

Can Birds Communicate Using Cellphones and Tablets?

Unbelievably, these whip-smart birds have taken feathered friendships to a whole new level. Learning how to use tablets and cellphones to make calls in a three-month study (147 calls were actually made by 18 birds), Ellie and Cookie continue to call each other more than a year after the study ended.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- In the U.S. alone, more than 20 million parrots are kept as pets, and many of them aren't given enough stimuli to meet their cognitive and emotional needs
- Researchers with Northeastern University in Boston taught pet parrots how to use tablets and cellphones to make video calls, then allowed them to initiate calls to other birds
- Every parrot engaged with the system, and most of them "exhibited high motivation and intentionality" in doing so
- Some of the parrots experienced "arguably life-transformative" benefits from interacting with members of their same species, such as foraging behaviors and learning to fly
- Parrots require daily social interaction and mental stimulation at least on par with what you would give to a preschooler to avoid developing behavioral problems

Parrots are highly intelligent, social animals that require significant interactions and mental stimulation to be healthy and happy. They may also enjoy an occasional video chat with their fellow birds, according to research presented at the 2023 CHI Conference on Human Factors in Computing Systems in Hamburg, Germany.¹

In the U.S. alone, more than 20 million parrots are kept as pets, and many of them aren't given enough stimuli to meet their cognitive and emotional needs.² Often, they're the only parrot in the household, never getting a chance to form relationships with or interact with other parrots.

Yet, in the wild, parrots live in the company of other birds and typically form long-term bonds with one partner. In captivity, parrots that don't get enough socialization may develop severe behavioral problems, including becoming aggressive or engaging in self-mutilation, such as pulling out their feathers.³

Researchers with Northeastern University in Boston, in collaboration with colleagues from MIT and the University of Glasgow, set out to determine if technology could help, revealing that many parrots seemed to enjoy video calls with their feathered friends.⁴

Parrots Make Video Calls, Form Feathered Friendships

The study involved 18 parrots who were taught how to use tablets and cellphones to make video calls, then allowed to initiate calls to other birds over a three-month period. First, the birds were taught to ring a bell when they wanted to make a call. Once the bell was rung, their caretaker would give them a tablet showing images of friends to call.

The birds could then initiate up to two calls over a three-hour period. Each call was stopped after a maximum of five minutes, as well as if the birds showed signs of fear or aggression.⁵ Some parrots became fast friends and quickly showed preferences for certain birds over others. While some birds became excited, others were calmer — and some even fell asleep near the screen.⁶

In one instance, a Goffin's cockatoo — a type of small, white parrot — named Ellie and an African grey named Cookie continued to call each other more than a year after the study ended. In another, a Northeastern University news release reported:⁷

"Two sickly, elderly male macaws paired together in the study had scarcely seen another macaw in their lives, yet formed a deep bond — dancing and singing enthusiastically together through the screen and calling 'Hi! Come here! Hello!' whenever one or the other moved out of the video frame."

All the Parrots Chose to Make Calls

Over the course of the study, the birds made 147 calls. Every parrot engaged with the system, and most of them "exhibited high motivation and intentionality" in doing so. In other words, when given the chance, many initiated calls and seemed to enjoy doing so.

All of the parrots' caregivers also felt that the birds benefitted from the chats, with some experiencing "arguably life-transformative" benefits from interacting with members of their same species. According to a Northeastern University news release:⁸

"Not only did the birds initiate calls freely and seem to understand that a real fellow parrot was on the other end, but caretakers overwhelmingly reported the calls as positive experiences for their parrots. Some caregivers watched their birds learn skills from their video friends, including foraging, new vocalizations and even flying. 'She came alive during the calls,' reported one."

Study author Rébecca Kleinberger, an assistant professor at Northeastern, said the birds used vocalizations that birds may use in the wild to "say hello" and suggested such calls may help improve captive parrots' quality of life.⁹ "We're not saying you can make them as happy as they would be in the wild," she says. "We're trying to serve those who are already [in captivity]."¹⁰

Kleinberger also cautioned against the notion that guardians "can just put a screen in front of their bird and everything is gonna go well."¹¹ These cognitively complex creatures need much more than a video chat to stay well.

Pet Parrots Require Significant Enrichment

The featured study highlights parrots' complex social and cognitive needs. African grey parrots, for instance, voluntarily help each other to obtain food rewards, even if there's no incentive in it for themselves — an act of altruism.¹²

Goffin's cockatoos, meanwhile, can use two or more different tools to achieve a goal, a practice known as associative tool use.¹³ The only other nonhuman species known to do this is the chimpanzee.¹⁴ With their high intelligence, you can imagine how bored and stressed these birds become if left confined in a small cage with no stimulation.

While parrots are fascinating birds, be aware that they're high maintenance and require a great deal of specialized care, including social interaction and mental stimulation at least on par with what you would give to a preschooler, to avoid developing behavioral problems.

Many parrots are abandoned at rescues when their owners decide they require too much attention and care. So, if you're considering a parrot for a pet, please do extensive research to be sure you're up to the challenge.

And if you decide that you are, don't buy one from a pet shop. Instead, contact your local animal shelter or exotic bird sanctuary to find your perfect match — there are many parrots in need of good homes.

Sources and References

^{1,2,4} [CHI '23: Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems April 2023 Article No.: 534 Pages 1–16](#)

³ [World Animal Protection March 11, 2022](#)

^{5,7,8,9,10} [Northeastern Global News April 21, 2023](#)

^{6,11} [CBC April 25, 2023](#)

¹² [Current Biology January 9, 2020](#)

¹³ [Current Biology February 10, 2023, Discussion](#)

¹⁴ [Current Biology February 10, 2023](#)
