

JAMES M. HAYNES
Professor and Chairman
Department of Environmental Science and Biology

Contact Information

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Education

Carleton College, Northfield, MN - B.A., Biology, 1973
University of Minnesota - M.S., Fisheries, 1975
University of Minnesota - Ph.D., Ecology, 1978

Professional Experience

RESEARCH: Principal or Co-Principal Investigator for 42 externally-funded grants and contracts for fisheries and aquatic ecology research and education in the lower Great Lakes region totaling \$3.301 million since 1978, including impacts of zebra mussels on native benthic invertebrate communities; fish, invertebrates, and mink as indicators of aquatic system health; radio telemetry/netting studies of movements, habitats and diets of fishes; impacts of thermal discharges on fish in Lake Ontario, contaminant levels in sentinel biota; population status and trophic position of mink; dredging and recreation development on Lakes Ontario/Erie and the St. Lawrence River; photographic and illustrated guides to Great Lakes, Hudson River, and Bahamas fishes; and development of aquaculture ponds and a wet laboratory for aquatic organism culture at SUNY Brockport. Sabbatical leave research in 1988 with the NOAA/NMFS SE Fisheries Center Mississippi Laboratories explored techniques for determining the distribution and abundance of aquatic animals along environmental fronts and reefs in the Gulf of Mexico and SW Atlantic Ocean. Used radio telemetry to study movements and habitats of Chinook salmon and white sturgeon in relation to hydroelectric dams and gas super-saturation in the Snake and Columbia Rivers (Battelle Pacific Northwest Laboratories, 1975-78). These activities resulted in >30 refereed-publications, >30 technical reports, a book, and >60 professional presentations since 1976.

TEACHING: Professor (1991 to present), Associate Professor (1984-1990) and Assistant Professor (1978-83) of Environmental Science and Biology, SUNY College at Brockport. Teach undergraduate and graduate courses on Environmental Impact Analysis, Fisheries Science/Management, Fish Biology/Ecology, Fishery Techniques/Fish Identification, Pollution Biology, and Marine Biology/Geology-Bahamas, plus undergraduate courses on Environmental Science, Eco-Citizenship, Biological Oceanography, Evolution, and laboratories for General Biology. Lead instructor or project director for nine National Science Foundation Undergraduate Faculty Enhancement and National Dissemination programs: Summer Practicum for Applied Environmental Problem-Solving (Great Lakes Research Consortium) and Stressed Stream Analysis (Center for Applied Aquatic Science & Aquaculture).

ADMINISTRATION: Chairman, Department of Environmental Science and Biology, 2004-present; Project Director or Co-PD for 38 grants and contracts totaling \$2.642 million. Supervised one post-doctoral research associate, 20 M.S. graduates, and 1-5 students/technicians per semester/summer since 1978. Co-Director for Research and representative to the Council of Great Lakes Research Managers, Great Lakes Research Consortium, 2000-2003. Chairman, Monroe County Water Quality Management Advisory Committee that oversaw preparation of a water quality Remedial Action Plan for the Rochester Embayment of Lake Ontario, 1989-93 (continue to serve on County technical committees that devise and implement remedial actions, 1993 to present). Coordinated 10 week Decisions for the Great Lakes program in 1986 that involved 30 citizen participants and 33 speakers. Organized a 3-day, 15 participant workshop in 1987 to develop a fisheries research agenda for Lake Ontario. Chaired Department Budget Committee that distributed more than \$20,000 annually, 1985-90, and Personnel Committee (appointment, promotion, tenure decisions), 1992-96. Secretary-Treasurer, Education Section, American Fisheries Society, 1988-92. Chairman, NY Chapter, American Fisheries Society, Annual Meeting Program Committee, 1980. Chairman, American Fisheries Society Career Opportunities Committee, 1984, 1987 (helped initiate the national JOBSource computerized employment service). Administer Department scientific collections permit, 1980-present.

Honors and Awards

SUNY Chancellor's Recognition for Exemplary Contributions to Research, 2002
SUNY Chancellor's Award for Excellence in Teaching, 1999
College Environmental Educator Award, Monroe Co. Env. Mgmt. Council, 1997
Board of Directors, Great Lakes Tomorrow, Inc., 1987-1993
President, NY Chapter, American Fisheries Society, 1983.
Certified Fisheries Scientist, American Fisheries Society, 1981.
Northwest Association of Colleges and Universities Graduate Fellowship, 1975-1977.
Graduated cum laude and with distinction, Biology Department, Carleton College, 1973.

Professional Societies

American Fisheries Society (Education Section, NY Chapter)
American Institute of Fisheries Research Biologists (Fellow)
International Association of Great Lakes Research

Research/Scholarly Interests

Fish ecology, e.g., distribution in relation to environmental structure, biotelemetry to gather micro-environmental and behavioral data, coral reef fishes
Fisheries issues in the Great Lakes, Pacific Northwest, Gulf Coast/Bahamas regions
Biological indicators of ecosystem health, e.g., biotic indices, impacts of invading species
Environmental education, e.g., inter-/multidisciplinary approaches, cooperative learning

Other Interests/Skills

SCUBA/underwater photography, camping, fishing, hiking, canoeing, card playing/maintenance and repair, boat piloting, truck driving.

Details of Publication and Grant Experience

Journal Articles (* student author)

- Haynes, J.M., J.J. Pagano, and S.T. Wellman*. 2009. *Total PCBs, dioxin-furan TEQs and total mercury concentrations in mink in and out of the Rochester Embayment Area of Concern near and inland from the shore of Lake Ontario*. Archiv. Environ. Contam.Toxicol. 57(4): 794-802.
- Haynes, J. M., S.T. Wellman*, K.J. Beckett, J.J. Pagano, S.D. Fitzgerald, and S.J. Bursian. 2009. *Histological lesions in mink jaws are a highly sensitive biomarker of effect after exposure to TCDD-like chemicals: field and literature-based confirmations*. Archiv. Environ. Contam.Toxicol. 57(4): 803-807.
- Wellman*, S.T., J.M. Haynes, and J.J. Pagano. 2009. *Model estimates bioaccumulation of total PCBs, dioxin-furan TEQs, and total mercury in mink liver based on concentrations in Lake Ontario water*. Archiv. Environ. Contam.Toxicol. 57(4): 808-815
- Foust*, J.C., and **J.M. Haynes**. 2007. *Failure of walleye recruitment in a lake with little suitable spawning habitat is probably exacerbated by restricted home ranges*. J. Freshwater Ecol. 22(2): 297-309.
- Walter*, R.P., and **J.M. Haynes**. 2006. *Fish and coral community structure are related on shallow water patch reefs near San Salvador, Bahamas*. Bull. Marine Sci. 79(2): 365-374.
- Halbrend*, S.W., S.D. Hile*, **J.M. Haynes**, and B.R. Roosa. 2006. *Rock bass learn to associate food with a visual cue and remember the association when food is absent*. J. Freshwater Ecol. 21(3): 391-397.
- Hughes*, T.C., C.E. Lowie and **J.M. Haynes**. 2005. *Age, growth, relative abundance, and scuba capture of a new or recovering population of lake sturgeon in the lower Niagara River, New York*. N. Am. J. Fish. Mgmt. 25: 1263-1272.
- Haynes, J.M., N.A. Tisch, C.M. Mayer and R.S. Rhyne*. 2005. *Benthic macroinvertebrate communities in southwestern Lake Ontario following invasion of Dreissena and Echinogammarus: 1983 – 2000*. J. N. American Benthological Society. 24(1): 148-167.
- Haynes, J.M., M.M. Hluchy, and M.R. Connolly. 2004. *Disseminating successful undergraduate science curriculum adaptation and implementation strategies and CCLI grant-writing Techniques: Regional workshops led by successful innovators and experienced investigators, evaluating faculty change processes, and assessing student understanding of STEM concepts*. Pages 227-331, in *Invention and Impact: Building Excellence in Undergraduate Science, Technology, Engineering and Mathematics (STEM) Education*. American Association for the Advancement of Science. Washington, DC.
- Lowie*, C.E., and **J.M. Haynes**. 2001. *Comparison of walleye habitat suitability index (HSI) information with habitat features of a walleye spawning stream*. J. Freshwater Ecol. 16(4): 621-631.
- Haynes, J.M., T.W. Stewart and G.E. Cook*. 1999. *Benthic macroinvertebrate communities in southwestern Lake Ontario following invasion of Dreissena: continuing change*. J. Great Lakes Res. 25(4):828-838.
- Haynes, J.M. 1998. *Stressed stream analysis: addressing real environmental problems in local communities to stimulate undergraduate science faculty and students*. J. Coll. Sci. Teach. 28(1):43-51.
- Haynes, J.M. 1997. *Zebra mussels and benthic macroinvertebrate communities of southwestern Lake Ontario and selected tributaries: unexpected results?* Great Lakes Res. Rev. 3(1):9-16.

- Miller*, S.J., and **J.M. Haynes**. 1997. *Factors limiting colonization in western New York creeks by the zebra mussel, Dreissena polymorpha*. J. Freshwater Ecol. 12(1):81-88.
- Haynes, J.M. 1995. *Thermal ecology of salmonids in Lake Ontario*. Great Lakes Res. Rev. 2(1):17-22.
- Stewart*, T.W., and **J.M. Haynes**. 1994. *Benthic macroinvertebrate community changes following zebra mussel (Dreissena polymorpha) invasion of southwestern Lake Ontario*. J. Great Lakes Res. 20(2):479-493.
- Aultman*, D.C., and **J.M. Haynes**. 1993. *Spring thermal fronts and salmonine sport catches in Lake Ontario*. N. Amer. J. Fish. Mgmt. 13(3):502-510.
- Haynes, J.M., G.P. Gerber* and J.K. Buttner. 1989. *Response of sport fishes to thermal discharges in the Great Lakes: is Somerset Station, Lake Ontario, different?* J. Great Lakes Res. 15(4):709-718.
- Haynes, J.M., and G.P. Gerber*. 1989. *Movements and temperatures of radiotagged salmonines in Lake Ontario and comparisons with other large aquatic systems*. J. Freshwater Ecol. 5(2):197-204.
- Gerber*, G.P., and **J.M. Haynes**. 1988. *Movements and behavior of smallmouth bass, Micropterus dolomieu, and rock bass, Ambloplites rupestris, in southcentral Lake Ontario and two tributaries*. J. Freshwater Ecol. 4(4):425-440.
- Olson*, R.A., J.D. Winter, D.C. Nettles* and **J.M. Haynes**. 1988. *Resource partitioning in summer by salmonids in south-central Lake Ontario*. Trans. Amer. Fish. Soc. 117(6):552-559.
- Brett, B.L., G.P. Gerber* and **J.M. Haynes**. 1987. *Low genetic variability in northern populations of fish*. Isozyme Bulletin. 20:29.
- Nettles*, D.C., **J.M. Haynes**, R.A. Olson and J.D. Winter. 1987. *Seasonal movements and habitats of brown trout (Salmo trutta) in southcentral Lake Ontario*. J. Great Lakes Res. 13(2):168-177.
- Haynes, J.M., D.C. Nettles*, K.M. Parnell*, M.P. Voiland, R.A. Olson* and J.D. Winter. 1986. *Movements of rainbow/steelhead trout (Salmo gairdneri) in Lake Ontario and a hypothesis for the influence of spring thermal structure*. J. Great Lakes Res. 12(4):304-313.
- Haynes, J.M., and C.J. Keleher*. 1986. *Movements of Pacific salmon in Lake Ontario in spring and summer: evidence for wide dispersal*. J. Freshwater Ecol. 3(3):289-297.
- Keleher*, C.J., **J.M. Haynes**, D.C. Nettles*, R.A. Olson* and J.D. Winter. 1985. *Fall movements of Pacific salmon in Lake Ontario and several tributaries*. NY Fish and Game J. 32(2):167-175.
- Mellas*, E.J., and **J.M. Haynes**. 1985. *Swimming performance and behavior of rainbow trout (Salmo gairdneri) and white perch (Morone americana): effects of attaching telemetry transmitters*. Can. J. Fish. Aquat. Sci. 42(3):488-493.
- Haynes, J.M., and D.C. Nettles*. 1983. *Fall movement of brown trout in Lake Ontario and a tributary*. NY Fish and Game J. 30(1):39-56.
- Haynes, J.M., G.W. Thorburn and J.E. Gannon. 1983. *Environmental assessment: melding classroom instruction with problem-solving experience*. J. Coll. Sci. Teach. 12(6):394-398.
- Haynes, J.M. 1983. *Finding salmon and trout in Lake Ontario*. Water Spectrum 15(1):30-37, and Charter Industry Trade News 1(1):25-30 (1985).
- Haynes, J.M., and J.C. Makarewicz. 1982. *Comparison of benthic communities in dredged and undredged areas of the St. Lawrence River at Cape Vincent, NY*. Ohio J. Sci. 82(4):165-170.

- Haynes, J.M., and R.H. Gray. 1981. *Diel and seasonal movements of white sturgeon (Acipenser transmontanus) in relation to Columbia River temperatures*. Fishery Bulletin. 79(2):367-370.
- Haynes, J.M., and R.H. Gray. 1980. *Influence of Little Goose Dam on upstream movements of adult chinook salmon*. Fishery Bulletin 78(1):185-190.
- Gray, R.H., and **J.M. Haynes**. 1979. *Spawning migration of adult chinook salmon carrying external and internal radiotransmitters*. J. Fish. Res. Board Can. 36(9):1060-1064.
- Haynes, J.M., R.H. Gray and J.C. Montgomery. 1978. *Seasonal movements of white sturgeon (Acipenser transmontanus) in the mid-Columbia River*. Trans. Amer. Fish. Soc. 107(2):275-280.
- Gray, R.H., and **J.M. Haynes**. 1977. *Depth distribution of adult chinook salmon (Oncorhynchus tshawytscha) in relation to gas supersaturated water*. Trans. Amer. Fish. Soc. 106(6):617-620.

Books and Media

- Haynes, J.M. 1996. Taxonomic collection (204 species) and slide set (338 species) of sea weeds, invertebrates and fishes near San Salvador, Bahamas. Bahamian Field Station.
- Haynes, J.M., and N.J. Frisch. 1993. *Illustrated Guide to Hudson River Fishes*. Hudson River Foundation.(book and 120 slides)
- Haynes, J.M., N.J. Frisch and G.A. Bucher. 1984. *Photographic and Illustrated Key of Selected New York Fishes*. SUNY College at Brockport, NY. 80 slides.

Proceedings

- Alexander, A.K., and **J.M. Haynes**. 2009. *Testing the myth of the great barracuda, Sphyræna barracuda*. Pages 95-103 in Proceedings of the 12th Symposium on the Natural History of the Bahamas. San Salvador, Bahamas.
- Kuechle, V.B., **J.M. Haynes** and R.A. Reichle. 1989. *Use of small computers for telemetry data collections*. Pages 695-699, in C.J. Amlaner, Jr. (Ed.), Proceedings of the Tenth International Symposium on Biotelemetry. University of Arkansas, Fayetteville, AR.
- Gannon, J.E., **J.M. Haynes** and G.W. Thorburn. 1981. *Melding classroom instruction and real-world problem-solving in the aquatic sciences*. Fishery Educator's Section Special Session Proceedings. American Fisheries Society 111th Annual Meeting, Albuquerque, NM. 10 p.
- Haynes, J.M., and R.H. Gray. 1979. *Effects of external and internal radiotracer attachments on adult chinook salmon*. Pages 115-128 in Proceedings of the Second International Conference on Wildlife Biotelemetry. University of Wyoming, Laramie, WY.

Technical Reports (* student author)

- Haynes, J.M. 2010. *Fish community characteristics in Waneta and Lamoka Lakes, October 2004–October 2008, after herbicide treatment of aquatic macrophytes in June 2008*. Lamoka-Waneta Lakes Association. 27 pp.
- Haynes, J.M. 2008. *Fish community characteristics in Waneta and Lamoka Lakes, May 2003–October 2006, after herbicide treatment of aquatic macrophytes in Waneta Lake in April 2003*. Final report to the Lamoka-Waneta Lakes Association. Tyrone, NY. 59 p.

- Haynes, J.M., S.T. Wellman*, and J.J. Pagano. 2007. *RAP progress in the Rochester Embayment of Lake Ontario: population monitoring, trophic relationships, and levels of bioaccumulative chemicals of concern in mink, a sentinel species*. Final report to the NYS Great Lakes Protection Program, NYS Department of Environmental Conservation. Buffalo, NY. 146 p.
- Haynes, J.M., and S.M. Wells*. 2007. *Status of the longear sunfish, Lepomis megalotis, in western New York State, USA*. Final report to the New York State Department of Environmental Conservation. Albany, NY. 121 p.
- Haynes, J.M. 2006. *Fish community characteristics in Waneta and Lamoka Lakes, May 2003-October 2005, after chemical treatment of aquatic macrophytes in Waneta Lake in April 2003*. Final report to the Lamoka-Waneta Lakes Association. Tyrone, NY. 83 p.
- Haynes, J.M., and S.M. Wells*. 2006. *Fishes in Muddy Creek, Erie National Wildlife Refuge-Seneca Division, with emphasis on host species for federal and state-listed freshwater mussels and state-listed fishes*. Erie National Wildlife Refuge. Guys Mills, PA. 35 p.
- Haynes, J.M. 2005. *Fish communities in Waneta and Lamoka Lakes*. The Lamoka-Waneta Lakes Association. Tyrone, NY. 18 p.
- Haynes, J.M., J.C. Makarewicz and T.C. Young. 2004. *Levels of bioaccumulative chemicals of concern in air, water, sediment and sentinel species of the Rochester Embayment of Lake Ontario*. Final report to the New York Great Lakes Protection Fund. Buffalo, NY. 44 p.
- Haynes, J.M. *Indicators of change in water quality and environmental health in the Irondequoit Creek wetland complex, 1996-2003*. 2004. Final report to the Monroe County Department of Health. Rochester, NY. 23 p.
- Haynes, J.M., R.C. Dilcher, C.J. Norment, J.A. Zollweg and N.F. Parnell*. 2003. *Biological study of Irondequoit Bay*. New York Dept. of State/Monroe County. 226 p.
- Parnell*, N.F., R.P. Walter* and **J.M. Haynes**. 2003. *Assessing the status of fish communities in Lamoka and Waneta Lakes*. The Lamoka-Waneta Lakes Association. 22 p.
- Makarewicz, J.C., **J.M. Haynes**, R.C. Dilcher, J.C. Hunter, C.J. Norment and T.W. Lewis. 2000. *Biological survey of Yanty Creek Marsh*. NY Office of Parks, Recreation and Historic Preservation. 183 p.
- Haynes, J.M., and J.N. McNamara. 1998. *Indicators of change in water quality and environmental health in the Irondequoit Creek wetland complex*. Final report to Monroe Co. Dept. of Health. Rochester, NY. 48 p.
- Haynes, J.M. (Ed.). 1999, 1997, 1995, 1993, 1991. *New curricula developed by undergraduate faculty participants in the GLRC/NSF summer practicum*. Final reports to the National Science Foundation by the Great Lakes Research Consortium Summer Practicum for Applied Environmental Problem-Solving. 298, 567, 517, 444, 252 p.
- Haynes, J.M. (Ed.). 1998, 1996, 1994. *New curricula developed by faculty participants in the CASSA/NSF stressed stream analysis program*. Final reports to the National Science Foundation by the Center for Applied Aquatic Science and Aquaculture Stressed Stream Analysis Program. 396, 358, 350 p.
- Haynes, J.M. 1995. *Community ecology of the Niagara County artificial reef and nearby natural areas of Lake Ontario*. Final report to U.S. Fish and Wildlife Service. Amherst, NY. 38 p.
- Haynes, J.M. 1994. *Survey of Buttonwood Creek, Monroe County, NY to determine habitat availability for and relative abundance of a species of special concern, the pirate perch (*Aphredoderus sayanus*)*. Final report to Monroe County Dept. of Transportation. Rochester, NY. 23 p.
- Haynes, J.M. 1990. *Methods for sampling reef fishes, with emphasis on the red snapper (*Lutjanus**

- campechanus), *in the Gulf of Mexico: is stock assessment feasible?* NOAA/NMFS/SEFC Mississippi Laboratories. Pascagoula, MS. 66 p.
- Haynes, J.M. 1988. *Behavior and thermal habitats of fish at Somerset Station and in Lake Ontario: two-pump vs. three-pump operation*. Data report to the NY State Electric and Gas Corp. Binghamton, NY. 74 p.
- Haynes, J.M., G.P. Gerber* and J.K. Buttner. 1987. *Thermal ecology of selected sport fishes near Somerset Station and in Lake Ontario*. Final report to the NY State Electric and Gas Corp. Binghamton, NY. 118 p.
- Haynes, J.M., G.P. Gerber* and J.K. Buttner. 1987. *Movements and temperatures of salmonids and centrarchids near Somerset Station and in Lake Ontario in 1986*. 1986 annual report to the NY State Electric and Gas Corp. Binghamton, NY. 252 p.
- Haynes, J.M., and G.P. Gerber*. 1987. *Activity and survival of winter-impinged fish at Somerset Station*. Data report to the NY State Electric and Gas Corp. Binghamton, NY. 28 p.
- Haynes, J.M., J.K. Buttner and G.P. Gerber*. 1986. *Movements and temperatures of selected sport fishes near Somerset Station and in Lake Ontario in 1985*. 1985 annual report to the NY State Electric and Gas Corp. Binghamton, NY. 188 p.
- Haynes, J.M., J.K. Buttner and G.P. Gerber*. 1985. *Movements and temperatures of brown trout and rainbow/steelhead trout near Somerset Station and in Lake Ontario in fall 1984*. 1984 annual report to the NY State Electric and Gas Corp. Binghamton, NY. 36 p.
- Haynes, J.M., and C.J. Keleher*. 1984. *Spring and summer locations and temperatures of Pacific salmon in Lake Ontario*. Final report to the Ontario Ministry of Natural Resources/ Ontario Charter Boat Assoc./St. Catharines Fish and Game Assoc. 32 p.
- Haynes, J.M., J.C. Makarewicz and R.C. Dilcher. 1979. *Biological survey of Cape Vincent Harbor, NY*. Final report to the U.S. Army Corps of Engineers, Buffalo, NY. 50 p.
- Haynes, J.M. 1978. *Movement and habitat studies of chinook salmon and white sturgeon*. Special report to the U.S. Department of Energy by the Battelle Pacific Northwest Laboratories, Richland, WA. PNL-2471. 65 p. (also my Ph.D dissertation)
- Makarewicz, J.C., **J.M. Haynes** and R.C. Dilcher. 1979. *Biological survey of Oak Orchard Harbor, NY*. Final report to the U.S. Army Corps of Engineers, Buffalo, NY. 53 p.
- Makarewicz, J.C., R.C. Dilcher, **J.M. Haynes** and K.A. Shump. 1982. *Biological survey of the Buffalo River and Outer Harbor of Buffalo, NY*. Data report to the U.S. Army Corps of Engineers. Buffalo, NY. 155 p.
- Makarewicz, J.C., R.C. Dilcher, **J.M. Haynes** and K.A. Shump. 1982. *Biological survey of the Buffalo River and Outer Harbor of Buffalo, NY*. Final report to the U.S. Army Corps of Engineers. Buffalo, NY. 117 p.
- Poulin*, K.A., and **J.M. Haynes**. 1986. *Construction techniques, environmental impacts and laws/regulations for recreation development on the Great Lakes: an annotated bibliography and discussion of critical needs in New York*. Sea Grant First Impressions Report. NY Sea Grant Institute, SUNY at Stony Brook, NY. 71 p.

External Funding

- Haynes, J.M., K.F. Korfmacher, and E.J. Mellas. 2010-2012. *GLISTEN collaborative cluster planning and implementation*. Great Lakes Innovative Stewardship Through Education Network, National Center for Science and Cooperative Education.
- Haynes, J.M., and G. Neuderfer. 2010-2011. *Water quality monitoring for the Remedial Action Plan*. Monroe County Dept. of Health.

- Haynes, J.M., and J.A. Zollweg. 2005-2006. *Distribution of host fishes for listed and rare freshwater mussel species, and of state-listed fishes, in Muddy Creek on the Erie National Wildlife Refuge*. US Fish and Wildlife Service.
- Haynes, J.M. 2004-2006. *Status of longear sunfish populations in western New York*. NY Dept. of Environmental Conservation.
- Haynes, J.M. 2004. *Benthic macroinvertebrates of the Irondequoit Bay wetland*. Monroe County Dept. of Health.
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- Haynes, J.M. 2002. *Biological study of Irondequoit Bay*. Monroe County Department of Planning and Development.
- Haynes, J.M. 2002-2010. *Fishery study of Waneta and Lamoka Lakes*. Waneta-Lamoka Lakes Association.
- Haynes, J.M., S.M. Millar and M.M. Hluchy. 2001-2006. *Assessment and evaluation supplement to "Regional Workshops Led by Successful Innovators and Experienced Investigators."* National Science Foundation.
- Haynes, J.M. and M.M. Hluchy. 2000-2005. *Disseminating successful undergraduate science curriculum development, adaptation and implementation strategies and CCLI grant writing techniques: regional workshops led by successful innovators and experienced investigators*. National Science Foundation.
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- Haynes, J.M., J. Chiarenzelli, A. Nelson, J. Pagano and T.C. Young. 1999-2001. *Academic program assessment*. Great Lakes Research Consortium.
- Tisch, N., **J.M. Haynes** and C. Mayer. 1999. *Impact assessment of the introduced amphipod, Echinogammarus ischnus, in the Great Lakes*. Great Lakes Research Consortium.
- Makarewicz, J.C. and **J.M. Haynes** (Principal Investigators) and R.C. Dilcher, J.C. Hunter and C.J. Norment (Co-Principal Investigators). 1999. *Biological survey of Yanty Creek Marsh*. NY Office of Parks, Recreation and Historic Preservation.
- Haynes, J.M. (Lead Instructor), and seven co-investigators. 1998-99, 1996-97, 1994-95, 1993-93, 1990-91. *Great Lakes Research Consortium summer practicum for applied environmental problem-solving: new approaches and techniques for undergraduate faculty*. National Science Foundation, Undergraduate Faculty Enhancement Program.
- Haynes, J.M. (Project Director), and six co-investigators. 1997-98, 1995-96, 1993-94. *Stressed Stream Analysis: addressing real environmental problems to stimulate undergraduate faculty*. National Science Foundation, Undergraduate Faculty Enhancement Program.
- Haynes, J.M. 1996-97. *Macroinvertebrate survey, sampling strategy, and biotic index for the Irondequoit Creek wetland*. Monroe County Dept. of Health.
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- Haynes, J.M. 1992-93. *Deployment and recovery of sediment samplers and side-scan sonar in Lake Ontario*. SUNY at Stony Brook.

- Haynes, J.M. 1991. *Relative fish abundance at an artificial reef in Lake Ontario*. Niagara County Department of Planning and Industrial Development.
- Haynes, J.M. 1990. *Sediment sampling and analysis, Braddock Bay, Lake Ontario*. Town of Greece, NY.
- Haynes, J.M., and N.J. Frisch. 1989-90. *Illustrated guide and slide set for Hudson River fishes*. Hudson River Foundation.
- Haynes, J.M., and J.C. Makarewicz. 1989. *Sediment core sampling, Olcott Harbor, NY*. U.S. Army Corps of Engineers.
- Haynes, J.M. 1987-88. *Attraction of fishes to the thermal plume at Somerset Station under two-pump operating conditions*. Stone and Webster Engineering Corp.
- Haynes, J.M., D.J. Stewart and R.G. Werner. 1987-88. *Dynamics of salmonine predation in Lake Ontario, 1983-88*. Great Lakes Research Consortium.
- Buttner, J.K., and **J.M. Haynes**. 1987-88. *Expanding and enhancing existing freshwater research and education facilities at the SUNY College at Brockport*. U.S. Department of Education.
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- Haynes, J.M. 1984-87. *Thermal ecology of Lake Ontario fishes*. NY State Electric and Gas Corp.
- Haynes, J.M. 1984. *Summer locations and temperatures of Pacific salmon in western Lake Ontario*. Ontario Ministry of Natural Resources/Ontario Charter Boat Association.
- Haynes, J.M. 1983. *Recreation facility design and environmental impacts on the Great Lakes*. NY Sea Grant/NOAA.
- Haynes, J.M. 1983. *Photographic and illustrated key of selected NY fishes*. Faculty Grant for the Improvement of Undergraduate Instruction. SUNY.
- Haynes, J.M., and J.D. Winter. 1981-83. *Movements, distributions and habitat preferences of Lake Ontario salmonids*. NY Sea Grant/NOAA.
- Haynes, J.M. 1980. *Spawning movements of Lake Ontario brown trout using radiotelemetry*. University Awards Program. SUNY.
- Haynes, J.M., and J.C. Makarewicz. 1978-79. *Biological survey of Cape Vincent Harbor, NY*. U.S. Army Corps of Engineers.
- Makarewicz, J.C., and **J.M. Haynes**. 1978-79. *Biological survey of Oak Orchard Harbor, NY*. U.S. Army Corps of Engineers.

References

Available on request