DID THE BROWN TREE SNAKE ACT ALONE?

I would like to comment on one statement made by Rodda et al. in their recent article “The Disappearance of Guam’s Wildlife: New Insights for Herpetology, Evolutionary Biology, and Conservation” (BioScience 47: 565–574). They stated that Julie Savidge’s presentation on the snake predation in Guam was “met with skepticism” and that “few could believe that a mere snake was that efficient a predator.” Although some of those present, myself included, may have had some misgivings about her presentation, not all of them were based on whether or not the snake was having an influence. That fact, I feel, was clear to most of the audience. What was not clear was whether the snake was the only influence. Although the evidence she presented, which is reviewed in Rodda et al.’s article, seemed to rule out other potential impacts, such as pesticides or parasites, there were still some unanswered questions.

In particular, what were the causes of the expiration of the island swiftlet, Aerodramus vanikorensis, and the substantial decrease in the population of the bridled white-eye, Zosterops conspicillatus, on the adjacent island of Rota, where the brown tree snake has not been recorded? The complete disappearance of the swiftlet from Rota by 1980 (personal observation) is important because it has managed to maintain a reduced population on Guam despite substantial predation by the brown tree snake on other elements of the avifauna. Was it not possible that another, yet unidentified, influence had exerted an initial impact on the bird populations on Guam and that the snake was just the final impact but not the only one? Admittedly, there were no other envisioned impacts that were not considered by Savidge in her presentation, and none have come to light in subsequent years. Even so, the depletion of the avifauna of Rota by something other than the brown tree snake keeps alive, for some of us, the issue that we may be still overlooking another, equally interesting chapter of the near extermination of this island’s fauna.

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THE DIFFICULTIES IN ASSESSING LECTURES

Diane Ebert-May, Carol Brewer, and Sylvester Allred’s article “Innovation in large lectures—teaching for active learning” (BioScience 47: 601–607) was full of useful ideas, a number of which I have already stolen for my large biology class. For this, I offer my thanks, but the article once again pointed out two difficulties in experimental design that have vexed efforts to compare “conventional” didactic large lectures to alternative methods of handling large groups of students. The first difficulty is a variant of the so-called Hawthorne Effect, whereby members of an experimental group perform better (or have better attitudes) either because they know that they are part of a special group or because they receive special treatment from the experimenters. Even where the same individual gives both the “conventional” stuffy lecture and then the jazzy version, it is hard for me to imagine that the lecturer would not have more fun with the second, novel version, especially if that lecturer had bought into the idea that the novel approach was going to be better. Students would then quickly pick up the instructor’s probably contagious enthusiasm.

The second difficulty with this design is that we do not really know anything about the quality of the conventional lecture(r). Every campus has at least a handful of stunningly good, charismatic lecturers. If such an admittedly unusual lecturer provided the “baseline” conventional lecture, it would be a remarkable alternative that would show an improvement. On the other hand, if that lecturer had, for example, a monotone that could be used by the Bureau of Standards and could not explain to Daffy Duck how to quack, almost any alternative would be perceived as better.

To help quantify this effect for future studies, I propose the following gedanken experiment. Let there be two professors, A and B. Both would be provided with the same syllabus and lecture notes. Reporters in both classes would monitor the “delivery” of the curriculum to ensure that students in both classes had received exactly the same content. Professor A’s voice would be a nasal whine like Pee Wee Herman’s, punctuated with the occasional bray-

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