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

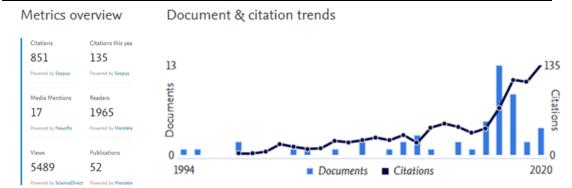
Spring 2001: Instructor Microbiology for Engineers - Dept. of Biology, Clarkson University

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)