

Professor Ernst Mayr



Birth: July 5, 1904
Kempten, Germany

Nationality: United States of America

Position: Professor Emeritus, Harvard University

Address: Museum of Comparative Zoology
Harvard University
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Education and Career:

1925	Cand. med., University of Greifswald
1926	Ph.D., University of Berlin (Zoology), June 26, 1926
1926-32	Assistant Curator, University of Berlin
1932-44	Associate Curator, Whitney-Rothschild Collection, American Museum of Natural History
1944-53	Curator, Whitney-Rothschild Collection, American Museum of Natural History (until June 30, 1953)
1953-75	Alexander Agassiz Professor of Zoology, Museum of Comparative Zoology, Harvard University,
1961-70	Director, Museum of Comparative Zoology, Harvard University
1975-	Professor Emeritus, Harvard University

Awards and Distinctions:

1954	National Academy of Sciences, Member
1958	Wallace-Darwin Medal, Linnaean Society of London
1967	Daniel Giraud Eliot Medal, National Academy of Sciences
1970	National Medal of Science, USA
1977	Coues Prize, American Ornithologists' Union
1978	Medal, College de France
1983	Balzan Prize
1984	Darwin Medal, Royal Society
1986	Sarton Medal
1988	Foreign Member, Royal Society
1994	Foreign Member, Russian Academy of Sciences

Representative Works:

- Mayr, E. (ed.) (1957). *The Species Problem*. Association for the Advancement of Science, Publication No. 50. 395 pp.
- Mayr, E. (1963). *Animal Species and Evolution*. Harvard University Press, Cambridge, MA. 797 pp.
- Mayr, E. (1969). *Principles of Systematic Zoology*. McGraw-Hill, New York. 428 pp.
- Mayr, E. (1970). *Populations, Species, and Evolution*. Belknap Press of Harvard University Press, Cambridge, MA. 453 pp.
- Mayr, E. (1976). *Evolution and the Diversity of Life: Selected Essays*. Belknap Press of Harvard University Press, Cambridge, MA. 721 pp.
- Mayr, E. (1982). *The Growth of Biological Thought: Diversity, Evolution and Inheritance*. Harvard University Press, Cambridge, MA. 974 pp.
- Mayr, E. (1988). *Toward a New Philosophy of Biology*. Harvard University Press, Cambridge, MA. 564 pp.
- Mayr, E. and Ashlock, P. (1991). *Principles of Systematic Zoology*. 2nd ed. McGraw-Hill, New York. 475 pp.

Academic Achievements:

Professor Mayr has led the field of systematic biology and evolutionary theory in the 20th century. He has not only contributed greatly to systematic biology but used findings thereof as the basis for his contributions to the development of other fields of biology, including biogeography, evolutionary theory, philosophy of biology, and history of biology. The list of his publications includes 15 books and over 650 journal articles.

The special quality of Professor Mayr as a researcher lies in the fact that he started as a naturalist and has continued, to his present age of 90, to be an observing and thinking naturalist. Already in his boyhood, Professor Mayr had excellent eyes for observing wild birds. He took interest in the Study of birds, and with this as impetus, he gave up the medical degree at the University of Greifswald. Thus, Professor Mayr was initiated an ornithologist when he started full-scale systematic research on birds at the Natural History Museum of the University of Berlin. He then moved to the American Museum of Natural History and lastly to the Museum of Comparative Zoology at Harvard University, for which he served as Director. His scientific contributions are generally based on his research activities at natural history museums.

Professor Mayr's achievements in the systematics of birds are mostly founded on expeditions to New Guinea and the Solomon Islands, conducted three times from the latter half of the 1920's to 1930, and also on empirical systematic research conducted for about 20 years at the American Museum of Natural History on its vast collections of birds from New Guinea and the Solomon Islands. During these years, Professor Mayr described 26

currently recognized species of birds, more than any other living ornithologist.

Professor Mayr wrote a large number of papers about various families and genera of birds, and he was the first to add behavioral characteristics, such as nesting and copulative behaviors, to then existing morphological analyses in the taxonomy of birds. Immediately after arriving at the Museum of Comparative Zoology, Harvard University in 1953, Professor Mayr assumed the leadership for completion of Peters' *Check-list of Birds of the World*, and published the last eight volumes and a revision of Volume 1. This check-list will long remain the standard work for the classification of birds.

Professor Mayr used the results of his studies of South Pacific birds to advocate a new historical-dynamic approach in contrast to the then existing static regional-geographic approach in biogeographical studies. In the early 1940's he introduced the faunistic approach to biogeography and proposed the basic concepts of "island biogeography".

Professor Mayr's achievements in the research of evolutionary theory were very clearly presented in his 1942 book *Systematics and the Origin of Species*. This book is a cornerstone for the modern synthesis of evolutionary theory as well as one for the new systematics. Professor Mayr wanted to show the importance of the results of systematic studies in evolutionary theory and to restore systematics to its rightful place among all the biological disciplines. He developed the principles of species-level systematics, introduced the biological species concept, and advocated allopatric speciation in terms of the origin of species. He developed several editions of a textbook on animal systematics from his 1942 book. Among them, *Principles of Systematic Zoology* (1969) is the most complete and broadly based. *Animal Species and Evolution*, published in 1963, was devoted entirely to evolutionary theory.

Along with Drs. Dobzhansky and Simpson, Professor Mayr advocated the modern synthesis of evolutionary theory. This synthetic approach to systematics and evolution had a major impact on biologists, and has become a standard approach to comparative biology since the middle of the 20th Century.

In relation to the philosophy of biology, Professor Mayr always inquired into the theoretical and philosophical implications of his studies. His *Evolution and the Diversity of Life: Selected Essays* (1976) and *Toward a New Philosophy of Biology* (1988) fall into this category.

Professor Mayr has also been interested in the historical development of science, and published several major books in this area, including *The Growth of Biological Thought: Diversity, Evolution and Inheritance* (1982).