

**LEO G. NICO**  
Curriculum Vitae – July 2004

**EMPLOYMENT**

United States Geological Survey  
Center for Aquatic Resources Studies (CARS)-Florida Integrated Science Centers (FISC)  
Nonindigenous Fishes Research Program  
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**EDUCATION**

Ph.D. Zoology, University of Florida, Gainesville, Florida, 1991. Dissertation: Trophic Ecology of Piranhas (Characidae: Serrasalminae) from Savanna and Forest Regions in the Orinoco River Basin of Venezuela.  
M.Sc. Biology, Southern Illinois University, Edwardsville, Illinois, 1982. Thesis: Life History and Ecology of Orinoco Basin Annual Killifish.  
B.A. Biology with Departmental Honors, Southern Illinois University, Edwardsville, Illinois, 1979.

**RESEARCH INTERESTS**

Distribution, ecology, and effects of nonindigenous fishes, with emphasis on introduced fishes occurring in the southeastern United States. Distribution, ecology, and systematics of Neotropical freshwater fishes.

**PROFESSIONAL EXPERIENCE**

1993-present **Research Fishery Biologist**, Nonindigenous Fishes Research Program, U.S. Geological Survey, Center for Aquatic Resources Studies-Florida Integrated Science Centers, Gainesville, FL. (Center formerly part of U.S. Fish and Wildlife Service/National Biological Service)  
  
1992-1993 **University Lecturer**, Environmental Studies Graduate Program and Department of Biology, Southern Illinois University at Edwardsville, IL.

**Previous positions: Invited Visiting Investigator**, UNELLEZ, Guanare, Venezuela.

Laboratory and field investigations of freshwater fish fauna of Venezuela (intermittent 1983-1991). **Ichthyologist/Field Biologist**, CVG Tecnica Minera, Venezuela. Member of interdisciplinary team of scientists and technicians during 7 expeditions to remote regions of the Orinoco River basin in southern Venezuela for purpose of inventorying natural resources. **Fishery Biologist**, Civil Service, U.S. Army Corps of Engineers, Planning Div., Environmental Analysis Branch, St. Louis, Missouri (intermittent 1983-1993).

## **PROFESSIONAL ACTIVITIES & MEMBERSHIPS**

American Society of Ichthyologists and Herpetologists – member (1979-present); Association of Neotropical Ichthyologists – member (ca. 1990-present); Aquatic Nuisance Species Digest – editorial board (1995-present); BioLannia – editorial board (1994-present). Reviewer for books (more than 2 professional and 3 children’s science books), articles for journals (e.g., BioTropica, Bulletin of the Southern California Academy of Sciences, Caribbean Journal of Science, Conservation Biology, journal Ecosystems, Florida Scientist, Ichthyological Exploration of Freshwaters, Journal of North American Fisheries Management, Journal of Fish Biology, The Southeastern Naturalist), and numerous grant proposals.

## **HONORS & AWARDS**

USGS Star Performance Award (1999); DOI-NBS Performance Award (1995); USCOE Special Act Award (1993); Honorary Independent Investigator, University of the Western Llanos (UNELLEZ), Guanare, Venezuela (1993); USCOE On-the-Spot Award (1988); USCOE Special Act Award (1988); USCOE Exceptional Service Award (1983); Competitive Graduate Award Fellowship, Southern Illinois University (1981); Outstanding Senior Award (1979). In addition to the above honors and awards, the scientist has been honored by having three new species of South American fishes named after him: *Rivulus nicoi* Thomerson & Taphorn 1992, *Acanthobunocephalus nicoi* Friel 1995, and *Lasiancistrus nicoi* Armbruster & Provenzano 2000.

## **INTERNATIONAL ACTIVITIES**

American Society of Ichthyologists and Herpetologists, 83rd annual meeting. Presenter or co-presenter on 6 scientific talks and posters. 26 June-1 July 2003, Manaus, Brazil

United States-Russia Invasive Species Workshop. Invited delegate representing U.S. Geological Survey for purpose of exchanging information and promoting discussion with Russian scientists on subject of nonindigenous species. Also presented a talk on black carp. Borok, Russia, 27-31 August 2001.

Invited scientist representing U.S. Geological Survey at a meeting held at the Canadian Museum of Nature. Provided information on the use of risk assessment for evaluating introduced fishes (presented to an audience of Canadian government officials and others). Ottawa, Canada, 7-10 July 1996.

United States-Brazil Environmental Mission. Represented U.S. Department of Interior, National Biological Survey, as member of invited multidisciplinary U.S. team conducting discussions with Brazilian scientists and officials on various environmental issues, including nonindigenous species. Brasilia, Brazil, 17-24 July 1994.

Investigator on numerous studies and expeditions in South America during period 1980-present, totaling more than 4+ years spent in country (mostly Venezuela and Brazil). Most recently, this included position as field investigator and consultant on National Geographic-sponsored expeditions to remote regions of southern Venezuela, January 1999 and January 2000.

Member of interdisciplinary team of scientists and technicians during 7 expeditions to remote regions of the Orinoco River Basin in southern Venezuela for purpose of inventorying natural resources. Expeditions were sponsored by the Venezuelan government (CVG Tecnica Minera) and included work in the following drainages: 1) Rio Caura (Mar-Apr 1989); 2) Sipapo-Guayapo rivers (12 May-7 Jun 1989); 3) Lower Rio Ventuari and tributaries (17 Sept-16 Oct 1989); 4) Atabapo-Atacavi rivers (23 Oct-17 Nov 1989); 5) Ocamo-lower Padamo-Matacuni rivers (16 Jan-16 Feb 1990); 6) Rio Mavaca (Jan-Feb 1991 ); 7) Supamo-Parapapoy rivers (Nov-Dec 1992).

### **CONTRACTS & GRANTS**

Served as Principal Investigator and Co-PI on grants from federal agencies (FWS, NPS, USGS, DOD). PI on three grants and Co-PI/Project Consultant on two other grants from National Geographic Society (1988-90, 1992-93, 1998, 1999). PI on Mellon Research Grant, Amazon Research/Training Program (1986).

### **ACADEMIC INVOLVEMENT**

Florida Museum of natural History, Courtesy Appointments (intermittent since 1994); University of Florida, Dept. of Zoology (ca. 1994-1998); University of Florida, Dept. of Fisheries and Aquatic Sciences (recent member on two graduate student committees) and Dept. of Agronomy (currently serving on one Ph.D. committee).

### **PUBLICATIONS**

To date, 32 full publications including two books, 27 scientific articles and book chapters, and 3 popular science articles. In addition, numerous abstracts in symposium proceedings and technical reports:

#### **Books:**

**Nico, L. G., J. D. Williams, and H. L. Jelks.** *In Press.* Biological Synopsis and Risk Assessment of Black Carp, an Introduced Fish. American Fisheries Society Special Publication, Bethesda, MD.

Fuller, P., **L. G. Nico**, and J. D. Williams. 1999. Nonindigenous fishes introduced to inland waters of the United States. American Fisheries Society Special Publication 27. American Fisheries Society, Special Publication 27, Bethesda, Maryland. 620 pp.

### **Other Publications:**

**Nico, L. G.**, and A. M. Muench. *In Press*. Nests and Nest Habitats of the Invasive Catfish *Hoplosternum littorale* in Lake Tohopekaliga, Florida: A Novel Association with Non-Native *Hydrilla Verticillata*. Southeastern Naturalist.

**Nico, L. G.** *In Press*. Changes in the Fish Fauna of the Kissimmee River Basin, Peninsular Florida: Non-Native Additions. J. N. Rinne (editor). Changes in fish community structure in large USA rivers: Status of native species, research, and management. American Fisheries Society Special Publication, Bethesda, MD.

Collins, T., J. Trexler, **L.G. Nico**, and T. Rawlings. 2002. Genetic diversity in a morphologically conservative invasive taxon: Multiple introductions of swamp eels to the southeastern United States. Conservation Biology 16(4):1024-1035.

**Nico, L.G.** 2001. Alexander von Humboldt (1769-1859): Contributions to knowledge of New World fishes. Pages 127-164 *in* G. Aymard (editor). Alexander von Humboldt: Homenaje al Bicentenario de su llegada a tierras Venezolanas (16 de julio-1799 al 26 de noviembre-1800). BioLlania, Special Edition No. 7 (Guanare, Venezuela).

**Nico, L. G.**, and J. J. Herod. 2001. [review of] R. Claudi and J. H. Leach (eds.), 2000, Nonindigenous Freshwater Organisms: Vectors, Biology, and Impacts, Lewis Publishers, Boca Raton, Florida, 464 pages. Transactions of the American Fisheries Society 130(2):347-348.

**Nico, L. G.**, and R. T. Martin. 2001. The South American suckermouth armored catfish, *Pterygoplichthys anisitsi* (Pisces: Loricariidae) in Texas, with comments on foreign fish introductions in the American Southwest. Southwestern Naturalist 46(1):98-104.

**Nico, L. G.**, and P. Fuller. 1999. Spatial and temporal patterns of nonindigenous fish introductions in the United States. Fisheries 24(1):16-27.

Frederick, P. C., M. G. Spalding, M. S. Sepulveda, G. E. Williams, **L. G. Nico**, and R. Robins. 1999. Exposure of great egret (*Ardea albus*) nestlings to mercury through diet in the Everglades ecosystem. Environmental Toxicology and Chemistry 18(9):1940-1947.

Retzer, M., **L. G. Nico**, and F. Provenzano. 1999. Two new species of *Acestridium* (Siluriformes: Loricariidae) from southern Venezuela, with observations on camouflage and color change. Ichthyological Exploration of Freshwaters 10(4):313-326.

- Soares-Port, L. M., S. J. Walsh, **L. G. Nico** and J. M. Netto. 1999. A new species of *Gelanoglanis* from the Orinoco and Amazon river basins, with comments on miniaturization within the genus (Siluriformes: Auchenipteridae: Centromochlinae). *Ichthyological Exploration of Freshwaters* 10(1):63-72.
- Nico, L. G.**, S. J. Walsh, and R. H. Robins. 1996. An introduced population of the South American callichthyid catfish *Hoplosternum littorale* in the Indian River Lagoon system, Florida. *Florida Scientist* 59:189-200.
- Nico, L. G.**, and M. C. C. de Pinna. 1996. Confirmation of *Glanapteryx anguilla* (Siluriformes, Trichomycteridae) in the Orinoco River basin of Venezuela, with notes on the habitats of the Glanapteryginae. *Ichthyological Exploration of Freshwaters* 7(1):27-32.
- Nico, L. G.**, D. J. Schaeffer, D. C. Taphorn, and A. Barbarino-Duque. 1994. Agricultural chemical screening and detection of chlorpyrifos in fishes from the Apure drainage, Venezuela. *Fresenius Environmental Bulletin* 3:685-690.
- Nico, L. G.**, and D. C. Taphorn. 1994. Mercury in fish from gold mining regions in the upper Cuyuni River system, Venezuela. *Fresenius Environmental Bulletin* 3:287-292.
- Nico, L. G.** and M. Morales. 1994. Nutrient values of piranha (Characidae: Serrasalminae) food items. *Copeia* 1994(2):524-528.
- Isbrücker, I. J., H. Nijssen, and **L. G. Nico**. 1992. *Leporacanthicus triactis*, a new loricariid fish from upper Orinoco River tributaries in Venezuela and Colombia (Pisces, Siluriformes, Loricariidae) (in German). *Die Aquarien- und Terrarienzeitschrift (DATZ)* 46(1):30-34.
- Thomerson, J. E., **L. G. Nico**, and D. C. Taphorn. 1992. *Rivulus tecminae*, a new killifish from Amazonas Territory, Venezuela (Rivulidae, Cyprinodontiformes). *Ichthyological Exploration of Freshwaters* 2(4): 289-296.
- Thomerson, J. E., **L. G. Nico**, and D. C. Taphorn. 1991. *Rivulus immaculatus*, a new killifish from Venezuela (Cyprinodontiformes, Rivulidae). *Copeia* 1991(2): 323-328.
- Nico, L. G.** 1991. Fishes of the night. Part 1. The electric eel. *Tropical Fish Hobbyist* 39 (January): 12-14,17,20,22.
- Nico, L. G.** 1991. Fishes of the night. Part 2. The weakly electric gymnotoids. *Tropical Fish Hobbyist* 39 (February): 10,13-18.
- Nico, L. G.** 1990. Feeding chronology of juvenile piranhas, *Pygocentrus notatus*, in the Venezuelan llanos. *Environmental Biology of Fishes* 29: 51-57.

- Thomerson, J. E., D. C. Taphorn, and **L. G. Nico**. 1990. Distribution of annual fishes (Pisces-Rivulidae) in the Rio Unare basin, Venezuela (in Spanish). *BioLlania* 7: 33-38.
- Nico, L. G.**, and J. E. Thomerson. 1989. Ecology, food habits and spatial interactions of Orinoco Basin annual killifish. *Acta. Biol. Venez.* 12(3-4): 106-120.
- Nico, L. G.** 1989. Geographic distribution: *Siren intermedia nettingi*. *SSAR Herpetological Review* 20(1): 11.
- Nico, L. G.**, and D. C. Taphorn. 1988. Food habits of piranhas in the low llanos of Venezuela. *BioTropica* 20(4): 311-321.
- Nico, L. G.**, D. C. Taphorn and J. E. Thomerson. 1987. Limnological data on the habitat of annual fishes (Cyprinodontidae) in the Venezuelan Llanos with a key to fish identification. *BioLlania* 5: 129-144. (In Spanish.)
- Nico, L. G.**, and D. C. Taphorn. 1986. Those bitin' fish from South America. *Tropical Fish Hobbyist* 34 (4): 24-27,30-34,36,40-41,56-57.
- Nico, L. G.**, and D. C. Taphorn. 1985. Diet of *Acestrorhynchus microlepis* (Pisces: Characidae) in the low llanos of Venezuela. *Copeia* 1985(3): 794-796.
- Nico, L. G.**, and D. C. Taphorn. 1984. Limnology of Orinoco Basin annual killifish pools. *J. Am. Killifish Assn. Tech. Paper.* 24: 3-16.
- Nico, L. G.**, and D. C. Taphorn. 1984. Biology of the tropical drum, *Plagioscion squamosissimus*, in the "Fernando Corrales" module of UNELLEZ, Apure State. *Revista UNELLEZ de Ciencia y Tecnologia.* No. 2, pp. 31-39. (In Spanish.)