

SCIENCE TRIVIA

Why Don't Penguins' Feet Freeze? And 114 Other Questions. By New Scientist. 2006. Free Press. (ISBN 1416541462). 212 pp. Paperback. \$14.00.

Why Don't Penguins' Feet Freeze? is a compilation of 115 of the best questions and answers from *The Last Word*, a column in *New Scientist* magazine. *The Last Word* represents both "the pursuit of the offbeat and the trivial" as well as "answers to questions that are asked every week by readers who newly discover" the column, according to the editor, Mick O'Hare. The popularity of the column has led to the development of a number of books, including the best-seller **Does Anything Eat Wasps?** that came out in 2005. **Why Don't Penguins' Feet Freeze?** is a light read that roams from keenly insightful to downright interesting to plainly amusing.

For educators, the book could be used anecdotally as a way to capture students' interest by reading questions and answers related to the subject currently being studied. For example, the question, "When people die of electric shock, what kills them - current or voltage?" might be of interest when studying electricity. Also, the book could be used as a vehicle to engage students in research related to questions posed in the book. Students could be directed to do independent research and write their own responses to the questions in the book, later verifying their responses with those published by the specialists themselves.

The questions in the column come from readers who write into *New Scientist* magazine with a question of interest. The questions are then posted on the *New Scientist* Web site and those who feel they have the capacity to answer

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the question can respond. This is where the book becomes a little muddy for the reader. In reference to the question mentioned above about electric shock and death, three individuals responded with three slightly different answers. It isn't so much that their answers contradict each other (they don't), but each individual approaches the answer from his or her own area of expertise and experience, adding tangential anecdotes as well. Because of this, the book can often leave the reader feeling a bit confused as to which response is the most correct. There are even a few instances in the book where the responses seem contradictory or entirely unrelated to each other. For example, the responses to "What is the irritant that causes my eyes to water when I am slicing onions?" vary dramatically from one another. The first responder does an excellent job of answering the question about the irritant that causes eyes to water when onions are being sliced, while subsequent responses simply focus on how to avoid this burning sensation in the first place. Not only are the responses vastly different from one another, they dodge the original question. These provide human interest and a bit of humor as well. There are instances in the book where the editor steps in and clarifies the responses that are fuzzy or contradictory, which can be helpful when the answers were unclear.

Again, in terms of using this book in the classroom, these discrepancies in professional responses to age-old questions can be used educationally in the form of a discussion, debate, or laboratory experiment that could be designed to attempt to answer the question with hard data. It would be very easy to set up an onion-slicing lab to explore which suggested method works the best—bread between the teeth, lemon under the top lip, or goggles.

In the end, the book is a light read, potentially useful to educators in a variety of ways, and certainly interesting if the off-beat and random is enjoyable to you.



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The Elephant's Secret Sense: The Hidden Life of the Wild Herds of Africa. By Caitlin O'Connell. Free Press. 2007. (ISBN 0743284410). 241 pp. Hardcover. \$24.00.

The title of this book makes most readers curious to find out more about the elephant's secret sense. I had that same sense of curiosity and wanted to know about the uniqueness of the elephants. The author does a nice job of putting the reader in the scenery of Africa and I felt like I was studying the elephants with her. It was interesting to see how the author used observation as the research technique to study the communication and behavior of elephants. As the author wrote about the elephants she became familiar with the "particular way the elephants seemed to be listening with their feet." O'Connell makes real life comparisons as she mentions how humans with hearing impairments can hear the vibration of music through wooden dance floors. She kept observing the elephants to see if they used vibrations in their feet to interpret messages.

Another interesting aspect O'Connell brings to the book is the culture and gender roles of the local women, who call her the "mother of the elephants." These gender roles influenced her need in using not only a male interpreter with the local farmers, but training a female interpreter (since much of the field work was done by women in the farming area). She also had to deal with the idea that some of the farmers viewed elephants as a nuisance to their crops.

The book provides photos of the elephants and the cement bunker used for her observations. She mentions that previous research studies have examined research on elephants' hearing and auditory vocalizations. However, O'Connell wanted to go deeper and study how the elephants were interpreting the messages. She discusses how her research shows that the "elephant vocalizations travel in the ground." The book takes the readers on a journey where they feel as though they are in the elephant research study.