## This Week's Citation Classic®

Pianka E R. Evolutionary ecology. New York: Harper & Row, 1974. 356 p. [University of Texas, Austin, TX]

Until relatively recently, biologists merely accepted as essentially immutable a broad range of biological phenomena, such as the fact that sex ratios are usually near equality (50:50), without considering why such facts might be so or how they could have evolved. Rigorous application of the theory of natural selection in population biology has greatly increased our understanding of numerous phenomena, including the evolution of genetic dominance, foraging tactics, reproductive tactics, senescence, sex ratios, social behavior, mate choice and mating systems, predator escape tactics, parasite virulence, niche breadth, resource partitioning, and so forth. [The SCI® and SSCI® indicate that this book has been cited in over 290 publications.]

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When I began teaching ecology in 1968-1969, the only two textbooks available totally lacked an evolutionary perspective. In 1970 I tired of apologizing to my students for these books' inadequacies and decided to write a more modern one based on my own lectures. I assembled an outline and sent it off to several publishers to inquire whether anyone would be interested. All but one simply rejected the outline out of hand, indicating that I was an unknown and that the manuscript would have to be written and reviewed before they would consider committing themselves to its publication. However, an editor at Harper & Row, Amy Kramer, showed my outline to the late Robert MacArthur, who assured her that I would write a good book. She signed me on and proved to be an exceedingly supportive editor, carefully gathering and holding out little bits of praise as carrots to keep me going when I grew weary of writing. Had I known then that many other ecology texts were also being written, I would never have continued. Imagine my chagrin when, in 1972-1973, six other ecology textbooks appeared by just as I was finally about to finish my own! My book was clearly too late, and a total anticlimax. Indeed, I almost stopped writing it just as it neared completion and probably would have if not for Kramer's clever support and the Concorde fallacy (you've got too much invested in it to quit now).

As luck would have it, however, this surfeit of texts resembled the recent Democratic primaries, and my book somehow emerged from the fray a "classic." J.M. Emlen<sup>3</sup> was more idiosyncratic, P.A. Colinvaux<sup>1</sup> was cuter, while the others were more "comprehensive." But Evolutionary Ecology, conceptual, clear, and concise, found its niche. I attribute the book's success to the eclectic quality of its contents, patterned after the thinking of Darwin, Fisher, Hamilton, Orians, MacArthur, Paine, Schoener, Trivers, and Wilson. I consider myself most fortunate to have been the spokesman for such clear thinkers. Evolutionary Ecology represents an image of part of our minds, one that reflects reality—principles developed here operate independently of Homo sapiens and life as we know it on planet Earth but apply to living systems anywhere in the cosmos.

Evolutionary Ecology is now in its fourth edition and has been translated into Japanese, Russian, Spanish, and Polish. The latter translation is ironically gratifying, since "Pianka" is an old Polish name (meaning "foam on the crest of a wave" or "froth on the head of a beer"). Sadly, no Piankas still live in that beleaguered country (my ancestors renounced their roots and fled anti-Semitism, becoming German gentiles).

Two edited British symposia<sup>7,8</sup> have also used the same title, as well as a new journal! The discipline has blossomed beyond anyone's wildest expectations.

<sup>1.</sup> Colinvaux P A. Introduction to ecology. New York: Wiley, 1973. 621 p. (Cited 60 times.)

Collier B, Cox G W, Johnson A W & Miller P C. Dynamic ecology. Englewood Cliffs, NJ: Prentice-Hall, 1973. 563 p. (Cited 25 times.)

<sup>3.</sup> Emlen J.M. Ecology: an evolutionary approach. Reading, MA: Addison-Wesley, 1973. 493 p. (Cited 255 times.)

Krebs C. J. Ecology: the experimental analysis of distribution and abundance. New York: Harper & Row, 1972. 694 p. (Cited 175 times.)

<sup>5.</sup> McNaughton S J & Wolf L L. General ecology. New York: Holt, Rinehart and Winston, 1973. 710 p. (Cited 40 times.)

<sup>6.</sup> Ricklefs R E. Ecology. Newton, MA: Chiron, 1973. 861 p. (Cited 140 times.)

<sup>7.</sup> Stonehouse B & Perrins C M, eds. Evolutionary ecology. London: Macmillan, 1977. 310 p.

<sup>8.</sup> Shorrocks B, ed. Evolutionary ecology. Oxford: Blackwell, 1984. 418 p.