CONFERENCE PRESENTATIONS

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Museums have archives?  
reuniting archives & collections

Nicole Kearney  
Biodiversity Heritage Library (Australia)  

@nicolekearney  
@bhl_au
A Different Type of Animal?
Advocating for Natural Science Archives

Barbara Mathe
Museum Archivist, American Museum of Natural History

Julia Blase
Field Book Project Manager, Smithsonian Institution

Christina Fidler
Museum Archivist, Museum of Vertebrate Zoology, UC Berkeley

Russell White
Director of Collections, Yale Peabody Museum of Natural History

Nicole Kearney
Coordinator, BHL-Australia, Museum Victoria
Biodiversity Heritage Library (BHL)

The world’s largest online repository for biodiversity heritage and archival materials.

biodiversitylibrary.org
220+ contributors
50+ MILLION pages
188,000+ volumes

Information on 170+ million species
5.5+ MILLION
Total unique users to date
98,000+
Average monthly unique users (CY16)

10+ MILLION
Total website visits to date
175,000+
Average monthly visits (CY16)

243
Countries & Territories

10,500+ followers
24,000+ followers
10,700+ followers

Australian visits: 65,812
@bhl_au 472 followers

*Stats as of September 2016
A synopsis of the Birds of Australia and the adjacent islands, John Gould, 1837
A synopsis of the birds of Australia, and the adjacent Islands /
A synopsis of the birds of Australia, and the adjacent Islands.
A synopsis of the birds of Australia, and the adjacent Islands /
Online = infinitely more accessible
1837-1838, English, Book, Illustrated edition:
Gould, John, 1804-1881.

1 v. : col. ill. ; 28 cm.
English

Edition details

Title

Author
Gould, John, 1804-1881.

Other Authors

Published

Physical Description
1 v. : col. ill. ; 28 cm.

Subjects
Birds -- Australia.
Ornithology -- Australia.

Contents
Contains 73 hand-painted plates facing letter-press descriptions,编辑 on recto of page, verso being blank; unpaginated.
Why are field diaries so important?
N.W. from Mt. Rufous - Mt. Hugel on right.
BLACK-FACED CORMORANT - a bird for which I must keep my eyes open on our own coast.

Afternoon tea 28/9/72

1-8 - Jean, Mrs Leaumont, Cliff Beauchamp, Noel Beauchamp, Mrs, and Mrs Rainesman

Thompson
Field diaries are full of data on animals, plants, fossils, weather, and habitats.
DATE: 26 September 1948

LOCATION: Lake Corangamite

OBSERVATIONS
DATE: 26 September 1948

LOCATION: Lake Corangamite

BEHAVIOUR: nesting

OBSERVATIONS:
- There were many white-fronted geese towards yellow-tailed taipans.
- Flocks of sprague's geese and white-fronted geese were very common.
- There were many white-fronted geese.
- There were many white-fronted geese in the area.
- There were many white-fronted geese.
SILVER GULLS (26.9.48)

300 nests on 1 island

15 islands of similar size

Estimates 4500 nests

Nesting success ~ 1.5 eggs/nest

= 7000 new gulls from this year from this locality
We need this data!

Historic observations

• past species’ abundance and distribution

• future biological surveys

• threatened species management
We need this data!

Historic observations
• past species' abundance and distribution
• future biological surveys
• threatened species management

Grampians National Park

Images: Heath Warwick & Nicole Kearney / Museum Victoria
A historic baseline for climate change research

Spatially heterogeneous impact of climate change on small mammals of montane California
Kevin C. Rowe, Karen M. C. Rowe, Morgan W. Tingley, Michelle S. Koo, James L. Patton, Chris J. Conroy, John D. Perrine, Steven R. Beissinger, Craig Moritz

Impact of a Century of Climate Change on Small-Mammal Communities in Yosemite National Park, USA
Craig Moritz, et al.
Science 322, 261 (2008);
DOI: 10.1126/science.1163428

The push and pull of climate change causes heterogeneous shifts in avian elevational ranges
MORGAN W. TINGLEY*, MICHELLE S. KOO*, CRAIG MORITZ††, ANDREW C. RUSH†† and STEVEN R. BEISSINGER*†
Underutilised resource

Inaccessible in their current state

- single hard copy
- single location
- hand-written (in the field)
- historic scripts
- unsearchable
- often uncatalogued
Procedures?
Documentation?
Management?
Preservation?
Standards of practice?
Access???
Hidden items in our collections

Ornithology Department Archives

“Estate of Graham Brown – note books”

Catalogued in our Records & Archives database (TRIM)
Step 1: create individual records
A record for every item

Object Name: BA 9142, Field Notes - Arthur Graham Brown, Ornithological Data Book 1, 1932 - 1954, Vertebrate Zoology, Object, Registered

History and Technology Collections:
- Primary Classification: Scientific Artwork
- Secondary Classification: Notes
- Tertiary Classification: Paper

Object Summary:
This is the first of six data books of Arthur Graham Brown, a man who would later become the president of the Royal Australasian Ornithologists’ Union (RAOU) and an Honorary Associate of the National Museum of Victoria.

These data books record details of Arthur Graham Brown’s observations of over 700 species in the field from 1932 and correspond to the field narratives produced by him between 1947 and 1957 in five diaries.

This data book covers the first 128 species and includes an index in the front of the book of all the species covered in these six data books. No species recorded for number 129.
A digital version in our database
TRIM = records management database

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Title</td>
<td>To be classified - MV ARCHIVES - NATIONAL MUSEUM OF VICTORIA - Ornithology Department Archives - Estate of A. Graham Brown - note books (RAOU archives)</td>
</tr>
<tr>
<td>Expanded Number</td>
<td>OLDERSYSTEM~04052</td>
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<tr>
<td>External ID</td>
<td></td>
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<tr>
<td>File Plan</td>
<td>To be classified (ZZ)</td>
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<td>All Thesaurus Terms</td>
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<td>Date Created</td>
<td>19/6/2003</td>
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<td>Date saved in TRIM</td>
<td>19/6/2003</td>
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<td>Date Published</td>
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</tbody>
</table>

**NOTES**


Deaccessioned
EMu = collection management database

Accesioned

This is the first of six data books of Arthur Graham Brown, a man who would later become the president of the Royal Australasian Ornithologists' Union (RAOU) and an Honorary Associate of the National Museum of Victoria.

These data books record details of Arthur Graham Brown's observations of over 700 species in the field from 1932 and correspond to the field narratives produced by him between 1947 and 1957 in five diaries.

This data book covers the first 128 species and includes an index in the front of the book of all the species covered in these six data books. No species recorded for number 129.
Step 2: create digital versions
Digitisation & post processing
A digital version in our database
You can’t search handwriting

OCR from a page of Graham Brown’s diary

|>^v^-^wAl^ livU*^/\ Curiae
'^tila'* -u^vttcvi Lsefei cit^:<
Lv. 1^ Ol^Vm?iJcw , L>w i^-^Otv^ dS^^iL* ll^^Uk^M/tTM^li?'^
tvc4fi>r '^^-^ G^WtY^^
uve^v. ||CCUvIr]^vv\l^'
'^L^>u^ l^t^
Step 3: transcription
Field Notes
1898
Vernon Bailey
Dept. of Agl.
Washington, D.C.
1784-4-18
Mr. Villhon came to town last night at 11 o'clock on account of an engagement to dine with some friends at M<hi rend="superscript">r</hi> Challis<unclear>Challis</unclear> in Bedford Square. He is exceedingly sorry not to have had the pleasure of meeting M<hi rend="superscript">r</hi> Bentham at his chambers, so much the more as he is obliged to postpone it for two or three days, very much against his inclination. Sunday 2 1/2 o'clock
Decipher our collections, discover hidden archives and contribute to knowledge
Join our community of 1,000+ volunteers

Get involved  Learn more
12 January 1898

Oriental Pratincole (Cerocola orientalis) The birds that I saw on the 31st December I thought had cleaned out but I find that they had only shifted about 8 miles or so.

Clare Valley 1898

March Ion (Hydrochelidon leucopareia) Flock of about 20 of these on the bore drain this morning — Clare Valley 1900.

Laughing Jackass (Garrulus glandarius)
On the 29th June 1947 The Orion arrived at Fremantle and we had our first sight of Australia and its birds. Silver Gulls abounded in the harbour...

So begins the first Australian field diary of Arthur Graham Brown, a man who would later become the president of the Royal Australasian Ornithologists' Union (RACU) and an Honorary Associate of the National Museum of Victoria.
Friday Monday = 30% transcribed
Max and I made a comparative list of Otways and Grampians of the birds confined to one or the other. It is as follows:

**OTWAYS**
- WHITE GOSHAWK
- KING PARROT
- ORANGE-BREASTED PARROT
- GROUND PARROT
- PINK ROBIN
- ROSE ROBIN
- RUFOUS FANTAIL
- RUFOUS BRISTLE-BIRD
- OLIVE-WHISTLER
- SINGING HONEYEATER
- BEAUTIFUL FIRETAIL
- SATIN BOWER-BIRD

**GRAMPIONS**
- LITTLE CUCKOO-SHRIKE
- HYLACOLA CAUTA
- WHITE-BROWED BABBLER
- SPECKLED WARBLER
- The LITTLE EAGLE should have been included, but I saw an "almost certain" bird at Barongarook 25.11.56!
<table>
<thead>
<tr>
<th>externalID</th>
<th>exportCor</th>
<th>date</th>
<th>Transcribed</th>
<th>dateValidated</th>
<th>individuation</th>
<th>occurrence</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>13/01/2015 22:40</td>
<td>21/02/2015 19:13</td>
<td>3</td>
<td>[crossed out] 4 [/crossed out] 2 [page number] [n] [27.11.51] [n] swamps and I poked round a few to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>11/01/2015 13:24</td>
<td>21/02/2015 19:20</td>
<td>4</td>
<td>[Page number] [27.11.51] nopen forest produced birds typical of it - WHITE-BROWNED BABE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>13/01/2015 13:54</td>
<td>23/02/2015 16:42</td>
<td>1</td>
<td>4 [Page number] [27.11.51] cleared land, and a farm turned up. W[e] masked our way from and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>14/01/2015 19:38</td>
<td>23/02/2015 17:00</td>
<td>2.6</td>
<td>[Page number] [28.11.51] had come by seeing a SCARLET ROBIN non the way, and got to the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>14/01/2015 12:59</td>
<td>23/02/2015 17:07</td>
<td>2.7</td>
<td>[Page number] [29.11.51] n The YELLOW-TUFTED HONEYEATER was the only new bird for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>14/01/2015 14:32</td>
<td>23/02/2015 17:13</td>
<td>3.8</td>
<td>[page number] [n] [30.11.51] We drove over the M[oun] t Victory Road to Lake Wartook when</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>14/01/2015 14:07</td>
<td>24/02/2015 19:08</td>
<td>2.9</td>
<td>[Page number] [n] [30.11.51] Your track 3 days ago. We returned to the car by the same route</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>13/01/2015 16:17</td>
<td>24/02/2015 19:38</td>
<td>12</td>
<td>10 [Page number] [n] [30.11.51] nof WHITE COCKATOOS. We turned eastwards at Cavendish and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>15/01/2015 19:40</td>
<td>24/02/2015 20:00</td>
<td>11.15</td>
<td>[Page number] [January 13th 1952] [n] [margin] 34 [circled] D. [circled] 34 [circled]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>13/01/2015 18:58</td>
<td>24/02/2015 20:09</td>
<td>13.17</td>
<td>[Page number] [January 13th 1952] While the boys were being given in drinks of milk and</td>
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<td></td>
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<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>14/01/2015 15:25</td>
<td>24/02/2015 24:29</td>
<td>9.18</td>
<td>[Page number] [January 14th 1952] while poorly and Jonathan called for a nwhizz at 4:15 o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>12/01/2015 14:02</td>
<td>26/02/2015 14:34</td>
<td>11.19</td>
<td>[Page number] [n] [Monday January 14th 1952] n After lunch we set off west, with the ncarav</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>14/01/2015 14:55</td>
<td>26/02/2015 15:03</td>
<td>7.20</td>
<td>[Page number] [n] [January 15th 1952] nthere was nothing exciting to be seen. But it nhad one</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>14/01/2015 15:12</td>
<td>26/02/2015 15:12</td>
<td>9.21</td>
<td>[Page number] [n] [January 15th 1952] nthere was nothing exciting to be seen. But it nhad one</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>19/01/2015 19:32</td>
<td>26/02/2015 15:48</td>
<td>9.23</td>
<td>[Page number] [January 16th 1952] nwind. The air for a mile around was nflatop with Strat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV_Grah</td>
<td>Fully</td>
<td>19/01/2015 19:48</td>
<td>26/02/2015 16:01</td>
<td>4.25</td>
<td>[Page number] [n] Thursday 17th. January 1952 n noticed the two little birds wingine oast the</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
[Warnambool], Port Fairy


Bridgewater Portland : walk along cliffs.

18-23.5.52 Lorne. “family holiday only.

19.1.52 Bridgewater

13.10.52 Colac “Cobden “Waare. “Max [village name]

14.10.52 Waare.

15.10.52 Waare “Sherbrook R[iver]

“Chapple Vale.

16.10.52 Chapple Vale, Lavers Hill, Glen [village name]

Apollo Bay

17.10.52 Apollo Bay “C[ape] Otway Rd. “B[ay]

18.10.52 Glen Aire “Mrs Denny [guess]. “Ford R[iver]

R[iver] : L. [Lower?] Calder River with Mrs Denny

<table>
<thead>
<tr>
<th>PAGE</th>
<th>DATE</th>
<th>LOCALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Crayfish Bay : Apollo Bay : Paradise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gerangamete : Loch* [Lough] Calvert floods,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stony Rises : [underlined] Home [/underlined]</td>
</tr>
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<td>LITTLE CUCKOO-SHRIKE</td>
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<td>HYLACOLA CAUTA</td>
</tr>
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<td>WHITE-BROWED BABBLER</td>
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<td>SPECKLED WARBLER</td>
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<td>have been included</td>
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<td>but I saw an &quot;almost</td>
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<td>OLIVE-WHISTLER</td>
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<td>SINGING HONEYEATER</td>
<td>Barongarook 25.11.56</td>
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</tr>
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</table>
Transcript in our database
Step 4: make them accessible
Ornithological Field Diaries of A. Graham Brown.
Along with the transcriptions!
Progress thus far…

42 field diaries digitised

22 diaries transcribed

= 4500 pages of handwritten entries

98 crowd-sourced online volunteers
New homes for our field diaries

... in our Scientific Art & Observation Collection.
But what about the data?
5 Graham Brown field diaries:

5611 animal sightings

<table>
<thead>
<tr>
<th>Date</th>
<th>Species</th>
<th>Location</th>
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<tbody>
<tr>
<td>09/09/1947</td>
<td>Red Wattle bird</td>
<td>Colac, near lake, in flowering gums</td>
</tr>
<tr>
<td>13/09/1947</td>
<td>Crested Grebes</td>
<td>Colac East, end of Church St, mouth of the creek</td>
</tr>
<tr>
<td>13/09/1947</td>
<td>Little Pied Cormorant</td>
<td>Colac, perched on the wreck</td>
</tr>
<tr>
<td>13/09/1947</td>
<td>Mountain Duck</td>
<td>Colac East, end of Church St, mouth of the creek</td>
</tr>
<tr>
<td>13/09/1947</td>
<td>Musk Duck</td>
<td>Colac, on the lake</td>
</tr>
<tr>
<td>13/09/1947</td>
<td>Silver Gull</td>
<td>Colac, over the lake, opposite Queen’s Avenue</td>
</tr>
</tbody>
</table>
Data – history

547 mentions of people & organisations

Historical descriptions of places & events

Personal anecdotes: the life of a 1940s country doctor
23 October 1950

At Gundagai the Murrumbidgee was flooded...

...small eucalypts that had been planted and were growing to cover the hillside below the memorial...

...the afternoon was tiring for the road was bad.
69 diaries uploaded
68 transcribed
64 online volunteers
D. Trail
Bureau of Mineral Resources,
Canberra.

Mawson, 1961
Notebook I

Framnes Mts.

20 February 1981
Flight Mawson Area -
Framnes Mts.
Eisler Nuniatik
Depot at base in West Ridge
Henderson & Eisler

Nuniatik appears as a characteristic
quartzite, Henderson & uniform.
N end of Masson Range
Painted Pt. in mountain
Mt. Wadl appears to be
Henderson & Masson Mt.

Approached from west side
1051 Summit Pt.
Mt. Burrell by southwest
Dallara Pt.

David Mt. also appears
mainly quartz.
No apparent difference in
David Mt. N of Henderson.
End, Mt. Adare of same Pt.
Best approach to all.
So who are these online volunteers?
Supporting online volunteers

- Clear online tutorials
- Online forums
- Email support & feedback
- People & place name index

Barongarook
Irrewillipe
Porepunkah
Warracknabeal

- Personal acknowledgement
VOLUNTEER PROFILE

Nicole Kearney (that's you!)

382  181  201
Total Contribution  Transcribed  Validated

ACHIEVEMENTS

CONTRIBUTION TO RESEARCH
You have contributed to 173 new field observations.
You have participated in 9 expeditions.
You have transcribed 0.04% of the total transcriptions on DigiVol.

First contributed in Oct 2014
What motivates online volunteers?

For each of the below categories, can you please rate on a scale of 1 to 5 what was your motivation to volunteer in DigiVol?

- Interested in natural history and cultural museum...
- Doing something worthwhile
- Making a contribution in the field of biodiversity
- Volunteering at home
- Making a contribution to the Australian Museum
- Sense of purpose it gives me
- Using the skills I already have
- You enjoy transcribing
- Gaining new skills and experience
- Making a contribution to another institution on...
- Being part of an online community through a forum
- Using it as work experience to help with gaining...

Paul Flemons, DigiVol Volunteer Survey, April 2015
Thank you

Nicole Kearney
nkearney@museum.vic.gov.au

@nicolekearney
@bhl_au