Dartmouth College

Dartmouth Digital Commons

Open Dartmouth: Published works by Dartmouth faculty

Faculty Work

3-1-2005

Writing the Future: Progress and Evolution

Michael Dietrich Dartmouth College

Follow this and additional works at: https://digitalcommons.dartmouth.edu/facoa

Part of the Biology Commons

Dartmouth Digital Commons Citation

Dietrich, Michael, "Writing the Future: Progress and Evolution" (2005). *Open Dartmouth: Published works by Dartmouth faculty*. 38.

https://digitalcommons.dartmouth.edu/facoa/38

This Book Review is brought to you for free and open access by the Faculty Work at Dartmouth Digital Commons. It has been accepted for inclusion in Open Dartmouth: Published works by Dartmouth faculty by an authorized administrator of Dartmouth Digital Commons. For more information, please contact dartmouthdigitalcommons@groups.dartmouth.edu.

readers and for upper-level undergraduate and graduate classes. Suggested readings at the end of each chapter lead to related topics and the primary literature. Some of the suggested articles are featured by listing a series of questions to be answered after reading the article. The literature cited is extensive, and references are listed at the end of the chapter in which they are cited.

I find that this volume will be very useful for both inspired undergraduates who plan on initiating honors studies or independent research, and for beginning graduate students. In my department, we present each graduate student with a reading list specifically designed to provide the necessary background for their anticipated field of study; I am requiring this textbook for ecological and evolutionary geneticists. This primer will help young biologists learn the nuts and bolts of ecological genetics, as well as its practical applications.

JEFFRY B MITTON, Ecology & Evolutionary Biology, University of Colorado, Boulder, Colorado

WRITING THE FUTURE: PROGRESS AND EVOLUTION. Edited by David Rothenberg and Wandee J Pryor. A Terra Nova Book. Cambridge (Massachusetts): MIT Press. \$29.95. xv + 274 p; ill.; no index. ISBN: 0– 262–18235–1. 2004.

This volume is ostensibly about evolution and progress, but not as they are understood by scientists as much as by a range of writers, poets, artists, and academics. Offering a sampling of contemporary cultural perspectives, the entries in this anthology alternate among philosophical analysis and poetry, scientifically oriented essays, and autobiographical musings.

The 30 contributions are distributed among four sections. The first addresses evolutionary founders, Alfred Russel Wallace and Charles Darwin, as well as iconic cases of evolution, such as the evolution of sex and industrial melanism. Michael Ruse's essay in this section is worth special note for its careful analysis of the interplay between science and culture surrounding ideas of evolutionary progress.

The second section consists of a set of reflections on human adaptability. Mixing poetry and prose, the evocative contributions in this section culminate in Floyd Skloot's powerful narrative of his adoptive son's prowess as a basketball player and the heart defect that caused him to reconsider his future. In the third section, contributors examine the relevance of human environments. Beginning with Leslie Van Gelder's reflections on the meaning of place for Darwin's father, an evolutionary biologist, this section ends with Carolynne Baker's archeological perspective on the evolution of the city of Hanoi. The final section addresses our imagined evolutionary future. Kevin Warwick's efforts to implant computer chips into his nervous system, and thereby extend his phenotype, are interestingly juxtaposed with Joan Maloof's essay on the ecological dimensions of transhumanism and Dale Jamieson's article on the possibility of moral progress.

Writing the Future is an eclectic and evocative mix. Its value is not in its scientific or academic content, but in its ability to inspire reflection on the many intersections of science and culture.

MICHAEL R DIETRICH, Biological Sciences, Dartmouth College, Hanover, New Hampshire



PLANT SCIENCES

THE POISONED WEED: PLANTS TOXIC TO SKIN. By Donald G Crosby. Oxford and New York: Oxford University Press. \$59.95. xi + 266 p + 24 pl; ill.; indexes of plant names and chemical common names, general index. ISBN: 0–19–515548–3. 2004.

The author's observation that it "seems almost as though any plant that is not allergenic must be either phototoxic or irritant" (p 149) sums up one of the major impacts of this book on readers. Even after noting that different levels of exposure and varying degrees of individual susceptibility contribute to increasing the number of plants that can induce a toxic effect on the skin, the diversity of such plants described in this volume is sobering. The author has adopted a multidisciplinary approach, albeit with a leaning toward phytochemistry, with which he also describes the botanical, toxicological, epidemiological, clinical, preventative, and therapeutic aspects of dermatotoxic plants. The book is well organized with a sensible progression of chapters, comprehensive indexing, and includes a valuable glossary of terms with which readers of other disciplines may not be fully acquainted. The inclusion of appendixes has been carefully considered to support, or illustrate in more detail, some general observations made in the main text.

The author describes the plants that have been known to cause allergenic, irritant, or photoreactive contact dermatitis. He then progresses to discuss the modes of exposure and mechanisms of action of the toxins. The presentation of chemical structures, properties, and methods of analysis of a wide range of dermatotoxins, including the uru-