



Monthly newsletter

22nd Edition - April 2015

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Notices and news

Can fish really feel pain?

FISH and FISHERIES, 2014, 15, 97–133

Abstract

We review studies claiming that fish feel pain and find deficiencies in the methods used for pain identification, particularly for distinguishing unconscious detection of injurious stimuli (nociception) from conscious pain. Results were also frequently misinterpreted and not replicable, so claims that fish feel pain remain unsubstantiated. Comparable problems exist in studies of invertebrates. In contrast, an extensive literature involving surgeries with fishes shows normal feeding and activity immediately or soon after surgery. C fiber nociceptors, the most prevalent type in mammals and responsible for excruciating pain in humans, are rare in teleosts and absent in elasmobranchs studied to date. A-delta nociceptors, not yet found in elasmobranchs, but relatively common in teleosts, likely serve rapid, less noxious injury signaling, triggering escape and avoidance responses. Clearly, fishes have survived well without the full range of nociception typical of humans or other mammals, a circumstance according well with the absence of the specialized cortical regions necessary for pain in humans. We evaluate recent claims for consciousness in fishes, but find these claims lack adequate supporting evidence, neurological feasibility, or the likelihood that consciousness would be adaptive. Even if fishes were conscious, it is unwarranted to assume that they possess a human-like capacity for pain. Overall, the behavioral and neurobiological evidence reviewed shows fish responses to nociceptive stimuli are limited and fishes are unlikely to experience pain.



Fish do not feel pain and its implications for understanding phenomenal consciousness

Biol Philos, DOI 10.1007/s10539-014-9469-4 - Brian Key

Abstract Phenomenal consciousness or the subjective experience of feeling sensory stimuli is fundamental to human existence. Because of the ubiquity of their subjective experiences, humans seem to readily accept the anthropomorphic extension of these mental states to other animals. Humans will typically extrapolate feelings of pain to animals if they respond physiologically and behaviourally to noxious stimuli. The alternative view that fish instead respond to noxious stimuli reflexly and with a limited behavioural repertoire is defended within the context of our current understanding of the neuroanatomy and neurophysiology of mental states. Consequently, a set of fundamental properties of neural tissue necessary for feeling pain or experiencing affective states in vertebrates is proposed. While mammals and birds possess the prerequisite neural architecture for phenomenal consciousness, it is concluded that fish lack these essential characteristics and hence do not feel pain.

Received: 14 April 2014 / Accepted: 6 December 2014. The Author(s) 2014. This article is published with open access at Springerlink.com

News from the NSW Animal Welfare Unit

Animal Research Review Panel Annual Report

The 2013/14 Panel annual report has been published on the Animal Ethics Infolink website:

<http://www.animalethics.org.au/annual-reports>

ANZCCART Conference

ANZCCART has announced its annual conference will be held from 21 - 23 July 2015 at the Gold Coast.

<https://www.adelaide.edu.au/ANZCCART/>

Dr Robert Dixon Animal Welfare Memorial Symposium

The 2015 Dr Robert Dixon Animal Welfare Memorial Symposium 'Why Animal Welfare Matters in Veterinary Education' was held Monday, 23 March at the University of Sydney. The symposium can be viewed at: <http://www.cve.edu.au/animalwelfare>

Important AEC Information

Application Resources

http://www.research.mq.edu.au/current_research_staff/animal_research_ethics/application_resources

Request to add or remove personnel to an existing Animal Research Authority

Please note that if there are numerous additions of personnel to the SAME project (ARA), you need only submit one amendment form detailing each addition. **However**, should you have numerous additions over a range of projects, then a separate amendment form would need to be submitted for each ARA.

For all new personnel additions, some form of ethics training must have been undertaken. It is preferable that all new personnel undertake the RACE training as detailed under **"Training Opportunities"** below.



Request for Amendment to existing Animal Research Authority (Other than for Change of Personnel)

If any researcher submits an amendment request for **extension** of a project, please note that the Researcher is required to submit a Progress report in conjunction with the amendment request. **In the event that the amendment is not approved, the AEC may accept the submitted Progress report as a Final report.**

Progress and Final Reports

Please ensure that **Table 3: Provide details of animals used***: (* Note the term "used" includes animals that were **observed**) in both the Progress report and Final report are completed accurately.

It is important to note that when completing a Final or Progress report that all second and subsequent reports need to contain the relevant details from all previous progress reports.

Training opportunities

Research Animal Care and Ethics Training

RACE Training: Module 1 - Introduction to Animal Research

Our [Research Animal Care and Ethics Training on-line course](#) is up and running.. The link to the online course is as follows: <https://ilearn.mq.edu.au/login/index.php>.

This training has replaced the current Working With Research Animals Workshop which was held bi-annually.

Once you have successfully completed the course, please advise animal.ethics@mq.edu.au by email and we will arrange to issue you a certificate, the recording of which will allow you to begin/continue to work with research animals at Macquarie University.

RACE Training: Module 2 - Research Animal care, handling and basic research techniques

Contact Macquarie Animal Research Services (MARS) at robyn.gentle@mq.edu.au or animal.ethics@mq.edu.au to enrol for **Module 2 - Research Animal care, handling and basic research techniques**, with both practical and theoretical components.

Animal Ethics Calendar

Next Application submission deadline date 2015

Monday 27 April 2015

Next Animal Ethics Committee Meeting date 2015

Thursday 14 May 2015



Animal Ethics Committee Meeting dates 2015

CLOSING DATE FOR SUBMISSIONS*	MEETING DATE
Tuesday 27 January 2015	Thursday 19 February 2015
Monday 23 February 2015	Thursday 19 March 2015
Monday 30 March 2015	Thursday 16 April 2015
Monday 27 April 2015	Thursday 14 May 2015
Monday 25 May 2015	Thursday 18 June 2015
Monday 29 June 2015	Thursday 16 July 2015
Monday 27 July 2015	Thursday 20 August 2015
Monday 24 August 2015	Thursday 17 September 2015
Monday 28 September 2015	Thursday 15 October 2015
Monday 23 November 2015	Thursday 10 December 2015

Contributions

If you would like to contribute to the Animal Ethics monthly newsletter, kindly email that content for the next month's newsletter.

Should you have any queries regarding your research, please do not hesitate to contact:

Animal Ethics Team

Animal.ethics@mq.edu.au, +61 (0) 2 9850 7758 / +61 (0) 439 497 383

Alternatively, for more information about AEC policies, procedures, forms and ethical clearance requirements, please go to our webpage at

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/animal_ethic