



iDigBio

Integrated Digitized Biocollections



iDigBio is funded by a grant from the National Science Foundation's Advancing Digitization of Biodiversity Collections Program (Cooperative Agreement EF-1115210). Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation. All images used with permission or are free from copyright.

Symbiota as a Tool for Online Data Management of Vertebrate Collections

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Consortium of Small Vertebrate Collections



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Consortium of Small Vertebrate Collections

The Consortium of Small Vertebrate Collections is a growing network of research, academic, and museum institutions focused on the study of birds, mammals, fish, amphibians, and reptiles. It is a collaborative venture of iDigBio and Arizona State University and provides a mechanism for network members to manage and share biodiversity data to scientists and the general public. Participating institutions are afforded sophisticated online data management tools without the need for onsite IT support.

Search Taxon

Mammal of the Day



© Sky Island Alliance and El Aribabi

What is this mammal?

[Click here to test your knowledge](#)

Reptile of the Day



What is this reptile?

[Click here to test your knowledge](#)

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Home >> Collections

Specimens & Observations

Specimens

Observations

Select/Deselect All

-  **Arizona State University Hasbrouck Insect Collection (ASU-Entomology)** [more info](#)
 -  **Arizona State University Herpetology Collection (ASU-ASUHEC)** [more info](#)
 -  **Arizona State University Ichthyology Collection (ASU-Fish)** [more info](#)
 -  **Arizona State University Mammal Collection (ASU-ASUMAC)** [more info](#)
 -  **Brigham Young University Mammal Collection (MLB-Mammal)** [more info](#)
 -  **Museo de Zoología, Universidad de Puerto Rico, Río Piedras (UPRRP-MZUPRRP)** [more info](#)
 -  **Tall Timbers Research Station - Mammals (TTRS-Mammals)** [more info](#)
 -  **Tall Timbers Research Station - Ornithology (TTRS-Ornithology)** [more info](#)
 -  **University of Arizona Mammal Collection (UA-Mammals)** [more info](#)
 -  **University of Central Oklahoma Collection of Vertebrates (UCOCV-MAM)** [more info](#)
 -  **University of Michigan Museum of Zoology (UMMZ-UMMZ)** [more info](#)
-
-  **Ajos-Bavispe National Forest and Wildlife Refuge (Ajos-Bavispe)** [more info](#)
 -  **Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO)** [more info](#)
 -  **eBird (eBird-eBird)** [more info](#)
 -  **GreaterGood - Madrean Discovery Expeditions (GreaterGood)** [more info](#)



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Welcome Gill! [My Profile](#) [Logout](#) [Sitemap](#)

[Home](#) >> [Collection Search Page](#) >> [Tall Timbers Research Station - Ornithology Details](#)



Tall Timbers Research Station - Ornithology (TTRS-Ornithology)

Data Editor Control Panel

- Add New Occurrence Record
 - Create New Records Using Image
- Add Skeletal Records
- Edit Existing Occurrence Records
- Add Batch Determinations/Nomenclatural Adjustments
- Print Labels/Annotations
- Batch Georeference Specimens
- Loan Management

Administration Control Panel

- View Posted Comments
- Edit Metadata and Contact Information
- Update Statistics
- Manage Permissions
- Import/Update Specimen Records
 - Quick File Upload
 - Skeletal File Upload
- Processing Toolbox
- Darwin Core Archive Publishing
- Review/Verify General Specimen Edits
- Data Cleaning Tools
- Duplicate Clustering
- Download Backup Data File

Contact:

Home Page: <http://www.ttrs.org/museum.html>

Collection Type: Preserved Specimens

Management: Live Data managed directly within data portal

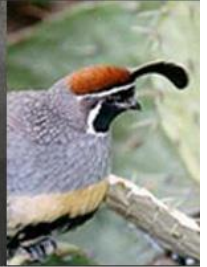
Global Unique Identifier: 250c2aa3-d76d-4305-a8e7-22c7811cf5d0

Usage Rights: CC0 1.0 (Public-domain)

Collection Statistics:

- 3945 specimen records
- 2466 (63%) georeferenced
- 1412 (36%) with images
- 3397 (86%) identified to species
- 72 families
- 288 genera

Consortium of Small Vertebrate Collections



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Home >> Collections >> Search Criteria

Enter Search Parameters

Fill in one or more of the following query criteria and click "Search" to view your results.

Taxonomic Criteria:

Include Synonyms from Taxonomic Thesaurus

Family or Scientific Name



Locality Criteria:

Country:

State/Province:

County:

Locality:

Elevation: to

Latitude and Longitude:

Bounding box coordinates in decimal degrees

Northern Latitude: N

Southern Latitude: N

Western Longitude: W

Eastern Longitude: W



Point-Radius Search

Latitude: N

Longitude: W

Radius: Kilometers



Details

Map

Comments

Linked Resources

Share 0



TTRS :

Ornithology

Tall Timbers Research Station - Ornithology

Catalog #: TTRS018720

Occurrence ID (GUID): 7c2bb74a-7202-4c45-9b44-9681961da812

Secondary Catalog #: 1872

Taxon: *Passerina ciris* (Linnaeus, 1758)

Family: Cardinalidae

Taxon Remarks: Painted Bunting

ID Remarks: AOU #: 601

Collector: Stoddard, Sr., H.L.

Date: 11 April 1958

Locality: UNITED STATES, Florida, Leon, WCTV Tower

30.6637790 -84.2106110 WGS 84

Georeference Remarks: Digitized to special geographic unit or named place via Google Maps

Specimen Images



Large Version



Large Version



Large Version

Record Id: 7c2bb74a-7202-4c45-9b44-9681961da812

Usage Rights: CC0 1.0 (Public-domain)

For additional information on this specimen, please contact: ()





1890 Territorial Normal School land
(Old North 1893)
1904 Central State Normal School
1907 *Statehood*
1919 Central State Teacher's College
1971 Central State University
1990 University of Central Oklahoma

Edmond population:

1904: 2,600

1971: 17,000

1990: 52,000

2000: 68,000

2015: 85,000





- “Metropolitan university”; located 13 miles north of OKC
- Current enrollment university: approx. 17,000
- **BIO Majors 2015-2016:** 20 Grad Students,
738 Undergraduates:
 - 546 – Biology
 - 116 – Biomedical Sciences
 - 11 – Medical Laboratory Science
 - 63 – Pre-professional program (dental, medical, optometry, vet med, clinical/med)
- 76 graduates last year

What are natural history collections?

- Treasure troves of biological diversity; documentation of our historical past
- Collections that are meticulously preserved, labeled, catalogued, and organized
- puzzle pieces that form detailed pictures of evolutionary relationships of organisms, biodiversity loss and global climate change.
- “Nature holds the key to our aesthetic, intellectual, cognitive and even spiritual satisfaction” E.O. Wilson



The importance of natural history collections

- Conservation of biodiversity
- Voucher specimens
- Unique flora and fauna
- Geographic and ecological distribution
- Changes in diversity – climate change, population structure or loss in genetic diversity
- Data sharing and verification
- Publications – education and research
- Analysis of frozen tissues and museum specimens (i.e. molecular analysis for phylogenetic relationships; presence of harmful pathogens – hantavirus)

UCO Biology Department Collections

- 1913 taxidermy class
- 1950s and 1960s plant and terrestrial invertebrate collections
- 1970s bird and mammal collections
- 1980s mycological and aquatic invertebrates collection
- 1990s reptile/amphibian collections
- 2005 Frozen tissue collection
- 2010 ichthyology collection







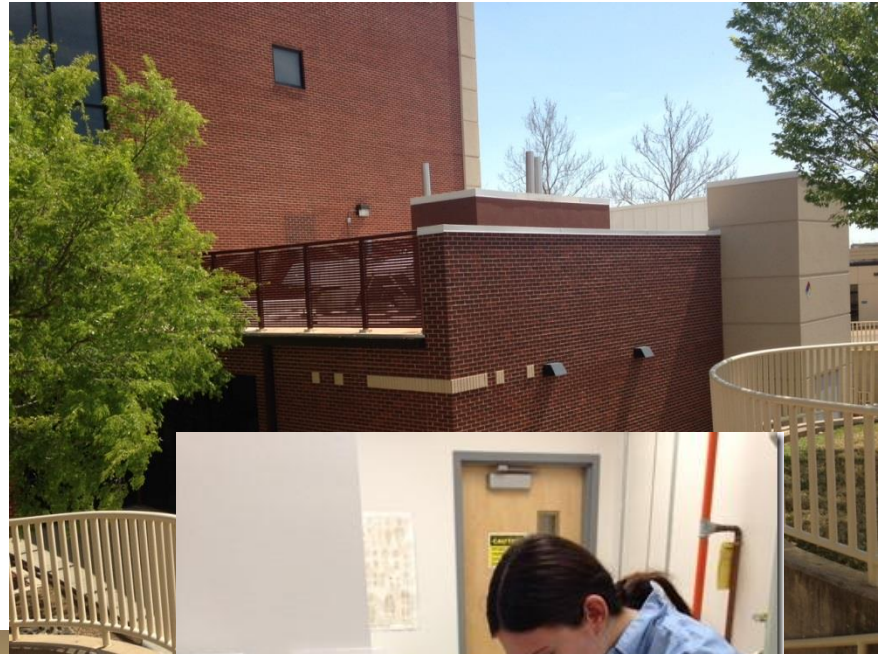




UCO Natural History Museum

- In 2007, NSF grant for improvements and enhancements to protect and efficiently store the unique and valuable biological collections at UCO
- Dry specimen storage cases and new cabinets/drawers were purchased to replace the old, deteriorating cabinets
- A small building was added to Howell Hall (UCO funded) to store alcohol collections and add processing and storage space
- In 2008, a part-time collections manager position was approved
- Students began working in the collections and curators added release time to schedule.





UCONHM

- **Vertebrate Collection**
 - Mammals: 7,000 specimens; tissues; taxidermy collection
 - Reptiles and Amphibians: 1,800 specimens
 - Birds: 2,400 skins; tissues; egg and nest collection
 - Fish: 100 wet specimens, recent transfer of OWRB specimens (comprehensive, ID'd Oklahoma fish collection)
- **Invertebrate Collection**
 - Terrestrial and Aquatic: 10,000 cataloged dry and wet specimens
- **Herbarium**
 - Oklahoma plants: 14,000 specimens (OVPD) and “Out of state” collection – 2,000+
 - Fungi: 4,000 specimens; MyCoPortal project

Collection use



- Education – upper level and general biology courses and Selman research station
- Research – publications, projects, data requests
- Collaboration with USFWS, ODWC, OWRB, OSDH, OZS, OSM, other regional universities
- Preservation of diversity records and distribution patterns (current vs past), voucher specimens
- Public outreach – OSM, visits to local libraries and schools, visits from school groups
- Taxidermy collection – visitors, art/photography classes, aesthetics

- Run short pieces of wire down into each of the feet



- Slide a straight wire (with fine first-aid cotton spun around it to mimic the thickness of the tail that was removed) into the tail skin - the wire should exceed the length of the tail and extend up into the body in order to provide extra support for tail and body.



- Sew up the incision with needle and cotton thread



- Brush all the commmeal from the skin.



- Prepare a skin tag and attach the string on the tag according to the picture. The string is inserted through the holes of the tag to form a loop, twisted and then the thread is passed back through the loop and pulled tight against the tag. A knot is tied in the string 1 inch from the tag.



- Tie the specimen tag to the right hind foot

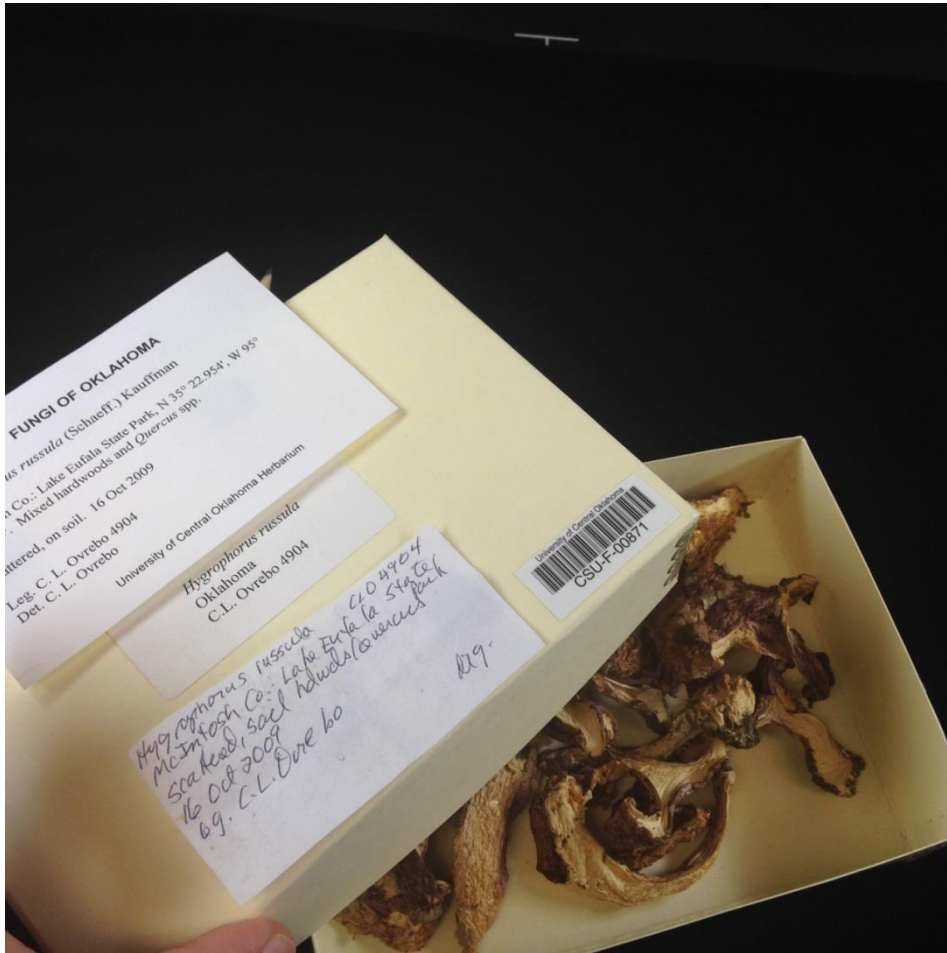


Website Outreach

<http://www.uco.edu/cms/biology/Facilities1/index.asp>
 Curatorial information, standard operating procedures, how to skin guides, suggested references



MyCoPortal Symbiota project



2/22/2016

MyCoPortal University of Central Oklahoma Herbarium Collection Profiles

MYCOLOGY COLLECTIONS PORTAL

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Home >> Collection Search Page >> University of Central Oklahoma Herbarium Details

University of Central Oklahoma Herbarium (CSU)

The fungal collections of CSU emphasize agarics, boletes and related macrofungi from eastern North America, the Caribbean region and Central. There are approximately 4,000 specimens in the herbarium that are pertinent to this project. Including vouchers for the studies of Clark Ovrebo and his students (e.g. please site some references). CSU also contains approximately 1000 images of specimens in the living condition, and about 1700 telioleles.

Contact: Clark Ovrebo (ovrebo@uco.edu)

Home Page: <http://biology.uco.edu/ucanherm/fungi.html>

Collection Type: Preserved Specimens

Management: Live Data managed directly within data portal

Global Unique Identifier: SSO:0000-5002-4177-9930-65067191869F

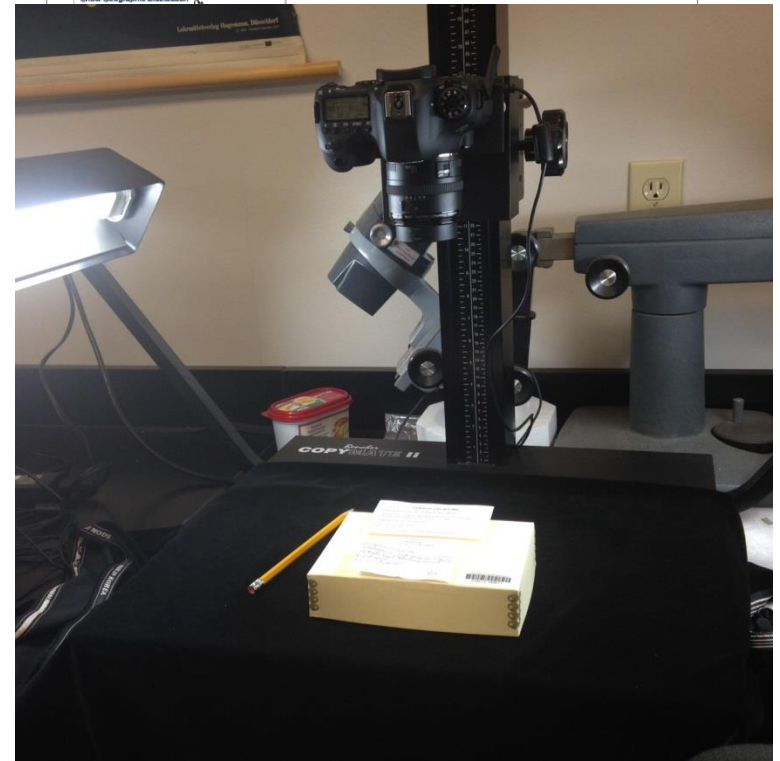
Usage Rights: CC0 1.0 (Public domain)

Collection Statistics:

- 2434 specimen records
- 1644 (68%) georeferenced
- 963 (40%) with images
- 1372 (56%) identified to species
- 73 families
- 217 genera
- 530 species
- 546 total taxa (including subsp. and var.)

Extra Statistics

Show Family Distribution
Show Geographic Distribution



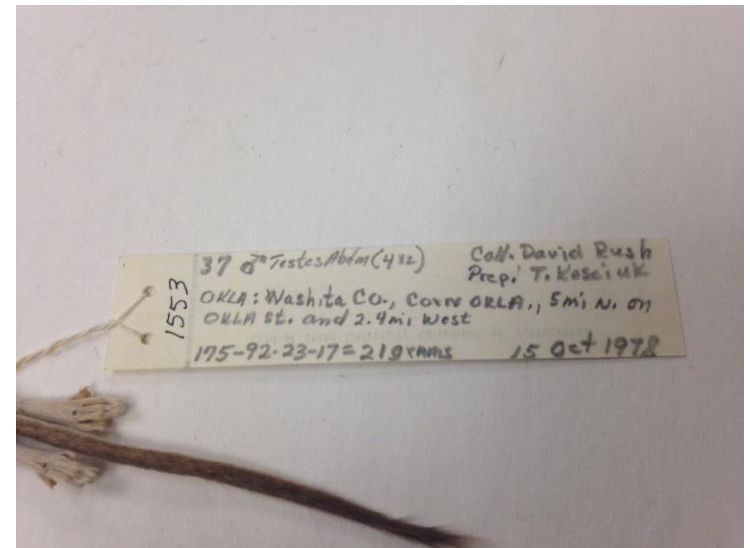
Oklahoma Science Museum 2016





Challenges for small university collections

- **Space** – storage and processing
- **Time** – part time collections manager (for 9 collections), minimal time for curators (rotating release time), limited student worker hours, training volunteers
- **Money**
- **Expertise** in field of biology
- **Tech support** and **knowledge**
- **Data management**
- **Lack of knowledge** and **digitization tools**
- **IPM**



Consortium of Small Vertebrate Collections

- Challenge: Time
- Challenge: Organization of data (accession/deaccession issues; locality information); Teaching collection
- Challenge: Verification between data catalog and physical specimens
- Challenge: Technical expertise and guidance
- Benefit: Catalogs in excel-current data requests by email
- Benefit: Online data access (for researchers, educators, collaboration of biodiversity and geographic distribution information) and management
- Benefit: updating location information
- Benefit: Online/virtual tutorials and information available



Perfection
isn't attainable,
but if we chase
perfection
we can catch
excellence.

~ Vince Lombardi



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