

Eberhard Gwinner (1938-2004)

Late swallows flew over the silent black crowd gathered on a Bavarian hillside. They were paying their respects to a great ornithologist. With the passing of Ebo Gwinner last September, the study of biological rhythms suddenly lost one of its eminent scientists.

Gwinner contributed to our field in a unique manner. Almost single-handedly, he created and consistently pursued the study of circannual

rhythms. Ted Pengelley and he detected free-running circannual rhythms simultaneously and independently in the 1960s—Pengelley in squirrel hibernation, Gwinner in songbirds. Ever since, Ebo's life was dedicated to the understanding of temporal organization in birds. He studied endogenous annual programs, their entrainment by photoperiodic and other cues, the control of annual long-distance migration and the adaptive nature of annual phenomena, as well as avian circadian clocks.

Ebo was both a keen field naturalist and a thorough experimentalist. He had a vast knowledge of birds across the globe. He knew their natural habits and habitats. His deep interest and insight provided the necessary basis for successfully keeping, breeding, and experimenting with individual birds in captivity over many years in an unprecedented manner. Unusual institutional support and facilities are required for studying such slow and long processes, in



Ebo Gwinner releasing a Stonechat (*Saxicola torquata axillaris*), Menengai, Kenya, December 1981. Photograph: Max-Planck Institute for Ornithology.

which some experiments can last up to 10 years. The Max Planck Society provided the stable long-term environment for research hardly feasible in more ephemeral university settings. Gwinner first did his PhD thesis on the social behavior of ravens, guided by Gustav Kramer and Konrad Lorenz of the Max Planck Institute of Behavioral Physiology. He then started in 1964 as a postdoc in Jürgen Aschoff's department of the

same institute in Andechs. This remained his home base from which he ventured abroad to work with leading scientists such as Don Farner in Seattle and Colin Pittendrigh in Stanford, to undertake field projects in Zaire, in Kenya, in Tanzania, in Kazakhstan, in the Galapagos, and so forth. The Arctic was to be his next target. Eventually, in 1991, he became director of the institute, recently transformed under his leadership into the new Institute of Ornithology.

To his students, Ebo was an inspiring and warmly engaged mentor, who set an example as a dedicated and hardworking scientist. Many graduate students worked under his guidance in a plethora of fields ranging from biological rhythms to migration, behavioral endocrinology, and behavioral ecology. He infused them with his enthusiasm for science, nature, and birds; taught them thorough experimentation; and patiently guided them during manuscript and talk preparations. Despite his heavy administrative

workload, he always made time to do hands-on research and managed to assist his students in their fieldwork across Europe, Asia, and his beloved Africa. Ebo was not only the expert PhD adviser but also a sought-after dancer at student parties. His warm personality, naturalist gut feeling, amiable guidance, inquiring questioning, and whistling in the hallways will be sorely missed by everybody in the institute. As a dedicated husband, father, and grandfather, he leaves his wife Helga, 3 children, and 5 grandchildren in bereavement, and as a *Doktorvater*, his many students.

Gwinner's career had a rich lifetime harvest of nearly 250 publications, virtually exclusively on birds. These include many classics. In the circannual field, there are, for instance, the experiments underpinning his theory that circannual programming determines both the duration and direction of long-distance migration. In the circadian field, Gwinner contributed the demonstration of entrainment by species-specific song and by melatonin and the concept of resonance

between pineal and SCN, in addition to numerous other new insights. Ebo's death deprives our field of much of current avian chronobiology and virtually all of its circannual studies.

Ebo was a modest man who loved simple life and good food, who communicated with ravens, and who had a deep craving for being outdoors. After conferences—such as the recent Society for Research on Biological Rhythms conference in Whistler—he would withdraw alone into the woods and go fly-fishing for a few days. The funeral ceremony outdoors in the autumn sun was a moving tribute to an eminent naturalist and a great human being.

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