

Aquatic Animals Health Commission  
MARCH 2006 Report  
USA Comments

**General Comments to all the draft guidelines on aquatic animal welfare**

The underlying premise of the guidelines is that fish as sentient animals are perforce capable of feeling pain. This premise is not well supported by sound scientific evidence and is currently being debated. The capacity to feel pain is dependent on cerebral cortical areas of the brain which are absent in fish<sup>1</sup>. To be capable of experiencing or feeling fear, or to suffer, also requires neurological structures not present in fish<sup>1</sup>. The OIE authors who drafted these guidelines acknowledge that further research in these areas is still needed to fully understand the ability of finfish to feel pain; however, they proceeded to recommend these guidelines assuming fish are fully capable of feeling pain and suffering. The OIE was given a mandate by the International Committee to develop guidelines that are scientifically based. Any assumption until either proven or disproved by sound science should not be part of any recommended guideline.

In view of the considerable disagreement among experts as to whether fish have even a rudimentary capacity for pain perception, it seems premature to base any guideline on such conclusions. To do so weakens arguments in favor of good animal husbandry for the purpose of health management and prevention of aquatic animal disease. Therefore, the United States believes that until there is considerably more scientific evidence for the ability of fish to perceive pain as developed from credible scientific sources, it is premature to recommend procedures to ensure “humane” slaughter or to recommend procedures for transport of aquatic animals on the basis of “animal welfare.” The guideline for “humane slaughter” should not be adopted at this time due to the paucity of good scientific data. The transport guidelines should be revised to focus on promoting good fish health during transport with opportunity to minimize the spread of aquatic animal pathogens.

We offer additional comments as follows:

**Introduction to the OIE Guidelines for the Welfare of Aquatic Animals**

The guiding principles referred to in these introductory guidelines need to be revised to better emphasize the importance of good husbandry for aquatic animals. Good husbandry practices help minimize physiological stress thereby helping to prevent disease. The experience of animal health professionals and that of fish farming communities throughout the world can demonstrate the importance of good animal husbandry for promoting animal health. Reference to the so called “internationally accepted five freedoms” is misleading. The five freedoms are neither internationally accepted for **poikilothermic aquatic** animals nor necessarily appropriate for fish and shellfish since it has not been clearly demonstrated that such animals are sentient or feel pain. Similarly, the suggestion that there is “international recognition of the three R’s (reduction in numbers, refinement of experimental methods and replacement of aquatic animals with non-animal techniques)” is misleading. Many countries actively support the use of animals, especially poikilothermic aquatic animals, for research purposes. Their use for research is distinctly more advantageous than the use of other animals because

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poikilothermic animals are phylogenetically and physiologically less complex and appear directed by innate behavior. Furthermore, many poikilothermic aquatic animals thrive in high density situations both, under wild or farming conditions.

There is only limited circumstantial evidence which shows that poikilothermic aquatic animals have even the most rudimentary ability to feel pain or be sentient. The absence of a neocortex in fish and shellfish argues against such ability<sup>1</sup>. As yet, there is no international acceptance of sentience or pain in aquatic poikilothermic animals. However, we agree that aquatic animal production is impacted by properly assessing their health and injuries, growth, behavior and other performance parameters, and monitoring their feeding, management and transport.

Given that the “Introduction to OIE Guidelines for the Welfare of Aquatic Animals” contains information that is either misleading, based on assumptions, or not documented by sound scientific data, the United States requests that these standards be significantly revised and again submitted to Member countries for comment.

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<sup>1</sup>Rose, F.D. 2002. The neurobehavioral nature of fishes and the question of awareness and pain. Reviews in Fisheries Science 10: 1-38.