



DEPARTMENT OF BIOLOGY

April 8, 2014

Joseph A. Cook, Ph.D.  
Museum of Southwestern Biology  
CERIA Building, MSC03 2020  
1 University of New Mexico  
Albuquerque, New Mexico 87131

Dear Dr. Cook,

We are building a COI (cytochrome oxidase c subunit 1) barcoding reference dataset for all North American bat species to test the effectiveness of DNA barcoding for identifying bat carcasses recovered at wind farms. COI sequences from vouchered specimens are available for 36 of the 47 bat species found in North America. Our goal is to obtain tissue samples and produce COI sequences from the remaining 11 species. We have obtained tissue samples from the Biodiversity Research and Teaching Collection at Texas A&M University for eight of the missing species. We are requesting permission for destructive sampling of tissue from two of the remaining species from the Museum of Southwestern Biology (details below).

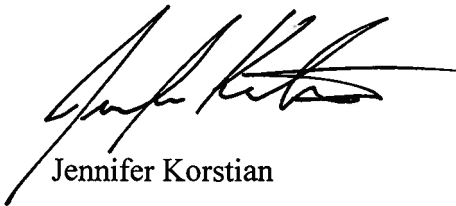
As part of an ongoing wind-wildlife research program at Texas Christian University, we have sequenced COI for >900 bats found during post-construction mortality surveys at a north Texas wind farm. We plan to use the North American COI reference dataset to barcode those bats (some of which are badly degraded at the time of recovery). Ms. Korstian has successfully sequenced the COI region for several *Lasiurus borealis* tissue samples collected from museum skins from the Fort Worth Museum of Science and History. From those museum skins, we extracted DNA from wing-membrane tissue. As these specimens were preserved with their

wings tightly folded, we obtained tissue samples from relatively inconspicuous locations (i.e. the folded wing membrane).


In an effort to capture the diversity at COI within each species we are requesting samples from two individuals of each species from the widest possible geographic range. We propose collecting wing-membrane tissue samples from 4 specimens (see table on page 2 for complete list). We propose removing a small portion of tissue from wing membranes of each specimen using a 3mm biopsy punch (or scissors) from the most inconspicuous location possible. We can provide shipping information to cover shipping charges. We are ready to begin this project immediately and have sufficient funding to complete the project.

Thank you for considering our request.

Sincerely,



Jennifer Korstian



Dr. Dean Williams

Proposed specimens for collecting wing-membrane tissue samples.

Identification	Genus	Species	subspecies	collection date	state
MSB:Mamm 122026	<i>Myotis</i>	<i>occultus</i>		1995	Colorado
MSB:Mamm 121949	<i>Myotis</i>	<i>occultus</i>		1995	New Mexico
MSB:Mamm 120243	<i>Myotis</i>	<i>ciliolabrum</i>	<i>melanorhinus</i>	1993	New Mexico
MSB:Mamm 116049	<i>Myotis</i>	<i>ciliolabrum</i>	<i>melanorhinus</i>	1989	Wyoming