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Joseph Bruno Slowinski, 1962-2001

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# OBITUARIES

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## JOSEPH BRUNO SLOWINSKI 1962–2001

**J**OSEPH Bruno Slowinski was born on 15 November 1962 in New York City and died on 12 September 2001 during his 11th expedition to Myanmar (Fig. 1). On the morning of 11 September, Joe was bitten by a multibanded krait (*Bungarus multicinctus*) when he reached into a collecting bag to grab a snake presumed to be a species of *Dinodon*. Joe was interested in *Dinodon* because it is a mimic of *Bungarus*. Despite valiant efforts on the part of expedition members, Joe passed away in his last Burmese jungle camp. According to the wishes of his family, Joe was cremated in Myanmar, a country Slowinski described as “visually stunning.” Joe is survived by his mother Martha Crow of New York City, his father Ronald Slowinski of Kansas City, and his sister Rachel Slowinski of Los Angeles.

Joe lived in New York City for the first three years of his life. His family moved to Indiana when Joe was three, and the following year the family settled in Kansas City, Missouri. Joe’s work in Asia started at an early age when he attended the first grade in Kyoto, Japan. When the family returned to Kansas City the following year, Joe attended public schools through the eighth grade. He attended Pembroke Country Day School, a private boy’s high school, on a full four-year scholarship. Joe’s scholarship application included an essay entitled “Why Ecology Is Important,” and although Slowinski did not become an ecologist, this essay was clearly a sign that Joe was deeply interested in biology.

Actually Slowinski’s interest in natural history developed at an early age, and he spent many of his early years searching for creatures (Fig. 2). He inherited artistic talent from his parents and drew pictures of living and extinct organisms in addition to searching for and collecting them during family outings. His mother introduced Joe and his sister to the Geology Club, a group that met at the University of Missouri at Kansas City. Joe and Rachel (he was 11 and she was 10) were the youngest members of the club. Joe contributed to the meetings by setting up displays of his fossils.

Joe collected Pleistocene fossils from the Kaw (Kansas) River during outings with his mother and sister. He was one of the first to discover

the rich Pleistocene mammal deposits of the Kaw River and took examples of these fossils to the Natural History Museum at the University of Kansas for identification. Joe met Dr. Larry Martin as a teenager and later worked with Martin as a work-study student in the museum contributing several fossil specimens to the holdings at the University of Kansas. Joe’s finds were spectacular, and he was known as the “King of the Kaw” during his early college years. Joe found an entire mastodon femur, a partial mastodon skull, and several bison skulls. The Natural History Museum at the University of Kansas has a number of Joe’s Pleistocene mammal fossils on exhibit. In July of 1979, Joe participated in an Earthwatch expedition to the fossil beds of South Dakota on a full scholarship for room and board. Joe traveled with his father to South Dakota, and they camped along the way. Joe discovered “abundant” rattlesnakes in Nebraska, and Ron remembers watching the “snaker’s gleam” grow in Joe’s eyes.

Slowinski met Stan Rasmussen during their first year at the University of Kansas. Together they spent time engaged in a number of outdoor activities including hiking, camping, canoeing, wildlife viewing, tree climbing, snorkeling, fossil collecting, and exploration of new areas, and they always tried to incorporate herpetology into their adventures. Although Joe seemed to be poised for a career in paleontology, his love for living snakes spurred him to study them for his doctoral thesis. Ron Slowinski believes that the summer of 1979 was a critical time for Joe, because his passions shifted from fossil mammals to recent serpents.

Joe started the Ph.D. program at the University of Miami in 1984 with Jay M. Savage. Jay frequently asked “senior” graduate students to watch over the “junior” students, and Brian Crother was assigned to “watch over” Joe Slowinski. Their friendship developed instantly, and the rest of the lab watched them! Joe and Brian loved snakes, school, sports, and beer. After daily racquetball games, members of the Savage lab argued science while drinking beers on the “veranda.” Slowinski was an active member of the Savage lab group and a vocal participant on the veranda. Joe was competitive, and he loved playing any kind of game. He participated in intramural basketball and baseball games as well as those played in saloons (darts and pool). During this time, Joe was famous for bringing a four-foot long “baby” cobra to the lab and for

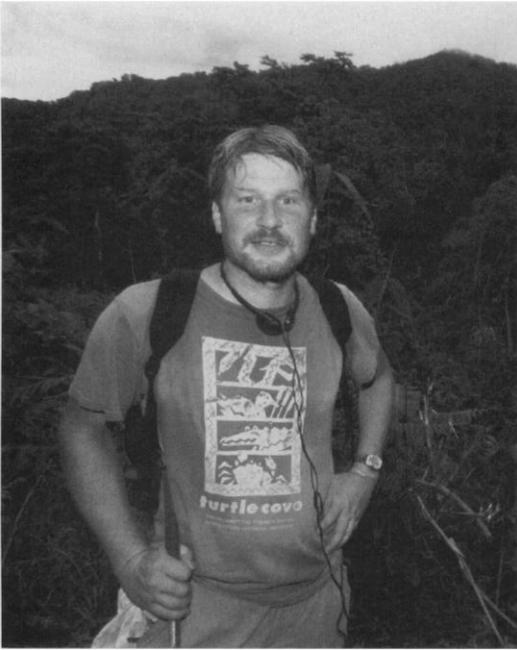


Fig. 1. Joseph B. Slowinski, 2001, Myanmar. Photo by Dong Lin.



Fig. 3. Joe Slowinski and *Boa constrictor*, 1985, Costa Rica. Photo by Alan Rebertus.

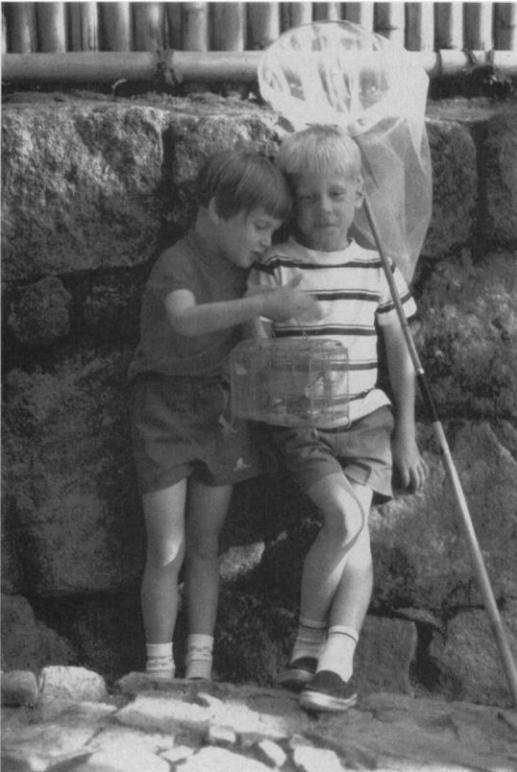


Fig. 2. Joseph and Rachel Slowinski, 1968, Japan. Photo by Ron Slowinski.

shipping a rattlesnake to a friend on a Greyhound bus!

Joe developed his interest in tropical herpetology during an eight-week field course in Costa Rica offered by the Organization for Tropical Studies (OTS). Joe's course in the summer of 1985 included several herpetologists (Patricia Burrowes, Brian Crother, John Fauth, and Juan Renifo). Research conducted with Brian Crother and John Fauth during the OTS course resulted in two publications (Slowinski et al. 1987; Fauth et al. 1989), and research conducted with Suzanne Koptur resulted in a third paper (Koptur et al. 1990), which may be an OTS record. Joe's affection for Costa Rican snakes began with the OTS course (Fig. 3) where he saw his first coral snake in the forests of Tortuguero, an experience that ultimately led to an analysis of coral snake phylogeny for his doctoral dissertation (completed in 1991).

Joe's dissertation project was laboratory-based, but he really loved fieldwork. During his graduate school days Joe conducted fieldwork in the United States, Costa Rica, Mexico, Peru, Guatemala, Jamaica, and the Bahamas. Slowinski and Peter Lahanas took part in a survey of

the herpetofauna of the Talamanca Mountains in 1986 during which they struggled to keep up with their Costa Rican counterparts as they climbed Volcan Chirripó, the tallest mountain in Costa Rica. During his years in Miami, Joe was supported as a teaching assistant (general biology and comparative anatomy labs), a lecturer (genetics, ecology, general biology, and phylogenetic methods), and as a research assistant working on the reproductive biology of anoles (Tokarz and Slowinski 1990). Joe also worked as a naturalist in Peru for a year (1990–1991). Joe and his sister Rachel were interested in visiting exotic locales, and he traveled extensively with Rachel during and after graduate school.

Joe had three postdoctoral positions following completion of his dissertation. First he worked with Roy McDiarmid and George Zug at the National Museum of Natural History on the systematics of elapid snakes using morphological data (1991–1992). Then he moved to Louisiana State University and worked on molecular systematics of elapid snakes with David Good (1992–1994) and was an introductory biology instructor (1994–1996). While at LSU, Joe was an important resource for students working on systematic projects. He mentored many students including Frank Burbrink who recently named a corn snake (*Elaphe slowinskii*) after Joe (2002, *Molecular Phylogenetics and Evolution* 25:465–476). Finally, Joe moved to Southeastern Louisiana University in 1996 for a third postdoctoral position with Mary White and Brian Crother working on snake systematics, and serving as an instructor for introductory biology and genetics.

Joe got his “dream job” when he was hired as an assistant curator in the Department of Herpetology at the California Academy of Sciences in 1997. He was promoted to Associate Curator in 2000 and served as a Research Professor of Biology at San Francisco State University (2000–2001). Guin Wogan and Rhonda Lucas were Joe’s graduate students working on Burmese frogs and snakes, respectively. Both spent time with Joe in Myanmar, and they served as research associates on the Herpetofauna of Myanmar project.

Slowinski’s research interests were broad, and he published papers on a variety of subjects (see Selected Bibliography). He published a book entitled *Introduction to Genetics* (Slowinski, 1998a) and papers that covered natural history, distribution, ecology, evolutionary theory, fossils, animal behavior, snake color patterns, pollination biology, snake karyotypes, systematic practices, elapid systematics, and new species from Myanmar. His interests in the mathematics

of phylogenetics developed while he was a graduate student at the University of Miami. Slowinski worked on several papers concerning the mathematics of phylogenetics and diversification (Slowinski and Guyer 1989a,b; 1993; Guyer and Slowinski 1991, 1993, 1995), which kindled an exploration of how evolutionary processes might be tested through examination of shapes of phylogenetic trees. The importance of Joe’s work in shaping this field was honored in a recent dedication by Arne Mooers and Stephen Heard (2002, *Systematic Biology* 51:833–834).

In addition to having a vital research program focused on elapids, the herpetofaunal diversity of Myanmar, and the biodiversity of the Gaoligongshan in Yunnan Province, Joe served his profession. He was the Editor-in-Chief and co-founder of the electronic journal *Contemporary Herpetology* (1997–2001). He co-organized an ASIH symposium in 1995 with Brian Crother dealing with snake phylogeny. Joe served on the Grants-in-Herpetology selection committee for the Society for the Study of Amphibians and Reptiles (1999–2001), and he reviewed grants for the National Science Foundation and the National Geographic Society. He reviewed manuscripts for a variety of journals including *Copeia*, *American Naturalist*, *Biological Journal of the Linnean Society*, *Evolution*, *Herpetologica*, *Journal of Herpetology*, *Molecular Phylogenetics and Evolution*, and *Systematic Biology*. Slowinski belonged to several scientific societies including the American Society of Ichthyologists and Herpetologists, Herpetologists’ League, International Herpetological Symposium, Society for Molecular Biology and Evolution, Society for the Study of Amphibians and Reptiles, Society of Systematic Biology, and the Willi Hennig Society.

Joe first visited Myanmar (Burma) in 1997 and fell in love with the country. The isolationist policies of the military government relaxed recently and Slowinski took advantage of this opening to initiate a long-term research initiative in Myanmar. Joe recognized the potential for working in southeast Asia’s largest nation and he anticipated finding species new to science. He described finding new species as the “ultimate discovery.” At the time of his death, the Myanmar herpetological collection at the California Academy of Sciences numbered 6781 specimens of which 2945 were collected by Joe and his field crews. At least 18 species new to science were obtained during Slowinski’s work in Myanmar. On his first trip to Myanmar, he visited Mwe Hauk (Cobra Village) in the southern part of the country. He returned to Myanmar in February 1998 with Jens Vindum, Carol Spencer (California Academy of Sciences), and

Heidi Robeck (Harvard University). During this visit, villagers brought in specimens and Joe wrote "Once again specimens came raining in. Great ones too: a venomous sea snake, a series of rare water snakes, deadly cobra relatives called kraits, beautiful green vine snakes. I love this place." Joe overlapped with George Zug, curator at the Smithsonian Institution, in Yangon (Rangoon) in May 1998. U Khin Maung Zaw, the director of the Myanmar Nature and Wildlife Conservation Division, encouraged Joe and George to initiate a survey of Myanmar's herpetofauna. Slowinski and Zug were awarded a \$259,000 grant from the National Science Foundation (DEB 9971861) for the herpetological survey (The amphibian and reptile diversity of Myanmar) in 1999. The three years of funding supported Burmese scientists who collected amphibians and reptiles year-round for the project. In addition to gaining information on the Burmese herpetofauna, Slowinski and Zug trained Burmese scientists. The field team was led by U Htun Win and included Daw Thin Thin, U Sai Wunna Kyi, U San Lwin Oo, U Kyi Soe Lwin, U Awan Khwi Shein, and U Hla Tun. Dong Lin, Rhonda Lucas, Heidi Robeck, Jens Vindum, and Guin Wogan were also associated with the Herpetofauna of Myanmar project.

Joe traveled to China in 2000 as part of the China Natural History Project based at the California Academy of Sciences. Just before Joe's death, he and Peter Fritsch were awarded a \$2.4 million grant from the National Science Foundation for a survey of the Gaoligongshan in Yunnan Province (DEB 0103795). The five-year grant is a multidisciplinary collaboration between the California Academy of Sciences, the Kunming Institute of Botany, and the Kunming Institute of Zoology.

Joe Slowinski will be remembered by his colleagues for his scientific contributions and by his family and friends for his exuberance. Joe liked sports and especially loved playing basketball. He was a loyal friend and a very productive collaborator. Joe taught himself the mathematics he needed to model evolutionary processes of diversification. Joe liked music and especially loved "early" rock and roll. He once played Chuck Berry's Greatest Hits during an entire collecting trip to Florida. Joe loved cooking and dining out, especially in New Orleans, Los Angeles, and San Francisco. Joe loved field work, especially in Myanmar. He loved working with venomous snakes, especially elapids. Herpetologists who choose to work with venomous snakes are a special breed, and Joe's interest in these snakes was legendary among those who knew him. His encounter with the krait, pre-

sumed to be a krait mimic, in September 2001 was an unfortunate accident. His family, friends, and the academic community suffered a profound loss. However, Joe died doing what he loved best in the country he loved best.

Two funds have been established in Joe Slowinski's memory. The Joseph B. Slowinski Memorial Fund at the California Academy of Sciences, Golden Gate Park, San Francisco, California 94118 and the Joseph B. Slowinski Award Fund, The Center for North American Herpetology, 1502 Medinah Circle, Lawrence KS 66047.

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