

KU Ornithology Tissue Loan Policy

The collection of frozen tissue samples in the Division of Ornithology has been assembled through decades of effort by staff, students, and associates of the KU Biodiversity Research Center. Planning, funding, and implementing each field collecting event has required considerable investment of time, effort, and resources. The Division *in general* has a very open policy of tissue sample grants and exchange, but within the bounds of some basic tenets: (1) we grant tissue exchanges only for well-founded and well-justified scientific applications, and (2) we expect users of the tissue-exchange system to be *contributors* to the system, as the system can only work when the burden of building such an archive is spread widely among many researchers.

Genetic samples are used in a different manner than traditional museum specimens, and so a different set of criteria apply when considering loan requests. In general, the Division supports high-quality research proposals from investigators seeking samples to supplement their own collecting efforts. Samples are loaned to specific investigators for specific projects. Samples cannot be transferred to other researchers without permission from the Division of Ornithology. If project plans change significantly or additional collaborators are included after the loan is made, approval must be obtained from the Division staff. Key considerations in decisions regarding tissue grants are as follows:

Scientific merit: Samples will be provided only to investigators who demonstrate clearly and convincingly the scientific merit of the proposed work. Among the factors that will be considered are the questions being asked, completeness of taxon sampling, character sampling, and the investigator's track record of research and timely publication. Projects that result in superficial treatment of a group are unlikely to be supported, as they often discourage or delay more thorough investigation of the group. For systematic proposals, testing of specific hypotheses is not mandatory if the researcher proposes in-depth investigations into the relationships and evolution of a particular group.

Collecting effort: Priority will be given to researchers seeking key samples to augment the results of their own collecting efforts. In the case of students, the collecting activities of the advisor or institution will be considered. Un-vouchered samples have little scientific utility, and indeed conclusions based on such samples are best considered speculation, rather than scientific results. Assessment of the collecting activities of investigators and institutions regarding a particular study will thus take into account the limited scientific utility of un-vouchered samples.

Number of samples: Requests for a limited number of samples to be included in a larger project are more likely to be approved than requests for large portions of the project's sampling. If KU samples will constitute a large proportion of the sampling, then collaborative arrangements or some sort of in-kind support for Division activities should be proposed.

Rarity of samples: Requests for rare or difficult-to-acquire samples may require extra justification. Such samples should be integral to the project design and not just included because they are novel.

Conflict with existing projects: Sample requests that conflict with KU projects already planned or underway are unlikely to be approved. In such cases, collaborations may be explored, or projects (either KU or the proposed projects) can be altered to minimize conflict.

Destructive sampling policy

Techniques for extracting usable DNA from preserved specimens have advanced to the point that samples from destructive sampling of specimens are increasingly included in systematic studies. The Division operates under the general principle that destructive sampling should occur only when non-destructive options have been exhausted or do not exist. Requests for such grants from the KU collection will be subject to the criteria listed for standard tissue requests, but will also take into account the following factors.

Because destructive sampling requires irreparable damage to the specimen, only small requests will be considered. Destructive sampling should not be considered an alternative to collecting fresh material. Specimens to be destructively sampled should be unobtainable by conventional methods, and sampling will generally be carried out by Division personnel.

Loan conditions

In return for receiving samples from the KU collection, the Division of Ornithology requires that investigators:

1. Deposit DNA sequences in publicly accessible sequence databases (GenBank) as soon as the work using them is published.
2. Return purified DNA extracts and any unused tissues to the Division of Ornithology upon completion of the project.
3. Send reprints of any and all publications based on KU Ornithology samples to the Division upon publication.
4. Acknowledge the KU Biodiversity Research Center and field collectors for all loaned samples.