Still, as Bix observes, the United States never witnessed anything comparable to England's eighteenth-century Luddites, or 'machine breakers'. Most workers who lost their jobs simply resigned themselves to the supposed inevitability of technological 'progress'. Nor did union leaders condemn the technological developments behind these job losses. Instead, they wished only to ensure that workers who kept their jobs shared in whatever profits mechanization provided.

Bix also discusses the depiction of technological unemployment in Depression-era popular culture, and its manifestation in radio and movies, high-brow literature and science fiction, jokes and cartoons. And she persuasively reinterprets the 1939–40 New York World's Fair as being as much a calculated defence against fears of technological unemployment as a celebration of the "World of Tomorrow".

Nevertheless, Americans' historic bedrock faith in progress through technology — and their traditional equating of technological progress with social progress — were seriously challenged by the spectre of technological unemployment. But that faith survived. Still, the very phrase 'Machine Age', which dates back at least to the late nineteenth century, lost for ever its strictly positive connotation. The seeds of the widespread disenchantment with technological advances that have sprouted since the 1960s were, I believe, sown in this Great Depression debate.

Similarly, Bix's work can be linked with the technological determinism that contemporary high-tech takes for granted: the conviction that technology shapes everything and that all else in the world must accommodate it. Bix describes how many scholars in the 1920s and '30s viewed technological unemployment as the almost inevitable result of American society's inability to cope with the economic, social and psychological effects of unceasing technological advance. Sociologist William Ogburn termed this phenomenon "cultural lag", and — decades before the high-tech prophet Alvin Toffler — used the metaphor of the wave to suggest the futility of resisting technological advances.

Although Bix's book mentions neither Toffler nor any of the other high-tech visionaries who routinely embrace technological determinism, her work could profitably be read as an antidote to theirs. Like every other historian of technology, Bix recognizes that technological determinism is historical fantasy. Yet her analysis of Ogburn and his fellow believers in cultural lag is as scrupulously fair to all viewpoints as is the rest of her book.

Inventing Ourselves Out of Jobs? is a first-rate historical study that simultaneously speaks to our high-tech present. It could not be more timely or more deserving of a wide readership. ■

Howard P. Segal is in the Department of History, University of Maine, Orono, Maine 04469, USA.

Shelling out the facts

The Ecology of Freshwater Molluscs
by Robert T. Dillon Jr
Cambridge University Press: 2000. 509 pp. £75, $120

David L. Strayer

Molluscs have traditionally taken a back seat to insects and crustaceans in freshwater ecology, and rarely feature prominently in courses or textbooks on the subject. Yet recent work shows that suspension-feeding bivalves and grazing snails can control the abundance and composition of primary producers such as phytoplankton, and thus have far-reaching impacts on freshwater ecosystems.

Freshwater snails are intermediate hosts for important pathogenic trematodes of humans and livestock, thereby occupying a central place in what might be called medical limnology. Moreover, as hundreds of species of freshwater molluscs are extinct, or imperilled by human activities, the group urgently needs the attention of conservation biologists. In other words, there are good reasons to bring molluscan ecology closer to the ecological mainstream.

Rob Dillon believes that freshwater molluscs have their own special ecology, distinguished by their immobility, indiscriminate diet and high requirement for calcium. He also thinks they have a largely untapped potential to contribute to the advancement of general ecology, and his book covers their life history, diet, biotic interactions and distribution. The chapter on parasitism shows the importance and complexity of parasitic interactions, and will be especially valuable to ecologists, who tend to overlook parasitism as an important ecological factor. The book also contains original analyses of published data, and proposes a new framework (based on J. Philip Grime's triangular model) in which to interpret molluscan life histories and distributions.

The chief strength of this book is its presentation and analysis of a large, scattered body of literature on freshwater molluscs. The literature coverage is impressively wide and international (but not very multilingual), although some key studies are inexplicably missing. Similarly, several research topics that have figured prominently in freshwater molluscan ecology (for example, the ecological roles of molluscs and their historical biogeography) are poorly represented.

Dillon's analyses are alternately stimulating and irritating. I jotted down many ideas for new research projects in the margins of the book. At the same time, I feel that many of Dillon's conclusions are premature or even incorrect. Further, the narrow focus on molluscs has caused him to miss opportunities for making connections to the broader ecological literature on topics such as the selection of food items by herbivores and sublethal effects of predators on prey. Thus, this book should be read critically. Despite these flaws, however, it is a valuable resource for students seeking fresh research questions, readers looking for information about freshwater molluscs, and ecologists who want to see what freshwater molluscs have to offer. ■

David L. Strayer is at the Institute of Ecosystem Studies, Box AB, Route 44A, Millbrook, New York 12545-0129, USA.

All clammed up

Bivalve molluscs tend to cluster in areas of the Monterey Canyon where sulphide-rich water percolates up through the sediments.

From *The Deep Sea* by Bruce Robison and Judith Connor (Monterey Bay Aquarium Press, $9.95, £8.95).