

## Details about WFVZ

- More than 400 individual collections; ~300,000 sets
- More than 8,700 individual collectors
- Individual collections range in size from 1 egg set to >14,000 sets –

E.g., LSU (10,000), SDNHM (12,000), Patuxent (10,000), Philadelphia Academy of NS (8,000), Nelson Hoy (PA, 14,500 + 28,000 from the Norrises), Richard Etchecopar (FR, 7,000), Ed Harrison (11,000)

### 15 Largest North American Egg Collections

| Collection                                  | # of egg sets as of 2013 |
|---|--------------------------|
| Western Foundation of Vertebrate Zoology    | 300,000                  |
| Delaware MNH                                | 36,700                   |
| Smithsonian                                 | 31,300                   |
| San Bernadino Museum                        | 28,000                   |
| Field Museum of NH                          | 21,000                   |
| American Museum of NH                       | 16,000                   |
| Museum of Vertebrate Zoology, UC Berkeley   | 14,000                   |
| Royal Alberta Museum                        | 14,000                   |
| University of Wisconsin, Green Bay          | 12,000                   |
| Museum of Comparative Zoology, Harvard      | 11,600                   |
| Royal Ontario Museum                        | 11,300                   |
| Santa Barbara MNH                           | 11,000                   |
| California Academy of Sciences              | 11,000                   |
| Florida Museum of NH, University of Florida | 10,400                   |
| Carnegie MNH                                | 9,930                    |



## <u>Digitization/Modernization</u> <u>Accomplishments <2012:</u>

- Entered basic data from 56,000 study skin labels
- Entered basic data from ~100,000 egg set records
- Photographed egg sets and nests of approx 750 species of birds breeding in the USA for Birds of North America online project

Data entry was primarily accomplished by volunteers and staff over a 10-year period. In 2006, all digitized data were uploaded into Ornis, and were regularly updated thereafter.



In June 2012 The Western Foundation of Vertebrate Zoology was awarded a prestigious 3-year grant from the National Science Foundation for the digitization of more than 75,000 records of eggs of birds in the Order "Passeriformes" (the "Songbirds"). The WFVZ receives a large number of requests for information for these birds every year, for evaluations of historic and current bird distributions, breeding dates, clutch & egg sizes, & eggshell thicknesses. These data are used particularly in studies of climate change, environmental contamination, and phylogeny.

The NSF project has employed 25 undergraduate and recently-graduated Biology students, and young professionals who are in-between their undergraduate and graduate school educations. The students have been involved in various aspects of digitization of passenine records, including entering data from the original cards, scanning the cards, georeferencing egg sets, photographing eggs, relabeling and correcting problems with data entry and records, and reorganizing materials in the collection. All of the digitized data have been regularly uploaded and shared with the public and researchers via the Internet portals ORNIS, VertNet, GBIF, and IDigBio.

We have greatly enjoyed working with, teaching, and learning from all of the NSF data entry technicians who have made this project possible, and the WFVZ sincerely thanks them all. We have also thoroughly enjoyed introducing students to the professional museum workl, bioinformatics, and omithology, and hope to be able to continue such work in the near future!



National Science Foundation Data Entry Technicians

#### Dustin Andre Mimi Mega Lindse Ivett F

Dustin Baker Andrew Brinkman Mimi Damwyk Megan Hines Lindsey Mercer Ivett Plascencia Lindsey Sones

Alaina Benham-Lipp Brittany Byrd Jan Katie Dickins Jar Amy Huffman Lic Nathan Monica Du Bryan Roth Eli Megan Tyner Ch

ipp Mike James Carey Ryane Janet Garcia Rebec Lloyd Lustina Susy M Duane Nash Ryan Elizabeth Sayre Christopher Walsh

Mike Biscoe Ryane Cox Rebecca Gridley Susy Mateos Ryan Newkirk







# Accomplishments from 2012-2015 with NSF support:

- Part- and full-time data entry technicians scanned more than 83,000 Passerine egg and nest records;
- Captured data from 83,000 Passerine egg and nest records;
- Photographed 83,000 egg sets;
- And georeferenced 72,000 records.
- All data were uploaded regularly throughout the project into Ornis and Ornis2; VertNet; GBIF; and during the last year of the project, iDigBio
- All photos, scans, and data available for downloading through the WFVZ's website (coming shortly)

THANK YOU, NSF!!!





## Current Needs at the WFVZ:

- Photographs of remainder of egg collection specimens (non-passerine sets; approximately 150,000)
- Photographs of nest collection specimens (20,000 specimens)
- Scanning of fieldnotes collection
- Climate-control infrastructure
- Walk-in freezer
- Laboratory upgrades for processing egg contents and tissues for contamination studies, and etc!