R. TODD ENGSTROM

309 Carr Lane Tallahassee, Florida 32312 (850) 668-8703 email: engstrom@bio.fsu.edu

EDUCATION

Earlham College, Richmond, Indiana: 1972-76; B.A. Biology

Florida State University, Tallahassee, Florida: 1977-79; M.S. Biology

Florida State University: 1980-86; Ph.D. Biology

PROFESSIONAL EXPERIENCE

U.S. Forest Service: Wildlife technician, Resources Planning Act, Vertebrate Assessment 1977-78

Conservation Consultants, Inc., Palmetto, FL: Staff biologist 1980

Cornell Laboratory of Ornithology: Research biologist 1986-89

Tall Timbers Research Station: Research biologist 1990-2002; Acting Director of Research 1991-93, 2001-2002.

The Nature Conservancy: Greenwood Project Director, 2002-2005.

PROFESSIONAL SOCIETIES

American Ornithologists' Union, Association of Field Ornithologists, Cooper Ornithological Society, Ecological Society of America, Florida Ornithological Society, Society for Conservation Biology

SERVICE

Association of Field Ornithologists: Bird count editor Journal of Field Ornithology 1988-89

Florida Ornithological Society: Vice-President; Editor, *Florida Field Naturalist* 1996-1999; Records Committee (current); Editorial Committee (current); Conservation Committee (current).

Florida Nongame Wildlife Advisory Council (Florida Fish and Wildlife Conservation Commission): Member 1996-2001 (Chairman 1997-2001).

Wilson Ornithological Society: Council (2002-2005).

American Ornithologists' Union: Book Review Editor, *The Auk* 2001-present.

Southwest Georgia Prescribed Fire Council: Chairman (2005).

HONORS/AWARDS

Marcia Brady Tucker Award; 1980; (\$350.00) Travel award

Malvin and Josephine Herz Foundation Fellowship; 1981; (\$600.00); Ornithological research, University of Minnesota, Lake Itasca Biological Station

Southeastern Section of the Wildlife Society. Best journal article 1980-81. "Plot size as a factor in Winter Bird Population Studies."

Best poster award; 1997; Biodiversity in Managed Forests Conference, Uppsala, Sweden

RESEARCH SUPPORT

1983: Sigma Xi, (\$250.00); Geographic variation in nesting phenology and clutch size in the Red-winged Blackbird

1983: Frank M. Chapman Memorial Grant, (\$500.00); Geographic variation in nesting phenology and clutch size in the Red-winged Blackbird

1988: U.S. Fish and Wildlife Service (\$16,125); Publication of the Breeding Bird Census and Winter Bird Population Study

1988: Minnesota Department of Natural Resources (\$1791); Bird Counts in Minnesota Habitats: a Review

1988: Florida Game and Fresh Water Fish Commission (\$4713); Bird Counts in Florida Habitats: a Review

1989: U.S. Department of Agriculture (\$3000); Nesting productivity in birds as an indicator of environmental change in agricultural areas of New York State

1991: Georgia Department of Transportation (\$10,000); Construction of artificial red-cockaded woodpecker cavities in relation to the U.S. 319 widening project.

1991: World Widlife Fund (\$2500); Educational brochure on the red-cockaded woodpecker

1992: U.S. Forest Service (\$15,750); Red-cockaded Woodpecker foraging behavior, habitat use and provisioning rates in an old-growth longleaf pine forest.

- 1992: U.S. Fish and Wildlife Service (\$10,000); Red-cockaded Woodpecker behavioral response to the use of fire retardant foaming agents.
- 1992: National Science Foundation (\$178,526); F.C. James (PI), Florida State University, Species-centered environmental analysis for the Red-cockaded Woodpecker.
- 1994: National Fish and Wildlife Foundation (\$14,000); L. Brennan, R.T. Engstrom, S. Hermann, Tall Timbers Research Station; Vertebrate Response to Ecosystem Management of Longleaf Pine on Public Lands in the Florida Panhandle.
- 1997: Turner Foundation (\$65,000); R. T. Engstrom and Keith Moser. Evaluating silvicultural alternatives in the longleaf pine ecosystem.
- 1998: USDA Forest Service (\$20,000); R. T. Engstrom. Ecology of the Red-cockaded Woodpecker in Osceola National Forest.
- 2001: National Fish and Wildlife Foundation (\$31,000); R. T. Engstrom. Conservation of the Red-cockaded Woodpecker in the Red Hills.

REVIEWED PUBLICATIONS

- Baker, W.W., R.L.Thompson, and R.T. Engstrom. 1980. The distribution of Red-cockaded Woodpecker colonies in Florida. *Fla. Field Nat.* 8:41-45.
- Engstrom, R.T. 1981. The species-area relationship in spot-map censusing. Pp. 421-425. <u>In</u> C.J. Ralph and J.M. Scot (eds.) Estimating the numbers of terrestrial birds. *Studies in Avian Biology No.6*.
- Engstrom, R. T., and F.C. James. 1981. Plot size as a factor in Winter Bird-Population Studies. *Condor* 83:34-41.
- Engstrom, R. T., R.L. Crawford, and W.W. Baker. 1984. Breeding bird populations in relation to forest structure following fire exclusion: a 15-year study. *Wilson Bull.* 96:437-450.
- Andreae, M.O., R.J. Ferek, F. Bermond, K.P. Byrd, R.T. Engstrom, S. Hardin, P.D. Houmere, F. LeMarrec, and H. Raemdonck. 1985. Dimethyl sulfide in the marine atmosphere. *J. Geophys. Res.* 90:12,891-12,900.
- Engstrom, R. T. 1993. Characteristic birds and mammals of longleaf pine forest. *Tall Timbers Fire Ecol. Conf.*, 18:127-138.
- Carter, J.H., III, R.T. Engstrom, and P.M. Purcell. 1995. Use of artificial cavities for Red-

- cockaded Woodpecker mitigation: two studies. Pp. 372-379 <u>in</u> D.L. Kulhavy, R.G. Hooper and R. Costa (eds.). Red-cockaded Woodpecker: Recovery, ecology, and management, Center for Applied Studies, College of Forestry, Stephen F. Austin State Univ., Nacogdoches, TX.
- Engstrom, R. T., and F.C. James. 1984. An evaluation of techniques used in the Breeding Bird Census and Winter Bird-Population Study. *Amer.Birds* 38:19-23.
- James, F.C., R.T. Engstrom, C. NeSmith, and R. Laybourne. 1984. Inferences about population movements of Red-winged Blackbirds from morphological data. *Amer. Midl. Nat.* 111:319-331.
- Engstrom, R. T., and G.W. Evans. 1990. Hurricane damage to red-cockaded woodpecker (*Picoides borealis*) cavity trees. Auk 107:608-610.
- Sisson, D.C. and R.T. Engstrom 1993. Wood Duck nest sites in an old-growth longleaf pine forest. *Proc. Annu. Conf. Southeast. Assoc. Fish and Wildl. Agencies* 47:99-104.
- Engstrom, R. T., and W.W. Baker. 1995. Red-cockaded Woodpeckers on Red Hills hunting plantations: inventory, management and conservation. Pp. 489-493 in D.L. Kulhavy, R.G. Hooper and R. Costa (eds.). Red-cockaded Woodpecker: Recovery, ecology, and management, Center for Applied Studies, College of Forestry, Stephen F. Austin State Univ., Nacogdoches, TX.
- Turner, M.G., G.J. Arthaud, R.T. Engstrom, S.J. Hejl, J. Liu, S. Loeb and K. McKelvey. 1995. Usefulness of spatially explicit animal models in land management. *Ecological Applications* 5:12-16.
- Engstrom, R.T., L.A. Brennan, W.L. Neel, R.M. Farrar, S.T. Lindeman, W.K. Moser, and S.M. Hermann. 1996a. Silvicultural practices and Red-cockaded Woodpecker management: a reply to Rudolph and Conner. *Wildlife Soc. Bull.* 24(2):334-338.
- Engstrom, R.T., D.B. McNair, L.A. Brennan, C.L. Hardy and L.W. Burger. 1996b.

 Influence of dormant versus lightning season prescribed fire on birds in longleaf pine forests: experimental design and preliminary results. *Trans. 61st North American Wildlife and Natural Resources Conference (1996):200-207.*
- Engstrom, R.T., and F.J. Sanders. 1997. Ecology of the Red-cockaded Woodpecker in an old-growth longleaf pine forest. *Wilson Bulletin 109:203-217*.
- Brennan, L.A., R.T. Engstrom, and W.E. Palmer. 1998. Whither wildlife without fire? Transactions of the 63rd North American Wildlife and Natural Resources conference; 1998 March 20-25; Orlando, FL. Washington, DC: Wildlife Management Institute: 402-414.

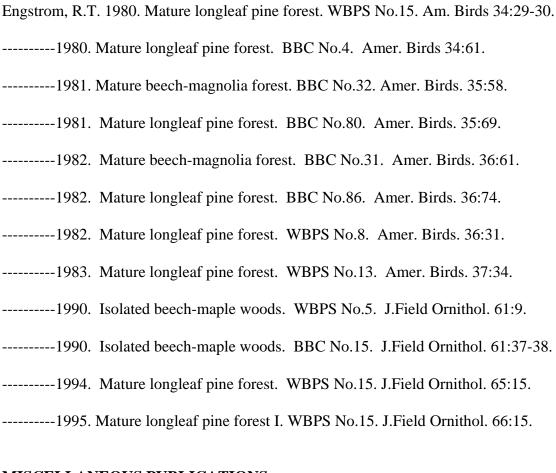
- Engstrom, R.T., and G. Mikusinski. 1998. Neighborhood size in populations of the Red-cockaded Woodpecker. *Auk* 115:473-478.
- Hanula, J. L., and R. T. Engstrom. 2000. Comparison of Red-cockaded Woodpecker diet in old-growth and old-field longleaf pine habitats. *American Midland Naturalist* 144:370-376.
- Cox, J. and R. T. Engstrom. 2001. The effects of spatial patterns of conservation lands on the persistence of a large population of Red-cockaded Woodpeckers. *Biological Conservation* 100:137-150.
- Cox, J.A., W.W. Baker and R.T. Engstrom. 2001. Red-cockaded woodpeckers in the Red Hills region: a GIS-based assessment. *Wildlife Society Bulletin* 29:1278-1288.
- Crawford, R. L., and R. T. Engstrom. 2001. Characteristics of avian mortality at a north Florida television tower: a 29-year study. *Journal of Field Ornithology* 72:380-388.
- Greenlaw, J. S., and R. T. Engstrom. 2001. First record of Spotted Towhee in Florida. *Florida Field Naturalist* 29:26-28.
- Saenz, D., R.N. Conner, D.C. Rudolph and R.T. Engstrom. 2001. Is a "hands-off" approach appropriate for red-cockaded woodpecker conservation in twenty-first-century landscapes? *Wildlife Society Bulletin* 29:956-966.
- Engstrom, R.T. and R.N.Conner. 2004. Ecological forestry, old-growth, and birds in the longleaf pine (*Pinus palustris*) ecosystem. Proceedings of the 23rd International Ornithological Congress, Beijing, China, August 11-17, 2002.
- Engstrom, R.T., P.D. Vickery, D.W. Perkins, and W.G. Shriver. 2005. Effects of fire regime on birds in southeastern pine savannas and native prairies. *Studies in Avian Biology* 30:147-160.
- Mitchell, R.J., J.K. Hiers, J.J. O'Brien, S.B. Jack, and R.T. Engstrom. *In Review*. Silviculture that sustains: the nexus between silviculture, frequent prescribed fire, and conservation of biodiversity in longleaf pine forests of the southeastern United States. *Canadian Journal of Forest Research*.

BOOK CHAPTERS

Engstrom, R.T., S. Gilbert, M.L. Hunter, Jr., D. Merriwether, G.J. Nowacki, and P. Spencer. 1999. Practical applications of disturbance ecology to natural resource management. Pages 313-330 in Johnson, N.C., A.J. Malk, W.T. Sexton, and R.C. Szaro (eds.), Ecological stewardship: a common reference for ecosystem management, Volume 2. Elsevier Science Ltd., Oxford.

Palik, B., and R.T. Engstrom. 1999. Species composition. Pages 65-94 <u>in M.L. Hunter, Jr. (ed.)</u> Maintaining biodiversity in forest ecosystems. Cambridge University Press, Cambridge.

DATA PUBLICATIONS



MISCELLANEOUS PUBLICATIONS

- Engstrom, R. T. 1989. Preface to the inaugural issue of Resident Bird Counts. J. Field Ornithol. 61:3-4.

 -----1989. The 1988 counts. J.Field Ornithol. 61:5.

 -----1990. The 1989 counts. J.Field Ornithol. 61:3-4.
- Engstrom, R. T. 1990a. An evaluation of the Colonial Bird Register. Pp.26-32 <u>in</u> S. Droege and J. Sauer (eds.) Proc. of the Workshop on the Analysis of Population Trends from Avian Surveys, Biol. Reports Series, U.S.Fish and Wildlife Service.

- Engstrom, R. T., G.S. Butcher, and J.D. Lowe. 1990b. Population trends in the Least Tern (Sterna antillarum) from Maine to Virginia: 1975-1986. Pp.130-138 in S. Droege and J. Sauer (eds.) Proc. of the Workshop on the Analysis of Population Trends from Avian Surveys, Biol. Reports Series, U.S.Fish and Wildlife Service.
- Engstrom, R.T. 1996. White-breasted Nuthatch. Pp. 595-601 <u>in</u> Rare and Endangered Biota of Florida. Vol. 5. J.A. Rodgers, Jr., H.W. Kale II, and H.T. Smith (eds.) Univ. Press of Florida, Gainesville, FL.
- Engstrom, R.T. 1996. American Avocet. Pp. 507-513 <u>in</u> Rare and Endangered Biota of Florida. Vol. 5. J.A. Rodgers, Jr., H.W. Kale II, and H.T. Smith (eds.) Univ. Press of Florida, Gainesville, FL.
- Engstrom, R.T. 1993. The Red-cockaded Woodpecker in the Red Hills. Tall Timbers Research Station and World Wildlife Fund. [Educational brochure]
- Costa, R., E.E. Stevens, N.T. McKay, and R.T. Engstrom. 1996. A current bibliographic resource for the Red-cockaded Woodpecker. Red-cockaded Woodpecker Field Office, Clemson, South Carolina, National Fish and Wildlife Foundation, Washington, D.C.
- Engstrom, R.T. 2001. Red-cockaded woodpeckers: prospects for recovery. Georgia Wildlife Federation Natural Georgia Series 8:12-13.
- Engstrom, R.T., L.K. Kirkman and R.J. Mitchell. 2001. The natural history of the fire forest. Georgia Wildlife Federation Natural Georgia Series 8:5-11, 14-17.
- Engstrom, R. T. 2002. Fire and birds in the Central Hardwoods landscape. Pp. 75-86 in Proc. Workshop on Fire, People, and the Central Hardwoods Lanscape. USDA Forest Service, Gen. Tech. Rept. NE-274.
- Engstrom, R. T., and D. J. Brownlie. 2002. Burning for birds: concepts and applications. Pp. 58-64 *in* W.M. Ford, K. R. Russell, and C. E. Moorman, eds. Proceedings: the role of fire for nongame wildlife management and community restoration: traditional uses and new directions; 2000 September 15; Nashville, TN. Gen. Tech. Rep. NE-288. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station. 145 p.
- Engstrom, R.T., and W.E. Palmer. 2005. Two species in one ecosystem: management of Northern Bobwhite and Red-cockaded Woodpecker in the Red Hills. C. John Ralph and Terrell D. Rich (eds.) Bird Conservation Implementation and Integration in the Americas: Proceedings of the Third International Partners in Flight Conference 2002. Gen. Tech Rep. PSW-GTR-191. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture.

UNPUBLISHED REPORTS

- Engstrom, R.T. 1978. Life history of the Red-cockaded Woodpecker. Contract Report, U.S.Forest Service, Tallahassee, Florida.
- Engstrom, R.T. 1978. The Red-cockaded Woodpecker in the Apalachicola National Forest. Contract Report, U.S.Forest Service, Tallahassee, Florida.
- Engstrom, R.T. 1993. Avian communities in Florida habitats: analysis and review. Florida Game and Fresh Water Fish Commission, Nongame Wildlife Program NG88-022.

REVIEWS

- Engstrom, R.T. 1984. A review: Estimating the numbers of terrestrial birds. C.J. Ralph and J.M. Scott (eds.) Studies in Avian Biology No. 6. Fla. Field Nat. 12:107-109.
- Engstrom, R.T. 1993. Birding by ear: A guide to bird-song identification. 1989. R.K. Walton and R.W. Lawson, Houghton-Miflin Co. Fla. Field Nat. 21(2):38.
- Engstrom, R.T. 1995. Florida bird species: an annotated list. 1992. W.B. Robertson, Jr. and G.E. Woolfenden, Florida Ornithological Society, Special Publ. No. 6. Fla. Scientist 58:61-62.
- Engstrom, R. T. 1998. The Florida Field Naturalist 1973 to 1997: the first 25 years. Florida Field Naturalist 26:65-74.
- Engstrom, R. T. 1999. Made for Each Other: A Symbiosis of Birds and Pines by R. M. Lanner, Wilson Bulletin 111:297-298.

EDITED PUBLICATIONS

- Cerulean, S.I. and R.T. Engstrom (eds.). 1995. Fire in wetlands: a management perspective. Proc. 19th Tall Timbers Fire Ecology Conference.
- Engstrom, R. T., and K. Galley. (editors) 2002. Fire in Temperate, Boreal, and Montane Ecosystems Fire. Proc. 22nd Tall Timbers Fire Ecology Conference.

INVITED PRESENTATIONS

1. Invited presentation: Texas Chapter of the Wildlife Society, 10-12 Feb. 1994, Nacogdoches,

Texas.

- 2. Invited presentation: Joseph Jones Ecological Research Station, 9 March 1995, Newton, Georgia.
- 3. Invited presentation: Virginia Polytechnic Institute and State University, 20 March 1995, Blacksburg, Virginia.
- 4. Invited presentation: National Research Council, 14 June 1996, Atlanta, Georgia.
- 5. Invited presentation and abstract: Longleaf Alliance, 17-19 September 1996, Mobile, Alabama.
- 6. Invited presentation: Georgia Ornithological Society, (keynote speaker at meeting banquet), 11 October 1997, Tallahassee, Florida.
- 7. Invited presentation: Georgia Southern University, 26 May 1998, Statesboro, Georgia.
- 8. Invited presentation and paper: Symposium on Neotropical Migrant Birds, January 1999 (In preparation), Biloxi, Mississippi.
- 9. Invited presentation and paper: Workshop on Fire, People, and the Central Hardwoods Landscape; 12-14 March 2000; Richmond, Kentucky. USDA Forest Service.
- 10. Invited presentation and paper: The role of fire for nongame wildlife management and community restoration: traditional uses and new directions; 12-16 September 2000; The Wildlife Society 7th Annual Conference; Nashville, TN.
- 11. Invited presentation and papers. Third International Partners In Flight Conference: A Workshop On Bird Conservation Implementation And Integration in the Americas; 20-24 March 2002, Asilomar State Park Conference Center, Monterey, California.
- 12. Invited presentation. Birds of the longleaf pine ecosystem. 4th Longleaf Alliance Regional Conference; 17-20 Nov. 2002; Southern Pines, NC.

GRADUATE STUDENTS

John J. Kappes (University of Florida); 2004; PhD; "Species interactions associated with Red-cockaded Woodpecker cavities at two forests in northern peninsular Florida."

David L. Leonard, Jr. (University of Florida); 2005; PhD; "The White-breasted Nuthatch in Florida: history, limiting factors, and phylogeography."

REFERENCES

Dr. Frances James Department of Biological Sciences Florida State University Tallahassee, Florida 32306 (850) 644-2217 (office) james@bio.fsu.edu

Leonard A. Brennan, Ph.D.
Professor and Endowed Chair for Quail Research
Caesar Kleberg Wildlife Research Institute
700 University Blvd, MSC 218
Texas A&M University, Kingsville, TX 78363-8202
361-593-5551 (office)
361-593-3924 (fax)
leonard.brennan@tamuk.edu

Dr. Lindsay Boring Joseph W. Jones Ecological Research Center Rt. 2 Box 2324 Newton, Georgia 31770 (229) 734-4706 (office) (229) 734-4707 (fax) lindsay.boring@jonesctr.org