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Education

Ph.D. in Ecology, Institute of Ecology, University of Georgia, USA, under direction of Dr. Catherine Pringle, May 2001. Dissertation title: 'Stream community and ecosystem responses to deforestation in eastern Madagascar.'

B.Sc. in Marine and Freshwater Biology, Queen Mary and Westfield College (University of London), UK, June 1993, under direction of Prof. Alan Hildrew.

Professional experience

Assistant Professor. Department of Biological Sciences, University of Alabama (2005-present).

Postdoctoral Scientist. The Ecosystems Center, Marine Biological Laboratory (2002-2005). Examined the responses of high-Arctic stream ecosystems to climate change, with a focus on Arctic grayling populations.

Postdoctoral Researcher. Institute of Ecology, University of Georgia (2001-2002). Examined effect of increased nutrient concentrations on ecosystem function of detritus-based headwater streams.

Short-term Research. Institute of Ecology, University of Georgia (2000-2001). Examined role of terrestrial carbon in the trophic support of coastal fish communities in Micronesia and the structure of Micronesian stream ecosystems.

Dissertation Research. Institute of Ecology, University of Georgia (1996 to 2001). Examined effects of deforestation on the stream communities and ecosystems of eastern Madagascar and the conservation ecology of the web-footed tenrec *Limnogale mergulus*, an endemic mammal.

Research Assistant. Institute of Ecology, University of Georgia (1995-1996). Examined migration and ecosystem function of tropical freshwater shrimps in Puerto Rico.

Undergraduate Researcher. Rara Avis rainforest reserve, Costa Rica (1992). Conducted studies on macroinvertebrates and leaf litter decomposition in a tropical stream.

Research interests	Stream community and ecosystem ecology; ecological stoichiometry; global change; freshwater biodiversity; ecology of fishes and semi-aquatic mammals.
Teaching experience	<p>BSC 385 – <i>General Ecology</i>, every Fall since 2007.</p> <p>BSC 652 – <i>Community Ecology</i>, Spring in even years since 2006.</p> <p>BSC 485/585 – <i>Aquatic Biology Seminar</i>, every Spring since 2008.</p> <p>BSC 695 – <i>Stable Isotope Ecology</i>, Spring 2009.</p> <p>BSC 695 – <i>Fish Bioenergetics</i>, Spring 2007.</p> <p>BSC 695 – <i>Frontiers in Ecology</i> (seminar class), Fall 2005.</p> <p>Teaching assistant, ECL 350 - <i>General Ecology</i>, Fall 1996; ECL 362 - <i>Vertebrate Diversity and Evolution</i>, Winter 1997; ECL 1000 - <i>Ecological basis of environmental issues</i>, Summer 1997 and Spring 2000.</p>
Awards	<p>Awarded First Class (Honors), University of London, June 1993.</p> <p>Awarded three competitive University-Wide Research Assistantships, University of Georgia, 1995-6, 1997-8, and 1998-9.</p>
Grants received	<p>National Science Foundation (Division of Environmental Biology): “Collaborative Research: Defining ecosystem heterotrophic response to nutrient concentrations and ratios” 2010-2013 (\$1,180,427); (Co-PI with A. Rosemond, J. Maerz and V. Gulis).</p> <p>National Science Foundation (Office of International Science and Engineering): “U.S.A.-Iceland International Planning Visit: Interactive effects of climate warming and nutrient enrichment on stream ecosystems” 2009-2010 (\$16,591); (Co-PI with W. Cross and A. Huryn).</p> <p>National Science Foundation (Arctic Sciences Division): “Factors controlling seasonal changes in the structure and function of food webs of perennial spring streams in Arctic Alaska.” 2006-2009 (\$541,347); (Co-PI with A. Huryn).</p> <p>St. Johns River Water Management District (Florida, USA): “Assessment of the effects of land use changes on LSJRB watershed detrital input (Phase II).” 2005-2007 (\$320,000); (with A. Benke, A. Huryn and M. Chadwick).</p> <p>National Geographic Society: “Distribution, conservation status, and</p>

molecular phylogeography of Madagascar's web-footed tenrec.”
2005-2006 (\$10,000); (with L. Olson).

The Douroucouli Foundation: “Conservation ecology of the endangered aquatic tenrec *Limnogale mergulus* (Insectivora: Tenrecidae) in Ranomafana National Park, Madagascar.” 1997-1999 (\$8,000); (with C.M. Pringle).

**Journal
articles (27)**

Suberkropp, K., V. Gulis, A.D. Rosemond, and J.P. Benstead. *In revision*. Ecosystem and physiological scales of microbial responses to nutrients in a detritus-based stream: results of a 5-year continuous enrichment. *Limnology and Oceanography* **00**:000-000.

Benstead, J.P., A.D. Rosemond, W.F. Cross, J.B. Wallace, S.L. Eggert, K. Suberkropp, V. Gulis, J.L. Greenwood, and C.J. Tant. 2009. Nutrient enrichment alters storage and fluxes of detritus in a headwater stream ecosystem. *Ecology* **90**:2556-2566.

Bixby, R., J.P. Benstead, M.M. Douglas, and C.M. Pringle. 2009. Relationships of stream algal community structure to catchment deforestation in eastern Madagascar. *Journal of the North American Benthological Society* **28**:466-479.

Benstead, J.P., J.G. March, C.M. Pringle, K.C. Ewel, and J.W. Short. 2009. Biodiversity and ecosystem function in species-poor communities: community structure and leaf litter breakdown in a Pacific island stream. *Journal of the North American Benthological Society* **28**:454-465.

Cross, W.F., A.P. Covich, T.A. Crowl, J.P. Benstead, and A. Ramírez. 2008. Secondary production, longevity and consumption rates of freshwater shrimps in two tropical streams of contrasting geomorphology and food web structure. *Freshwater Biology* **53**:2504-2519.

Benstead, J.P., A.C. Green, L.A. Deegan, B.J. Peterson, K. Slavik, W.B. Bowden, and A.E. Hershey. 2007. Recovery of three Arctic stream reaches from experimental nutrient enrichment. *Freshwater Biology* **52**:1077-1089.

Frost, P.C., J.P. Benstead, W.F. Cross, H. Hillebrand, J.H. Larson, M.A. Xenopoulos, and T. Yoshida. 2006. Threshold elemental ratios of carbon and phosphorus in aquatic consumers. *Ecology Letters* **9**:774-779.

Benstead, J.P., J.G. March, B. Fry, K.C. Ewel, and C.M. Pringle. 2006. Testing IsoSource: stable isotope analysis of a tropical fishery with diverse organic matter sources. *Ecology* **87**:326-333.

- Cross, W.F., J.P. Benstead, P.C. Frost, and S.A. Thomas. 2005. Ecological stoichiometry in freshwater benthic systems: recent progress and perspectives. *Freshwater Biology* **50**:1895-1912.
- Frost, P.C., W.F. Cross, and J.P. Benstead. 2005. Ecological stoichiometry in benthic freshwater ecosystems: an introduction. *Freshwater Biology* **50**:1781-1785.
- Wilcox, H.S., J.B. Wallace, J.L. Meyer, and J.P. Benstead. 2005. Effects of labile carbon addition on a headwater stream food web. *Limnology and Oceanography* **50**:1300-1312.
- Goodman, S.M. and J.P. Benstead. 2005. Updated estimates of biotic diversity and endemism for Madagascar. *Oryx* **39**:73-77.
- Benstead, J.P., L.A. Deegan, B.J. Peterson, A.D. Huryn, W.B. Bowden, K. Suberkropp, K.M. Buzby, A.C. Green, and J. Vacca. 2005. Responses of a beaded Arctic stream to short-term N and P fertilisation. *Freshwater Biology* **50**:277-290.
- Gulis, V., A.D. Rosemond, K. Suberkropp, H.S. Weyers, and J.P. Benstead. 2004. Effects of nutrient enrichment on the decomposition of wood and associated microbial activity in streams. *Freshwater Biology* **49**:1437-1447.
- Benstead, J.P. and C.M. Pringle. 2004. Deforestation alters the resource base and biomass of endemic stream insects in eastern Madagascar. *Freshwater Biology* **49**:490-501.
- Benstead, J.P., P. de Rham, J.-L. Gattolliat, F.-M. Gibon, P.V. Loiselle, M. Sartori, J.S. Sparks, and M.L.J. Stiassny. 2003. Conserving Madagascar's freshwater biodiversity. *BioScience* **53**:1101-1111.
- March, J.G., J.P. Benstead, C.M. Pringle, and F.N. Scatena. 2003. Damming tropical island streams: problems, solutions, and alternatives. *BioScience* **53**:1069-1078.
- Benstead, J.P., M.M. Douglas, and C.M. Pringle. 2003. Relationships of stream invertebrate communities to deforestation in eastern Madagascar. *Ecological Applications* **13**:1473-1490.
- Cross, W.F., J.P. Benstead, A.D. Rosemond, and J.B. Wallace. 2003. Consumer-resource stoichiometry in detritus-based streams. *Ecology Letters* **6**:721-732.

March, J.G., J.P. Benstead, C.M. Pringle, and M. Luckymis. 2003. Benthic community structure and invertebrate drift in a Pacific island stream, Kosrae, Micronesia. *Biotropica* **35**:125-130.

McCafferty, W.P. and J.P. Benstead. 2002. Cladistic resolution and ecology of the Madagascar genus *Manohyphella* Allen (Ephemeroptera: Teloganodidae). *Annales de Limnologie* **38**:41-52.

Benstead, J.P., K.H. Barnes, and C.M. Pringle. 2001. Diet, activity patterns, foraging movement and responses to deforestation of the aquatic tenrec *Limnogale mergulus* (Lipotyphla: Tenrecidae) in eastern Madagascar. *Journal of Zoology* **254**:119-129.

March, J.G., J.P. Benstead, C.M. Pringle, and M.W. Ruebel. 2001. Linking shrimp assemblages with rates of detrital processing along an elevational gradient in a tropical stream. *Canadian Journal of Fisheries and Aquatic Sciences* **58**:470-478.

Benstead, J.P., J.G. March, and C.M. Pringle. 2000. Estuarine larval development and upstream post-larval migration of freshwater shrimps in two tropical rivers of Puerto Rico. *Biotropica* **32**:545-548.

Benstead, J.P., J.G. March, C.M. Pringle, and F.N. Scatena. 1999. Effects of a low-head dam and water abstraction on migratory tropical stream biota. *Ecological Applications* **9**:656-668.

March, J.G., J.P. Benstead, C.M. Pringle, and F.N. Scatena. 1998. Migratory drift of larval freshwater shrimps in two tropical streams, Puerto Rico. *Freshwater Biology* **40**:261-273.

Benstead, J.P. 1996. Macroinvertebrates and the processing of leaf litter in a tropical stream. *Biotropica* **28**:367-375.

Manuscripts in review (1)

Benstead, J.P., W.F. Cross, J.G. March, W.H. McDowell, A. Ramírez, and A.P. Covich. Biotic and abiotic controls on ecosystem significance of consumer excretion in two contrasting tropical streams. Submitted to *Freshwater Biology*.

Manuscripts in preparation (3)

Benstead, J.P., L.A. Deegan, A.D. Huryn, and B.J. Peterson. Effects of phosphorus fertilization on stoichiometric interactions in an arctic river foodweb. To be submitted to *Ecology*.

Benstead, J.P., A.D. Huryn, D.M. Sanzone, S.M. Parker, B.J. Peterson, L.A. Deegan, and W.B. Bowden. Nitrogen uptake and transformation in adjacent arctic streams of contrasting disturbance regime. To be submitted to *Limnology and Oceanography*.

Benstead, J.P., A.D. Huryn, S.M. Parker, and J.B. Ramsey. Seasonal ecology of juvenile northern Dolly Varden (*Salvelinus malma malma*) in a spring-fed arctic stream. To be submitted to *Freshwater Biology*.

Edited book

Goodman, S.M. and J.P. Benstead (Eds). 2003. *The Natural History of Madagascar*. University of Chicago Press, Chicago, USA.

Book chapters (5)

Peterson, B.J., L.A. Deegan, W.B. Bowden, A.D. Huryn, S.M. Parker, and J.P. Benstead. *Submitted*. Streams. Pages 000-000 in Hobbie, J.E., and Kling, G.W. (Eds) A warming arctic: ecological consequences for tundra, streams and lakes. Oxford University Press, Oxford, UK.

Cross, W.F., A.D. Rosemond, J.P. Benstead, S.L. Eggert, and J.B. Wallace. 2005. Differential effects of consumers on C, N, and P dynamics: insights from long-term research. Pages 235-247 in de Ruiter, P.C., Wolters, V., and Moore, J.C. (Eds) Dynamic food webs: multispecies assemblages, ecosystem development and environmental change. Academic Press, San Diego, USA.

Benstead, J.P. and L. Olson. 2003. *Limnogale mergulus*. Pages 1267-1273 in Goodman, S.M. and Benstead, J.P. (Eds) The natural history of Madagascar. University of Chicago Press, Chicago, USA.

Pringle, C.M. and J.P. Benstead. 2001. The effects of logging on tropical river ecosystems. Pages 305-325 in Fimbel, R.A, Grajal, A., and Robinson, J.G. (Eds) The cutting edge: conserving wildlife in logged tropical forests. Columbia University Press, New York, USA.

Benstead, J.P., M.L.J. Stiassny, P.N. Loiselle, K.J. Riseng, and N. Raminosoa. 2000. River conservation in Madagascar. Pages 205-231 in Boon, P.J., Davies, B.R., and Petts, G.E. (Eds) Global perspectives on river conservation: science, policy and practice. Wiley, Chichester, UK.

**Published or
accepted abstracts
(50)**

Venarsky, M.P., J.P. Benstead, and A.D. Huryn. 2009. Leaf litter processing in four cave-stream ecosystems. *Bulletin of the North American Benthological Society* **26**:178.

Ramsey, J.B., J.P. Benstead, A.D. Huryn, and S.M. Parker. 2009. Accelerated rates of detrital processing exacerbate winter carbon-limitation of an Arctic spring-stream ecosystem. *Bulletin of the North American Benthological Society* **26**:102.

Benstead, J.P., A.D. Huryn, S.M. Parker, and J.B. Ramsey. 2009. Linking bioenergetics of a top stream predator to ecosystem function in an arctic spring-fed stream. *Bulletin of the North American Benthological Society* **26**:132-133.

Morse, N.B., W.M. Wollheim, J.P. Benstead, and W.H. McDowell. 2009. Impacts of suburbanization on food web stoichiometry in detritus-based streams of New England. *Bulletin of the North American Benthological Society* **26**:195.

Venarsky, M.P., A.D. Huryn, B.R. Kuhajda, and J.P. Benstead. 2008. Life history of the obligate cave crayfish *Orconectes australis australis*. *Bulletin of the North American Benthological Society* **25**:159-160.

Kendrick, M.R., J.B. Ramsey, J.P. Benstead, M.P. Venarsky, and M.K. Junior. 2008. Variation in $\text{NH}_4\text{-N}$ excretion rate in response to starvation and handling stress in freshwater organisms. *Bulletin of the North American Benthological Society* **25**:237.

Ramsey, J.B., A.D. Huryn, J.P. Benstead, and S.M. Parker. 2008. Evidence for strong nitrogen limitation in a perennial spring-fed stream in arctic Alaska. *Bulletin of the North American Benthological Society* **25**:247.

Benstead, J.P., A.D. Huryn, J.B. Ramsey, and S.M. Parker. 2008. Does production of a top stream predator (Dolly Varden charr, *Salvelinus malma*) track seasonal shifts in ecosystem productivity of a spring-fed arctic stream? *Bulletin of the North American Benthological Society* **25**:160-161.

Huryn, A.D., J.P. Benstead, S.M. Parker, and J.B. Ramsey. 2008. Do annual cycles of light availability and snow-melt drive ammonium uptake dynamics in an arctic spring stream? *Bulletin of the North American Benthological Society* **25**:247.

Rosemond, A.D., S. Dye, S.L. Eggert, J.P. Benstead, J.M. Davis, and J.B. Wallace. 2007. Can nutrient-enriched aquatic systems lose carbon? Export of particulate C in response to enrichment in a detritus-based headwater stream. *Bulletin of the North American Benthological Society* **24**:172.

Chadwick, M.A., J.P. Benstead, A.D. Huryn, H.S. Wilcox, D.R. Dobberfuhl, and A.C. Benke. 2007. Assessment of nitrogen dynamics in an urban stream using a ^{15}N tracer addition. *Bulletin of the North American Benthological Society* **24**:215.

Venarsky, M.P., A.D. Huryn, B.R. Kuhajda, and J.P. Benstead. 2007. Assessment of population size, age structure and growth rates for cave-inhabiting crayfish in Alabama. *Bulletin of the North American Benthological Society* **24**:335.

Heatherly, T., D. Sanzone, H.S. Wilcox, J.P. Benstead, A.D. Huryn, S.M. Parker and B.J. Peterson. 2007. Ammonium uptake and transformation in two arctic streams with contrasting disturbance regimes using simultaneous N tracer additions. *Bulletin of the North American Benthological Society* **24**:281.

Sanzone, D.M., B.J. Peterson, H.S. Wilcox, W.B. Bowden, J.P. Benstead, L.A. Deegan, A.D. Huryn, and S.M. Parker. 2006. Nitrogen uptake and retention in arctic spring and mountain stream foodwebs. *Bulletin of the North American Benthological Society* **23**:149.

Wilcox, H.S., M.A. Chadwick, J.P. Benstead, A.D. Huryn, A.C. Benke, and D.R. Dobberfuhl. 2006. Stable isotope analysis of stream foodwebs along an urbanization gradient. *Bulletin of the North American Benthological Society* **23**:342.

Frost, P.C., J.P. Benstead, W.F. Cross, H. Hillebrand, J.H. Larson, C. MacKenzie, M.A. Xenopoulos, and T. Yoshida. 2005. Threshold carbon:phosphorus ratios of aquatic organisms: relative effects of metabolism and elemental composition. Summer Meeting of the American Society of Limnology and Oceanography, Santiago de Compostela, Spain, 19-24 August, 2005.

Benstead, J.P., L.A. Deegan, A.D. Huryn, and B.J. Peterson. 2005. Stoichiometric effects of phosphorus fertilization in an Arctic river food web. Annual meeting of the Ecological Society of America, Montreal, Canada, 7-12 August, 2005.

Frost, P.C., J.P. Benstead, W.F. Cross, H. Hillebrand, J.H. Larson, C. MacKenzie, M.A. Xenopoulos, and T. Yoshida. 2005. Threshold carbon:phosphorus ratios of aquatic consumers: effects of growth rate, metabolism, and body elemental composition. Annual meeting of the Ecological Society of America, Montreal, Canada, 7-12 August, 2005.

Cross, W.F., J.P. Benstead, J.G. March, A. Ramírez, W.H. McDowell, and A.P. Covich. 2005. Consumer-driven nutrient recycling and its effects on whole-ecosystem flux in tropical streams. *Bulletin of the North American Benthological Society* **22**:201.

Benstead, J.P., L.A. Deegan, A.D. Huryn, and B.J. Peterson. 2005. Stoichiometric effects of phosphorus enrichment in the Kuparuk River food web. *Bulletin of the North American Benthological Society* **22**:251-252.

Green, A.C., J.P. Benstead, L.A. Deegan, B.J. Peterson, W.B. Bowden, A.D. Huryn, and A.E. Hershey. 2005. Recovery of three Arctic stream

reaches from experimental nutrient enrichment. *Bulletin of the North American Benthological Society* **22**:373-374.

Wilcox, H.S., D.M. Sanzone, B.J. Peterson, J.P. Benstead, L.A. Deegan, W.B. Bowden, S.M. Parker, A.D. Huryn, and A.C. Green. 2005. Nitrogen dynamics and foodweb interactions in contrasting Arctic streams. *Bulletin of the North American Benthological Society* **22**:378-379.

Benstead, J.P., L.A. Deegan, A.D. Huryn, A.C. Green, and B.J. Peterson. 2004. Stoichiometric interactions in the Kuparuk River food web. *Bulletin of the North American Benthological Society* **21**:174.

Rosemond, A.D., J.P. Benstead, J.W. Greenwood, K. Suberkropp, R. Hilten, S.L. Eggert, W.F. Cross, H.S. Weyers, and J.B. Wallace. 2004. Nutrient enrichment affects carbon dynamics in a detritus-based stream. *Bulletin of the North American Benthological Society* **21**:274-275.

Wilcox, H.S., D.M. Sanzone, B.J. Peterson, J.P. Benstead, L.A. Deegan, W.B. Bowden, S.M. Parker, A.D. Huryn, and A.C. Green. 2004. Nitrogen retention in mountain and spring Arctic streams. *Bulletin of the North American Benthological Society* **21**:424-425.

Suberkropp, K., V. Gulis, A.D. Rosemond, H.S. Weyers, and J.P. Benstead. 2004. Effects of nutrient addition on the annual production of leaf-associated microorganisms in a headwater Appalachian stream. *Bulletin of the North American Benthological Society* **21**:413.

Green, A.C., H.S. Wilcox, B.J. Peterson, W.B. Bowden, L.A. Deegan, A.D. Huryn, J.P. Benstead, H.M. Rantala, and S.M. Parker. 2004. Stream network characteristics of the Upper Kuparuk watershed, North Slope, Alaska. *Bulletin of the North American Benthological Society* **21**:224-225.

Rosemond, A.D., K. Suberkropp, W. Cross, J. Greenwood, V. Gulis, P.J. Mulholland, J.B. Wallace, H.S. Weyers, J.P. Benstead, and R. Hilten. 2003. Relative response of consumers, resources, and ecosystem function to nutrient enrichment in a detritus-based system. Annual Meeting of the Ecological Society of America, Savannah, Georgia, 3-8 August, 2003.

Gulis, V., K. Suberkropp, H.S. Weyers, J.P. Benstead, and A.D. Rosemond. 2003. Whole-stream nutrient enrichment increases decomposition rate of wood and associated microbial activity. *Bulletin of the North American Benthological Society* **20**:94.

Cross, W.F., J.P. Benstead, A.D. Rosemond, and J.B. Wallace. 2003. Ecological stoichiometry of a detritus-based stream food web. *Bulletin of the North American Benthological Society* **20**:272.

Benstead, J.P., L.A. Deegan, B.J. Peterson, A.D. Huryn, and A.C. Green. 2003. A stoichiometric perspective on the Kuparuk River long-term fertilization experiment. *Bulletin of the North American Benthological Society* **20**:287.

Barnes, K.H. and J.P. Benstead. 2003. Diets of an endemic *Bedotia* sp. (Pisces: Bedotiidae) and co-occurring exotic fishes in eastern Madagascar. *Bulletin of the North American Benthological Society* **20**:339-340.

Wilcox, H.S., J.B. Wallace, J.L. Meyer, and J.P. Benstead. 2003. Effects of a labile carbon addition on benthic macroinvertebrate abundance, biomass, and stable isotope signature in a headwater stream, North Carolina, USA. *Bulletin of the North American Benthological Society* **20**:375-376.

Sanzone, D.M., B.J. Peterson, K.H. Barnes, J.P. Benstead, L.A. Deegan, C.P. Crockett, W.B. Bowden, S.M. Parker, A.D. Huryn, and A.C. Green. 2003. Nitrogen uptake and transformation in arctic spring and mountain streams. *Bulletin of the North American Benthological Society* **20**:369-370.

Green, A.C., B.J. Peterson, L.A. Deegan, J.P. Benstead, W.B. Bowden, A.D. Huryn, S.M. Parker, J.A. Vacca, C.P. Crockett, and J.L. Mosher. 2003. Effects of nutrient fertilization on a small beaded tundra stream on the North Slope of Alaska. *Bulletin of the North American Benthological Society* **20**:335.

Rosemond, A.D., J.P. Benstead, K. Suberkropp, W.F. Cross, P.J. Mulholland, J.L. Greenwood, and J.B. Wallace. 2002. Does nutrient enrichment increase carbon limitation of a detritus-based stream food web? Annual Meeting of the Ecological Society of America, Tucson, Arizona, 5-9 August, 2002.

Benstead, J.P., A.D. Rosemond, J.B. Wallace, K. Suberkropp, J.L. Greenwood, and W.F. Cross. 2002. Long-term nutrient enrichment alters organic matter dynamics in a headwater stream. *Bulletin of the North American Benthological Society* **19**:219-220.

Suberkropp, K., V. Gulis, H.S. Weyers, J.P. Benstead, and A. D. Rosemond. 2002. Effects of nutrient addition on the annual production of leaf-associated microorganisms in a headwater Appalachian stream. *Bulletin of the North American Benthological Society* **19**:231.

March, J.G. and J.P. Benstead. 2002. Habitat and community structure along a Pacific island stream continuum. *Bulletin of the North American Benthological Society* **19**:272.

Benstead, J.P. 2001. Conservation status of Madagascar's river ecosystems: lessons from a large ancient island. Society of Conservation Biology Annual Meeting, Hilo, Hawaii, 30 July – 1 Aug 2001.

March, J.G., J.P. Benstead, C.M. Pringle, and F.N. Scatena. 2001. Mitigating the negative effects of dams on migratory tropical island stream biota. Society of Conservation Biology Annual Meeting, Hilo, Hawaii, 30 July – 1 Aug 2001.

Benstead, J.P. and C.M. Pringle. 2001. Responses of stream periphyton metabolism to deforestation in eastern Madagascar. *Bulletin of the North American Benthological Society* **18**:261.

March, J.G., J.P. Benstead, C.M. Pringle, and K.C. Ewel. 2001. Role of tropical macroconsumers in leaf litter breakdown: insights from an insect-poor Micronesian stream. *Bulletin of the North American Benthological Society* **18**:259.

Benstead, J.P. and C.M. Pringle. 2000. Responses of stream food webs to deforestation in southeastern Madagascar. *Bulletin of the North American Benthological Society* **17**:201.

Rabeson, P.N., J.P. Benstead, and C.M. Pringle. 2000. Seasonality and composition of aquatic insect emergence in Mariavaratra stream, Ranomafana National Park, Madagascar. *Bulletin of the North American Benthological Society* **17**:215.

Benstead, J.P., J.G. March, and C.M. Pringle. 1998. Effects of water abstraction on interstream differences in the migration of freshwater shrimps, Puerto Rico. American Society of Limnology/Ecological Society of America, St. Louis, Missouri, June 1998.

Benstead, J.P. and C.M. Pringle. 1997. Responses of stream benthic communities to forest conversion in southeastern Madagascar. *Bulletin of the North American Benthological Society* **14**:86-87.

March, J.G., J.P. Benstead, C.M. Pringle, and M. Ruebel. 1997. Effects of fishes and shrimps on leaf breakdown along a tropical river continuum, Puerto Rico. *Bulletin of the North American Benthological Society* **14**:209.

Benstead, J.P., J.G. March, and C.M. Pringle. 1996. Effects of dams and associated water withdrawal on the migration of freshwater shrimps in a

tropical river, Puerto Rico. *Bulletin of the North American Benthological Society* **13**:202.

March, J.G., J.P. Benstead, and C.M. Pringle. 1996. Migration of freshwater shrimp larvae: elevational and diel patterns in two tropical river drainages, Puerto Rico. *Bulletin of the North American Benthological Society* **13**:161.

Professional activities and service

Member of the Editorial Board of *Freshwater Biology* (2005-present).

Guest co-editor of a 2005 *Freshwater Biology* special issue (Vol. 50 Issue 11) on ecological stoichiometry of benthic ecosystems.

Ad hoc reviewer for *Ecology Letters*, *Ecology*, *Ecological Applications*, *BioScience*, *Oecologia*, *Limnology and Oceanography*, *Biogeochemistry*, *Freshwater Biology*, *Conservation Biology*, *Journal of the North American Benthological Society*, *Canadian Journal of Fisheries and Aquatic Sciences*, *Marine Ecology Progress Series*, *Hydrobiologia*, *Archiv für Hydrobiologie*, *Journal of Biogeography*, *Biotropica*, *Journal of Tropical Ecology*, *Copeia*, *North American Journal of Fisheries Management*, *Aquatic Conservation*, and *Invertebrate Biology*.

Invited Speaker: Department of Ecology, Montana State University, 25 September 2008: “Seasonal changes in the structure and function of a spring-fed stream ecosystem in arctic Alaska”

Invited Speaker: Odum School of Ecology, University of Georgia, 2 December 2008: “Seasonal changes in the structure and function of a spring-fed stream ecosystem in arctic Alaska”

National Science Foundation Review Panel Member – 2006 Doctoral Dissertation Improvement Grants (Ecological Biology and Ecosystems Science), 22-24 February 2006.

National Science Foundation Review Panel Member – 2008 Doctoral Dissertation Improvement Grants (Ecological Biology), 13-15 February 2008.

Invited member of IUCN/Species Survival Commission *Afrotheria Specialist Group* (2001-present). See: <http://www.calacademy.org/research/bmammals/afrotheria/ASG.html#>.

Member of the Ecological Society of America and North American Benthological Society (both since 1995).