



The challenges of attribution: Insights from one (unusual) biological collection

Mike Webster

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Director, Macaulay Library

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The **Cornell** Lab  of Ornithology

Biological Specimens



Magnificent Riflebird
Specimens at the Netherlands
Centre for Biodiversity Naturalis



Bird Collection at NMNH
(Smithsonian Inst)



Biological Specimens



Magnificent Riflebird
Specimens at the Netherlands
Centre for Biodiversity Naturalis



Videos by Benjamin Clock for Macaulay Library

Biological Specimens



Musician Wren
(*Cyphorhinus arada*)
ML Audio #29734
Recorded by Ted Parker
August 1982
Madre de Dios, Peru

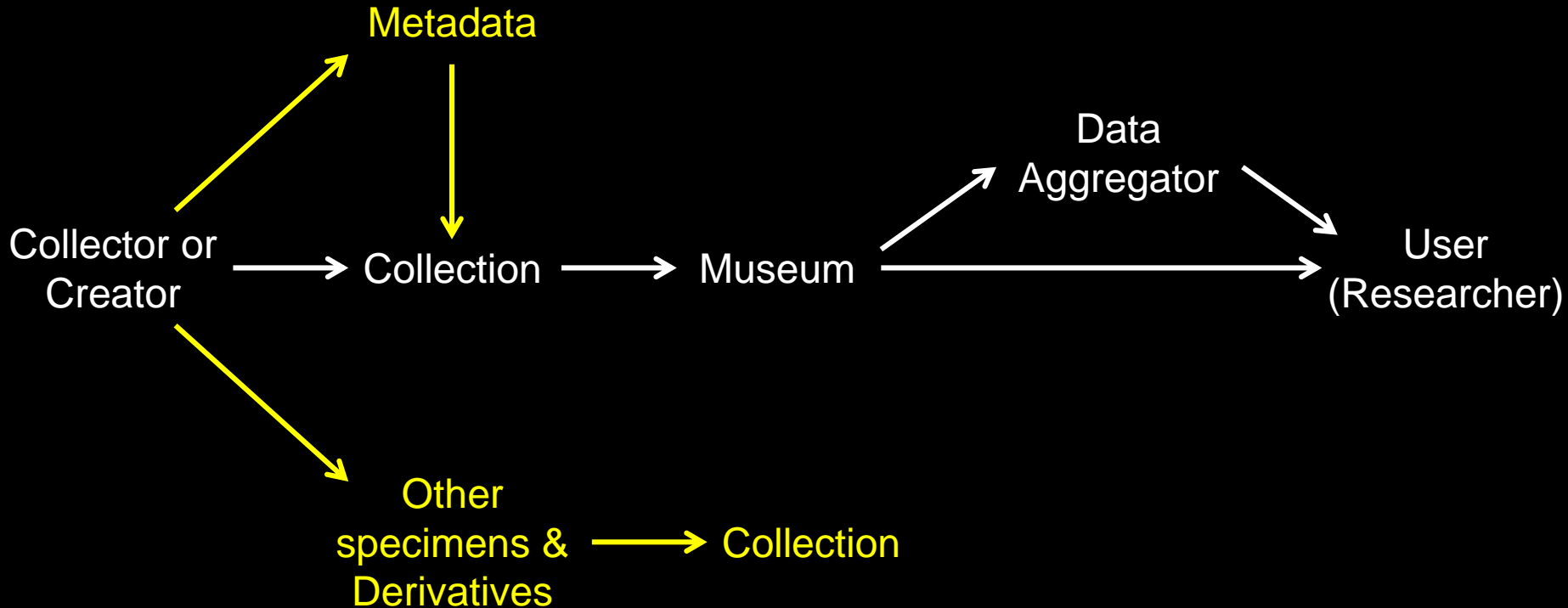
The Macaulay audio/video collection
has over 6M digital specimens*



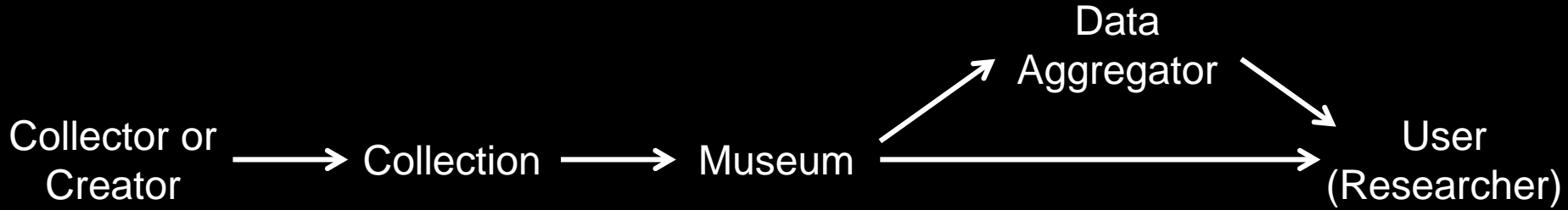
Photo: Conservation International, Haroldo Castro

*About 300K audio recordings

The Specimen Pipeline

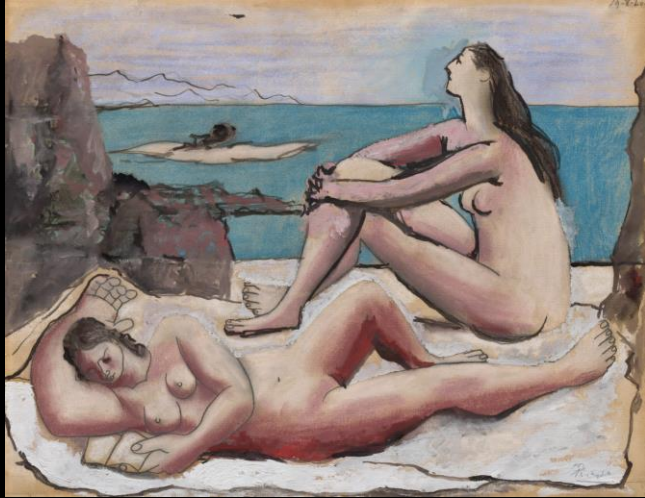


The Specimen Pipeline

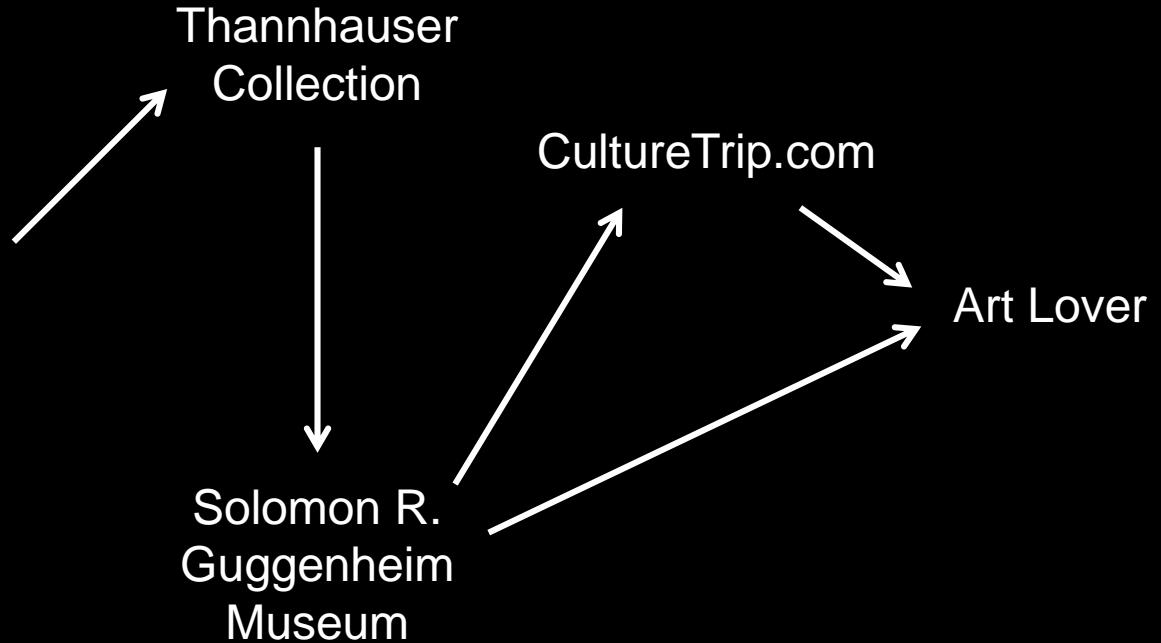


The Specimen Pipeline

Three Bathers (Trois baigneuse)

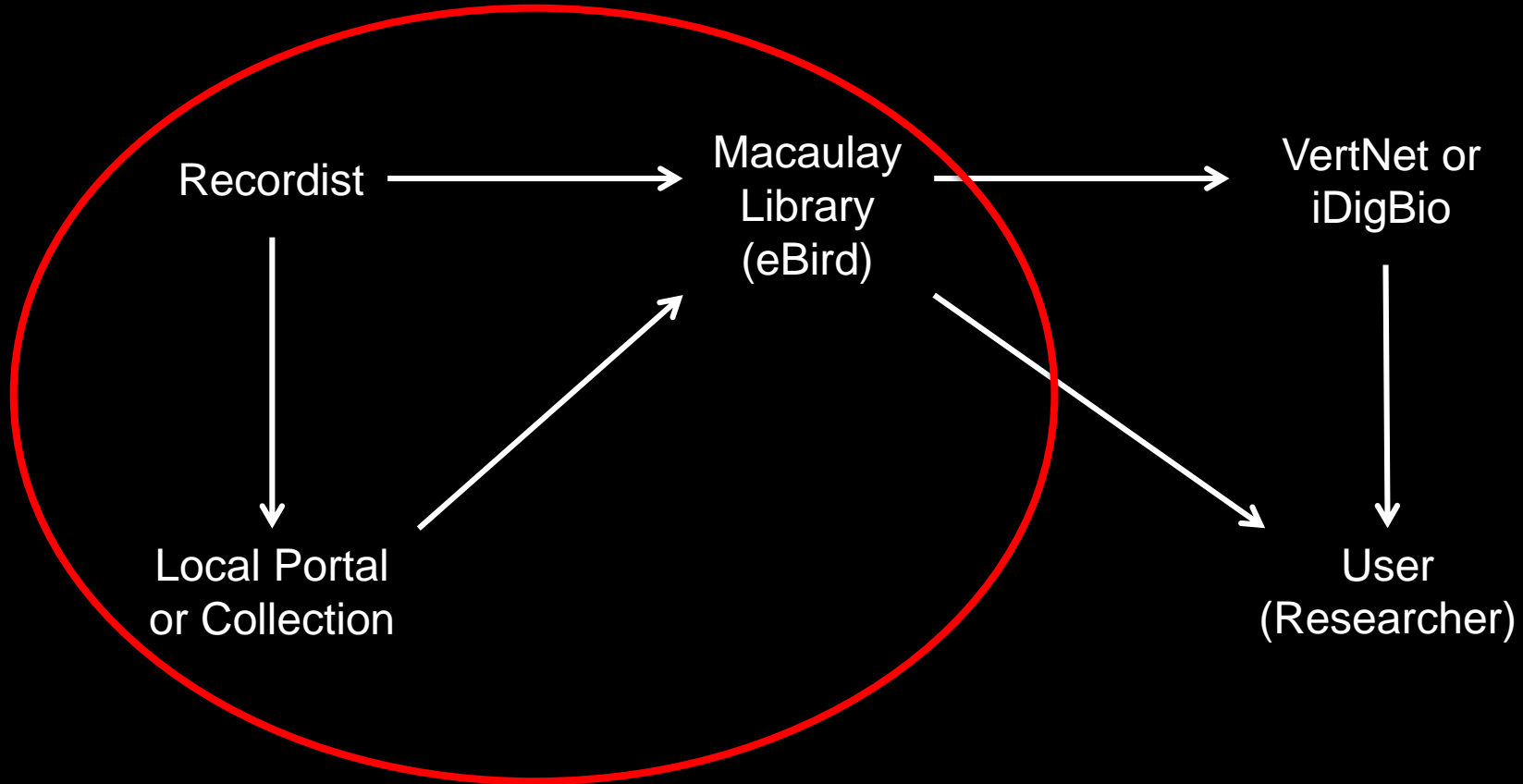


Pablo Picasso








Critically important to attribute the artist and collection

The Specimen Pipeline



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 **Species** 


Enter species name

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Ladder-backed Woodpecker

Picoides scalaris

 © [Kathleen Dvorak](#)


 10 Feb 2018

 Choke Canyon SP--Calliham Unit (McMullen Co.)(CTC 082), McMullen, Texas, United States

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[eBird Checklist](#)
S42686646


[Macaulay Library](#)
ML85656831





Nilgiri Flycatcher

Eumyias albicaudatus

 © [Sreehari K Mohan](#)

 5 May 2017

 Eravikulam NP--Eravikulam Hut, Idukki, Kerala, India

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[eBird Checklist](#)
S36656173

[Macaulay Library](#)
ML85656701

SOUNDS

Song

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All About Birds

Two Tips For Telling A Bird's Age By Its Molt Patterns

By Nate Swick
June 8, 2017

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From the *Summer 2017* issue of Living Bird magazine. [Subscribe now.](#)


Late summer is the time when ragged, disheveled-looking birds start showing up at feeders. Gone is the sleek, clean look of spring. Some birds may even be missing feathers, as if they've come out the other end of a bar fight.


These birds aren't sick—they're molting. Feathers are the defining characteristic for birds, and critically



Photo by *Ryan Schain/Macaulay Library.*






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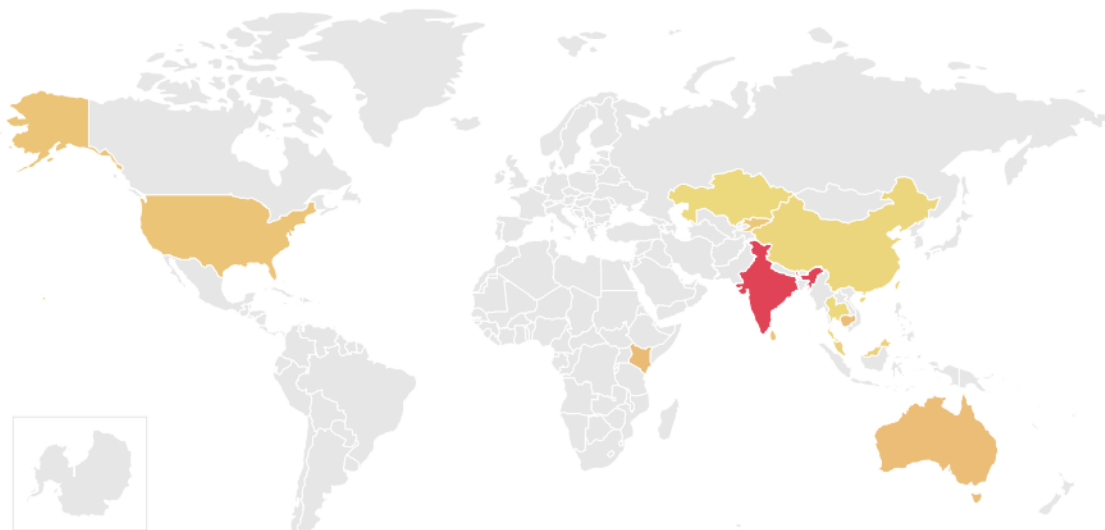
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Ramit Singal
India
Regional Reviewer for [6 Regions](#)
Hotspot Editor for [India](#)
eBirder since **15 Feb 2013**
Oldest checklist: [1 Oct 2000](#)
Oldest media: [10 Oct 2009](#)
I have a keen interest in several aspects of natural history but I am especially fond of birds and frogs.

Region: **World** [Change Region](#)

 1517 Species observed	 2535 Complete Checklists 3219 Total	 684 Species w/ photos 1966 Observations	 355 Species w/ audio 690 Observations	
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1  998

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Tawny Pipit

Anthus campestris

End Point - Manipal, Udupi, Karnataka, India
7 Jan 2012



Tawny Pipit

Anthus campestris

End Point - Manipal, Udupi, Karnataka, India
12 Oct 2012



Bank Myna

Acridotheres ginginianus

Indira Gandhi International Airport, Delhi, South
West Delhi, Delhi, India
26 Jan 2018

Latest Audio (World) [View All](#)



Asian Koel

Eudynamys scolopacea

Shettybettu 2, Udupi, Karnataka, India
11 Feb 2018



Black-hooded Oriole

Oriolus xanthornus

Shettybettu 2, Udupi, Karnataka, India
11 Feb 2018



Rufous Treepie

Dendrocitta vagabunda

Shettybettu 2, Udupi, Karnataka, India
11 Feb 2018

Latest Checklists (World)

11
Species

12 Feb 2018 14:39
Parkala — Garson Junction
Karnataka, India

74
Species

11 Feb 2018 06:33
Shettybettu 2
Karnataka, India

2
Species

10 Feb 2018 18:54
Phalguni River Lodge -
Pilikula
Karnataka, India

19
Species

10 Feb 2018 17:47
Manjalpaade, Mangalore
Karnataka, India

26
Species

10 Feb 2018 17:07
Manjalpaade, Mangalore
Karnataka, India

84
Species

10 Feb 2018 07:08
Kenjar Wetlands, Mangalore
Karnataka, India


10
Species


9 Feb 2018 07:58
Karkardooma Park
Delhi, India

13
Species

8 Feb 2018 16:35
Defence Colony
Delhi, India


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Pedro Nicolau
Portugal
Regional Reviewer for [Setúbal, PT](#)
eBirder since **2 Feb 2013**
Oldest checklist: **9 Jun 2007**
Oldest media: **16 Aug 2009**
<https://www.flickr.com/photos/pni...>
Started birding in 2007. Currently a Master's student in Biostatistics.


Region: **World** [Change Region](#)

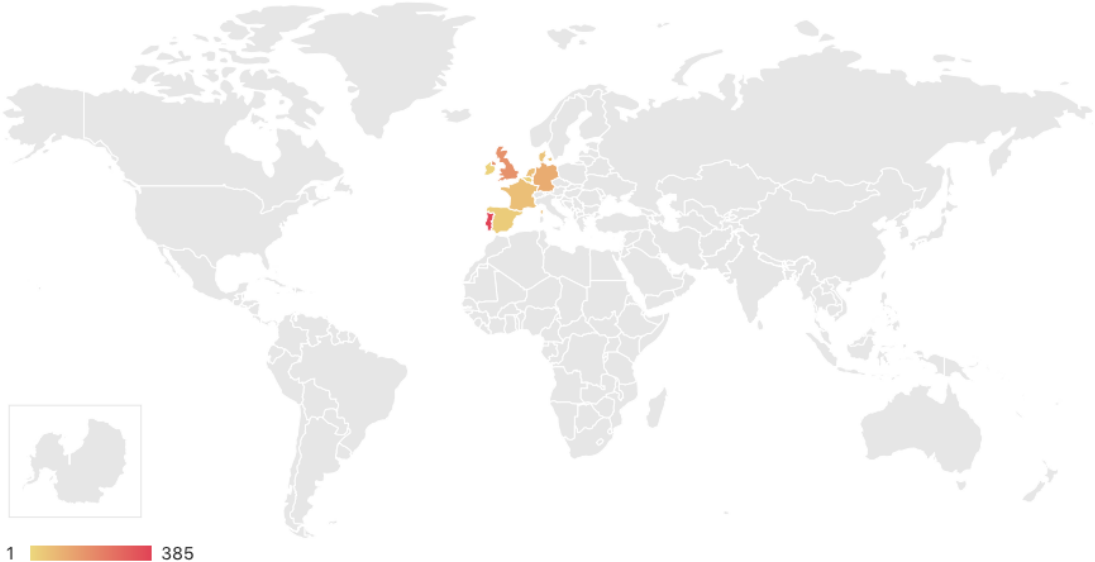
 **417**
Species observed


 **1337**
Complete Checklists
1562 Total

 **316**
Species w/ photos
809 Observations

 **10**
Species w/ audio
10 Observations





1  385

Giving Attribution to Middle-Man

PortugalAves eBird

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0

Species observed

0

Species with photos

0 Observations

0

Days of checklist streak

Best streak: 10 days

0


Complete checklists

0 Total


0

Species with audio

0 Observations




Rufous-gorgeted Flycatcher *Ficedula strophilata* © Ian Davies Macaulay Library eBird




PortugalAves is a collaborative project managed by the Sociedade Portuguesa para o Estudo das Aves.

COLLABORATORS



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Webster Lab, Cornell

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Lab Group Statistics

Media Contributed: 234

Used in: 55 publications

Data h-index: 25.2



Rufous-gorgeted Flycatcher *Ficedula strophilata* © Ian Davies Macaulay Library eBird



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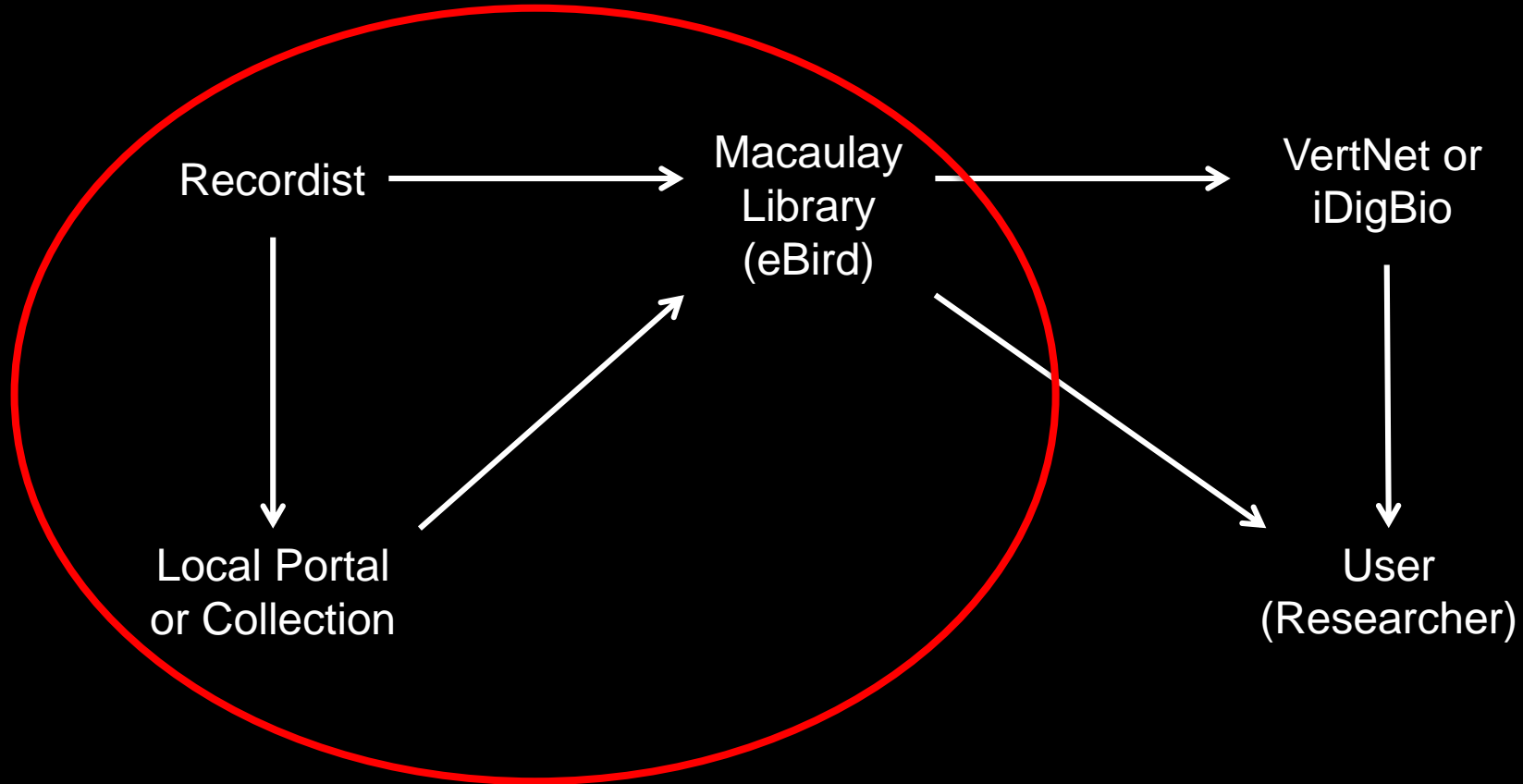
The Cornell Lab



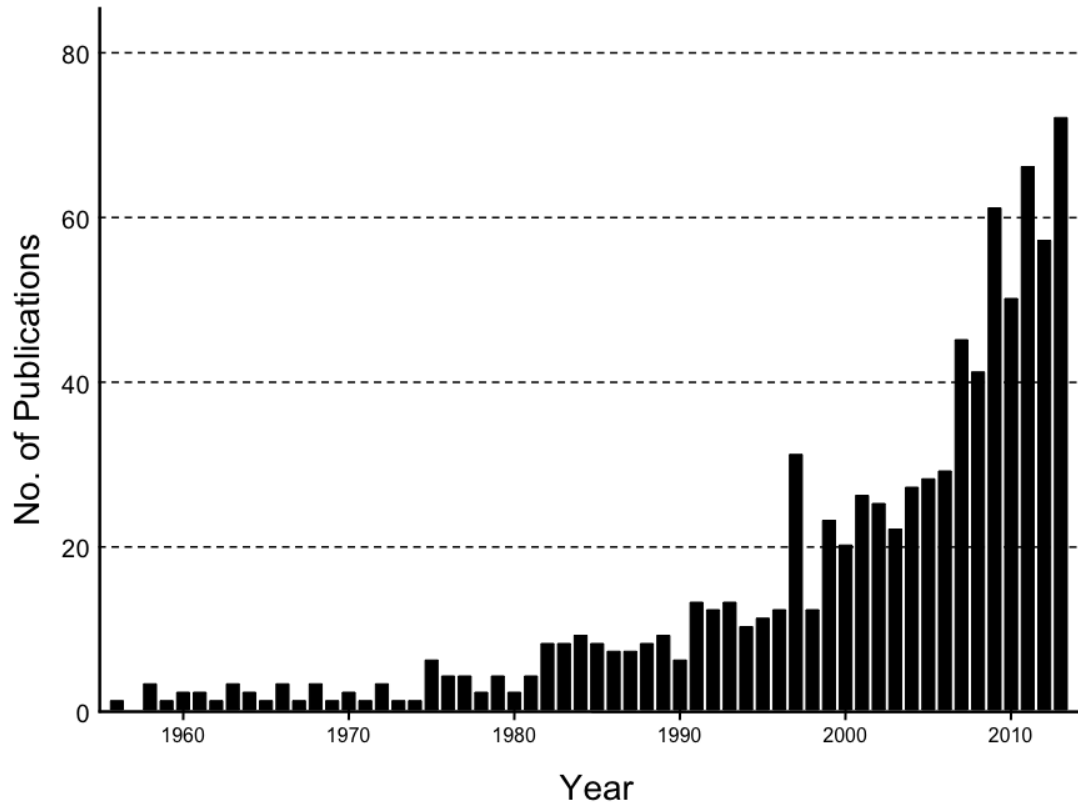
Summary: Working With Birders

1. Give birders the tools they want to do their own thing
2. Use attributions to incentivize
3. Work with regional “collections” (portals) to organize and motivate the community

The Specimen Pipeline



Macaulay Library Publications



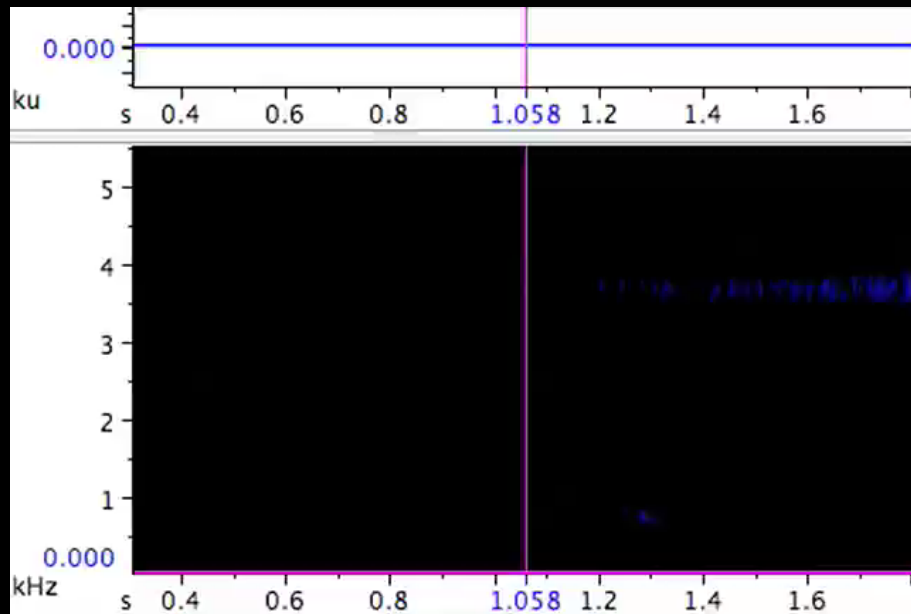
Search Terms:

Lab of Ornithology
Library of Natural Sounds
Cornell Lab
Macaulay
Macauley
McCauley
Macolly
Mack Holly
Etc.



Challenges for Researchers

1. Learning curve
2. The next paper/proposal
(or class or report or
permit application or...)
3. No benefit



Common Potoo (ML #59964, Paul Schwartz)

Carrots vs Sticks

Getting the community to contribute will fail if:

1. It is too onerous
2. Researchers don't benefit
3. It doesn't help researchers do what they want/need to do anyway

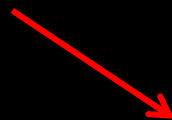
Will succeed if: we can provide easy-to-use tools that allow researchers to do their own research better

Carrots vs Sticks

Getting the community to contribute will fail if:

1. It is too onerous
2. Researchers don't benefit
3. It doesn't help researchers do what they want/need to do anyway

Technology



Will succeed if: we can provide **easy-to-use tools** that allow researchers to do their own research better

Carrots vs Sticks

Getting the community to contribute will fail if:

1. It is too onerous
2. Researchers don't benefit
3. It doesn't help researchers do what they want/need to do anyway

Technology

Sociology

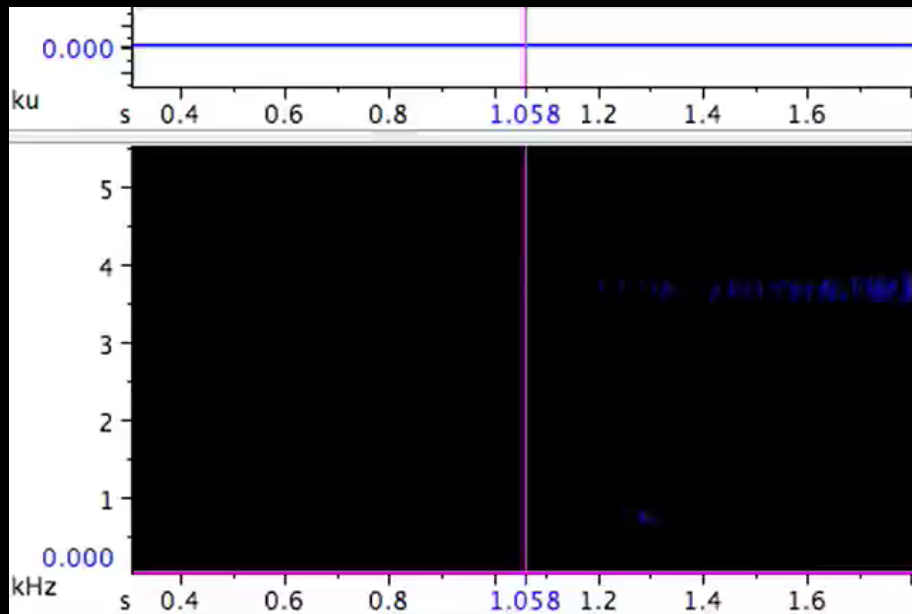
Will succeed if: we can provide **easy-to-use tools** that **allow researchers to do their own research better**

Thanks!

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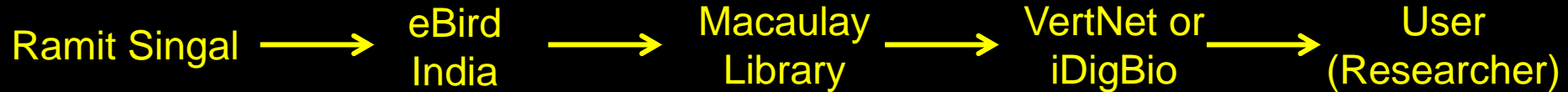
Why Important?

1. Transparency/Repeatability
2. Feedback to contributors
3. Gather usage information
4. Promote brand
5. Etc.



Common Potoo (ML #59964, Paul Schwartz)

The Specimen Pipeline




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Macaulay Library

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Mike Webster (Mike Webster) Sign Out Language



Mike Webster

Freeville, New York, United States

eBirder since 5 Feb 2011

Oldest checklist: 18 Jan 2008

Oldest media: 16 Nov 2015

<http://pages.nbb.cornell.edu/neur...>

I am Director of the Macaulay Library at the Cornell Lab of Ornithology, and also a professor in the Department of Neurobiology and Behavior on Cornell Campus. I study bird communication and behavior, focusing primarily on Australian Fairy-wrens and North ...
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Your profile URL:
<https://ebird.org/ml/profile/MjQyNTQw>

Region: **World** [Change Region](#)

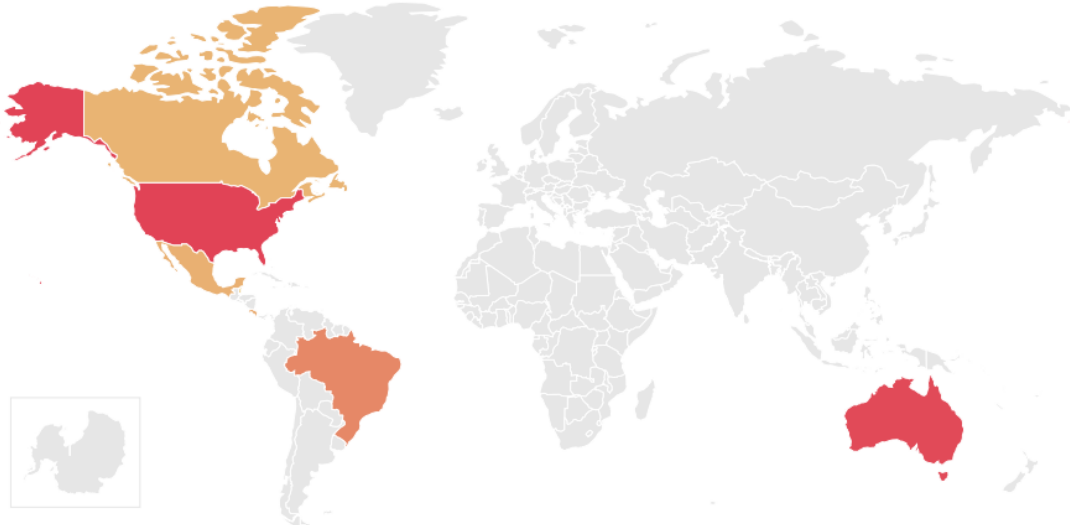
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999
Species observed


409
Complete Checklists
626 Total

1
Species w/ photos
1 Observations

9
Species w/ audio
9 Observations





1  348

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Lesser White-fronted Goose *Anser erythropus*

Lezíria Grande de Vila Franca de Xira--área geral (acesso condicionado), Vila Franca de Xira, Lisboa, Portugal
25 Jan 2018



Lesser White-fronted Goose *Anser erythropus*

Lezíria Grande de Vila Franca de Xira--área geral (acesso condicionado), Vila Franca de Xira, Lisboa, Portugal
25 Jan 2018



Greater White-fronted Goose (Eurasian) *Anser albifrons albifrons*

Lezíria Grande de Vila Franca de Xira--área geral (acesso condicionado), Vila Franca de Xira, Lisboa, Portugal
25 Jan 2018

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Eurasian Reed Warbler

Acrocephalus scirpaceus
RN Estuário do Tejo--EVOA--Lagoa Principal (acesso condicionado), Vila Franca de Xira, Lisboa, Portugal
2 Jan 2018



Red-throated Pipit

Anthus cervinus
Lagoa dos Patos, Alvito, Beja, Portugal
25 Jan 2017



Citrine Wagtail

Motacilla citreola
Lezíria Grande de Vila Franca de Xira--área geral (acesso condicionado), Vila Franca de Xira, Lisboa, Portugal
1 Jan 2017

Latest Checklists (World)

19
Species

4 Feb 2018 16:50
RN Estuário do Tejo--EVOA--Lagoa Grande (acesso condicionado)
Lisboa, Portugal

35
Species

3 Feb 2018 15:36
Ribeira das Enguias
Setúbal, Portugal

61
Species

3 Feb 2018 13:21
RN Estuário do Tejo--Monte de Pancas
Santarém, Portugal

40
Species

25 Jan 2018 15:00
Quinta da Atalaya (acesso condicionado)
Setúbal, Portugal

36
Species

25 Jan 2018 13:10
RN Estuário do Tejo--Monte de Pancas
Santarém, Portugal

64
Species

25 Jan 2018 08:10
Lezíria Grande de Vila Franca de Xira--área geral (acesso condicionado)
Lisboa, Portugal

12
Species

19 Jan 2018 16:33
Far Aldazar Din
Beja, Portugal

13
Species

19 Jan 2018 15:01
RN Sapal Castro Marim e VRSA--esteiro da Carrasqueira
Faro, Portugal

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999

Species observed

409

Complete checklists

626 Total

1

Species with photos

1 Observations

9


Species with audio

9 Observations

0


Days of checklist streak

Best streak: 10 days



Parakeet Auklet *Aethia psittacula* © Nigel Voaden Macaulay Library eBird

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A new face for eBird: redesigned homepage

By Team eBird | January 30, 2018

As you read these words, you will probably be noticing that everything on the eBird homepage looks shiny and new! We're delighted to share our new redesigned home for eBird.

[Read more](#)



We make it visible.