

PETER N. REINTHAL

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EDUCATION:

Ph.D., Duke University, Zoology, 1987. Dissertation: Morphology, ecology and behavior of a group of the rock-dwelling cichlid fishes from Lake Malawi, Africa. J.G. Lundberg, Advisor.
 M.S., Yale University, Biology, 1982. Division of Ecology and Evolutionary Biology.
 B.A., Reed College, Biology, 1978. Commendation for Academic Excellence, Div. Math & Nat Sciences.

POSITIONS (Current):

Director; University of Arizona Museum of Natural History (EEB Zoology Collections), Department of Ecology and Evolutionary Biology (EEB), University of Arizona 2003-present.
 Associate Curator of Fishes and Invertebrates & Research Associate Professor, EEB, 1999-present.

Executive Committee – Desert Fish Council – 2011-present.

Spikedace (*Meda fulgida*) and Loach Minnow (*Tiaroga cobiatius*) Recovery Team (USFW) - 2012-present.
 Gila chub (*Gila robusta*) recovery team (USFW) – 2012- present.

Native Fishes Conservation Team – 2003-present.

Adjunct Research Professor, School Renewable Natural Resources. University of Arizona. 1999-present.

POSITIONS (Past):

Desert Fishes Recovery Task Force - 2001- present.

Steering Committee, IDEAL (International Decade of East African Lakes) 1997-2010t.

Adjunct Professor, Makerere Univ., Kampala, Uganda & Univ. Antananarivo, Madagascar. 1994-2005.

Coordinator/Instructor, PASS/START Research Training Workshop, MacArthur Foundation, Kenya 2002-2006. (with Eric Odada, University of Nairobi)

Steering Committee, IDEAL (International Decade of East African Lakes) 1997-2005.

Scientific Advisory Committee, Institute for the Conservation of Tropical Environments, 1996-2006.

Associate Professor & Curator of Fishes, Biology Dept, Eastern Michigan University. 1994-1999.

Assistant Professor & Curator of Fishes, Biology Department, Eastern Michigan University. 1991-1994.

Research Scientist, Office Dean of Science, AMNH. 1990-91.

Kalbfleisch Research Fellow and Research Scientist, Department of Herpetology and Ichthyology, American Museum of Natural History. 1988-91.

Joseph Bailey Instructor, Zoology Department, Duke University. 1986-87.

Current Aquatic Research Programs in Arizona:

- 1) Aravaipa Creek Fish Monitoring Program – 2002-present.
- 2) Aravaipa Watershed Mine Tailings/Heavy Metal Contaminants and Food Web Dynamics Program – 2002-present.
- 3) Alum/Sonoita Creek Aquatic Community Structure – 2009-present.
- 4) Lead Contamination in California Condors in Vermillion Cliffs, AZ – 2005-present.

Grants:

USGS (PI Floyd Gray) – Impacts of Mine Tailings on aquatic communities of Alum Creek, Arizona.

Verde River Ecological Flows Study Phase II: Integrated Research for Refining Flow-Ecology Response Models was funded by the Arizona Water Institute (AWI) (2007-08); \$32,394. Co-PI with Dr. Julie Stromberg (ASU, riparian ecology); Dr. Mark Schmeckle (ASU, geomorphology); Dr. Tom Meixner (UA, hydrology); Dr. Peter Reintal (UA, ichthyology); Dr. Abe Springer (NAU, hydrogeology), Jeanmarie Haney (TNC, hydrogeology); and Dale Turner (TNC, biology).

Historical and current fish distributions in the Verde River, Arizona. 2009. \$5,000. The Nature Conservancy. 3/09-6/09.

National Science Foundation. #0602350, Collaborative Research: The Lake Malawi Drilling Project – A long, high-resolution record of abrupt climate change in the southern tropics of East Africa. 09/08/08, \$245,542 = U of A Budget.

Bureau of Land Management. Analyses of lead contamination and food web dynamics in Aravaipa Creek Food Web. 2010. \$25,000

Bureau of Land Management. \$12,500. Monitoring and review of native fishes populations Aravaipa Creek. 2010-15.

Bureau of Land Management. \$18,000. Monitoring and review of native fishes populations Aravaipa Creek. 2003-04. Renewed \$5,000 2004-05. Renewed 2004-10 - \$20,000

Arizona Game and Fish Department. Isotopic analyses of lead in Condors – bullets and blood. \$20,000 2005-2007.

Arizona Game and Fish Department. Linking Bullets and Blood in Condors – an Isotopic Approach. \$40,000 02/01/05 – 02/01/08.

National Science Foundation. #0237447 Repatriation of data from Mexican specimens at the University of Arizona, Biological Research Collections program. April 1, 2003-March 30, 2006, \$116,371.

National Science Foundation. Research Experience for Undergraduates for Repatriation of data from Mexican specimens at the University of Arizona Project, Biological Research Collections program. April 1, 2004-March 30, 2006, \$4,000.

University Foundation Grant - Outreach Collection Development for Benton Shell Collection, P.I. – Dr. Peter Reinthal and Co-P.I., Dr. Katrina Mangin, 2002. \$9,950. As part of this grant, Dr. Mangin and I worked with the development office in raising an endowment for the Benton Shell Collection of approximately \$250,000 for graduate student support.

National Science Foundation. Facilities Improvement Grant, Aquatic and Terrestrial Laboratory Facilities. Co-PI w/ six Biology Faculty 1996-1998, \$331,000. Facilities grant for aquarium and greenhouse research facilities at Eastern Michigan University.

Agency for International Development. University Development Linkage Program Grant; Eastern Michigan University, SUNY Stony Brook, and Duke Univ. with Universities of Antananarivo and Fianarantsoa in Madagascar. 1993-1998, \$2,000,000. Training and research program ‘linking’ 3 U.S. with 2 Madagascar Universities. Field conservation class in Madagascar for 4 years.

National Science Foundation. Faunal Inventory Panel, Ichthyological Survey of Madagascar. DEB-9300996, 9/93-2/98, \$174,980. Surveys and systematics of freshwater fishes of Madagascar.

National Science Foundation. Ecosystems Panel, Lake Victoria: Structure and Function of a Tropical Ecosystem – with Dr. G. Kling, U. Mich., PI., 5 co-PI's, DEB-9318085. 1993-1998, \$600,000. Top-down versus bottom-up impacts of nutrients and exotic species on food web dynamics in Lake Victoria ecosystem.

Aquatic Resources of Ambatovy/Analamay and Tora Tora Fotsy Wetlands, Madagascar, Golder Assoc, 1997-1998. \$ 11,500. Support for surveys in Madagascar.

National Geographic Society. An Ichthyological Survey of the Mangoro River, Madagascar \$11,600.

World Wide Fund for Nature - An Ichthyological Survey of the Mangoro River, Madagascar \$4,660.

National Geographic Magazine - Geographic variation in sculpins of Lake Baikal, USSR 1990.

American Museum of Natural History - Survey of Tiawi/Gola Reserves, Sierra Leone. 1990; \$7,800.

National Geographic Magazine - The cichlid fishes of northern Lake Malawi. 1989.

National Science Foundation - Dissertation Improvement Grant BSR 85-01426, Cichlid fishes of Lake Malawi. 1985-1986; \$10,850.

International Union for Conservation of Nature and World Wildlife Fund (International), Lake Malawi National Park Project w/ D.S.C. Lewis, 1984-86; \$37,000: 1986; WWF (International) \$11,000.

Misc. Grants: CCRE; COCOS Foundation; Sigma Xi; AZ Game and Fish.

AWARDS:

Jack Ward Prize for Best Student Paper, Evolutionary Ecology & Ethology of Fishes Conference, 1987.

Sigma Xi - Sally Hughes Schrader Award, Duke Chapter, 1987.

Cocos Foundation Fellowship in Morphology 1986.

PROFESSIONAL EXPERIENCE:

Teaching Experience:

University of Arizona: Ichthyology (1999, 2001, 03, 05, 07, 09, 11), Evolutionary Biology (2000-12).
 Eastern Michigan University: Ichthyology; Evolution; Zoology; Introductory Biology; Seminars in Aquatic Ecosystems, Molecular Evolution, Elements of Ecology, Bioenergetic Modeling & Speciation.
 MacArthur Foundation Eastern African Aquatic Ecology Training Program (2001-2005) Held in Naivasha, Kenya.
 UDLP Field Class in Madagascar: Field class in Conservation Biology (1994-1997).
 Hunter College, CUNY: Foundations of Science - Non-majors Biology Class (1987-89).
 Duke University (full responsibility for classes): Evolution (non-majors) & Behavioral Ecology (1986/87)

Graduate Students:

Ph.D.:

John Sparks, U of Mich. (2001) Phylogenetic analyses of the cichlid fishes from Madagascar. Ph.D. Program at Univ of Michigan - Co-advisor with G. Smith, U of Michigan. Present position – Curator position at American Museum of Natural History, Department of Ichthyology, 2002.

Masters:

Lisa Brooke McDonough, Univ. Arizona.
 Rebecca Prescott, School of Renewable Natural Resources, University of Arizona.
 Jeff Johnson, 1998. EMU Growth and Life History of *Rastrineobola argentea* (Cyprinidae), Lake Victoria. MSc. 123 pp. Present position – Research Biologist, Smith and Root, Vancouver, Washington.
 Karen Riseng, U of Mich., 1997; The Distribution of Fishes and the Conservation of Aquatic Resources in Madagascar. MSc. 149 pp. - Co-advisor w/ Dr. G. Kling, University of Michigan.
 Jeff Cypher, Msc. EMU, 1996; Wrist morphology of bats: phylogenetic implications. MSc. 143 pp. Present position – Assistant Curator, Toledo Aquarium.

Graduate Student Committees (University of Arizona).

Simone Alin – Completed Fall 2001, GeoSciences; Modern and fossil biodiversity in Lake Tanganyika, East Africa: calibration and interpretation of paleoecological records of diversity turnover in the Late Holocene
 Andy Schultz – Ph.D., RNR. 2007. Gila Chub competition and habitat preferences. Scott Bonar, Chair.
 Kirsten Rowell – Ph.D. student, GeoSciences, Temperature and salinity preferences of Totoaba (*Cynoscion macdonaldi*) and white corvina in the Gulf of California based on oxygen isotopes.
 Sergio Castrezana – Ph.D., EEB, Early stages of speciation in *Drosophila*. Completed 2005. T. Markow, Advisor.
 Cristina Velez – Completed 2004. MSc. University of Arizona. Relative Impact of Predation by Nonnative Fishes on Native Fishes in the Verde River, Arizona.
 Tom Archdeacon, MSc. SNR, Asian Tapeworm impacts on Chub.
 Jason Kline. MSc. SNR. Asian Tapeworm studies.
 Jessica Gwinn. SNR. Effluent impacts on behavior in Bony-tailed chub.
 Peter Holm – PhD student, EEB, Burrowing Snake phylogenetics. 2007. Judy Bronstein, Advisor.
 Jack Ruggirello, on committee 2011 - present.

Undergraduates:

Emily Washburn; Max Louthier, James , Madeline Klees, James L. Cunningham – All presented papers at the Joint Annual Meeting of the Arizona/New Mexico Wildlife/Fisheries Conference in Phoenix, 2012. Louthier and Cunningham won Best Student Poster at the EEB Student Research Competition 2012.

Previous: Caily Nelson, Abigail McCallum, Ami Kidder, Alexander Monteverde, Paul Matson, Nicole Kedrich, Rebecca Prescott, Ceit Chesser, Josie Thompson, Cara J. Rodgveller , Julianne Steers, Jon Duke, Bridget Cashdoll, Frank Peters, Ben Pri-Tal, Kim Smith, Rachel Vaughn, Allison Ebner, Cassandra Hightower, Catarina Kaczurkin (Degree within One Program),

Coordinate approximately 20 volunteers every spring and every fall for the Aravaipa Creek fish sampling – these includes undergraduate students and graduate students from the University of Arizona. Various state (AGFD), federal agency (BLM, USFW, USFS) and NGO (The Nature Conservancy) participate.

International training and management:

Aquatic Sciences Training Program, 2001-2008. Professor and lecturer at East African Aquatic Sciences Training Program in Kenya. MacArthur Foundation.

Adjunct Professor, Makerere Univ., Uganda, 1994-2006. Teach at Makerere and FIRI, Jinja, Uganda. Taught four week class in Kisumu, Kenya Summer 2002.

Madagascar, 1993-1998. A.I.D. sponsored training Malagasy students in aquatic sciences. Teaching conservation biology classes (Oct-Nov 1994-97). Malagasy graduate students.

Cape Maclear Fisheries Station, Lake Malawi. 1981-87. Research station supervisor and training Malawi Fisheries Department personnel.

Smithsonian Research Station, Carrie Bow Cay, Belize, C.A. 1983 & 1989. Manager of research station.

Consultant, Workshops and Panels:

IDEAL (International Decade of East African Lakes) 2nd International Symposium, 2000.

GEF-STAP African Lakes Review, 2000.

Ramsar Wetlands Advisory Committee, Madagascar, 1997.

Conservation International, UNDP and World Bank, 1995. Determine Global Environmental Facility Conservation Priorities in Madagascar, Aquatic Sciences Group Leader.

USAID and Conservation International, 1995. TRADEM Workshop to determine conservation and development guidelines for the international trade in Madagascar wildlife.

Eastern Michigan 1993, University Consortium for EPA Research facility at Bay City, MI.

World Bank, 1991-94. Global Environmental Facility; Research Component of Lake Malawi GEF Project; Ecology and systematics of Lake Malawi cichlid fishes \$6,000,000.

World Bank, 1993-96. Global Environmental Facility; Limnology and water quality monitoring of Lake Malawi. World Bank, 1993-1999. Global Environmental Facility; Part of Lake Victoria team establishing \$5,000,000 research component of \$70,000,000 Lake Victoria GEF.

National Geographic Magazine. Field research on Lake Baikal sculpins, U.S.S.R., 1990. Field research and article on Lake Malawi, 1989/90.

Royal Ontario Museum. 1986. Design exhibit of Lake Malawi cichlid fishes & field team coordination.

Consultant. 1978-80. Identified natural areas, management plans & threatened species in ORE & CA.

Seminars:

Invited Speaker; IDEAL International Symposium; Spring Symposium, Field Museum, Chicago. Global Ecology Series, International Center, St Norbert College. International Ranomafana National Park Project Conference, Fianarantsoa, Madagascar; Lake Huron Basin Symposium, Windsor, Canada.

Plenary Speaker, Fish Trophic Ecology Meetings - GUTSHOP 92. Orcas Island, Washington; Lake Victoria Basin Conference, Jinja, Uganda, Arizona, Michigan State, Guelph, ANSP; Western Michigan; Albion; Univ. Michigan (Fish Div. & Molecular Evol.); Queens College; AMNH Systematic Discussion Group & Members Lectures; Arizona; Rutgers; NYU; Penn; Harvard; Maine; Royal Ontario Mus.

Professional Affiliations and Service:

2011- Elected to Executive Committee, Desert Fishes Council – 2011-2012.

2011- Consultant to COSMOS Magazine (twice):

<http://www.cosmosmagazine.com/news/5057/female-fish-keep-attractive-friends-distract-males>

2011 –President's Club luncheon in Phoenix with COS Development Office.

2010 - EEB Commencement Speaker

Memberships in Professional Societies: Am. Soc. Ichs. & Herps, Evolution, Conservation Biology, Syst. Zool., Desert Fish Council

Local Committee, ASIH Meetings 1991; Co-organized Labroid Fishes: Pattern and Process Symposium; Chaired Sessions; Judge for Stoye Award for Best Student Paper.

Chair, Student Best Paper Awards Committee, American Fisheries Society 2001.
Reviewer – 2012 only – Limnology and Oceanography, NSF, Marine Biology, BioScience.

PUBLICATIONS – Books and CD ROMS:

- Reinthal, Peter. 2000. The Biology of Frogs. CD-ROM. w/ W. Blundell, programmer.
Cohen, Andrew S., & Peter Reinthal. 1999. Biodiversity: The Great Lakes of Africa. CD-ROM. w/ W. Blundell, programmer. Univ. Arizona.
Lewis, D.S.C., P.N. Reinthal & J. Trendall. 1987. *A Guide to the Fishes of Lake Malawi National Park*. World Wildlife Fund, Kreida Press. 72 pp - 20,000 copies; All proceeds raised over \$100,000 for Malawi Faunal Preservation Society.
Reinthal, P.N. 1990. The Living Jewels of Lake Malawi. *National Geographic Magazine*. 177(5): 42-51.
Reinthal, P.N. 1996. *An Illustrated Dissection Guide to the Mexican Gray Perch, Pomadasys magranthans*, 36 pp., 12 figures.

PUBLICATIONS - Academic:

- Reinthal, Peter N., A.S. Cohen, D.L. Dettman. (2011). Fish fossils as paleo-indicators of ichthyofauna composition and climatic change in Lake Malawi, Africa. [Palaeogeography, Palaeoclimatology, Palaeoecology](#) 303 (2011): 126-132.
Bronstein, Judith L. and Peter N. Reinthal. 2010. A New Approach to Teaching Evolution. Book review of *The Tangled Bank*. *Evolution*.
Cohen, A. S., Stone, J., Beuning, K., Ivory, S., Park, L.E., Reinthal, P., Blom, M., McGlue, M., Scholz, C.A., Johnson, T., Brown, E., and King, J., 2009 The Lake Malawi Scientific Drilling Project (LMSDP): Historical ecology of an ancient lake and lessons learned for speciation studies using scientific drilling. Species In Ancient Lakes (SIAL) Workshop. Ohrid, Macedonia, Sept 6-11, 2009.

Cohen, Andrew, S., Jeffery R. Stone, Kristina R. M. Beuning, Lisa E. Park, Peter N. Reinthal, David Dettman, Christopher A. Scholz, Thomas C. Johnson, John W. King, Michael R. Talbot, Erik T. Brown, and Sarah J. Ivory. 2007. Ecological consequences of early Late Pleistocene megadroughts in tropical Africa. *PNAS* 104(42): 16422-16427.
Hearn, D, P. Reinthal and H. Blasius. 2005. Aquatic Macroinvertebrate Diversity and Community Composition of the Gila Box Conservation Area. Bureau of Land Management 29 pp.
Stefferdud, S.E. and P.N. Reinthal. 2005. Fishes of Aravaipa Creek, Graham and Pinal Counties, Arizona; Literature Review and History of Research and Monitoring. Bureau of Land Management, 351 pp.
Desert Fishes Recovery Team. (2003, 2004 and 2006). (1) Status of Federal and State Listed Warm Water Fishes of the Gila River Basin, with Recommendations for Management; (2) Status of Federal and State Non-Listed Warm Water Fishes of the Gila River Basin, with Recommendations for Management; (3) Analysis of recovery plan for implementation of threatened and endangered warm water fishes of Gila basin. Series on status, management and recovery of Gila basin fishes - co-author w/ eleven authors.
Reinthal, P.N. K.J. Riseng and J.S. Sparks. 2003. Water management issues in Madagascar: Biodiversity, conservation and deforestation. In: *Water Management Issues in Africa*, T. Crisman, L. Chapman, C. Chapman and L. Kaufman eds. 124-142 pp.
Hall, D.H., P.N. Reinthal, H.L. Stackhouse and C. Lowe. Accepted with revision. Population characteristics of a commercially harvested frog from northwestern Mexico. *Southwestern Naturalist*.
Sparks, J.S. and P.N. Reinthal. 2001. A new species of *Ptychochromoides* from southeastern Madagascar (Teleostei: Cichlidae) with comments on monophyly & relationships of the ptychochromine cichlids. *Ichthyological Explorations of Freshwaters* 12: 1125-132.
Sparks, J.S. and P.N. Reinthal. 1999. *Paretroplus maromandia*, A new species of cichlid fish from the northwest of Madagascar. *Occ. Pap. Mus. Zool. Univ. Michigan*, Number 727: 1-18.
Reinthal, Peter N & M.L.J. Stiassny. 1997. Revision of the Madagascan genus *Ptychochromoides* with description of a new species. *Ichthyological Explorations of Freshwaters* 7(3/4): 353-368.
Kitchell, J.F., D.E. Schnidler, R. Ogutu-Ohwayo and P.N. Reinthal. 1997. The Nile Perch in Lake Victoria: Interactions between predation and fisheries. *Ecological Applications* 7(2): 653-664.

- Reinthal, Peter N. & A. Meyer. 1997. Molecular phylogenetic tests of speciation models in African cichlid fishes. Pp. 375-390. In *Molecular Evolution and Adaptive Radiations*, Givnish, T.J. and Sytsma, K.J. eds., Cambridge University Press.
- Reinthal, Peter N & M.L.J. Stiassny. 1997. Description of a new species of *Ptychochromoides* (Teleostei: Cichlidae) from the Nosivolo River, Eastern Malagasy Republic. *Ichthyological Explorations of Freshwaters* 7(3/4): 353-368.
- Reinthal, P.N., J. Sparks and K. Riseng. 1996. Ecology, vulnerability and temporal changes in freshwater fish communities in Madagascar. *Proceedings Spring Symposium, Field Museum, Chicago*.
- Reinthal, P.N. & I.G. Macintyre. 1994. Spatial and temporal variations in grazing pressure by herbivorous fish: Tobacco Reef, Belize. *Atoll Research Bulletin* No. 425: 1-14.
- Reinthal, P.N. & G.W. Kling. 1994. Exotic species, trophic interactions and ecosystem dynamics: A case study of Lake Victoria. Stouder, D., K. Fresh and R.J. Feller, eds. *Theory and Application in Fish Trophic Ecology*. The Bell W. Baruch Library in Marine Science Number 18. pp 295-314.
- Moran, P., I. Kornfield, & P.N. Reinthal. 1994. Molecular systematics and radiation of the haplochromine cichlids (Teleostei: Perciformes) of Lake Malawi. *Copeia* 1994(2): 274-288.
- Reinthal, P.N. 1993. Evaluating biodiversity and conserving Lake Malawi's fish fauna. *Conservation Biology* 7:211-219.
- Stiassny, M.L.J. & P.N. Reinthal. 1992. Description of a New Species of *Rheocles* (Atherinomorpha, Bedotiidae) from the Nosivolo Tributary, Mangoro River, Eastern Malagasy Republic. *American Museum Novitates* 3031, 8 pp.
- Reinthal, P.N. & M.L.J. Stiassny. 1991. The fishes of central and eastern Highlands, and coastal plain of Madagascar; a study of an endangered fauna with recommendations for a conservation strategy. *Conservation Biology* 5: 231-243.
- Reinthal, P.N. 1990. Morphological analyses of the neurocranium of a group of rock-dwelling cichlid fishes (Cichlidae: Perciformes) from Lake Malawi, Africa. *Zool. J. Linn. Soc. (Lond)*. 98: 123-139.
- Reinthal, P.N. 1990. The feeding habits of a group of tropical herbivorous rock-dwelling cichlid fishes (Cichlidae: Perciformes) from Lake Malawi, Africa. *Environmental Biology of Fishes*. 27: 215-233.
- Reinthal, P.N. 1989. The gross intestine morphology of a group of rock-dwelling cichlid fishes (Cichlidae: Perciformes) from Lake Malawi, Africa. *Netherlands Journal of Zoology*. 39: 208-225.
- Macintyre, I.G., R.R. Graus, P.N. Reinthal, M.M. Littler & D.S. Littler. 1987. The barrier reef sediment apron: Tobacco Reef, Belize. *Coral Reefs* 6: 1-12.
- Reinthal, P.N. & S.M. Lewis. 1986. Social behavior, foraging efficiency and habitat utilization in a group of tropical herbivorous fish. *Animal Behavior* 34: 1687-1693.
- Stager, J.C., P.N. Reinthal & D.A. Livingstone. 1986. A 25,000 year history for Lake Victoria, East Africa and some comments on its significance for the evolution of cichlid fish. *Freshwater Biology* 16:15-19.
- Reinthal, P.N., B. Kingsley & S.M. Lewis. 1984. Dietary shifts in the queen triggerfish, *Balistes vetula*, in the absence of its primary food item, *Diadema antillarum*. *Marine Ecology* 5(2): 191-195.
- McKaye, K. R., T. Kocher, P.N. Reinthal, R. Harrison & I. Kornfield. 1984. Genetic variation in color morphs of a Lake Malawi cichlid fish. *Evolution* 38: 215-219.
- McKaye, K.R., T. Kocher, P.N. Reinthal & I. Kornfield. 1982. Genetic analysis of a sympatric sibling species complex of *Petrotilapia Trewavas* (Cichlidae, Lake Malawi). *Zool. J. Linnean Soc.* 76:91-96.

PUBLICATIONS - Book Reviews and Technical Reports:

- Sparks, John, Karen Jo Riseng and Peter N. Reinthal. 1998. A Floral and Faunal Survey of the Ephemeral Pools, Streams, and Wetlands in the Ambatovy Region, Eastern, Madagascar. *Phelps Dodge, Madagascar (Ambatovy) Survey*.
- Reinthal, P.N. and D.H. Hall. 1996. Status of Mexican Anuran Populations, Dept of Environment, Mexico City, 68 pp. 6/96.
- Reinthal, P.N. 1993. Limnology and water quality monitoring component for Lake Malawi Global Environmental Facility (GEF) Project. The World Bank, 37 pp. 12/93.
- Reinthal, P.N. 1993. Research Component, Lake Malawi GEF Project. The World Bank, 48 pp. 3/93.
- Reinthal, P.N. 1993. Book review, *Cichlid Fishes: Behaviour, Ecology and Evolution*. Fish & Fisheries Series, Vol. 2. Ed. Miles Keenleyside. *Copeia* 1993: 1200-1202.
- Reinthal, P.N. 1991. Book review, *Cichlids of Lake Malawi* by Ad Konings. *Copeia* 1991: 1165-1166.
- Reinthal, P.N. 1986. IUCN/WWF - Final Report Lake Malawi National Park Project, 47 pp.
- Reinthal, P. 1989. Review, *Fishes of Zimbabwe*, G. Bell-Cross and J.L. Minshull. *Copeia* 1989: 809-810.

- Brightman, K., T.George & P.Reinthal. 1979. White Mountain Bighorn Sheep Report, U.S.F.S., 116 pp.
- George, T.L. & P.N. Reinthal. 1979. Stewardship Master Plan Cascade Head Natural Area. Nature Conservancy, 96 pp.
- Reinthal,P.N. 1979. Evaluation of Top Ten Potential Natural Areas, Oregon. The Nature Conserv. 88 pp.
- Reinthal, P.N. 1979. Sage Grouse Habitat Utilization & Requirements. U.S.F.S. White Mtn. Dist 34 pp.
- Reinthal, P. & E. Schoffelen. 1978. EIS for Expansion of Oxbow Park, Oregon. 42 pp.
- Reinthal, P. & S. Schultz. 1980. Master Plan for Nesika Beach Natural Area. The Nature Conserv. 68 pp.

Surveys, collections and conservation projects:

- Madagascar, 1988-present. Survey and systematics of freshwater fishes; Developing island-wide conservation strategies and priorities for aquatic resources; Long-term monitoring program. Research emphasizes molecular systematics and biogeography of Malagasy fishes. Training Malagasy students.
- Lake Victoria, Uganda. 1992-pres. Ecosystems team studying structure/ function of tropical aquatic ecosystem. Bioenergetic modeling. Food web analysis using stable isotopes. Growth and productivity in *Rastrineobola argentea*.
- Lake Malawi, Africa. 1981-present. Developed Lake Malawi National Park. Large collections w/ emphasis on preserved and skeletal fish and tissues for genetics - deposited w/ NMNH & AMNH. Guide to fishes and management plan for Lake Malawi National Park. Supervision/training Fisheries personnel. Developed GEF Project for World Bank.
- Mexico, Estacion Biologia de Choacahui, Choacahui, San Miguel Sinaloa. Freshwater fish collection, Deposited AMNH.
- Lake Baikal, USSR. 1990. Collections of sculpins from Lake Baikal - deposited with AMNH.
- Sierra Leone. 1990. Survey of Moa River and Tiawi Island Park; deposited with AMNH.
- Zimbabwe, Africa. 1988. General collection of freshwater fishes of Zimbabwe. Deposited with AMNH.
- Smithsonian Research Station, Carrie Bow Cay, Belize, C.A. 1983-89. Feeding ecology of herbivorous fish. Manager of research station. Collections of labroid fishes.

REFERENCES: Available on request