

**Progress Report, Actions #30**  
**2018-2020 Bilateral and Multilateral Actions,**  
**Circumpolar Action Plan:**  
**Conservation Strategy for the Polar Bear**



<b>Action</b>	Obtain information, where possible, on vital rates for all 19 subpopulations of polar bears. Improve methods to evaluate ecological indicators (e.g., reproduction) as proxies for robust estimates of vital rates
<b>Point(s) of contact or Lead country</b>	Canada Caroline Ladanowski & Samuel Iverson <a href="mailto:Caroline.ladanowski@canada.ca">Caroline.ladanowski@canada.ca</a> ; <a href="mailto:Samuel.iverson@canada.ca">Samuel.iverson@canada.ca</a> ;
<b>Partner Countries</b>	All Polar Bear Range States
<b>Timeline Description as per 2018-2020 implementation table</b>	Task proposed for 2018-2020 Proposed Timeline: January 2018: Canada develops information templates; February-April 2018: request to Range State members to solicit existing vital rates information from national experts; May-October 2018: information compiled and expert opinion sought to determine priority information needs and sampling recommendations; November-December 2018: draft report prepared by Canada; January-April 2019: report reviewed by Range State national experts; May-July 2019: final report complete.
<b>Baseline Status</b>	No circumpolar meta-analysis of estimated vital rates, as ecological indices has occurred.
<b>Planned Outputs</b>	A status report. The report will be made publically available by the Range State parties through the website. Intended audience includes researchers and wildlife managers, as well as other parties with an interest in polar bear conservation.
<b>Modifications made to date</b>	None
<b>Progress Report Date</b>	September 30, 2019

**Progress Report on Activity:**

A detailed outline was developed by Canada in consultation with Range States partners. The planned output is a status report comprised of the following subsections:

- (1) A compendium of existing information on polar bear subpopulation vital rates and the methods used to estimate them.
- (2) An evaluation of critical information needs obtained from outreach to polar bear experts relating to (a) priority subpopulations for new or ongoing study; (b) the type of information best suited to estimate and monitor changes in vital rates; and (c) best

practices for obtaining consistent, comparable information across regional subpopulations.

- (3) A discussion of challenges and considerations in the collection of vital rate information, including prioritization of limited financial resources and issues related to Indigenous/stakeholder perspectives on the use of techniques that involve physically handling bears.

In developing the project proposal, it was noted that the Polar Bear Specialist Group (PBSG) has an interest in conducting vital rates work and has made proposals to fund such work. This sub-action is complementary to that request and seeks to work with PBSG to identify priority information needs. Much of the information required for Part 2 of this sub-action will be obtained from the products developed under CAP Action #63 (Improved design of polar bear population studies) which is ongoing and led by the U.S.

Canada is coordinating this action with input from all Range States through the PBSG.

The timeline has been delayed from that which was initially proposed. Canada determined the project would best be advanced by engaging and with contracting an expert outside consultant, Dr. Stephen Atkinson, to lead the work. Additional time was required to hire Dr. Atkinson and for him to begin his work.

From January 2018 to November 2018, information templates were developed and the proposal was refined. In December 2019, Dr. Atkinson began compiling and reviewing vital rates studies for an annotated bibliography. In May 2019, formal outreach was made to Range State colleagues and PBSG members describing the initiative and seeking additional information for inclusion in the annotated bibliography. Dr. Atkinson is currently undertaking efforts to collect expert opinion through bilateral conversations to support parts 2 and 3.

**Next Steps:**

- October 1 – November 15, 2019: outreach to polar bear management and research experts to be completed and the draft status report developed.
- December 15, 2019: draft status report completed and shared with Range States and PBGS colleagues for review and input.
- January 30, 2020: status report completed.

**Considerations Going Forward:**

Recommendations included in the status report with regard priority subpopulations for new or ongoing vital rates study should be cross-referenced against the Subpopulation Inventory Schedule (<https://polarbearagreement.org/resources/agreement/circumpolar-action->

[plan/appendix-v](#)) to ensure proposed actions are in alignment with identified priorities with regard to abundance estimation and the collection of vital rates data.