Story by Kathy Wythe

Dr. Kirk Winemiller, Regents Professor in Texas A&M's Department of Wildlife and Fisheries Sciences, throws a castnet to sample fishes in a floodplain lagoon of the Rio Cinaruco in the Venezuelan Llanos.

WORDS WITH WINEMILLER

Researcher's passion for rivers, fish began early

Growing up in a rural area of north central Ohio, Dr. Kirk Winemiller, now a Regents Professor of wildlife and fisheries sciences at Texas A&M University and internationally known ecologist, often frequented a creek directly across the highway from his home.

"I spent a lot of time in that creek, a lot of time, catching fish and crawdads," he said.

In his home, he took care of his aquarium, filled with tropical fish. "I was obviously drawn to fish; I don't know how to explain it."

This inherent passion for rivers and fish continued as he attended Miami University in Ohio, studying the ecology of local fish, and at the University of Texas at Austin, where he earned his doctorate in ecology with a focus on fish and food webs.

"The goal I always had as a boy raising tropical fish in aquariums was to go to the tropics and study tropical fish," he said. While at the University of Texas, he realized that goal, studying tropical fish in Venezuela and Costa Rica.

After graduation and with a Fulbright Scholarship in hand, Winemiller and his new wife, Dr. Leslie Kelso-Winemiller, arrived in Zambia, Africa, in 1989, to begin a year-long study of fish ecology on the Zambezi River and its huge floodplain.

"That was probably the greatest year in my life," he said, recalling traveling up and down the river and its floodplain, catching and identifying fish. The couple discovered two previously undescribed species, *Serranochromis altus* and *Neolebias lozii*.

While in Zambia, the Winemillers became friends with American Catholic missionaries Bill and Jeannie Ritter, who operated a food distribution and nutrition center in Mongu. The Ritters (Bill is the current governor of Colorado) provided the couple with housing and allowed Winemiller to examine fish in the mission's fish market, where he found rare species. They also linked the Winemillers with other missionaries in outlying, remote areas, who sometimes provided housing and other logistical help.

After a stint at the Oak Ridge National Laboratory's Environmental Science Division in Tennessee, Winemiller came to Texas A&M in 1992 to teach population dynamics and introductory ecology and continue his research.

Through the years, Winemiller's research has focused on two areas of fish ecology: fish population ecology and aquatic food web ecology. With his fish ecology research, he is trying to understand the dynamics of fish populations in rivers and streams and how the fish interact with their environment to influence their behavior, abundance, and ⇨

distribution, Winemiller said. Much of this research relates to environmental flows, another issue he is very involved with (see related stories on pages 3 and 5).

In his food web ecology research, Winemiller is investigating the basis for production dynamics, such as where nutrients in the rivers are coming from, how the nutrients yield different food resources, and how the food resources are passed through the network of predator/prey interactions.

Although based in College Station for the past 17 years, Winemiller has not abandoned his goal of studying and identifying tropical fish. He and his students still go to the tropics to document fish diversity, frequently finding previously unknown species.

Almost half of his research has been international, with projects in at least 10 Latin American and African countries. For 15 years, his lab maintained a long-term study site on the Cinaruco River in Venezuela. The field station was abandoned earlier this year because of political tensions in the region.

It was for his international research and work with international students that Winemiller was recently recognized with three awards.

Last year former Texas A&M President Dr. Elsa Murano presented Winemiller with the 2008 Texas A&M University Presidential Award of Excellence for Faculty Service to International Students.

According to a Texas A&M news release, many international students and scientists are drawn to the university because of Winemiller's international reputation. "According to one of his nominators, Winemiller has made his international students feel welcome and integrated them into his teaching, training, mentoring, and research activities in Wildlife and Fisheries," the release said.

In January 2009 the Texas A&M University Board of Regents presented the 2008 Regents Professor Award to Winemiller as a highly productive and internationally known ecologist recognized for his scientific expertise in biodiversity conservation and management of water resources.

In March 2009 he received the Bush Excellence Award for Faculty in International Teaching. According to the news release announcing the Bush award, Winemiller is "internationally recognized for his research and brings that experience into the classroom on a daily basis. The mix of U.S. and international students in his lab creates a cross-cultural environment that is very enriching for all his students enabling them to learn and thrive in international settings."

Winemiller's attraction to and innate curiosity about fish that developed as a young boy is still very much alive.

"I am still fascinated by rivers, streams, and fishes. That lies at the core of what motivates me," he said. "That we can do research that is highly relevant to some of our most pressing problems, not just for conservation of biodiversity and fishery management but also water resource management, is just a huge bonus."

Dr. Kirk Winemiller and his wife, Dr. Leslie Kelso-Winemiller with former President George H. W. Bush, after receiving the Bush Excellence Award for Faculty in International Teaching. The award was established through the support of the former President and Mrs. Bush with financial assistance from the George Bush Presidential Library Foundation.