

# ESA HISTORICAL RECORDS COMMITTEE

(ESTABLISHED 1944)

## NEWSLETTER

*Resources for the history of the Ecological Society of America  
and the history of ecology and allied sciences*

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### *Events at the Upcoming Annual Meeting, Portland, Oregon, August 2017*

The Historical Records Committee is sponsoring a **Special Session on “Saving Historical Records: Challenges for Ecology and Its Historians in the 21st Century,”** which will be held on Monday evening, August 7, from 8:00-10:00 p.m. in the conference hotel.

Julie Mulroy developed the idea for the session. Alan Covich, Charles Nilon, and Sharon Kingsland from HRC are co-organizers and Alan will serve as the session’s moderator. Co-organizers Frederick J. Swanson (USDA Forest Service, Pacific NW Research Station; Oregon State University) and Thomas W. Mulroy (Leidos/Scientific Applications International Corporation, Carpinteria, California; Santa Barbara Botanic Garden) provide excellent help in defining the session’s themes and breadth.

The purpose of the session is to engage meeting attendees in a discussion of how to identify and preserve diverse materials relating to ecology’s history, to ensure that future scientists and historians will be able to comprehend the range of ecological practices, challenges, and accomplishments during the Ecological Society of America’s second century.

Why can we benefit from this discussion now? As we enter the second ecological century, the importance of saving historical records for future scholars is vital. But do we even know what kinds of records could or should be preserved? Our Society’s diverse membership is the ideal place to begin a broad discussion of what may be out there and what should be on our radar. We envision the Special Session as an opportunity to brainstorm about the challenges we face in preserving records of many kinds.

We commonly focus on preserving research ecologists’ personal materials (important for charting careers and progress in our field), as well as preserving records relevant to the history of the Ecological Society of America. But there are many other kinds of records needed for a full history of ecological disciplines. Examples include the following;

- Management records of long-term ecological projects;
- Records relating to applied ecology (such as those generated by environmental consulting firms);
- Records that chart changes in content or emphasis in the teaching of ecology, including teaching for different audiences and with innovative tools. Teaching records help us to understand how our views about what is important in our field change.

This is by no means an exhaustive list. Paper, digital, photographic and film records await archiving, as well as photographic, specimen, and narrative records documenting the condition of specific places at specific times. Are there other records we should be thinking about? We hope to cast a wide net in our upcoming session.

We invite conference attendees to share ideas about the opportunities and challenges involved in documenting the history not only of ESA, but also of ecology in all its diverse aspects. What records should we focus on preserving, and with what priority? What are the key obstacles to preservation and how can they be overcome? What are the challenges we face in preserving records in the digital age?

We hope that ideas generated will stimulate continuing discussions and lead to future projects related to historical record-keeping. These projects ideally will engage with scientists and historians of science in equal measure, and prepare us for the challenges of 21st-century historical record-keeping. A summary of the discussion will appear in a future newsletter.

### ***Spotlight on Archives: Unexpected Repositories for the History of Ecology***

The history of ecology, a remarkably broad and eclectic science, can be explored in many kinds of archival repositories. The illustrations below are a sample of some of these collections.

*State historical societies* often hold records, including photographs and films, related to natural history and ecology. The Oregon Historical Society is currently running a series “On the Road with Finley and Bohlman” (April to June, 2017), showcasing the work of early twentieth-century nature photographers William L. Finley, Irene Finley, and Herman T. Bohlman, who combed the state’s rugged lands to capture birds on film. For the early history of ecology as a discipline, the papers of Daniel Trembley MacDougal at the Arizona Historical Society in Tucson document the research and conservation activities of the first generation of American ecologists. MacDougal, a charter member of the Ecological Society of America, was the first director of the Carnegie Institution of Washington’s Desert Botanical Laboratory. After its founding in 1903 the lab became an important research center for ecology, attracting disciplinary builders such as Forrest Shreve and Frederic Clements. The correspondence and photographs preserved in Tucson capture the early stages of the discipline in rich detail.

*Museums as repositories of human ecological records.* Sometimes the preservation of records can be threatened by the closing of projects or a shift in research directions. One example that involves human ecology, also involving the Carnegie Institution of Washington, had a fortunate outcome. One of the important early projects in Carnegie’s Department of Historical Research was a study conducted from 1913 to 1957 of Mayan civilization in Mexico and Central America. After 1929, under the directorship of Alfred Kidder, the project became broadly interdisciplinary and included ecological as well as historical, ethnographic, sociological, medical and linguistic studies. The project closed in 1958, a victim of shifts in research priorities that followed the launch of the Soviet Sputnik satellite in 1957. After the closure, many of the Carnegie scholars moved to the Peabody Museum of Archaeology and Ethnology at Harvard, which also acquired the project’s extensive photographic archive. Subsequently, Artstor Digital Archive collaborated with the Peabody Museum to make available 44,000 digital images from Carnegie’s renowned archive. The digital project is described on this Artstor webpage:

<http://www.artstor.org/content/carnegie-institution-washington-photographs-mayan-excavations-peabody-museum-archaeology-and>

*Thematic collections in the life sciences.* The *Hunt Institute for Botanical Documentation* at Carnegie Mellon University in Pittsburgh specializes in all aspects of the history of botany and plant science. Its collections include manuscripts, plant images, and photographs, including materials important for the history of ecology. One unexpected finding was the travel diary of plant physiologist and ecologist Frits Warmolt Went, the director of the Missouri Botanical Garden from 1959 to 1963. Went travelled extensively in the 1950s and 1960s and recorded his observations and meetings with scientists around the world, providing a glimpse into the postwar milieu at a time when ecological science was expanding.

*Archives maintained by scientific patrons.* Starting in the early twentieth century the Rockefeller Foundation became an important patron of science, medicine, and social science. Its collections are housed in the *Rockefeller Archive Center* in Tarrytown, New York. The Rockefeller Archive Center has for decades been an extraordinary resource because of its devotion to preserving the legacy of Rockefeller philanthropy. Their records support a wide range of scholarly work, which extends to the history of ecology and related fields within the biological, biomedical and agricultural sciences. Here we profile one collection of an ESA member, the papers of Donald Redfield Griffin (1915-2003) which were donated by his family and catalogued in 2015 (<http://dimes.rockarch.org/FA164/overview>). A naturalist at heart, Griffin became fascinated by problems of sensory physiology and had a distinguished career at Cornell and Harvard University. His last academic appointment in 1965 was as professor at the Rockefeller Institute (now University). He is known for research on echolocation in bats and on animal navigation, migration, and communication. His ideas about animal awareness and consciousness generated controversy in the 1970s, but are now widely accepted. His papers provide great insight into the history of sensory physiology and ecology in the mid-20<sup>th</sup> century and have already supported one doctoral dissertation (Richard S. Nash, *Sensory Physiology and the Return of the Animal Mind in the Career of Donald Redfield Griffin, 1934-1986*, Ph.D. dissertation, Johns Hopkins University, 2016).

### ***Historical Records and Historical Questions: Uncovering the Process of Science***

Documenting what it has meant to practice ecology, including how the discipline has evolved over time and how it has been applied in diverse contexts, requires many kinds of records that we might not think about preserving. We rightly pay attention to the products of scientific work -- theories, concepts, data, discoveries, inventions, and so forth. But investigating the complex process that brought that science into being – and what fosters or hinders the process – helps us understand what science as a human enterprise is all about. Many kinds of historical records are essential to uncovering the creative process involved in science. They give insights into the social interactions, behind-the-scenes discussions, or circuitous intellectual routes (which might include many wrong-turnings) that led to the results that are reported. How can we think about preserving records that capture the *process* of science in all its complexity?

The finished products of scientific study may reveal little, if anything at all, about the wider context that might be operating to foster or constrain certain approaches or ideas in science. Scientists' diaries, notebooks, and professional as well as private correspondence all help to reveal the complicated process of science. Oral histories are becoming increasingly important as ways to capture personal reflections on the interactions behind the published science. Documents relating to the management of field research would help us understand what lies behind both successful and unsuccessful projects. The institutional context

and patronage relationships that support science have to be understood before we can appreciate why certain lines of inquiry were taken up while others were abandoned.

When new institutions or programs are created, how are the founding visions behind these projects worked out in practice? What happens when ecologists move into new kinds of environments (such as urban or other human-dominated environments)? How do they adapt their questions and methods to new spaces of inquiry? We have relatively few documents showing the process by which innovative laboratory designs and new instruments are introduced and subsequently adapted to the needs of researchers. When new interdisciplinary projects are undertaken, how do the different disciplines interact and how does the interaction work? To answer such questions unpublished records, supported where possible by oral histories and interviews, are invaluable.

It is also valuable to understand how science and scientists operate in the larger society. Applied ecology, policy-related activity, and any form of public outreach all help to gauge the value of ecology to a given society. The outcome – whether a policy decision, strategic planning document, popular book, or another result – is visible. But what is not visible is also instructive -- the process of discussion, compromise, and negotiation that went on behind the scenes – and such discussions, if recorded, should be preserved.

Teaching records, which reveal both the content and the methods of educational programs, are important to preserve, because the teaching of ecology also defines the nature of the discipline and its evolution over time, although in a broad field like ecology what is considered central will also depend on the kind of ecology being taught. Beyond the textbooks, what happens in the classroom, laboratory, and field to inspire the next generation of ecologists? How are young people “socialized” to become scientists? What are the diverse experiences of graduates students as they enter into the culture of science?

The preservation of historical records that reveal the many facets of science, its culture and its norms, can be seen as complementing the practice of science. Historical research can prompt self-reflection within science, or evaluation of what is being done and for what reasons. When it helps the public to understand the nature of science as a practice, the history of science also contributes to the creation of a scientifically literate society.

The Newsletter is issued quarterly. Please send news items or suggestions at any time to Sharon Kingsland ([sharon@jhu.edu](mailto:sharon@jhu.edu)).