

Creative methods for utilizing collections for education and outreach

Randy Singer

iDigBio/Florida Museum of Natural History



Overview

- How we've done collection outreach in the past
- Thinking of collections as education AND research tools
- New ideas for outreach

Outreach (n): That thing you write about doing in the broader impacts section of a grant.

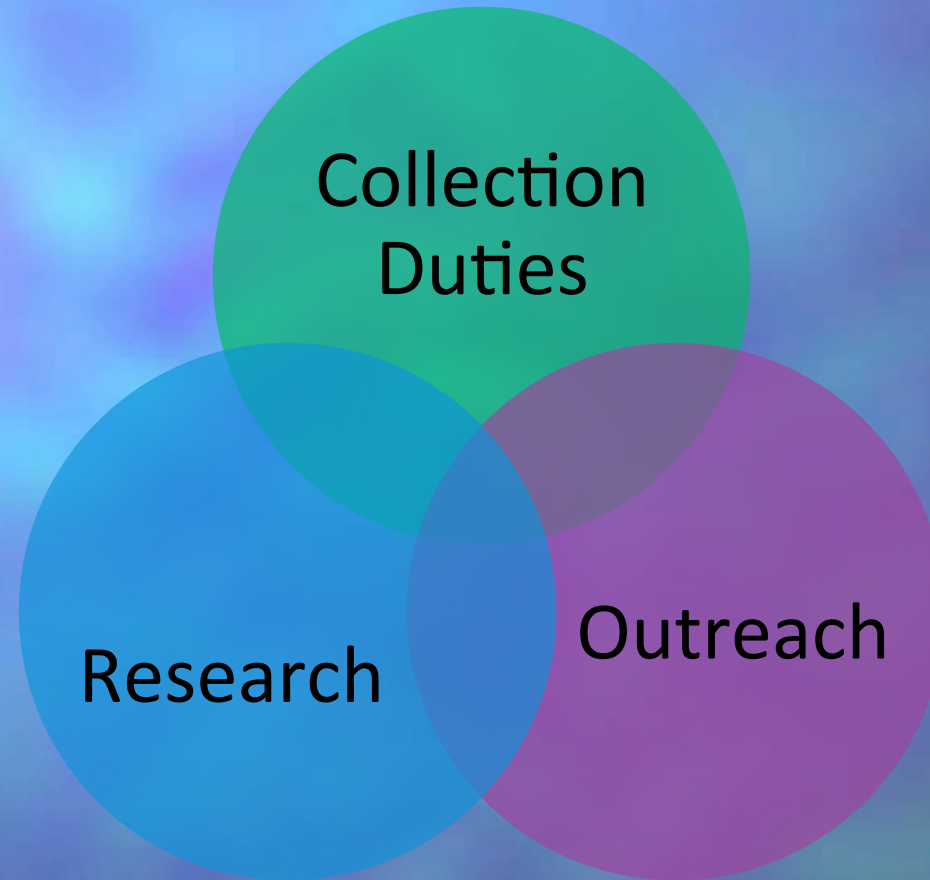




Past Outreach



Past Outreach



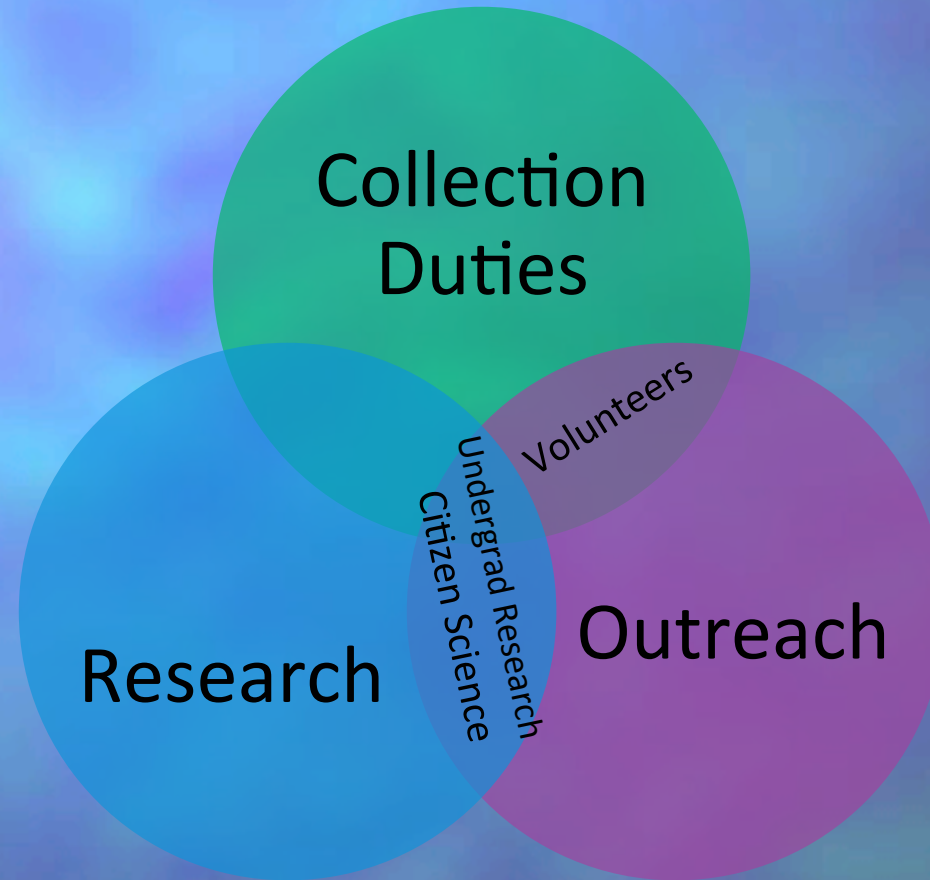
Past Outreach



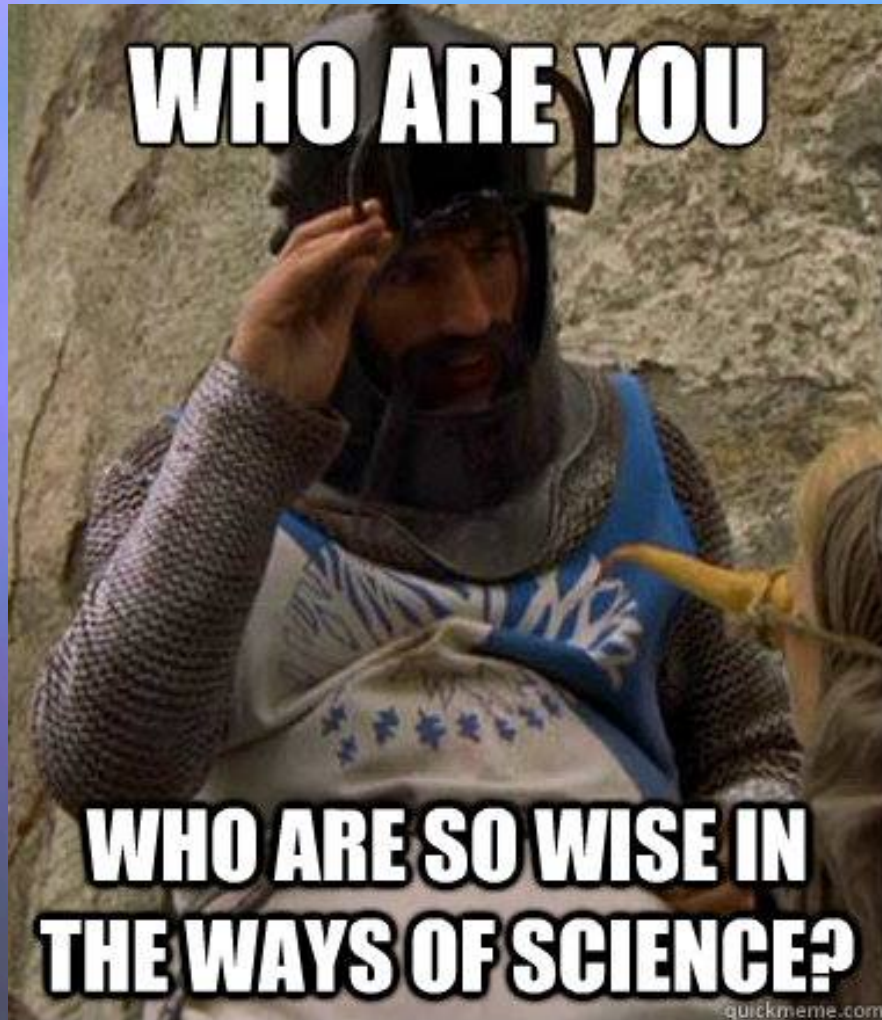
Research

Outreach

Past Outreach

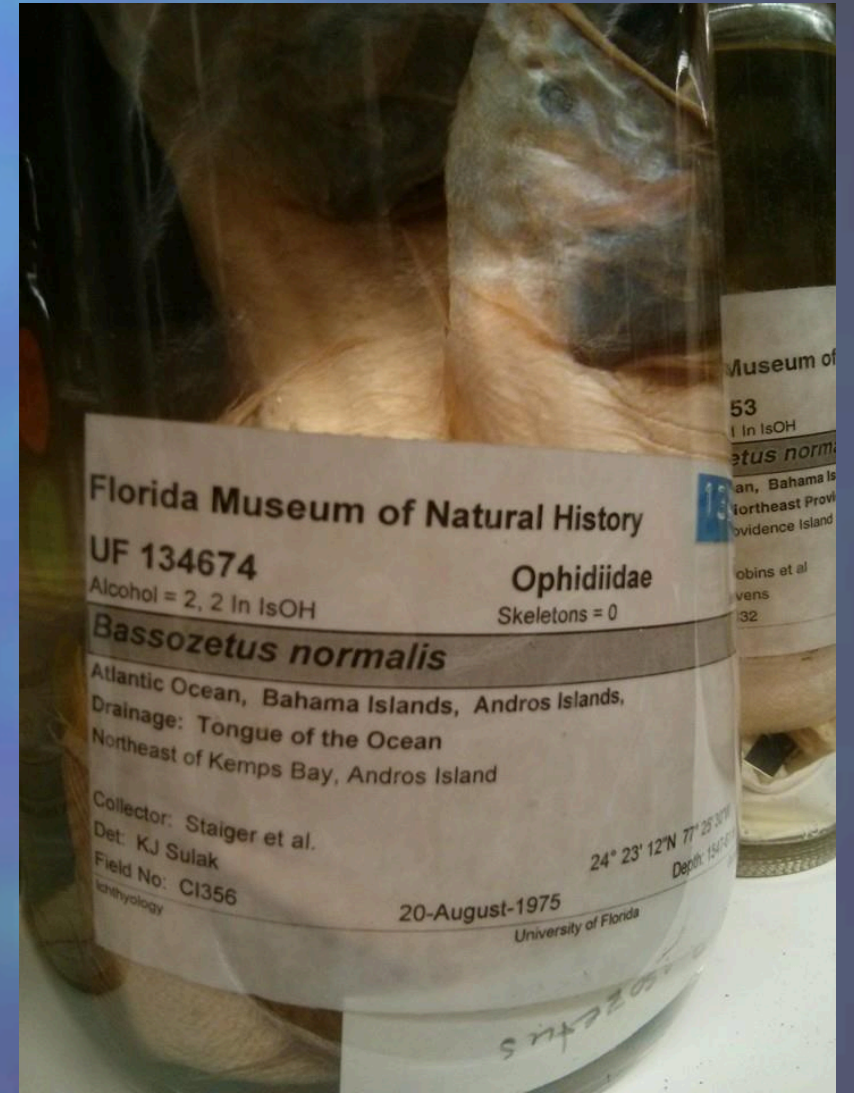
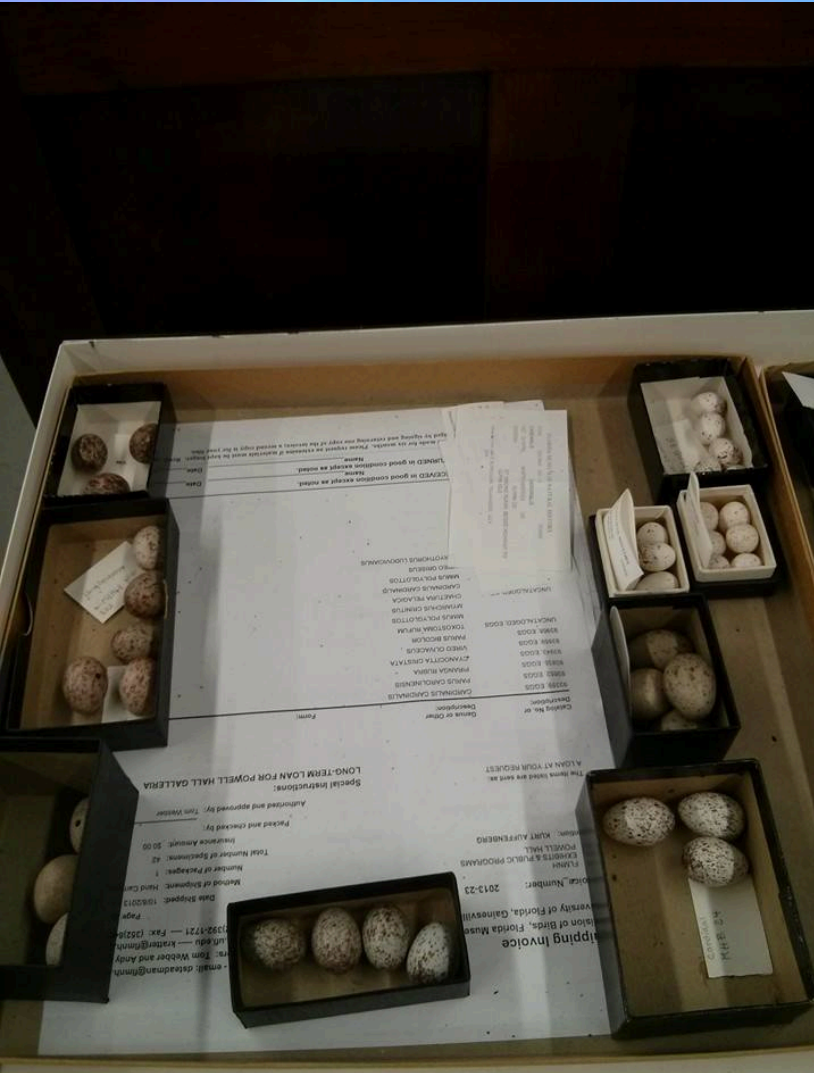


Collections as tools for outreach – Experts

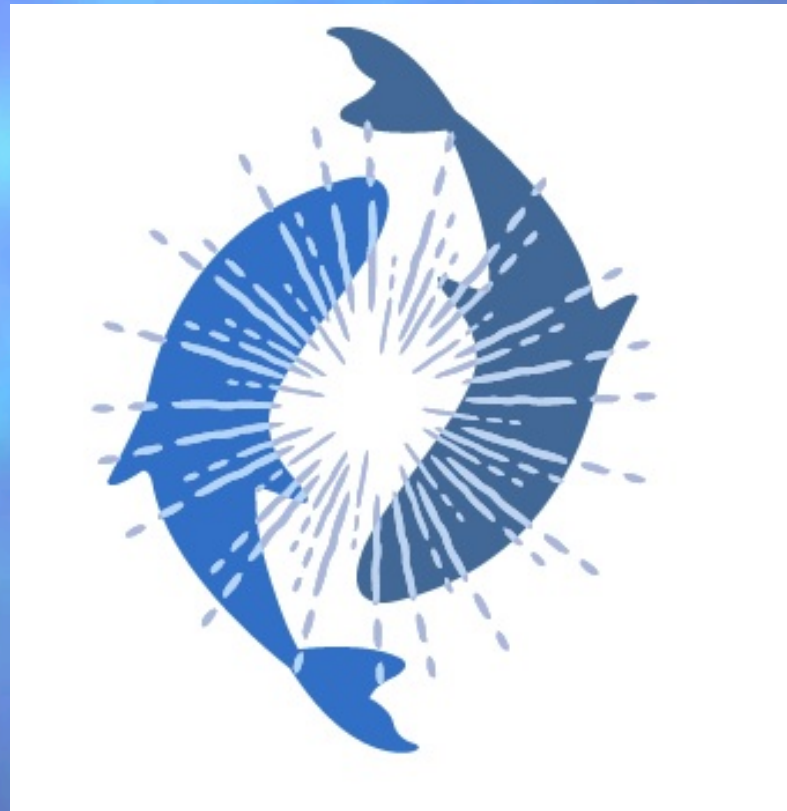




Collections as tools for outreach - Data



New ideas for outreach



New ideas for outreach - Facebook



Florida Museum of Natural History Fish Collection
Museum · College & University

Create Call to Action Liked Message

Timeline About Photos Reviews More ▾



Mammal Collection, University of Alaska Museum of the North
Non-Profit Organization

Like Follow Message

Timeline About Photos Likes Videos



Oregon State Ichthyology Collection
Museum/Art Gallery

Liked Following Message


Timeline About Photos Reviews More ▾



Natural History Collections
Closed Group

Joined Share Notification

New ideas for outreach - Facebook



Underwater webcams screenshot ...
Closed Group

Joined ▾ Share Notifications ...

Discussion Members Events Photos Files Search this group

Write Post Add Photo / Video Ask Question Add File

Write something...

GROUP INFO

MEMBERS 961 members (13 new)



Randy Hudlemeyer ▸ Underwater webcams screenshot sharing
20 hrs · 📷

Randal did this fish change color from silver to red or was that a trick of the lighting?

Like · Comment · Stop Notifications · Share

👍 Connie Gildner and 2 others like this.

Randal Singer They are mostly red but its a silvery red. *Gephyroberyx darwinii* (Darwin's slimehead).
Just now · Edited · Like · 👍 1

Write a comment... 📷 😊

New ideas for outreach – Internet forums

The NEW REDDIT JOURNAL of SCIENCE



3804

[Science AMA Series](#) [Oceanography AMA](#) Science AMA Series: We're scientists on a NOAA ocean exploration mission to uncover the deepest, unseen parts of the Caribbean Sea.

Ask Us Anything self.science

submitted 13 days ago by [NOAAgov](#) NOAA.gov Official Account

We are Andrea Quattrini (deep-sea biologist, U.S. Geological Survey), Mike Cheadle (geologist, University of Wyoming), and Brian Kennedy (NOAA ocean explorer and NOAA Corps officer). We are currently on NOAA Ship Okeanos Explorer conducting some of the first deepwater exploration ever in areas of the Caribbean, including the Puerto Rico Trench. As one of the deepest places in the ocean, the Puerto Rico Trench offers opportunities for cutting-edge exploration of some of the least-understood habitats on the planet.

We expect to continue to encounter productive ecosystems with life specially adapted to the harsh conditions of the deep ocean. Additionally, we expect to improve understanding of seismic interactions in a tectonically active part of the ocean and gain knowledge about deepwater fisheries.

During the expedition, we are using remotely operated vehicles (ROVs) to explore the seafloor. The video stream is being transmitted via satellite from the ship to shore, and is available [LIVE online](#). This means that anyone, anywhere with an Internet connection can follow our discoveries as they happen.

We have all participated in numerous deep-ocean exploration missions. We're here from 1:00 pm ET to 3:00 pm ET to answer your questions about the Puerto Rico expedition or ocean exploration in general...AUA!

[951 comments](#) [share](#)

top 200 comments [show 500](#)

sorted by: [best](#)

3804

[\[-\] TheTattedspyder](#) 262 points 13 days ago

What has been your most surprising/interesting discovery?

[permalink](#)

3804

[\[-\] melanostomias](#) [Grad Student](#) | [Ichthyology](#) | [Florida Museum of Natural History](#) 254 points 13 days ago*

(Randy) On this particular voyage we have seen the following so far (just to name a few interesting highlights and I'll add more as discoveries come):

- Queen snapper swimming almost 500 meters deep
- A large colony of as many as 10 different organisms feeding/living on one large coral stalk
- A large canyon missed by previous scanning efforts, but seen by our ROV
- Human waste (cans, glass bottles, even a denim jumpsuit!) as far as 3500 meters down
- A large amount of invertebrate diversity hundreds of species seen
- Interesting insights into the geologic history of the Caribbean Sea
- Over 50 unique species of fish
- Feeding behaviors of deep-sea animals
- Hermit crabs with anemones on their backs
- Observation of a sea star not seen since it was collected for its original description in the 19th century
- a mini ecosystem on a paint can at 1700 meters (~10 species or so living on and in the can)

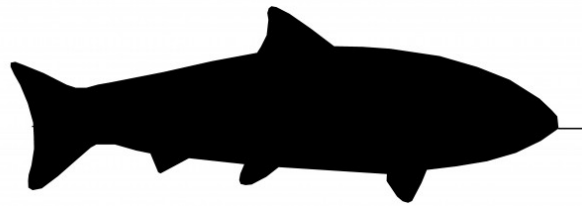
New ideas for outreach – Telepresence or Visits



New ideas for outreach – Collection Activities



New ideas for outreach – Collection Activities

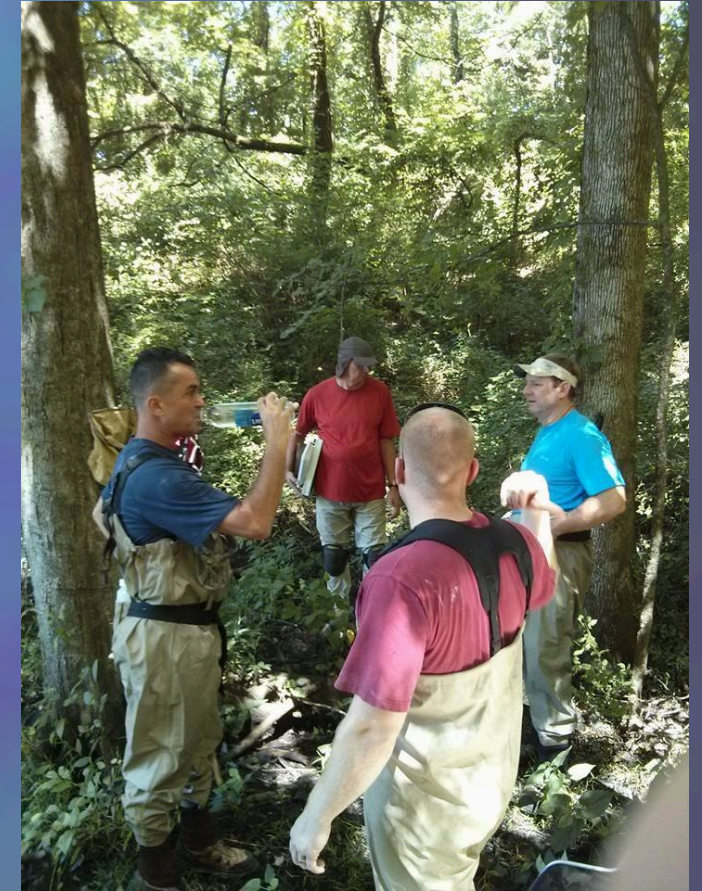


- Morphology/anatomy
- Identification
- Evolution (placement in collection)
- Organization and preservation

New ideas for outreach – Long Term Projects



New ideas for outreach – Long Term Projects



Field to database activities are a great way to engage and participate in science with the public (and it helps you too!)

New ideas for outreach – Long Term Projects

Be collaborative!



Think about big picture questions!



New ideas for outreach – Collection Activities



Ask yourself: How can my research or collection duties contribute to learning?

New ideas for outreach - Availability

Rule # 1 for creating innovative and impactful outreach: Make yourself available!

If you preserve it,
they will come....



Thanks!

- **Shari Ellis**
- **Deb Paul**
- **Randal J. Singer (my dad)**
- **Michael Sandel**
- **Collection staff at FLMNH (UF)**

