



Emotions run high in the animal kingdom

BY LISA MARSHALL

Do mice feel empathy? Do magpies grieve for their dead? Do dogs have a moral code?

These may seem odd questions from a Brooklyn-born boy whose only childhood pet was a goldfish, but as early as age 4 Marc Bekoff knew he had an unusual curiosity for the animal world.

“My parents said that I always ‘minded’ animals,” Bekoff recalls. “I was always asking what they were thinking and feeling — and I hated zoos, circuses and rodeos.”

Now 63, with 200 scientific papers and 20 books in his portfolio, the recently retired CU professor is lauded as one of the world’s leading researchers of the study of animal emotions and a key force behind a paradigm shift in how we view our nonhuman companions. Rather than see them as predictable, robotic slaves to instinct — the prevailing perception through the 70s — scientists are now warming to the notion that animals possess not only simple neurologically hard-wired emotions, such as fear and happiness,

but may also have the capacity for more complex feelings, such as joy, empathy, jealousy, altruism and even a sense of morality.

“Science is finally catching up with what we already knew — that animals are emotional and smart,” says Bekoff, author of *The Emotional Lives of Animals* (New World Library).

Instinctual or emotional animals?

Early on, Bekoff made his mark as a nonconformist. After graduating from Washington University in St. Louis with a degree in anthropology, he swiftly entered medical school to, as he plainly admits, “get out of the draft.”

“I thought I could do more by demonstrating and protesting than by going to war,” says Bekoff, who still sports a graying ponytail, an earring and a tireless willingness to write letters to the editor or pick up a protest sign for the right cause.

While attending a medical/doctoral program at Cornell Medical School, he staged protests against the school’s use
(continued on page 32)

(continued from page 31)

of animals for research. Ultimately, after being required to kill a favorite cat named Speedo in the name of science, he walked out and returned to Washington University to study animal behavior.

There, too, his beliefs ran against the grain.

“The prevailing attitude at the time was very reductionist — that animals were just instinctual machines that didn’t think or feel much,” Bekoff says.

In the late 70s, four years after coming to CU to teach courses in animal behavior, Bekoff began to turn that notion on its head with a seminal eight-year field study of coyotes in Grand Teton National Park, Wyo.

“People always talked about ‘the coyote,’ as if there was only one way for them to behave,” Bekoff says. Instead, he discovered that their behavior varied dramatically from place to place, with some living as a pack, others living alone and some living as mated pairs — depending on how much food was available. “It showed that coyotes and wolves and dogs really are adaptable. They are not pre-programmed machines. They assess a situation and change their behavior accordingly,” Bekoff says.

“The prevailing attitude at the time was very reductionist, that animals were just instinctual machines that didn’t think or feel much.”

— Marc Bekoff

He has since camped out in subzero temperatures to spy on penguins in Antarctica, gathered heaping piles of elephant dung in northern Kenya and studied the behavior of grosbeaks, stellar jays and assorted fish. But he is perhaps best known for his study of dogs at play.

Learning to speak “dog”

Bekoff compiled reams of videotape of dogs and their wild relatives (coyotes and wolves) and examined them frame-by-frame to unravel the hidden meaning behind their roughhousing. What he found was an initiation dance (perhaps familiar to anyone who has ever been to a dog park), which he coined “the play bow.”

He says the pose — hind up, chest on

the ground, forelegs stretched forward — is actually a request for permission. It’s like saying, “I don’t want to fight you, mate with you or eat you. Let’s play.” Dogs use a modified play bow to warn, “I’m going to bite you now, but it’s all in fun,” or after an overly exuberant nip to say, “Oops, sorry. I got carried away. Let’s keep playing.”

Some dogs will “self-handicap” or “role-reverse,” either weakening their bite or lying down on their back for the sake of a good game (an act that would seriously endanger them outside of play). And Bekoff notes a dog will rarely use the play bow to trick another dog, convincing it to let its guard down only to pounce with real aggression. The reason? In the canine world, there are sanctions for lying, and those who break trust often end up being ostracized, he says.

While Bekoff’s play research has earned him scientific awards and stories in *Time* and spots on the *Discovery Channel*, critical peers have called the work “frivolous” and “anthropomorphic.”

“Do animals think? My answer is ‘No. They do not,’” argues University of Florida psychology professor Clive Wynne, author of *Do Animals Think?* (Princeton University Press). Wynne believes that each species has its own unique way of reasoning, and it is radically different than what we

humans define as “emotions” and “thoughts.” By projecting human-like cognition onto the animal world, Wynne says we flatten the diversity of the world and rob ourselves of the opportunity to truly understand animals. Plus, he says, the notion that animals feel human-like emotions and thoughts “is just not consistent with the hard facts of science.”

Bekoff stresses he is certainly not alone in the burgeoning field of ethology — the study of behavior patterns in animals. Recent studies have shown that mice react more strongly to painful stimuli after they have seen other mice in pain. Ethologists interpret this as a show of empathy. New research suggests that elephants experience something akin to post-traumatic stress disorder. Scientists have learned that



Cliff Grasmick

Professor emeritus and researcher Marc Bekoff enjoys his longtime companion Jethro, on the left, and their friend, Zeke.

mammals share many of the same neuroanatomical structures and brain chemicals responsible for human emotion.

And then there are the not-terribly-scientific anecdotes that, nonetheless, bolster the belief that animals have complex emotional lives.

Acknowledging joy and suffering

Bekoff likes to tell the story of a so-called “magpie funeral” he once came across in Boulder. Bird by bird they stepped up, pecked the corpse and stepped back. Then one flew off to collect some twigs and placed them over the corpse. “Then they all surrounded the carcass in what was almost like a moment of silence and flew off,” he says, noting that after publishing the account he got countless e-mails from people who had seen similar behavior in crows.

Dale Jamieson, director of environmental studies at New York University, says what sets Bekoff apart is his willingness to speak his mind.

“He has connected the scientific issues with ethical questions, something scientists have typically shied away from,” Jamieson says. “In that way he has been extremely important for the animal rights movement.”

Indeed, Bekoff has spoken out on everything from zoo conditions to the ethical treatment of prairie dogs and the treatment of cows and chickens in factory farms.

He left CU in 2006 and has been volunteering with Jane Goodall’s Roots & Shoots, an educational program for people of all ages to effect change for

animals and the environment. He also lectures around the world and teaches at Boulder County Jail.

“He is an infectious speaker who just draws you in with his openness, non-aggressiveness and total sincerity and commitment to helping animals on the planet,” says CU professor **Cathy Comstock** (MEngl’75, PhD’81), who often invites Bekoff to speak to one of her classes.

On a recent fall day at his mountain cabin west of Boulder, Bekoff was busy readying for a journey to Chengdu, China, where he helps rescue moon bears tortured by those who want to harvest their bile for use in traditional medicine.

Holding up a picture of a despondent, near-dead bear, Bekoff explained what Jasper’s life was like for 15 years before he was rescued. He was kept in a barbaric, rusted metal “crush cage,” which pressed him to the floor — unable to sit, stand or walk — as a catheter in his gallbladder sucked out his bile.

“If you rob animals of their emotions, it allows you to do anything you want to them. It’s a distancing mechanism,” Bekoff explains.

And what happens if you acknowledge they have the capacity to feel joy and to suffer?

Ask Jasper — a fully-recovered bear whose broad smiling mug now graces Bekoff’s wall.

Lisa Marshall (Jour, PolSci’94) is a freelance journalist and mother of four who lives in the hills west of Lyons, Colo. She writes about health, science and outdoor adventure.