GUIDELINES AS TO THE TYPES OF RESEARCH THAT CAN BE FUNDED WITH AN AFO GRANT

Grants from the Association of Field Ornithologists can be used to support research involving a variety of methodologies and techniques within certain guidelines that are provided below.

However, potential applicants should also be aware that AFO grants, especially the Skutch grants, can also be used to support research that is primarily or exclusively <u>observational</u> in nature and designed to add to our knowledge of the natural history of the species. Alexander Skutch was a master observer of birds living undisturbed in their natural environment and a strong proponent of this type of study.

Potential applicants should be aware the guidelines below are not exhaustive. On occasion, an applicant may propose to use a methodology or technique that is not addressed. In addition, there are certain activities for which it is difficult to provide specific guidelines because the impact of the research on the birds under study very much depends on the species involved and what the researcher plans to do. If an applicant is uncertain as to whether their research project can be funded with an AFO grant given their intended activity, they should contact the chair of the AFO Grants Committee to discuss this prior to submitting an application.

The AFO Council always welcomes input regarding these guidelines, which will be revised and updated on a regular basis.

ALLOWABLE METHODOLOGIES AND TECHNIQUES

Bird capture

Provided this rarely, if ever, causes territory or nest abandonment, birds may either be captured in mist nets, trapped and removed from nest boxes or other artificial nesting structures, or lured to Bal-chatri and other decoy-type traps. Live native birds may not be used as lure animals in decoy traps; any other lure animal used must be treated humanely. Ideally individual birds should be captured only once and prior to, or early in, the nesting cycle.

Time in captivity

In general, individuals should not be kept in captivity for more than about 25 minutes during the breeding season and 1 hour during the non-breeding season.

Banding

The banding of birds with numbered metal bands and color bands is permitted when banding is essential to answer the research questions proposed. This would include, but is not necessarily limited to, studies of: 1) social behavior and territoriality; 2) mate choice, retention, fidelity, etc.; 3) natal and breeding dispersal; 4) individual longevity (especially as this relates to conservation); and 5) migratory behavior (e.g., behavior at stopover sites). Projects that simply involve the capturing and banding a wide variety of species with no specific research questions being addressed are ineligible for funding.

When the research project does require banding, researchers should band individuals with the minimal number of bands required to identify individuals and answer the questions being asked. When it will suffice, one or two color bands should be used rather than three. Applicants must describe and justify the types and number of bands they anticipate adding to each bird.

Playback of vocalizations / use of decoys as an aid in bird capture

One can use playback of vocalizations (of a conspecific or predator, etc.) and/or taxidermic mounts or artificial decoys to lure birds into nets. Use of live conspecific or heterospecific avian decoys, however, is not permitted. Any other type of live decoy animal used must be treated humanely.

Playback of vocalizations for other purposes

Playback may be used on a limited basis to assess the presence/absence and/or number of a species in a particular area but care must be taken not to distract birds for any length of time from reproductive activity. Limited playback of vocalizations, conspecific and/or heterospecific, during the nesting cycle (from courtship/nest construction through independence of young) may be permitted as part of a behavioral study provided it does not negatively affect reproductive success in anyway. <u>Repeated</u> playback of vocalizations during nesting cycle (e.g., for purposes of assessing changes in territorial boundaries) is not permitted.

Nest inspection and assessment of nestling development

Provided that it does not cause abandonment, nests can be inspected, and eggs or young briefly removed from nests, but this should be done the minimum number of times necessary during the nesting cycle to answer the questions being asked. Nestlings can be weighed, measured, banded, etc., but care should be taken to not induce premature fledging.

Assessment of egg viability and characteristics and embryonic development

Transillumination ("candling") and floatation of eggs to assess features of freshly laid eggs (e.g., yolk size), egg viability, and embryo age is permitted.

Fecal sampling

Birds may be held in captivity (with or without the use of mesh wire in bags) for a brief period to collect a fecal sample. If an applicant anticipates that a longer period of time than specified above (see "Time in captivity") will be needed to collect a fecal sample, they should provide specifics and an explanation in their proposal.

Blood sampling

A single, small sample of blood may be taken from a bird for various purposes that include (but are not necessarily limited to): 1) obtaining DNA for studies of reproductive behavior and assessments of kinship; 2) systematic studies; 3) the determination of endoparasite loads; and 4) testing for contaminants. In general, the total amount of blood taken should be no more than two-thirds of a 50 μ L capillary tube. However, taking a larger sample may be permitted if the research involves large-bodied species, although applicants will need to fully justify the need for additional blood.

Feather sampling and clipping

One or a small sample (≤15) of body/contour feathers may be collected for purposes that include (but are not necessarily limited to): 1) obtaining DNA for studies of reproductive behavior, assessments of kinship, or systematic studies; 2) assessment of coloration; 3) isotope analyses; and 4) determining level of contaminants (feathers may not be removed or clipped for purposes of determining effects on behavior or flight ability). A single, outer tail feather may be collected only when use of contour feathers will not suffice. The tip of single outer tail feather may also be clipped for the above purposes and for purposes of marking individuals, especially when banding is not an option. Wing feathers may not be removed or clipped for any reason.

Thermal recording within nests

Devices that record nest cup temperature are permitted provided that they do not increase the chances of hatching failure or damage to eggs and do not interfere with the normal activities of incubating birds, e.g., egg-turning and repositioning.

Video-recording at nests

Video-recording of activity at nests is permitted but applicants must explain how they intend to hide or camouflage recording equipment and/or habituate birds to the presence of cameras, tripods, etc. Recording must be stopped if there is any suggestion that the presence of recording equipment is disrupting normal nesting activity, e.g., feeding rates or is increasing the risk of nest predation.

Attached transmitters, geolocators, and other dataloggers

Use of devices that will be attached to the bodies of birds is only permitted in instances where the specific methodology (i.e., the device, attachment method, duration of attachment, etc.) has been demonstrated to have no negative impact on the study species (not a similar or related species). The evidence for this must be presented in some detail in the proposal.

Studies of brood parasitism

A brood parasite's eggs or chicks cannot be placed in host nests. Within the native ranges of both hosts and avian brood parasites, removal of parasitic eggs or chicks or eliminating the impact of a natural parasite on one of its natural hosts in any other way is also not permitted. An exception may be made, however, when such actions are part of an effort to conserve host species, especially threatened and endangered species, and all appropriate permits for these actions have been secured. One can passively exclude access of parasites to nests (e.g., making the nest box entrances too small for parasites to enter). Playback of parasite (or host) vocalizations is permitted but should follow guidance above about minimally disruptive playbacks. Live, captive parasites cannot be presented to host individuals. Taxidermic mounts or artificial models of parasites may be presented to hosts but preferably no more than once per breeding cycle to each host female/pair.

Applicants should structure the Methods section of their research proposal so as to make it clear that their proposed research fits within the guidelines above. Applicants should also briefly describe their experience/training with their proposed methodologies and/or their plans to acquire such experience/training, especially with more difficult techniques. The AFO Grants Committee reserves the right to request additional information from an applicant regarding methodology and applicant experience before considering a proposal.

In addition, if there is evidence that a particular methodology or technique, especially an unusual one, is <u>not</u> detrimental to the species to be studied or similar types of species, applicants are encouraged to briefly describe that evidence. For a review of relevant studies as well as suggestions as to best practices, applicants are encouraged to review the latest version of the *Guide to the Use of Wild Birds in Research* published by the Ornithological Council (see <u>https://birdnet.org/info-for-ornithologists/guidelines-english-3rd-edition-2010/</u>).

TYPES OF RESEARCH THAT CANNOT BE SUPPORTED WITH AN AFO GRANT

In general, research that involves the collection of whole individuals and/or one or more of the following more disruptive and invasive procedures will not be funded:

- Activity that increases the risk of predation on embryos, young, or adults or potentially decreases their health in any way
- Capturing of birds using cannon or rocket nets
- Marking of individuals using neck collars, wing tags, leg tags, and/or nasal discs or saddles
- Biopsies and any other collection of tissue with the exception of blood and feathers (see below)
- Surgery of any type and/or the implantation of hormones or any other drug/substance into adults, juveniles, or eggs
- Diet composition analysis by gastric flushing, forced egestion, or neck ligatures
- Exposure adult birds to live, prepared, or artificial model predators other than in a single instance to aid in capture (see below)