

## Data Management and Dissemination

Because a major objective of LTREB funding is to disseminate important long-term data series, I will use five means of making my data accessible: through the University of Chicago, via the Knowledge Network for Biocomplexity (KNB), through the National Oceanographic Data Center (NODC), through Data Dryad, and through the *Ecological Archives* of the Ecological Society of America. At the University of Chicago, I am guaranteed server space via the Biological Sciences Division Information Services (BSDIS). The BSDIS is the primary technology provider for biological and medical sciences at the U of Chicago and is committed to providing this service. I have also developed a University of Chicago website, partially supported by the LTREB, which includes overviews of the core projects and publications from the LTREB, and on which I have posted data sets or links to published data ([woottonlab.uchicago.edu](http://woottonlab.uchicago.edu)). NODC is an updatable archive relevant to marine systems, which is overseen by NOAA. Our ocean condition data are posted there ([data.nodc.noaa.gov/accession/99812](http://data.nodc.noaa.gov/accession/99812)). Data Dryad is a common archiving program for data used in many publications. I have posted data on the food web and interaction web structure derived from the long-term studies at Tatoosh ([dx.doi.org/10.5061/dryad.39jv1](https://dx.doi.org/10.5061/dryad.39jv1)), which underlies several of the analyses in the five year renewal horizon as well as a publication arising from the first portion of the LTREB (Sander et al. 2015). *Ecological Archives* is a peer-reviewed data publication mechanism of ESA that permits updating. My species transition (1993-2012) data have been accepted for publication there, but *Ecological Archives* has yet to post them. The KNB is an NSF-funded program for sharing ecological and environmental data (<http://knb.ecoinformatics.org/index.jsp>). The LTER program uses this interface, as does NCEAS. Using the software Morpho, I will upload my data and data descriptions (metadata) here. I will post the core data sets collected by LTREB within two years of the conclusion of the LTREB renewal period, or sooner when they are associated with publications.

Links to these data storage programs are and will be available on my website. Posting data on my website provides a central point where multiple subsets of data can be integrated, while circumventing the need to shoehorn data sets of different structures into the same file with a highly complex format. However, the existing web-based resources are independent of both my website and my academic department and will thus serve as a stable and long-term means of making my data accessible to a wide community.

Choice of the data outlet will depend on the nature and prior use of the data: many journals now link to particular data archives (e.g. Dryad or *Ecological Archives*), so it will be natural to post data there to readily link to publications. Marine physical and chemistry data will be of particular interest to the oceanography community and so naturally are placed on the NOAA NODC site. *Ecological Archives* is perhaps the primary source for ecologists to turn to first, and it makes sense to post biological data series of the most widespread ecological interest there, but some data posting is conceivably limited as it is a peer-reviewed outlet with the potential to decline data sets. Finally, KNB offers the ability to archive data regardless perceived importance, and will be a backstop to other outlets. To the extent that the core datasets can be interposed among archives, I will do so to increase visibility.

To ensure the most flexibility in data use, I will format posted data as ASCII files; the lack of program-specific formatting commands makes this the most adaptable file type for analysis programs as they evolve through time.

A table summarizing data set access follows:

Data Series	Posted Locations	Status
Tatoosh Physical Data	woottonlab.uchicago.edu, nodc.noaa.gov/cgi-bin/OAS/prd/accession/details/99812	2000-2010 posted, exploring process for updating through 2015 and beyond
Quadrat/Transect Transitions	woottonlab.uchicago.edu, shortly to appear at <a href="http://esapubs.org/archive/search.php">http://esapubs.org/archive/search.php</a>	1993-2012 posted/in press, exploring process for updating through 2015 and beyond
Bird Censuses	woottonlab.uchicago.edu	(1986-2015) Working on metadata. Exploring most appropriate outlet, probably KNB.
Food/Interaction Web Data	woottonlab.uchicago.edu, <a href="https://dx.doi.org/10.5061/dryad.39jv1">dx.doi.org/10.5061/dryad.39jv1</a>	Time averaged information. Published in Data Dryad
Mussel Removal Transition Data	woottonlab.uchicago.edu	Posted on website, being prepared to submit to Ecological Archives (1997-2015)