The Age of Man: A Father Figure

IN HIS NEWS & ANALYSIS STORY "ARCHAEOLOGISTS SAY THE 'Anthropocene' is here—but it began long ago" (19 April, p. 261), M. Balter reports that the "Age of Man," characterized by detrimental environmental changes caused by human activities, may have begun thousands of years ago. This hypothesis was proposed more than a century ago by Alfred Russel Wallace (1823–1913),

one of the greatest evolutionary biologists of the 19th century (1). Wallace is well known as the codiscoverer of the Darwinian principle of natural selection and as the founder of biogeography (2).

As Wallace was interested in many subjects, including anthropology, psychology, politics, and economics (1), he was well qualified to evaluate the impact of humans on natural habitats from an evolutionary perspective. In 1898, he described "[t]he plunder of the earth," with reference to the "struggle for



Alfred Russel Wallace

wealth" by irresponsible humans (3). Wallace lamented the "reckless destruction of stored-up products of nature ... not equaled in amount during the whole preceding period of human history" and the "clearing of the (tropical) forests ... to make coffee plantations." He concluded that "[t]he devastation caused by the great despots of the Middle Ages and of antiquity ... has thus been reproduced in our times" (3).

In 1910, Wallace described the era of human environmental destructiveness, which started with the systematic use of fire and the possession of weapons for hunting (4). He also argued that "the extinction of so many large Mammalia (at the end of the Pleistocene) is actually due to man's agency" (4). Hence, Wallace is the spiritual father of the "overkill hypothesis"—i.e., the idea that extensive hunting by early humans may have caused megafaunal extinctions, which led to zoologically devastated ecosystems (4).

The year 2013 marks the centenary of Wallace's death. It should be acknowledged that this "unselfish man in the shadow of Darwin" (1, 2) was the first scientist who outlined, in his popular books (3, 4), what we today (unofficially) call the Anthropocene.

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