

University of Miami Curriculum Vitae for David Letson

October 21, 2003

PERSONAL

2. David Letson
3. Home phone: (305) 361-5986
4. Office phone: (305) 361-4083 (voice) (305) 361-4675 (fax)
5. Address: 325 Cypress Drive, Key Biscayne, FL 33149-1209
6. Current rank: Tenured Associate Professor
7. Primary Appointment: Division of Marine Affairs and Policy
8. Secondary Appointment: Economics Department
9. Citizenship: USA
10. Visa: None

HIGHER EDUCATION

11. Institutional:

9/79-5/83: JAMES MADISON UNIVERSITY, Harrisonburg, Virginia. Bachelor of Science, Magna Cum Laude with distinction, in May 1983. Double major in economics and English.

9/83-9/89: THE UNIVERSITY OF TEXAS AT AUSTIN. Ph.D. in economics, with concentrations in natural resource and environmental economics, public finance and mathematical economics. Ph.D. Dissertation: Transferable Discharge Permits for Regional Water Quality.

12. Non-institutional: None

13. Certification, licensure: None

EXPERIENCE

14. Academic

6/00-Present: ASSOCIATE PROFESSOR, University of Miami, Rosenstiel School of Marine and Atmospheric Science, Division of Marine Affairs and Policy. 4600 Rickenbacker CSWY Miami, FL 33149-1098. Tenure granted in March 2003.

6/99-5/00: ASSISTANT PROFESSOR, UM/RSMAS.

8/95-5/99: RESEARCH ASSISTANT PROFESSOR, UM/RSMAS.

1/84-5/89: ASSISTANT INSTRUCTOR, Economics Dept., University of Texas.

6/84-12/84: GRADUATE RESEARCH ASSISTANT, Economics Dept., University of Texas, under a grant from the U.S. Environmental Protection Agency.

15. Non-Academic

11/89-7/95 ENVIRONMENTAL ECONOMIST, Natural Resources and the Environment Division, Economic Research Service, U.S. Department of Agriculture.

Assessing economic impacts of regulatory and legislative policy decisions, particularly those pertaining to the Clean Water Act, the Coastal Zone Management Act, and the 1990 and 1995 Farm Bills. Includes investigations of (1) how incentive policies work in the context of investment dynamics and policy uncertainty; and (2) how to design policies to manage the greater physical uncertainty and enforcement costs associated with agricultural runoff controls, as compared to point source controls. Other projects: (a) national geographic information system that evaluates alternative policies for controlling livestock waste and (b) farm-level simulation framework to assess the added production risk of soil loss and pesticide restrictions.

1985-1987: ECONOMIST, City of Austin Electric Department.

Responsibilities: Helped develop econometric models for the Department's *Long Term Outlook for System Energy and Peak Demand: 1986-2000* and *Forecast of System Energy and Peak Demand*.

16. Military: None.

PUBLICATIONS

17. Books, monographs:

Letson, David and J. Walter Milon, eds. 2002. *Economic Dimensions of Florida's Coastal Environmental Resources: A Guide to Economic Valuation and Impact Analysis*. Washington, DC: NOAA/Office of Policy and Strategic Planning. 240 pp.

Letson, David; Daniel Suman and Manoj Shrivani, eds. 1998. *Pollution Prevention in the Coastal Zone*. Ann Arbor: National Pollution Prevention Center for Higher Education, University of Michigan. 64pp.

Letson, David; Stephen Crutchfield; and Arun Malik. 1993. "Point/Nonpoint Source Trading for Controlling Pollutant Loadings to Coastal Watersheds: A Feasibility Study,"

In *Theory, Modeling and Experience in the Management of Nonpoint Source Pollution*. Clifford Russell and Jason Shogren, eds. Kluwer Academic Publishers.

18. Refereed Journal Articles and Exhibitions:

Refereed Articles:

Shivlani, Manoj P.; David Letson and Melissa Theis. 2003. "Visitor Preferences for Public Beach Amenities and Beach Restoration in South Florida" *Coastal Management* Vol. 31(4): 367-385. Oct-Dec.

Jagtap, Shrikant S.; James W. Jones, Peter Hildebrand, David Letson, James J. O'Brien, Guillermo P. Podestá, Fedro Zazueta and David Zierden. 2002. "Responding To Stakeholder's Demands For Climate Information: From Research to Practical Applications in Florida" *Agricultural Systems* Vol. 74(3): 415-430.

Podestá, Guillermo; David Letson, Carlos Messina, Fred Royce, R. Andrés Ferreyra, James Jones, James Hansen, Ignacio Llovet, Martin Grondona and James O'Brien. 2002. "Use of ENSO-related climate information in agricultural decision making in Argentina: a pilot experience" *Agricultural Systems* Vol. 74(3): 371-392.

Ferreyra, R. Andrés; Guillermo Podestá; Carlos Messina; David Letson; Julio Dardanelli, Edgardo Guevara and Santiago Meira. 2001. "A Linked-modelling Framework to Estimate Maize Production Risk Associated with ENSO-related Climate Variability in Argentina" *Agricultural and Forest Meteorology*. Vol. 107(1): 177-92.

Letson, David; Ignacio Llovet, Guillermo Podestá, Frederick Royce, Victor Brescia, Daniel Lema and Gabriel Parellada. 2001. "User Perspectives of Climate Forecasts: Crop Producers in Pergamino, Argentina" *Climate Research* Vol. 19(1): 57-67.

Letson, David and B.D. McCullough. 2001. "ENSO and Soybean Prices: Correlation without Causality" *Journal of Agricultural and Applied Economics* Vol. 33(3): 513-21.

Letson, David; James Hansen; Peter Hildebrand, James W. Jones, James J. O'Brien, Guillermo Podestá, Fred Royce and David Zierden. 2001. "Florida's Agriculture and Climatic Variability: Reducing Vulnerability" *Florida Geographer* Vol. 32(1): 38-57.

Llovet, Ignacio and David Letson. 1999. "Condicionantes Sociales y Modelos Mentales en La Adopción de Información Climática entre Productores Agropecuarios del Norte de La Provincia de Buenos Aires" [Mental Conditioning Factors and Mental Models Influencing the Adoption of Climate Information by Farmers in the Northern Province of Buenos Aires] *Cuadernos del Programa Interdisciplinario de Estudios Agrarios* Vol. 9(1): 9-54.

Letson, David and Noel Gollehon. 1998. "Spatial Economics of Targeting Manure Policy for Water Quality Benefits" *Journal of the American Water Resources Association* Vol. 34(1): 185-93. Note: Won best article of the year for this journal.

Letson, David and Noel Gollehon. 1998. "Specialized Animal Production and Groundwater Protection" *Review of Agricultural Economics*. Vol. 20(2): 348-65.

Letson, David and B.D. McCullough. 1998. "Better Confidence Intervals: the Double Bootstrap with No Pivot" *American Journal of Agricultural Economics* Vol 80(3): 552-59.

Letson, David; Daniel Suman and Manoj Shivlani. 1998. "Pollution Prevention in the Coastal Zone: Lessons of Four Case Studies" *Coastal Management* Vol. 26(3): 157-75.

Letson, David. 1998. "Economics of the Intracoastal Waterway in Broward County" *Florida Geographer*. Vol. 29(1): 30-43.

Shivlani, Manoj; David Letson and Christian Read Sawzcyn. 1998. "Socioeconomic Impact of the Florida Net Ban in Monroe County" *Florida Geographer* Vol. 29(1): 12-29.

Letson, David and Noel Gollehon. 1996. "Confined Animal Production and the Manure Problem" *Choices* 11(3): 18-21, 24.

Westenbarger, David and David Letson. 1995. "Livestock and Poultry Waste Control Costs" *Choices* 10(2): 27-30.

Letson, David and Parveen Setia. 1994. "On-Farm Costs of Reducing Environmental Degradation under Risk" *Estudios Económicos* 9(2): 163-88.

Crutchfield, Stephen; David Letson and Arun Malik, 1994. "Feasibility of Point-Nonpoint Source Trading for Managing Coastal Water Quality" *Water Resources Research* 30(10): 2825-36.

Malik, Arun; David Letson and Stephen Crutchfield. 1993. "Point/Nonpoint Source Trading of Pollution Abatement: Choosing the Right Trading Ratio," *American Journal of Agricultural Economics* 75(4): 959-67.

Letson, David. 1992. "Point-Nonpoint Source Pollution Reduction Trading: An Interpretive Survey" *Natural Resources Journal* 32(2): 219-32.

Letson, David. 1992. "Simulation of a Two-Pollutant, Two-Season Pollution Offsets System for the Colorado River of Texas Below Austin" *Water Resources Research* 28(5): 1311-18.

Letson, David, 1992. "Investment Decisions and Transferable Discharge Permits," *Environmental and Resource Economics* 2(4): 441-58.

Refereed Exhibitions:

Organized a NOAA/Office of the Chief Scientist sponsored workshop at the Orlando Expo Centre on February 28, 2003 on economics and coastal resource management. This workshop had two objectives: a) to help attendees understand basic tools of economic analysis including benefit-cost analysis, full cost accounting, and cost-effectiveness; and b) to demonstrate applications of these tools using case studies from important environmental management and planning problems in Florida. The workshop concluded with a roundtable discussion featuring a group of prominent economists in Florida who discussed the past and future role for economic analysis in environmental resource management in Florida. The workshop was designed for managers and staff in state and local planning offices, elected officials, and representatives from nongovernmental organizations and industry who are involved with or have an interest in management and planning for water, coastal and marine resources.

Letson, David. 2002. "Analyzing Management Responses to Forecasts" Invited lecture, International Research Institute for Climate Predictions, Advanced Training Institute on Climate Variability and Food Security.

Letson, David. 2001. "Some Economics of Climate Change" Invited lecture, Florida Memorial College.

Letson, David. 2001. "ENSO-nomics" Invited lecture, Florida International University.

Letson, David; Guillermo Podestá; Carlos Messina and Andrés Ferreyra. 2001. "ENSO Forecast Value, Variable Climate and Stochastic Prices" American Agricultural Economics Association meetings in Chicago.

Letson, David. 2000. Regional Application of ENSO Forecasts to Agriculture, Presented at Cambios Climaticos: Una Vision Integral. Hosted by Universidad de Talca, Chile. Sponsored by NOAA's Office of Chief Scientist.

Letson, David. 1998. Three lectures on the value of ENSO forecasting for agriculture. Invited presentation, University of Belgrano. Buenos Aires.

Letson, David. 1997. AEconomic Value vs. Economic Impact for Recreational Fisheries@ Invited seminar, U.S. Department of Commerce/National Oceanic and Atmospheric Administration/National Marine Fisheries Service. Atlantic Billfish Advisory Council.

Letson, David. 1997. AEconomic Valuation of Natural Resources.@ Invited seminar, U.S. Department of Commerce/National Oceanic and Atmospheric Administration/Coastal Ocean Office. Florida Environmental Valuation Workshop. Orlando, FL.

Letson, David. 1997. "Economic Value of the Florida Intracoastal Waterway." Invited seminar, Florida Inland Navigational District and the Broward County Department of Natural Resource Protection.

Letson, David; Noel Gollehon; Vince Breneman; and Cathy Kascak. 1997. "Spatial Economics of Confined Animal Production and Groundwater Protection" American Agricultural Economics Association meetings in Toronto.

Letson, David. 1994. "Spatial Economics of Animal Waste Controls in the New Clean Water Act," Western Economic Association Meetings in Vancouver.

Letson, David. 1994. Three lectures on pollution rights trading. Invited presentation, Universidade Nova de Lisboa (Portugal).

Letson, David. 1993. "Investment Decisions and Transferable Discharge Permits." Invited presentation at Institut National de la Recherche Agronomique (Paris).

Letson, David; Arun Malik; and Stephen Crutchfield. 1992. "Point/Nonpoint Source Trading for Managing Agricultural Pollutant Loadings: Prospects for Coastal Watersheds". Invited presentation at the University of Massachusetts/Amherst.

Letson, David; Arun Malik; and Stephen Crutchfield 1992. "Point/Nonpoint Source Trading of Pollution Abatement: Choosing the Right Trading Ratio," Association of Environmental and Resource Economists' meetings in Baltimore, MD.

Letson, David; Arun Malik; and Stephen Crutchfield. 1991. "Point/Nonpoint Source Trading of Pollutant Reductions." Invited presentation, Colegio de Mexico, Mexico City.

Letson, David; Arun Malik; and Stephen Crutchfield. 1991. "Point/Nonpoint Source Trading for Controlling Pollutant Loadings to Coastal Watersheds: A Feasibility Study," Association of Environmental and Resource Economists' Workshop on the Management of Nonpoint-Source Pollution in Lexington, KY.

Letson, David and Parveen Setia. 1991. "Farm-Level Impacts of Improving Environmental Quality Under Risk," American Agricultural Economics Association meetings in Manhattan, KS.

Letson, David and Parveen Setia. 1990. "Adoption of Alternative Management Systems to Improve Water Quality Under Uncertainty," Third National Research Conference on Pesticides, in Richmond, VA.

19. Other works, publications and abstracts:

Alvarez, Ricardo; Wendell Cropper; Mark Harwell; Shrikant Jagtap; Chris Landsea;

David Letson; Cindy Parker; Manoj Shivlani; Harold Wanless and John Winchester. 2001. *Feeling the Heat in Florida: Global Warming on the Local Level*. Natural Resources Defense Council.

Crutchfield, Stephen; Marc Ribaudó; Parveen Setia; David Letson; and Leroy Hansen. 1991. *Cotton Production and Water Quality*, USDA/ERS Staff Report AGES 9105.

Espino, M. Delores; Art Darling; Luis Ajamil; William Dover; John Flanigan; Bill Hunt; Grace Johns; David Letson; J. Walter Milon; L. Jack Moller; Dick Ogburn; Charles Pattison; Eric Raasch; Stuart Strahl; Bubba Wade; Richard Weisskoff; L. Carl Woehlcke; Bernard Yokel and J. Webb Smith. 1998. *Report on Full Cost Accounting*. Governor's Commission for a Sustainable South Florida. FL Dept Community Affairs, FL Coastal Management Program, pursuant to National Oceanic and Atmospheric Admin Award #NA 87OZ0203.

Florida Consortium. *El Niño, La Niña and Florida's Climate: Effects on Agriculture and Forestry*. June 1999.

Gollehon, Noel; Margriet Caswell; Marc Ribaudó; Robert Kellogg; Charles Lander and David Letson. 2001. *Confined Animal Production and Manure Nutrients*. US Dept Agriculture, Economic Research Service. Agricultural Information Bulletin #771. June. Full manuscript available online at www.ers.usda.gov/publications/aib771/aib771.pdf. See associated webpage at www.ers.usda.gov/publications/aib771/.

Letson, David. 1990. "Benefit-Cost Analysis as a Dialogue," a review of A. Allan Schmid's *Benefit-Cost Analysis: A Political Economy Approach*. Westview Press, 1989. *Journal of Agricultural Economics Research* 42(3): 35-36. Also, in Spanish: *Estudios Económicos* 7(1): 145-47. 1992.

Letson, David. 1993. "Mathematical Programming: Tinker Toys with a Purpose," a review of Sten Thore's *Economic Logistics: The Optimization of Spatial and Sectoral Resource, Production, and Distribution Systems*. Quorum Books, 1991. *Journal of Agricultural Economics Research* 44(3): 46-48.

Letson, David. 1998. "Economics of the Intracoastal Waterway" In *Four Essays on the Intracoastal Waterway*, Jeffrey Halsey, editor. Educational Report issued by the Florida Inland Navigational District and the Broward County Dept Natural Resource Protection.

Letson, David; Stephen Crutchfield; and Arun Malik. 1993. *Point-Nonpoint Source Trading for Managing Agricultural Pollutant Loadings: Prospects for Coastal Watersheds*. USDA/ERS Agricultural Economics Report #674. September.

Letson, David; Daniel Suman and Manoj Shivlani. 1999. "Pollution Prevention in the U.S. Coastal Zone" *InterCoast* Vol. 33. Pages 14, 15 and 21. Winter.

Lyon, Randolph and David Letson. 1985. "A Review of EPA Cost Analyses," in *Pollution Cost Analysis*, J.B. Braden and R.M. Lyon, editors. A report to U.S. Environmental Protection Agency under Cooperative Agreement CR-811059-01-0, November.

Setia, Parveen and David Letson. 1990. "Adoption of Alternative Management Systems to Improve Water Quality Under Uncertainty," in *Pesticides in the Next Decade*, Diana Weigmann, ed. Blacksburg: Virginia Water Resources Research Center. November.

Shivlani, Manoj; Daniel Suman and David Letson. 1998. *Annotated Bibliography of Coastal Pollution Prevention Studies*. National Pollution Prevention Center for Higher Education, University of Michigan/US Environmental Protection Agency.

20. Works accepted for publication:

Letson, David, Guillermo Podestá, Carlos Messina and R. Andrés Ferreyra. "The Uncertain Value of Even Perfect ENSO Phase Forecasts" Forthcoming, *Climatic Change*.

Messina, C.D., D. Letson and J.W. Jones. "Tailoring Management of Tomato production to ENSO phase at different scales in Florida and Puerto Rico" Submitted, *Transactions of the American Society of Agricultural Engineers*.

Vedwan, Neeraj; Fernando Miralles-Wilhelm; Kenneth Broad; David Letson; Guillermo Podesta; James W. Jones and James J. O'Brien. "Innovation in Lake Okeechobee management in Florida: a case study of the use of climate information" *Society and Natural Resources*, submitted.

Vedwan, Neeraj; Kenneth Broad; David Letson; Guillermo Podesta; Jim Jones and James J. O'Brien. "Florida Consortium's Climate Information Dissemination Efforts" *Bulletin of the American Meteorological Society*, submitted.

PROFESSIONAL

21. Funded research performed:

"Application of Seasonal Climate Forecasts to Agriculture in the Southeastern USA" National Oceanic and Atmospheric Admin/ Office of Global Programs. July 2002 – June 2005. \$675,000/year. With Kenny Broad, Fernando Miralles-Wilhelm, Guillermo Podestá and several PIs from Univ of Florida, Univ of Georgia and Florida State Univ.

"Environmental Cooperative Science Center" National Oceanic and Atmospheric Admin. D. Letson, PI, with Florida A&M, Jackson State, South Carolina State, Delaware State and Morgan State Univ. Amount (Letson): \$100,000/yr. Oct 2001 – Sept 2003.

AAssessment of Climate Change on the South Florida Environment@ USEPA/National Center for Environmental Research and Quality Assurance. M. Harwell, PI. D. Letson and six other co-PIs. \$900,000. Oct 1999-Sept 2002.

“Application of Seasonal Climate Forecasts to Agriculture in the SE USA” National Oceanic and Atmospheric Admin/Office of Global Programs. Aug 1999 - July 2002. \$300,000/yr. With G. Podestá and several PIs from Univ of Florida and FL State Univ.

ARegional Assessment of the Effects of ENSO-Related Climate Variability on the Agricultural Sector of Argentina and Uruguay--Implications for Adoption of Climate Forecasts@ Source: National Science Foundation, Methods and Models for Integrated Assessment Initiative. Aug 1997-July 1999. \$170,000. With Guillermo Podestá and several investigators from Univ of Florida and Florida State Univ.

ARegional Application of ENSO-Based Climate Forecasts to Agriculture in the Americas@ Source: U.S. Department of Commerce/National Oceanic and Atmospheric Administration/Office of Global Programs. Oct 1997-Sept 1999. \$820,000. With Guillermo Podestá and several co-PIs from Univ of Florida and Florida State Univ.

AClimate Variability and Agriculture in Argentina and Uruguay: Assessment of ENSO Effects and Perspectives for the Use of Climate Forecasts@ Source: Inter-American Institute for Global Change Research. Guillermo Podestá, David Letson, and Christine Harwell, co-principal investigators. Jan 1997-Dec 1998. \$90,000.

ARegional Assessments and Applications for Effects of Seasonal-to-Interannual Climate Variability@ Source: National Oceanic and Atmospheric Admin/Office of Global Programs. Guillermo Podesta and Christine Harwell lead PIs, with several co-PIs here and from Univ of Florida and Florida State Univ. Jan 1997-June 1997. \$450,000.

ACompendium and Case Studies on Coastal Pollution Prevention.@ Source: USEPA through the National Pollution Prevention Center at the University of Michigan. David Letson and Daniel Suman, co-PIs. Amount: \$13,500 for Oct 1995-Sept 1996.

AArticle Waste and Water Quality: Nutrient Balances at the Farm and County Levels@ Source: U.S. Department of Agriculture, Economic Research Service. PI: David Letson. Amount: \$19,500 for Jan-Dec 1996.

22. Editorial responsibilities

Editorial Councils: *Journal of Environmental Economics and Management*, and *Journal of Agricultural and Applied Economics*.

Reviewer, *Agricultural Systems*, *American Journal of Agricultural Economics*,

Environmental and Resource Economics, Estudios Económicos, Journal of Agricultural and Resource Economics, Journal of Environmental Economics and Management, Land Economics, Marine Resource Economics, Review of Agricultural Economics, Water Resources Bulletin, and Water Resources Research.

23. Professional and honorary organizations:

American Economic Association
American Agricultural Economic Association
Association of Environmental and Resource Economists
Latin American and Caribbean Environmental and Resource Economists

24. Honors and awards:

Best article of 1998, *Journal of the American Water Resources Association.*

25. Post-Doctoral Fellowships

26. Other Professional Activities:

\$ NOAA Coastal Environmental Economics Extension Network.
\$ Water Sub-Committee for the Governor=s Commission for the Everglades.
\$ Socioeconomic Advisory Group, NOAA=s Global Coral Reef Monitoring Network.
\$ Tech Advisory Committee, South Dade Agric and Rural Land Retention Plan.

29. Thesis and Dissertation Advising:

Master=s Internship reports in Marine Affairs:

\$ Jorge Alarcon
\$ Amie Gimon Davis
\$ James DeCocq
\$ Vallierre Deleveaux (MS thesis)
\$ Helga Dienes (chair)
\$ Shara Fisler
\$ William Hinsley (chair)
\$ Gabriel Rulfo Garcia
\$ Sharon Homer-Drummond (chair)
\$ Chauncey Kelly
\$ Christopher Len (chair)

\$ Yair Lichtensztajn
\$ Amie Lowe
\$ Kris McFadden
\$ Sandra McLaughlin (chair)
\$ Victoria Myers
\$ Roxanne Nikolaus
\$ Chad Noel
\$ Diane Toni Parras
\$ Christopher Petry (chair)
\$ Daryl Reed
\$ Jose Antonio Rodriguez
\$ Nadia Sbeih
\$ Joseph Schittone
\$ Rebecca Seidenfeld
\$ John Webb Tyler Smith
\$ Carolyn Steve (chair)
\$ John Stinn
\$ Roberto Torres
\$ Erica Van Coverden
\$ Arietta Venizelos
\$ Anne Wakeford (chair)
\$ Wendy Wood

Undergraduate theses:

\$ Christian Read Sawczyn (Marine Affairs). Mr. Sawczyn=s thesis led to a refereed journal publication in *Florida Geographer*.
\$ Melissa Theis (Marine Affairs). Ms. Theis is co-author on a paper from this project published in the refereed journal *Coastal Management*.

PhD Dissertations:

\$ Sherry Bartz-Marvez (Economics)
\$ Roberto Cid (Economics)
\$ Abdulhamid Alkhalifa (Economics)
\$ Cinda Scott (MBF)
\$ Marcia Almeida (MBF)
\$ Silvia Bolanos (International Studies)

Other Universities:

\$ Master's thesis of Esther Bartfeld, University of Michigan, 1993. Now a research associate with Ross and Associates, in Seattle.

SERVICE

30. University Committee and Administrative Responsibilities.

Search Committee, Director for the Center for Sustainable Fisheries.

31. Community Activities:

UM/RSMAS PI on NOAA's research and education center at Florida A&M University. These centers are intended to increase minority participation in the areas of environmental science, marine science, remote sensing and atmospheric science. UM/RSMAS receives two minority graduate student fellowships for its participation.

Organized Florida Sea Grant Seminar for February 8-9, 1996, on Pollution Prevention in the Coastal Zone by Mohammed Ansari, Senior Lead Process Engineer and Pollution Prevention Leader for Allied-Signal Corporation.

Faculty Supervisor, Port of Miami Propeller Club.

Socioeconomic Advisory Group, NOAA's Global Coral Reef Monitoring Network.

Water Sub-Committee for the Governor's Commission for the Everglades.

Member, Tech Advisory Committee, South Dade Agric and Rural Land Retention Plan.