

Ultraviolet-B and Amphibia

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The differences in scientists' personalities can affect the ways in which they practice their science and interpret their results. The debate on the importance of ultraviolet-B (UVB) radiation in amphibian declines underscores this point. Lawrence Licht, who finds no support for the hypothesis that UVB radiation is a causal factor in amphibian declines (his latest article on the subject appears in this issue of *BioScience*), and Andrew Blaustein are poles apart in terms of their personalities and their approaches to research; these differences have resulted in scientific conflict. Each of these researchers proclaims the other's work to be scientifically misleading; each is both right and wrong in his assertions.

Since he first witnessed amphibian declines in his study ponds in Oregon, Blaustein has dedicated his research career to searching for the causes of global amphibian declines. Blaustein's research agenda is sweeping; he is willing to take risks to understand the big picture; and he just might overlook some details in order to move on to the next set of hypothesis-testing experiments. Licht, in contrast, bristles at scientific characterizations that he believes are based on faulty assumptions and research design, and he dedicates considerable research effort to verifying which assumptions and protocols are faulty and whether they affect the original research conclusions.

When Blaustein first reported on his UVB research (Blaustein et al. 1994), the media focus was on whether UVB radiation was *the* cause of global amphibian declines. In 1994, the amphibian research community was still divided on whether, in fact, there was a global amphibian problem. Consensus on this issue was not reached until 1996. Licht was not the only amphibian biologist to be dismayed by Blaustein's media exposure. Although Blaustein was careful in his public presentations, the impression from his interviews (at least to me) was that UVB radiation might be what the scientific community was looking for to explain amphibian declines. However, if Blaustein