2009 ANNUAL REPORT JAMES C. KENNEDY

ENDOWED CHAIR IN WATERFOWL AND WETLANDS CONSERVATION

FROM THE CHAIR

The first endowed chair in the College of Forest Resources and one of the largest at Mississippi State University was established in fall 2008 through a most generous gift from Mr. James C. Kennedy of Atlanta, Ga. based-Cox Enterprises Inc. Accordingly, it was named The James C. Kennedy Endowed Chair in Waterfowl and Wetlands Conservation.

The chair will ensure — in perpetuity — education, research, outreach, and service directly related to waterfowl and wetlands ecology and conservation through MSU's department of wildlife, fisheries and aquaculture and the college. Throughout North America, university programs in waterfowl and wetlands are declining in number. This decline and the internationally recognized program in waterfowl and wetlands at Mississippi State were Mr. Kennedy's primary reasons for creating the chair.

Three faculty members are currently associated with the waterfowl-wetlands program. They are Drs. Rick Kaminski, current Kennedy Chair, associate dean, and professor of wildlife; J. Brian Davis, assistant professor of wildlife; and Mike Schummer, post-doctoral research and teaching associate. Dr. Davis now occupies Kaminski's former position on the wildlife faculty. Davis is teaching Waterfowl Ecology & Management, Principles in Wildlife Conservation Management, and will assist Kaminski in instructing Wetlands Ecology & Management. Dr. Davis is busy establishing his own research program with graduate students but will collaborate with Kaminski in research, service, and development. Dr. Schummer has taught Waterfowl and Wetlands Ecology and Management and Wildlife Techniques. Additionally, since 2007, he has conducted research on forecasting duck migrations and management of weekly waterfowl hunting frequency on Mississippi Wildlife Management Areas. Dr. Schummer will be moving to Michigan in February 2010 with his wife, Sarah Fleming, after she completes her master's degree requirements in the department of wildlife, fisheries and aquaculture. We will miss Mike and Sarah, as integral partners of "Team Duck," but we know they will be successful in Michigan and nearer their natal grounds of New York and Ontario, respectively.

An active research program continues involving 12 university students. They include three doctoral students (Heath Hagy, Amy Spencer, and Jake Straub), eight master's students (James Callicutt, Josh Cheshier [Plant & Soil Sciences], Sarah Fleming, Justyn Foth, Alan Leach, Elizabeth St. James, Alicia Wiseman, and Christina Zimmerman [Geosciences/Climatology]), and an undergraduate student, Mitch Weegman, who holds the Scenic Homes 'Richard M. Kaminski' Endowed Scholarship in Waterfowl & Wetlands Conservation. The students have received numerous awards as listed in this report. For example, five graduate students received travel or presentation awards at state, national, and international conferences. Mitch Weegman was awarded the Barry M. Goldwater Scholarship, one of only 11 MSU students to have received this prestigious scholarship. Additionally, he was a finalist for a Rhodes Scholarship to pursue a Ph.D. at Oxford University in England. Indeed, these energy-rich, intellectual, and dedicated youthful professionals will lead waterfowl and wetlands science and conservation during this century. You may evidence this leadership by inspecting their production of scientific and popular publications and presentations listed in this report.

Clearly, I am blessed to be the Kennedy Chair and work daily with Team Duck colleagues. Mr. Kennedy, thank you from the depths of our hearts for your belief in us and for ensuring the future of the waterfowl and wetlands program at MSU. We are indebted!

For more information about the Kennedy Chair and the individuals involved, please visit our web site at www.cfr.msstate.edu/ kennedychair.

Gratefully,

Rick Kaminski

FACULTY&STUDENTS

FACULTY

Dr. Richard (Rick) M. Kaminski

James C. Kennedy Endowed Chair Associate Dean, College of Forest Resources Professor, Department of Wildlife, Fisheries, and Aquaculture

> Dr. J. Brian Davis Assistant Professor Department of Wildlife, Fisheries, and Aquaculture

Dr. Mike Schummer Post-doctoral research and teaching Associate Department of Wildlife, Fisheries, and Aquaculture









STUDENTS

Heath Hagy Ph.D. candidate Department of Wildlife, Fisheries, and Aquaculture



Amy B. Spencer Ph.D. student Department of Wildlife, Fisheries, and Aquaculture



Jacob N. Straub Ph.D. student Department of Wildlife, Fisheries, and Aquaculture

James Callicutt M.S. student Department of Wildlife, Fisheries, and Aquaculture

> Josh Cheshier M.S. student Department of Plant and Soil Sciences

(Kathryn) Sarah Fleming M.S. student Department of Wildlife, Fisheries, and Aquaculture





FACULTY& STUDENTS



STUDENTS

Justyn Foth

M.S. student Department of Wildlife, Fisheries, and Aquaculture

Alan Leach M.S. student Department of Wildlife, Fisheries, and Aquaculture

Elizabeth St. James M.S. student Department of Wildlife, Fisheries, and Aquaculture

Mitch Weegman Undergraduate student and Goldwater Scholar Department of Wildlife, Fisheries, and Aquaculture

Alicia Wiseman M.S. student Department of Wildlife, Fisheries, and Aquaculture





James C. Kennedy Chairman, Cox Enterprises Inc. Chairman, Cox Radio, Inc.

PUBLICATIONS

Davis, J.B., B.D. Leopold, R.M. Kaminski, R.R. Cox Jr. 2009. Wood duck duckling mortality and habitat implications in floodplain systems. Wetlands 29(2):607-614.

Fleming, K.S., R.M. Kaminski. 2009. To Manage or Not to Manage? Delta Wildlife 17(1):32-33.

Hagy, H. 2009. Spring migration and reproduction. Delta Wildlife 17(1):12-13.

Havens, H., **R.M. Kaminski**, **J. Davis**, S.K. Riffell. In Press. Winter abundance of waterfowl and waste rice in managed Arkansas rice fields. Proceedings of the Southeastern Association of Fish & Wildlife Agencies. 63.

Kaminski, R.M., K. Brasher. 2009. Wonder weeds for waterfowl. Farming for Wildlife, Summer:52-54.

Kaminski, R.M., R. Moring. 2009. Grassy corn for wintering ducks. Delta Wildlife 17:27.

Manley, S.W., **R.M. Kaminski**, P.B. Rodrigue, J.C. Dewey, S.H. Schoenholtz, P.D. Gerard, K.J. Reinecke. 2009. Soil and nutrient retention in winter-flooded ricefields with implications for watershed management. Journal of Soil and Water Conservation 64:173-182.

Pearse, A.T., K.J. Reinecke, S.J. Dinsmore, **R.M. Kaminski**. 2009. Using simulation to improve wildlife surveys: Wintering mallards in Mississippi, USA. Wildlife Research 36(4):279-288.

Schummer, M.L., R.M. Kaminski, A.H. Raedeke, D.A. Graber. In Press. Weather- related indices of autumn-winter dabbling duck abundance in middle North America. Journal of Wildlife Management 74(1).

Schummer, M.L., R.M. Kaminski. In Press. Predicting duck migration with a Weather Severity Index. Delta Wildlife. Winter volume (2009).

Schummer, M.L., S.S. Badzinski, S.A. Petrie. 2009. Selenium accumulation in sea ducks wintering at Lake Ontario. Archives of Environmental Contaminants and Toxicology.

Strickland, B.K., **R.M. Kaminski**, K. Nelms, A. Tullos, editors. 2009. Waterfowl habitat management handbook. Mississippi State University Extension Service Publication 1864. 31 pp.

"...Richard M. Kaminski, associate dean of the College of Forest Resources, received The Wildlife Society's Caesar Kleberg Award for Excellence in Applied Wildlife Research..."

Callicutt, J. T., **M.L. Schummer**, **H.M. Hagy**, **R.M. Kaminski**. 2009. Fall and winter studies of food use by North American dabbling ducks (Anas spp.): 1900-2008. Presented at the 2nd Southeastern Natural Resources Graduate Student Symposium, Starkville, Mississippi.

Callicutt, J.T., **H.M. Hagy**, **M.L. Schummer**, **R.M. Kaminski**. 2009. Studies of fall-winter food use by North American dabbling ducks: 1900-2008. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Cheshier, J.C., J.D. Madsen, **R.M. Kaminski**. 2009. Selective herbicides for managing moist-soil wetlands in the Mississippi Alluvial Valley. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Davis, J.B. 2009. Annual ecology and conservation of North American waterfowl and wetlands. Presented in the Department of Biological Sciences, Mississippi State University.

Fleming, K.S., R.M. Kaminski, T.E. Tietjen, G.N. Ervin, K.D. Nelms, M.L. Schummer. 2009. Avian community responses to management and hydrology on wetland reserve program lands in Mississippi. Presented at the 16th Wildlife Society Annual Conference, Monterey, California.

Fleming, K.S., R.M. Kaminski, T.E. Tietjen, G.N. Ervin, K.D. Nelms, M.L. Schummer. 2009. Evaluation of wetland size and vegetative quality on waterfowl use in Wetlands Reserve Program wetlands in Mississippi. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Fleming, K.S., R.M. Kaminski, T.E. Tietjen, G.N. Ervin, K.D. Nelms, M.L. Schummer. 2009. Plant and duck community responses to management and hydrology on Wetlands Reserve Program lands in Mississippi. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Foth, J.R., R.M. Kaminski, J.N. Straub, A.G. Leach, T.D. Leininger. 2009. Aquatic macroinvertebrates in hardwood bottomlands in the Mississippi Alluvial Valley and Interior Flatwoods. Presented at the Mississippi Chapter of The Wildlife Society, Jackson, Mississippi.

Foth, J.R., R.M. Kaminski, J.N. Straub, A.G. Leach, T.D. Leininger. 2009. Aquatic macroinvertebrates in hardwood bottomlands in the Mississippi Alluvial Valley. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

"...Doctoral candidates Heath Hagy and Jacob Straub garnered second place at the 5th North American Duck Symposium for their poster presentation entitled, "A reliable correction factor for recovery of moist-soil seeds from core samples..."

Foth, J.R., R.M. Kaminski, J.N. Straub, A.G. Leach, T.D. Leininger. 2009. Aquatic invertebrate abundance and community composition in flooded hardwood bottomlands in the Mississippi Alluvial Valley. Presented at the 2nd Southeastern Natural Resources Graduate Student Symposium. Starkville, Mississippi.

Hagy, H., R.M. Kaminski. 2009. Moist-soil foods and wintering waterfowl conservation in the Mississippi Alluvial Valley. Presented at the Forest and Wildlife Research Applications Conference, Jackson, Mississippi.

Hagy, H.M., J.N. Straub, R.M. Kaminski. 2009. A reliable correction factor for recovery of moist-soil seeds from core samples. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Hagy, H.M., R.M. Kaminski, K.J. Reinecke, S.K. Riffell, and F.J. Vilella. 2009. Waterfowl use and food depletion in fall-manipulated moist-soil wetlands in the Mississippi Alluvial Valley. Presented at the 2nd Southeastern Natural Resources Graduate Student Symposium. Starkville, Mississippi.

Hagy, H.M., R.M. Kaminski, K.J. Reinecke. 2009. Giving up density of moist-soil seeds by dabbling ducks in the Mississippi Alluvial Valley. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Kaminski, R.M. 2009. Connecting croplands, waterfowl, and wetlands through conservation in the Mississippi Alluvial Valley. Presented at the Society of Wetland Scientists Annual Meeting, Madison, Wisconsin.

Kaminski, R.M. 2009. Duck migration forecasts in the Mississippi Flyway. Presented at the Ducks Unlimited Annual Banquet. Grenada, MS.

Kaminski, R.M. 2009. Mallard and other waterfowl habitat management in Mississippi. Presented at the Mississippi State University Extension Service Wildlife Seminar Series.

Kaminski, R.M. 2009. The 10+ Commandments of Conservation. Presented at the Alliance for Graduate Education in Mississippi. Mississippi State University.

Kaminski, R.M. 2009. Connecting croplands, waterfowl, and wetlands through science and conservation. Presented at the Forest and Wildlife Research Center Seminar Series, Mississippi State, MS.

Leach, A.G., J.N. Straub, R.M. Kaminski, A.W. Ezell, J.R. Foth, T.D. Leininger, K.J. Reinecke. 2009. Red oak acom production and abundance in the Mississippi Alluvial Valley. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Leach, A.G., J.N. Straub, R.M. Kaminski, J.R. Foth, A.W. Ezell, T.D. Leininger, K.J. Reinecke. 2009. Red oak acom production and abundance in the Mississippi Alluvial Valley. Presented at the Mississippi Chapter of The Wildlife Society, Jackson, Mississippi.

Leach, A.G., R.M. Kaminski, J.N. Straub, A.W. Ezell, T.D. Leininger. 2009. Influence of winter flooding on red oak acorn gross energy. Presented at the Mississippi Chapter of The Wildlife Society, Jackson, Mississippi.

Schummer, M.L., M. Gray, J.D. Stafford, R.M. Kaminski, K.J. Reinecke. 2009. Abundance, dynamics and conservation of duck foods and foraging habitats in North America. Presented at the 5th North American Duck Symposium, Toronto, Ontario.

Schummer, M.L., R.M. Kaminski, C.L. Wax, M.E. Brown, C.E. Zimmerman, A.H. Raedeke, D.A. Graber. 2009. Long-term trend analyses of climatic factors influencing autumn-winter migration by mallards in Central, Mississippi, and Atlantic Flyways. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Spencer, A.B., **R.M. Kaminski**, L.R. D'Abramo, **H.M. Hagy**, 2009. Crayfish-harvest potential in wetlands managed for waterfowl in Mississippi. Presented at the 139th meeting of the American Fisheries Society, Nashville, TN.

Spencer, A.B., **R.M. Kaminski**, L.R. D'Abramo, **H.M. Hagy**. 2009. Crayfish-harvest potential in natural wetlands managed for waterfowl in Mississippi. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Spencer, A.B., **R.M. Kaminski**. 2009. Preliminary assessment of ecosystem services provided by moistsoil wetlands. Presented at the Mississippi Water Resources Conference, Tunica, Mississippi.

Spencer, A.B., **R.M. Kaminski**. 2009. Crayfish ecology and harvest potential in moist-soil wetlands managed for wintering waterfowl in Mississippi. Presented at the Southern Division of the American Fisheries Society, New Orleans, Louisiana.

St. James, E.A., **M.L. Schummer**, **R.M. Kaminski**, E.J. Penny, K.D. Brunke, J.H. Havens. 2009 Effect of weekly hunting frequency on waterfowl harvest, abundance, and hunter satisfaction in Mississippi. Presented at the 2nd Southeastern Natural Resources Graduate Student Symposium. Starkville, Mississippi.

St. James, E.A., M.L. Schummer, R.M. Kaminski, E.J. Penny, K.D. Brunke, J.H. Havens. 2009. Effect of hunting frequency on waterfowl harvest, abundance, and hunter satisfaction in Mississippi. Presented at the Graduate Student Research Symposium, Mississippi State, Mississippi.

St. James, E.A., M.L. Schummer, R.M. Kaminski, E.J. Penny, K.D. Brunke, J.H. Havens. 2009. Effect of weekly hunting frequency on duck harvest, abundance, and hunt quality in Mississippi. Presented at the Mississippi Chapter of The Wildlife Society, Jackson, Mississippi.

St. James, E.A., **M.L. Schummer**, **R.M. Kaminski**, E.J. Penny, K.D. Brunke, J.H. Havens. 2009. Effect of weekly hunting frequency on waterfowl harvest, abundance, and hunting quality in Mississippi. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Straub, J.N. 2009. Ecology of bottomland hardwood forests. Presented in the Department of Biological Sciences, Mississippi State University.

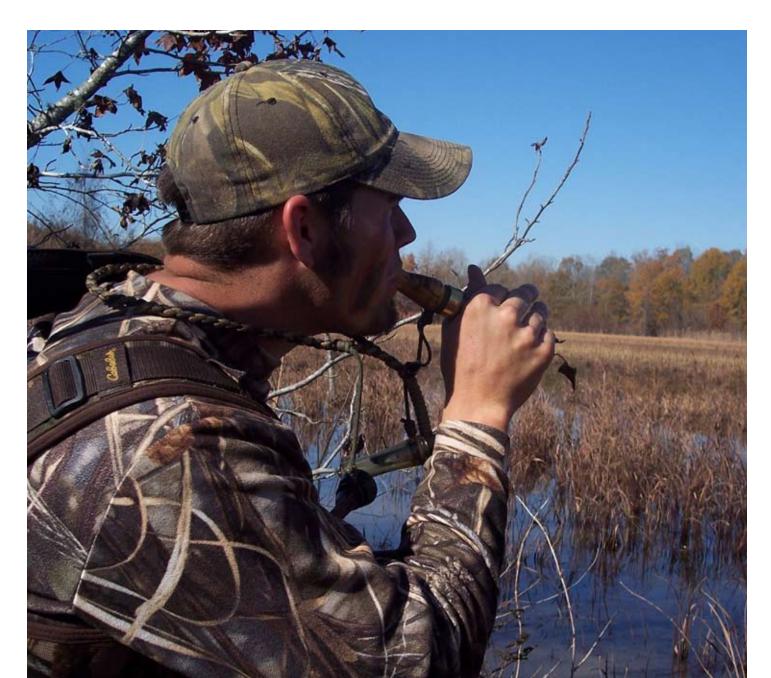
Straub, J.N., H.M. Hagy, R.M. Kaminski. 2009. A reliable correction factor for recovery of moistsoil seeds from core samples. Presented at the Mississippi Chapter of The Wildlife Society, Jackson, Mississippi.

Straub, J.N., R.M. Kaminski, A.G. Leach, J.R. Foth, A.W. Ezell, T.D. Leininger. 2009. Red oak acom production and abundance in the Mississippi Alluvial Valley. Presented at the 2nd Southeastern Natural Resources Graduate Student Symposium. Starkville, Mississippi.

Weegman, M.D., M.M. Weegman. 2009. Trace element concentrations in Lesser Scaup eggs and invertebrate foods. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.

Wiseman A.J., R.M. Kaminski, S.K. Riffell, K.J. Reinecke, E.J. Larson. 2009. Waterfowl foods in managed grain sorghum fields in the Mississippi Alluvial Valley. Presented at the 2nd Southeastern Natural Resources Graduate Student Symposium. Starkville, Mississippi.

Wiseman, A.J., R.M. Kaminski, S.K. Riffell, K.J. Reinecke, E.J. Larson. 2009. Waterfowl foods in managed grain sorghum fields in the Mississippi Alluvial Valley. Presented at the 5th North American Duck Symposium, Toronto, Ontario, Canada.



AWARDS

Sarah Felming

Ernest A. Gluesing Outstanding Graduate Student Award, Masters level, Department of Wildlife and Fisheries, Mississippi State University.

Heath Hagy

2nd place, doctoral student poster presentation, North American Duck Symposium, 2009, Toronto, Ontario, Canada

David Nabi Memorial Award, Department of Wildlife and Fisheries, Mississippi State University

Travel Award, North American Duck Symposium, 2009, Toronto, Ontario, Canada

Richard M. Kaminski

Mississippi Hero of Conservation, Mississippi Ducks Unlimited

Outstanding Technical Publication, "Waterfowl Habitat Management Handbook for the Lower Mississippi River Valley", Bronson Strickland, Rick Kaminski, Kevin Nelms, and Adam Tullos, authors. Mississippi Chapter of The Wildlife Society.

The Wildlife Society's 2009 Caesar Kleberg Award for Excellence in Applied Wildlife Research

Amy Spencer

Travel Award, American Fisheries Society

Elizabeth St. James

2nd place, master's student poster presentation, North American Duck Symposium, 2009, Toronto, Ontario, Canada

Jacob Straub

Travel Award, North American Duck Symposium, 2009, Toronto, Ontario, Canada

2nd place, doctoral student poster presentation, North American Duck Symposium, 2009, Toronto, Ontario, Canada

Mitchell D. Weegman

Barry M. Goldwater Scholar Interviewed candidate for a Rhodes Scholarship at Oxford University in England

> "...Master's student Elizabeth St. James placed second at the 5th North American Duck Symposium for research on the effects of hunting frequency on waterfowl use, harvest, and hunt quality on Mississippi Wildlife Management Areas..."



The following stories can be read on the Kennedy Website by visiting: www.cfr.msstate.edu/kennedychair

Managing WRP for waterfowl 'I Love Ducks': Students follow migration on cross-country field trip Using your time wisely, at least, if you're a duck... MSU professor and alumni attend wetlands conference Ducks Unlimited honors Mississippi Heroes Of Conservation MSU students and alumni, winners at 5th North American Duck Symposium MSU professor again honored for practical waterfowl research Climate change or not, ducks aren't here Future waterfowl professionals wisit Ducks Unlimited National Headquarters



Current and former "Team Duck" MSU students at the 5th North American Duck Symposium in Toronto, Ontario, August 2009



Department of Wildlife, Fisheries and Aquaculture | Department of Forestry | Department of Forest Products

MISSISSIPPI STATE