

DAVID COX

DAVID COX CONSULTING, LLC

2044 14TH AVENUE, SUITE 24

VERO BEACH, FLORIDA 32960

GOALS

- Apply ecological knowledge to policy and management decisions
- Promote a thoughtful public today and educate future generations to apply the best available science

SERVICES

- environmental site assessment, land planning, permitting & listed species surveys
- natural lands management, habitat assessment & ecological restoration
- conservation land acquisition & public access planning
- science-based land development ordinances
- design, implementation & management of independent research, over 45 peer-reviewed scientific publications, plus numerous reports and studies
- successful grant preparation & administration, including budgets
- advocacy in the public interest and public communication
- experience in education at all levels "K-postgraduate"

SELECT CLIENTS

- U.S. Fish & Wildlife Service, Office of Ecological Services
- Harvard University, Arnold Arboretum, Boston, MA
- Friends of Bee Gum Point, Town of Indian River Shores, FL
- Kamehameha Schools, Kailua-Kona, Hawaii
- South Florida Water Management District, W. Palm Beach, FL
- Environmental Learning Center, Vero Beach, FL
- Indian River Land Trust, Vero Beach, FL
- Gracewood Incorporated, Vero Beach, FL
- Graves Brothers Company, Vero Beach, FL
- Indian River County School District, Vero Beach, FL
- Indian River Habitat for Humanity, Vero Beach, FL
- Envirovet Institute, University of Illinois, Urbana, IL
- John's Island Water Management, Inc., Town of Indian River Shores, FL
- Greenwood Development Corporation, Liberty Hill, SC

EXPERIENCE

Since 2010	Senior Ecologist, HydroPlan, LLC
Since 2000	Principal, David Cox Consulting, LLC
1998-1999	Certified Senior Ecologist, Ecological Society of America
	Associate Professor, Florida Institute of Technology, Melbourne, FL
1997-1998	Naturalist, Environmental Learning Center, Vero Beach, FL
1994-1996	Sr. Research Fellow, USF/Shriners Hospital, Tampa, FL
1987-1994	Asst. Professor, Dept. of Biology, University of Oregon, Eugene, OR
1986-1987	Senior Scientist, College of Marine Studies, University of Delaware, Lewes, DE
1983-1986	Asst. Professor, Department of Biology, Vassar College
1982-1994	Senior Scientist, Mount Desert Island Biological Labs
1981-1983	Asst. Professor, Washington University School of Medicine, St. Louis, MO
1979-1980	NATO Fellow, University of Oxford, Oxford, England

EDUCATION

Postdoc	University of Oxford, Animal Ecology Research Group
Ph.D.	Washington University, Population Biology & Ecology
B.A.	Washington University, Biology & Chemistry
	Vanderbilt University

TEACHING

I have taught a variety of courses spanning science and the humanities (environmental science, molecular biology, ecology, physiology, the human relation to nature, history of biology, marine biology, and others). I have taught at scholarly institutions (Washington University, Vassar College, University of Oregon, Florida Institute of Technology), nature centers, and public as well as private elementary and secondary schools.

SELECTED AFFILIATIONS

Ecological Society of America, British Ecological Society, International Association for Ecology, American Association for the Advancement of Science

PUBLICATIONS

Cox, D.L., and Alexander, W. 2006. *Traces: The Legacy of Indian River County, Volume 2. European Contact and Colonization*. Vero Beach, FL: School District of Indian River County.

Sexton, O.J., Bramble, J.E., Heisler, I.L., Phillips, C.A., and Cox, D.L. 2005. Eggshell composition of squamate reptiles: relationship between eggshell permeability and amino acid distribution. *Journal of Chemical Ecology* 31: 2391-2401.

Cox, D.L. 2004. *Pre-Drainage Everglades Landscapes and Hydrology: A Review*. South Florida Water Management District: West Palm Beach, FL.

Cox, D.L., and Alexander, W. 2003. *Traces: The Legacy of Indian River County, Volume 1. Prehistory*. Vero Beach, FL: School District of Indian River County.

Cox, D.L., 2001. *Science for Earth Stewards: K – 5 Science Curriculum*. Vero Beach, FL: School District of Indian River County.

Cox, D.L., 2001. An “Ecosystem” timeline: changing definitions in ecology, 1935-2000. A Web Project of the Institute for Cultural Landscape Studies, Harvard University. <http://www.icls.harvard.edu/current.html>

Cox, D.L., 2000. *Changing the Course of the Future: Earth Stewards Curriculum*. Vero Beach, FL: School District of Indian River County.

Cox, D.L., Walker, P. and Koob, T.J. 1999. Predation on eggs of the thorny skate. *Transactions of American Fisheries Society* 128:370-384.

Smirnova, E. A., Cox, D. L. and Bajer, A. S. 1995. Antibody against phosphorylated proteins (MPM-2) recognizes mitotic microtubules in endosperm cells of higher plant *Haemanthus*. *Cell Motility and the Cytoskeleton* 31:34-44.

Cox, D.L. 1994. What young biologists need to know. A review of The Right Tools for the Job. *At Work in Twentieth-Century Life Sciences*, Clarke, A. E. and Fujimura, J. H. (Editors). *The Quarterly Review of Biology* 69: 379-380.

Cox, D.L. and Koob, T.J. 1993. Predation on elasmobranch eggs. *Symposium on Reproduction and Development in Cartilaginous Fishes*. In *Environmental Biology of Fishes*, 38: 117-125.

Cox, D.L. and Koob, T.J. 1993. Solid-state catechol oxidase in skate (*Raja erinacea*) egg capsule. *The Bulletin, Mount Desert Island Biological Laboratory*, 32: 17-19

Koob, T.J. and Cox, D.L. 1993. Stabilization and sclerotization of *Raja erinacea* egg capsule proteins. Symposium on Reproduction and Development in Cartilaginous Fishes. In Environmental Biology of Fishes, 38: 151-157.

Straus, J.W., Monian, C.L. and Cox, D.L. 1993. Nidamental gland catechol oxidase in the little skate (*Raja erinacea*): latency caused by an endogenous low molecular weight factor. Comparative Biochemistry and Physiology 105B: 117-122.

Straus, J.W., Rabidou, N.C., Bogdany, J.K. and Cox, D.L. 1993. Oxidative enzymes and the formation of egg capsules in the little skate (*Raja erinacea*). The Bulletin, Mount Desert Island Biological Laboratory, 32: 14-16.

Straus, J.W. and Cox, D.L. 1992. Purification and characterization of cysteine proteinases from *Tetrahymena thermophila*. Comparative Biochemistry and Physiology 97B: 641-653.

Straus, J.W., Monian, C.L. and Cox, D.L. 1992. Catechol oxidase latency in nidamental gland extracts from the little skate (*Raja erinacea*). The Bulletin, Mount Desert Island Biological Laboratory, 31: 24-26.

Straus, J.W., Monian, C.L. and Cox, D.L. 1992. Preparation and characterization of immobilized antipain and chymostatin for the isolation of proteolytic enzymes by affinity chromatography. The Bulletin, Mount Desert Island Biological Laboratory, 31: 20-23.

Cox, D.L. and Rogers, B. 1992. A review of The History of Biology: A Selected, Annotated Bibliography. The Quarterly Review of Biology 67: 350-351.

Cox, D.L. and Koob, T.J. 1991. Predation on eggs of the little skate (*Raja erinacea*) in the Gulf of Maine. The Bulletin, Mount Desert Island Biological Laboratory 30: 123-124.

Koob, T.J. and Cox, D.L. 1991. Skate (*Raja erinacea*) egg capsule proteins. The Bulletin, Mount Desert Island Biological Laboratory 30: 21-23.

Straus, J.W. and Cox, D.L. 1991. Catechol oxidase in the little skate (*Raja erinacea*) shell gland: enzyme latency induced by an endogenous factor. The Bulletin, Mount Desert Island Biological Laboratory 30: 23-25.

Cox, D.L. and Koob, T.J. 1990. Latent catechol oxidase in the little skate (*Raja erinacea*). Comparative Biochemistry and Physiology 95B: 767-771.

Koob, T.J. and Cox, D.L. 1990. Introduction and oxidation of catechols during the formation of the skate *Raja erinacea* egg capsule. *Journal of the Marine Biological Association, U.K.* 70: 395-411.

Cox, D.L. and Koob, T.J. 1989. Studies on skate (*Raja erinacea*) egg capsule formation. IV. Catechol oxidase activation. *The Bulletin, Mount Desert Island Biological Laboratory* 28: 126.

Koob, T.J. and Cox, D.L. 1989. Accumulation of calcium and magnesium in *Raja erinacea* egg capsule during formation and after oviposition. *The Bulletin, Mount Desert Island Biological Laboratory* 28: 124-126.

Koob, T.J. and Cox, D.L. 1988. Egg capsule catechol oxidase in the little skate *Raja erinacea* Mitchell, 1825. *The Biological Bulletin* 75: 202-211.

Cox, D. L., Mecham, R.P. and Koob, T.J. 1987. Site-specific variation in amino acid composition of skate egg capsule (*Raja erinacea* Mitchell 1825). *Journal of Experimental Marine Biology and Ecology* 107: 71-74.

Koob, T.J. and Cox, D.L. 1987. *Raja erinacea* egg capsule: a model for interactions of metals with membrane-bound quinones. *The Bulletin, Mount Desert Island Biological Laboratory* 27: 116-117.

Koob, T.J. and Cox, D.L. 1986. Effects of salinity, pH and urea on shell gland catechol oxidase activity of the little skate (*Raja erinacea*). *The Bulletin, Mount Desert Island Biological Laboratory* 26: 113-116.

Koob, T.J. and Cox, D. L. 1986. Studies on skate (*Raja erinacea*) egg capsule formation. II. Introduction of catechols occurs in utero. *The Bulletin, Mount Desert Island Biological Laboratory* 26: 109-112.

Koob, T.J. and Cox, D.L. 1985. Shell gland catechol oxidase in the skate (*Raja erinacea*). *The Bulletin, Mount Desert Island Biological Laboratory* 25: 132-134.

Cox, D.L., Koob, T.J., Mecham, R.P. and Sexton, O.J. 1984. External incubation alters the composition of squamate eggshells. *Comparative Biochemistry and Physiology* 79B: 481-487.

Koob, T.J. and Cox, D.L. 1984. Studies on skate (*Raja erinacea*) egg capsule formation. *The Bulletin, Mount Desert Island Biological Laboratory* 24:78-81.

Cox, D.L. 1983. Chemical composition of *Iguana iguana* eggshell. *Annual Report of the American Philosophical Society* 1983: 147-148.

Campbell, E.J., Senior, R.M., McDonald, J.A. and Cox, D.L. 1982. Proteolysis by neutrophils: relative importance of cell-substrate contact and oxidative inactivation of proteinase inhibitors in vitro. *Journal of Clinical Investigation* 70: 845-852.

Cox, D.L., Mecham, R.P. and Sexton, O.J. 1982. Lysine-derived cross-links are present in a non-elastin, proline-rich protein fraction of Iguana iguana eggshell. *Comparative Biochemistry and Physiology* 72B: 619-623.

Cox, D.L. 1980. The history of ecology: archives of the Ecological Society of America. *Bulletin of the British Ecological Society* XI(4): 127-129.

Cox, D.L. 1980. A note on the queer history of niche. *Bulletin of the Ecological Society of America* 61(4): 201-202.

OTHER CREATIVE WORKS

Cox, D.L., Grudens, K., and Stanbridge, R. 2006. St. Sebastian River Greenway Plan. Indian River County, FL. In partnership with Pelican Island Audubon Society, Friends of St. Sebastian River, Indian River County Historical Society, Indian River Land Trust, Sebastian River Area Chamber of Commerce, and the Division of Community Development and Planning, Indian River County.

Cox, D.L., and Alexander, W. 2006. Traces: The Legacy of Indian River County, Volume II. European Contact and Colonization. Vero Beach, FL: School District of Indian River County.

Ecker, D., Veron, B., Catchpole, J., Tripson, J. Baker, R. and Cox, D.L. 2006. Landscape Ordinances. Indian River County, FL. In partnership with Pelican Island Audubon Society, and the Division of Community Development and Planning, Indian River County.

Cox, D.L. 2006. Regional Simulation Natural Systems Model: Peer Review for the South Florida Water Management District.

Cox, D.L. and Stanbridge, R. 2005. The Trans-Florida Central Railroad. Rails-to-Trails Project, interpretive displays. Vero Beach, FL: Indian River County Parks Department and Indian River Historical Society.

Cox, D.L. 2004. Pre-Drainage Everglades Landscapes and Hydrology: A Review. South Florida Water Management District: West Palm Beach, FL.

Cox, D.L. 2004. The Native Way: Interpretive Trail. Vero Beach, FL: The Environmental Learning Center.

Cox, D.L. 2004. County Tree Protection Ordinance. Indian River County, FL. In partnership with Pelican Island Audubon Society, and the Division of Community Development and Planning, Indian River County.

Cox, D.L., and Alexander, W. 2003. Traces: The Legacy of Indian River County, Volume I. Prehistory. Vero Beach, FL: School District of Indian River County.

Cox, D.L. 2003. Master Interpretive Plan for Public Environmental Education Facilities. Vero Beach, FL: The Environmental Learning Center.

Cox, D.L. 2003. Restoring Natural Plant Communities in the Lost Tree Islands Conservation Area. Vero Beach, FL: A Proposal in partnership with Indian River County, The Town of Indian River Shores, The City of Vero Beach, The Marine Resources Council, and Coastal Tech, Inc.

Cox, D.L. 2002. Let's Do This Together. Video Script and Production. Vero Beach, FL: The Environmental Learning Center.

Cox, D.L. 2002. Public Environmental Education Facilities and Boardwalk Extension. Vero Beach, FL: The Environmental Learning Center.

Cox, D.L., 2001. Science for Earth Stewards: K – 5 Science Curriculum. Vero Beach, FL: School District of Indian River County.

Cox, D.L., 2001. An “Ecosystem” timeline: changing definitions in ecology, 1935-2000. A Web Project of the Institute for Cultural Landscape Studies, Harvard University. <http://www.icls.harvard.edu/current.html>

Cox, D.L., 2000. Changing the Course of the Future: Earth Stewards Curriculum. Vero Beach, FL: School District of Indian River County.

Cox, D.L., 2000. The St. Sebastian River. Outdoor interpretive trail & panels. Vero Beach, FL: Indian River County Parks Department.

Cox, D.L. and CM & Associates. 1999. Ecosystems of Florida Traveling Museum Exhibits. Prepared for The Environmental Learning Center, Vero Beach, FL.

Cox, D.L., 1999. Pelican Island National Wildlife Refuge and the Indian River Lagoon. Public access and education project. City of Sebastian, FL.

Contact

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