ESA HISTORICAL RECORDS COMMITTEE

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NEWSLETTER

Resources for the history of the Ecological Society of America

and the history of ecology and allied sciences

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Upcoming Sessions at the Annual Meeting, Ft. Lauderdale, Florida

Julie Mulroy and Zoe Nyssa have been hard at work assembling a terrific program for the Ft. Lauderdale meeting. We have an exceptionally diverse set of disciplines represented, as you will see from the descriptions below. Steven Armour, who is in charge of ESA's electronic archives at the Hargrett Rare Book and Manuscript Library, University of Georgia, will be contributing a poster. Many thanks to Julie and Zoe for organizing these exciting sessions. More information will be in the July newsletter.

To Continue the Conversation: For members and friends of HRC and those particicpating in our sessions, as customary we expect to organize groups for dinner or lunch to continue the conversations generated by our sessions. Often we have a group dinner on the day of our sessions. We hope you can join us. In addition, our committee's annual business meeting is usually on Wednesday morning at 7:00 a.m. It will include discussion of the Tuesday sessions. All participants are welcome to attend the business meeting. I will circulate a note to get a rough head-count closer to the date.

Organized Oral Session and linked Organized Poster Session scheduled for Tuesday, August 9:

OOS: "**The Importance of History and Historical Records as Ecologists Confront the Anthropocene"** on Tuesday, August 9, 8:30-11:30 a.m.

Description: A multidisciplinary set of presentations explores the increasingly important role that historical records play in addressing the accelerating changes that confront us in the Anthropocene. The concept of the Anthropocene compels us to examine the long-term relationship of humans and their environments, and in so doing to draw on diverse types of historical records and datasets. We must consider new institutional structures that facilitate cross-disciplinary approaches to environmental problems. Presenters demonstrate how interdisciplinary approaches, new technologies, and novel institutional structures can assist us in learning from the past to respond to present and future challenges. Opportunities for use of long term datasets and museum collections in research, conservation and education are highlighted. (Organized by Juliana Mulroy, Denison University.)

OPS: "**Uses of and Access to Historical Data as Ecologists Confront a Rapidly Changing World**," on Tuesday, August 9, 4:30-6:30 p.m.

Description: ESA's Historical Records Committee promotes the preservation and use of historical records in ecology. We have invited a group of historians, archivists, museum researchers, conservation biologists and ecologists to help us expand our efforts at this critical time in human history. The poster session presents specific applications and case studies using long term data sets, field notes, historical photographs, explorations of

digitized literature and other approaches to current ecological and environmental challenges. (Organized by Zoe Nyssa, Harvard University.)

Also of Interest! OOS from Integrated Digitized Biocollections (iDigBio)

Deborah Paul, who is contributing to our OOS, is also moderating the session sponsored by Integrated Digitized Biocollections, or iDigBio, which has organized a session on "**Leveraging the Power of Biodiversity Specimen Data for Ecological Research**," Wednesday, August 10, 8:00-11:30.

Description: In this Organized Oral Session, we bring together a diversity of speakers who have incorporated biological specimen data into their ecological research. Specimen collections include centuries of information from around the world and, as a result, comprise data collected in a wide range of formats, languages, media, accuracy, precision, and completeness. Using these data therefore requires an interdisciplinary approach that incorporates international standards and protocols. Further, these efforts must be forward thinking to anticipate the needs of future researchers and the capabilities of future technologies. The opportunities and challenges in working with these data are numerous and widely applicable across ecological fields. The session will include talks that span taxa, time and geographies, with an emphasis on data from iDigBio (Integrated Digitized Biocollections; www.idigibio.org).

See iDigBio's wiki for more session information:
https://www.idigbio.org/wiki/index.php/Leveraging_the_Power_of_Biodiversity_Specimen_Data_for_Ecological_Research_at_ESA_2016

An interesting aspect of iDigBio is its invitation to "citizen scientists" to assist research. Libby Ellwood will discuss this theme in the session. Many of these projects build from the idea that natural history information, if aggregated in digital form and combined with other relevant biological and physical data, could allow scientists to ask new questions about ecological and evolutionary processes. One illustration, described on the "WeDigBio" website, involves the retrieval of specimen data from the Florida State University Herbarium:
https://www.wedigbio.org/content/florida-state-universitys-herbarium

Projects of this kind often start with transcriptions, perhaps of specimen labels or other information held in museums. The idea is that once the information is "liberated" from the museum cabinet and put online, it can be used in many new ways. "Citizen scientists" are invited to help make these transcriptions.

Preserving Records, Preserving Cultures: A Historical Footnote

The diverse projects undertaken through iDigBio remind us that advances in natural history have long depended on contributions from people who are not, in our modern way of thinking, professional scientists. After all, even Darwin would be considered an amateur by modern standards. He started out as an avid collector of beetles.

In ornithology, observations by bird-watchers have contributed hugely to our knowledge of species distributions and abundance. Mark Barrow, historian of science, has described how, even after ornithology became a scientific discipline, it continued to depend on the services of birdwatchers and amateur enthusiasts. (*A Passion for Birds: American Ornithology after Audubon*, Princeton University Press, paperback edition, 2000).

This historical and continuing relationship between amateur enthusiasts and professional scientists leads us to reflect on how important it is to preserve, not just records, but also the *cultural practices* that induce people, generation after generation, to observe nature, and collect, remember, or record what they observe.

Preserving cultural practices in natural history is different from teaching everyone to speak in the language of Linnean bionomials, our common scientific language. This brings us to our historical footnote.

Laurence Irving, a biologist who worked for many years in the Arctic in the mid-twentieth century, published a fascinating article "On the Naming of Birds by Eskimos" in 1958 [*Anthropological Papers of the University of Alaska* 6 (2):61-77.] Irving discovered that the appearance and behavior of birds were "considered interesting subjects in Eskimo conversations," which surprised him because very few birds were used for food. Natural history, it seemed, was pursued not for practical reasons, but because of general intellectual interest. Irving realized that native knowledge of birds could provide a significant addition to ornithological information.

In his survey of how the people of Kobuk (living in arctic forest) named birds compared to their neighbors, the Nunamiut (living in mountainous tundra), Irving was helped by native scientist Simon Paneak. Irving noted that among native peoples, "knowledge of natural history is seriously cultivated and its possessor is socially distinguished for his leadership in matters of natural history." Paneak (shown at right) was one such leader.

The native nomenclature for birds, Irving found, "serves a social purpose quite different from scientific taxonomy, but it opens for us a great store of Eskimo information about nature." A comparison of native naming practices with ours also illustrated "how an unwritten language preserves the common and unmistakable understanding upon which the accumulation of knowledge depends in a human society."

Image: website of Simon Paneak Memorial Museum: http://www.north-slope.org/departments/inupiat-history-language-and-culture/simon-paneak-memorial-museum/simon-paneak

The time spent to learn natural history, Irving concluded, showed "the important value placed upon abstract study in the general social scheme of these arctic societies." The intellectual culture represented by the pursuit of natural history, and communicated verbally from one generation to the next, helped "to secure social cohesion in the Eskimo population which was scattered over the diverse arctic environments." One begins to realize what a loss it would be if Linnean taxonomy were to replace other nomenclatures. The knowledge embedded in these traditional cultures was truly a form of science, just one conducted in a different language.

The HRC newsletter is a quarterly and welcomes contributions from HRC members and friends. Please send Newsletter items to Sharon Kingsland at sharon@jhu.edu