## O P E N B O O K

## The Mammalian Life Span

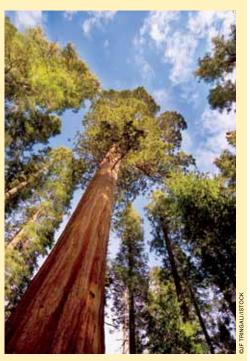
Pellegrino University Professor emeritus Edward O. Wilson has written with increasing urgency about mankind's disruption of the biosphere, and the heedless extinction of species. He continues the argument in Half-Earth: Our Planet's Fight for Life

(Liveright, \$25.95), with this vivid challenge to humans' self-perception, from the beginning of "History Redefined" (chapter 16):

History is not a prerogative of the human species. In the living world there are millions of histories. Each species is the inheritor of an ancient lineage. It exists in a point of space and time after a long journey through the labyrinth of evolution. Each twist and turn has been a gamble with the species' continued existence. The players are the many ensembles of genes in the population. The game is the navigation of the environment in which the population lives. The payout is the share of breeding individuals in the next generation. The traits prescribed by the genes that sufficed in past generations might in the future continue to do so, but might not. The environment is also changing. In new environments the genes may keep on winning, allowing the species to survive. Or not. Some of the variants of the genes, having

arisen by mutation or forming new combinations, might even cause the species population to grow and spread. But at any time in a changing environment, the species could lose this game of evolution, and its population would spiral to extinction.

The average life span of a species varies according to taxonomic group. It is as long as tens of millions of years for ants and trees, and as short as half a million years for mammals. The average span across all groups combined appears to be (very roughly) a million years. By that time the species may have changed enough to be called a different species, or else it may have split into two or more species—or vanished entirely to join the more than 99 percent that have come and gone since the origin of life. Keep in mind that every surviving species (including us) is there-



Looking up: For all their evolutionary advantages, mammalian species have shorter life spans than ants and trees.

fore a champion in a club of champions. We all are best of the best, descendants of species that have never turned wrong in the maze, never lost. Not yet....

The human species, of course, has an evolutionary history, which reaches very far back in time beyond traditional recorded history. We, too, are the twigend of a phylogeny. The multitudinous stories of human cultures are epics in the usual sense, but you will understand that the traits of human nature that have molded these stories are also products of evolution....The two levels, biological and cultural, flow one into the other. This is the reason that history makes no sense without prehistory, and prehistory makes no sense without biology.

a move to New York, electing instead to launch his career away from the entrenched norms of Broadway. Partly because costs were lower, St. Louis was a "safe space" for the kinds of rule-breaking productions he wanted to stage. "If it's bad," he says, "it's bad in St. Louis." He founded New Line in 1991. The early years were challenging. Making money by writing and directing edgy theater in small venues across the city was almost impossible, but Miller became skilled in the financial acrobatics necessary to keep the company afloat: "We figured out we could do one show that might tank, like Jerry Springer: The Opera, and then something that was more secure financially, like Bonnie and Clyde."

Beginning in 2008, the company earned national attention for reviving Broadway flops. Miller became infatuated with the cast album for a new show called *High Fidelity*, adapted from Nick Hornby's novel. Curious to find out why it tanked on Broadway after just 13 performances, Miller dug up a bootleg video of the production, concluded that the "original director was just awful," and reached out to the composer and lyricist about getting the rights. They were surprised but thrilled that he wanted to resuscitate their show.

*High Fidelity* made its second debut in a raucous, pared-down production that sold out almost every night of its threeand-a-half-week run. Following that hit, New Line revamped two more shows with short-lived Broadway runs: *Cry-Baby*, adapted from the John Waters film, in 2012, and *Hands on a Hardbody*, about a Texas contest in which participants vie to win a truck, in 2014. Each of the re-crafted productions drew enough attention that directors all over the country began seeking his advice. "We've accidentally become this company that saves shows from Broadway," he says.

In the theater world, Miller's faithfulness to scripts is uncommon. Many directors cut chunks from shows—even from hits—to save time and hassle, or to broaden appeal. New Line's associate director, Mike Dowdy, says he's never seen Miller cut a line from a production. When something feels wrong, Miller scavenges for past versions of scripts, tracks down writers and lyricists, and scours the Internet for anything that helps provide useful context. He relied on the memoir of an addict in early 1990s New York City to shape his interpretation of *Rent*. For *Hair*, which