

MIND GAMES

Clever animals may actually plan ahead.

BY ALINE ALEXANDER NEWMAN

Dolphins don't stress over the fish snack that got away. They don't wonder if a prowling shark will attack them on the other side of the reef. *Or do they?*

"Until now, many scientists thought animals lived only in the present," says Nicky Clayton, a psychology professor at Cambridge University in England. They believed that only humans could both remember the past and plan for the future. But Clayton's research shows that some animals can engage in mental time travel.

"Maybe loads of animals have this ability," she says. "Maybe only a few." Scientists don't know yet. Nor do they know how animals do it without thinking in words. But if the following stories are any indication, some animals have the power. And they're using it to get the best of each other...and of humans. Keep reading to meet some critters with a plan.





FRIENDS FOREVER

Keiki the bottlenose dolphin and Ola the false killer whale are best buds who want more face time, so they hatch a plan to make that happen. Every day they perform in separate tanks at an oceanarium. Every night after closing, Keiki jumps the fence between their tanks. But this makes it difficult to separate them by show-time, so keepers lay a wide plank on top of the fence to make it a tougher hurdle. Every morning the plank is in the water, and Keiki is in Ola's tank. What's going on?

One keeper spies on the pair. She sees Ola, the stronger animal, stand on his tail and push the heavy board off the fence with his nose. Keiki leaps and...success! Teamwork brings them together again. "They never do it when we're around," says behavioral biologist Karen Pryor of Watertown, Massachusetts. "They know we would put them back in their own tanks."

Once the keepers realize what is happening, they arrange play-dates for the two friends, and everyone ends up happy.



RED LIGHT GREEN LIGHT

A stray horse shows up at the home of five-year-old Dennis Wright—who lives way out in the country—and decides to stay. Dennis, of Callahan, California, names the horse Maude.

The boy and horse are inseparable. But when Dennis turns six, he has to start school. So he shuts Maude in the yard and places a board across the space where a gate should be. Then Dennis and his siblings walk down a winding road toward school.

Maude stays put until the kids round the corner. Then she jumps the board and follows them on the sly. At every bend in the road Maude waits until Dennis moves out of sight before she goes ahead. Calculating every move, the mare doesn't show herself for more than a mile. By then Dennis is sitting at his school desk, and his teacher spots Maude looking into the classroom window!



DUMB AND DUMBER

Jodie and Specks, Dalmatian housemates, have their own beds—fluffy cedar pillows covered in fake sheepskin. Apparently Jodie prefers a bed that Specks warms up and has figured out the perfect plan for grabbing it. The beds sit side by side opposite a wall of windows in Amelia Vetrone's living room in South Pasadena, California. Each evening Specks chooses one of the beds. He tramps it down, turns in circles, and curls up to sleep. Then Jodie appears. She stares at Specks. You can almost see a glint in her eye.

"Ruff! Ruff! Ruff!" barks Jodie, racing toward the window. Specks leaps to his feet and bounds after her.

"It's as if he's saying, 'Who is it? Who is it?'" says Vetrone. "It's nobody! But by the time Specks realizes this and turns around, Jodie has taken his comfy spot."

"She does this almost every night," says Vetrone. "And he falls for it every time."



HIDE-AND-SEEK

Sweetie Pie the scrub jay plans her snacks, saving worms to eat later. But she also has to hatch a plan to keep a bossy male bird named Psycho from finding them. Raised in a laboratory, she buries the worms in a sand-filled ice-cube tray backed by stacks of Legos (right, top). Uh-oh! Looking over her shoulder, Sweetie Pie spots Psycho (right, bottom) watching her from another enclosure.

Sweetie Pie knows that if Psycho sees where she buries her worms, he'll steal her stash when she isn't around. So the first chance she gets when Psycho isn't watching, she secretly digs up the worms and re-hides them.

Soon after, Psycho is released into Sweetie Pie's enclosure. Sweetie Pie had correctly predicted his next move: He flies straight to the first hiding place, probes in the sand with his bill, and finds...nothing! "Then he bashes the Lego bricks in frustration," says Nicky Clayton, the Cambridge University professor who takes care of the birds and studies their behavior. "Nobody likes to be outsmarted!"



FINDERS KEEPERS

What would you do if your little sister wanted half your candy bar—after she already ate one of her own? Zuri, a captive western lowland gorilla, faces a similar problem whenever his keeper tosses him a pile of nuts. The nuts scatter on the ground and Zuri's half sister, Jumoke, rushes straight for them. "Jumoke is getting treats, too—in a different place," says Judy Sievert, gorilla keeper at Seattle's Woodland Park Zoo in Washington. "She's trying to get double portions." No way can Zuri gather up all his goodies fast enough to prevent Jumoke from snatching some of them. Zuri has to plan quickly.

Deciding to fake out Jumoke, he ignores the treats and wanders several feet away, where he pretends to hunt for nuts in the grass. Jumoke follows him and searches, too. Once she is thoroughly distracted by the hunt for imaginary treats, Zuri returns to his real treats. Yum! Now he's got them all for himself.



THE HEAVY THINKER

Forty pigs share a pen in Cambridge, England, where they get fed once a day. To keep the pigs from making hogs of themselves, each animal wears an electronic collar. That tells a computerized feeding machine who is eating and how many food pellets to release.

But one clueless pig loses her collar and has to eat straw. Meanwhile, a clever pig finds the fallen collar and comes up with a scheme to get extra food. *Ding!* The found collar triggers the computer, and the clever pig gets a second supper. She continues tricking the computer for three more days—until she is caught "red-footed." "We didn't know a pig might learn something like that," says Donald Broom, a Cambridge University professor. The clever pig gives an old rhyme new meaning: "This little piggy eats pellets. This little piggy chews straw. Clever little piggy has seconds. Clueless little piggy has none." *Wee, wee, wee....*

PICANI PICANI / IMAGEBROKER.NET / PHOTOLIBRARY (HORSE); ELAINE HUI (JODIE AND SPARKS); NICOLA S. CLAYTON (SWEETIE PIE); VINCE J. MUSI / NATIONAL GEOGRAPHIC STOCK (PSYCHO); JUDY SIEVERT / WOODLAND PARK ZOO (ZURI AND JUMOKE); LYNN M. STONE / KIMBALL STOCK (PIG)

