

# 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: Vouchered 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. "magnostipes" II*



*P. kingsleyae*



*P. "vadamans"*

# Goal #1: Digitize Media & Make Accessible

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ML 190032

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Brownish Twistwing Background Species (9)

**Brownish Twistwing -- *Cnipodectes subbrunneus*** [BROWSE SPECIES »](#) [MORE VIDEO »](#) [MORE AUDIO »](#)

Age/Sex	Identification	Solicitation	Behavior	Note
1 Adult Male	100%	Natural	song	
	Sight and Sound	Playback Self		

Locations Media and Equipment (1) Notes (1)


**Daniel F Lane**  
20 Jun 1996 at 07:00

Geography  
Peru  
Loreto

Locality  
84.0 km NW of Contamana; NE bank Rio Cushabatay; Cushabatay Camp 1

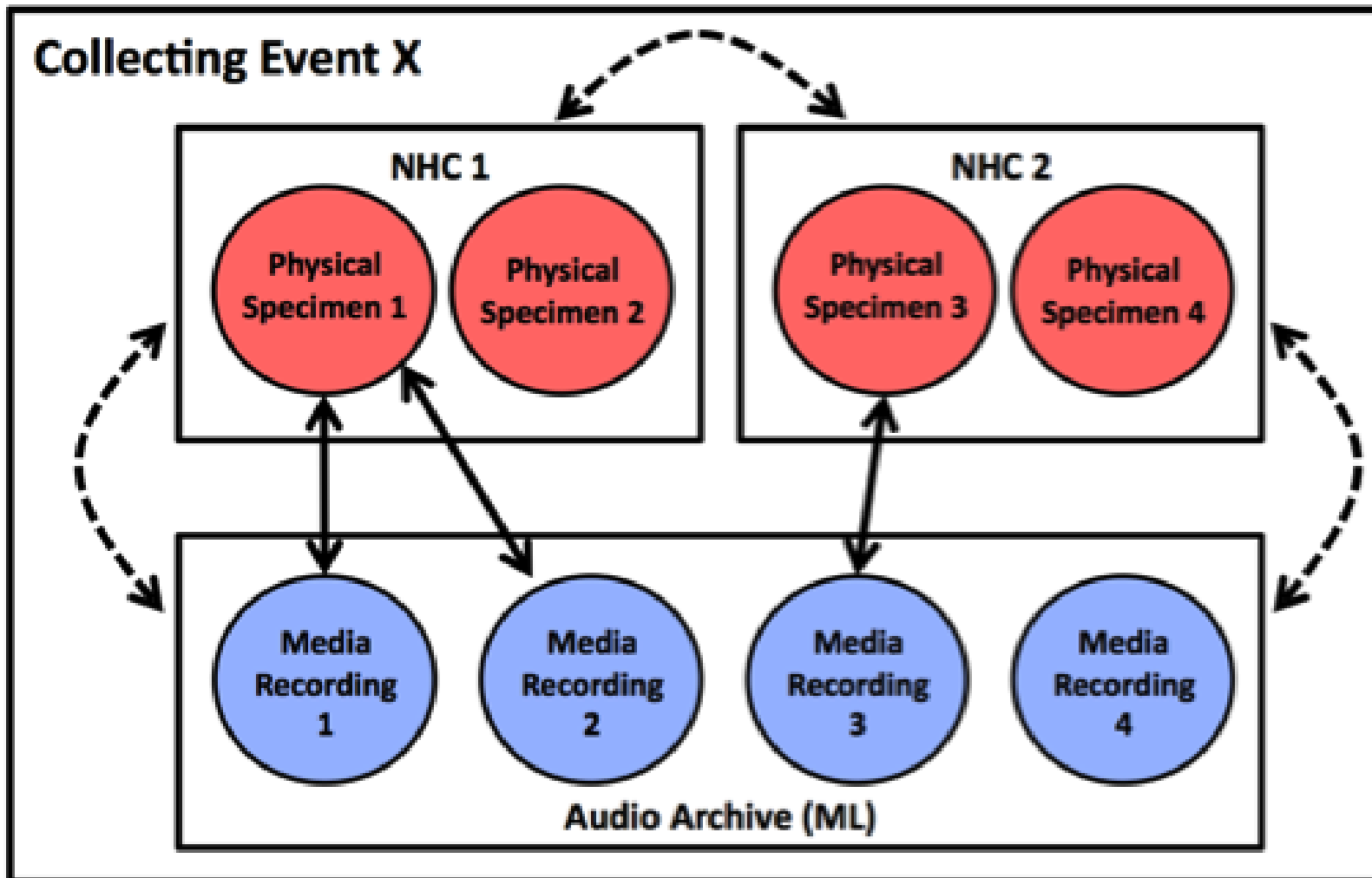
Latitude/Longitude  
-7.15 -75.73333

Elevation  
200 meters



Institution	Total Archived Recordings
Univ. of Kansas	10,750
Cal Academy	3,200
Smithsonian	2,000
LSU	1,400
TNHC	1,200
Yale	1,000
<b>Total</b>	<b>19,550</b>

## Goal #2: Establish Links Across Collections



# Goal #2: Establish Links Across Collections

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## ML 193667

Search recordings by catalog number or species:

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### Source File

 Add File Name

ISCI: \_\_\_\_\_  
RRN: KU Tape 68

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### Recordist and Date

William E Duellman on 1960 June 12 at 2125 hours. Recordist2:  Save Recordist and Date

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### Subjects

[New Primary Subject](#) | [New Background Subject](#)

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### 1. Subject : Smilisca baudinii

Save Current Subject Delete Subject

Taxon: Smilisca baudinii -- Mexican Smilisca

Primary Subject:

Environmental Subtitle:

Certainty of Species: Certain

ID Type: Sight

Time Code:  -

Recordist Distance: 2 feet -  meters

Captive:

Specimen Collected:

Age/Sex	Female	Male	Unknown
Juvenile	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Immature	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Specimen ID/URL: KUH 57163

Physical Specimen Occurrence IDs: b5b944c6-b069-11e3-8cfe-9f...

Field Prep Num:

Inst:Coll:Cats: KU:KUH:57163

# Goal #2: Establish Links Across Collections

## Specimen Record

Animalia > Chordata > Amphibia > Anura > Hylidae

### *Smilisca baudinii*

From KUBI Herpetology Collection

Continent	North America	Institution Code	KU
Country	Mexico	Collection Code	KUH
State/Province	Oaxaca	Catalog Number	57163
Locality	10 Km S Tehuantepec	Date Collected	1960-06-12
Latitude	16.24		
Longitude	-95.21		



## Media



← Link to ML Data Record

## Specimen Record

Animalia > Chordata > Amphibia > Anura > Hylidae

### *Smilisca baudinii*

From Macaulay Library Audio and Video Collection

Continent	North America	Institution Code	CUML
Country	Mexico	Collection Code	Sound Film
State/Province	Oaxaca	Catalog Number	193667
Locality	Tehuantepec	Collected By	William E Duellman
		Date Collected	1960-06-12

## Specimen

Catalog Number	193667
Other Catalog Numbers	<b>KUH 57163</b> KUH Catalog #

## Other

Language	en
Modified	2015-10-14
ID	urn:catalog:CUML:Sound/Film:193667
dcterms:references	http://macaulaylibrary.org/audio/193667
dcterms:accessRights	http://vertnet.org/resources/norms.html
dwc:establishmentMeans	native
dwc:occurrenceStatus	present
dwc:associatedOccurrences	<b>KUH GUID</b> <b>b5b944c6-b069-11e3-8cfe-90b11c41863e</b>
dwc:institutionID	urn:lsid:biocol.org:col:34939



## 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