WILSON, EDWARD O.
1929–

Born on June 10, 1929, in Birmingham, Alabama, Edward Osborne Wilson, one of the twentieth century’s exemplary individuals, started out as an ecological scientist and transitioned to applied conservationist and environmental ethicist. Early in his life, Wilson began to observe some of the smallest and most diverse organisms: insects, especially ants. “In 1942, when I was 13 years old,” he remembers, “I was studying ants for a Boy Scout project... and so I discovered a nest of red fire ants” (2006, p. 71), which was the first known colony of the invasive exotic species *Solenopsis invicta* in the United States. In his autobiography *Naturalist* (1994), Wilson recalls how his childhood years in the U.S. South imbued him with a curiosity for all aspects of natural history and provided the foundation of his scientific career. This boyhood fascination with ants eventually led to a Ph.D. and faculty career at Harvard University where he explored diverse topics and scales, ranging from chemical ecology to biogeography, from taxonomy to the evolution of social interactions. For *The Ants* (coauthored with Bert Hölldobler), he was awarded a Pulitzer Prize for nonfiction in 1990.

In the 1960s, ant-collecting expeditions to Pacific islands and the New World Tropics grounded Wilson’s scientific work in basic natural history, which emphasized descriptions of species and their interactions. Then, however, he used firsthand experiences in observing small organisms as illustrations for addressing major ecological and evolutionary questions, in the process positing the taxon cycle (Wilson 1959, 1961) and island biogeography theory (MacArthur and Wilson 1967). Both hypotheses were major conceptual advances in explaining patterns of species richness from biogeographic and demographic principles. This body of work, resting on theoretical principles, was also rigorously shown in the field with whole island experiments in the Florida Keys. It has since proved to be not only a powerful current of thought in general ecological theory, but also in conservation, as the idea of island patches of suitable habitats for particular species can be used to manage vulnerable populations across the landscape matrix.

Wilson’s investigation of ants also led to insights regarding their communication and colony organization. His seminal research in chemical ecology showed that ants use pheromone cues to coordinate their complex group superstructure. Such results eventually led to a path of inquiry regarding the biological basis of social interactions in general. With *Sociobiology: The New Synthesis* (1975), Wilson sought to explain behavioral traits within strictly biological confines—an idea that proved controversial, but also founded a new discipline and earned him his first Pulitzer Prize for nonfiction in 1978 for *On Human Nature*.

As a writer, Edward O. Wilson was able to transcend his academic discipline and link it with society by effectively communicating scientific understanding to a wider audience, often employing ground-breaking neologisms. For example, the term *biophilia* (humans’ innate attraction to living systems) was coined by Erich Fromm in *The Heart of Man* (1964), but Wilson’s homonymous book generated dynamic discussion about the concept in 1984. Likewise, in an academic symposium moderated by Wilson, Walter G. Rosen coined the term *biodiversity* in 1985, but Wilson’s 1988 book of the same name introduced the term into our collective vocabulary and imagination and from there helped to coalesce the environmental movement and governmental policy around concern over the modern crisis of mass extinctions of species. In 2006 Wilson himself invented the term *Eremozaic Era* as a provocative depiction of the “Age of Loneliness” that will succeed the sixth mass extinction if humanity does not undertake immediate actions to protect the planet’s biodiversity.

To perpetuate his legacy, the Edward O. Wilson Biodiversity Foundation was launched in 2007 to “preserve biological diversity in the living environment by inventing and implementing business and education strategies in the science of conservation.” Its approach parallels Wilson’s own development. The foundation attempts to maintain Wilson’s traditional emphasis on the need to understand all biodiversity with a natural history-oriented program consisting of hands-on education and citizen science. Yet the organization also uses the experience of its cofounders and capital derived from the biotechnology industry to put forward a technology-based, capitalistic model for future research and conservation. This market-based approach to conservation and development—involving, for example, tapping genetic resources and creating win-win cooperative agreements with industry—coincides with Wilson’s own strong belief in the power of science and technology to solve problems. This approach is ironic to some, as many conservation problems are in fact the result of science and technology.

As a scientist, Wilson has earned the highest professional recognition (e.g., the National Medal of Science, the Craford Prize, and the Tyler Award), but unlike most academics he has also attained great social relevance. In both arenas, his popular and scientific work has significantly contributed to shedding light on the beauty and value of the diversity of insects and other inconspicuous organisms found in the living systems around us. Prestige, however, does not confer immunity from disapproval. By placing such a high value on technological and scientific solutions, Wilson has also been
the focus of criticism. In particular, his defense of socio-biology created a storm of rancorous debate, leading to a confrontation in which activists dumped a pitcher of water on Wilson’s head at a conference. The current orientation of his foundation may also prove problematic for some conservationists. Nonetheless, Edward O. Wilson established himself as one of the most influential thinkers of his day precisely by working in the natural sciences and simultaneously at the interface of science and society.

SEE ALSO Biodiversity; Biophilia; Conservation; Conservation Biology; Extinction.

BIBLIOGRAPHY

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WORDSWORTH, WILLIAM
1770–1850

William Wordsworth was born on April 7, 1770, in Cockermouth in Cumberland’s Lake District and is considered one of England’s finest nature poets. His poetry and critical works manifest a complex understanding of the relationship among the natural environment, language, and human passions. That complexity is apparent in his best-known critical essay, the Preface to Lyrical Ballads (Wordsworth and Coleridge 1969 [1800, 1802]), which was written to justify the experimental style of those poems. The Preface indicates the artificial diction of earlier poets and calls for a new way of describing and relating to the natural world that will honor the qualities most fundamental to human life: imagination and emotion. Wordsworth did not advocate a simple return to nature. Instead, he reminded his readers that the source of what is best in human manners, feelings, language, and community resides in a positive relationship to the natural world. Wordsworth died on April 23 in Rydal Mount, Westmorland, England.

POETRY AND THE BOND WITH NATURE

The bond of humanity with nature, Wordsworth suggested—though as indestructible as the deep, universal emotions that structure people’s inner lives and influence their actions and relationships—was being attenuated in an increasingly urban Great Britain. The radical industrialization of English life and the tumultuous events connected with the French Revolution of 1789, he suggested, were “acting with a combined force to blunt the discriminating powers of the mind” (Wordsworth and Coleridge 1969, p. 160). That situation can be considered the predecessor of the contemporary information age, with its taste for news, novelty, and speed. The more city people’s cravings for “extraordinary incident” (Wordsworth and Coleridge 1969, p. 160) are satisfied by tabloid-style accounts and the more their desire for racy or mawkish entertainment is satisfied by pandering artists, the more they tend toward a paradoxical, narcotized state of “savage torpor” (Wordsworth and Coleridge 1969, p. 160). Essentially, Wordsworth’s complaint is about the hollowing out of emotion and experience until no feeling, event, or utterance seems authentic: Cheap spectacle replaces genuinely artistic representation, and quantity replaces quality in all areas of life.

In response to a development destructive to individual identity and genuine community, Wordsworth outlined a redemptive poetics. Because the corruption of language and sentiment lay at the heart of the problem, he considered it vital to have recourse to devise a better model in both areas: life in the English countryside. The Preface states that the main object of Lyrical Ballads was “to chuse incidents and situations from common life, and to relate or describe them, throughout, as far as was possible, in a selection of language really used by men” (Wordsworth and Coleridge 1969, p. 156). Readers are told, “Low and rustic life was generally chosen, because in that condition, the essential passions of the heart find a better soil in which they can attain their maturity, are less under restraint, and speak a plainer and more emphatic language . . .” (Wordsworth and Coleridge 1969, p. 156). Country people are less distanced from their vital passions than are urban dwellers; they