

14 November 2017

**Dr. Thomas L. Poulson**, 318 Marlberry Circle, Jupiter, FL 33458-2850  
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**Emeritus Professor of Biological Sciences**

Ecology & Evolution Group, University of Illinois at Chicago  
(retired and moved to Jupiter FL June 2000)

**Affiliate Research Professor Honors College FAU-Jupiter since 2016**

Work on cave fish with Dr. Alex Keene

**ABBREVIATED ACADEMIC ACTIVITIES AND HONORS Pre 2000**

**Activities and honors**

1. Scientist in two 3<sup>rd</sup> grade plays: Clouds, Dinosaurs
2. Bird-banding under high school teacher's federal permit
3. 3<sup>rd</sup> place New York State High School Science Fair, 1952 (1<sup>st</sup> place Long Island)
4. N.Y. State Fisheries Biologist, summer 1953 (Adirondacks)
5. B. S. Cornell University 1952-1956 (GPA 4.5, Dean's List all years); monthly exhibits for JORDANI natural history club
6. NSF Pre-doctoral Fellowship at U, Michigan – Ann Arbor 1956-1959
7. Horace Rackham Postdoctoral Fellowship at UCLA 1961
8. Lead scientist on a proposal for Long-term Ecological Monitoring at Mammoth Cave National Park ranked number one for scientific merit park-service-wide

**Academic Degrees**

1. B.S. Cornell University 1952-1956
2. PhD. Zoology University of Michigan – Ann Arbor 1956-1961

**Academic employment:**

1. Yale University 1962-1970 Instructor to non-tenured Associate Professor
2. Notre Dame 1970-1972 Associate Professor without tenure
3. U. Illinois at Chicago tenured 1973 - 2000 Associate & Full Professor
4. Mammoth Cave National Park, Consulting Ecologist GS-14 (summers 1991-1993)

**Competitively funded research grants:**

1. NIH 1962 – 67, NSF 1967 – 69, 1974-1978 (seed grant)
2. 1967 Yale Junior Faculty Fellowship (sabbatical)
3. State of Connecticut 1969
4. NSF Equipment 1972, 1973
5. 1979 STRI-BCI Panama (sabbatical grants from Smithsonian and American Philosophical Society)
6. NSF 1980 – 81 Doctoral Dissertation Improvement with Kathleen Lavoie
7. Mammoth Cave National Park Division of Science & Resource Management

1992, 1993, 1994 – 97

8. Chicago Wilderness (dunes succession research) 1998, 1999

**Peer reviewed publications:** Mainly cave organisms (evolution, physiology, and ecology), old-growth forests, dunes succession, physiological ecology of birds and small mammals)

1. Journals: 46 with 29 first-authored and 13 second-authored
2. Book chapters: 6 with 5 first-authored
3. Book with Charles Mohr LIFE OF THE CAVE 1966 McGraw Hill

**Reviews of NSF & other grants + reviews of papers for journals:** ~ 2–6 / year

**Invited addresses and seminars:** 0 – 3 per year for 40 years

**Students trained:**

1. Undergraduate Honors Theses (Yale 5, UIC 9)
2. Thesis Masters (Yale 2, UIC 8)
3. PhD Dissertations (Yale 3, Notre Dame 1, UIC 5)
4. Postdoctoral Fellows (Yale 1, UIC 2)
5. Visiting Professors on sabbatical (Yale 2, UIC 1)
6. Outside MS and PhD Committee member (2 -5 per year until 2000)

**Technical reports and abstracts to national and international meetings:**

1. Peer-reviewed: 2 – 3 per year for the past 50 years
2. Book reviews (peer-reviewed) 6 (mainly cave biology)
2. Non-reviewed: 17 mainly at Mammoth Cave National Park

**Honors and awards:**

1. Elected or conferred by scientific societies
  - AAAS Fellow
  - New York Academy of Sciences
  - Sigma Xi
  - American Society of Naturalists
  - National Speleological Society
  - (Fellow, Certificate of Merit, Outstanding Scientist)
2. Teaching and Service in Science and Interpretation
  - 1985 Mammoth Cave National Park special commendation for contributions to science, resource management & interpretation
  - 1996 Staszak Award for Outstanding Teaching of Science grades 3 – 6
  - 1977 Distinguished Visiting Professor Texas Tech U
  - 1999 U. Illinois Chicago Innovation & Excellence in Teaching

**Working Committees outside the University:**

1. Cave Research Foundation 1970 – 1998 Science Committee & Chief Scientist
2. Cave Research Foundation 2000 – present Reviewer Research Grants
2. National Speleological Society 1975 – 2000 Research Advisory Committee

3. Illinois Nature Conservancy Science Committee 1996 – 2000
4. 1996-99 Steering Committee for MacArthur Grant  
for Training 3<sup>rd</sup> world scholars
5. 2002 People to People Parks & Resources Management in South Africa

### **SINCE RETIREMENT 2000 – Main focus Scientific Natural History**

#### **FAU - JUPITER.**

1. Part-time Adjunct Professor for Honors College (teaching in the dual enrollment program, Jupiter High School Environmental Sciences and Research Academy) – 3 courses in 2002 and 2003
2. Collaborative research in Alex Keene's lab on cavefish since 2015

#### **FAU - Jupiter LIFE-LONG LEARNING SOCIETY.**

1. 4 to 6 session courses 2003 – 2008 with 30 – 35 students e.g.
  - The nature of Natural History in South Florida.
  - Scientific Bases for Resolving Conflicts in Environmental Issues.
  - The Everglades
2. Five lectures with 95 – 135 students 2010 – 2016. e.g.
  - Be Beguiled by the Wild: Fieldtrip to the Wakodahatchee Wetlands,
  - Life's a Beach But Don't Be Crabby: Ocean and Lagoon Beaches.
  - Cat's Meow & Dog's Bow-wow: Our Pets and Their Wild Relatives.
3. Wine and Wisdom Discussion Series. 25 student limit. 2018.  
Controversies about Everglades Restoration

**FAU ENVIRONMENTAL INSTITUTE.** Two summers (2001 and 2002) helping to teach the scientific bases for natural history for the FAU Environmental Institute 3 days a week for 5 weeks each to grades 1-3 and 4-6 at Abacoa, Jupiter, FL

#### **SIERRA CLUB.**

1. Expert witness testimony for the Sierra Club both based on 40 years of expertise in caves and karst:
  - The ecological – physiological bases for likely impact of a proposed construction of a Peabody Coal coal-fired power plant on Mammoth Cave National Park and its cave adapted species (deposition and trial testimony).
  - The geological – ecological potential impacts of deep well waste water injection in Miami – Dade Counties (informational public workshop).
2. Power-point talks on “Our Wonderful Everglades” to two Florida chapters
3. Various stages of These Glades are Your Glades ... lyrics and illustrations
4. Help Loxahatchee group with natural history interpretation for Inner City Outing Program

5. Public comments to SFWMD and Palm Beach County Commissioners on local environmental issues and on the Everglades.

**MAMMOTH CAVE NATIONAL PARK, Division of Science and Resource Management.** Continuing follow-up to three summers (1992 – 1994) as an Ecological Consultant [GS-14] for the implementation of a Long-term Ecological Monitoring Program for which my led proposal ranked 1 of 125 Park Service-wide for scientific merit. Mentoring of two permanent staff members, one who was my PhD Student.

**THE NATURE CONSERVANCY, BLOWING ROCKS PRESERVE.** Volunteering and consulting.

1. 2001 - 2007 restoration and interpretation locally & the Indian River Lagoon
2. Marine Debris surveys with Ocean Conservancy protocols 2000 - 2005.

**ARTHUR M. MARSHALL FOUNDATION AND FLORIDA ENVIRONMENTAL INSTITUTE** centered on developing science-based educational and public outreach programs aimed at restoring the Everglades and its historic river of grass. 2001 – 2015 (endowment and mission part of Everglades since 2016)

1. Since 2001, attendance and comments at Environmental Action Committee, chaired by John Marshall at the SFWMD resulting in periodic position statements.
2. 2004 – 2012 member of the Advisory Board and Senior Scientist in charge of the summer internship program; this includes a two-week classroom – field course on Ecosystems of south Florida and eight additional weeks of intense mentoring by Poulson, subject matter mentors and both marketers and grant writers.
3. 2013 – 2015 three days of mentoring in class and the field for summer interns.
4. Public comments on the impact, and contribution to sustainable growth in Palm Beach County FL of the Scripps Research Park and adjoining residential community in comparison to alternative sites. The negative tradeoffs include huge costs of infrastructure, fragmentation of and future impacts on adjacent natural areas, and abrogation of the voted bond issue to stop development of natural areas and farmland. The positive tradeoffs are only large contiguous areas for a planned community and spinoff businesses.

**FRIENDS OF THE ARTHUR R. MARSHALL LOXAHATCHEE NATIONAL WILDLIFE REFUGE.** Since 2010 Board of Directors, Science & Education Chair).

1. Major help in developing trail signage and award-winning exhibits
2. 15 interactive “Exploring Nature” essays on Friends web site
3. Yearly Exploring Nature table at Everglades Day
4. Continued mentoring of 5 - 8 interpretive guides at Refuge
5. Wrote and helped illustrate 31-page VISITOR’S GUIDE
6. Written and oral comments on management issues
7. Helped develop talk about Refuge for Speakers Bureau

### **POWER-POINT TALKS & VIDEOS FOR VARIED AUDIENCES**

1. Science as a voyage of discovery. Jupiter High School Meet the Scientists Series 2008. Same venue 2016 Scientific Natural History)
2. These Glades are Your Glades. Lyrics and illustrations. (current version with videographer Jay Paredes available on Friends of Loxahatchee web site)
3. Solid Waste Authority Nature Trail videos – Scat Rap & Woodpeckers
4. Green Cay Nature Center 2009 Wildlife and 2017 Science for Seniors Series
5. Natural history topics to local Sierra Club chapter (three times in 10 years)
6. Proceedings of International Conference on Subterranean Biology 2016 – 2 papers and 1 poster
7. Life-long Learning Society FAU Jupiter Florida. Retiree attendance increased from 30- 40 to 120-150 for one day interactive talks. Examples are:
  - A. The cat's meow and the dog's bow-wow: your favorite pets and their wild Florida relatives
  - B. Life's a beach but don't be crabby: Virtual field trip to lagoon and ocean beaches
  - C. Exploring nature – Be beguiled by the wild
8. Life-long learning Wine and Wisdom series. An open discussion of myths and misunderstandings about Everglades Restoration 2018.

### **AWARDS AND HONORS SINCE RETIREMENT**

1. Multi-authored Biology of Subterranean Fishes 2001 CRC Press “dedicated to Dr. Thomas L. Poulson in appreciation for his pioneering and inspiring work on cave fishes and other subterranean creatures” As Part of David Culver's perspective on Tom he wrote. “My own experiences with him in the field remain vivid and important now nearly forty years since most of them transpired. I have never encountered a more careful observer of cave life—he was and is a great naturalist. I have also never encountered a better critic of bad ideas and more enthusiastic supporter of new ideas and hypotheses. But more than anything it is his enthusiasm for studying cave life that dominates time in the field with Tom.”
2. With respect to Tom's publication of his dissertation on Cave Adaptation in Amblyopsid Fishes Culver wrote “Since his initial work, a sixth species has been discovered—*Spleoplatyrhinus poulsoni*. According the Web of Science®, his paper has been cited 106 times since 1983 (as far back as digital records go). I can find only one research paper (some reviews are cited more) that is cited even 50 times—Wilkens (1971), which was cited 71 times.
3. Conservationist of the Year Award in recognition of dedication to Everglades Education 2006 by ARMF & FEI
4. Environmental Champion of the year -- Palm Beach County 2015.

## **EXTENDED INTERVIEW**

### **Spelean Spotlight**

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**National Speleological Society NEWS, May 2010, 10 pages.**

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*With a youthful sparkle, at the 3/4 century mark, our interviewee shares his zeal for life and love of all living things with exceptional enthusiasm and excellence. Our teacher, mentor and friend contributes and will continue to contribute through his seminal works and fine example. RZ.*

### **ABACOA COMMUNITY JUPITER, FL**

1. Greenways Committee 2002 – 2016. Co-led nature walks and trash pickups
2. Abacoa Community Garden started by Tom and Liz Poulson in 2010. An organic and sustainable vegetable and fruit tree garden with 25% donation of vegetables to a homeless shelter. Currently ~ 50 members. See web page and facebook.