Wild Animal Initiative

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Call for proposals

The welfare and ecology of juvenile wild animals

Opening date: July 2, 2021

Closing date: August 29, 2021

Grant size: 25,000 - 250,000 USD

Geographic focus: Flexible

Submissions: Submit an Expression of Interest form by August 29, 2021.

Background

It is tempting to imagine wild animals as healthy adults acting out the optimal life history to which they are adapted. Unfortunately, common life history strategies effectively guarantee that this image is not representative of what most individuals will actually experience. In many species, a minority survive to maturity, even if those who do reach adulthood may be capable of long lives.

The complex life histories of many species mean that juveniles interact with their world differently than adults. They have different capabilities and face different risks. They may inhabit entirely different habitats or even have different body forms, as is often seen in insects and amphibians. This raises the possibility that the truncated lives of animals who die young may be characterized by very different levels of welfare, for better or worse.

At <u>Wild Animal Initiative</u>, our objective is to improve the well-being of as many animals as possible. Therefore, we prioritize work on the most numerous wild animals, such as rodents, fish, and even invertebrates. The same logic leads us to prioritize research into the early lives of wild animals. While only some animals will survive to experience adulthood, a much greater proportion experience what life is like as a juvenile member of their species.

Therefore, we are pleased to solicit proposals for research on the welfare, ecology, and everyday experiences of juvenile wild animals. Relevant projects might include studies that extend captive animal welfare assessment techniques to juvenile wild animals, or those that demonstrate how ecological concepts can relate to wild animal health and wellbeing. Additional example projects are provided below.

How to apply

- **First round:** Submit an Expression of Interest form by August 29, 2021.
- **Second round:** Submit a full proposal, animal impacts form (if applicable), and CV.

Key dates

- Expression of Interest forms due: August 29, 2021
- Full Proposal invitations: September 10, 2021
- Full Proposals due: December 5, 2021
- Decisions expected: January 28, 2022

Eligibility

Wild Animal Initiative provides grants for research projects that help us understand and improve the lives of wild animals. Eligible projects will shed light on one of the following questions:

- What are the subjective experiences of wild animals like?
- What strategies can we use to improve the welfare of wild animals responsibly?

All final proposals will be required to explain how their anticipated results could inform part of a holistic welfare assessment based on the Five Domains framework of animal welfare (Mellor et al. 2020, Figure 1).

We will prioritize eligible projects insofar as they:

- Are especially likely to enable or motivate further welfare-relevant research, such as by establishing foundational concepts, developing novel methods, or engaging with areas of active discourse.
- Are especially unlikely to attract interest from other funders.
- Are relevant to especially numerous taxa.

Who can apply

This call is open to anyone, but we are especially interested in supporting postdocs and PhD students pursuing a long-term research career in the field of wild animal welfare. We particularly encourage applications from researchers who have not previously included welfare considerations in their work. If you are not sure whether your project would be relevant to understanding wild animal welfare, please feel free to contact us to discuss your idea.

What we fund

We will generally fund whatever is required for the project to be completed. However, we prioritize funding for direct research costs such as for supplies, materials, and travel. Funding for other expense areas (such as stipends, salaries, or durable goods) should be fully justified relative to the project goals.

What we do not fund

Wild Animal Initiative does not provide funding for indirect costs or institutional overhead.

Selection criteria

- **Engagement:** To what extent will this project accelerate or inspire other research or activity in support of wild animal welfare?
- Scope: How many animals could potentially benefit from the results of this project, and by how much?
- **Tractability:** Does this project have a high probability of being able to be carried out as described and delivering the expected answers or results?
- **Neglectedness:** How likely is it that this project could be funded by another organization, without reducing its value for wild animal welfare?
- Research ethics: How likely is the execution of this project to cause harm to non-human animals or people?

Definitions

- Juvenile/early life The precise timing of life stages will vary between species. Juvenile/early life begins when an individual is born or hatched, and ends after they attain reproductive maturity. This includes ages sometimes classified as "sub-adult" rather than "juvenile."
- Welfare The aggregate quality of an individual's subjective experiences over a given time period (or the sum of the welfare of each individual in a group). This can also be called "well-being" or "quality of life." We use "improving welfare" interchangeably with "reducing or preventing suffering." See here for further explanation.
- Wild animal Any individual animal whose life is not closely managed by humans. This includes animals living
 freely in human-dominated environments, such as parks and urban spaces, but excludes pets, farmed animals, and
 animals kept in zoos or in laboratories.

Project types

Relevant research directions include, but are not limited to:

- Comparing time or energy budgeting by juveniles of a given population distributed over different land use types.
- Estimating rates and causes of mortality of juveniles in an under-researched species.
- Population or ecosystem modeling to predict direct and indirect effects of changes in behavior (e.g. dispersal) or outcomes (e.g. survivorship) of juveniles from a particular species.
- Rigorous observational research to document the experiences of juveniles in a wild animal population (e.g. patterns and preferences of feeding, sleeping and other behaviors; encounters with other animals, including predators and conspecifics, amicable or confrontational).
- Collection of physiological or behavioral welfare metrics from juveniles (e.g. heart rate, facial/vocal expressions, glucocorticoids, telomere attrition).
- Development or testing of new welfare metrics that would be applicable to juveniles.
- Development or testing of interventions to improve the welfare of juvenile wild animals (e.g. headstarting, supplemental feeding, contraception).

Example

The following is a summary of a hypothetical project we would be interested in funding:

Black-tailed prairie dogs live in colonial networks ("towns") made up of family groups ("coteries") that form a metapopulation structure. As they approach sexual maturity, male black-tailed prairie dogs typically disperse from the subpopulation they were born in to seek more distantly related mates. Prior research suggests that this transitional period of life is perilous, with elevated mortality rates among dispersing males. It seems likely that most of this excess mortality results from increased predation risk, as dispersers are away from the protection of their burrows and the warning calls of conspecifics, or that the increased mortality risk comes from conflict with other prairie dogs in their receiving colony. However, the available data are very limited. The ongoing transformation of prairies to urban and agricultural land may be increasing average dispersal distances for black-tailed prairie dogs, making their journeys even riskier. In this project, we propose to collect data on stress (heart rate and cortisol), movement, activity, and cause-specific mortality from a sample of yearling black-tailed prairie dogs from three colonies in eastern Colorado. These data would allow us to characterize the specific hazards associated with dispersal, map dispersal routes, and assess the welfare of dispersing individuals in contrast to individuals of the same age who do not leave their birth colony or disperse along different routes or at different times.