

# UPDATE: DSR DBO Special Issue May 2019-Complete

**Jacqueline M. Grebmeier**

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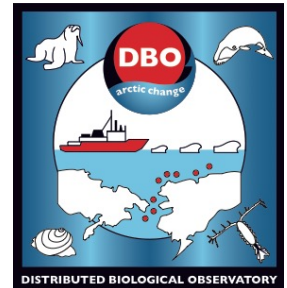
University of Maryland Center for Environmental Science, Solomons, MD, USA

**Pacific Arctic Group**

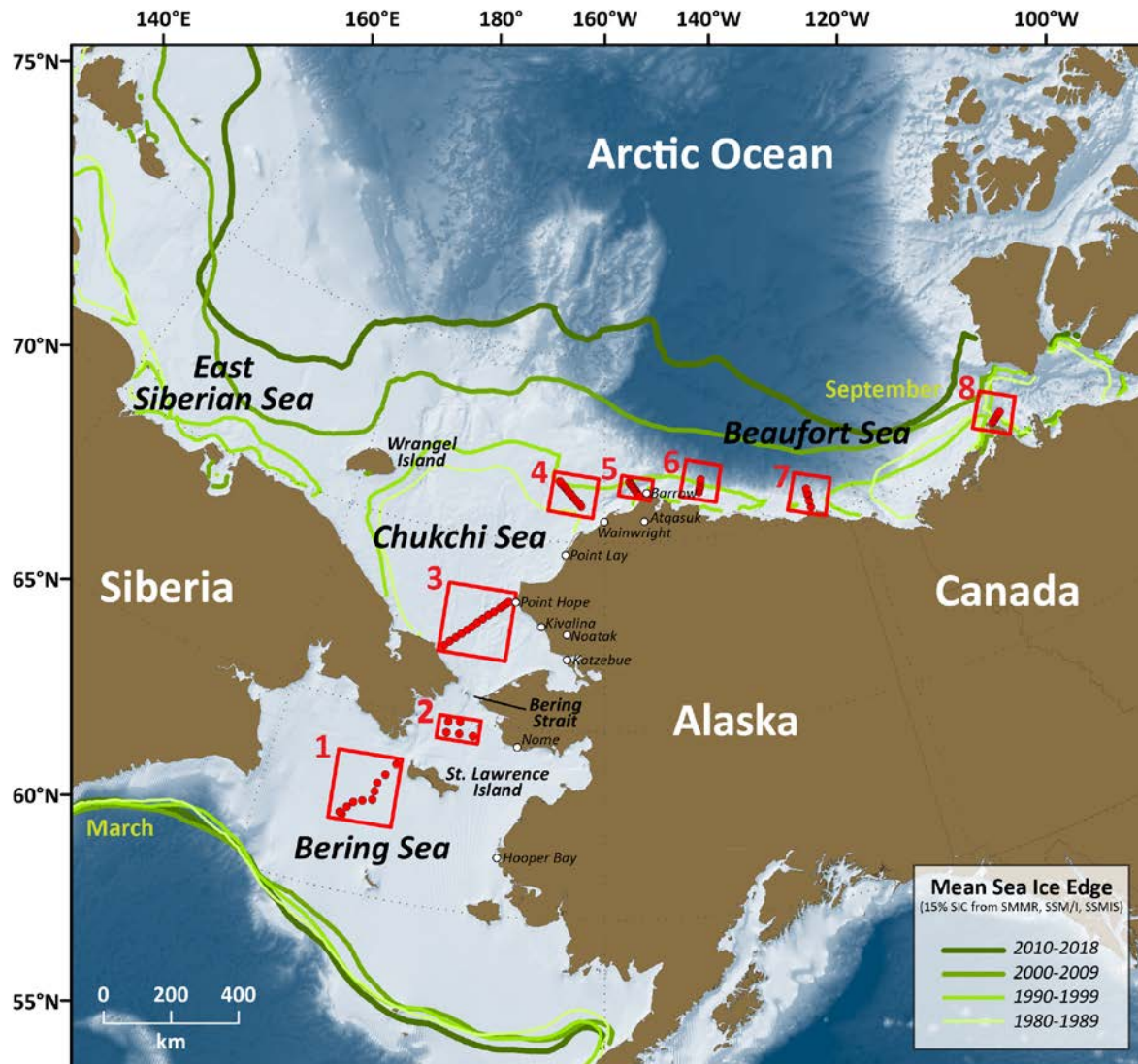
**ASSW 2019**

**Arkhangelsk, Russia**

**May 23, 2019**

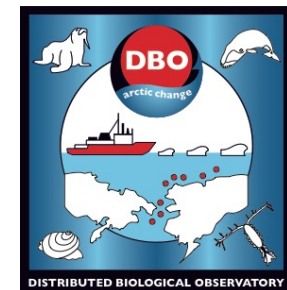


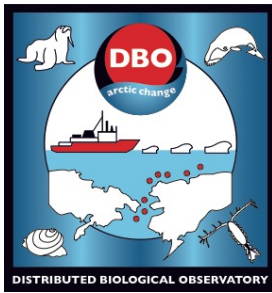
# The Distributed Biological Observatory: A Change Detection Array in the Pacific Arctic



- Special issue in Deep Sea Research II, Volume xxx; May 2019
- Guest editors: Grebmeier JM, SE Moore, LW Cooper, KE Frey, 2019
- Introductory chapter + 15 papers

[Grebmeier, Moore, Cooper, Frey, 2019]





*Grebmeier, Moore, Cooper, Frey: DBO DSR Special Issue Manuscript Titles*

**Special DSR Issue-The Distributed Biological Observatory: A Change Detection Array in the Pacific Arctic Region**

**Guest Editors:** Jacqueline M. Grebmeier, Sue E. Moore, Lee W Cooper, and Karen E Frey

**15 accepted papers+introduction, May 2019-COMplete**

**INTRODUCTION**

**1. The Distributed Biological Observatory: A Change detection array in the Pacific Arctic region - An Introduction**

Jacqueline M. Grebmeier, Sue E. Moore, Lee W Cooper, and Karen E Frey

**SEA ICE AND PHYSICAL OCEANOGRAPHY**

**2. Distributed Biological Observatory Region 1: Physics, chemistry and plankton in the northern Bering Sea**

Phyllis J. Stabeno, Shaun W. Bell, Nicholas A. Bond, David G. Kimmel, Calvin W. Mordy, Margaret E. Sullivan

**3. The encoding of wind forcing into the Pacific-Arctic pressure head, Chukchi Sea ice retreat and late-summer Barrow Canyon water masses**

Stephen Okkonen, Carin Ashjian, Robert G. Campbell, Philip Alatalo

**4. Seasonal to mesoscale variability of water masses and atmospheric conditions in Barrow Canyon, Chukchi Sea**

Robert S. Pickart, Carolina Nobre, Peigen Lin, Kevin R. Arrigo, Carin J. Ashjian, Catherine Berchok, Lee W. Cooper, Jacqueline M. Grebmeier, Ian Hartwell, Jianfeng He, Motoyo Itoh, Takashi Kikuchig, Shigeto Nishinog, Svein Vagle

**5. Pathways, timing, and evolution of Pacific winter water through Barrow Canyon**

Emily L. Shroyer, Robert S. Pickart

**6. On the nature of wind-forced upwelling in Barrow Canyon**

Maria N. Pisareva, Robert S. Pickart, Peigen Lin, Paula S. Fratantoni, Thomas J. Weingartner

**7. Characteristics and dynamics of wind-driven upwelling in the Alaskan Beaufort Sea based on six years of mooring data**

Peigen Lin, Robert S. Pickart, G.W.K. Moore, Michael A. Spall, Jianyu Hua

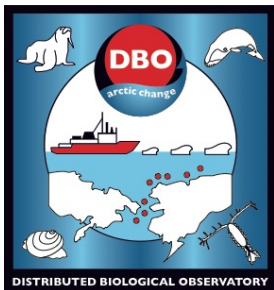
**PHYTOPLANKTON AND NUTRIENTS**

**8. A decade of summertime measurements of phytoplankton biomass, productivity and assemblage composition in the Pacific Arctic region from 2006-2016**

K.E. Giesbrecht, D.E. Varela, J. Wiktor, J.M. Grebmeier, B. Kelly, J.E. Long

**9. Impact of spatiotemporal variability in phytoplankton size structure on benthic macrofaunal distribution in the Pacific Arctic**

Hisatomo Waga, Toru Hirawake, Amane Fujiwara, Jacqueline M. Grebmeier, Sei-Ichi Saitoh



*Grebmeier, Moore, Cooper, Frey: DBO DSR Special Issue Manuscript Titles*

### **BENTHOS AND FISH**

**10. Changes in abundance and biomass of the bivalve *Macoma calcaria* in the northern Bering Sea and the southeastern Chukchi Sea from 1998 to 2014, tracked through dynamic factor analysis models**

Christina L. Goethel, Jacqueline M. Grebmeier, Lee W. Cooper

**11. Benthic trophic sensitivity to on-going changes in Pacific Arctic seasonal sea ice cover – Insights from the nitrogen isotopic composition of amino acids**

Monika Kędra, Lee W. Cooper, Mengjie Zhang, Dana Biasatti, Jacqueline M. Grebmeier

**12. High-latitude benthic bivalve biomass and recent climate change: testing the power of live-dead discordance in the Pacific Arctic**

Caitlin A. Meadows, Jacqueline M. Grebmeier, Susan M. Kidwell

**13. A Video Seafloor Survey of Epibenthic Communities in the Pacific Arctic including Distributed Biological Observatory stations in the Northern Bering and Chukchi Seas**

Lee W. Cooper, Marisa L. Guarinello, Jacqueline M. Grebmeier, Alynne Bayard, James Lovvorn, Christopher North, Jason Kolts

**14. Developing an observational design for epibenthos and fish assemblages in the Chukchi Sea**

Katrin Iken, Franz Mueter, Jacqueline M. Grebmeier, Lee W. Cooper, Seth L. Danielson, Bodil A. Bluhm

### **MARINE BIRDS AND MAMMALS**

**15. Representation of the Pacific Arctic seabird community within the Distributed Biological Observatory array, 2007–2015**

Kathy J. Kuletz, Daniel Cushing, Erik E. Osnas, Elizabeth A. Labunski, Adrian Gall

**16. Marine birds and mammals as ecosystem sentinels in and near Distributed Biological Observatory regions: An abbreviated review of published accounts and recommendations for integration to ocean observatories**

Sue E. Moore, Kathy J. Kuletz