Developing a Centralized Digital Archive of Vouchered Animal Communication Signals (VACS)

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Primary Institutions

• Macaulay Library, Cornell Lab of Ornithology
• Cornell University Museum of Vertebrates
• Louisiana State University Museum of Natural Science
• University of Kansas Biodiversity Institute
• Texas Natural Science Center, University of Texas
• California Academy of Sciences

Secondary Institutions

• American Museum of Natural History
• Peabody Museum, Yale University
• Smithsonian Institution National Museum of Natural History
• Zoologisk Museum, Københavns Universitet
• Museu Paraense Emilio Goeldi
TCN: Voucherized Animal Communication Signals

TCN Goals:

• Digitize and make accessible animal communication signals associated with physical voucher specimens

• Establish direct and transparent links across collections between physical voucher specimens and digitized recordings

TCN Research Theme:
Understanding the tempo and mode of animal signal evolution
Paramormyrops - Ivindo R.

P. "teugelsi"

P. "tenuicauda"

P. "SN9"

P. hopkinsi

P. longicaudatus

P. curvifrons

P. gabonensis

P. "szaboi"

P. "magnostipes" I

P. "magnostypes" II

P. kingsleyae

P. "vadamans"
Goal #1: Digitize Media & Make Accessible

<table>
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<tr>
<th>Institution</th>
<th>Total Archived Recordings</th>
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<td>Univ. of Kansas</td>
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<td>Total</td>
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Goal #2: Establish Links Across Collections
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**Specimen Record**
Animalia > Chordata > Amphibia > Anura > Hylidae

**Smilisca baudinii**
From KUDI Herpetology Collection

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**Media**

Link to ML Data Record

**Specimen Record**
Animalia > Chordata > Amphibia > Anura > Hylidae

**Smilisca baudinii**
From Macaulay Library Audio and Video Collection

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**Specimen**

| Catalog Number | 193667 |

Other Catalog Numbers

KUH Catalog #

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Data Management, Access, and Use

- Seven TCN partner datasets have been published to iDigBio, totaling more than 1.1 million data records

- MP3 proxies of all archived audio recordings are playable via the ML web site and the iDigBio data portal

- Higher-resolution WAV sound files are available free to researchers via the ML web site

- Nearly 6,000 recordings made by TCN recordist-collectors have already been delivered via the ML web site
Network Management

• Organized and hosted major workshop and meeting on the digitization of vertebrate specimens

• Workshop participation from 70 staff/researchers from museums and other institutions across U.S.

• Individual communication with partner institutions during audio digitization and archival process

• Future TCN-wide communication efforts to ensure full linkages between collections
Next Steps

• Continue with digitization and archival work at ML

• Apply the successful collection linkage process, including data publishing, to specimens at additional partner institutions