NAMMCO SCIENTIFIC COMMITTEE 30

WORKING GROUP ON RINGED SEALS

16 November 2023, 16:00–19:00 CET, Video conference

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SC/30/RSWG/07	Rosing-Asvid, A., Löytynoja, A., Momiglaino, P., Hansen, R. G., Hjorth Scharff-Olsen, C., Valtonen, M., Kammonen, J., Dietz, R., Farsø Rigét, F., Ferguson, S., Lydersen, C., Kovacs, K. M., Holland, D. M., Jernvall, J., Auvinen, P., & Tange Olsen, M. (2023). An evolutionarily distinct ringed seal in the Ilulissat Icefjord. *Molecular Ecology*, *00*, 1–12. https://doi.org/10.1111/mec.17163	4.1
SC/30/RSWG/08	Lang, A., Boveng, P., Quakenbush, L., Robertson, K., Lauf, M., Rode, K., Ziel, H., & Taylor, B. (2021). Re-examination of population structure in Arctic ringed seals using DArTseq genotyping. *Endangered Species Research*, *44*, 11–31. https://doi.org/10.3354/esr01087	4.1.

For Information Documents

Doc. No.	Title	Agenda item
SC/30/RSWG/FI01	NAMMCO–North Atlantic Marine Mammal Commission. (1996). *Report of NAMMCO scientific committee* Ad hoc *working group on ringed seals* (p. 18). NAMMCO.	Several
SC/30/RSWG/FI02	Kovacs, K. M. (2014). *Circumpolar ringed seal (*Pusa hispida*) monitoring—CAFF´s ringed seal monitoring network* (43 Rapportserie Norsk Polarinstitutt, p. 48). Norsk Polarinstitutt.	Several
SC/30/RSWG/FI03	Quakenbush, L. T., Crawford, J. A., Nelson, M. A., & Olnes, J. R. (2019). *Pinniped movements and foraging: Village-based satellite tracking and collection of traditional ecological knowledge regarding ringed and bearded seals.* (OCS Study BOEM 2019-079; p. 131). U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Alaska Outer Continental Shelf Region.	4

SC/30/RSWG/FI04	Citta, J. J., Lowry, L. F., Quakenbush, L. T., Kelly, B. P., Fischbach, A. S., London, J. M., Jay, C. V., Frost, K. J., Crowe, G. O., Crawford, J. A., Boveng, P. L., Cameron, M., Von Duyke, A. L., Nelson, M., Harwood, L. A., Richard, P., Suydam, R., Heide-Jørgensen, M. P., Hobbs, R. C., … Gray, T. (2018). A multi-species synthesis of satellite telemetry data in the Pacific Arctic (1987–2015): Overlap of marine mammal distributions and core use areas. *Deep Sea Research Part II: Topical Studies in Oceanography*, *152*, 132–153. https://doi.org/10.1016/j.dsr2.2018.02.006	4
SC/30/RSWG/FI05	Crawford, J. A., Quakenbush, L. T., & Citta, J. J. (2015). A comparison of ringed and bearded seal diet, condition and productivity between historical (1975–1984) and recent (2003–2012) periods in the Alaskan Bering and Chukchi seas. *Progress in Oceanography*, *136*, 133–150. https://doi.org/10.1016/j.pocean.2015.05.011	4
SC/30/RSWG/FI06	Crawford, J. A., Frost, K. J., Quakenbush, L. T., & Whiting, A. (2019). Seasonal and diel differences in dive and haul-out behavior of adult and subadult ringed seals (*Pusa hispida*) in the Bering and Chukchi seas. *Polar Biology*, *42*(1), 65–80. https://doi.org/10.1007/s00300-018-2399-x	4
SC/30/RSWG/FI07	Crawford, J. A., Frost, K. J., Quakenbush, L. T., & Whiting, A. (2012). Different habitat use strategies by subadult and adult ringed seals (*Phoca hispida*) in the Bering and Chukchi seas. *Polar Biology*, *35*(2), 241–255. https://doi.org/10.1007/s00300-011-1067-1	4
SC/30/RSWG/FI08	Hamilton, C. D., Lydersen, C., Aars, J., Acquarone, M., Atwood, T., Baylis, A., Biuw, M., Boltunov, A. N., Born, E. W., Boveng, P., Brown, T. M., Cameron, M., Citta, J., Crawford, J., Dietz, R., Elias, J., Ferguson, S. H., Fisk, A., Folkow, L. P., … Kovacs, K. M. (2022). Marine mammal hotspots across the circumpolar Arctic. *Diversity and Distributions*, *28*(12), 2729–2753. https://doi.org/10.1111/ddi.13543	4,6
SC/30/RSWG/FI09	Freitas, C., Kovacs, K. M., Lydersen, C., & Ims, R. A. (2008). A novel method for quantifying habitat selection and predicting habitat use. *Journal of Applied Ecology*, *45*(4), 1213–1220. https://doi.org/10.1111/j.1365-2664.2008.01505.x	4
SC/30/RSWG/FI10	Freitas, C., Kovacs, K. M., Ims, R. A., & Lydersen, C. (2008). Predicting habitat use by ringed seals (*Phoca hispida*) in a warming Arctic. *Ecological Modelling*, *217*(1–2), 19–32. https://doi.org/10.1016/j.ecolmodel.2008.05.014	4
SC/30/RSWG/FI11	Freitas, C., Kovacs, K. M., Ims, R. A., & Lydersen, C. (2008). Predicting habitat use by ringed seals (*Phoca hispida*) in a warming Arctic. *Ecological Modelling*, *217*(1–2), 19–32. https://doi.org/10.1016/j.ecolmodel.2008.05.014	4,7
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SC/30/RSWG/FI14	Hamilton, C., Lydersen, C., Ims, R., & Kovacs, K. (2016). Coastal habitat use by ringed seals *Pusa hispida* following a regional sea-ice collapse: Importance of glacial refugia in a changing Arctic. *Marine Ecology Progress Series*, *545*, 261–277. https://doi.org/10.3354/meps11598	4

SC/30/RSWG/FI15	Hamilton, C. D., Kovacs, K. M., Ims, R. A., Aars, J., & Lydersen, C. (2017). An Arctic predator-prey system in flux: Climate change impacts on coastal space use by polar bears and ringed seals. *Journal of Animal Ecology*, *86*(5), 1054–1064. https://doi.org/10.1111/1365-2656.12685	4
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SC/30/RSWG/FI17	Hamilton, C. D., Kovacs, K. M., Ims, R. A., & Lydersen, C. (2018). Haul-out behaviour of Arctic ringed seals (*Pusa hispida*): Inter-annual patterns and impacts of current environmental change. *Polar Biology*, *41*(6), 1063–1082. https://doi.org/10.1007/s00300-018-2260-2	4
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SC/30/RSWG/FI19	Hamilton, C. D., Vacquié-Garcia, J., Kovacs, K. M., Ims, R. A., Kohler, J., & Lydersen, C. (2019). Contrasting changes in space use induced by climate change in two Arctic marine mammal species. *Biology Letters*, *15*(3), 20180834. https://doi.org/10.1098/rsbl.2018.0834	4
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SC/30/RSWG/FI21	Lone, K., Hamilton, C. D., Aars, J., Lydersen, C., & Kovacs, K. M. (2019). Summer habitat selection by ringed seals (*Pusa hispida*) in the drifting sea ice of the northern Barents Sea. *Polar Research*, *38*(0). https://doi.org/10.33265/polar.v38.3483	4
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SC/30/RSWG/FI23	Nelson, M., Quakenbush, L., Taras, B., & Ice Seal, C. (2019). Subsistence harvest of ringed, bearded, spotted, and ribbon seals in Alaska is sustainable. *Endangered Species Research*, *40*, 1–16. https://doi.org/10.3354/esr00973	4
SC/30/RSWG/FI24	Quakenbush, L. T., Bryan, A. L., Crawford, J. A., & Olnes, J. R. (2020). *Biological Monitoring of Ringed Seals in the Bering and Chukchi Seas* (NA16NMF4720079-Final Report; p. 33). Arctic Marine Mammal Program, Division of Wildlife Conservation, Alaska Department of Fish and Game.	4
SC/30/RSWG/FI25	Olnes, J., Quakenbush, L., Nelson, M., Simon, A., Burns, J., & Ice Seal Committee. (2022). Trends in Subsistence Harvests of Ice Seals in the Yukon-Kuskokwim Delta Region, Alaska, 1962 – 2018. *ARCTIC*, *75*(4), 449–461. https://doi.org/10.14430/arctic76302	5

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SC/30/RSWG/FI30	Bourdages, M. P. T., Provencher, J. F., Sudlovenick, E., Ferguson, S. H., Young, B. G., Pelletier, N., Murphy, M. J. J., D'Addario, A., & Vermaire, J. C. (2020). No plastics detected in seal (Phocidae) stomachs harvested in the eastern Canadian Arctic. *Marine Pollution Bulletin*, *150*, 110772. https://doi.org/10.1016/j.marpolbul.2019.110772	Other
SC/30/RSWG/FI31	Brown, T. A., Alexander, C., Yurkowski, D. J., Ferguson, S. H., & Belt, S. T. (2014). Identifying variable sea ice carbon contributions to the Arctic ecosystem: A case study using highly branched isoprenoid lipid biomarkers in Cumberland Sound ringed seals. *Limnology and Oceanography*, *59*(5), 1581–1589. https://doi.org/10.4319/lo.2014.59.5.1581	Other
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SC/30/RSWG/FI33	Carlyle, C. G., Roth, J. D., Yurkowski, D. J., Kohlbach, D., Young, B. G., Brown, T. A., Riget, F. F., Dietz, R., & Ferguson, S. H. (2022). Spatial variation in carbon source use and trophic position of ringed seals across a latitudinal gradient of sea ice. *Ecological Indicators*, *145*, 109746. https://doi.org/10.1016/j.ecolind.2022.109746	Other
SC/30/RSWG/FI34	Chambellant, M., Stirling, I., & Ferguson, S. (2013). Temporal variation in western Hudson Bay ringed seal *Phoca hispida* diet in relation to environment. *Marine Ecology Progress Series*, *481*, 269–287. https://doi.org/10.3354/meps10134	Other
SC/30/RSWG/FI35	Chambellant, M., Stirling, I., Gough, W. A., & Ferguson, S. H. (2012). Temporal variations in Hudson Bay ringed seal (*Phoca hispida*) life-history parameters in relation to environment. *Journal of Mammalogy*, *93*(1), 267–281. https://doi.org/10.1644/10-MAMM-A-253.1	Other
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SC/30/RSWG/FI37	De La Vega, C., Mahaffey, C., Yurkowski, D. J., Norman, L., Simpson, E., Smout, S., Ferguson, S. H., & Jeffreys, R. M. (2021). Biomarkers in Ringed Seals Reveal Recent Onset of Borealization in the High- Compared to the Mid-Latitude Canadian Arctic. *Frontiers in Marine Science*, *8*, 700687. https://doi.org/10.3389/fmars.2021.700687	Other
SC/30/RSWG/FI38	Desforges, J.-P., Kohlbach, D., Carlyle, C. G., Michel, C., Loseto, L. L., Rosenberg, B., Yurkowski, D. J., & Ferguson, S. H. (2022). Multi-dietary tracer approach reveals little overlap in foraging ecology between seasonally sympatric ringed and harp seals in the high Arctic. *Frontiers in Marine Science*, *9*, 969327. https://doi.org/10.3389/fmars.2022.969327	Other
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SC/30/RSWG/FI40	Ferguson, S. H., Yurkowski, D. J., Young, B. G., Fisk, A. T., Muir, D. C. G., Zhu, X., & Thiemann, G. W. (2020). Comparing temporal patterns in body condition of ringed seals living within their core geographic range with those living at the edge. *Ecography*, *43*(10), 1521–1535. https://doi.org/10.1111/ecog.04988	Other
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SC/30/RSWG/FI49	Houde, M., Taranu, Z. E., Wang, X., Young, B., Gagnon, P., Ferguson, S. H., Kwan, M., & Muir, D. C. G. (2020). Mercury in Ringed Seals (*Pusa hispida*) from the Canadian Arctic in Relation to Time and Climate Parameters. *Environmental Toxicology and Chemistry*, *39*(12), 2462–2474. https://doi.org/10.1002/etc.4865	Other
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