TEXTING WITH A SCIENTIST

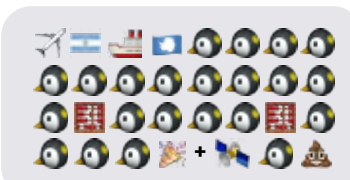
PENGUINS HIDING IN PLAIN SIGHT

BY MOLLY BENNET

WHAT'S BLACK and white and pink all over? Adélie penguins and their poop! We texted with Heather Lynch, an ecologist at Stony Brook University in New York, about how she tracks penguins from space using their bright pink poop. Recently, Lynch and her colleagues announced that they had discovered several gigantic groups of penguins that nobody even knew existed. That was something we had to hear more about. An edited and condensed version of our conversation follows.

Can you tell me about your work, using only emoji?

Molly



Heather

🤔 I think I'm going to need you to translate that for me!

Sure thing! In a nutshell: My students and I fly to Argentina and then take a boat to Antarctica to survey penguins. Over the course of a four-month field season, we'll count (hence the abacus) lots and lots of penguins. The rest of the year, we use satellites to track penguin populations by measuring the size of the guano (poop) stain they leave behind at the colony. Sometimes we even discover new colonies in satellite imagery!

What's the most exciting discovery you've made?

The Danger Islands, by a mile! We found several huge colonies of Adélie penguins with satellites, and we put together a field expedition shortly thereafter. All in all, the Danger Islands contain about 1.5 million penguins.

But do they really poop so much you can see it from space?

Indeed! Even just a couple of pairs of 🐧 can produce enough 💩 to be seen from space. It helps that it's bright pink and that the Antarctic is otherwise largely gray and white.

Pink? Why?

🐧 🍽️ 🦐

Penguins eat krill, which look a lot like shrimp. The pink shells of the krill are ground up and pooped out as a pink slime. Lucky for us, the size of the guano stain tells us how many penguins there are.

What's next for your Danger Islands research?

Now that we know what is there, we can keep a good eye on them with satellites. There are several other penguin hot spots on our wish list for the coming years, so I'm keeping my fingers crossed that we can find the 💰 and a good solid 🚤 to check them out.

O.K., last question! After spending all this time dealing with smelly pink guano, do you still ❤️ penguins?

I still ❤️ penguins, and I don't think I'll ever get tired of discovering new things — it's the best part of being a scientist. Even if I have to wade through 💩 to do it. :)