## RESUME

# Richard D. Clark, Jr.

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## **EDUCATION**

1972	B.S.	Zoology Pennsylvania State University University Park, Pennsylvania
1974	M.S.	Fisheries Science Virginia Polytechnic Institute and State University Blacksburg, Virginia
1985	Ph.D.	Fisheries Science The University of Michigan Ann Arbor, Michigan

### EXPERIENCE

1993-Present	Adjunct Professor and Visiting Scientist Quantitative Fisheries Center Department of Fisheries and Wildlife Michigan State University
2001-Present	Adjunct Research Scientist School of Natural Resources and Environment The University of Michigan Ann Arbor, Michigan

2000-2002	Tribal Affairs Manager Fisheries Division Michigan Department of Natural Resources Ann Arbor, Michigan
1993-2000	Research Program Manager Fisheries Division Michigan Department of Natural Resources Ann Arbor, Michigan
1996-2001	Adjunct Associate Professor School of Natural Resources and Environment The University of Michigan Ann Arbor, Michigan
1988-1996	Adjunct Assistant Professor School of Natural Resources and Environment The University of Michigan Ann Arbor, Michigan
1977-1993	Fisheries Research Biologist Michigan Department of Natural Resources Institute for Fisheries Research Ann Arbor, Michigan
1975-1977	Fisheries Statistician-Analyst Texas Parks and Wildlife Department Austin, Texas
1973-1975	Research Assistant Virginia Polytechnic Institute and State University Blacksburg, Virginia

## HONORS AND PROFESSIONAL AFFILIATIONS

Justin Leonard Award 2008 from Michigan Chapter of the American Fisheries Society for high achievements over a career in Fisheries Science.

State of Michigan Certificate of Tribute 2007 from Governor, Jennifer M. Granholm for work excellence and commitment to serving the people of the Great Lakes State in producing the Inland Tribal Treaty Settlement.

**Director's Award 2007** from Director, Rebecca Humphries, of Michigan Department of Natural Resources for outstanding contributions as member of the State of Michigan's negotiating team in the Indian Treaty Federal Court case (Inland Hunting, Fishing, and Gathering segment). Court settlement (2007 Consent Decree) achieved September 2007.

- **Top Fin Award 2004** from Fisheries Division, Michigan Department of Natural Resources for outstanding contributions as primary developer of the Michigan Large Lakes Survey Program.
- **Director's Award 2000** from Director, K. Cool, of Michigan Department of Natural Resources for outstanding contributions as member of the State of Michigan's negotiating team in the Indian Treaty Federal Court case (Great Lakes Fishery segment). Court settlement (2000 Consent Decree) achieved August 2000.
- **Top Fin Award 2000** from Fisheries Division, Michigan Department of Natural Resources for work as member of the State of Michigan's negotiating team in Great Lakes Indian tribal fishing case, 2000. Court settlement (*2000 Consent Decree*) achieved August 2000.
- **Chief's Award** from Chief, John Robertson, Fisheries Division, Michigan Department of Natural Resources for outstanding contributions to the Division and Department, 1995.
- President of Michigan Chapter of the American Fisheries Society, 1994.
- Associate Editor of North American Journal of Fisheries Management, 1987-1989.
- **Best Paper Award** from the American Fisheries Society for paper published in the North American Journal of Fisheries Management, Volume 5, 1985.
- Fishery Alumni Memorial Award for outstanding fisheries science student at The University of Michigan, School of Natural Resources, 1982-1983.
- **Outstanding Texas Fishery Worker Award** from Texas Chapter of the American Fisheries Society, 1976.

American Fisheries Society member, 1974-2007.

#### **REPORTS AND PUBLICATIONS**

- Madenjian, C. P., D. B. Bunnell, D. M. Warner, S. A. Pothoven, G. L. Fahnenstiel, T. F. Nalepa, H. A. Vanderploeg, I. Tsehaye, R. M. Claramunt, **R. D. Clark, Jr.** 2015. Changes in the Lake Michigan food web following dreissenid mussel invasions. Journal of Great Lakes Research (in press).
- **Clark**, R, D., Jr., M. Jones, and I. Tsehaye. 2014. Instruction manual for the Lake Michigan Chinook salmon-alewife predator-prey ratio analysis. Quantitative Fisheries Center Technical Report 2014-??, Michigan State University, East Lansing, MI. 39 pp.
- Clark, R. D., Jr. 2012. Review of Lake Michigan Red Flags Analysis. Quantitative Fisheries Center Technical Report, T2012-01, Department of Fisheries and Wildlife, Michigan State University, East Lansing. 37 pp.

- Brenden, T. O., L. Wang, P. W. Seelbach, R. D. Clark, Jr., M. J. Wiley, B. L. Sparks-Jackson. 2008. A spatially constrained clustering program fro river valley segment delineation from GIS digital river networks. Environmental Modeling and Software 23 (2008) 638-649.
- Hanchin, P. A., B. J. Gunderman, and R. D. Clark, Jr. 2008. The Fish Community and Fishery of the Cisco Lake Chain, Gogebic County, Michigan and Vilas County, Wisconsin with Emphasis on Walleyes, Northern Pike, and Muskellunge. Michigan Department of Natural Resources, Fisheries Special Report 4x, Ann Arbor.
- Wang, L., T. O. Brenden, P. W. Seelbach, A. R. Cooper, J. D. Allan, R. D. Clark, Jr., and M. J. Wiley. 2008. Landscape-based identification of human disturbance gradients and references for streams in Michigan. Environmental Monitoring and Assessment.
- Hanchin, P. A., Todd G. Kalish, Zhenming Su, and R. D. Clark, Jr. 2007. The fish community and fishery of Lake Leelanau, Leelanau County, Michigan with emphasis on walleyes, northern pike, and smallmouth bass. Michigan Department of Natural Resources, Fisheries Special Report 42, Ann Arbor.
- Hanchin, P. A., R. P. O'Neal, R. D. Clark, Jr., and R. N. Lockwood. 2007. The walleye population and fishery of the Muskegon Lake System, Muskegon and Newaygo Counties, Michigan in 2002. Michigan Department of Natural Resources, Fisheries Special Report 40, Ann Arbor.
- Brenden, T. O., L. Wang, R. D. Clark, Jr., P. W. Seelbach, and J. Lyons. 2007. Comparison between model-predicted and field-measured stream habitat features for evaluating fish assemblagehabitat relationships. Transactions of the American Fisheries Society 136:580-592.
- Schneider, J. C., R. P. O'Neal, and R. D. **Clark**, Jr. 2007. Ecology, management, and status of walleye, sauger, and yellow perch in Michigan. Michigan Department of Natural Resources, Fisheries Special Report 41, Ann Arbor.
- Brenden, T. O., R. D. Clark, Jr., A. R. Cooper, P. W. Seelbach, L. Wang, S. Aichele, E. G. Bissell, and J. S. Stewart. 2006. A GIS framework for collecting, managing, and analyzing multi-scale landscape variables across large regions for river conservation and management. Pages 49-74 *in* R. M. Hughes, L. Wang, and P. W. Seelbach, editors. Landscape Influences on Stream Habitat and Biological Assemblages. American Fisheries Society, Symposium 48, Bethesda, Maryland.
- Hanchin, P. A., R. D. Clark, Jr., R. N. Lockwood, and T. A. Cwalinski. 2005. The fish community and fishery of Burt Lake, Cheboygan County, Michigan with emphasis on walleyes and northern pike. Michigan Department of Natural Resources, Fisheries Special Report 36, Ann Arbor.
- Hanchin, P. A., R. D. Clark, Jr., R. N. Lockwood, and N. A. Godby, Jr. 2005. The fish community and fishery of Crooked and Pickerel lakes, Emmet County, Michigan with emphasis on walleyes and northern pike. Michigan Department of Natural Resources, Fisheries Special Report 34, Ann Arbor.
- Hanchin, P. A., R. D. Clark, Jr., and R. N. Lockwood. 2005. The fish community and fishery of Michigamme Reservoir, Iron County, Michigan with emphasis on walleyes and northern pike. Michigan Department of Natural Resources, Fisheries Special Report 33, Ann Arbor.

- Clark, R. D., P. A. Hanchin, and R. N. Lockwood. 2004. The fish community and fishery of Houghton Lake, Roscommon County, Michigan with emphasis on walleyes and northern pike. Michigan Department of Natural Resources, Fisheries Special Report 30, Ann Arbor.
- Belyea, G. Y., S. L. Maruca, J. S. Diana, P. J. Schneeberger, S. J. Scott, R. D. Clark, Jr., J. P. Ludwig, C. L. Summer. 1998. Impact of double-crested cormorant predation on the yellow perch population in the Les Cheneaux Islands of Michigan. Proceedings of Cormorant Symposium, Midwest Fish and Wildlife Conference, December 1997.
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- Lockwood, R. N., R. D. **Clark**, Jr., and J. W. Merna. 1995. Evaluation of catch-and-release regulations for smallmouth bass on the Huron River, Michigan. Michigan Department of Natural Resources, Fisheries Research Report 2016, 39 pp.
- Nuhfer, A. J., R. D. **Clark**, Jr., and G. R. Alexander. 1994. Recruitment of brown trout in the South Branch of the Au Sable River, Michigan in relation to stream flow and winter severity. Michigan Department of Natural Resources, Fisheries Research Report 2006, 14 pp.
- **Clark**, R. D., Jr., and G. R. Alexander. 1992. Evaluation of catch-and-release trout fishing regulations on the South Branch of the Au Sable River, Michigan. Michigan Department of Natural Resources, Fisheries Research Report 1987, 27 pp.
- **Clark**, R. D., Jr. and R. N. Lockwood. 1990. Population dynamics of bluegills subjected to harvest within the 5.0- to 6.9-inch size range. Michigan Department of Natural Resources, Fisheries Research Report 1961, 46 pp.
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- Clark, R. D., Jr. and R. A. Martin. 1988. A computerized system for managing hatchery fish transportation in Michigan. North American Journal of Fisheries Management 8:102-111.
- Clark, R. D., Jr. 1985. A mathematical model for assessing recreational fishing regulations. Doctoral Dissertation, School of Natural Resources. The University of Michigan, Ann Arbor, Michigan.
- Clark, R. D., Jr., and G. R. Alexander. 1985. Effects of a slotted size limit on a multispecies trout fishery. Michigan Department of Natural Resources, Fisheries Research Report 1926.

- Clark, R. D., Jr., and B. Huang. 1985. The conflict between sportfishing, commercial fishing, and rehabilitation of lake trout in Lake Michigan. North American Journal of Fisheries Management 5:261-276. (Received Best Paper Award for 1985)
- Clark, R. D., Jr. and G. R. Alexander. 1984. Effects of a slotted size limit on the brown trout fishery of the Au Sable River, Michigan. *In*: R. M. Hamre, editor. Proceedings of the Wild Trout III Symposium. Trout Unlimited and Federation of Fly Fishermen, Viena, Virginia.
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- Clark, R. D., Jr. 1984. A tale of two whitefish fisheries: the boom-and-buster and the green-branch. Michigan Department of Natural Resources, Fisheries Technical Report 84-4. 14pp.
- Clark, R. D., Jr. 1983. The effects of fishing regulations on annual fluctuations in abundance and harvest. Michigan Department of Natural Resources, Fisheries Research Report 1917. 37pp.
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- Clark, R. D., Jr., G. R. Alexander, and H. Gowing. 1980. Mathematical description of trout stream fisheries. Transactions of the American Fisheries Society 109:587-602.
- Clark, R. D., Jr. and R. T. Lackey. 1980. The relationship between monitoring and modeling of fish populations. *In*: Biological Monitoring of Fish. C. H. Hocutt and J. R. Stauffer, Jr., Editors. Lexington Books, Lexington, Massachusetts, USA. pages 379-391.
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- Prentice, J. A., R. D. **Clark**, Jr., and N. E. Carter. 1977. Walleye acceptance a national view. Fisheries. 2(5):15-17.
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- Clark, R. D., Jr. and R. T. Lackey. 1976. A technique for improving decision analysis in fisheries and wildlife management. Virginia Journal of Science. 27(4): 199-201.

- **Clark**, R. D., Jr. and R. T. Lackey. 1975. Computer implemented simulation as a planning aid for state fisheries management agencies. Division of Forestry and Wildlife Resources, Virginia Polytechnic Institute and State University. Bulletin FWS-3-75. 179pp. (M.S. thesis).
- **Clark**, R. D., Jr. and R. T. Lackey. 1974. Managing trends in angler consumption of freshwater recreational fisheries. Proceedings of the Southeastern Association of Game and Fish Commissioners.
- Clark, R. D., Jr. and R. T. Lackey. 1974. Computer simulation as a planning aid in recreational fisheries management. Virginia Journal of Science. 25(2):49.

## POPULAR ARTICLES

- Clark, R. D., Jr. 1991. From brook trout to brown trout. <u>The RIVERWATCH</u>, the newsletter of the Anglers of the Au Sable. Same article also published in <u>Michigan Trout</u>, a publication of Michigan Council of Trout Unlimited.
- Clark, R. D., Jr., and G. R. Alexander. 1990. South Branch catch-and-release regulations. <u>The</u> <u>RIVERWATCH</u>, the newsletter of the Anglers of the Au Sable.
- **Clark**, R. D., Jr. 1990. Movements of large brown trout. <u>The RIVERWATCH</u>, the newsletter of the Anglers of the Au Sable. Same article also published in <u>Michigan Trout</u>, a publication of Michigan Council of Trout Unlimited. Same article also published in <u>The Evening Hatch</u>, the newsletter of Michigan Fly Fishing Club.
- Clark, R. D., Jr. 1989. Changes in trophy deer production in Michigan over the last 50 years. pages 43-48 *In*: Richard P. Smith, editor. Commemorative Bucks of Michigan's - Michigan Big Game Records. 2nd edition.
- **Clark**, R. D., Jr. 1989. Behavior of large brown trout. <u>The RIVERWATCH</u>, the newsletter of the Anglers of the Au Sable. Same article also published in <u>Michigan Trout</u>, a publication of Michigan Council of Trout Unlimited. Same article also published in <u>The Evening Hatch</u>, the newsletter of Michigan Fly Fishing Club.
- **Clark**, R. D., Jr. 1989. The voluntary catch survey. <u>The RIVERWATCH</u>, the newsletter of the Anglers of the Au Sable. Same article also published in <u>Michigan Trout</u>, a publication of Michigan Council of Trout Unlimited.
- Clark, R. D., Jr. 1988. Six years of catch-and-release regulations on the South Branch. <u>The</u> <u>RIVERWATCH</u>, the newsletter of the Anglers of the Au Sable.
- Clark, R. D., Jr. and G. R. Alexander. 1988. A review of the trout catch from the Au Sable River, 1987. Michigan Department of Natural Resources, 22 pp.
- Clark, R. D., Jr. and G. R. Alexander. 1987. A review of the trout catch from the Au Sable River, 1986. Michigan Department of Natural Resources, 26 pp.

- Clark, R. D., Jr., G. R. Alexander, G. T. Schnicke, and W. J. Buc. 1980. Fly fishing on the Au Sable River Mainstream: a report on the expectations and early results of the special fishing regulations. Michigan Department of Natural Resources, 14pp.
- <u>PUBLIC SPEAKING EXPERIENCE</u> I currently give several oral presentations or seminars per year. Over my entire career, I have prepared and delivered numerous lectures and seminars concerning my research studies or management activities. My audiences have been very diversified, including the Michigan Natural Resources Commissioners, attorneys, professional fisheries biologists, professional fisheries technicians, commercial fishermen, recreational anglers, and students (from the 3rd grade through college graduate school). I was one of three professors to team-teach the Ecology of Fishes (NR 409) course at the University of Michigan in 1992.

### List of graduate students I helped supervise at the University of Michigan

- Smith, Kelley D. 1981. A general numerical model for evaluating size limit regulations with application to Michigan bluegill. (M. S. thesis, The University of Michigan).
- Merron, Glenn S. 1982. Growth rate of brown trout in areas of the Au Sable River, Michigan, before and after domestic sewage diversion. (M. S. thesis, The University of Michigan).
- Koziol, Anne M. 1982. Dynamics of lightly exploited populations of lake whitefish, Isle Royale vicinity, Lake Superior. (M. S. thesis, The University of Michigan).
- Lorantas, Robert M. 1983. Assessment of the channel catfish fishery in Saginaw Bay, Lake Huron. (M. S. thesis, The University of Michigan).
- Haak, Raymond J. 1987. Mortality, growth, and yield of channel catfish in Saginaw Bay, Lake Huron. (M. S. thesis, The University of Michigan).
- Clapp, David F. 1988. Movement, habitat use, and daily activity patterns of trophy brown trout in the South Branch of the Au Sable River, Michigan. (M. S. thesis, The University of Michigan).
- Regal, Gary E. 1992. Range of movement and daily activity of wild brown trout in the South Branch of the Au Sable River, Michigan. (M. S. thesis, The University of Michigan).
- Hudson, John. 1993. Seasonal and daily movements of large brown trout in the Mainstream Au Sable River, Michigan. (M. S. thesis, The University of Michigan).

### **REFERENCES**

Available on request.