Epilogue: A celebration or lament for biodiversity?

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We embarked on this biodiversity journey in the hope that those accepting the challenge would generate novel thoughts and approaches to understanding and conserving biodiversity. On that count, our challenge has been an outstanding success. Our authors variously champion new knowledge on the role of limiting factors in the maintenance and evolution of biodiversity (McPeek, 2023) and the importance of eliminating null expectations before probing deeper into its sources (Bell, 2023). They inform us how a single worldview of adaptation as an evolutionary game (Kotler et al., 2023) transforms our abilities to better model and comprehend the diversity of life and its conservation. Many of the most intriguing games are likely to be played out among the multitudinous species within: the "hidden players" (Thompson et al., 2001; Holt, 2007) whose interactions invariably reveal profound effects on "individual" fitness, population dynamics, and the structure of ecological communities. The need to conserve those micro-assemblages is at least as paramount as conserving their hosts (Lagerstrom et al., 2023).

Our need to conserve emerges from the absurd incongruity of our species' unparalleled success at adaptation, and in manipulating biodiversity for our benefit. Yet our relationships with biodiversity, and our frustrated attempts in its conservation, are haunted by ecological, social, and political non-linearities common to the interactions that yield deep insights into ecological communities. Our authors, optimists all, but some only because the alternative is too depressing to contemplate, provide solutions ranging from fecal transplants to nuclear power plants. Some, including our dear, indefatigable friend, Stuart Pimm, achieve spectacular success against nearly impossible odds.

Calls for action too often fall on the deaf ears and dithering actions of politicians whose good intentions imagine biodiversity flourishing alongside ever-expanding development. Combating this unsustainable worldview is, perhaps, our greatest challenge. While "fingers in the dyke" is insufficient (Brown et al., 2023), we nevertheless need to stop the leaking (Morris, 2023) while we work hard to find ways that improve human existence while reducing impacts on the rest of life. Each requires that we must work hard to educate ourselves and others on the "intrinsic, intellectual value" (Holt, 2023) of species, their environments, and their interactions. Those intrinsic values, like an unread treatise, novel, poem, or anthology, are no less important whether we study a few, many, or none. Simply knowing that they are there is value enough—as long as we act as though we care.

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