



Science Magazine Podcast Transcript, 7 September 2012

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Promo

The following is an excerpt from the *Science* Podcast. To hear the whole show, visit www.sciencemag.org and click on “*Science* Podcast.”

Music

Interviewer – Sarah Crespi

Finally today we have Meghna Sachdev, online news writer for *Science*. She’s here to give us a rundown of some of the recent stories from our daily news site. I’m Sarah Crespi. Okay, Meghna, first up we have a story about the tragic lives of the bold, in this case, bold elk.

Interviewee – Meghna Sachdev

Yes. So a new study has discovered that the boldest elk are the ones that often end up getting targeted by hunters, and the shier ones get away.

Interviewer – Sarah Crespi

So how did they study bold and shy elk behavior?

Interviewee – Meghna Sachdev

Shy elk tend to avoid areas that are populated by humans, and they don’t explore very much. And so the bold elk are basically encountering people a little more and tend to be a lot more exploratory.

Interviewer – Sarah Crespi

So that’s how they defined the personalities of these elk. How did they study their interactions with hunters?

Interviewee – Meghna Sachdev

So about 122 elk were tracked with GPS collars, and their movements were analyzed. And at the end of the hunting season, researchers looked at how the elk were moving and how many of them had been killed. And it turned out about 25 of them died by the end of hunting season.

Interviewer – Sarah Crespi

And those were the bold.

Interviewee – Meghna Sachdev

Most of them were the bold ones. What they found was that the elk that moved the most and traveled the biggest distances tended to be the ones that were killed by hunters.

Interviewer – Sarah Crespi

And so what does this say about elk populations and their interactions with people?

Interviewee – Meghna Sachdev

Well, one of the things that researchers are concerned about is that the humans are acting as a selective pressure in elk populations. So essentially by selecting for the bold elk, humans might be making elk populations a little bit more skittish.

Interviewer – Sarah Crespi

And so what about other predators that like to eat elk? Are they pushing them in the same direction?

Interviewee – Meghna Sachdev

Well, that's actually the next step, and that's what researchers want to study: are the bold elk also targeted by predators like wolves and bears? And one of the things they think might be happening is that maybe the bold elk actually manage to get away from these natural predators, and so everything might balance out in the end.

Interviewer – Sarah Crespi

Interesting. Okay, well, next up we have another animal story. This time it's tiger timeshares, a story about how these endangered and dangerous animals are learning to live with humans.

Interviewee – Meghna Sachdev

Yes, that's right. A field study in Nepal's Chitwan National Park looked at how tigers and people can share the same environment. And what they found are that tigers are adapting by becoming a little bit more nocturnal.

Interviewer – Sarah Crespi

So why did the researchers choose to look at Nepal for this study?

Interviewee – Meghna Sachdev

Well, so Nepal's Chitwan National Park is one of the less than 30 parks in the world that can support enough breeding tigers to maintain genetic diversity, and it's also got a lot of human interaction and human activity in the area.

Interviewer – Sarah Crespi

So there's more people there, but how did they study tigers when there weren't people around?

Interviewee – Meghna Sachdev

So what they did is they set up about 75 camera traps in the dry season over 2 years. They put them around roads and other areas where they expected tigers and people to be, and they just sort of looked to see how many tigers and how many people they could catch.

Interviewer – Sarah Crespi

And so what they found was that the tigers and the people were not overlapping.

Interviewee – Meghna Sachdev

What they expected to find was that human activity would be driving the tigers further into the park. But that's not actually what they found. The density of the tiger populations well into the park and around these more active areas was about the same.

Interviewer – Sarah Crespi

So how is this different from what we already knew about tiger behavior?

Interviewee – Meghna Sachdev

Tigers in parts of the world like Indonesia and Malaysia, which have been studied, are seen about half the time in the daylight. But what they saw in Nepal was that between 80 and 95% of their activity was done in the dark. So the tigers don't really like hanging out with people, and so they decided the best way to share the space was by becoming a little bit more nocturnal.

Interviewer – Sarah Crespi

So tigers are behaving this way in Nepal, but are we going to see similar kinds of stratification of time between people and animals in other countries and other places?

Interviewee – Meghna Sachdev

Well, researchers say that this is something that does need to be included in conservation plans. But one of the reasons this works in Nepal is because there is an economic incentive. There's a lot of ecotourism, so it is supporting the population and stopping the people from getting cranky when it comes to sharing their space with tigers. But I don't think we can expect to see us running timeshares with bears or wolves anytime soon.

Interviewer – Sarah Crespi

Okay, last up we have a story on how the shape of a glass could actually influence how much we imbibe.

Interviewee – Meghna Sachdev

Yes. So next time you drink too much, you really might be able to blame your glass. Researchers were interested to see whether there was an optical illusion going on when people drank beer out of fluted versus straight glasses. People tend to pace themselves when they drink beer, as opposed to drinking soft drinks, like Coke or lemonade. But they weren't finding that happening with fluted glasses, so they took a look into it.

Interviewer – Sarah Crespi

So how did they convince people to drink beer for science?

Interviewee – Meghna Sachdev

Well, surprisingly, it wasn't that hard to do. What they did is they had a few groups of people drink beer and lemonade out of two different kinds of glasses while watching a

nature documentary – so they weren't just sitting around drinking. And then they measured how fast each of the groups finished their drinks.

Interviewer – Sarah Crespi

And so the fluted glasses had an effect?

Interviewee – Meghna Sachdev

They did when it came to beer. People tend to pace themselves when it comes to beer. And so what they found was that when people were drinking out of straight glasses, they tended to drink slower. I think it took them about 13 minutes to finish what was about 354 milliliters – which is about a regular can of beer – whereas when they were drinking out of fluted glasses, they finished in about 8 minutes. And that's about as fast as they were drinking the lemonade, as well.

Interviewer – Sarah Crespi

And so what's going on there? Why did the fluted glass make a difference?

Interviewee – Meghna Sachdev

What they think is happening is that there's an optical illusion with the fluted glass, so it's a lot more difficult to figure out when you get to the halfway point. So one of the things researchers in the U.K., where the study was done, are interested in doing is figuring out how to get people to control their drinking. And so they found that people do want to know how much they're drinking, and they tend to self-regulate by looking at when they get halfway. And if they can't do that with the fluted glasses, they tend to just drink it all down.

Interviewer – Sarah Crespi

So what are the next steps? Are they going to start marking up glasses in pubs?

Interviewee – Meghna Sachdev

Actually, that's exactly one of the solutions they came up with. I guess we'll see if it works.

Interviewer – Sarah Crespi

We'll know when the glass is half empty. Okay, Meghna, well, what else is on the site this week?

Interviewee – Meghna Sachdev

Well, on *ScienceNOW* this week, you can find out about the International ENCODE Project, smooth ocean surfaces during extreme hurricanes, as well as how albatrosses soar. And on our policy blog, *ScienceInsider*, you can get the skinny on exactly what the Democratic National Committee's 2012 platform is saying about science and technology. Check out all this and more on our website, news.sciencemag.org.

Interviewer – Sarah Crespi

Meghna Sachdev is a writer for *ScienceNews* Online. You can check out the latest news and the policy blog, *ScienceInsider*, at news.sciencemag.org, where you can also join a live chat, *ScienceLive*, on the hottest science topics, every Thursday at 3 p.m. U.S. Eastern time.