

A Potpourri of Eight Books on Plant and Animal Consciousness by David P. Stang:

Many decades ago when I first began to read ancient Buddhist texts in English translation I became quite curious about what the sage old Buddhist authors meant when they employed the term “Sentient Beings.” During my high school and college years I remember being taught that only human beings can be considered to possess consciousness. The Skinnerian Behaviorist writings we were assigned to read asserted that the most intellectually advanced animals are capable of nothing more sophisticated than a simple reflex derived from “operant conditioning”. B.F. Skinner believed that over-exalted human beings were similarly stunted. Understandably, as time passed, I erroneously concluded that the Buddhist authors, when referring to sentient beings, must have meant only those human beings who had cultivated a sound and well developed mind.

Part of the reason why I became so confused about the meaning of the term “Sentient Beings” was that I got sucked into believing that B.F. Skinner knew what he was talking about. One magical and unforgettable day about a couple of decades ago I was enriched by an epiphany concerning the consciousness of animals and how we are capable of relating to and communicating with them. This epiphany occurred during a visit to my good friend, Dan Dreyfus, who is very bright, holds a Ph.D., and whose cognitive reasoning is usually quite solid. Yet neither his doctorate nor his well-honed empirically cognitive skills constitute the essence of his feeling vibrantly connected to creatures of Nature.

My friend Dan, in order to expose me to how he connects to and communicates with such lovely creatures, took me out on his patio and asked me to sit very still. Then he went inside and came out with food for the birds, squirrels and chipmunks. As he sat down in his chair the birds dropped down from the trees, perched on his arms and wrists and ate the seeds out of his hands as well as those that had fallen to the patio floor next to his feet. Then the squirrels scampered down from the branches above and ate seeds out of the cup which my friend held firmly against the trunk of the tree.

After he had finished feeding the birds and the squirrels my friend noticed that a chipmunk had arrived on the scene. He poured some seeds into the palm of his right hand and sat down holding his hand about three inches above the patio’s red brick floor. The chipmunk headed straight for the hand holding the seeds then stopped dead in its tracks as he noticed my presence. Dan said to the chipmunk, “Don’t be afraid. He won’t hurt you. He’s just a spectator. Now come and eat your seeds.” The chipmunk trotted over to my friend, rubbed his nose against his forearm, then hopped up on my friend’s wrist and ate contentedly out of his hand. The little furry creature filled his mouth with seeds until his cheeks puffed out like little balloons. Then he hopped down and scampered over to the edge of the patio to masticate his mouth full of seeds.

Just then about seven or eight of the birds who had already eaten their fill re-landed on the fence at the edge of the patio chirping away as they looked down at my friend. Facing the birds Dan said, “Did you have a good feed?” He then looked at me and said, “They have returned just for the company. They do it all the time.”

He told me that several days each week a wild Fox in his neighborhood walks to the edge of his patio while he is sitting in his chair. The fox will simply stand there and look at my friend and he at the fox. Dan told me that this communion with the wild animals means a lot to him. He said, ‘I really feel connected to these critters and they to me. I talk to them and they understand me. You

can imagine what a transformational effect my experiences with these wild creatures has had upon me.'

As I reflected upon this astounding experience it occurred to me that without a shadow of a doubt animals as well as humans are sentient beings.

I began to wonder if other forms of life could also be considered sentient beings. This curiosity resulted in my discovering a number of fascinating books which shed much light on my longtime quest to understand the nature of sentient beings. A potpourri of such books is introduced below. What an initial shock it was for me to read a New York Times Bestseller, *The Secret Life of Plants*, by Peter Tompkins and Christopher Bird, (re-printed in A New York Times book review appears: "The cult favorite, which hypothesized that plants may be sentient." Now that was an understatement. In fact, Tompkins and Bird actually demonstrated that plants *are* sentient. This brilliantly researched book (their bibliography contains hundreds of entries) describes scientific research conducted throughout the world on plant consciousness. The authors inform us that Charles Darwin himself in his 19th century botanical studies noted a number of characteristics of plants indicating their various sensitivities indicative of consciousness. And many other researchers like Darwin who succeeded him have confirmed that plants possess a unique intelligence. Here are a few of the titles of the book's 21 chapters: "Plants and ESP"; "Plants That Open Doors"; "Plants Will Grow to Please You"; "The Mystery of Plant and Human Auras."

A kindergarten teacher friend had also read the book during the year it was first published. She was so inspired by it that she conducted an experiment with two freshly picked ripe tomatoes and her classroom full of five-year-olds. She placed the first tomato at one end of the windowsill spanning one side of her classroom and the second tomato at the opposite end of the same windowsill. Each morning she would line up her students up to sequentially and individually converse with each tomato. They were instructed to tell the first tomato that it was ugly and that they hated it while the message to the second tomato was just the opposite. It was something like this: 'You are so beautiful and I love you very much.' As you might have guessed in a short while the first tomato quickly began to rot and turn black while the second tomato stayed fresh looking and radiant for the entire duration of the several week experiment.

The Hidden Life of Trees, by Peter Wohlleben, Greystone Books, 2015; *The Inner Life of Animals*, Greystone Books, 2017

Peter Wohlleben, is a German writer who focuses on ecological themes. He manages a municipally owned, environmentally friendly forest in Germany. In fact, he lives in the middle of that forest with his wife, family dog and his small collection of animals, including tamed feral creatures. Wohlleben's book on trees has been an international bestseller. But 'tree-huggers' might not like it because Wohlleben doesn't anthropomorphize trees the way Tompkins and Bird seemed to. The closest Wohlleben comes to humanizing trees is in this passage: "When a root feels its way forward in the ground, it is aware of stimuli. The researchers measured electrical signals that lead to changes in behavior after they were processed in a 'transition zone.' If the root encounters toxic substances, impenetrable stones or saturated soil, it analyzes the situation and transmits the necessary adjustments to the growing tip. The root tip changes direction as a result of this communication and steers the growing root around the critical areas." Otherwise, he often discusses ways in which an individual tree species collectively acts to preserve and sustain itself within a forest's overall ecological environment.

If you are looking for touchy-feely stories, his book *The Inner Life of Animals* is far more satisfying. It is full of stories of animals – particularly mammals – experiencing love, grief and compassion. The most human and emotionally sensitive of all animals Wohlleben asserts is the pig which he says is also surprisingly one of the cleanest species. In his 41st chapter the author tells us, "I would like to argue for the existence of an animal soul in the religious sense of the word.... which I am happy to attribute to all animals."

Becoming Nature: Learning the Language of Wild Animals and Plants, by Tamarack Song, Bear & Company, Rochester, VT, 2016.

Tamarack Song has spent his life studying the world's aboriginal peoples, apprenticing to Elders, and learning traditional hunter-gatherer survivor skills. He has lived for years alone in the woods as well as living with a pack of wolves. Song explains, "Sometimes when I melt into the woods I Become a Deer. At other times I Become a Bird or a Frog. All the time I Become Nature; for if I don't, I remain only an observer. An outsider.... Here we will discover that there is nothing magical or clairvoyant about being able to understand what animals say. We will find that touching an animal is just as possible – and maybe as amazing – as reaching out to touch our lover. Each of us is a child of Nature, the same as any Native with the same intrinsic skills and abilities, and we are every bit as capable of Becoming Nature as they are." His book contains an elaborate 12 step program for attuning oneself to nature and acquiring animal consciousness.

Being a Beast: Adventures Across The Species Divide, By Charles Foster, Picador, New York, 2016. Charles Foster is a brilliant and highly eccentric English veterinarian and proud father of six children. His book is as ingeniously conceived as it is composed. In addition to scouring relevant zoological studies pertaining to the animals which interested him, he often spent several weeks at a time unwashed on site observing the animals he wrote about. Foster became fiercely curious about the existential essence of being an animal – in particular a Badger, Otter, Fox, Red Deer and Swift. His epistemological intent was to answer the following question: If I were this particular species how would I view the world?

Regarding each of the five animals he writes about in his book he decided he would do everything within his power to live among each such animal species and copy their behavior as closely as he could. He crawled hands and knees upon a forest floor in pursuit of badgers, dug and ate worms as his sole source of food for several days, as they do. He disliked otters the most, but crawled around riverbanks sniffing the malodorous fecal deposits, known as spraints, which otters leave to mark their territory. Foster slept overnight under shacks in East London in the area where Fox come to feed and breed and worshipfully admired them more than Hindu Indians kowtow to cattle. His minutely detailed descriptions of how foxes triangulate with their ears subterranean voles then pounce upon them as a hunting technique was an absolute treasure to read.

In his chapter on red deer he provides stunning descriptions of what it was like for him to crawl slowly, inch by inch, several hundred yards on his belly, dragging his hunting rifle along with him in hopes of shooting a stag surrounded by hinds without sabotaging his effort by moving too quickly, making any sounds or giving off any scent which would quickly shoo them away.

The common *swift* (*Apus apus*), called simply "*swift*" in Great Britain, is a soft-tailed, black *bird* that breeds across Eurasia and winters in southern Africa, nesting in buildings and hollow trees. Scientists have long suspected that the common swift remains airborne for extraordinary amounts of time during its annual migration. Foster tracked the migratory flight of swifts from England to

South Africa and back again. Foster noted in his Epilogue, “If I can establish a real relationship with the nonhuman animal, there are grounds for optimism with regard to relationships with humans. If I can bond with the swift, I may well be able to bond with my children. True, I won’t be able to prove in a Euclidean sort of way that I’m really relating to the swift. But the human-animal relationship will be simpler than the human-human one, and it won’t be obscured by so much tangles emotion. That means it might be easier to be reassured that a human-animal relationship is real. ”

Another English author, in fact a brilliant British biologist wrote a classic bestseller which incontrovertibly demonstrated that human-animal relationships are absolutely real. Its focus is on the reality that a man’s best friend is his dog and how closely connected his dog is to him.

Dogs That Know When Their Owners Are Coming Home and Other Unexplained Powers of Animals, Rupert Sheldrake, Three Rivers Press, New York, 1999, 2011.

I remember reading this book when it first came out and found it then to be not only profound but deeply insightful. It is full of dozens of stories of dogs who showed persuasive evidence that they knew exactly when their master was coming home. My favorite story in that book involved an English marketer who made several business trips a year to South Africa. From the southern tip of the Dark Continent he would frequently call his wife who was home in England with their dog. What was most amazing was that when he called his wife the second the phone rang in the marketer’s home the dog would immediately start barking. His dog knew that it was his master who had placed the call. The dog would never when the phone would otherwise be bringing when someone else had placed the call.

What is most profound about this book is that Rupert’s Sheldrake had an explanation for how the dog knew that it was his master who was calling and how dogs knew exactly when their master would be coming home. The term Sheldrake used to explain such phenomena is Morphic Fields. Here he is not talking about fields of grass, but with something more like magnetic fields. Sheldrake argued that dog owners and their pet dogs are deeply connected to one another through Morphic Fields. In his other writings he showed that Morphic Fields also connect human beings to one another as well as to their pets and that in a sense all sentient beings, regardless of species, are connected to one another through Morphic Fields.

The Emotional Lives Of Animals, By Marc Bekoff, New World Library, Novato, California, 2007. Marc Bekoff is a professor emeritus of biology at the University of Colorado – Boulder. He is also a cognitive ethologist. Cognitive ethology is the comparative, evolutionary, and ecological study of animal minds. Bekoff tells us, Ethology “focuses on how animals think and what they feel, and this includes their emotions, beliefs, reasoning, information processing, consciousness, and self-awareness.” The main objects of the research, he noted, entail tracing mental continuity among different species; discovering how and why intellectual skills and emotions evolve; and unlocking the worlds of the animals themselves. Cognitive ethologists prefer to study animals in their natural environment.

Yet Bekoff acknowledged that “Whenever I observe or work with animals, I get to contribute to science and develop social relationships at the same time, and to me, there’s no conflict between these two activities.” He informed us that animals feel a wide range of emotions, including each of Darwin’s six universal emotions: “anger, happiness, sadness, disgust, fear, and surprise.” And they tend to feel these emotions strongly. Thus, when they are happy they seem euphoric and when they

are sad they often appear seriously depressed. He also noted that animals tend to adhere to a strong moral code and he rhetorically asks, "... If animals can be shown to display a sense of justice along with a wide range of cognitive and emotional capacities, including empathy and reciprocity, does that make the differences between humans and all other animals a matter of degree rather than kind?"

It is no coincidence that Bekoff emphasizes animals' sentience, the initial question posed in this review. Here is what he had to say on that topic: "Sentience is the central reason to better care for animals. Questions regarding sentience are important and extremely challenging, but we also need to distinguish between feeling and knowing. Well-being centers on what animals feel, not what they know. ... We know that 'objective, value-free science' itself reflects a particular set of values. We know that the results of scientific research (all those facts) *should* influence how we act in the world; otherwise science becomes a meaningless exercise. And we also know animals feel emotions and suffer at our hands, and they do so globally. Ethics, with a capital E needs to have a place in our ongoing deliberations about how we interact with other animals.... Animals are subjective beings who have feelings and thoughts, and they deserve respect and consideration."

There is no doubt about it. Marc Bekoff feels a deep connection to the animals he has studied. He relates to them and he loves them. But in addition to reading Bekoff's story, I have known quite a few people, including Dan Dreyfus, my late wife Sarah among others, who are able to communicate telepathically and emotionally bond with animals I have longed for many years to be able to participate in that kind of a relationship with an animal myself. In 2015 I personally enjoyed that experience at my summer home in Ireland. There I take great delight in walking from my house down to the shoreline where I sit on my 300 million-year-old red sandstone seat and watch the sun set over the huge mountainous McGillicutty Reeks running along the Iveragh Peninsula across the Bay. On that seat I notice the Otters swimming nearby and the Cormorants diving down from the sky to spear a fish, then surface with a fish in their mouth and fly off with their dinner. I like to listen to the gentle lapping of the waves against rocky shore punctuated by the Cormorants' screechy screams.

On the walk back to the house I usually reach into my pants pocket and pull out a carrot and feed it one bite at a time to a beautiful white Kerry Bog Pony mare named Fairy, grazing on my land, who whinnies when she sees me. I whinny back to her so she knows I understand her and accept her as she is.

It was my good fortune some years ago to have been taught by a healer named Kerrith who was trained by an American Indian medicine woman how to communicate ideas to animals. In essence, this technique entails sending mind pictures to the animal such as a picture of oneself petting or feeding it. Thus, after grabbing a carrot or two, I'll walk outside and when I see Fairy grazing at the other end of the pasture I will whinny then whistle at her and simultaneously send her a picture of me feeding her a carrot. Almost immediately she will look up at me and begin walking toward where I am standing, expecting to be fed.

Not very long ago I fed her a turnip and she spit it out. OK, I said, I won't do that again. Then I fed her the carrot she was expecting. Sometimes when we meet, she and I engage in a bonding ritual of smelling each other's breath from about a two-inch distance between our

nostrils. If I linger too long doing this before feeding her she gently head butts me to alert me that it's time to get down to brass tacks.

One day as I was coming out of the meditation while sitting on my stone seat and not yet fully present or focused, I began to ruminate about what to do next. Recalling that I had one carrot left in my pocket I thought what fun it would be to feed it to Fairy. Next I slowly stood up, turned around and what did I see? It was Fairy. She had walked down two steps leading toward the stone seat expecting to be fed.

Oh my God, how did that happen? How did Fairy know I was thinking about feeding her a carrot? I had no conscious intent to send her a mind picture. Then it came to me: Fairy and I are connected. There is a strong enough bond between us apparently for her to be able to tune me in just as I tune her in when I'm sending her a mind picture.

This perception led me to reflect upon the potpourri of books I selected to include in this review. William James in writing his *The Varieties of Religious Experience* asked himself "What is transacting here?" He was of course interested in spiritual behavior and he sought in that classic text to describe it. But his emphasis was on discovering the subjective essence of what the people he wrote about had been experiencing. He believed that they felt a deep and abiding connection to what he chose to call a "Higher Power."

So as I went over in my mind what the authors of the books being reviewed in this essay were trying to achieve I sensed a spectrum of interest which initially began as an academic curiosity about the nature of animal or plant consciousness or behavior. The authors were looking for evidence and seeking to comprehend patterns in the behaviors of animals and plants. This constituted the objectivity thrust of their investigation. But in the process of the ethologists' observations many noticed there was a strong subjective element extant as well. They were relating to their subject of study and felt that their subject of study was relating to them. Taken a step further several authors noticed that they felt connected to their subject of study and that exchanges of feelings and togetherness were occurring between them. Some of the authors seemed to direct the preponderance of their attention to comprehending and describing animal or plant behavior while others – at the opposite extreme – took delight in relating to and being connected with their animal or plant subject of investigation. But in most cases, their writings revealed, an interest in both the objective and subjective dimensions of their investigative undertaking. The full spectrum of consciousness entails both the objective and subjective dimensions.

In relating this notion of relationship to, and connection with, animals and plants I was taken back to the amazing telepathic communication and bonding I experienced with Fairy during the summer of 2015. I came to recognize that it was one of the most enjoyable experiences in my life. So much so that I wrote an account of the experience and it was published. I sent reprints of it to my friends. There was something really profound going on between Fairy and me that caused me to wonder if our connectedness to one another as humans as well as with animals and plants could possibly become cosmic in scope.

This brings us now to the last book in this review.

The Additions to the Book of Daniel (author unknown) first appeared in the *Septuagint* version of the Old Testament during approximately the first century BC. This Apocryphal text seems to echo and expand upon Psalm 148. Why this material is included here is because it attributes consciousness not only to human beings, animals and plants but also to inanimate things. Both Psalm 148 and *The Additions* invoke praise of Yahweh by all elements of Creation imploring each named element, (whether animate or inanimate) to: "... Praise Yahweh from the Earth, sea-monsters and all the depths, fire and hail, snow and mist, storm-winds that obey his word, mountains and every hill, orchards and every cedar, wild animals and all cattle, reptiles and winged birds, kings of the earth and all nations, princes and all judges on earth, young men and girls, old people and children together..." Each of these elements of Creation is called to express praise. So too the three young men while engulfed in flames and sentenced by King Nebuchadnezzar to die in the flaming furnace, chant in unison this invocation to praise.

This remarkable story has, for the past twenty centuries been incorporated into the Christian monastic Liturgy as the *Benedicite* and daily chanted around the world at Matins and sometimes other services. Many years ago while during my first reading of these invocations of praise I thought to myself what an absolute absurdity! Sadly still under the influence of the Skinnerian behaviorists I then believed that plants and inanimate things absolutely lacked any form of consciousness. But now in this new era of Quantum Mechanics shaping how we perceive both our consciousness and our interconnectedness to the Divine, and to all other beings, fire and hail, snow and mist, even storm-winds may indeed possess some form of consciousness in modern history thought previously unimaginable. One conceivable explanation for such possibilities is the existence of Morphic Fields. Rupert Sheldrake, author his book about how dogs know when their master is coming home, is persuaded that Morphic Fields are the means by which we are all interconnected with one another.