A quarterly publication of the South Fork Natural History Museum (SoFo) • Winter 2017

SOFO naturalist

Each quarter SoFo features eco-links, written by a member or friend of the Museum. If you wish to submit an article please contact us.

eco links

Does My Dog *Love Me?*

by Carl Safina

Carl Safina, Jude on the left and Chula on the right. Photo: Pat Paladines

"Does my dog love me, or does she just want a treat?" I'm often asked this question, and I've asked it myself. Hasn't any dog-lover?

It says something about our insecurity that our main question about them is whether they love us; it's always about us. But what do they feel? What emotions do they experience? Can we even know?

When someone says you can't attribute human emotions to animals, they forget the key leveling detail: humans are animals. (We have to keep reminding ourselves, because we're only human.) Human sensations are animal sensations. Inherited sensations, using inherited nervous systems.

All of the emotions we know of just happen to be emotions humans feel. But our emotions help us understand other animals' pleasure, pain, sexuality, hunger, frustration, self-preservation, defense of territory and of young.

But OK; doesn't that lead us right back to old assumptions? Not if we incorporate all we've learned. Consider romantic love. It is obvious that elephants, with their matriarchal families, wandering males, absence of male-female pair bonds, and no male care of young, don't have romantic love. So, evidence and logic can be trustworthy guides. In fact, the word for evidence plus logic is: science.

We never seem to doubt that an animal acting hungry feels hungry. What reason is there to disbelieve that an elephant who seems happy, is happy? We can't really claim scientific objectivity when we recognize hunger and thirst while they're eating and drinking, exhaustion when they tire, but deny them joy and happiness as they're playing with their children and their families. Yet the science of animal behavior has long operated with that bias—and that's unscientific. When they seem joyous in joyful contexts, joy is the simplest interpretation of the evidence. Their brains are similar to ours, they make the same hormones involved in human emotions—and that's evidence too. So let's not assume. But let's not insist on wearing blinders and ignoring all the evidence.

Brain scans show that core emotions of sadness, happiness, rage or fear, and motivational feelings of hunger and thirst, are generated in "deep and very ancient circuits of the brain," says the noted neurologist Jaak Panksepp. Rage, for example, gets produced in the same parts of the brains of a cat and a human. Many species apparently share ancient brain-chemical systems largely unchanged during evolution. Makes sense; being afraid of lurking danger has obvious survival value for all kinds of animals. Humans might sometimes have "nothing to fear but fear itself," but we still feel it, because fear runs deep.

For further evidence of similar experience, consider that many animals respond similarly to mood-altering drugs. Rats can become addicted to the same euphoria-producing drugs that humans get addicted to. Dogs with compulsive behaviors respond to the same medications as do humans with obsessive-compulsive disorder. It's the same disease. Stressed animals' blood carries the same stress-related hormones as does the blood of stressed-out humans. Crayfish hide for extended periods after getting mild electrical shocks. Such crayfish showed elevated levels of serotonin—evidence of clinical anxiety. When researchers gave the crayfish a drug used to treat humans suffering from anxiety—chlordiazepoxide—they resumed normal crayfish activities and explorations. The researchers write, "Our results demonstrate that crayfish exhibit a form of anxiety." Perhaps one could consider administering chlordiazepoxide (or taking some) before throwing the next batch of live crayfish into boiling water. Or try the pasta.

One would expect so important a feeling as fear to arise early in the history of animals, and to be retained during evolutionary changes wherever predators may lurk. And that's what we see. Writes Panksepp, "The resemblances between basic animal and human emotions are truly remarkable." But what's remarkable is that this comes as a surprise to us. What else could we expect?

Rather than mistakenly attributing emotions that they do not experience, our larger mistake has been denying emotions that other animals do experience.

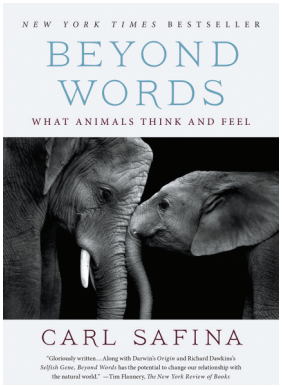
What if some other animals actually do feel sensations that we label with words like: anxiety, fear, rage, interest, affection, exuberance, depression, curiosity, playfulness, tenderness, lust, trust, love, jealousy, frustration, fairness—. Is it possible that humans alone feel all these things; that all other animals feel none of them? I don't think so. I'm not suggesting that humans and other animals have all the same emotions. Self-loathing seems uniquely human.

Carl Safina runs for his life from colliding elephant seals, South Georgia Island. Photo: Barb Ferguson

So, do other animals have human emotions? Yes, they do. Do humans have animal emotions? Yes. They are the emotions of shared brain structures and shared chemistries, originated in shared ancestry. They are the shared feelings of a shared world.

And love? If an animal comes to lick you and lie next to you, you might wonder whether they "love" you. I think it's a pretty reasonable to conclude that they do, considering the enormous range of emotions that we label with the word "love." Romantic love, parental love, infantile love, love of community, of country, love of food, of chocolate, love of books and education, of sports, the arts—. The word "love" is a catch-all phrase for so many different positive emotions. We say we love ice cream, a certain movie, practical boats and impractical shoes, or a summer's day. Some people love fighting. If we allow ourselves to be so sloppy with such a seemingly crucial word, then one conclusion is almost inescapable: Animals love. The more interesting question is: which animals, what do they love, and in what way? How do they experience it; what positive, gap-closing emotions do they feel?

An elephant approaches water anticipating the relief of refreshment and the pleasures of mud. When my puppy rolls on her back to get me to rub her belly again, it's because she anticipates the soothing experience of our warm contact. Even when our dogs aren't hungry, they always enjoy a treat. They *enjoy* it.



Paperback Edition

This article is excerpted from Carl Safina's most recent book, Beyond Words; What Animals Think and Feel, *now in paperback, Kindle, and audio. We are pleased to add that Carl is a member of the South Fork Natural History Museum's Board of Directors.*

If you enjoy reading books about nature, science, and environmental issues, we invite you to join us at SoFo on Saturday, January 7, 2017, at 10 am, for coffee and pastries as we launch a new program, SoFo's Book Discussion Group. At this first get-together, you'll meet our discussion leader, Lisa Kiss, decide on the best day and time for our monthly meetings, and review a list of suggested titles. One of the books we will be reading is Carl's Beyond Words; What Animals Think and Feel. *For the titles of some of the books we are considering, please see the front page of the inserted* SoFo Calendar At A Glance. *Of course group members' book suggestions will be welcome. We look forward to seeing you on January 7. Advance reservations are necessary, please call us at (631) 537-9735 or email sofo@hamptons.com as soon as possible to let us know that you will attend.*

Footnotes on Nature

Birds' Nests *in Winter*

by Crystal Oakes, SoFo Nature Educator, Membership & Development Associate

Winter habitat exploration reveals many treasures that were hidden during spring and summer, when deciduous plants still have their leaves. One of my favorite treasures to look for is birds' nests. Many birds breed in the spring and summer and need a nest to hold their eggs and young. Since the eggs and young are easy food for many predators, the nests are usually well hidden and are only revealed after the leaves have fallen off the trees and bushes.

I'll mention briefly three common nest types of nest you might find in winter:

- those made in natural tree cavities or man-made nest boxes (which are designed to be like a tree cavity and may be free-standing or attached to a tree)
- those made in crooks of trees
- those built on platforms

Among cavity nesting birds are the Eastern Bluebird—the New York State bird—Black-capped Chickadee, Tufted Titmouse, Downy Woodpecker, and White-breasted Nuthatch. A natural cavity nest could have started as a place where a branch died and fell off a tree. Depending on the size and age of the tree, the branch may have had some of the trunk grow around it so, when the branch rots off, the rot penetrates the trunk, creating a cavity. Woodpeckers can also create tree cavities but will rarely carve into living tree tissue. Dead trees or branches are much softer than living ones and easier to carve a nest into. Woodpeckers may re-use the same tree to create a new cavity but very rarely will they re-use the same cavity. Other cavity nesters take advantage of that fact and will nest in an old woodpecker cavity.

For those birds that nest in the crooks of trees, their saucer-shaped and cup-shaped nests can be made with twigs, grasses, other green vegetation, mud, spider webs (in the case of hummingbirds), lichen, moss, animal hair or fur, snakeskins, thistle and cattail fluff, and, unfortunately, human garbage—apparently plastic bags and wrappings can look similar to snakeskin. Some nests are made with only one material, some with a variety. To make these nests, the mother first makes a platform in a crook of branches; she then sits on the platform she has made and, using her bill and feet, builds the sides around her body. In the end, the inside shape of the nest will look very much like the inside of a teacup. A bird may have to try several nests before one will stay together. Birds that you can see in your backyard that build their nests shaped like a saucer or cup include the American Robin, Northern Cardinal, Gray Catbird, and Blue Jay. Different species that nest in trees will build their nests at different heights above ground.


Robin's Nest

I can't end without mentioning two of the most exciting and easy to notice nests, the Osprey's and the Bald Eagle's. Both build very large platform nests, one at the top of a pole, the other starting close to the crown of a tree. These nests may be reused year after year, unless the supporting pole or tree collapses. An Osprey pair mates for life, returning to the same nest year after year, and will add new nesting material every year. Ospreys aren't picky about what goes into their nest; they use pretty much anything they might find at the salt marshes or the bays. Bald Eagles used to be very rare here, but now we regularly sight adult and juvenile Bald Eagles flying over the Long Pond Greenbelt Preserve in the winter. Bald Eagles build one of the biggest nests of all birds and also use it year after year. Their nests are made from sticks and branches, interwoven and filled in with grasses and a wide variety of other fibers; the bottom is often softened and lined with their own feathers.


Osprey and nest on platform

I hope that after reading this article, you will notice and enjoy the birds' nests as the leaves fall and they are revealed. Please leave the nests where they are—it is illegal in the State of New York to possess or sell bird nests without permission from the DEC. Visit the Cornell Lab of Ornithology at allaboutbirds.org for more specific information about the bird species I've mentioned.

SoFo news

SAVE THE DATES
FOR OUR EXCITING 2017 SUMMER EVENTS

Third Annual Climate Change Conference
Saturday, June 10, 2017

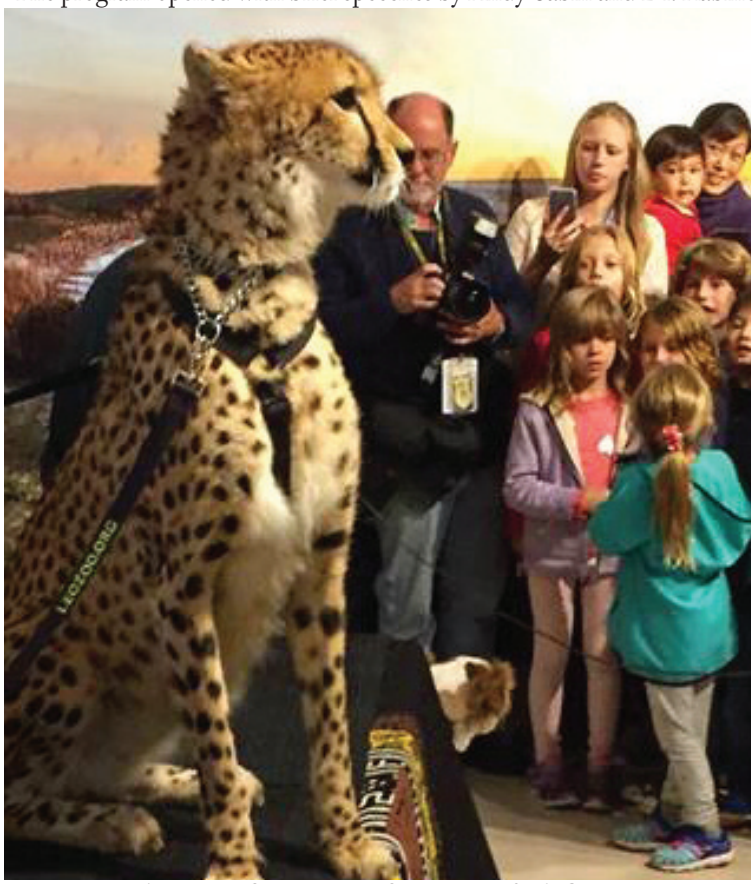
28th Annual Summer Gala
SoFo Goes Global!
Saturday, July 15, 2017

PANTHERA WILD CATS EXHIBIT OPENING RECEPTION
SATURDAY, OCTOBER 15, 2016

by Diana Aceti, SoFo Development Director

On Saturday, October 15, 2016, 350 guests joined Andy Sabin, President of SoFo's Board of Directors; Dr. Alan Rabinowitz, CEO of Panthera, and other distinguished guests and members at an opening Cocktail Reception of SoFo's new Panthera Wild Cats Exhibit. The multimedia exhibit, featuring wall-to-floor photographs, panels, and the video, *The Secret Life of Mountain Lions,* produced by WildFutures, explores the questions: What is Panthera? and Why Should We Care about Wild Cats? The exhibit, made possible by a grant from Panthera, Inc., will be on display in the Barn at the Museum through December 2019.

The program opened with brief speeches by Andy Sabin and Dr. Rabinowitz and featured a guest appearance by Marcella Leone, founder of the LEO Zoological Conservation Center of Greenwich, Connecticut, accompanied by Adaeze, the cheetah who is the LEO's Zoo "Animal Ambassador." Adaeze, who, with her companion dog, Odie, makes special appearances for educational outreach and to spread the word on cheetah conservation, delighted the excited crowd, which included numerous families.



Adaeze, LEO ambassador Cheetah, and SoFo Guests

Panthera is the only organization that is devoted exclusively to the conservation of the world's 38 wild cat species and their ecosystems. Utilizing the expertise of the world's premier cat biologists, Panthera partners with local and international NGOs, scientific institutions, local communities, governments around the globe, and citizens who want to help ensure a future for wild cats.

The Panthera Wild Cats Exhibit is open daily from 10 am to 4 pm.

Andy Sabin, SoFo Board President, Dr. Alan Robert Rabinowitz, CEO Panthera, and Marcella Leone, Founder, LEO Zoological Conservation Center

SoFo news

SoFo is Dan's Papers Best of the Best Museum 2016 —second consecutive year!

SoFo Naturalist & Calendar go green to save trees, it's official, by membership vote!

The votes are in and SoFo will issue the quarterly Newsletter/Calendar through members-only email blasts that will be sent four times a year. The newsletter and calendar——with complete program descriptions——will be posted on our website at www.sofo.org/calendar. Thank you for joining us in our quest to stay green as we continue to take measures to positively impact our environment.

28 YEARS OF NATURE EDUCATION

South Fork Natural History Museum (SoFo)

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The SoFo *Naturalist* is published quarterly as a benefit of membership

Address Service Requested

Dated Material

Printed on Recycled Paper with Soy Ink

BULK RATE
Non-Profit
U.S. Postage Paid
Permit #5
Bridgehampton,
NY 11932