**LTER Education Committee Conference Call**

**March 1, 2017**

**3:00-4:00 pm EDT**

**MINUTES**

1. Attendance

Jill Haukos – Co-Chair (KNZ), Art Schwarzschild - Co-Chair (VCR), Noelia Baez (LUQ), Bess Caplan (BES), Marty Downs (NCO), Kara Haas (KBS), Adrian Howkins (MDV), Janice McDonnell (PAL), Sam Norlin (NCO), Marty Downs (NCO), Nick Oehm (FCE), Kari O’Connell (AND), Pamela Snow (HFR), Elena Sparrow (BNZ), Alan Berkowitz (BES), Caitlin Potter (CDR), Alex Rose (NWT), Liz Duff (PIE), Charina Cain (CCE)

1. Approve February minutes

Minutes approved.

1. New Business
   1. Network Communication Office –Sam Norlin, Marty Downs

* Mini-symposium (March 21) new web site ([https://nco.lternet.edu/discovering-nature-ecosystem-change/](https://nco.lternet.edu/discovering-nature-ecosystem-change/" \t "_blank))
* LTER-NEON (March 28-31) will mostly focus on the potential for scientific synergies, particularly between senior and junior investigators. The basic goal is to examine how we can better support each other's science.
* LTER-EDI-DataONE-CZO, etc. meeting (April 11-13). The goal of this meeting is to survey the data landscape to look for overlaps/gaps in the data.
* Science Council Meeting (May 17-19) at Hubbard Brook. Who is attending for the Education Committee? Jill will be in Scotland. Kari will go.Norlin, Howkins, and Haukos laid out a partial vision for the schoolyard book series.
* **3 new LTER sites:**
* Northern Gulf of Alaska (NGA)
* Northeastern US Shelf (NES)

[https://www.nsf.gov/news/news\_summ.jsp?cntn\_id=191149](https://www.nsf.gov/news/news_summ.jsp?cntn_id=191149" \t "_blank)

* Beaufort Lagoon Ecosystem (BLE)

[https://nsf.gov/news/news\_summ.jsp?cntn\_id=191300&org=NSF&from=news](https://nsf.gov/news/news_summ.jsp?cntn_id=191300&org=NSF&from=news" \t "_blank)

* 1. Network Updates
     1. EB Updates - Kari O’Connell
        + 1. Suggested a collaboration between LTER and the NEON education group. Marty will provide an update on this idea after the March 28th NEON-LTER meeting.
          2. Science Council meeting (May 17 – 19) – there will be a 1 hr. discussion on the nature of the LTER network and reviewing what has been successful for the network in the past and where the network is going in the future (i.e. synthesis), hopefully including education as part of the discussion. O’Connell will be representing the EOC at the Science Council meeting and may need information/ input from the ed. reps prior to the meeting – stay tuned for communication from O’Connell. Downs suggested focusing on education cross-site projects that had been funded and ways education had contributed to cross-site synthesis and how education integrates with the science mission.
          3. New LTER sites – be prepared for three new education reps to join the group; we need to complete the EOC Handbook to help guide these people.
  2. Working Group Updates
     1. Professional Development - Cross-Site Research Experiences for Teachers (RET) – Kara Haas

Nothing new to report.

* + 1. Ecological Data Literacy - Alan Berkowitz

Data Literacy workshop in Berkely, CA: Caitlin Potter (CDR) attended the workshop and reported that the Concord Consortium folks (<https://concord.org/stem-resources/subject/biology>) are very interested in working with the LTER educators on future projects by incorporating LTER data into online educational software. Liz and Melissa (Data Nuggets coordinators) are planning to work with existing Data Nuggets to produce new activities with the Concord Consortium. Potter will communicate with Sam Norlin about any activity with the Concord Consortium folks.

* + 1. Next Generation Science Standards – Steven McGee

Nothing new to report.

* + 1. Children’s Book Series – Adrian Howkins & Sam Norlin

In February, a group consisting of Downs, Norlin, Howkins, and members of Taylor Trade Publishing met in Santa Barbara to come up with an outline for the next version the Children’s Book Series. Downs submitted the plan to NSF as a rough outline. Marketing of the series was addressed with emphasis placed on the series as a total and it being marketed throughout the Network. Greater interest will propel greater sales and more interest from the publishers to further market the books. Accompanying curriculum materials are also encouraged and development of these materials could be funded by Education and Human Resources. Alex Rose (NWT) has examples of curriculum kits they’ve developed for their book and are willing to share their materials with interested parties.

* + 1. Higher Education – Art Schwarzschild

Schwarzschild attended a small local education conference in Maryland (Maryland Association of Environmental and Outdoor Educators) and conducted a workshop on education at the VCR. He finds small, regional conferences to be more effective in communicating our educational message than the large conferences. If we want more educators to use the LTER digital library then a local workshop may be the most effective tool to reach our target audience. Another idea is to combine the children’s book series and accompanying curriculum in a set and have this material readily available to teachers at regional conferences. Downs suggested that we finalize the NCO education and outreach web site so we can direct teachers to this site. Downs also requested that EOC reps notify her about our attendance at conferences to put on the NCO web site calendar. O’Connell suggested that we ask the group, as a monthly reminder, to let the NCO know about conferences we’re attending and what we’re doing to spread the word on the activities of education within the LTER network.

Data Nuggets & Digital Library content:

Liz Duff offers a graduate-level course for teachers to connect to LTER research. Their assignment was for each teacher to partner with a LTER researcher (visit by phone or Skype, or meet directly) and develop a Data Nugget. Her program has resulted in the production of 9 Data Nuggets so far. Discussion ensued about including a link to the Data Nuggets on the SLTER Digital Library web site. We then discussed whether to abandon the Digital Library in favor of the Data Nuggets altogether. The evaluation of the proposed Digital Library activities seems to be a stumbling block to future development of activities. Berkowitz mentioned that having a grant for the development of future Digital Library activities would certainly facilitate the project. Members of the EOC would like to sit down in person and discuss this topic at length and the group agreed that meeting during the Ecological Society of America (ESA) meeting in August might be the best time to work on this topic.

Education Resources web page at NCO

Downs requested feedback on what to include on the Education Resources web site within the NCO’s site.

* + 1. Citizen Science – Elena Sparrow

The Citizen Science Association conference is scheduled for May 17 – 20 in Minneapolis, MN. EOC members are encouraged to join. There are many valuable workshops including “Learn how to visualize data” that EOC members may be interested in.

Alan mentioned that it might be useful for the EOC to do a survey of our active citizen science projects throughout the LTER Network.

* + 1. Professional Development – Kari O’Connell, Alan Berkowitz

It would be nice to have a standing topic for each monthly call that would serve to direct the course of the call and provide on-going professional development for the EOC. O’Connell will produce a simple Google form to see what others would like to discuss and this will be distributed to the EOC list.

We need to work on sharing interests and announcements about potential grants and collaborations. Cases in point – there are 2 “Dear Colleague” letters from NSF that are pertinent to the EOC:

1. Public Participation in Science, Technology, Engineering, and Mathematics Research: Capacity-building, Community-building, and Direction-setting. (deadline - April 11)

<https://www.nsf.gov/pubs/2017/nsf17047/nsf17047.jsp>

1. FY 2017 Innovations at the Nexus of Food, Energy and Water Systems (INFEWS) Funding Opportunity on Nitrogen, Phosphorus, and Water.

<https://www.nsf.gov/pubs/2017/nsf17013/nsf17013.jsp>

* + 1. Diversity

Alan Berkowitz mentioned that BES is working on a diversity statement and that he would appreciate collaborating with any EOC rep who has experience with such a project.

* 1. Site Updates/Announcements

Nothing new to report.

1. EOC Meeting Schedule
   * 1. April 5, 2017
     2. May 3, 2017
     3. June 7, 2017
     4. July 12, 2017 (one week later than usual)
     5. August 2, 2017