# Andrew F. Casper

# **<u>PROFILE</u>** (ResearchGate Profile: www.researchgate.net/profile/Andrew\_Casper)

- Subject matter expert in freshwater conservation, emphasis on large rivers & Great Lakes
- 20 yrs of leadership in multiple natural resource agencies (Programmatic and Personnel)
- 53 peer-reviewed publications with >850 citations (1392 via Google Scholar)
- 35 book chapters and technical reports and 8 special symposia organized
- >\$7 million in competitive research support plus 31 unique agency collaborations

# ACADEMIC BACKGROUND

Université Laval, Québec, Québec CAN	Ph.D., Océanographie, 2005
Southern Illinois University Carbondale IL	M.Sc., Biological Sci., 1993
Southern Illinois University Carbondale IL	B.Sc., Natural Sciences, 1990

# **PROFESSIONAL POSITIONS**

**Lecturer,** Loyola University - School of Environmental Sustainability, Chicago IL 60660 (1/20 – present)

- **Director of Freshwater Research,** Daniel P. Haerther Center for Conservation and Research, John G. Shedd Aquarium, Chicago IL 60605 (10/17 – 12/18)
- **Field Station Director and Assistant Research Program Leader** (10/12 9/17), U. of Illinois, Illinois Natural History Survey, Illinois River Biological Station, Havana IL, 62644.
- **Post-Doctoral Researcher** (7/11 9/12), USEPA-ORD, NHEERL, Gulf Ecology Division (William S. Fisher, mentor), Gulf Breeze FL 32561-5299.
- **Research Biologist** (12/07 7/11), Aquatic Ecology and Invasive Species Branch, US Army Corps of Engineers, Engineer Research and Development Center, Vicksburg MS 39180.
- **Post-Doctoral Researcher** (8/05 12/07), EcoHydrology Laboratory (James A. Gore mentor), Environmental Sci., Policy & Geog. Program, U. of So. Florida St. Petersburg, FL 33701.
- Visiting Instructor/Researcher (4/98 6/05), Biology Dept., Clarkson Univ., Potsdam, NY.
- **Benthic Analyst** (10/96 4/98), Grace Analytical Labs, Inc. Sub-contractor to the USEPA Great Lakes National Program Office, Chicago IL.

Head Technician (11/92 - 9/96), Large River Program, Dept. of Biology, U. of Louisville, KY.

Project Manager (11/88 - 12/91), Dept. of Pollution Control, Southern Illinois U. Carbondale.

# SUMMARY OF LEADERSHIP CAPABILITIES

Freshwater Science & Conservation Planning

- Various science advisory roles for State & Federal Agencies focused on large floodplain rivers (e.g., USACE Upper Mississippi River Restoration-LTRM, IL DNR/USFWS/EPA Asian Carp Monitoring and Response Coordination Council)
- Facilitation of stakeholder workshops for USACE Civil Works & Environ. Planning projects
- Led policy briefings and planning workshops with Federal agencies and other stakeholders
- Teach and published on the links between biodiversity and freshwater science and policy

# Partnership Building and Public Policy Participation

- Panelist, Great Lakes Commission Aquatic Nuisance Species and Chicago Area Waterways
- Co-founder, Floodplain Science Network

# Résumé

(https://www.sciencebase.gov/catalog/item/56f0319ce4b0f59b85dd1238)

- Co-founder, Large River Monitoring Forum (lccnetwork.org/group/floodplain-science-network)
- Multi-agency partnerships with TNC, Universities, Municipalities, and Agencies
- Member of the Asian carp response coordination council with IL DNR (http://asiancarp.us/)
- Participant in IL Nutrient Loss Reduction Strategy- Nutrient Management Council
- Participant in USACE science advisory body for the Upper Mississippi River Restoration

### Personnel Leadership and Management

- Led INHS search committees for more than 25 MS- and PhD-level scientists and 7 postdocs
- Conduct staff meetings, strategic planning, & retreats to facilitate project and initiative goals
- Completed annual reviews including identifying goals and objectives, training opportunities

## Development of complex projects

- Participated in institutional effort to increase private donor gifts to ~\$110k
- Prepared >10 collaborative research proposals to support mission and/or program goals
- As PI, administered >\$6 million in funding (e.g., Illinois DNR, NSF, US Army Corps of Engineers, USEPA's Great Lakes Restoration Initiative)

### TEACHING EXPERIENCE AS INSTRUCTOR OF RECORD

**Spring & Fall 2020:** <u>Instructor</u> for The Scientific Basis of Environmental Issues – Institute for Environmental Sustainability, Loyola University Chicago

- **Spring 2006 2008**: <u>Instructor</u> for Aquatic Environmental Instrumentation Dept. of Environmental Science, Policy & Geography, University of South Florida St. Petersburg
- **Fall 2006**: Guest Lecturer for Environmental Science and Conservation Biology Dept. of Environmental Science, Policy & Geography, University of South Florida St. Petersburg
- **Spring 2006**: <u>Instructor</u> Aquatic Invertebrate Ecology– Dept. of Environmental Science, Policy and Geography, University of South Florida St. Petersburg
- **Fall 2005**: Guest Lecturer on Benthic Invertebrate Ecology Dept. of Environmental Science, Policy & Geography, University of South Florida St. Petersburg
- Fall 2003 & 2004: Instructor Introductory Biology Dept. of Biology, Clarkson University

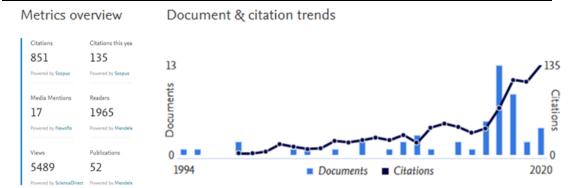
Spring 2001: Instructor Microbiology for Engineers - Dept. of Biology, Clarkson University

Summer 1999: Instructor Aquatic Invertebrate Ecology - Dept. of Biology Clarkson University

Fall 1998: Instructor Aquatic Ecology Laboratory - Dept. of Biology Clarkson University

#### **Research Cruises**

- Team taught Marine Sci. Practicum aboard R/V Bellows & Suncoaster (Tampa Bay, 06-08).
- 2-week research cruise aboard the CCGS Nahidik on the Mackenzie River, (N.W.T., Aug 04).
- Sampled benthos/zooplankton of the St. Lawrence Estuary on the CCGS Willie Deraspe(02-04)
- 5-week benthic sampling aboard USEPA R/V Lake Guardian (Great Lakes April & Aug 97).
- Piloted/lead numerous small boat (16-35 ft) experiments and samplings over the last 20 years



#### SUMMARY OF PEER-REVIEWED PUBLICATIONS AND EXAMPLES RELEVANT TO TNC

- Pyron M, Logsdon-Muenich R and **AF Casper**. 2020. Conservation potential of North American large rivers: the Wabash River compared with the Ohio and Illinois rivers. Fisheries and Aquatic Sciences 23:15-21
- Gore JA, Banning J and AF Casper. 2016. River Resource Management and the Effects of Changing Landscapes and Climate. In: River Science: Research Applications for the 21st Century. Pages 295 – 312. D.J. Gilvear, M.T. Greenwood, M.C. Thoms, and P.J. Wood (eds.). Wiley & Sons, Chichester. DOI: 10.1002/9781118643525.ch15
- Gibson-Reinemer DK, RE Sparks, JL Parker, JA DeBoer, MW Fritts, McClelland MA, Chick JH, and **AF Casper**. 2018. Ecological Recovery of a River Fish Assemblage following the Implementation of the Clean Water Act. BioScience 67: 957-970

Sponsor	Total to Casper	# of Awards
Sportfish Restoration Fund (USFWS/IL DNR)	\$2,311	7
Great Lakes Restoration Initiative (USEPA/IL DNR)	\$2,055	6
Upper Mississippi River Restoration (USACE)	\$1,943	6
The Nature Conservancy (Illinois Chapter, Emiquon Preserve)	\$193	2
Basic Research Program (USACE - ERDC)	\$111	1
Ass't Chief of Staff Installation Mgmt (USACE - DoD)	\$110	1
The Nature Conservancy/ NOAA Community Restoration Prgm	\$59	2
Jacksonville District (USACE)	\$41	1
New Investigator Award (USACE - ERDC)	\$37	1
Environmental Benefits Analysis (USACE - SWWRP - HQ)	\$34	1
Africa Command (USACE - DoD)	\$33	1
US EPA Office of Research and Development	\$33	1
National Science Foundation - DEB	\$30	3
Florida Institute of Oceanography	\$25	1
Prairie Research Institute Seed Funds (U. of Illinois)	\$20	1
Water Resource Assistance Program (USACE-HQ)	\$19	1
National Great River Research and Education Center Interships	\$6	1
Total (x1,000's)	\$7,060	37

#### **PROJECT SUPPORT RECEIVED** (by source since 1998)