



# iDigBio

Integrated Digitized Biocollections

# Imaging Birds and Mammals Tall Timbers Research Station

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# Biological Research/Field Stations

Small, potentially with multiple collections

Focused

Research centered

Rich data

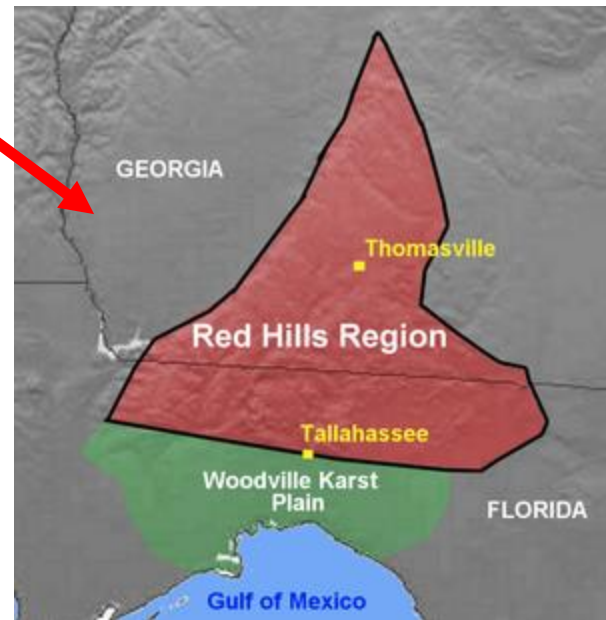
Potentially the best representation of a limited geographic area

High value specimens

Not widely disseminated, duplicated, or available



## Tallahassee Red Hills Region





# TALL TIMBERS

Research Station & Land Conservancy



Biological Collections



Fire ecology



# TALL TIMBERS

Research Station & Land Conservancy

Longleaf Pine Ecosystem

Formerly more than 90 Million acres

Now about 3,000 old growth acres remain

Much of it under the management of Tall Timbers

## Collections

- Archeology-Paleontology
- Birds
- Bird Photo Archive
- Insects (Lepidoptera)
- Mammals
- Plants
- Reptiles and Amphibians
- Worms



**Awards**



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**Award Abstract #0956343**

**Collaborative Research: Imaging the Tall Timbers Research Station's Biological Research Collections**

<b>NSF Org:</b>	<a href="#">DBI</a> <a href="#">Division of Biological Infrastructure</a>
<b>Initial Amendment Date:</b>	July 13, 2010
<b>Latest Amendment Date:</b>	August 23, 2010
<b>Award Number:</b>	0956343
<b>Award Instrument:</b>	Continuing grant
<b>Program Manager:</b>	Anne Maglia DBI Division of Biological Infrastructure BIO Directorate for Biological Sciences
<b>Start Date:</b>	July 15, 2010
<b>End Date:</b>	June 30, 2012 (Estimated)
<b>Awarded Amount to Date:</b>	\$96,867.00
<b>Investigator(s):</b>	Kevin Robertson <a href="mailto:krobertson@ttrs.org">krobertson@ttrs.org</a> (Principal Investigator) Gil Nelson (Co-Principal Investigator)
<b>Sponsor:</b>	Tall Timbers Research Inc 13093 Henry Beadel Drive Tallahassee, FL 32312-9801 (850)893-4153
<b>NSF Program(s):</b>	BIOLOGICAL RESEARCH COLLECTION
<b>Program Reference Code(s):</b>	9178, 9184, , 9179
<b>Program Element Code(s):</b>	1197

**ABSTRACT**

The goal of this project is to create high-resolution digital images of the ca. 16,000 plant, bird, mammal, and Lepidoptera specimens in the Tall Timbers Research Station (TTRS) Museum in Tallahassee, Florida, USA. The specimens represent a nearly complete



## Specimen Counts

Plants (~10,500 specimens)

Birds (~4,000 specimens)

Mammals (~1,000 specimens)

Butterflies (~1,500 specimens)





Unequalled opportunity  
for completeness and detail

## Equipment/Software list:

Nikon D3X 24.5 megapixel camera

AFS Micro-Nikkor 60 mm macro autofocus lens

Nikon 105 mm f/2.8 VR Micro lens

Nikon 12-24 mm zoom lens (for larger specimens)

Kaiser Copy Stand RSX with RTX Arm for holding camera

Kaiser attached fluorescent lighting system

Helicon Focus software

CombineZ stacking software

Camera Control Pro 2 software

Nikon Capture NX2 software

Nikon View NX2 software

Several custom-designed, project-specific software applications written by Gil Nelson

Computer

4 External hard drives for temporary storage

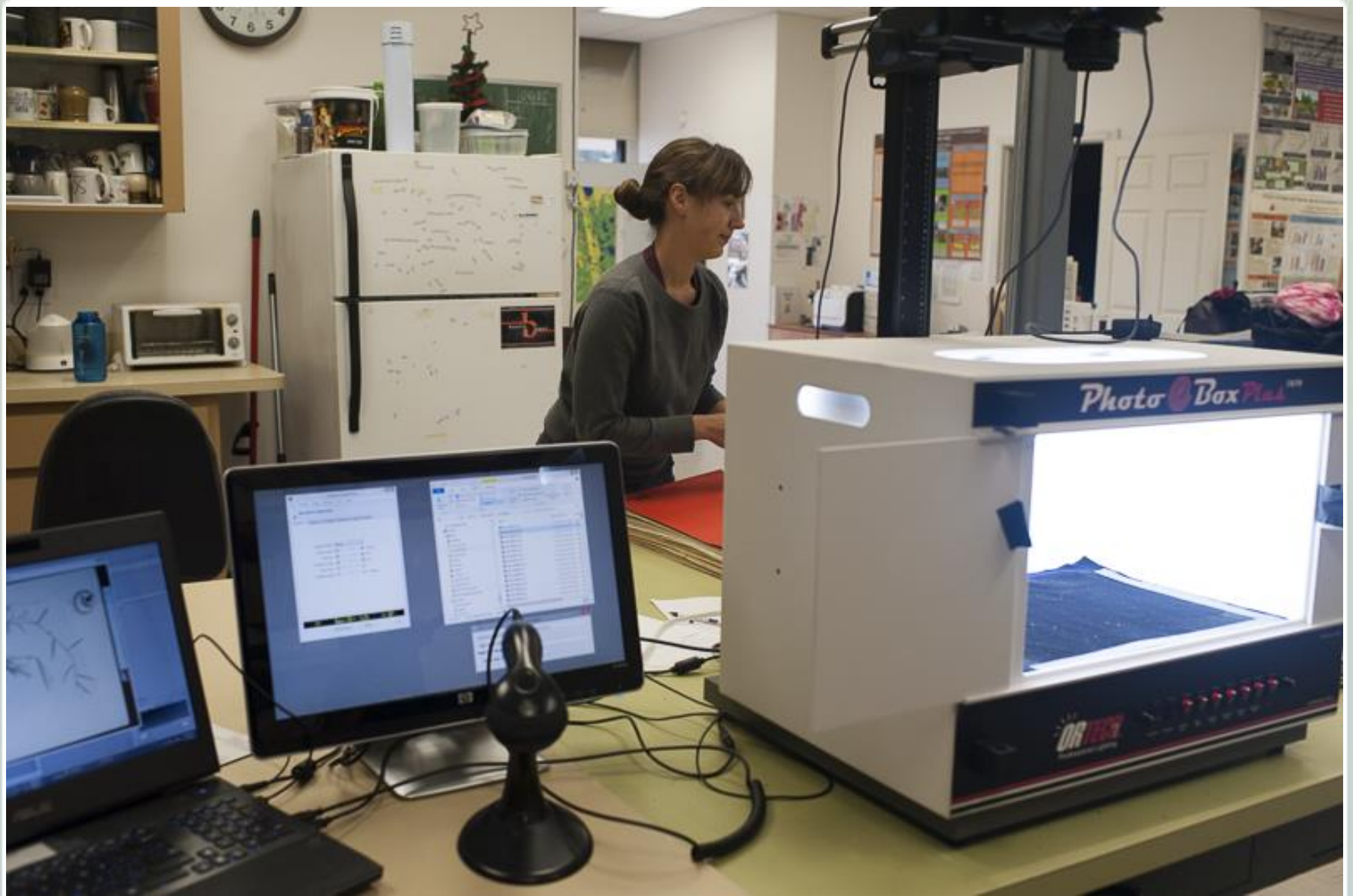
Written protocols/workflows



Imaging station

# Photo eBox





Nikon D3x  
Full frame  
24.5 megapixel  
Live view



Nikon 810  
36.3 megapixel  
Full frame  
Live view



## Kaiser Copy Stand RSX with RTX Arm





## **Selection Criteria**

- Two of each species (male/female)
- All specimens of special interest (T&E, endemic, e.g. RCW, Sherman Fox Squirrel)
- Any specimens cited in publication
- Specimens with bill deformity or other morphological abnormalities

## **Views**

- Birds: dorsal, ventral, lateral
- Mammals: dorsal

# Passerina ciris





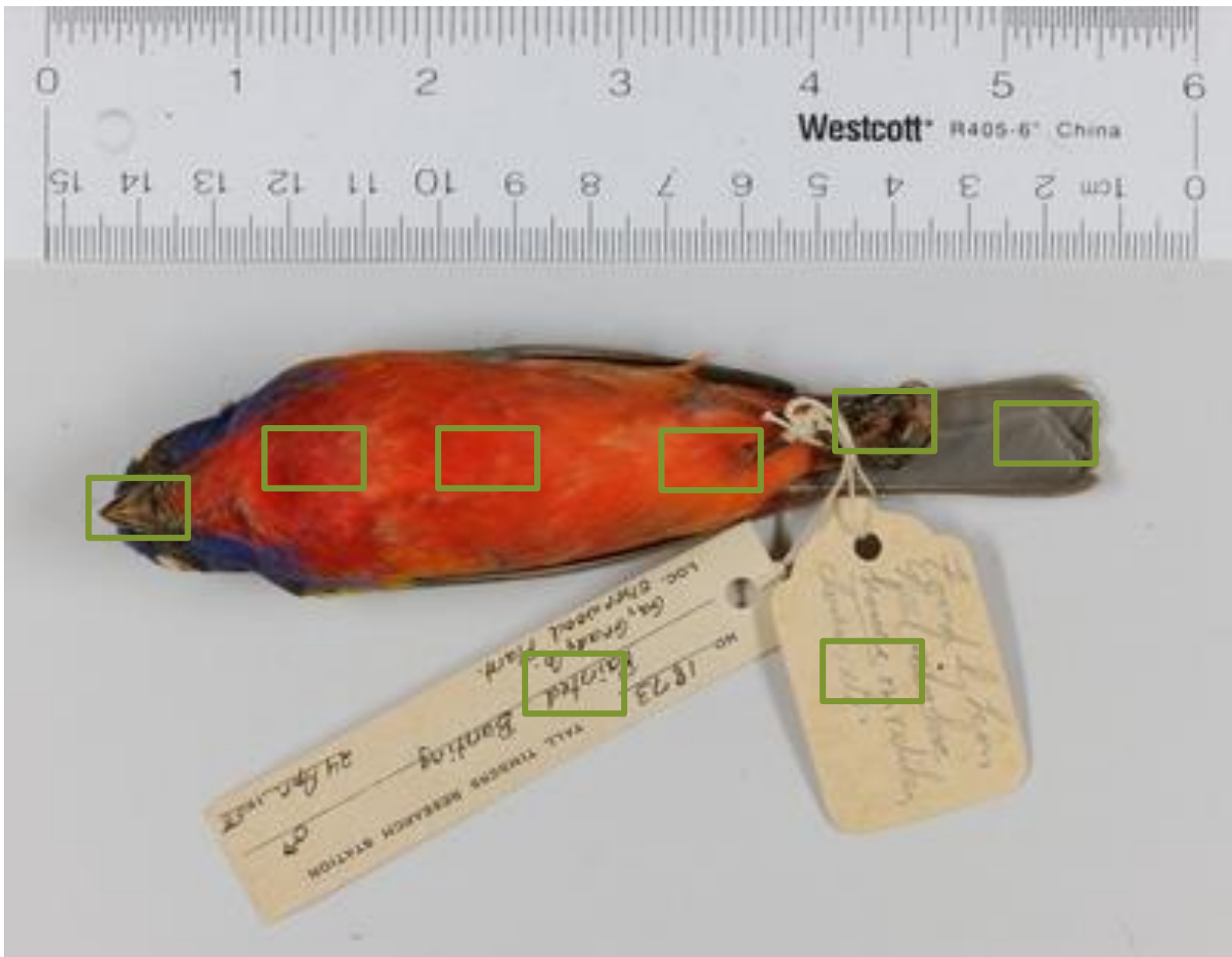




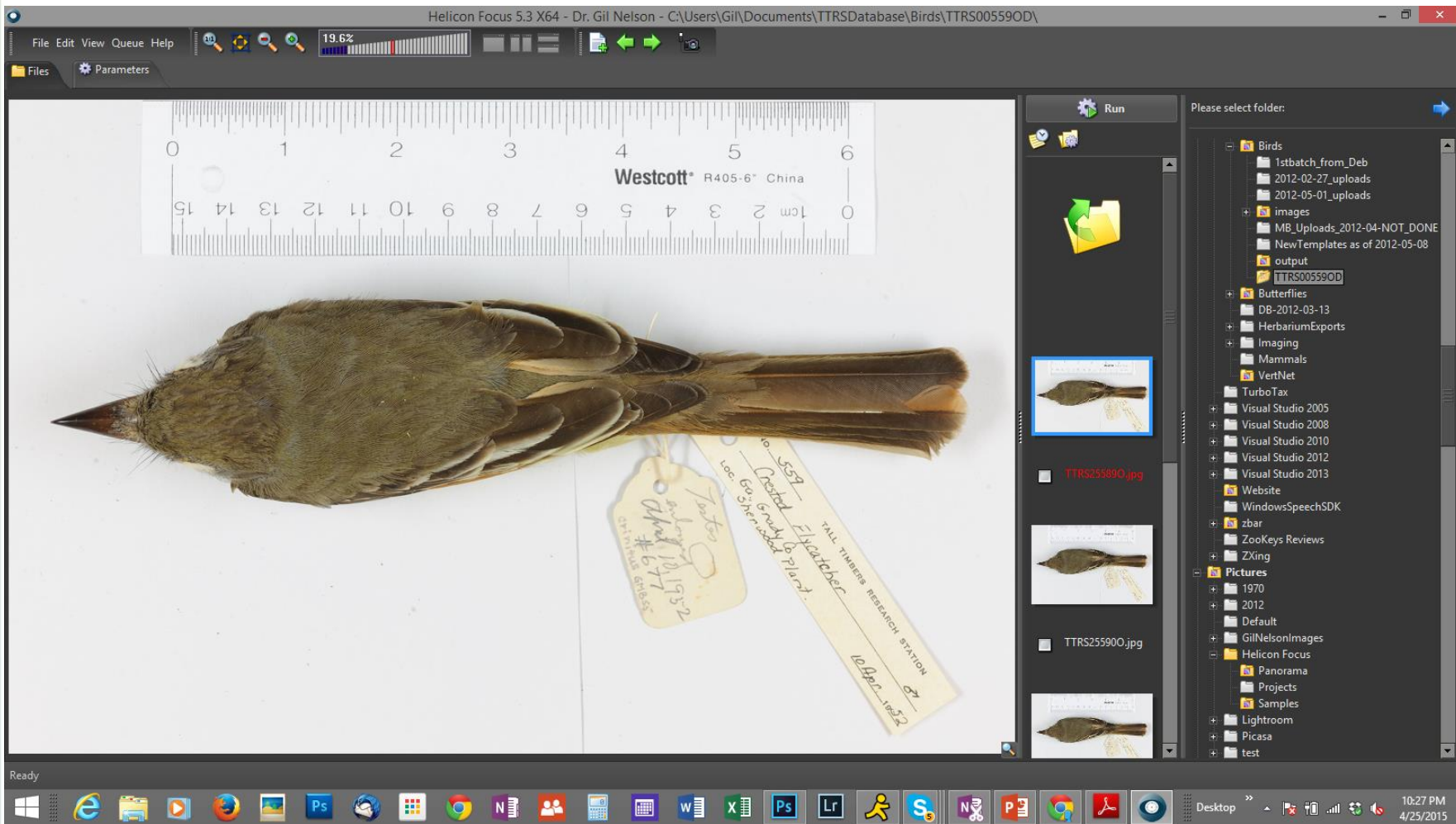
NO 920  
Lorraine Semple  
100 E. 5th St. W. W. 100  
MOUNTAIN VIEW STATION  
1908  
908  
1908

# Camera Control Pro

The screenshot displays the Camera Control Pro software interface. On the left, a 'Live View (Tripod)' window shows a specimen on a white background with a ruler at the top. The specimen is a dark, textured, elongated piece, possibly a piece of bark or wood, with a pine cone to its left. A red box highlights a barcode on the specimen's label. Below the specimen is a small white card with text: 'UNIVERSITY OF FLORIDA STATE UNIVERSITY Tallahassee PLANTS IN FLORIDA' and 'Herbarium of Florida State University'. The right side of the interface shows the 'Camera Control Pro' window with a menu bar (File, Camera, Image, Settings, Tools, Help) and a status bar indicating 'The D3X is connected.' Below this, there are tabs for 'Exposure 1', 'Exposure 2', 'Storage', 'Mechanical', and 'Image Processing'. The 'Exposure 1' tab is active, showing camera settings: Exposure Mode: Manual, Shutter Speed: 1/60 sec, Aperture: f/8, Exposure Comp.: 0 EV, Flash Comp.: 0 EV, and Flexible Program: 0 Step(s). At the bottom, a black status bar displays '60 f8 + 0 M (r 12)'. Below the status bar are buttons for 'AF and Shoot', 'Shoot', and 'Lv'.

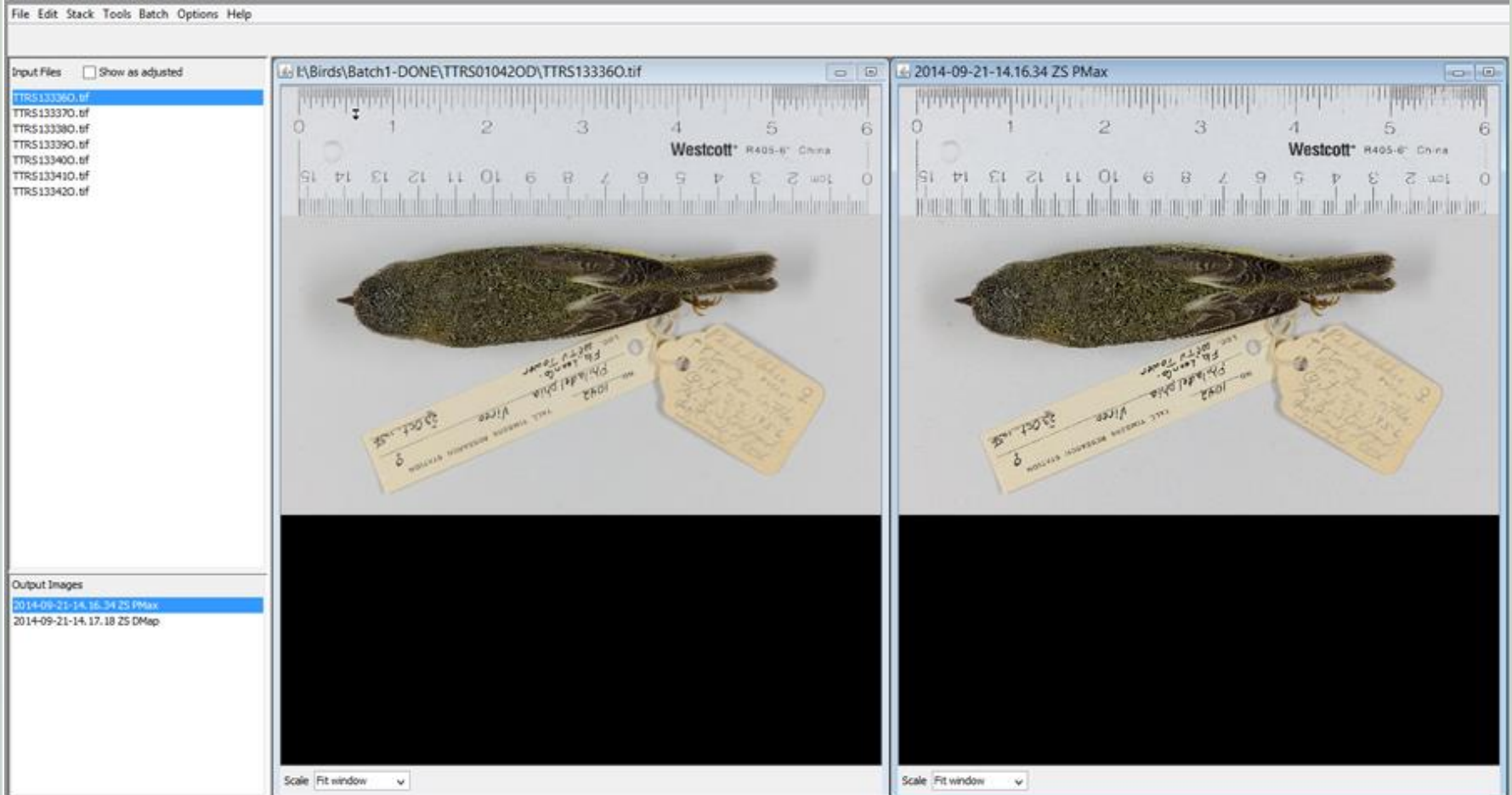


# Helicon Focus





# Zerene Stacker



# CombineZ

CombineZP

NEW Align and Balance Used Frames (Q) GO [Left Arrow] SAVE [Up Arrow] [Down Arrow] [Help Icon]

Help

Hide Back Forward Print Options

- ? Start Page
- ? News of New Releases etc.
- + Getting Started
- + Procedures and Examples
- + Reference

## CombineZP

### Image Stacking Software

by

Alan Hadley

[alan@micropics.org.uk](mailto:alan@micropics.org.uk)



The images above are Copyright their original photographers and were all produced with the help of CombineZ. Further details are at the [CombineZ Yahoo Group](#).

# Morphbank.net



Specimen 823767

User: Guest [\[click to login\]](#)

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Search images by keywords

## Specimen Record: [\[823767\]](#) [Scolopax minor](#)

**Contributor:** Jim Cox

**Submitter:** Gil Nelson

**Group:** Tall Timbers

**Date Submitted:** 2013-02-13

**Last Modified:** 2013-02-13

**Publish Date:** 2013-02-20

**AOUNO:** 228.0

**vernacularName:** American Woodcock

**Specimen Id:** 823767

**Basis of Record:** Specimen

**Sex:**

**Form:**

**Type Status:**

**Stage:**

**DeterminedBy:**

**Determination Notes:**



[View the full image](#)

[Go to image detail page](#)

### Collection

**Collector:**

**Institution:** TTRS

**Catalog:** 279

**Date Collected:**

**Locality** [Edit this locality](#)

**Locality Id:** 827073

**Continent:**

**Water Body:**

**Country:** UNITED STATES

**State/Province:** Florida

**County:** Leon

**Locality:** TTRS

**Latitude:**

**Longitude:**

**Elevation (m):**

**Depth (m):**

### Determination

**Kingdom:** [Animalia](#)

**Phylum:** [Chordata](#)

**Class:** [Aves](#)

**Order:** [Ciconiiformes](#)

**Family:** [Scolopacidae](#)

**Genus:** [Scolopax](#)

### Determination annotations

# iDigBio Portal



## Full Specimen Record

### Taxonomy

Scientific Name	<i>Lasiurus intermedius</i>
Kingdom	Animalia
Scientific Name Authors	H. Allen, 1862
Taxon Rank	Species
Nomenclatural Status	valid

### Specimen

Catalog Number	514
Sex	Male
Institution Code	TTRS
Basis of Record	Specimen

### Collection Event

Collected By	W. W. Baker
Verbatim Date Collected	1970-2-15

### Locality

## Georeference Data



The blue marker indicates the location of the current record, the red points are locations of similar specimens in the iDigBio system

[View Raw API Record](#)

## Record Image





**iDigBio**  
Integrated Digitized Biocollections