
conservative Edmund Burke, O'Brien astonished many critics by having located a soulmate in such a staunch defender of the status quo. But O'Brien argued that Burke's ragings against the abuses of power in France (and in England) were evidence that he was a liberal, in the oldest and best sense of the world. Burke and O'Brien are, in fact, distant kinsmen, and, beyond blood ties they are related by being early and late examples of that now-dying breed—the public intellectual who believes that ideas matter in political life.

Science & Technology

JOURNEY TO THE ANTS: A Story of Scientific Exploration. By Bert Hölldobler and Edward O. Wilson. Harvard. 228 pp. \$24.95

Looking for an exciting new career? How about myrmecology?

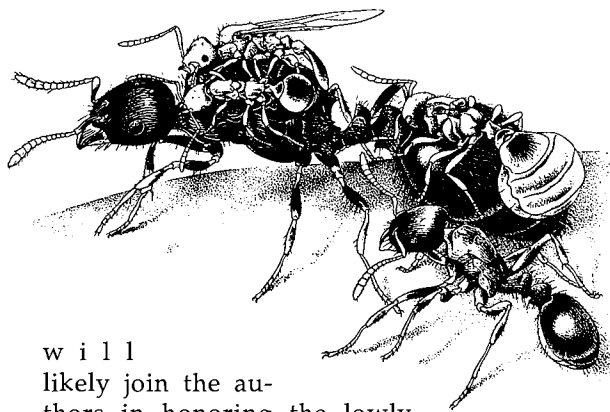
The humble ant occupies anything but a humble place in the world's ecosystems. "If all the ants somehow disappeared," Hölldobler, a physiologist at Germany's University of Würzburg, and Wilson, an entomologist and sociobiologist at Harvard University, write, the effect would be "catastrophic. Species extinction would increase even more over the present rate, and the land ecosystems would shrivel more rapidly." Without ants to collect and recycle the detritus of animal and vegetable matter, they explain, "the world would rot. As dead vegetation piled up and dried out, narrowing and closing the nutrient cycles, other complex forms of vegetation would die, and with them the last remnants of the vertebrates." Think about that the next time you squash an ant on your kitchen floor.

Hölldobler and Wilson's earlier, Pulitzer Prize-winning *The Ants* (1990) was an attempt to distill everything currently known about the family *Formicidae*, and immediately established itself as the pre-eminent work in the field. Unfortunately its dense technical language may have daunted the average reader, and here the

two myrmecologists attempt to enlist nonscientists in the study and preservation of these wondrous insects.

Ants have been around since dinosaur days—that is, roughly 60 million years. Conservative estimates place their number today at 10 thousand trillion, distributed among tens of thousands of species. Ants are tiny in everything but sociobiological complexity. They communicate, for example, by releasing a medley of chemical-based substances from different parts of the body that register alarm, attraction, the discovery of food, and a diversity of other signals. "Ants, like humans," the authors write, "succeed because they talk so well." Collectively, each colony functions as a kind of "warrior state," in which "organized conflict among colonies of the same species is far more frequent than human war." Various species employ "propaganda, deception, skilled surveillance, and mass assaults singly or in combination to overcome their enemies." Their behavior is strikingly varied: African weaver ants form chains of their own bodies to cross wide gaps between leaves, while honeypot ants climb on top of each other when fighting to gain a size advantage.

At the end of this *Journey*, many readers



w i l l likely join the authors in honoring the lowly ants: "For a while longer at least, they will help to hold the world in balance to our liking, and they will serve as a reminder of what a wonderful place it was when first we arrived."