



IN MEMORIAM

Edwin O'Neill Willis, 1935–2015

Johan Ingels

Destelbergen, Belgium
johan.ingels@skynet.be

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Edwin O'Neill Willis passed away in Rio Claro near São Paulo, Brazil, on April 11, 2015, at 80 years of age. He was a Fellow of the American Ornithologists' Union since 1974, an Honorary Member of the Cooper Ornithological Society, and a member of the Waterbird Society, Neotropical Bird Club, Neotropical Ornithological Society, Raptor Research Society, Sociedade Brasileira de Ornitologia, Association of Field Ornithologists, and Wilson Ornithological Society.

A descendant of Cherokee Indians, Ed (as he was known to friends) was born on January 18, 1935, the son of Andrew Nelson Willis and Verna Fleming Willis. He was raised on a farm in Russellville, Alabama. When only 6 years old, he had already spent hours observing birds in the woods near the farm. And when his mother gave him binoculars, he became an avid birdwatcher with a strong interest in the natural history of birds. His first ornithological note, "Fall field trip to Saint Francis Sanctuary," was published in *Maryland Birdlife* in 1949, when Ed was only 14 years old.

In 1956, Ed graduated from Virginia Polytechnic Institute in Blacksburg, Virginia, with a B.S. in biology. While studying there, under a professor who regularly worked in Central America, Ed visited a tropical forest for the first time, which resulted in a growing interest in tropical birdlife. That same year, a friend at Louisiana State University, Steve Russell, invited Ed to join him during fieldwork in British Honduras (now Belize). There, Ed compared the foraging behavior of the Red-throated Ant-tanager (*Habia fuscicauda*) and Red-crowned Ant-tanager (*H. rubica*). It was his first contact with Neotropical ant-following birds. Their behavior would fascinate him for the rest of his life. This study resulted in an M.S. degree in zoology from Louisiana State University with a thesis on "The foraging behavior of ant-tanagers in British Honduras."

In 1960, Ed started to study the birds, especially the ant-following birds, of Barro Colorado Island in Gatun Lake in the Panama Canal. He soon found that the 400-ha reserve was not large enough to preserve its original bird diversity.

In the years after its establishment, many species disappeared from the island. Subsequently, Ed returned for annual censuses of the birds on the island. For his work on the ant-following birds of Barro Colorado Island—in addition to studies of such birds in Panama, Costa Rica, Trinidad, Guyana, and Colombia—he earned a Ph.D. in zoology from the University of California, Berkeley, with a dissertation on "The behavior of Bicolored Antbirds" (*Gymnopithys bicolor*, now *G. leucaspis*), considered an obligate follower of army ants. After 1964, Ed continued and expanded his studies of ant-following birds in Colombia, Ecuador, Peru, and Amazonian Brazil.

In 1967, Ed was asked to supervise the fieldwork of Yoshika Oniki, a student at the University of Kansas, who studied ant-following birds near Belém in Brazil. In 1970,



EDWIN O'NEILL WILLIS in February 2012. Photo credit: UNESP

she received an M.S. for this work. Her thesis was titled "Studies of the guild of ant-following birds at Belém, Brazil". Ed found it fantastic that he could help a young lady with her studies of his beloved antbirds, and their collaboration became lifelong later that year when they were married. In 1987, she earned a Ph.D. in zoology from the University of Campinas, São Paulo, with a dissertation on the nesting of birds near Belém and Manaus.

From 1956 on, Ed took up positions at a variety of foundations, museums, and universities. In 1982, he finally arrived at the Universidade Estadual Paulista in Rio Claro, the state university of São Paulo. He started as collaborating professor of zoology (1982–1986), teaching vertebrate zoology, ornithology, and field ornithology. In 1986, he wrote a thesis, "Studies of the Barred Woodcreeper (*Dendrocolaptes certhia*)," that enabled him to become associate professor of zoology (1986–1994) and, later, professor of zoology (1994–2005). In January 2005, he retired from the university after 23 years of teaching and research.

The subjects of Ed's ornithological research reflect his broad interest in all aspects of avian life. Having begun with research on the ecology and behavior of ant-tanagers (*Habia* spp.) in Belize, he went on to study South American birds that follow army ants. African ant-following birds also captured Ed's interest, as evidenced by his studies in 1981 and 1983, as did birds of eucalyptus and rainforests in New Zealand and Australia (1990 and 1991).

The list of Ed's publications is impressive: nearly 300 papers in a wide variety of Brazilian and international journals. He also made a point of publishing many of his papers and books in Portuguese for the benefit of Brazilian students. Almost 85 papers were coauthored with his wife. Between 1966 and 1986, he wrote 36 papers on bird species following swarms of army ants. Both Ed and Yoshika had a strong interest in the reproductive biology of Neotropical birds. Nearly 45 of their papers dealt with aspects of the nesting of Neotropical birds, and together they wrote a series of 5 papers on breeding records of birds from Manaus, Brazil, in *Revista Brasileira de Biologia* and 7 papers from a study of breeding birds of the Belém area, Brazil, in *Ciência e Cultura*. They also described the first nests ever found of the Cinnamon-vented Piha (*Lipaugus lanioides*), Buff-throated Purplethroat (*Iodopleura pipra*), Collared Gnatwren (*Microbates collaris*), and Ringed Antpitta (*Corythopis torquata*). In 2002, Yoshika and Ed published a "Bibliography of Brazilian birds: 1500–2002," in which they listed all publications on Brazilian birds from the past 6 centuries. In 2003, they published the book *Aves do Estado de São Paulo*.

In 1968, after field studies of the Pale-faced Antbird (*Phlegopsis borbae*), Ed decided that this antbird was quite different from the red-faced antbirds of the genus *Phlegopsis* and placed it in a new, monotypic genus, called

Skutchia, in honor of Alexander F. Skutch. In 1992, Ed and Yoshika described a new species of flycatcher, the Restinga Tyrannulet (*Phylloscartes kronei* Willis and Oniki, 1992; *restinga* is a descriptive term for the sand-ridge woodlands on the southeastern coast of the state of São Paulo). This tyrannulet was named after the zoologist Ricardo Krone, who collected the first specimen of this new form in 1898, later wrongly identified by Hans von Berlepsch as a Mottle-cheeked Tyrannulet (*Phylloscartes ventralis*).

In recognition of his contributions to science, Ed was honored by colleagues who named Willis's Antbird (*Cercomacra laeta* Todd, 1920). His name was also used for a subspecies of the Red-throated Ant-tanager (*Habia fuscicauda willisi* Parkes, 1969) and for a louse (Mallopha: Philopteridae: *Formicariicola willisi* Oniki and Emerson, 1982) found on the Short-tailed Antthrush (*Chamaeza campanisona*). In 2007, when molecular studies proved that the Scale-backed Antbird was not closely related to the genus *Hylophylax* (in which early taxonomists had placed it on the basis of morphology), Carlos Eduardo Agne and José Fernando Pacheco proposed the new generic name *Willisornis* in honor of Ed, who had contributed so much to the study of thamnophilid species. This genus now consists of two species: Scale-backed Antbird (*W. poecilonota*) and Xingu Antbird (*W. vidua*).

Ed was a simple, almost shy man. He never smoked or drank alcohol, and he thought this meant he was not good company for others. He preferred to read journals and books and write papers instead of talking, joking, and laughing with colleagues, activities he considered a waste of time. He enjoyed fieldwork most of all and lived with only his family and his birds in mind.

Ed never sought recognition for his work, but although he remained an American citizen and thus a foreigner, he was publicly recognized in Brazil for his tireless efforts to protect Neotropical, and especially Brazilian birds. In June 2001, he was made an Honorary Citizen of Rio Claro, the city in which he lived; and he was honored by the Brazilian Ornithological Society on the occasion of the XXI Brazilian Ornithological Congress in 2014.

Ed's contributions to Neotropical ornithology cannot be overstated—they are simply monumental. He was the Alexander Skutch of his generation. Surely he will be best remembered as the only ornithologist who intensively studied the birds that follow swarms of army ants, both of which are now disappearing from their natural habitats.

Ed is survived by his wife Yoshika Oniki, his daughter Michelle Willis (married to Valerio De Cao), and his grandson Elliot De Cao. Yoshika, also an esteemed ornithologist, now specializes in the study of ectoparasites of Neotropical birds. Michelle lives in Italy with her family, where she has her own successful career as a musician.

For information, I am most grateful to Yoshika Oniki.