At a Meeting of the Faculty of Arts and Sciences on May 20, 2008, the following Minute was placed upon the records.

ERNST MAYR

Born: July 5, 1904
Died: February 3, 2005

Ernst Mayr, Alexander Agassiz Professor of Zoology in the Museum of Comparative Zoology (MCZ) from 1953 until his retirement in 1975, and director of the MCZ from 1961–1970, passed away on February 3, 2005, due to liver cancer. Through his prodigious writing career spanning more than 80 years—he published more than 700 scientific papers and 24 books—he helped lay the foundations of contemporary evolutionary biology, doggedly consolidating its myriad strands of field observation, museum study and laboratory experiment into a coherent picture of the mechanisms by which species change over time. His capacity for synthesis and for amassing evidence supporting or challenging theories of evolutionary change was unsurpassed among evolutionary biologists of the 20th century. He is widely regarded as one of three architects of the so-called Modern, or Neo-Darwinian, Synthesis in evolutionary biology, an integration in the 1930s and 1940s of the seemingly conflicting set of observations coming from statistical genetics, paleontology and field studies of species in their natural habitats. He also was an institution builder, having spearheaded the founding of the Society for the Study of Evolution in 1946, still the leading professional society for the evolutionary sciences; conceiving of and securing financing for the MCZ Laboratories in Harvard's North Yard while director of the MCZ; and defending the Estabrook Woods, Harvard's 650-acre woodland in Concord, Massachusetts, from encroaching development. The cornerstones of Mayr's thought emphasized the geographic, spatial variation within species; modes of biological inference that focused on populations rather than individuals; and the notion that species were groups of individuals reproductively isolated from other such groups. Through these perspectives Mayr shepherded evolutionary biology for much of the 20th century from its fragile status as a wandering flock of ideas inherited from Darwin to its present dominance of biological thought and inquiry.

Ernst Mayr was born in Kempten, Germany, on July 5, 1904, and his parents fostered an interest in natural history. His first mentor, the German ornithologist Erwin Stresemann, saw his potential and lured him away from a career in medicine with a program for ornithological study and an offer of fieldwork in far-flung tropical outposts. Mayr completed his PhD in Berlin at the age of 22 after only 16 months of study, and he was eventually offered his chance for fieldwork. Darwin-like, he set off to New Guinea for 26 months and then to the Solomon Islands for a year to amass collections that began to inform his ideas about speciation, the process by which one ancestral species divides into two. During this fieldwork and observations of far-flung bird species little known to Western biologists, he encountered example after example of geographical isolation accompanying species divergence. After returning to Berlin in 1930, and soon afterwards moving onto a curatorship at the American Museum of Natural History in New York City, he published extensively on these collections and eventually synthesized them into his seminal *Systematics and the Origin of Species* (1942).

Mayr moved to the MCZ at Harvard in 1953, and although he was never formally the curator of ornithology, he was the main intellectual driver of evolutionary and ornithological thought on the fifth floor of the MCZ. He mentored a series of students who brought order to many bird faunas throughout the world; many of these individuals are now recognized leaders in historical and biological thought. His extensive and tireless systematic revisions of living birds, which culminated in the 16-volume *Peter's Checklist for Birds*, brought order to the often bewildering diversity of birds, and still forms the framework for organizing the ornithological collections of the MCZ today.

Mayr updated and further synthesized his ideas on evolution in his monumental *Animal Species and Evolution* (1963), an epic work that articulated a conceptual framework that has dominated many branches of systematics and evolutionary biology. In it he refined his concept of species, focusing on reproductive isolation and using the presence of gene flow as a litmus test for the validity of two forms as different species. Mayr's so called biological species concept was and is still frequently contested by modern practitioners of so-called phylogenetic systematics—those evolutionary biologists who see the genealogical tree of species as the primary, if not exclusive, roadmap by which to understand their origin. Nonetheless, the biological species concept has defiantly stood the test of time and is still widely embraced as the most practical and universally explanatory concept of species, not only by museum scientists but by population geneticists as well.

This species concept is the child of another conceptual advance by Mayr, namely the recognition of the prevalence of so-called allopatric speciation, in which physical and spatial separation of populations prevents them from interbreeding. According to Mayr, sympatric speciation, in which two species might arise from one without any sort of geographic barrier, rarely, if ever occurred. Nonetheless, towards the end of his life, Mayr began to embrace the possibility of sympatric speciation, with the discovery by others of putative examples of the process in organisms as diverse as fish, birds, and tropical palms apparently diverging despite completely overlapping ranges, for example, on the same island or within the same lake.

Toward the end of his long career, Mayr turned his writing and teaching at Harvard toward the history and philosophy of biology, producing such seminal works as *The Growth of Biological Thought* (1982) and *Toward a New Philosophy of Biology* (1988), in which he grappled with defining what makes evolutionary inquiry distinct from the mechanistic approaches of molecular biology, and from inference in the physical sciences. His books have been translated into at least 15 languages. Towards the end of his life he was impressed, indeed awed, by the increasing integration of the biological, chemical and physical sciences, an integration he applauded, even as biology seemed to be moving away from the holistic, organism-based, natural-history approach that he so vigorously championed. He is survived by daughters Christa Menzel of Simsbury, Connecticut, and Susanne Harrison of Bedford, Massachusetts, five grandchildren and ten great-grandchildren.

Respectfully submitted,