

Preface

The seemingly innocent observation that the activities of organisms bring about changes in environments is so obvious, and has been familiar to science for so long, that it seems an unlikely focus for a new line of thinking about evolution. Yet *niche construction*, as this process of organism-driven environmental modification is now known, has hidden complexities. When we first began to explore the role of niche construction in evolution, in one case over twenty years ago, we had little idea of the scale of the problem. It rapidly became apparent that a serious investigation would take us into population and ecosystem ecology and lead us to reflect on the relationships between these disciplines. As our investigations proceeded, it appeared the ramifications of niche construction grew to frightening proportions. We now believe that understanding niche construction is a fundamental problem for science and the areas touched on in this book reflect its wide scope. Although we could have limited its sweep to ecology and evolution, we decided also to include a consideration of the consequences of a niche construction perspective for the human sciences, both because human niche construction is particularly powerful, and because all three of us have an interest in the relationship between human biology and cultural processes, especially in the context of evolution. We also believe that a focus on the niche construction of our own species has helped us to an understanding of niche construction in general.

We recognize that in a book of this breadth we cannot be experts on all the material covered. While we have done our utmost to produce a scholarly work, we accept that we will not have covered each topic as well as a specialist might. Nonetheless, we hope that we have done enough to bring into focus the problems that the process of niche construction introduces into evolutionary biology.

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JOS, KNL, MWF

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