



## Animal Emotions

Do animals think and feel?

by Marc Bekoff

### Fish Are Sentient and Emotional Beings and Clearly Feel Pain

Fish deserve better treatment based on data on their emotional lives.

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I always love it when scientific researchers provide solid empirical data on the cognitive and emotional lives of nonhuman animals (animals) that some take to be a "surprise" because in their (uninformed) opinion "this just can't be so." I recently wrote about this sort of surprise in an essay called "The Emotional Lives of Crayfish: Stress and Anxiety." And, now, Culum Brown, a professor at Macquarie University in Sydney, Australia, has published a review paper in the journal *Animal Cognition* titled "Fish intelligence, sentience and ethics" that clearly shows that fish are sentient and emotional beings and clearly feel pain in much the same way that humans do. The abstract of this significant essay available only to subscribers reads as follows:

Fish are one of the most highly utilised vertebrate taxa by humans; they are harvested from wild stocks as part of global fishing industries, grown under intensive aquaculture conditions, are the most common pet and are widely used for scientific research. But fish are seldom afforded the same level of compassion or welfare as warm-blooded vertebrates. Part of the problem is the large gap between people's perception of fish intelligence and the scientific reality. This is an important issue because public perception guides government policy. The perception of an animal's intelligence often drives our decision whether or not to include them in our moral circle. From a welfare perspective, most researchers would suggest that if an animal is sentient, then it can most likely suffer and should therefore be offered some form of formal protection. There has been a debate about fish welfare for decades which centres on the question of whether they are sentient or conscious. The implications for affording the same level of protection to fish as other vertebrates are great, not least because of fishing-related industries. Here, I review the current state of knowledge of fish cognition starting with their sensory perception and moving on to cognition. The review reveals that fish perception and cognitive abilities often match or exceed other vertebrates. A review of the evidence for pain perception strongly suggests that fish experience pain in a manner similar to the rest of the vertebrates. Although scientists cannot provide a definitive answer on the level of consciousness for any non-human vertebrate, the extensive evidence of fish behavioural and cognitive sophistication and pain perception suggests that best practice would be to lend fish the same level of protection as any other vertebrate.

Professor Brown's findings, consistent with the excellent research of Victoria Braithwaite (see [this](#) and [this](#)) are reviewed all over the web and this essay called "[Fish have feelings too: Expert claims creatures experience pain in the same way humans do - and should be treated better](#)" nicely captures the essence of his review. Some snippets that should entice you to read the full essay include:

- They [fish] develop cultural traditions and can even recognize themselves and others
- They also show signs of Machiavellian intelligence, such as cooperation



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- Professor Brown said the primary senses of the fish are "just as good" and in some cases better than that of humans.
- The level of mental complexity that fish display is on a par with most other vertebrates, while there is mounting evidence that they can feel pain in a manner similar to humans.

#### Fish should be included in our moral circle

Professor Brown also noted that, "Although scientists cannot provide a definitive answer on the level of consciousness for any non-human vertebrate, the extensive evidence of fish behavioural and cognitive sophistication and pain perception suggests that best practice would be to lend fish the same level of protection as any other vertebrate ... We should therefore include fish in our "moral circle" and afford them the protection they deserve."

In her very interesting book called *Do Fish Feel Pain?* Dr. Braithwaite concluded, "*I have argued that there is as much evidence that fish feel pain and suffer as there is for birds and mammals — and more than there is for human neonates and preterm babies.*" (page 153).

It's high time that use what we know on behalf of fish and other animals who are used and abused in the countless billions. Fish clearly are not things nor disposable objects, but rather sentient and feeling beings, a point stressed in Farm Sanctuary's "[Someone, Not Something](#)" project.

Reference:

Brown, C. (2014). [Fish intelligence, sentience and ethics](#). *Animal Cognition*. DOI 10.1007/s10071-014-0761-0.

Marc Bekoff's latest books are *Jasper's story: Saving moon bears* (with Jill Robinson; see [also](#)), *Ignoring nature no more: The case for compassionate conservation* (see [also](#)), and *Why dogs hump and bees get depressed* (see [also](#)). *Rewilding our hearts: Building pathways of compassion and coexistence* will be published fall 2014. ([marcbekoff.com](http://marcbekoff.com); [@MarcBekoff](#))



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