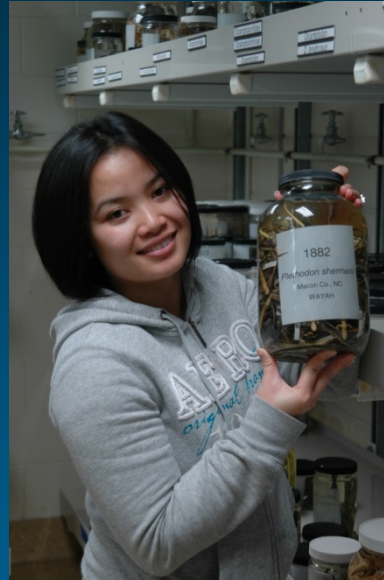


OSU Herpetological Research Collection: Past, Present, Future



[video](#)

Stevan J. Arnold

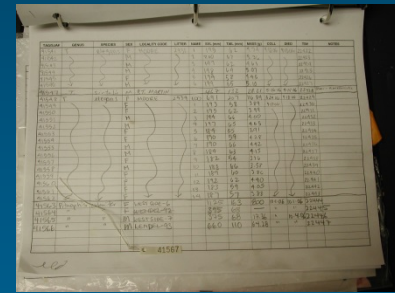
Curator of Amphibians & Reptiles
Department of Integrative Biology

Overview

- ☞ The current curator is retiring on 1 Jan 2019 but will work *pro bono* for a couple of years.
- ☞ Do we need a replacement curator?
- ☞ What are the options for hiring a replacement?

What is the collection?

- ➔ Specimens (50,000+ amphibians and reptiles preserved in ethanol).
- ➔ Records (60,000+ records of localities, pedigree, stomach contents, photos, habitat, etc).
- ➔ Frozen tissue (20,000+ samples of tissue frozen at -80 deg C).
- ➔ Localities (4,800+ sampling stations documented with notes, photos, and videos).



[more details](#)

Where is the collection?

☞ Physical presence of specimens.- was in Cordley → now in Weniger → will return to Cordley



☞ Physical presence of frozen tissue and hard copies of records.- Cordley



☞ Local and online digital presence of records.-
T: drive, VertNet

VertNet
[link](#)

Why can't we put the collection in storage?

- ☞ It is being used.
- ☞ It is growing.
- ☞ Need access for routine curating (e.g., replacing fluid lost by evaporation, answering queries, etc).
- ☞ It is flammable.



Who uses the specimen collection?

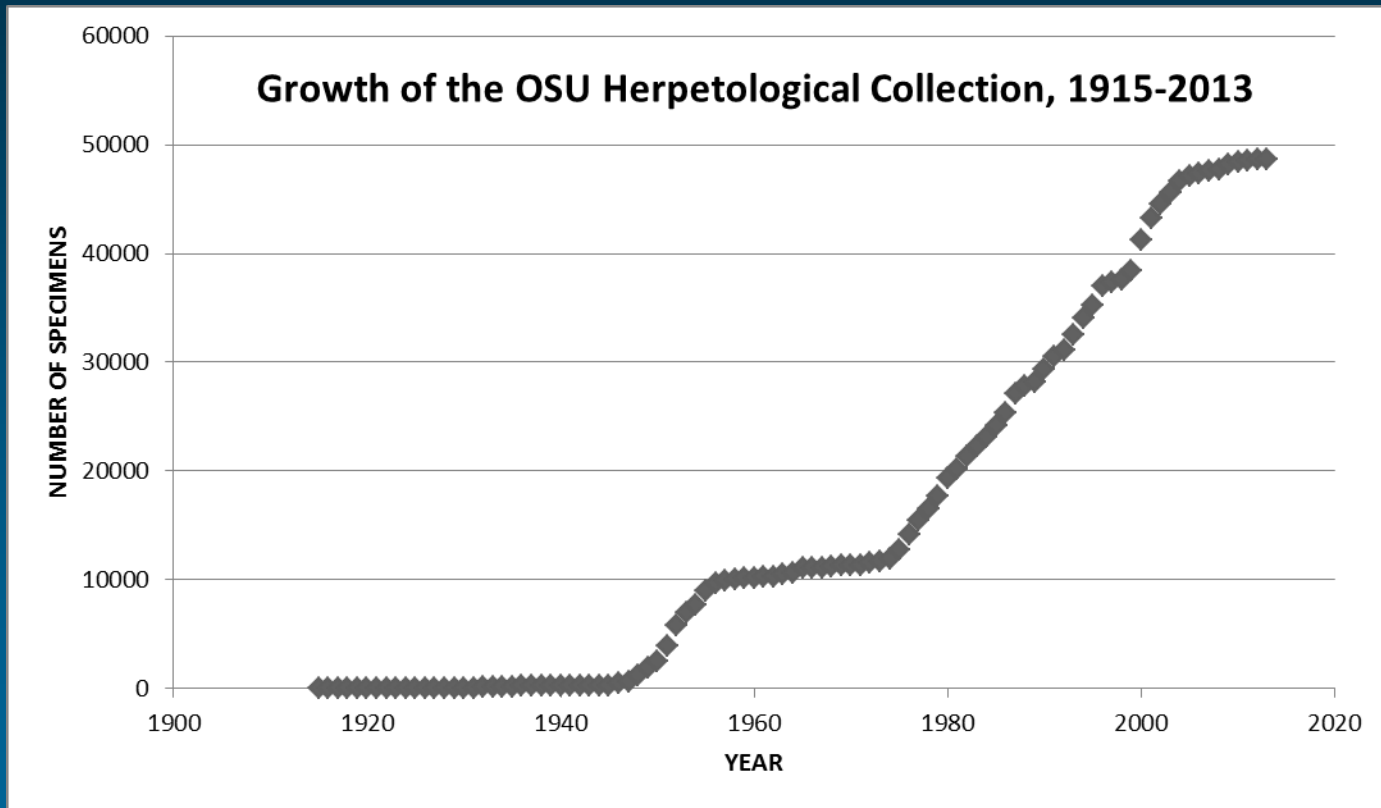
☞ **Researchers** (e.g., physical access to specimens, loans of specimens and tissue).

☞ **Students** (e.g., research projects, dissertaton research, tours).

☞ **Public** (e.g., individual and group tours).



How fast is the specimen collection growing?



Why is the collection important?

- 👉 Documents the distribution of Oregon's herpetofauna.
- 👉 Significant national/international resource.
- 👉 Important resource for specimen-based teaching, research, and outreach.

Distribution of the Pacific Chorus Frog based on museum records



Pseudacris regilla



Stebbins 1951

20 Largest Herpetological Specimen Collections in the USA (thousands of specimens)

Rank	# specimens	name	State
1	572	National Mus Nat Hist	DC
2	349	Amer Mus Nat Hist	NY
3	347	Univ Kansas Biodiv Instit	KS
4	316	Cal Acad Sci	CA
5	285	Field Mus Nat Hist	IL
6	272	Museum of Vert Zool	CA
7	197	Univ Michigan Mus Zool	MI
8	173	Florida Mus Nat Hist	FL
9	170	Carnegie Mus Nat Hist	PA
10	114	Univ Texas Arlington A&R Div Res Ctr	TX
11	99	Louisiana State Mus Nat Sci	LA
12	94	Texas Nat Hist Collections, Austin	TX
13	76	San Diego Nat Hist Mus	CA
14	66	Univ Colorado Mus Nat Hist	CO
15	63	James R. Slater Mus Nat Hist	WA
16	59	Sam Noble Oklahoma Mus Nat Hist	OK
17	58	Oregon State University	OR
18	57	Univ Arizona Mus Nat Hist	AZ
19	49	North Carolina Mus Nat Sci	NC
20	43	Yale Peabody Mus	CT

Who owns/controls the collection?

- ➡ Individual researchers.
- ➡ Department of Integrative Biology.
- ➡ Deans of the Colleges of Science & Agricultural Science.

Who owns/controls the collection?

 ~~Individual researchers.~~

 ~~Department of Integrative Biology.~~

 Deans of the Colleges of Science & Agricultural Science.

Implications of College-level control of the Herpetological Collection?

- ☞ IB cannot give the Collection away or sell it on Ebay.
- ☞ If IB does not exercise its responsibility to maintain the collection, it could be transferred to another department.
- ☞ Along with such a transfer, IB would lose the opportunity to hire a curator and teach two herpetology courses ([IB 573 Herpetology](#), [IB 574 Systematic Herpetology](#))

Who pays for collection operations and other expenses?

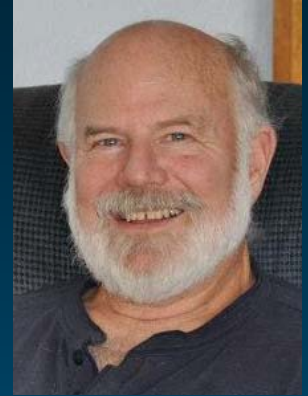
- ☞ NSF research grants.- Arnold & Houck grants for work on snakes and salamanders.
- ☞ Department of IB.- funds allocated on item-by-item basis.
- ☞ Natural History Fund.- endowment generates ca \$16K/yr, shared by several collections.
- ☞ Braly Fund.- endowment generates ca \$12K/yr, used for IB faculty research setups.
- ☞ NSF infrastructure program.- for special needs, not day-to-day operations.

What does a curator do?

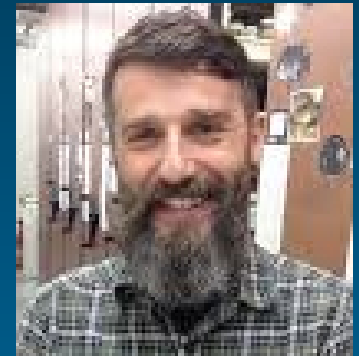
- ☞ Answer questions (e.g., from the public, researchers, students, administrators, Fire Marshall).
- ☞ Identify specimens (including photographs of specimens).
- ☞ Supervise the maintenance and growth of the collection and its databases (including writing collection improvement grants).

Who will curate the collection?

☞ The R. Storm/ S. Arnold model.-
tenure track with research, curatorial, and
teaching duties; systematics training.



☞ The Peter Konstantinidis model.-
instructor with curatorial and e-campus
teaching duties; systematics training.



☞ The Chris Marshall model.- non-
tenure track faculty with curatorial and
teaching duties; systematics training.



Summary

- ☞ The collection consists of specimens, tissue, and data of several kinds.
- ☞ The collection supports collection-based teaching, research, and outreach.
- ☞ The collection has local, regional, and national users.
- ☞ The collection needs a curator trained in herpetology and systematics.
- ☞ The curator might be a tenure track or instructor faculty appointment.