

**ANIMAL WELFARE AND ETHICAL REVIEW BODY**

**Minutes of the meeting held on 25 July 2024**

Present:

[REDACTED]

Apologies:

[REDACTED]

In attendance:

[REDACTED]

**1. Minutes**

*Agreed:* That the minutes of the meeting held on 20 June 2024 were approved.

**2. Applications for New Project Licences**

**2.1. [REDACTED], Fish Physiology in the Anthropocene**

*Considered:* A completed AWERB form, PPL application and presentation.

*Interviewed:* [REDACTED]

*Committee discussion:*

- How researchers interact with companies where the results from the studies may be harmful to that company was discussed, and the need to seek input from the Vice President for Social Responsibility.

*Revisions:* It was explained to the applicant that the committee had provided comments to the Secretariat prior to the meeting and while some would be discussed in the meeting, the list below includes all the comments whether they were raised in the meeting or not.

- The statistics for Protocol 2 need to be finalised and approved by [REDACTED].
- The licence would benefit from proof reading as there are some typographical errors that need correction.
- Page 10 – Please can you check the dates for when you have held licences from – both the PIL and PPL say since 2012.
- Page 31/32 of 71 - In Protocol 1, steps 14 and 15, the mitigation actions, adverse effects, controls, and HEPs remain the same. However, I am curious if there is any difference in the loss of equilibrium and the recovery time between these two challenge tests. Please can you add some information on this.
- Page 37 and 59 - Protocols 1 and 2 require more specific general humane endpoints, with the inclusion of the current BSF traffic light system for fish welfare assessment. As discussed in the meeting you should speak with the [REDACTED] as NACWO regarding your traffic light system.
- As discussed in the meeting, the meaning of "We will continue to work with local groups and pressure companies to improve the condition of the water fish live in" is not quite clear. Are 'pressure companies' a specific thing or do you mean your studies will help give evidence to companies for them to improve the condition of the water fish line in. Please clarify this. Given the unusual range of stakeholder groups, it would be good to understand the strategy for dissemination to all stakeholders in a bit more detail. It is good to see the commitment to publishing negative data. However, given the possible immediate political and socio-economic implications of the work it may be important to ensure that negative findings are made available at the same time and in the same format as positive findings.
- The committee understands how unlikely your attempts are to work with [REDACTED], but they would like a stronger commitment from you that you will keep trying to work with them.
- Page 51 - How is blood taking from a fish performed? Does it require anaesthesia or just manual restrained?
- Page 61 – Is there a lost line at the bottom of the page?
- A number of comments were made regarding your Non-Technical Summary which are listed below. Please update your NTS based on the comments and send it to the following lay members for their review [REDACTED]
  - Page 2 of 71 - Aims - " This information will have short, medium and long term benefits for fish welfare through improved conservation and management." could be removed as this is dealt with under 'who or what will benefit' Page 6 - Under

administration of substances section, I'm not sure I understand the section on use of growth regulators and growth assessors. Is this to mimic the effects of exposure to pollutants etc? Please explain for a lay reader.

- Page 3 of 71 - ectotherm - may need defining or would cold blooded do (or other less technical term)?
- Page 3 of 71 - resource managers' is somewhat specialist - what does it mean? Who are these people? Can it be expressed in simple lay language? Not all people see nature as a 'resource' so care in terminology may be considered here.
- Page 3 of 71 - It will also be used to hold current water management companies (e.g. water companies) accountable' - are we confident it will? Or is it safer to say could?
- Page 4 of 71 - on the surface if the river' - typo? - 'of the river'?
- Page 5 of 71 - (Table 1) and subsequent reference to tables - the NTS will be public but the rest of the document not. Reference to materials not in the NTS should be avoided.
- Page 5-6 of 7 - 'slow decrease in oxygen until a minimal threshold is reached', 'a slow increase in water temperature until their thermal maximum is reached' - both of these challenge tests are not expected to cause adverse effects or cause long term welfare issues. Slow deprivation of oxygen and slow warming may read, to a lay reader, a worse experience than it is for the fish. I wondered if the 'thermal maximum' and 'minimal threshold' could be emphasised as humane in some way? I was not sure how to understand 'thermal maximum' - do the fish lose consciousness when they lose equilibrium? page 19 and 72 explains 'fish recover well' from these trials; only experiencing short-term distress. I wonder if 'loss of equilibrium' would be less likely to be misread by the non-expert? Coupled with 'from which fish recover well'.
- Page 7 of 71 - respirometry - technical term - could it be defined or expressed in lay language?
- The lay public may not understand what 'anthropogenic' means. Can you explain it in the NTS? Perhaps using the language of climate change (or global heating or whatever is preferred) would better convey the purpose and importance of the project? 'Resistance, resilience and adaptability of fish to climate change' seemed to capture your project well (this is in the aims section).
- In terms of the Developmental Programming protocol, will the aged animals tolerate the monitoring, challenge testing and injection of substances as easily and if not, how will you take this into account? Will the lengths of time between the 5 stages differ for each species? Perhaps it might be helpful to add in the "what will be done to the animals" section of the NTS that up to 5 life stages are used depending on the protocol.

*Outcome:* The study was given provisional approval based on the applicant making the changes/clarifications listed above to the satisfaction of the Chair/AWERB.

### 3. Cat B applications (for information only)

Two Category B forms were provided to the group for students undergoing placements at the University of Texas Health Science Center at Houston. Both studies had been considered by the executive committee and given approval.

It was noted that Question 30 on both forms had not been completed. While the studies have been given approval, the forms should be corrected for the records.

### 4. Report on licences processed from 06/06/2024 to 08/07/2024

The following amendments were approved by the executive committee.

#### 4.1. Amendments to Project Licences

██████████, Extracellular Matrix Mediated Control of Immune Cell Recruitment & Positioning in Health & Disease  
██████████, Dynamics in Tissue Mechanics, Gene Transcription & Signalling During Tissue Formation & Regeneration

### 5. Update on applications outstanding from previous meetings and upcoming Project Licence applications

- 5.1. The committee were provided with a document showing the status of applications considered previously and those pencilled in for future meetings.
- 5.2. Unsubmitted licence to ASRU.
  - A licence approved by AWERB in December 2022 has still not been submitted to ASRU. The researcher has received an extension for her funding and is not yet ready to start the animal work.
  - The group discussed the need for this application to be seen again by AWERB given the length of time since it was first considered. New techniques may now be available, or new knowledge from publications. The group were informed that this was a new licence not a continuation so there were no animals already in the facility. A timeframe for approval was discussed with other members explaining that delays can sometimes happen and for the need to be proportionate in any process that is decided upon. The group discussed if funders would consider it appropriate that the work is not taking place in a timely manner.
  - **Action:** The Compliance and Licensing Manager will contact the researcher to ask for an update.
  - **Action:** The topic will be discussed further at an 'away day'.

### 6. NVS report

- 6.1. No comments were made on the April and May NVS reports.

### 7. Any other business

#### 7.1. Mid-term reviews

The Secretary reported that a researcher who was invited to attend a meeting to discuss their ongoing work had questioned the need to attend the meeting or complete the mid-term review form. The current process is that all licence holders need to undergo a mid-term even if the HO has not stipulated this. For licences with any severe protocols the licence holder must attend the main AWERB meeting. For all other licences, the licence holder completes the mid-term review form which is considered by the 3Rs subgroup. The Chair of the 3Rs group explained that the RSPCA expect ongoing review of all licences.

The concern was raised regarding the reluctance of the licence holder to attend; however, the view was also voiced that if there had been any issues with the licence they would have been flagged up by the animal facility.

The purpose of the mid-term review was discussed; it is an opportunity to know if there are any 3Rs changes that could be disseminated to the research community.

**Action:** The Secretary will contact the licence holder again and say that the committee want to know about the successes so far on the licence and if any 3Rs changes have taken place that could aid other researchers.

#### **7.2. Lighting changes in the animal facility**

The 3Rs Manager requested endorsement of a change in lighting which had been discussed at a recent liaison committee meeting. The lighting schedule had been circulated to users via a survey and received input from [REDACTED]. AWERB endorsed the new lighting schedule.

#### **7.3. Frog nerve-muscle practical**

The Named Persons raised a recent application under Category C of the Policy on the use of Animals in Research and Teaching Activities which was requesting a specific type of humane killing for frogs which are then dissected by undergraduate students. Historically the facility has bought in frogs or used surplus frogs for the teaching. [REDACTED]

A discussion took place including the usefulness of students performing this dissection, the obligations the university may have towards delivering classes that they have said they will provide, if there is time to change the teaching offered, and if there are alternative ways for the students to observe the dissection.

**Action:** The application will be circulated to the committee prior to the next away day so that they can make an informed decision on if the work should be supported after having more time to consider the application.

#### **7.4. [REDACTED]**

It was [REDACTED] last meeting as Chair. The committee and Establishment Licence Holder thanked [REDACTED] for his leadership. [REDACTED] was introduced as the new Chair.

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**The next meeting will be on 19 September 2024 at 10am-12.30pm.**

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#### **Dates of meetings for the 2024/2025 academic year are:**

19 September 2024

17 October 2024

14 November 2024

12 December 2024  
30 January 2025  
27 February 2025  
27 March 2025  
24 April 2025  
29 May 2025  
26 June 2025  
31 July 2025  
August break

**Dates of meetings for the 2025/2026 academic year are:**

25 September 2025  
23 October 2025  
20 November 2025  
18 December 2025