Defending Collections

I come from a museum background, and therefore recognize the inherent bias in this post. However I also feel that coming from that background, but now working outside of a museum, has provided me a unique perspective into the value of collections. I hadn’t planned on blogging today, but the recent cuts at The Field Museum in Chicago, my former home institution, strike me as rather personal. While a postdoc there I published an article on the value of natural history collections, which you can see here. Today I’d like to expand those themes a little.

First some background. When I talk about collections (or collections based research) I mean using the samples that are held in a museum. They are usually collected by a museum and they are housed in temperature-controlled holdings. There they are the basis of many different kinds of biodiversity research. Curators at museums are analogous to professors at universities, and the collections are organized and maintained by collections managers. The latter are typically individuals who often have a shockingly large taxonomic knowledge, and an intimate familiarity with the literally hundreds of thousands of samples within the collections.

These samples represent an invaluable source of data because they are spatially and temporally explicit. This means that every sample in a museum has a known place and time when it was collected. Because we know that we can do comparative research either across time or space. Moving across time would allow us to compare, for example, the reefs in Papua New Guinea and Fiji. Similarly moving across time would allow us to compare how reefs have changed over time by sampling the same area over multiple decades. The collections we made in Papua New Guinea in 2011 (as a joint Field Museum and University of Papua New Guinea expedition), are directly comparable to the collections the Field Museum made in the 1928 Crane Pacific expedition.

Because there are few institutions that have the ability to pull off collections at this scale, and even fewer who have the dedicated resources to house, maintain and curate these collections, natural history museums are cornerstones of biodiversity research. There are simply no other places equipped to serve as these libraries of biodiversity, and when a culture closes its libraries it closes off its desire to remember the past and envision the future.

UPDATE: There is a petition going around to voice your concern about these cuts. Please consider signing it:

https://www.change.org/petitions/protect-research-at-field-museum-of-natural-history-chicago
Crab Cracking Like a Pro http://bit.ly/WjT0Rx

The ironic aspect of such cuts is that they come at just the time when we have the technology to create world-wide access to biodiversity information through initiatives such as FishNet2, VertNet and GBIF. Access to vouchered specimen records are vital to our ability to study the effects of global climate change, urbanization, and a variety of other impacts that reach far beyond systematics and taxonomy. The value of natural history holding is not decreasing, it is increasing, and just at the time that many natural history museums are finding it difficult to exist. What a pity.

I so appreciate this post. I have been a volunteer in the collection at the Field for over twelve years and I am saddened by this news. E. O. Wiley’s comment is appropriate and only adds to my sadness! What can we do to ensure that these collections are cared for and studied? It has become a burning question for me.

Josh- do you have the inside dope on what in hell is going on at the Field Museum? Seems like an effort to undue everything we are discussing the extremely high value of.

Sadly I do not. From what I hear the curatorial staff is trying to work in a constructive fashion to come up with alternatives. This is a battle that impacts all of us and something that we should all be rallying around (I know I’m preaching to the choir here)
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