

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 projects involving a variety of methodologies and techniques within the boundaries of certain guidelines that are provided below.

Potential applicants should be aware that AFO grants, especially Skutch Grants, can be used to support research that is primarily or exclusively observational in nature and designed to add to our knowledge of the natural history of one or more species. Alexander Skutch was a master observer of birds living undisturbed in their natural environment and was a strong proponent of this type of study. The only restriction is that the proposed project must be “question-driven,” i.e., designed to provide new information. Grants will not be awarded, for example, to set up or run a bird-banding station.

Potential applicants should be aware the guidelines below are not exhaustive. On occasion, an applicant may propose using a methodology or technique that is not addressed. Additionally, there are certain activities for which it is difficult to provide specific guidelines because the impact of the research on the birds under study 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 our existing guidelines, which are revised and updated on a regular basis.

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. This includes bird capture and banding. The AFO Grants Committee reserves the right to request additional information from an applicant regarding methodology and applicant experience before considering a proposal.

If there is evidence that a particular methodology or technique, especially an unusual one, is not 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, which is published in both English and Spanish. See <https://birdnet.org/info-for-ornithologists/guidelines/>. An additional useful resource is *Marking Wild Birds-Animal Welfare Risks* published by the Norwegian Scientific Community for Food and the Environment that can be found here: <https://vkm.no/english/riskassessments/allpublications/markingswildbirdsanimalwelfare risks.4.43decf91187dbb7d67824389.html>

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

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 any way. Repeated playback of vocalizations during nesting cycle (e.g., for purposes of assessing changes in territorial boundaries) is not permitted.

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.

Playback may be used more extensively during the non-breeding season for various purposes, e.g., in studies of flocking behavior to assess attraction to, or repulsion from, conspecifics and heterospecifics and/or to study response to vocalizations of predators. Playbacks may not be so extensive, however, that they substantially disrupt activities required for survival such as feeding, increase exposure of individuals to predators, or cause individuals to permanently abandon an established home range.

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. Samples of blood may be taken from the ulnar vein or from vessels in the tibiotarsus.

In larger species, a syringe and needle may be used. For smaller species (< than 100 g) veins should be punctured with a 26 gauge or smaller needle and blood collected into a microhematocrit capillary tube. In general, the total amount of blood taken should be no more than a third to a half of a 50 µL capillary tube. Taking a larger sample may be permitted if the research involves large-bodied species; however, applicants will need to justify the need for additional blood in their proposal.

Toe clipping is not an acceptable means of collecting 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.

Toenail clipping

Toenails of adults and nestlings may be clipped for identification purposes when other means of marking are not an option. Nails must not, however, be “cut to the quick” such that bleeding occurs and re-growth of the nail is not possible.

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 the 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.

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, feathers, and nails; surgery of any other type

- Implantation of hormones or any other drug/substance into adults, juveniles, or eggs

- Diet composition analysis by gastric flushing, forced egestion, or neck ligatures

- Exposing birds to live, prepared, or artificial model predators other than in a single instance to aid in capture