

Interactive comment on “Sea-Ice Indicators of Polar Bear Habitat” by H. L. Stern and K. L. Laidre

Anonymous Referee #2

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This paper was very well written and easy to follow. It is solid work with sound analyses based on the best available data, and the results are striking and present material of high value that will be important as reference material and also as a basis for future work. I have no major questions or ideas for improvement of this article. Below a couple of minor comments.

Introduction, line 46: “The global population size is estimated to be about 25,000..)” I am not sure if “estimated” is the best wording here, as 25,000 is the sum of several estimates and guesses/extrapolations from areas with little or no data, so maybe rewrite.

Line 47: “Genetic analysis indicates that there is considerable gene flow between some subpopulations, while others are relatively discrete (...).” I would say “shows” rather than “indicates”. Genetic structure is very low. Would also rewrite last part of sentence, maybe “. . . It is more modest for some”. I do not think subpopulations anywhere is

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close to being discrete.

Methods, page 6, line 164: “. . . The winter sea-ice cover will likely continue to provide suitable polar bear habitat for at least several more decades (. . .).” Where? In most places?

Discussion: page 11, line 318, “. . . that show an increase in the number of ice-covered days” Should be decrease, not increase? Or ice-free days, not ice-covered days?

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