



PALEONTOLOGY IN HONOR OF WILLIAM R. DOWNS III (1950–2002)

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The contributions in this issue of *Palaeontologia Electronica* honor the life and work of William R. Downs III (1950–2002), known to most of his acquaintances as Will, and to his Chinese colleagues as Dong Weilin. The diversity of topics among these papers, their wide geographic range, and the suite of seventy authors from a dozen different countries attest to his impact on the field of vertebrate paleontology.

Will grew up in the Washington, D.C. area, but from his college years onward, his home base was northern Arizona. He earned a Humanities B.A. from Northern Arizona University and became fluent in Mandarin Chinese through an immersion program in Hong Kong. He had no advanced degrees. His vertebrate paleontology skills were self-taught. He learned from field expeditions, from laboratory preparation, through listening and discussing at scientific meetings, and through reading widely. He was a hard-working and lively collaborator—in the field, in the lab, and as a co-author. He was energetic, intense, stoic, and stubborn, and he had a gift for humor. People of many cultures welcomed and appreciated him (Badgley et al. 2004). Gatesy et al. (this issue) said it well, “With little money and few possessions, he carried with him an indefatigable spirit of curiosity and seemingly endless energy.”



Figure 1. Will Downs, photo by Steven Ward.

Will was an expert at collecting and preparing vertebrate fossils. In the field he collected fossils ranging in size from shrews to dinosaurs. He had the patience for painstaking excavation and the stamina for weeks of screen-washing. In most of his field areas, he collected and processed many tons of fossiliferous matrix to find the remains of microvertebrates within. In the laboratory, he prepared specimens for research and exhibit. Fossils collected or prepared by Will reside in the research museums and universities of three continents.



Figure 2. Screen washing in Pakistan.

Will cut his teeth, geologically speaking, on the Mesozoic rocks of the Colorado Plateau in the southwestern United States. His discovery of mammals in the Lower Jurassic Kayenta Formation was a major event in North American vertebrate paleontology. When Will showed George Gaylord Simpson (Simpson 1978; Laporte 2000) the first tooth, Simpson turned slowly away from the microscope toward Will and in his deliberate way said, “This is truly a great find.” If Simpson’s approval had an effect on Will, no one could tell. He was already excited, and he would stay that way. He never hid his enthusiasm. He was the same with everyone, lofty or humble.

Will was also an accomplished whitewater oarsman, a skill he honed in numerous raft trips on the Colorado River through the Grand Canyon and on other major rivers of the western United States. It was an outdoor classroom for him. How could he not learn geology in such a setting? As a direct result of the friendships built on southwestern rivers, he participated with a team of structural geolo-



Figure 3. Will and paleomagnetic sampling team in China.

gists on a geological reconnaissance rafting trip on the Yangbi River (a tributary of the Lancang Jiang, which becomes the Mekong River in Laos) in western Yunnan, China (Molnar, this issue; Winn and Foster, this issue).

Will’s later career focused primarily on three geographic areas—China, Pakistan, and Africa—although the papers in this issue are adequate testimony that he would go anywhere that opportunity, interest, and adventure coincided. Among his field areas, China stands above the rest. The respect he had for China and the Chinese people, and the respect they had for him, is expressed well in the dedication of the paper by Wang et al. (this issue), “Will made a profound impact in Chinese vertebrate paleontology at a time of maximum stress as the Chinese scientific communities struggled to find their footing amid rapid changes of research environment and science policy during the early days of economic reforms of the country. Besides being one of the few western scientists who could read technical Chinese paleontological literature, Will inspired us with his single-minded dedication to field paleontology, his love of adventure, his care for Chinese culture, and his tireless promotion of Chinese vertebrate paleontology.”

Two papers in this issue (Bever et al. and Jokela et al.) pay tribute to Will’s skill as a translator of Chinese scientific literature and his generosity with the results. But every paper herein expresses a tacit or explicit debt to Will Downs, some more directly than others. Several papers are based on specimens – collected by Will – that contributed to the authors obtaining their advanced degrees. All are based on friendship and the influence that Will had. Matt Colbert, the grandson of the venerable Edwin Harris Colbert (Colbert 1980; 1989) and the talented Margaret Matthew Colbert (Colbert 1992; Elliot 2000), who visited Flagstaff in the summers during the 1970s, wrote (Colbert, this issue), “My brother Denis and I would hang out there pestering the scientists and staff. ... The highlight of any research center visit was the geology prep lab, where Will could be found sorting matrix or air-scribing some fossil. He was extremely generous to us boys, always taking time to share some off-color tale, to offer his seasoned opinion on the delicate art of interacting with the ladies, or to help with one of our volunteer projects Will was a major influence in my formative years....”

Thus, the papers of this issue are, in addition to scientific contributions, vignettes to a greater or lesser degree of the life and work of Will Downs, the things he liked, the influence he had on his friends, or simply their consideration of him. In

addition, the publication of this tribute in *Palaeontologia Electronica* has special appeal to us as editors for a number of reasons that we think would have appealed to Will as well. There are no page limits. Publication is efficient and fast and allows for creative illustration techniques. It is cost effective. And it is available all over the world at no direct cost to the user.

We would like to express our deep appreciation to the editors of *Palaeontologia Electronica*, especially David Polly and Whitey Hagadorn, for their help and assistance. We greatly appreciate working with the congenial Jennifer Rumford. The editors and staff of *Palaeontologia Electronica* work at the highest professional standards and their efforts are changing the way publication in our science is done.

We also thank reviewers and others who have contributed. We especially thank Diana Vineyard for her hard work in compiling and keeping track of the vast numbers of loose ends, for converting files from one format to another, and for being pleasant through it all. Dale Winkler, Kent Newman, and Michael J. Polcyn helped us to solve various problems. With seventy contributing authors, it is little surprise that we also utilized their expertise in the review process. Additional reviewers include Pierre-Olivier Antoine, Kenneth Angielzck, Jon Baskin, Robyn Burnham, Michael Caldwell, Pierre Mein, Gregoire Metais, Donald Prothero, Jay Quade, Ray Rogers, Peter Rose, Bruce Rubidge, William Sanders, Chris Sidor, Rob Van der Voo, and Jeff Wilson. We have also been supported by The Saurus Institute and the Institute for the Study of Earth and Man at Southern Methodist University.

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Figure 4. Will in the Siwaliks of Pakistan.

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