

Use the words on the opposite page to complete the passage

Are fishes sentient?

Myth 2

_______ is commonly understood as the ability to feel pleasure and pain. Although debate continues in the scientific community, there appears to be a clear case that fishes can feel pleasure and pain. This evidence has been considered sufficient enough for various organisations to formally recognise fish sentience, such as the American Veterinary Medical Association, the Australian Veterinary Association and RSPCA Australia. The World Organisation for Animal Health also states that we have an

_____ to ensure the _____ of fishes.

Biology of fishes

The main argument against fish sentience is based on a particular interpretation of fish biology. In 2012, a paper was published concluding that fishes cannot feel pain or have other feelings, because they are _____.

The basis of this conclusion was that fishes lack a part of the brain called the _____, which only _____ have, and that a neocortex is necessary in order to feel pain. Numerous scientists have since produced a large body of evidence to _____this.

These scientists explain that different _____ can still achieve the same results, and fishes have all the hardware they need to have the same experiences as mammals with a neocortex.

In fact, they explain that the neocortex takes over ______ that may also exist in other parts of the brain. For example, ______ in birds has been widely accepted even though they too lack a neocortex.

FACTS AND FISHES



Consciousness under the Sea Cloze Passage

Instead of a neocortex, birds have a _____ and fishes have a _____, both of which are sufficient to suggest that these animals are conscious and able to feel pain.

A group of scientists held a forum at Cambridge University to discuss the current scientific understanding of animal consciousness. As a result, they drafted and signed a _____

, which concludes that consciousness isn't limited to _____; that

emotions can derive from parts of the brain other than the cortex; and that pain can still be felt without a neocortex.

In simple terms, the case in favour of fish sentience is that fishes have all the biological and physiological systems necessary for _____.

Moreover, many scientists draw attention to how similar these systems are to those of mammals, including ______. They explain that this shouldn't be surprising, as humans inherited our pain receptors from _____.

WORDS TO CHOOSE FROM

Myth 2

ethical responsibility welfare dispute anatomy unconscious humans pain perception fish-like ancestors sentience mammals consciousness paleocortex pallium functions neocortex Declaration on Consciousness vertebrates

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