Collectors' Frequently Asked Questions

about

Collection and Deposit of NPS Threatened and Endangered Animal Tissue Samples

in the

Ambrose Monell Cryo Collection, American Museum of Natural History January 2010 (Rev. February 2013, December 2018)

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Q: What is the NPS Endangered Species Program?

A: The NPS Endangered Species Program works to sustain and recover over a thousand populations of federally listed threatened and endangered (T&E) species in nearly fifty percent of the National Park System units. The program's mission is to reduce the risk of extinction of plants and animals in the parks, and to restore species that have occurred in parks historically but have been lost due to human activities. For more information see http://www.nature.nps.gov/biology/endangeredspecies/.

Q: Why are NPS and the Ambrose Monell Cryo Collection (AMCC) at the American Museum of Natural History cooperating to manage tissue samples collected from federally listed threatened and endangered animals in parks?

A: The Endangered Species Act of 1973 establishes the goal that all federally listed threatened and endangered (T&E) species be restored to the point where they are again viable, self-sustaining members of their ecological communities. To effectively manage existing populations of these species, parks need data about these populations, their genetic

relationships, and movements on the land over time. DNA analysis provides information about these characteristics that can inform park management decisions.

Launched in May 2001, the Ambrose Monell Cryo Collection (AMCC) will eventually house approximately one million frozen tissue samples representing the DNA of a wide range of animal species. Potentially the largest and most comprehensive initiative of its kind, the Museum's frozen tissue collection supports a broad range of research by providing an accessible repository of frozen tissue specimens. Researchers collect the specimens under controlled conditions using kits that the Museum provides. Documented samples, packed in special equipment, are shipped to the Museum, where they are housed in cryogenic storage. For further information on AMCC, see https://www.amnh.org/our-research/sackler-institute-for-comparative-genomics/facilities/amcc.

Tissue samples from parks are on loan to AMCC, which makes the samples available to researchers, consistent with NPS requirements, for a broad range of comparative genetic and genomic research. In a time of massive species loss, such efforts are essential in order to preserve as comprehensive a record as possible of the earth's biodiversity.

Q: What responsibilities do I have if I collect T&E animal tissues?

A: If you are applying to collect tissue (blood and other tissue) samples from federally listed threatened and endangered (T&E) animal species found in national parks, you may be required as a condition of the permit to follow specific procedures to facilitate deposit of samples in the NPS Special Collection at the Ambrose Monell Cryo Collection (AMCC) at the American Museum of Natural History (AMNH). The AMCC partners with NPS to enable long-term comparative studies of T&E species from national parks. Samples are on loan from NPS to AMNH in accordance with an AMNH/NPS agreement (available at https://www.nps.gov/nature/science-and-research-resources.htm).

Q: Must all T&E animal tissue samples be deposited in the NPS Special Collection at AMCC?

A: No. The NPS At-Risk Species Coordinator determines, on a case-by-case basis, when samples will be deposited at AMCC. In most cases, samples will not be required from all individual organisms sampled in a study. Before you prepare and submit your permit application, contact the park permit coordinator to find out if samples that you propose to collect will be deposited at AMCC.

Q: What must I do if I am told that T&E tissue samples that I collect are to be deposited with the NPS Special Collection at AMCC?

A: Follow these steps:

a. In your permit application, complete Appendix A of the application showing the Ambrose Monell Cryo Collection at the American Museum of Natural History as the repository. Because NPS has a repository agreement with AMNH, you do not need to obtain the signature of AMNH officials. Enter "AMNH/NPS Agreement" in the repository signature block.

- b. Contact the NPS At-Risk Species Coordinator, the park permit coordinator and park curator for special instructions during the application process and after the permit is issued.
- c. Contact the Collections Manager at AMCC for special instructions. Contact information is at https://www.amnh.org/our-research/sackler-institute-for-comparative-genomics/facilities/amcc/amcc-staff.
- d. Collect, prepare, and ship your samples according to the instructions on the AMCC web site at the-amcc or as instructed by the AMCC Collections Manager.
- e. Complete the AMCC National Park Service Specimen Deposit Form, available on the NPS web site at https://www.nps.gov/nature/science-and-research-resources.htm and on the AMCC web site at <a href="https://www.amnh.org/our-research/sackler-institute-for-comparative-genomics/facilities/amcc/united-states-national-park-service-special-collection/united-states-national-park-service-special-collection-documents.

Q: How do I obtain NPS accession and catalog numbers for my specimens?

A: Contact the park curator who will provide accession and catalog numbers.

Q: How do I meet the permit requirement to catalog the specimens before I ship them to AMCC?

A: Contact the park curator for instructions. The park curator may want you to submit data for import to the NPS catalog record, using Microsoft Excel or Access. The Catalog number should always be the first field in the file. Information on the NPS catalog system, including the data fields in the catalog record and instructions for importing/exporting data, is in the user manual at https://www.nps.gov/museum/publications/ICMS.html and at https://www.nps.gov/nature/science-and-research-resources.htm. Note: The name of the NPS cataloging system changed in 2009 from ANCS+ to ICMS.

Q: What information about the specimens and associated records do I include in the Investigator's Annual Report (IAR)?

A: Report in the IAR

- a. The status of any copies of field notes, data files, photos, or other study records that the permit requires be submitted to the park.
- b. The status of cataloging and final disposition for all collected specimens (tissue samples and other specimens) that are to be permanently retained as part of the park's museum collection.
- c. The name(s) of the repository(ies) where the samples *will be* deposited for a continuing project, and where the samples *are deposited* for a completed project.

d. A brief description of the samples, the conditions of collecting, and how you documented the vouchers from which you collected the tissue samples (through photography or, if permitted, collection and retention of the specimen in a designated museum collection.)

The project is incomplete until you have submitted any required copies of the associated records, submitted catalog data to the park curator, and shipped the samples to the authorized repository(ies). For further information on the IAR, see https://irma.nps.gov/content/RPRS/Index2.aspx.

Q: How should I document collection of a voucher specimen from which I collected the tissue sample?

A: If the permit authorizes collection of a voucher specimen, you must

- a. Comply with the permit conditions for documentation and disposition of collected and permanently retained specimens.
- b. Contact the park curator for instructions on submission of catalog data and documenting deposit of the specimen in the repository designated in the permit.

Q: Where can I get more information on the NPS Special Collection at AMCC and related procedures?

A: The Agreement between the National Park Service and the American Museum of Natural History on Management of NPS Tissue Collections and the Complete Guidance for Collection and Deposit of NPS T & E Animal Tissue Samples in the Ambrose Monell Cryo Collection, American Museum of Natural History are available at https://www.nps.gov/nature/science-and-research-resources.htm.

The following contacts will provide additional guidance:

Park Permit Coordinator

Go to https://irma.nps.gov/rprs/Parks/Search and select the park. The park permit coordinator contact information will appear.

Park Curator

Go to https://irma.nps.gov/rprs/Parks/Search and select the park. The park curator contact information should appear in the Park Conditions. If not, request the contact information from the Park Permit Coordinator.

AMCC Curator-in-Charge

Go to https://www.amnh.org/our-research/sackler-institute-for-comparative-genomics/facilities/amcc/amcc-staff.

NPS At-Risk Species Coordinator William Austin

William Austin
At-Risk Species Coordinator
National Park Service
1201 Oakridge Drive, Suite 200
Fort Collins CO 80525
970-267-7216
william austin@nps.gov