

NORTH PACIFIC RESEARCH BOARD

"Building a clear understanding of the North Pacific, Bering Sea, and Arctic Ocean ecosystems that enables effective management and sustainable use of marine resources."

January 31, 2022

Mr. Simon Kinneen, Chair North Pacific Fishery Management Council 1007 West Third, Suite 400 Anchorage, AK 99501-2252

Re: Nomination of Danielle Dickson to the Bering Sea Fishery Ecosystem Plan Team

Dear Chairman Kinneen,

I would like to nominate Danielle Dickson for appointment to the Council's Bering Sea Fishery Ecosystem Plan (FEP) Team to replace Dr. Jo-Ann Mellish who is stepping down to focus on other work priorities. With Danielle's marine mammal experience and leading the upcoming Norther Bering Sea Integrated Ecosystem Research Program (IERP), I feel Danielle would be an excellent candidate to round out the FEP teams' overall expertise. Danielle is wrapping up the Arctic IERP and just launched the Assessment phase for the Northern Bering Sea IERP. Her focus will be in the Bering Sea region for the next several years.

Danielle began her career as a marine mammal biologist. Early in her career she volunteered on numerous marine mammal research and later focused her M.S. on harbor seal ecology. She worked as the staff biologist and biosampling program coordinator for the Alaska Native Harbor Seal Commission, then spent five years working as a Marine Mammal Biologist for LGL Alaska Research where she worked on several Cook Inlet beluga whale monitoring projects and studied the effects of seismic offshore exploration activities on marine mammal behavior in the Chukchi and Beaufort Seas. She has been a member of the Society for Marine Mammalogy since 1998 and NPRB typically supports her attendance of the society's biennial conference.

Danielle's current resume is attached for reference. Thank you for considering Ms. Dickson's appointment at the upcoming Executive Session of the SSC.

Sincerely,

Lynn Palensky Executive Director

DANIELLE DICKSON

North Pacific Research Board 1007 W. Third Avenue, Suite 100 Anchorage, AK 99501 Tel. 907-223-2032 Danielle.Dickson@nprb.org

EDUCATION

2004 Master's of Science in Biological Sciences (summa cum laude), University of Alaska Anchorage, Anchorage, AK

Bachelor's of Science in marine science with a concentration in biology (Honors degree, cum laude), Southampton College of Long Island University, Southampton, NY

PROFESSIONAL EXPERIENCE

July 18, 2011- North Pacific Research Board, 1007 W. 3rd Avenue, Suite 100, Anchorage, AK 99501

Senior Program Manager/Chief Officer for Collaboration and Synthesis (October 2018-Present)

- Manage coordination of research projects funded by or complementary to the work of NPRB, foster collaboration between these projects, and oversee related synthesis efforts.
- Develop innovative partnerships with other institutions to jointly fund research that relates to achieving the NPRB mission.
- Demonstrate NPRB capacity to facilitate coordination of Alaska marine research with national and international colleagues and indigenous knowledge holders.
- Continue work associated with the Senior Program Manager role listed below.

Senior Program Manager (July 2014-October 2018)

- Design, implement, and manage the Integrated Ecosystem Research Program (IERP). I developed and managed the \$18.6 M Arctic Integrated Ecosystem Research Program (Arctic IERP www.nprb.org/arctic) 2016-2021 that addressed how climate-related changes in the marine ecosystem influence the transfer of energy throughout the Chukchi Sea ecosystem and the distribution and abundance of fishes. I also managed the \$17.6 M Gulf of Alaska IERP 2011-2018 that investigated the hypothesis that the recruitment of commercial groundfish is correlated with fish survival during their first year of life. This program has provided information to advance fishery management and has led NOAA to make important updates to Gulf of Alaska ecosystem indicators.
- Serve as the Senior Program Manager for the NPRB Long-Term Monitoring Program. I coordinate with PIs to demonstrate the utility of the time series data they collect, find novel applications for the data, and attract consortium funding partners and new collaboration opportunities.

Program Manager (July 2011-July 2014)

- Managed the \$17.6 million Gulf of Alaska IERP and served as liaison to foster collaboration with the Gulf Watch Alaska long-term monitoring program funded by the Exxon-Valdez Oil Spill Trustee Council.
- Actively managed the \$1.5 million Pacific Marine Arctic Regional Synthesis (PacMARS) in coordination with National Science Foundation to guide a team of senior-level scientists to develop products that went beyond individual scientific disciplines and made broad-scale recommendations for the direction of future Arctic research efforts. Communicated with the public about the project and represented NPRB at meetings in Alaska Native communities in North Slope, Northwest Arctic, and Bering Strait regions.
- Established relationships with partner organizations to fund the Arctic IERP and coordinated closely with Interagency Arctic Research Policy Committee and U.S. Arctic Research Commission. Secured \$2.5 M from partner organizations to support the program.

June 1, 2006-July 15, 2011

Marine Mammal Biologist, LGL Alaska Research Associates, Inc., 2000 West International Airport Road, Suite C-1, Anchorage, AK, 99502

- Formulated and carried out marine mammal research in the Arctic to meet the
 reporting requirements of an Incidental Harassment Authorization issued to the oil
 and gas industry by NOAA. Collected and analyzed data to assess the effects of
 marine seismic surveys on marine mammal distribution and behavior and
 contributed to comprehensive reports on the Joint Monitoring Program in the
 Chukchi and Beaufort seas, open-water seasons, 2006–2009.
- Calculated marine mammal take estimates for an early winter seismic survey in the Alaskan Beaufort Sea using best available information on marine mammal spatial distribution and life history. Recommended modifications to survey design to minimize interactions with marine mammals.
- Served as a Marine Mammal Biologist and Field Crew Leader for studies of Cook Inlet beluga whale seasonal behavior and habitat use in relation to industrial activities proposed by Chuitna Coal, the Port of Alaska, and the Alaska Department of Transportation.
- Acted as a liaison for communications related to seismic surveys for Lamont-Doherty Earth Observatory (2010 2011). Contacted Alaska Native communities and NGOs, fisheries organizations, and state and federal agencies for public scoping related to marine seismic surveys in the Gulf of Alaska, Bering Sea and Arctic Ocean.

May 15, 2004-May 30, 2006

Wildlife Biologist and Biosampling Program Coordinator, Alaska Native Harbor Seal Commission, 800 E. Dimond Blvd., Anchorage, AK 99518

- Trained and certified Alaska Native hunters to collect biological samples for research from harbor seals harvested for subsistence.
- Collaborated with the Alaska Department of Fish & Game, the Alaska Sea Life Center, the National Marine Fisheries Service, the University of Alaska, and other institutions to conduct research using the samples collected by the program to assess the health of harbor seal populations statewide.

Dec. 15, 2004-Jan. 15, 2005

Environmental Consultant, Stratus Consulting, 1881 9th Street #201, Boulder, CO, 80302

Documented the location and extent of oiling of habitat and marine mammals as a
vessel-based marine mammal observer under contract to NOAA for a Natural
Resource Damage Assessment following the Selendang Ayu oil spill in Unalaska,
Alaska.

Jan. 1, 2004-Dec. 31, 2004

Environmental Analyst, Altarum, 3520 Green Ct., Suite 300, Ann Arbor, MI 48105

- Participated in discussions that led to the development of an integrated science plan for the North Slope region of Alaska (North Slope Science Initiative).
- Facilitated information exchange workshops and drafted summary documents and supporting materials.

Jun. 21, 2001 May 4, 2004

Graduate Research Assistant, University of Alaska Anchorage, 3211 Providence Dr., Anchorage, AK 99508

- Characterized harbor seal use of the ecosystem at the terminus of Bering Glacier in southcentral Alaska.
- Collaborated with scientists from a variety of disciplines (oceanography, ichthyology, geology, glaciology, paleontology, etc.) to characterize the ecosystem at the terminus of Earth's largest temperate surging glacier, and to make management recommendations based on sound science.
- Modeled seasonal trends in harbor seal abundance using generalized linear modeling.
- Examined harbor seal diet to relate significant trends in seal abundance to ephemeral prey resources.
- Developed methodology for assessing harbor seal demography using aerial photogrammetry.
- Monitored the movements and haulout patterns of individual seals using VHF radio telemetry.

Jul. 15, 2000-Jun. 15, 2001

Volunteer Field Assistant, Hong Kong University/ Underwater World Singapore, 80 Siloso Rd., Sentosa, Singapore 098969

• Assisted with the simultaneous recording of video and acoustic data to identify signature calls of captive Indo-Pacific humpbacked dolphins.

Mar. 1, 2000-April 1, 2000

Marine Mammal Observer, NOAA Windward Islands humpback whale survey, Southern Caribbean Sea, National Marine Fisheries Service, Southeast Fisheries Science Center, 75 Virginia Beach Dr., Miami, FL 33149

 Participated in a ship-based census for humpback whales and other marine mammal species that involved searching for animals visually and using passive acoustics.

Jan. 1, 2000-Apr. 30, 2000

Volunteer Field Assistant, Whale Center of New England, P.O. Box 159, Gloucester, MA, 01931

- Participated in a long-term mark-recapture study of North Atlantic humpback whales using photo-identification.
- Documented the behavior of individual feeding humpback whales.

Oct. 1,1999- Volunteer Field Assistant, Pacific Whale Foundation, 300 Maalaea Rd., Suite 211, Maui, HI, 96793

• Assisted in the deployment and recovery of time-depth recorders used to study the diving behavior of cetaceans.

Jan. 15, 1998-Apr. 30, 1998 Research Assistant, Southampton College of Long Island University, 239 Montauk Hwy., Southampton, NY 11968

• Studied seasonal changes in behavior and demographic trends in a population of migrating North Pacific humpback whales near Maui, Hawaii (undergraduate Honor's thesis).

PUBLICATIONS

- Baker, M.R., E.V. Farley, C. Ladd, S.L. Danielson, K.M. Stafford, H.P. Huntington, and **D.M.S. Dickson**. 2020. Integrated Ecosystem Research in the Pacific Arctic Understanding ecosystem processes, timing, and change. Deep-Sea Research Part II: Topical Studies in Oceanography 177. https://doi.org/10.1016/j.dsr2.2020.104850.
- Huntington, H.P., S.L. Danielson, F.K. Wiese, M. Baker, P. Boveng, J.J. Citta, A. De Robertis, D.M.S. Dickson, E. Farley, J.C. George, K. Iken, D.G. Kimmel, K. Kuletz, C. Ladd, R. Levine, L. Quakenbush, P. Stabeno, K.M. Stafford, D. Stockwell, and C. Wilson. 2020. Evidence suggests potential transformation of the Pacific Arctic Ecosystem is underway. Nature Climate Change 10:342-348. https://doi.org/10.1038/s41558-020-0695-2.
- Moran, J.R., M.B. O'Dell, M.L. Arimitsu, J.M. Straley, and **D.M.S. Dickson**. 2017. Seasonal distribution of Dall's porpoise in Prince William Sound, Alaska. Deep-Sea Research II: Topical Studies in Oceanography.
- **Dickson, D.M.S.**, and M. Baker. 2016. Introduction to the North Pacific Research Board Gulf of Alaska Integrated Ecosystem Research Program (GOAIERP): Volume I. Deep-Sea Research Part II: Topical Studies in Oceanography 132:1-5.
- **Savarese**, **D.M.** and J.M. Burns. 2010. Harbor seal (*Phoca vitulina richardii*) use of the Bering Glacier habitat: implications for management. (Chapter 9) *In* Robert A. Shuchman and Edward G. Josberger (eds.). Bering Glacier: Interdisciplinary studies of Earth's largest temperate surging glacier. Special Publication 462 of the Geological Society of America. 384 p.
- **Savarese, D.M.** 2004. Seasonal trends in harbor seal (*Phoca vitulina richardsi*) abundance at the Bering Glacier in Southcentral Alaska. M.S. thesis, University of Alaska Anchorage, Anchorage, AK. 70 pp.

SYNERGISTIC ACTIVITIES

- Co-Lead of the Interagency Arctic Research Policy Committee Marine Ecosystems Collaboration Team January 2017-present.
- Participated in two mentorship circles organized by the Interagency Arctic Research Policy Committee in 2021 and 2022.
- Member of the Interagency Arctic Research Policy Committee End-Of-Plan Steering Committee for the U.S. Arctic Research Plan 2017-2021.
- Served on an external review committee for the NOAA Oceanic & Atmospheric Research Arctic Research Program summer 2019.

- Contributor to Deal, C., G. Gibson, and W. Weijer. 2019. Marine Biogeochemistry in the Coastal Arctic: Towards Improved Quantitative Understanding of the Controls on Marine Biogeochemical Processes in the Arctic Coastal Zone, and Their Impacts on Climate and the Food Web: A White Paper for DOE's Regional and Global Model Analysis (RGMA) Program.
- Co-lead of the Interagency Arctic Research Policy Committee Chukchi and Beaufort Sea Ecosystem Collaboration Team June 2014-December 2016.
- Managing Guest Editor for two volumes of special issues entitled "Understanding Ecosystem Processes in the Gulf of Alaska" published in *Deep-Sea Research II*.
- Responses of Arctic Marine Ecosystems to Climate Change, edited by F.J. Mueter, **D.M.S. Dickson**, H.P. Huntington, J.R. Irvine, E.A. Logerwell, S.A. MacLean, L.T. Quakenbush, and C. Rosa, Alaska Sea Grant, University of Alaska Fairbanks, 2013.
- Co-Investigator on marine mammal research permits issued to Jan Straley and Craig Matkin by the National Marine Fisheries Service. Collaborator on the Gulf Watch Alaska research program funded by the Exxon-Valdez Oil Spill Trustee Council.

TECHNICAL REPORTS

- **Dickson, D.** 2020. Implementing Ecological Forecasting in Alaska. Report to NOAA National Weather Service, NOAA Alaska Region, and NOAA Alaska Fisheries Science Center. North Pacific Research Board, Anchorage, AK.
- NPRB 2015. Arctic Program Implementation Plan 2015-2021. North Pacific Research Board, Anchorage, AK.
- Wiese, F., G. Auad, D. Williams, R. Merrick, M. Jeffries, B. Kelly, A. Thornhill, L. Thorsteinson, and **D. Dickson**. 2015. Framing Arctic marine research initiatives: A Framework for coordinated marine ecosystem research in the U.S. Chukchi and Beaufort Seas. North Pacific Research Board, Anchorage, AK.
- **Dickson, D**. (Editor). 2014. Developing a Conceptual Model of the Arctic Marine Ecosystem. Workshop report, 92 p. http://www.iarpccollaborations.org/teams/Chukchi-Beaufort-Seas#documents.
- Beland, J., C.M. Reiser, R. Rodrigues, and **D.M. Dickson**. 2011. Beaufort Sea vessel-based monitoring program. (Chapter 5) In: Funk., D.W., D.S. Ireland, R. Rodrigues, and W.R. Koski (eds.). 2011. Joint Monitoring Program in the Chukchi and Beaufort seas, open-water seasons, 2006–2009. LGL Alaska Report P1050-2, Report from LGL Alaska Research Associates, Inc., LGL Ltd., Greeneridge Sciences, Inc., and JASCO Applied Sciences, for Shell Offshore, Inc. and Other Industry Contributors, and National Marine Fisheries Service, U.S. Fish and Wildlife Service. 462 p. plus Appendices.
- Reiser, C.M., J. Beland, D.S. Ireland, R. Rodrigues, and **D.M. Dickson**. 2011. Chukchi Sea vessel-based monitoring program. (Chapter 3) In: Funk., D.W., D.S. Ireland, R. Rodrigues, and W.R. Koski (eds.). 2011. Joint Monitoring Program in the Chukchi and Beaufort seas, open-water seasons, 2006–2009. LGL Alaska Report P1050-2, Report from LGL Alaska Research Associates, Inc., LGL Ltd., Greeneridge Sciences, Inc., and JASCO Applied Sciences, for Shell Offshore, Inc. and Other Industry Contributors, and National Marine Fisheries Service, U.S. Fish and Wildlife Service. 462 p. plus Appendices.
- Reiser, C.M., **D.M. Savarese**, D.S. Ireland, and M. Bourdon. 2011. Beaufort Sea vessel-based marine mammal monitoring results. (Chapter 5) In: Reiser, C.M, D.W. Funk, R. Rodrigues, and D. Hannay. (eds.) 2011. Marine mammal monitoring and mitigation during marine geophysical surveys by Shell Offshore, Inc. in the Alaskan Chukchi and Beaufort seas, July–October 2010: 90-day report. LGL Rep. P1171E–1. Rep. from LGL Alaska Research Associates Inc., Anchorage, AK, and JASCO Applied Sciences, Victoria, BC for Shell Offshore Inc, Houston, TX, Nat. Mar. Fish. Serv., Silver Spring, MD, and U.S. Fish and Wild. Serv., Anchorage, AK. 240 pp, plus appendices.

- Reiser, C.M., **D.M. Savarese**, D.S. Ireland, and M. Bourdon. 2011. Chukchi Sea vessel-based marine mammal monitoring results. (Chapter 7) In: Reiser, C.M, D.W. Funk, R. Rodrigues, and D. Hannay. (eds.) 2011. Marine mammal monitoring and mitigation during marine geophysical surveys by Shell Offshore, Inc. in the Alaskan Chukchi and Beaufort seas, July–October 2010: 90-day report. LGL Rep. P1171E–1. Rep. from LGL Alaska Research Associates Inc., Anchorage, AK, and JASCO Applied Sciences, Victoria, BC for Shell Offshore Inc, Houston, TX, Nat. Mar. Fish. Serv., Silver Spring, MD, and U.S. Fish and Wild. Serv., Anchorage, AK. 240 pp, plus appendices.
- Savarese, D.M., C.M. Reiser, D.S. Ireland, and R. Rodrigues. 2010. Beaufort Sea vessel-based monitoring program. (Chapter 6) In: Funk, D.W., D.S., Ireland, R. Rodrigues, and W.R. Koski (eds.). 2010. Joint monitoring program in the Chukchi and Beaufort seas, open water seasons, 2006–2008. LGL Alaska Rep. P1050-3, Rep. from LGL Alaska Research Associates, Inc., LGL Ltd., Greeneridge Sciences, Inc., and JASCO Research Ltd. For Shell Offshore Inc., and Other Industry Contributors, and National Marine Fisheries Service, U.S. Fish and Wildlife Service. 499 p, plus Appendices.
- Haley, B., J. Beland, D.S. Ireland, R. Rodrigues, and D.M. Savarese. 2010. Chukchi Sea vessel-based monitoring program. (Chapter 3) In: Funk, D.W., D.S., Ireland, R. Rodrigues, and W.R. Koski (eds.). 2010. Joint monitoring program in the Chukchi and Beaufort seas, open water seasons, 2006–2008. LGL Alaska Rep. P1050-3, Rep. from LGL Alaska Research Associates, Inc., LGL Ltd., Greeneridge Sciences, Inc., and JASCO Research Ltd. For Shell Offshore Inc., and Other Industry Contributors, and National Marine Fisheries Service, U.S. Fish and Wildlife Service. 499 p, plus Appendices.
- Reiser, C. M., **D. M. Savarese**, B. Haley, and J. Beland. 2010. Vessel-based marine mammal monitoring results. (Chapter 5) In: Reiser, C. M, D. W. Funk, R. Rodrigues, and D. Hannay. (eds.) 2010. Marine mammal monitoring and mitigation during open water seismic exploration by Shell Offshore, Inc. in the Alaskan Chukchi Sea, July–October 2009: 90-day report. LGL Rep. P1112-1. Rep. from LGL Alaska Research Associates Inc. and JASCO Research Ltd. for Shell Offshore Inc, Nat. Mar. Fish. Serv., and U.S. Fish and Wild. Serv. 104 pp, plus appendices.
- Haley, B., C. Reiser, J. Beland, and **D. Savarese**. 2009. Chukchi Sea vessel-based seismic monitoring. (Chapter 5) In: Ireland, D.S., R. Rodrigues, D. Funk, W. Koski, D. Hannay (eds.). 2009. Marine mammal monitoring and mitigation during open water seismic exploration by Shell Offshore Inc. in the Chukchi and Beaufort Seas, July October 2008: 90-day report. LGL Rep. P1049-1. Rep. from LGL Alaska Research Associates, Inc., LGL Ltd., Greeneridge Sciences, Inc., and JASCO Research Ltd. For Shell Offshore Inc., Nat. Mar. Fish. Serv., and U.S. Fish and Wild. Serv. 277 pp, plus appendices.
- Beland, J., C. Reiser, B. Haley, and **D. Savarese**. 2009. Chukchi Sea vessel-based shallow hazards and site clearance monitoring. (Chapter 6) In: Ireland, D.S., R. Rodrigues, D. Funk, W. Koski, D. Hannay. (eds.) 2009/ Marine mammal monitoring and mitigation during open water seismic exploration by Shell Offshore Inc. in the Chukchi and Beaufort Seas, July October 2008: 90-day report. LGL Rep. P1049-1. Rep. from LGL Alaska Research Associates, Inc., LGL Ltd., and JASCO Research Ltd. For Shell Offshore Inc., Nat. Mar. Fish. Serv., and U.S. Fish and Wild. Serv. 277 pp, plus appendices.
- Reiser, C., B. Haley, J. Beland, and **D. Savarese**. 2009. Beaufort Sea vessel-based seismic monitoring. (Chapter 7) In: Ireland, D.S., R. Rodrigues, D. Funk, W. Koski, D. Hannay. (eds.) 2009/ Marine mammal monitoring and mitigation during open water seismic exploration by Shell Offshore Inc. in the Chukchi and Beaufort Seas, July October 2008: 90-day report. LGL Rep. P1049-1. Rep. from LGL Alaska Research Associates, Inc., LGL Ltd., and JASCO Research Ltd. For Shell Offshore Inc., Nat. Mar. Fish. Serv., and U.S. Fish and Wild. Serv. 277 pp, plus appendices.
- Beland, J., C. Reiser, B. Haley, and **D. Savarese**. 2009. Beaufort Sea vessel-based shallow hazards and site clearance monitoring. (Chapter 8) In: Ireland, D.S., R. Rodrigues, D. Funk, W. Koski, D. Hannay. (eds.) 2009/ Marine mammal monitoring and mitigation during open water seismic

- exploration by Shell Offshore Inc. in the Chukchi and Beaufort Seas, July October 2008: 90-day report. LGL Rep. P1049-1. Rep. from LGL Alaska Research Associates, Inc., LGL Ltd., and JASCO Research Ltd. For Shell Offshore Inc., Nat. Mar. Fish. Serv., and U.S. Fish and Wild. Serv. 277 pp, plus appendices.
- Reiser, C., B. Haley, **D. Savarese**, and D. Ireland. Chukchi Sea vessel-based monitoring program. *In* D. S. Ireland, Funk, D. W., R. Rodrigues, and W. R. Koski (eds.). 2008. Joint Monitoring Program in the Chukchi and Beaufort Seas, July-November 2007. LGL Alaska Rep. P971-1. Rep. from LGL Alaska Research Associates Inc., Anchorage, AK, LGL Ltd., and JASCO Research Ltd. and Greeneridge Sciences, Inc. for Shell Offshore Inc, Houston, TX, ConocoPhillips Alaska Inc., Anchorage, AK and Nat. Mar. Fish. Serv., Silver Spring, MD. and U.S. Fish and Wildlife Service. 445 p. plus appendices.
- Markowitz, T.M., T.L. McGuire and **D.M. Savarese.** 2007. Monitoring beluga whale (*Delphinapterus leucas*) distribution and movements in Turnagain Arm along the Seward Highway. Final report prepared by LGL Alaska Research Associates, Inc., Anchorage, Alaska for HDR Alaska Inc., Anchorage, Alaska on behalf of the Alaska Department of Transportation and Public Facilities.
- **Savarese, D.M.**, T.L. McGuire and T.M. Markowitz. 2007. Spatial distribution of beluga whales near the Port of Anchorage. Chapter 3 *In* T.M. Markowitz and T.L. McGuire (eds.) 2007. Temporal-spatial distribution, movements and behavior of beluga whales near the Port of Anchorage, Alaska. Report from LGL Alaska Research Associates, Inc., Anchorage, Alaska, for Integrated Concepts and Research Corporation and the U.S. Department of Transportation Maritime Administration.
- Nemeth, M.J., C.C. Kaplan, A.M. Prevel-Ramos, G.D. Wade, **D.M. Savarese**, and C.D. Lyons. 2007. Baseline studies of marine fish and mammals in Upper Cook Inlet, April through October 2006. Final report prepared by LGL Alaska Research Associates, Inc., Anchorage, Alaska for DRven Corporation, Anchorage, Alaska.