
DONATIONS TO THE FUND

Donations to the Dr. James C. Schmulbach Scholarship Fund will be graciously accepted.

To contribute please send a check to:

Schmulbach Scholarship Fund
% Will Saylor
Cleghorn Springs SFH
4725 Rimrock Hwy.
Rapid City, SD 57702

A receipt for your tax deductible contribution will be provided.

Please find this brochure on the Dakota Chapter's website.

<http://dakotaafs.sdstate.org/>



SCHOLARSHIP INFORMATION

Eligibility:

Any undergraduate student in their Junior or Senior year studying Fisheries Science or a related field at an accredited college or university in North or South Dakota is eligible to apply.

Application:

Applications must be submitted to the President of the Dakota Chapter of the American Fisheries Society by January 1.

Applications will include:

An essay of 200 words or less, describing the student's interest in fisheries science and their career goals, a resume, a letter of reference from a fisheries professional and a copy of the student's college transcripts.

Selection:

Scholarship recipients will be chosen by the Governing Board of the Dakota Chapter based upon an evaluation of the information submitted.

Award:

Scholarship(s) will be awarded to the successful candidate(s) by the President of the Dakota Chapter yearly at its annual meeting. The dollar value and number of scholarships awarded will be determined by the Governing Board of the Dakota Chapter.

Scholarship applications can be submitted electronically to:

will.saylor@state.sd.us

DR. JAMES C. SCHMULBACH MEMORIAL SCHOLARSHIP

Dakota Chapter of the
American Fisheries Society



'Doc' - Dr. James C. Schmulbach

Dr. James C. Schmulbach (Doc) received his PhD degree from Iowa State University and his undergraduate degree from Southern Illinois University. Doc joined the faculty of five professors in the Department of Zoology at USD in 1958. He began teaching a new course, Ichthyology, and was described as "quite a go-getter" for his efforts to increase fisheries research at the University. He was a charter member of the Upper Missouri River Chapter of the American Fisheries Society,

now the Dakota Chapter of the American Fisheries Society.

He was called Doctor Sturgeon because of his great knowledge of the Missouri River and its fishes. His work on the Missouri River in the 1960s and 1970s was the first to begin revealing changes after the dams were closed and the downstream segment channelized. He guided studies of fish food webs and integrated the river's four dimensions (lateral, longitudinal, vertical, and temporal).

Doc and his students studied the longitudinal dimension by comparing channelized vs. unchannelized reaches. They found reduced standing crop of aufwuchs and fish in channelized reaches. He studied the lateral dimension by evaluating the fish populations and fish food in various macrohabitats, particularly riverside wetlands. They found different selection of macrohabitats by immature and adult fishes in the unchannelized Missouri River from Gavins Point to Rulo, Nebraska.

He studied the vertical dimension by evaluating how river flows scoured invertebrates from the bottom into the water column (called "drifting community"). They reported that shovelnose sturgeon eat macroinvertebrates, and shifts in feeding activity and prey vulnerability were influenced by dam discharges.

His conclusions about how the fish and fish food organisms had changed in three dimensions of the river led him to speculate on how the river might change with time - the temporal dimension. "Continuing reduction in the size of the aquatic backwater habitats portends deterioration of the Missouri River fishery. The entire degradation-aggradation cycle of the

sediments has been changed by the dams, thus interrupting the scheme of plant succession. New serial stages in the backwater habitats are less frequently established and the relentless march of plant succession towards terrestrial communities proceeds in existing marshes.... future harvest rates of this fishery will remain modest or probably decline."

Doc retired from USD in 1994 after guiding 30+ Graduate students who studied a variety of fishery subjects in South Dakota and untold 1,000's of future science teachers, medical professionals, and amateur naturalists on to future careers.

Doc's energy and personable nature left indelible marks on the untold lives he touched throughout his career and into his retirement. Doc was a mentor to many and a friend to all. His unmistakable laughter filled the halls of the biology department at the University for 36 years. Doc's passion for natural resources did not end with academia. Hunting morels, chasing turkeys, angling for walleyes and perch on Big Stone, following one of his many German Shorthairs who always had a place in Doc's home as well as the field, sharing a beer or a bottle of his homemade wine with a story, watching his beloved Cardinals or Bears (you did not want to rib Doc about football on Monday morning if the Bears had lost)...

Doc knew and appreciated all of these things and especially the people in his life. His work and energy will go on through not only the lives and understanding of biology and natural systems of his students, but also his legacy of fostering youth will continue indefinitely through the Dr. James C. Schmulbach Scholarship Fund.

The following excerpts are taken from a lecture Doc presented in 1988 entitled "Marsh Legacy" and aptly describe Doc's passion for education, nature, the Missouri River, and the need to conserve for the future of mankind.

Dr. James C. Schmulbach – in his own words...

I am a naturalist by choice and a biologist by training, with research interests focused on the ecology of flowing waters and primarily on fish communities....

I was fortunate in that during my childhood, my parents, especially my mother who was an elementary school teacher, encouraged my interest in nature. Moreover, the relaxed life of a youngster growing up in a rural environment in the pre-TV 1930s permitted abundant interaction with nature's wares. I became a naturalist; more precisely, I remained one.

...for a few, their naturalist's values are essentially nonnegotiable... They recognize that for all the structural and functional complexity in living organisms there is a uniformity of pattern superimposed upon all life. More importantly, they understand the interdependence between all living things. They are students of whole organisms, populations and communities.

See the Dakota Chapter website for the entire lecture.

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