

CREW's Most Recent Peer-reviewed Polar Bear Scientific Publications

- Tompros A, Wojtusik J, Virgin E, Philpott M, Curry E. (2025). Assessment of anti-Müllerian hormone in polar bears (*Ursus maritimus*): Insights into seasonal regulation and reproductive senescence. *Theriogenology Wild* 7:100140 doi: 10.1016/j.therwi.2025.100140
- Curry E, Reinhart PR, Heinz JY, Barnes JL. (2025). Altrenogest-supported term gestation complicated by dystocia in a species exhibiting embryonic diapause, the red panda (*Ailurus fulgens*). *Theriogenology Wild* 7:100139 doi.org/10.1016/j.therwi.2025.100139
- Temam SJ, Atwood TC, Laidre KL, Virgin E, Rode KD, Rispoli L, Curry E. (2025). Hemoglobin A1c (HbA1c) is a retrospective indicator of denning in polar bears (*Ursus maritimus*). *Journal of Mammalogy*. *Journal of Mammalogy* gyaf033; 1-11. doi.org/10.1093/jmammal/gyaf033
- Curry E, Barnes J, Donelan E, Wojtusik J, Kennedy V, Virgin E, Philpott M, Roth TL. (2024). Reproductive health assessments in female polar bears: Anatomy, pathology, and diagnostic techniques. *Theriogenology Wild* 5:100105. doi:10.1016/j.therwi.2024.100105
- Wojtusik J, Philpott M, Donelan E, Stoops MA, Roth TL, Curry E. (2024). Testosterone concentrations in juvenile male polar bears (*Ursus maritimus*). *Theriogenology Wild* 5:100104. doi:10.1016/j.therwi.2024.100104
- Rzucidlo C, Curry E, Shero M. (2023). Non-invasive measurements of respiration and heart rate across wildlife species using Eulerian video magnification of infrared thermal imagery. *BMC Biology* 21:61. doi: 10.1186/s12915-023-01555-9
- Brandhuber M, Atkinson S, Cunningham C, Roth T, Curry E. (2023). Assessing dehydroepiandrosterone sulfate (DHEAS) as a novel biomarker for monitoring reproduction in polar bears. *General and Comparative Endocrinology* 338:114276. doi: 10.1016/j.ygcen.2023.114276.
- Curry E, Philpott ME, Wojtusik J, Haffey WD, Wyder MA, Greis KD, Roth TL. (2022). Label-free quantification (LFQ) of fecal proteins for potential pregnancy detection in polar bears. *Life* 12:796. doi: 10.3390/life12060796
- Wojtusik J, Roth TL, Curry E. (2022). Case studies in polar bear (*Ursus maritimus*) sperm collection and cryopreservation techniques. *Animals* 12:430.
- Curry E, Skogen M, Roth TL. (2021). Evaluation of an odour detection dog for non-invasive pregnancy diagnosis in polar bears (*Ursus maritimus*): Considerations for training sniffer dogs for biomedical investigations in wildlife species. *Journal of Zoo & Aquarium Research* 9:1-7.
- Bourque J, Desforges JPW, Levin M, Atwood TC, Sonne C, Dietz R, Jensen TH, Curry E, McKinney MA. (2020). Climate-associated drivers of plasma cytokines and contaminant concentrations in Beaufort Sea polar bears. *Science of the Total Environment* 745:140978.
- Bryant J and Roth T. (2018). Annual fecal glucocorticoid metabolite concentrations in pregnant and pseudopregnant polar bears (*Ursus maritimus*) in North American zoos. *Journal of Zoo and Aquarium Research*, 6(1), 6–11. <https://doi.org/10.19227/jzar.v6i1.259>
- Steinman KJ, O'Brien JK, Fetter GA, Curry E, Roth TL, Owen MA, Robeck TR. (2017). Enzyme immunoassay analysis for androgens in polar bear (*Ursus maritimus*) urine using enzyme hydrolysis. *Aquatic Mammals* 43:245-253.

- Curry E, Safayi S, Meyerson R, Roth TL. (2015). Reproductive trends of captive polar bears (*Ursus maritimus*) in North American zoos: a historical analysis. *Journal of Zoo and Aquarium Research* 3:99-106.
- Curry E, Wyatt J, Sorel L, MacKinnon KM, Roth TL. (2014). Ovulation induction and artificial insemination of a captive polar bear (*Ursus maritimus*) using fresh semen. *Journal of Zoo and Wildlife Medicine* 45:645-649.
- Stoops MA, MacKinnon KM, and Roth TL (2012). Longitudinal fecal hormone analysis for monitoring reproductive activity in the female polar bear (*Ursus maritimus*). *Theriogenology* 78: 1977-1986.
- Curry E, Roth TL, MacKinnon KM, Stoops MA. (2012). Factors influencing annual fecal testosterone metabolite profiles in captive male polar bears (*Ursus maritimus*). *Reproduction in Domestic Animals* 47:222-225.
- Curry E, Stoops MA, Roth TL. (2012). Non-invasive detection of candidate pregnancy protein biomarkers in the feces of captive polar bears (*Ursus maritimus*). *Theriogenology* 78:308-314.