



Creating Behavioral Reference Intervals for Tiger Cub Outcomes

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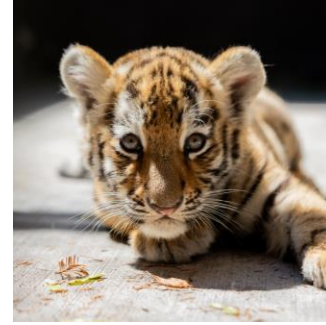
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Creating Behavioral Reference Intervals to Improve Tiger Cub Outcomes





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Goals



- **Felid TAG:** understanding species-specific behavior to meet husbandry needs
- **AZA Strategic Framework for the Wellbeing of Animals:** enhance lives by advancing animal welfare science
- **Tiger SSP:** provide up to date information in the Animal Care Manual to turn these findings into practice

Study Process

- (1) Conduct a retrospective analysis of tiger cub survival for all three sub-species and to identify risk factors for death
- (2) Collaborate on creating an ethogram specific to cub and dam interactions, using the Delphi method
- (3) Recruit participation from all AZA-accredited institutions with confirmed tiger pregnancies in 2025 to film and record the first 72 hours of dam-offspring interactions

- (4) Code behaviors in ZooMonitor using the ethogram created in phase 2, on the cub cohorts from 2025
- (5) Repeat observing for confirmed tiger pregnancies in 2026. In addition to filming, use the reference interval(s) calculated in phase 3 to inform conversations around intervention
- (6) Compare outcomes between 2025 and 2026 cohorts

Predictions and Outcomes

- We predict that low birth weight, first-time mothers, larger litters, and lack of intervention will contribute to poor cub outcomes
- We predict that experts will come to consensus on the ethogram on the second (approval) round
- We predict that using the reference intervals to guide conversations around intervention will lead to better outcomes for cubs in the 2026 cohort

- *These actions are appropriate to address the current wellbeing issue of poor cub outcomes and will help identify risk factors from past data to apply a more focused lens on target future litters, as well as help create user-friendly reference intervals for guiding future intervention.*



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Next Steps



- Internal research approval at your institution
 - *You can opt in to any of the steps of the study!*
Participation is not limited to pregnancy/birth
- (1) Sharing past records: our Veterinary co-PI's will reach out to you
- (2) Start the two-step ethogram questionnaire:
<https://forms.office.com/g/PwFSyvJfbF>
 - We will send the second step after compiling answers from first round
- (3) Filming: We will send you 4 Wyze cams, SD cards, and an external hard drive for videos
- (4) We will code video in ZooMonitor
- (5) Repeat filming in 2026
- (6) Analysis and interpretation

Thank you!

