Guide to the Raymond B. Cowles Papers

Laurie Hannah and Lindsey Hashimoto
Cheadle Center for Biodiversity and Ecological Restoration
University of California, Santa Barbara
Harder South 9615
Santa Barbara, California 93106-9615
Phone: (805) 893-2401
Fax: (805) 893-4222
Email: hannah@lifesci.ucsb.edu
URL: http://ccber.lifesci.ucsb.edu/library
© 2008
The Regents of the University of California. All rights reserved.
Guide to the Raymond B. Cowles Papers

Collection number: MS-02

Cheadle Center for Biodiversity and Ecological Restoration
University of California, Santa Barbara
Santa Barbara, California

Processed by:
Laurie Hannah and Lindsey Hashimoto

Date Completed:
2008

Encoded by:
Laurie Hannah

© 2008 The Regents of the University of California. All rights reserved.

Descriptive Summary
Title: Raymond B. Cowles papers
Dates: 1920-1992
Collection number: MS-02
Creator: Cowles, Raymond B. (Raymond Bridgman), 1896-1975
Collection Size: 6 linear feet8 boxes
Repository: Cheadle Center for Biodiversity and Ecological Restoration (University of California, Santa Barbara). C. H. Muller Library
Santa Barbara, CA 93106-9615
Abstract: This collection consists of correspondence, published and unpublished manuscripts, photographs, artifacts, and biographical materials of zoologist and UCLA professor Raymond Cowles.
Languages: Languages represented in the collection: English
Access
Collection is open for research.
Publication Rights
Copyright has not been assigned to the Cheadle Center for Biodiversity and Ecological Restoration, UC Santa Barbara. All requests for permission to publish or quote from manuscripts must be submitted in writing to the Director. Permission for publication is given on behalf of the Cheadle Center as the owner of the physical items and is not intended to include or imply permission of the copyright holder, which must also be obtained by the reader.
Preferred Citation
Raymond B. Cowles papers, MS-02, Cheadle Center for Biodiversity and Ecological Restoration. University of California, Santa Barbara.
Acquisition Information
Gift of Kay Wolsey, Cowles’ daughter.
Processing Information
Arrangement and description of this collection was made possible by a grant from the Institute of Museum and Library Services.
Biography / Administrative History
Ecologist, naturalist, and teacher Raymond Bridgman Cowles was born in 1896 in Natal, South Africa to missionary parents. He left Africa for the United States where he attended school, worked, served in the military during WWI, and attended Pomona College, earning a bachelor's degree in 1920. Following field work in Africa from 1925-27, he received his PhD in zoology from Cornell in 1928 and began working at UCLA in 1929, where he taught zoology until 1963.
Cowles wrote extensively about animals and specifically about reptilian thermoregulation, his pioneering research, from the 1920s through the mid 1970s. Other areas of research were fire ecology, desert ecology, continental drift and climate change, and overpopulation. Population issues, such as poverty, limited natural resources, famine, and birth control
overlaid many of his arguments and were a concern stemming from his South African upbringing. Cowles published over 100 articles and wrote two books: Zulu Journal published in 1959 and Desert Journal published in 1977.

Cowles was recognized for his teaching and research with many awards and honors, including an honorary doctorate of science from Pomona College; the Cowles Animal Medical Ward at the Living Desert Reserve; and the UC Cowles Temescal Canyon Reserve in the Santa Monica Mountains, dedicated in 1978. Cowles died in 1975 at the age of 79.

**Scope and Content of Collection**

This collection of papers deals predominantly with the published and unpublished writings of Raymond Cowles. The Correspondence series gives an insight into Cowles' struggles to publish his works on overpopulation in a timely fashion, as well as his views on various issues appearing in his writings. Noted correspondents include colleagues Kenneth Norris, Garrett Hardin, and Robert Stebbins, as well as Zulu chief Gatsha Buthelezi. The series Published Writings and Unpublished Writings contain the bulk of the collection. Among the highlights are the two versions of his unpublished book On the Bondage of Human Numbers, a pessimistic look at the future of unrenewable, limited resources and the effects of overpopulation, which was to be published by University of Oklahoma press in 1968, as well as a different version co-written with Lucy Birzis. Also included are early drafts for his last book Desert Journal, published posthumously in 1977 with Elna Bakker, and a futuristic and optimistic novel that takes place 300 years after what Cowles predicted would be an economic-radiation crash. The Photograph series includes many images of desert reptiles and birds both in Africa and California, and photos of Zululand. Many of the photos have captions. The Artifact series contains the most unusual items--detritus from the first atomic bombs detonated in New Mexico in 1944, collected by Cowles during a survey he conducted on the effects of radiation on desert animals.

**Arrangement**

This collection is organized into 7 series: Series 1 Biographical Materials, Series 2 Correspondence, Series 3 Professional Activities, Series 4 Published Writings, Series 5 Unpublished Writings, Series 6 Photographs, and Series 7 Artifacts.

**Indexing Terms**

The following terms have been used to index the description of this collection in the library's online public access catalog.

- Desert ecology--California
- Overpopulation
- Reptiles--Physiology
- Zoologists--California
- field notes
- Cowles, Raymond B. (Raymond Bridgman), 1896-1975
- Desert ecology--South Africa--KwaZulu Natal

**Separated Material**

Cowles' reprint collection and his published books are housed separately in the library.
Professional Activities

Box 1, Folder 15  Papers and Lectures Given
Box 1, Folder 16  National Science Foundation Film and Television Projects, Proposal
Box 1, Folder 17  Grant Proposals
Box 1, Folder 18  San Pascual Zoo Annex

Published Writings

Box 1, Folder 19  Correspondence with Max Knight re: Zulu Journal 1957-1959
Box 1, Folder 20  Zulu Journal
Box 1, Folder 21  Desert Journal - Reviews
Box 3, Folder 2-16  Desert Journal - Miscellaneous Drafts
Box 1, Folder 22  The Flowing Well of Life
Box 1, Folder 23  Soil is Life - Review
Box 1, Folder 24  On Aggression - Review
Box 1, Folder 25  Origin of the Tetrapods
Box 1, Folder 26  Letters to the Editors
Oversize_box 1-2  Scrapbook of Published Articles
Box 1, Folder 27  Conservation
Box 1, Folder 28  Reptiles and Other Animals
Box 1, Folder 29  Africa
Box 1, Folder 30  Overpopulation
Box 1, Folder 31  Notes
Box 1, Folder 32  Bibliographies/Works Cited
Box 1, Folder 33  Miscellaneous
Box 1, Folder 34  Publications by Other People [1 of 2]
Box 1, Folder 35  Publications by Other People [2 of 2]

Unpublished Writings

Scope and Contents note
This large series consists of drafts for unpublished books and articles. Some of these papers
may be early drafts of articles that were eventually published under a different title. Folders
with actual titles are transcribed from the title page of the draft. Two large folders of
unsorted materials may actually be duplicates of other works.

Box 2, Folder 1  Degrees of Poverty and Density of Populations: Africa (1965 and 1971)
Box 2, Folder 2  The Issue of Begetting
Box 2, Folder 3  Apologia
Box 2, Folder 4  Malthus Resurrected: Supply Versus Demand and Inflation
Box 2, Folder 5  Three Major Symptoms, One Disease and One Cure
Box 2, Folder 6  Emanicipation From Our Bondage to Excess Numbers: A Biologist's Dream
Box 2, Folder 7  Reproductive Superfluity, Harvests and Life and Death
Box 2, Folder 8  Reproductive Superfluity: Fodder for Evolution, Change, Survival, and Nourishment
for Man
Box 2, Folder 9  The People Crunch Is Here/Biological Compulsions, Education, and Man's Future
Box 2, Folder 10  Biological Basics for Human Welfare
Box 2, Folder 11  Utopia
Box 2, Folder 12  Our Theoretical Future?
Box 2, Folder 13  Irresponsible
Box 2, Folder 14  Warning of Impending Catastrophe
Box 2, Folder 15  Fantasy? - Science Fiction or a Detour of the Black-White Racial Problem
Box 2, Folder 16  Fantasy? - A Solution to the Black-White Racial Problem? Melting Pot or Segregation
with Independence
Box 2, Folder 17  Man's Submission to the Slavery of His Numbers
Box 2, Folder 18  A New Look at the Problem
Box 2, Folder 19  Technology, the Promethean Myth, Future Resources and Man's Hopes
Box 2, Folder 20  Elements of the Population Problem
Box 2, Folder 21  Resources for the Future and Man Contending with Fellow Man
Box 2, Folder 22  Of Human Numbers
Box 2, Folder 23  What is the Optimum Number of Human Beings?
<table>
<thead>
<tr>
<th>Box 2, Folder 24</th>
<th>The Optimum Number of Human Beings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box 2, Folder 25</td>
<td>Resources for the Future and Man Contending with Fellow Man</td>
</tr>
<tr>
<td>Box 2, Folder 26</td>
<td>Pernicious Misdiagnosis of Universal Shortages</td>
</tr>
<tr>
<td>Box 2, Folder 27</td>
<td>Mistrust, Fear, and the Population Explosion (South Africa's Racial and Political Dilemma)</td>
</tr>
<tr>
<td>Box 2, Folder 28</td>
<td>For Our Children's and Our Own Future</td>
</tr>
<tr>
<td>Box 2, Folder 29</td>
<td>Human Expectations and Population Densities</td>
</tr>
<tr>
<td>Box 2, Folder 30</td>
<td>A Different Kind of Peace Treaty</td>
</tr>
<tr>
<td>Box 2, Folder 31</td>
<td>Supply Versus Demand Equals Inflation</td>
</tr>
<tr>
<td>Box 2, Folder 32</td>
<td>Childbearing and the Future</td>
</tr>
<tr>
<td>Box 2, Folder 33</td>
<td>Midweek Excursion in Search of Sylvan Solitude and a Moment of Quiet for Soul Searching</td>
</tr>
<tr>
<td>Box 2, Folder 34</td>
<td>Irresponsible Fun with the Meaning of Words</td>
</tr>
<tr>
<td>Box 2, Folder 35</td>
<td>Some Biotic Aspects of Continental Drift</td>
</tr>
<tr>
<td>Box 2, Folder 36</td>
<td>Continental Drift and New Thermal Adaptations in the Archosaurs: And for Paleoclimatologists?</td>
</tr>
<tr>
<td>Box 2, Folder 37</td>
<td>Continental Drift, Magnetic Reversals, Climatic Change and Biotic Extinction</td>
</tr>
<tr>
<td>Box 2, Folder 38</td>
<td>The Evolutionary Significance of Albedo (Color) in the Human Skin</td>
</tr>
<tr>
<td>Box 2, Folder 39</td>
<td>The African's Skin</td>
</tr>
<tr>
<td>Box 2, Folder 40</td>
<td>The Needs of the Species Versus the Needs of its Individuals: Insoluble Civil Conflict</td>
</tr>
<tr>
<td>Box 2, Folder 41</td>
<td>The Importance of Microclimates</td>
</tr>
<tr>
<td>Box 2, Folder 42</td>
<td>Terrestrial Vertebrates, Their Bodily Configuration Size, and Metabolic Rates</td>
</tr>
<tr>
<td>Box 2, Folder 43</td>
<td>Arches in the Bridge from Fish to Man</td>
</tr>
<tr>
<td>Box 2, Folder 44</td>
<td>Tool Using Baboons</td>
</tr>
<tr>
<td>Box 2, Folder 45</td>
<td>Conflict Between the Ethic of Living Systems and the Human Ethic</td>
</tr>
<tr>
<td>Box 2, Folder 46</td>
<td>Semantics and Progress in Vertebrate Thermoregulation</td>
</tr>
<tr>
<td>Box 2, Folder 47</td>
<td>Nothing but Noisy Tree Frogs?</td>
</tr>
<tr>
<td>Box 2, Folder 48</td>
<td>The California Condor, Chaparral Fires and Fire Suppression</td>
</tr>
<tr>
<td>Box 2, Folder 49</td>
<td>Santa Anas Will Always Flow and Brush Fires Rage</td>
</tr>
<tr>
<td>Box 2, Folder 50</td>
<td>Fire Control in Our Montane and Adjacent Vegetational Areas</td>
</tr>
<tr>
<td>Box 2, Folder 51</td>
<td>Chaparral Fires, Fire Suppression, Ecological Change and a Possible Indicator Organism</td>
</tr>
<tr>
<td>Box 2, Folder 52</td>
<td>Speculation on a Latent Role of Heat in Vertebrate Evolution</td>
</tr>
<tr>
<td>Box 2, Folder 53</td>
<td>On the Cryptic Significance of Externality in the Avian Cloacal Protuberance and Heated Conditions and the Sequellae</td>
</tr>
<tr>
<td>Box 2, Folder 54</td>
<td>Mesquite Oases on the Deserts</td>
</tr>
<tr>
<td>Box 2, Folder 55</td>
<td>Pure Air</td>
</tr>
<tr>
<td>Box 2, Folder 56</td>
<td>Human Ecology - Conservation and the Desert</td>
</tr>
<tr>
<td>Box 2, Folder 57</td>
<td>Embryonic Curricular Suggestions</td>
</tr>
<tr>
<td>Box 2, Folder 58</td>
<td>The Biokrene</td>
</tr>
<tr>
<td>Box 2, Folder 59</td>
<td>The Biokrene, Degrees of Overpopulation and a Reappraisal of Africa</td>
</tr>
<tr>
<td>Box 2, Folder 60</td>
<td>Utopia and the Biokrene/To Fit Into the Discussion of the Biokrene</td>
</tr>
<tr>
<td>Box 2, Folder 61</td>
<td>Eden Regained (A Series of Romantic Essays on Past, Present, and Future Human Husbandry) [1 of 2]</td>
</tr>
<tr>
<td>Box 2, Folder 62</td>
<td>Eden Regained (A Series of Romantic Essays on Past, Present, and Future Human Husbandry) [2 of 2]</td>
</tr>
<tr>
<td>Box 2, Folder 63</td>
<td>Eden Regained [1 of 2]</td>
</tr>
<tr>
<td>Box 2, Folder 64</td>
<td>Eden Regained [2 of 2]</td>
</tr>
<tr>
<td>Box 2, Folder 65</td>
<td>From the Bondage of Human Numbers [1 of 2]</td>
</tr>
<tr>
<td>Box 2, Folder 66</td>
<td>From the Bondage of Human Numbers [2 of 2]</td>
</tr>
<tr>
<td>Box 2, Folder 67</td>
<td>From the Bondage of Human Numbers - Photocopy - Draft Edition [1 of 2]</td>
</tr>
<tr>
<td>Box 2, Folder 68</td>
<td>From the Bondage of Human Numbers - Photocopy - Draft Edition [2 of 2]</td>
</tr>
<tr>
<td>Box 3</td>
<td>From the Bondage of Human Numbers - Edited copy in binder</td>
</tr>
<tr>
<td>Box 2, Folder 69</td>
<td>Bondage of Human Numbers - Carbon</td>
</tr>
<tr>
<td>Box 2, Folder 70</td>
<td>Miscellaneous - From the Bondage of Human Numbers</td>
</tr>
<tr>
<td>Box 2, Folder 71</td>
<td>No More Islands</td>
</tr>
<tr>
<td>Box 2, Folder 72</td>
<td>An African Adventure</td>
</tr>
<tr>
<td>Box 3, Folder 1</td>
<td>A Minority Appraisal of the Proposed New Environment Doctor Training Program</td>
</tr>
</tbody>
</table>
Artifacts

Box 3  
Section of electric cable employed in firing the world’s first atomic explosion 1944  
Physical Description: Cable approximately 2.75 in. long, labeled Amphenol RG-54A / U - 1944  
Scope and Contents note  
Cable found by Cowles during experiments he conducted in New Mexico searching for radiation damage to native fauna and flora. Cowles wrote a report of his findings and a summary in a note, dated 1958, to his grandchildren, explaining the significance of the cable. His conclusion: Two years after the detonation there were no animals showing illness—at least we could find none, but I am still convinced that natural predators collected all those sickened by radiation to a degree that was, and is, far more effective than human agents.

Box 3  
Metal bolt, encased in resin, from atomic explosion Trinity in New Mexico  
Scope and Contents note  
Item is described thus: Bolt, atom-blast sheared. Test Tower TRINITY New Mexico USA 1st atomic explosion, radio-activity = normal background. Picked up by R.B. Cowles during biological radiation survey.