# **Drupal Ecological Information System 2011 Training Report**

P.I. Inigo San Gil, Marshall White

Cross-site Projects, Synthesis and Training Working Groups 2011 Proposal

Organization Role: Lead Organizers

## **Summary**

Following the <u>2010 Drupal Ecological Information Management System</u> participant requests, the group applied for funds to hold a training session in 2011. After EB approved the submitted <u>training proposal</u>, we continued working on the DEIMS activities, and actively prepared an agenda, with focus on data applications.

There are two indicators used to evaluate the outcomes of this training session. One indicator is a post-training survey, and other appropriate indicator is identifying products associated that are derived from the training. This report includes both metric indicators. A full hands-on four day training was conducted in the LTER Network Office Training Laboratory for fifteen participants. Many products were deployed and refined during the training, development of such functionalities became the learning vehicle. At the end of the meeting, most participants expressed their strong interest in giving continuity to this training activity.

We created a full-fledge website with an agenda, programme, supporting materials -including videos-a sponsor section, announcements and news related to the training. See website at <a href="http://deims.lternet.edu/cod/cod6/">http://deims.lternet.edu/cod/cod6/</a>. Training attendants (see table below) helped crafted the training topics agenda and training format. In general, the training was very successful, and two attendants are submitting another proposal based on the increasing interest from participants. Attendants were handed materials during the first hour of the meeting, including badges and a folder that included an agenda and a stationary to take notes.

## **Attendants**

Name	Site	Affiliation
Eda Melendez	LUQ	Luquillo Experimental Forest LTER
Hap Garritt	PIE	Plum Island Ecosystem LTER
Kristin Vanderbilt	SEV	Sevilleta Wildlife Refuge LTER
James Laundre	ARC	Arctic LTER
Valerie LaPlante	JRN	Jornada del Muerto LTER
Ken Ramsey	JRN	Jornada del Muerto LTER
Hope Humphries	NWT	Niwot Ridge LTER
Aaron Stephenson	NTL	North Temperate Lakes LTER
Kyle Kwaiser	UMBS	University of Michigan Biological Station
Anya Shipunova	WHOIMBL	WHOI Library, Marine Biology Laboratory
Ranjeet Devarakondar	ORNL	Oak Ridge National Laboratory
Leanne Yanabu	LNO	LTER Network Office
Yang Xia	LNO	LTER Network Office
Marshall White	LNO	LTER Network Office

## **Report Outcomes: Post-training survey**

All attendants filled an online survey <a href="http://intranet.lternet.edu/im/node/976">http://intranet.lternet.edu/im/node/976</a> about the workshop. The questions on this survey are exactly the same as the previous year surveys (at <a href="http://intranet.lternet.edu/im/node/736">http://intranet.lternet.edu/im/node/736</a>). Here are the synthesized results, with detailed comments included in an appendix at the end.

For the following questions, the participants were asked to pick a number from 1 ( Poor/Not so much ) to 6 (Excellent/Definitely) as their answer.

The overall median for the answers falls in the top score (Excellent/Definetely).



This table summarizes the results per score of the answers. A few participants did not answer the questions.

Here are some remarks

#### I was able to ask questions.

100% answers gave maximum score (definitely)

#### My questions were answered

Most gave maximum score, only two persons gave the second and third highest grade

#### I have the tools I need to complete and launch my website

Four answered with the highest score and three with the second next highest score, one participant scored a 4.

#### I understand now basics concepts in Drupal

Most answered in the highest score, except for a person who gave it the second highest grade.

I liked the format of the workshop (small, paired expertise with specific goals, need-driven)

All but one gave this the maximum score except for one person who expressed he preferred a more traditional format. (See comments).

# **Report Outcomes: Post-training products**

There are a number of products that came out as a result of this training exercise. Due to the nature of the training, the number of outcomes is elevated.

In all cases, these products are part of a comprehensive information management system handled by the participant. In the table below, see some details of the individual site products in the third column. All LTER dedicated the year NSF IM supplement awards for Drupal related work.

URL	Participant	Component Description
http://gorilla.ites.upr.edu http://dev.ites.upr.edu http://sandbox.ites.upr.edu	Eda Melendez	<ul><li>Frontpage layout (Panels)</li><li>Rebuild website and database</li></ul>
http://pie-dev.mbl.edu	Hap Garritt	<ul> <li>Feeds, Unit services, Data, features</li> </ul>
http://tierra.unm.edu http://tierra.unm.edu:8888 http://tierra.unm.edu:8080	Kristin Vanderbilt	<ul><li>Page layout</li><li>Query by Author</li><li>Use of views, features</li></ul>
http://news.lternet.edu http://databits.lternet.edu	Leanne Yanabu	<ul><li>Maps</li><li>Modify themes</li></ul>
http://umbs.lsa.umich.edu	Kyle Kwaiser	<ul> <li>drupal 2 eml, repository, features</li> </ul>
http://jornada-vwdev.nmsu.edu http://jornada.nmsu.edu	Ken Ramsey	<ul> <li>DEIMS installed</li> <li>Populate content with Feeds</li> <li>Level 3 EML</li> <li>Increase the EML by 100%</li> </ul>
http://jornada-vwdev.nmsu.edu http://jornada.nmsu.edu	Valerie LaPlante	Network with group
http://lter.limnology.wisc.edu	Aaron Stephenson	Become familiar with Drupal, how to install, the 101.

http://arc-dev.mbl.edu	James Laundre	Themes, CSS, web services for units
http://culter.colorado.edu/NWT/dtest	Hope Humphries	<ul> <li>Hands on intro to Drupal Basics, devel server</li> </ul>
http://sitedb.lternet.edu	Yang Xia	Queries, Themes
http://intranet.lternet.edu	Marshall White	Help all, facilitation
http://mcmdev.lternet.edu	Inigo San Gil	Assist others
	Anya Shipunova	Help others, move drupal2eml forward
http://nbii-gbif2.ornl.gov/	Ranjeet Devarakondar	Fixed DBP export, help others with IFrames

#### **Lessons learned purpose and objectives**

A reduced group that began as a grassroots efforts had in 2010 the first official training. The format offered deviated from the traditional magisterial lectures to a hands-on, attendant driven approach. This particular mode pleased everybody, and all expectations were surpassed (see survey comments attached). The success of the training was traced to the size and type of training. A balanced mix of experts and Drupal novices allowed us to pair-up the participants. Efficiency on knowledge transfer can also be attributed to the high motivation levels of the attendants. The knowledge acquired can be immediately applied into their day to day work. This is not a curiosity, or trendy training, DEIMS are the tools to manage the backbone that the group of Information Manager chose.

Discussions and light weight demos on how to bring actual data into Drupal were discussed. From external application integration tools like "IFrames" (explained by Ranjeet) to adopting external database tables by "Table Wizard" or the Data modules were discussed and showcased. We plant to couple the aforementioned Drupal modules with the Drupal query and renderer tools that make the "Drupal Views" toolset, making inroads towards a mechanism to facilitate Network goals such as those gleaned at the PASTA project. This is an active area of development in DEIMS.

## Improvements from post-mortem analysis

- Not one single body of knowledge expectations were high due to the success of the previous meeting. Also, the feeling that the last mile of the learning curve of this technology is rather steep, and frustrates some group members.
- Video recordings come better when somebody is dedicating his/her attention, we will try to have a dedicated person manning the video station, rather than the presenter/organizer.
- Scalability is confirmed to be an issue. We struggled to meet all the requests, in part due to
  the increased number of participants, and in part cause some participants were not as
  engaged in their assigned roles. To avoid this rush, we will hire Drupal experts for the next
  training session. These trainers will be tasked specifically with assisting the group. It is not
  very fair to expect that some participants sacrifice the experience by teaching the rest all the
  time.

# **DEIMS 2011 Training**

## **Highlights**

## **Top 3 Significant Training Successes**

Training Success	Factors That Supported Success
Hands on, interactive	Focus on pragmatics exercises
Product oriented	Put the needed products as the centerpiece of the learning topics, instead of disconnected examples
Attendant Satisfaction	Format, motivation

## Other Notable Training Successes

Training Success	Factors That Supported Success
Social agenda, improved breaks	Keep the group rallied and engaged after hours. Some members experienced an hour of Albuquerque in the day-time.
Participation level	Attendants chances to ask questions
Attract more NSF funds	Group work, common goals.

## **Taining Shortcomings and Solutions**

Training Shortcoming	Recommended Solutions
Knowledge Gaps	Provide structured lectures to address essentials
Uneven take home load	Clarify expectations per attendant pre-training
Intensity	Tone it down, provide more relaxing moments
Scalability of training model	Unsure where this model breaks. 15 participants?

# **Appendix: Survey Comments**

Tell us what you thought about the workshop -- don't hold back!

Most attendants took some time to answer a survey to provide valuable feedback

Here are the actual comments.

1) So, I didn't know all that I really wanted, so my expectations weren't well defined. ..but I learned new aspects of drupal and came out more of a "drupalier" or whatever you call a person that knows and love drupal. The more one learns DRUPAL the higher the expectations, which are in turn, are more difficult to meet; We would need two concurrent sessions or re-structure the next workshop in such a way one can attend a discussion/presentation or meet with another person that knows what one needs or viceversa to work together.

- 2) Another great, hands on workshop. The format for the workshop was extremely suitable for interactions among participants and was very flexible for moving through Drupal workshop agenda items depending upon how guickly participants learned/demonstrated aptitude for particular concepts/modules etc.. A difficult challenge for training workshops is how to engage participants with varying levels of expertise. The workshop trainers were able to accomplish this by breaking out into groups of varying expertise to accomplish goals of the smaller breakout groups. I expect that within one more year there will be a core group of LTER IMs, SEV, LUQ, NTL, ARC, PIE, JRN, NWT who will be able to assist others in getting started with a DEIMS site. Once the core group of LTER DEIMS web sites is more public and following LTER IM best practices there will be more time/opportunity for DEIMS participants to delve into the more creative thought provoking aspects of Drupal content management. Currently I am learning alot about Drupal but from a point of view of satisfying some LTER criteria. LTER criteria is necessary but can limit group participation for non-LTER people, LTER folk tend to get bogged down with satisfying mandated tasks. Hopefully some of our mandated tasks are useful to the broader community as well.
- 3) This was a very productive training workshop. I learned a lot; from basics to advanced Drupal. I was able to get DEIMS installed on our production web server during the workshop and developed an approach to initially populating DEIMS content from our metadata stored in a relational database using the Drupal Feeds module during the workshop so that I was able to complete the content population on returning to my site to generate level 3 EML for our datasets. This was a fantastic training opportunity that made it possible for our site to quickly get our data catalog populated to the point of creating discovery level EML for our datasets within DEIMS. It would be great if another training opportunity was available to further our use and understanding of DEIMS so that we can create full level 5 EML from DEIMS following the recently updated LTER EML Best Practices. Now that we have DEIMS supporting our data catalog and creating EML for our datasets, we are staged to make even greater advances in our system if another training opportunity is made available in the future
- 4) This was a great opportunity to meet fellow Drupalers and find new contacts for future help/assistance
- 5) I was looking more for a solidly scheduled training workshop than the open-format session that it ended up being. I would have liked a step-by-step progression on how to set up a Drupal website and add modules and how to incorporate the DEIMS content types and modules. I did end up learning the concepts mentioned in the above survey, but that learning came through questions and requests, and not through lessons/lectures/assignments. Maybe this open format worked for the majority of attendees, but I personally prefer more traditional workshops with solid outlines and easily identifiable and achievable goals and outcomes
- 6) I have just looked through my notes from the workshop and it appears that I learned a lot. Yet my website is still not launched. Post-workshop, I did not possess the understanding necessary to build the views I needed, get rid of unwanted features from the theme, or make the webpage look more professional. I think there are some aspects of Drupal that aren't worth taking the time to learn -- like *theming*. Maybe we would be better off negotiating for some of Marsh's time to create a nice theme for all of us, and then we wouldn't all have to become CSS aficionados. I don't know. Anyway, the workshop was a nice opportunity to learn, but I didn't really care about some of the things that became the adhoc exercises, like the units feed. It was of academic interest when my website wasn't ready to launch. But some of the things I wanted help on couldn't possibly have interested other people, either. I think the workshop worked so well last time because we were all at about the same level, but this time I needed targeted help not really

appropriate for a group setting. And some of the people whom I thought were there to be helpful were pretty busy doing their own work when I asked for assistance. Not that I blame them.[\*Minimally edited at the request of the contributor]

7) The best part was dinner at Inigo's house. Thank you!