, G.A., **J.S. Nishi**, B.T. Elkin, and C. Strobeck. 2005. Effects of a recent founding event and intrinsic population dynamics on genetic diversity in a salvaged ungulate population. *Conservation Genetics*. 6: 905-916.
- Larter, N.C., **J.S. Nishi**, T. Ellsworth, D. Johnson, G. More, and D.G. Allaire. 2003. Observations of wood bison swimming across the Liard River, Northwest Territories, Canada. *Arctic*. 56: 408-412.
- Kutz, S.J., E.P. Hoberg, **J. Nishi** and L. Polley. 2002. Development of the muskox lungworm, *Umingmakstrongylus pallikuukensis* (Protostrongylidae), in gastropods in the Arctic. *Canadian Journal of Zoology*. 80: 1977-1985.
- Nishi, J.S.**, B.T. Elkin, and T.R. Ellsworth. 2002. The Hook Lake Wood Bison Recovery Project: Can a disease-free captive wood bison herd be recovered from a wild population infected with bovine tuberculosis and brucellosis? *Annals of the New York Academy of Sciences*. 969: 229 – 235.
- Nishi, J.S.**, C. Stephen, and B.T. Elkin. 2002. Implications of agricultural and wildlife policy on management and eradication of bovine tuberculosis and brucellosis in free-ranging wood bison of northern Canada. *Annals of the New York Academy of Sciences*. 969: 236 – 244.
- Nishi, J.S.**, D.C. Dragon, B.T. Elkin, J. Mitchell, T.R. Ellsworth and M.E. Hugh-Jones. 2002. Emergency response planning for anthrax outbreaks in bison herds of northern Canada: A balance between policy and science. *Annals of the New York Academy of Sciences*. 969: 245 - 250.
- Larter, N.C., A.R.E. Sinclair, T. Ellsworth, **J. Nishi**, and C.C. Gates. 2000. Dynamics of reintroduction in an indigenous large ungulate: the wood bison of northern Canada. *Animal Conservation* 4:299-309.
- Dragon, D.C., B.T. Elkin, **J.S. Nishi**, and T.R. Ellsworth. 1999. A review of anthrax in Canada and implications for research on the disease in northern bison. *Journal of Applied Microbiology*. 87: 208-213.
- Hoberg, E.P., L. Polley, A. Gunn, and **J.S. Nishi**. 1995. *Umingmakstrongylus pallikuukensis* gen. nov. et. sp. nov. (Nematoda: Protostrongylidae) from muskoxen, *Ovibos moschatus*, in the central Canadian Arctic, with comments on biology and biogeography. *Canadian Journal of Zoology*. 73: 2266-2282.

BOOK CHAPTERS

- Gunn, A., C.J. Johnson, **J.S. Nishi**, C.J. Daniel, M. Carlson, D.E. Russell, and J.Z. Adamczewski. 2011. Addressing Cumulative Effects in the Canadian Central Arctic – Understanding the Impacts of Human Activities on Barren-ground Caribou. *In* Krausman, P.R., and L.K. Harris (Eds.) Cumulative Effects in Wildlife Management: A Critical Aspect of Impact Mitigation. Taylor & Francis Group, Boca Raton, FL.
- Aune, K., C. Gates, Elkin, B.T. M. Hugh-Jones, D.O. Joly. and **J. Nishi**. 2010. Chapter 5 - Reportable or Notifiable Diseases *in* C.C. Gates, C.H. Freese, P.J.P. Gogan, and M. Kotzman (eds.) North American Bison Conservation Status Survey and Action Plan 2010, The IUCN American Bison Specialist Group and Species Survival Commission. Gland, Switzerland. [Online]
http://cmsdata.iucn.org/downloads/american_bison_report.pdf

TECHNICAL REPORTS (2010 – PRESENT)

- Adamczewski, J. Z., J. Boulanger, J. Williams, D. Cluff, K. Clark, **J. Nishi**, S. Goodman, K. Chan, and R. Abernethy. 2022. Estimates of breeding females and adult herd size and analyses of demographics for the Bathurst herd of barren-ground caribou: 2021 calving ground photographic survey. Manuscript Report No. 326, Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT.
- Wilson, A., **J. S. Nishi**, D. Cluff, B. Olson, J. Shaw, R. Kite, S. Behrens, N. Jutha, R. Abernethy, N. Wilson, and K. Clark. 2022. Wolf (diga) management program January - June 2022. Draft Technical report, Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT.
- Tłı̨chǫ Research and Training Institute (TRTI). 2022. Ekwò`Nàxoèhdee K'è 2021 Results Kokèti & Deèzàati. Dedats'eetsaa Tłı̨chǫ Research and Training Institute, Tłı̨chǫ Government, Behchokǫ, NT. 44 pp. Online [URL]: https://research.tlicho.ca/sites/default/files/2021_results_report_2.pdf
- Clark, K., **J. S. Nishi**, D. Cluff, S. Shiga, S. Behrens, R. Abernethy, and R. Mulders. 2021. Wolf (diga) management program January - May 2021. Draft Technical report, Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT. Online [URL]: <https://www.wrrb.ca/sites/default/files/DRAFT%202021%20Wolf%20Management%20Annual%20Report%2029%20Nov%202021.pdf>
- Nishi, J.** 2021. Technical Commentary on “W15 Forest Defense Strategy”. Unpublished Report submitted to Silvacom and Alberta Newsprint Company (ANC) Timber Ltd. EcoBorealis Consulting Inc. Millarville, AB. 7 pp + Appendices.
- Tłı̨chǫ Research and Training Institute (TRTI). 2021. Ekwò`Nàxoèhdee K'è 2020 Results Kokèti & Deèzàati. Dedats'eetsaa Tłı̨chǫ Research and Training Institute, Tłı̨chǫ Government, Behchokǫ, NT. 59 pp + Appendices Online [URL]: https://research.tlicho.ca/sites/default/files/2020_results_report.pdf
- Nishi, J. S.** 2020. A literature review of mining project impacts and mitigations for thimhorn sheep. Prepared for Yukon Department of Environment, Fish and Wildlife Branch. 33 pp + Appendices
- Nishi, J. S.**, R. Mulders, K. Clark, S. Behrens, R. Abernathy, S. Shiga, and D. Cluff. 2020. Wolf (diga) management pilot program technical report. DRAFT Manuscript Report, Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT. Online [URL]: https://www.wrrb.ca/sites/default/files/2020%20Wolf%20Management%20Pilot%20Program%20Technical%20Report%2021Aug2020_0.pdf
- Stelfox, B., **J. Nishi**, M. Carlson, T. Stubbs, L. Andrew, Colin MacDonald, N. Barrichello, and D. Simmons. 2020. Exploring population dynamics of the northern shùhtaʔepe (*Rangifer tarandus caribou*) in the Mackenzie Mountains – A Summary. Prepared for the ʔehdzo Got'ı̨nǫ Gots'è Nákedı – the Sahtú Renewable Resources Board, Tulı́t'a, NT. 9 pp.
- Stelfox, B., **J. Nishi**, M. Carlson, T. Stubbs, L. Andrew, Colin MacDonald, N. Barrichello, and D. Simmons. 2020. Exploring population dynamics of the northern shùhtaʔepe (*Rangifer tarandus caribou*) in the Mackenzie Mountains – Technical Report. Prepared for the ʔehdzo Got'ı̨nǫ Gots'è Nákedı – the Sahtú Renewable Resources Board, Tulı́t'a, NT. 102 pp.

- Tłıchq Research and Training Institute (TRTI). 2020. Ekwò Nàxoède K'è - Boots on the Ground - 2019 Results. Tłıchq Research and Training Institute, Tłıchq Government, Behchokq, NT. 60 pp + Appendices Online [URL]: https://research.tlicho.ca/sites/default/files/2019_ekwo_naxoede_ke_results_report_1.pdf
- Adamczewski, J. Z., J. Boulanger, H. Sayine-Crawford, **J. Nishi**, D. Cluff, J. Williams, and L.-M. Leclerc. 2019. Estimates of breeding females and adult herd size and analyses of demographics for the Bathurst herd of barren-ground caribou: 2018 calving ground photographic survey. Manuscript Report No. 279, Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT. 126 pp. Online [URL]: https://www.enr.gov.nt.ca/sites/enr/files/resources/279_manuscript.pdf
- Boulanger, J., J. Z. Adamczewski, **J. Nishi**, H. D. Cluff, J. Williams, H. Sayine-Crawford, and L.-M. Leclerc. 2019. Estimates of breeding females and adult herd size and analyses of demographics for the Bluenose-East herd of barren-ground caribou: 2018 calving ground photographic survey. Manuscript Report No. 278, Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT. 98 pp. Online [URL]: <https://www.enr.gov.nt.ca/en/estimates-breeding-females-adult-bluenose-east-caribou-herd-manuscript-278>
- Jalkotzy, M. G., J. Virgil, S. Morrison, **J. Nishi**, and W. Speller. 2018. Technical review of MSES 2017 Habitat availability and population viability of the Ronald Lake bison herd report. Technical Memorandum to Teck Resources Ltd., Project No. 1648112, Golder Associates Ltd., Calgary, AB. 14 pp.
- Morrison, S., **J. Nishi**, J. Virgil, M. Anderson, and M. Jalkotzy. 2018. Ronald Lake Bison Herd population viability analysis and regional connectivity analysis. Report Submitted to Teck Resources Limited, September 12, 2018, Golder Associates Ltd., Calgary, AB. 69 pp.
- Harding, R., **J. Nishi**, and L. Schaldemose. 2017. Caribou Recovery Pilot Project: Summary Report. Technical Report prepared for Canada's Oil Sands Innovation Alliance, Calgary, AB and submitted to Alberta Environment and Parks, Edmonton, AB. 54 pp. Online [URL]: <https://cosia.ca/sites/default/files/attachments/CRPP%20Summary%202017-12.pdf>
- Nishi, J.**, and K. Manuel. 2017. Caribou Recovery Pilot Project: Candidate Area Site Selection – Appendix A. Technical Report prepared for Canada's Oil Sands Innovation Alliance, Calgary, AB and submitted to Alberta Environment and Parks, Edmonton, AB. 31 pp + Attachments.
- Nishi, J.** 2017. Caribou Recovery Pilot Project: Fence and Handling Facility Construction Planning Guide – Appendix C. Technical Report prepared for Canada's Oil Sands Innovation Alliance, Calgary, AB and submitted to Alberta Environment and Parks, Edmonton, AB. 26 pp + Attachments.
- Nishi, J.** 2017. Caribou Recovery Pilot Project: Caribou Husbandry Management Planning Guide – Appendix D. Technical Report prepared for Canada's Oil Sands Innovation Alliance, Calgary, AB and submitted to Alberta Environment and Parks, Edmonton, AB. 48 pp + Attachments.
- Nishi, J.**, and K. McFarlane. 2017. Caribou Recovery Pilot Project: Genetic Management Planning Guide – Appendix E. Technical Report prepared for Canada's Oil Sands Innovation Alliance, Calgary, AB and submitted to Alberta Environment and Parks, Edmonton, AB. 35 pp + Attachments.
- Nishi, J.** 2017. Caribou Recovery Pilot Project: Predator and Wildlife Management Planning Guide – Appendix F. Technical Report prepared for Canada's Oil Sands Innovation Alliance, Calgary, AB and submitted to Alberta Environment and Parks, Edmonton, AB. 39 pp + Attachments.
- Nishi, J.** 2017. Caribou Recovery Pilot Project: Monitoring and Research Management Planning Guide – Appendix G. Technical Report prepared for Canada's Oil Sands Innovation Alliance, Calgary, AB and submitted to Alberta Environment and Parks, Edmonton, AB. 15 pp + Attachments.
- Nishi, J. S.** 2017. Status of the American Bison (*Bison bison*) in Alberta: Update 2017. Alberta Wildlife Status Report No. 38 (Update 2017), Alberta Environment and Parks, and Alberta Conservation Association, Edmonton, AB. 134 pp.
- Francis, S., and **J. Nishi**. 2016. A range assessment for the Klaza Caribou herd in the Dawson Range of west-central Yukon. Report MRC-16-01 prepared for Fish and Wildlife Branch, Yukon Department of Environment Whitehorse, Yukon. 86 pp. Online [URL]: http://yukonconservation.org/docs/MRC-16-01-Klaza_Caribou_Range_Assessment_FINAL_reduced.pdf
- Berryman, S., J. Straker, A. Garibaldi, and **J.S. Nishi**. 2016. Fort McKay Cumulative Effects Study Summary: Key Findings. Technical Report Prepared for Fort McKay Sustainability Department (Project No. FMBPRO). January 2016. Integral Ecology Group Ltd., Duncan, BC. 43 pp.

- Nishi, J. S.**, B. T. Elkin, and C. Stephen. 2016. A review of animal health policies and its implications for salvaging a captive breeding herd of disease-free wood bison (*Bison bison athabasca*). File Report No. 146, Department of Environment and Natural Resources, Government of the Northwest Territories, Yellowknife, NT. 104 pp.
- Antoniuk, T., **J. Nishi**, R. Harding, L. McNeil, and K. Manuel. 2016. Northeast Alberta Caribou Predator Fencing Pilot: Overview - Final. Canada's Oil Sands Innovation Alliance (COSIA), Calgary, AB. Online [URL]: <https://cosia.ca/sites/default/files/attachments/COSIA%20Caribou%20Fence%20Pilot.pdf>
- Nishi, J. S.** 2015. Considering Recovery Options for Southern Mountain Caribou on Ktunaxa Territory. Technical Report Prepared for Ktunaxa Nation Council (KNC), Cranbrook, BC. 47 pp.
- Nishi, J.**, K. Manuel and T. Antoniuk. 2015. Northeast Alberta Caribou Predator Fencing Pilot: Preliminary Fence Design. Prepared for Canada's Oil Sands Innovation Alliance by EcoBorealis Consulting Inc., K. Manuel Consulting Inc., and Salmo Consulting Inc.
- Antoniuk, T. M., L. McNeil, **J. S. Nishi**, and K. Manuel. 2015. Northeast Alberta Caribou Predator Fencing Pilot: Project Overview (Draft). Prepared for Canada's Oil Sands Innovation Alliance by Salmo Consulting Inc., EcoBorealis Consulting Inc., REDES Inc., McNeil Consulting Inc., and K. Manuel Consulting Inc. 22 pp.
- Antoniuk, T. M., E. Dzus, and **J. S. Nishi**. 2015. A methodological framework for caribou action planning in support of the Canadian Boreal Forest Agreement - Iteration 2. Prepared for The Science Committee and the National Working Group on Goals 2 and 3 of the Canadian Boreal Forest Agreement, Canadian Boreal Forest Agreement Secretariat, Ottawa, ON. 48 pp.
- Pyper, M., **J.S. Nishi**, and L. McNeil. 2014. Linear feature restoration in caribou habitat: A summary of current practices and a roadmap for future programs. Unpublished Report prepared for Canada's Oil Sands Innovation Alliance (COSIA), Calgary, AB. 38 pp. + Appendices.
- Nishi, J.S.**, M. Pyper, and L. McNeil. 2014. COSIA Caribou Habitat Linear Disturbance Restoration – Workshop Report. Unpublished Report prepared for Canada's Oil Sands Innovation Alliance (COSIA), Calgary, AB. 61 pp.
- Francis, S. and **J.S. Nishi**. 2014. Assessment of the Carcross Caribou Herd Range in Yukon. Unpublished Report prepared for Environment Yukon, Fish and Wildlife Branch, Whitehorse, YK. 46 pp. + Appendices.
- Nishi, J.S.**, S. Francis and T. Antoniuk. 2014. Bathurst Caribou Range Plan Technical Scope - meeting the challenge of assessing and managing cumulative effects. Unpublished Report prepared for Government of the Northwest Territories, Yellowknife, NT. 32 pp.
- Nishi, J.S.**, B. Croft, J. Boulanger, J. Z. Adamczewski, and A. Kelly. 2014. An estimate of breeding females in the Bathurst herd of barren-ground caribou, June 2009. File Report No. 144, Government of the Northwest Territories, Yellowknife, NT. Online [URL]: <http://www.enr.gov.nt.ca/files/estimate-breeding-females-bathurst-herd-barren-ground-caribou-june-2009>
- Berryman, S., A. Garibaldi, J. Straker, **J.S. Nishi** and J.B. Stelfox, 2013. A community approach for landscape planning. Integral Ecology Group, Victoria, BC. Prepared for the Fort McKay Sustainability Department, Fort McMurray, AB. Project No. FMBDHP-13. 64 pp + 5 Appendices. Online [URL]: https://www.landuse.alberta.ca/Forms%20and%20Applications/FMFN%20-%20Application%20App%209%20ALCES%20IEG%20Landscape%20Planning_2014-03-05_PUBLIC.pdf
- Francis, S., S. Kennett, T. Antoniuk, and **J. Nishi**. 2013. Fish and wildlife values in cumulative effects assessment: current status and Yukon needs assessment. Yukon Environment, Fish and Wildlife Management Branch, Whitehorse, YK. 111 pp.
- Kennett, S., and **J. Nishi**. 2013. Review of the Tlicho Land Use Plan. Unpublished report prepared for the Lands Protection Department, Tlicho Government, Behchoko, NT. 14 January 2013. 50 pp.
- Nishi, J.S.** 2013. Review of "Management and Monitoring Strategies for High Conservation Values in the Alberta-Pacific Forest Management Agreement Area (2010 - 2015)". Unpublished report prepared for Alberta Pacific Forest Industries Inc., Boyle, AB. 9 pp. Online [URL]: http://alpac.ca/files/4813/7053/6055/Nishi_2013_Peer_Review_of_ALPac_HVC_MM_Report.pdf
- Nishi, J.S.**, S. Berryman, J.B. Stelfox, A. Garibaldi, and J. Straker. 2013. Fort McKay Cumulative Effects Project: technical report of scenario modeling analyses with ALCES®. ALCES Landscape and Land Use

- Ltd., Calgary, AB., and Integral Ecology Group, Victoria, BC. Prepared for the Fort McKay Sustainability Department, Fort McMurray, AB. 126 pp + 5 Appendices. Online [URL]: https://www.landuse.alberta.ca/Forms%20and%20Applications/FMFN%20-%20Application%20App%207%20ALCES%20Cumulative%20Effects%20Report_2014-03-05_PUBLIC.pdf
- Stelfox, J.B., **J.S. Nishi**, S. Berryman, A. Garibaldi and J. Straker. 2013. Conserving opportunities for traditional activities by the community of Fort McKay amongst the industrial landscape of northeast Alberta. ALCES Landscape and Land Use Ltd., Calgary, AB., and Integral Ecology Group, Victoria, BC. Prepared for the Fort McKay Sustainability Department, Fort McMurray, AB. 78 pp + 4 Appendices. Online [URL]: https://www.landuse.alberta.ca/Forms%20and%20Applications/FMFN%20-%20Application%20App%208%20ALCES%20Opportunities%20Trad%20Activities_2014-03-05_PUBLIC.pdf
- Antoniuk, T., E. Dzus, and **J.S. Nishi**. 2012. A methodological framework for caribou action planning in support of the Canadian Boreal Forest Agreement. Canadian Boreal Forest Agreement, Ottawa, ON. 46 pp. [Online] http://canadianborealforestagreement.com/publications/CBFACaribou_guidelines_EN.pdf
- Antoniuk, T., L. McNeil, **J. Nishi**, and K. Manuel. 2012. Caribou Protection and Recovery Program - Technical Guidance, Oil Sands Leadership Initiative, Calgary, AB. 84 pp. [Online] http://www.osli.ca/uploads/files/OSLI_Caribou_Protection_Workshop_Findings_2012_07.pdf
- Nishi, J.S.** 2012. Summary Report of Wildlife-Fence Interactions of the Penny Ranch and Implications for Biodiversity. Prepared for Bennett Jones LLP, Calgary, AB. 41 pp.
- Campbell, M., **J. Nishi**, and J. Boulanger. 2010. A calving ground photo survey of the Qamanirjuaq migratory barren-ground caribou (*Rangifer tarandus groenlandicus*) population – June 2008. Nunavut Department of Environment, Technical Report Series 2010 – No. 1-10, 247 pp. [Online] http://env.gov.nu.ca/sites/default/files/report_-qamanirjuaq_caribou_nov_2010.pdf
- Nishi, J.S.** 2010. A Review of Best Practices and Principles for Bison Disease Issues: Greater Yellowstone and Wood Buffalo Areas. Wildlife Conservation Society and American Bison Society (ABS), ABS Working Paper No. 3. Bronx, New York, USA. 101 pp. [Online] <http://www.americanbisonsocietyonline.org/Publications.aspx>
- Nishi, J.S.** and T. Antoniuk. 2010. Cumulative Effect Thresholds and Natural Gas Development Scenarios in the southern Dehcho. Unpublished Report submitted to Indian and Northern Affairs Canada, Yellowknife. ALCES Group. Calgary, Alberta.

PROFESSIONAL ACTIVITIES

GRADUATE STUDENT – EXAMINATION COMMITTEES

- Forde, T.L. 2015. Heightened resolution in wildlife health monitoring and outbreak investigations through the use of molecular and genomic tools. PhD Dissertation. University of Calgary, Calgary, AB.
- Kutz, S.J. 1999. The biology of *Umingmakstrongylus pallikuukensis*, a lung nematode of muskoxen in the Canadian Arctic: field and laboratory studies. PhD Dissertation. University of Saskatchewan, Saskatoon, SK.

WORKSHOP FACILITATION (2010 – PRESENT)

- Collaborated with P. Jacobsen, Tłı̨chǫ Government. 2019 and 2022. Assist with delivery of 3-day training workshops for monitors and researchers of Ekwǫ̀ Nàxoèdee K'è (Boots On The Ground) Monitoring Program, 18-20 June 2019 and 22-24 June 2022, Yellowknife, NT
- Collaborated with L. Schaldemose (Schaldemose and Associates Inc.), R. Harding (REDES Inc.), and S. Grindal (Conoco-Phillips Canada, COSIA). 2016-2017. Engagement with nine Aboriginal communities, as both rights-holders and stakeholders, through three multi-party workshops (15-16 Mar, 24-25 May, and 4-5 Oct 2017, Fort McMurray, AB.) to facilitate a collaborative, interest-based approach for bringing communities and other interested parties together to ensure a common understanding and allow for identification of common ground for action and promote innovative, collaboratively developed solutions

with regard to the Caribou Recovery Pilot Project. Online [URL]:

<https://cosia.ca/uploads/documents/id56/CRPP%20Aboriginal%20Engagement%202017-12.pdf>

- Collaborated with T.M. Antoniuk (Salmo Consulting Inc.) on “Caribou Fencing Pilot Project – Working Group Meetings” 21 Sep 2015, and 4 Nov 2015, University of Alberta, Edmonton, AB.
- Collaborated with K. Garner (Ktunaxa Nation Council) on “South Selkirk Mountain Caribou: Maternal Penning Workshop”, 30-31 March 2015. Cranbrook, BC.
- Collaborated with M. Pyper (Fuse Consulting Ltd.) and L. McNeil (McNeil Consulting) on “COSIA Land EPA Caribou Habitat Linear Disturbance Restoration Workshop, 27 August 2014, Calgary, AB.
- Collaborated with T.M. Antoniuk (Salmo Consulting Inc.) and L. McNeil (McNeil Consulting) on “Oil Sands Leadership Initiative - Caribou Protection & Recovery Program Workshop, 16-17 May 2012, Banff, AB.
- Collaborated with J. Adamczewski (GNWT) on “Workshop on Counting Caribou,” in conjunction with 13th Arctic Ungulate Conference, 25 August 2011. Yellowknife, NT.
- Collaborated with K. Garner (Tlicho Government) on “Tlicho Ekwo Working Group – Orientation Workshop,” 13-15 December 2010, Yellowknife, NT.

COMMITTEES

- International Union for Conservation of Nature (IUCN), Species Survival Commission (SSC) Bison Specialist Group - North America (2001 – present)
- Government of the Northwest Territories, Department of Environment and Natural Resources, Wildlife Care Committee member (2004 – 2006)
- National Recovery Team for Wood Bison (1998 – 2007) and Chair of Genetic Management Recovery Implementation Group (2000 – 2007)
- Government of the Northwest Territories, Department of Transportation, Bison-Vehicle Committee (2003 – 2005)
- Bison Interim Measures Technical Working Group (2002 – 2004)
- Research Advisory Committee, Wood Buffalo National Park Bison Research and Containment Program (1998 – 2001)

MEDIA APPEARANCES

- Galloway, C. (Director). 2023. “*KÒK’ETÌ: WALKING WITH CARIBOU*” [Film: Documentary on Ekwo Nàxoèhdee K’è Caribou Monitoring Program, Tłı̨chǫ Government] Trail Films; Candela Collective Inc. Online [URL]: <https://www.trailfilms.ca/portfolio/koketi>

PROFESSIONAL AFFILIATIONS

- Alberta Institute of Agrologists, Professional Agrologist, P.Ag.
- Alberta Society of Professional Biologists, Professional Biologist, P.Biol.
- Alberta Chapter of the Wildlife Society
- Alberta Trappers’ Association

CERTIFICATIONS

- Alberta Drivers Licence (Class 3)
- Canada Firearms Licence – Possession and Acquisition (Non-restricted and Restricted)
- Canada Pleasure Craft Operator Card