



NIWA

Taihoro Nukurangi

NIWA Code of Ethical Conduct for the Use of Animals in Research, Testing and Teaching

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CODE OF
CONDUCT
APPROVED

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1. Description of general nature and extent of work

- 1.1 Under the Animal Welfare Act 1999, certain manipulations involving live animals are subject to a Code of Ethical Conduct (CEC) approved by the Director-General (DG) of Ministry for Primary Industries (MPI). Within this framework, Section 82 of the Act requires any establishment that conducts research on live animals to develop its own CEC and submit such CEC to the National Animal Ethics Advisory Committee (NAEAC) for scrutiny. No CEC has any legal force until approved by the DG of MPI.
- 1.2 This CEC is concerned with any live animal manipulations as defined in the Act that are conducted by any staff, students or visitors of the National Institute of Atmospheric Research (NIWA), or persons utilising properties or vessels of NIWA within New Zealand (NZ) territorial waters. Where there is any dispute between interpretation of this CEC and the legislation, then the requirements of the legislation are given preference.
- 1.3 NIWA research on animals involves mainly freshwater and marine fish, aquatic birds some cephalopods and crustaceans, including freshwater crayfish and lobsters. It may occasionally involve other species such as marine mammals. Research is conducted to meet NIWA's mission to "conduct leading environmental science to enable the sustainable management of natural resources for New Zealand and the planet". This may involve manipulations of fish behaviour, research on effects of adverse environmental effects and new aquaculture techniques. Research may be conducted at any of NIWA's offices nationwide and is frequently done on wild animals in their natural locations of rivers, lakes, oceans and islands.

2. Modifications

- 2.1 The Animals Ethics Committee (AEC) may recommend to the Chief Executive Officer (CEO) amendments to the CEC. Where these recommendations are accepted by the CEO, NIWA will apply in writing to the Director-General (DG) of MPI to seek approval for significant amendments to the CEC. Minor amendments to the CEC may be made by NIWA providing that the DG of MPI is given particulars of those minor amendments within two months of making those changes.

3. Exclusions

- 3.1 The CEC does not cover non-experimental traps or devices as per section 3.2 of the Act, used for fishing such as trawling, angling, trolling, seining, and dredging. Nor does the CEC cover electric fishing, which is exempt by virtue of section 3 (2) (d) of the Act. However, any manipulation between the capture of the animal by one of the methods above, and

subsequent release once assessed or humane euthanasia of the animal for subsequent assessment may require AEC consideration.

4. Definitions

4.1 'Animal' is defined as per the Act. As such, this includes but not limited to include mammals, birds, reptiles, amphibians, fish, octopus, squid, crab, lobster and crayfish and any other member of the animal kingdom which is declared by Order in Council, to be an animal for the purposes of this Act.

4.2 'Manipulation' is defined as per the Act. As such, this includes but not limited to interfering with the normal physiological, behavioural or anatomical integrity of the animal by deliberately (a) subjecting it to a procedure which is unusual or abnormal when compared with that to which animals of that type would be subjected under normal management or practice, or (b) depriving the animal of usual care. This includes exposing the animal to parasites, micro-organisms, drugs, chemicals, biological products, radiation, surgical intervention, electrical stimulation, abnormal nutrition, abnormal environmental conditions, enforcing unusual activity or restraint, or depriving it of usual care. It does not include any therapy or prophylaxis necessary or desirable for the welfare of the animal.

5. NIWA Animal Ethics Committee

5.1 The CEO of NIWA will establish an AEC for the purpose of implementing the requirements of the Animal Welfare Act 1999. The AEC shall report to the CEO. Section 98 of the Act requires every CEO holder to establish and maintain an AEC. Therefore, NIWA will maintain an AEC as appointed by the CEO.

6. Membership of the Animal Ethics Committee

6.1 The NIWA AEC will comprise at least six members as follows:

6.2 A senior member of NIWA capable of evaluating proposals for projects, qualifications and skills of proposer and scientific value of the project. This senior member of NIWA will be appointed by the CEO or delegate and will chair the AEC. The AEC shall, following the appointment of the Chair, be given the opportunity to endorse or otherwise the selection of the Chair.

6.3 A veterinarian nominated by the New Zealand Veterinary Association who is not otherwise affiliated with NIWA.

- 6.4 A nominee of an organisation approved under the Animal Welfare Act concerned with animal welfare, not otherwise affiliated with NIWA.
- 6.5 A suitable lay person representing the public interest, nominated by an appropriate Regional Council who is not otherwise affiliated with NIWA, the scientific community or any animal welfare agency.
- 6.6 A member of NIWA staff capable of evaluating proposals involving animal manipulation in terms of the responsibilities of the Act and including scientific merit.
- 6.7 A member of NIWA staff to represent staff responsible for the production and maintenance of the animals to be used.
- 6.8 Any additional persons that the CEO may appoint to provide relevant expertise.
- 6.9 The appointment of NIWA staff members to the AEC will be by recommendations of the Animal Welfare Officer (AWO) and Chair to NIWA CEO. Appointment of statutory external members to the AEC shall be by seeking nominations from the appropriate bodies and forwarding those names to NIWA CEO who shall ratify or decline those recommendations. Appointment shall be for a duration of five years with the right of NIWA to reappoint members to further terms. Reappointment of the statutory external members at the expiry of their term must be done following formal nomination by the relevant body. In the event of a vacancy, the same process applies to filling the vacancy.
- 6.10 NIWA shall ensure that statutory external members to the AEC and new members are given adequate training material, (including the NAEAC induction pack for new members and NIWA's CEC) and resources. The Chair will ensure that members are given the opportunity to contribute and express their views on all AEC activities. Appropriate remuneration shall be provided to all non-NIWA nominees for the time spent on activities of the AEC.
- 6.11 A quorum for the AEC shall comprise of 50% + 1 of members including at least two of the statutory external members and the Chair. If the Chair is absent either planned or unplanned, the member referred to in 6.6 will become the Acting Chair until the return of the current Chair or a new Chair is appointed.
- 6.12 A NIWA staff member, who may or may not be a member of the AEC shall be appointed as the NIWA AWO and will be given the responsibility, time and resources to adequately carry out the secretarial and administrative functions of the AEC outlined in this CEC.

6.13 The expectations of AEC members are to actively contribute to the duties of the AEC in accordance with the Animal Welfare Act 1999 and as indicated in this CEC.

7. AEC procedures

7.1 The AEC will:

- (a) Be responsible for advising the CEO of NIWA on all matters relating to the welfare of animals involved in manipulation within the company, including monitoring the CEC by any appropriate means.
- (b) Ensure that staff are aware of their responsibilities under the CEC for use of animals in research and maintain a prominent role within NIWA in the welfare of experimental animals.
- (c) AEC members shall treat all information regarding NIWA and including information submitted in the applications and reports with confidentiality.
- (d) Consider any application to the AEC for the use of animals in research, testing and teaching that cover all the proposed manipulations and is made on the appropriate application form.
- (e) Ensure that for project proposals involving manipulation of animals, the AEC is provided with all documentation relevant to the proposed manipulation of these animals.
- (f) Scrutinise this documentation as per section 100 of the Animal Welfare Act 1999 and ensure that the proposed treatment conforms to the CEC.
- (g) Agreement to approve satisfactory applications will be reached by the consensus of the AEC and approvals shall normally be for a period of up to three years, but may be extended where appropriate at the discretion of the AEC. Final decisions will be made in writing.
- (h) Discuss any deficiencies in the proposed manipulation with the person in charge of the project, direct what modifications shall be made to the application or decline the application. Final decisions will be made in writing.
- (i) Any variations from this application must receive prior approval of the AEC.

- (j) Record, and communicate AEC decisions to applicants in writing. Retain on file details of all manipulations of animals approved in project proposals and ensure that they are available to the CEO or anyone authorised by him/her or by the DG of MPI.
- (k) Members must meet in person at least once annually. The AEC will endeavour to hold monthly meetings, which may be done via videoconference. Any member of the AEC may request a videoconference to discuss projects or any other relevant matter.
- (l) Between meetings, the AEC may consider applications by videoconference. For such considerations the application and accompanying documentation will be distributed to the AEC via email and responses returned to the secretary. Where issues are raised those issues will also be circulated to the AEC. Projects approved in this manner will be subsequently recorded as such in the minutes. For these considerations the quorum rule applies as per 6.11.
- (m) On rare occasions when a rapid response is required for urgent experimental work or variations to an approved application that does not alter animal numbers or impact grading, consideration of such applications may be provided by a subcommittee comprising the Chair, one NIWA member and two of the statutory external members. These decisions must be confirmed, modified or revoked by the AEC within 30 days of the subcommittee decision. This provision is restricted to projects with impact gradings A, B and C.

7.2 Requests for non-urgent variations to approved procedures will be addressed in either of two ways:

- (a) Where the variation involves no increase of impact or animal numbers then approval may be provided by Chair and two external members of the AEC and the AEC notified of this at the next meeting. This decision will be discussed and minuted at the monthly meeting.
- (b) Where the variation involves an increase in impact or animal numbers then approval by consensus of the AEC is required.

7.3 The AEC meetings will not be open to the public as required by statutes relating to use of animals wholly or partly publicly funded, nor under the Local Government Official Information Act 1987 for reasons of commercial sensitivity. Requests for information under this Act will be dealt with in accordance with consideration of commercial sensitivity and protection of AEC members from potential harm.

8. Applications to the NIWA AEC

8.1 The AEC will provide readily accessible instructions and forms for staff for the preparation of applications to the AEC for consideration. Applications to the NIWA AEC for authorisation to conduct animal manipulations must include the following topics. Some information below may already be covered in Section 7:

- (a) An overview of the whole proposal, justification for the use of animals, protocol for experimentation, and an explanation of the value of the work and whether the design of the experiment is such that the objectives will be met.
- (b) That suitably qualified persons will be undertaking the research and a identification of whom will be responsible for the day-to-day maintenance of the animals.
- (c) That the number of animals required is the minimum necessary to ensure meaningful qualitative interpretation and/or statistical validity for quantitative studies.
- (d) Details on how the animal's health and welfare will be cared for before, during and after manipulation.
- (e) An explanation of how the impact on the animal will be minimised at capture, in captivity, and on manipulation.
- (f) Whether the same animals will be used repeatedly in successive projects and if so, how that would affect the welfare of the animals.
- (g) A commitment to the use or publication of the results of this research.
- (h) An indication of the expected impact on the animals as per the grading scales in the Animal Use Statistics publication.
- (i) An indication if this work will involve values or affect interests of te ao Māori. If so, details of that involvement and any mitigation are to be provided as per the instructions to applicants.
- (j) Any other information the AEC considers relevant.

9. Conflicts of interest

- 9.1 Any project proposals involving animal manipulation that NIWA members of the AEC themselves wish to lead or be involved in, must be either: scrutinised by independent referees nominated by the CEO or delegate or Chair, and replacing those NIWA members; or the AEC member leading or involved in the project must excuse themselves for the approval process for that project.

10. Additional protocols

- 10.1 The AEC shall develop and approve any additional codes of practice involving animal welfare considerations that will apply to NIWA staff working with animals. This presently refers to two codes (for fish tagging and electric fishing). Other codes may be developed where appropriate and those codes must be approved by the AEC and if necessary the DG of MPI.
- 10.2 Where appropriate the AEC may request the facility manager of a NIWA facility that is used for animal manipulations, or has animal welfare considerations, to develop and maintain standard operating procedures for animal practices. The standard operating procedures are subject to approval by the AEC.

11. Monitoring

- 11.1 The AEC shall monitor the performance of projects approved by the AEC through formal reporting requirements in which leaders of approved projects will provide written annual reports to the AEC, including actual animal use statistics, with exception reporting done if there is any variation from the planned use in the application. Final written reporting to the AEC will be provided within one month of completion date of the project.
- 11.2 The AEC may require further reports or inspection by the AEC or a representative of the AEC at any time.
- 11.3 The AEC shall monitor approved projects at the major animal holding sites where a significant number of projects are underway on a 3-monthly basis. One or more member of the AEC will audit one or more randomly selected current projects at each site against the approved application with regards to manipulation, impact, number of animals, animal care and management and staffing, and any other aspects deemed relevant at the time. Records of the monitoring, and a report on the activities and compliance of the site will be presented, and minuted, to the AEC at the next meeting.

- 11.4 The AEC will select 10 % of projects graded A and B and all project graded C, D and E monitored during the course of the project.
- 11.5 In cases of deviations from the approved application or non-compliance of the CEC or Animal Welfare Act 1999, the AEC will provide directives to the applicant in an appropriate timeframe depending on the nature and seriousness of the deviations. In all cases of non-compliance, section 16.4 may apply.

12. Parenting arrangements

- 12.1 NIWA takes the view that it will not enter into parenting arrangement. However, NIWA reserves the right to enter into parenting arrangements if circumstances deem it necessary. In such instances NIWA consider the use of the its AEC by other organisations providing that the Chair of the NIWA AEC is satisfied that the activities of the other organisation have similarities to those of NIWA to allow the relevant expertise of the AEC to be applied. Parenting arrangements will be accepted by exchange of letters or email advising conditions of the parenting arrangement and acceptance thereof. Appropriate inspections of approved projects and related facilities of the other organisation will be made by the AEC or delegate at least annually. NIWA will reserve the right to terminate such arrangements by written notice to the other organisation.
- 12.2 MPI will be notified when parenting arrangements are entered into or terminated.

13. Information management

- 13.1. The AWO will be responsible for carrying out the following functions of the AEC:
- (a) Prepare the agenda and background papers for AEC meetings, distribute background papers 14 days prior to meetings and distribute meeting minutes within 14 days of meetings.
 - (b) Formally advise staff of decisions concerning their applications to the AEC.
 - (c) Be responsible for keeping records of projects, approvals and reports for a period of at least five years.
 - (d) Meet the annual reporting requirements to MPI.
 - (e) Ensure all members of the AEC have copies of all relevant codes and protocols.

- (f) Ensure information about the responsibilities of staff and the AEC are made available to all NIWA staff via the One NIWA intranet site and/or other means.

14. Animal facilities and practices

- 14.1 In considering research using manipulation of live animals, the researcher will consider the feasibility of replacement of the use of live animals by other means, the reduction of the number of animals required and the refinement of techniques to minimise harm to animals and maximise benefits.
- 14.2 NIWA only holds aquatic animals in aquaria, tanks or other suitable containers in its various built-up sites. NIWA conducts research on live animals at these built-up sites and in the natural environment of rivers, lakes, ocean or islands. Where animals are kept on site, NIWA ensures that appropriate life support and husbandry facilities are available. The animals are cared for by staff trained in animal husbandry and research following standard operating procedures to ensure maintenance of the required welfare of the animals. Standard operating procedures are regularly reviewed, updated and approved by senior managers of each site and approved by the AEC. Monitoring of the health and environment of the animals are typically done at least daily. Veterinary care is available at each site as needed typically through external consultants. Termination of animals are done humanely in compliance of the Code of Welfare: Commercial Slaughter.
- 14.3 Staff involved with manipulations on live animals must be aware of the requirements of the Animal Welfare Act 1999 and the Marine Mammals Protection Act 1978.
- 14.4 Animals used at any NIWA research location for experimental purposes (as defined under the Act) must be lawfully acquired and used in strict compliance with all legislation that relates to their welfare and humane treatment.
- 14.5 The applicant, any persons carrying out the manipulation and the officer in charge of the unit in which they work are responsible for the work undertaken, including the choice of the number of animals to be used, the nature of the experimental procedures and all matters relating to the welfare of the animals and their ultimate disposal.
- 14.6 The persons directly caring for the day-to-day needs of captive animals must be properly trained for this purpose, able to ensure that feeding and care is of a high standard, able to recognise symptoms of distress and have access to a registered veterinarian should the need arise.

- 14.7 The persons carrying out the manipulation must be properly trained in the specified technique. They must inspect animals in accordance with an AEC approved schedule after the manipulation to ascertain the impact on the animals and as specified in the approval.
- 14.8 The selection of techniques should impose the least impact on the subject animals. Explicit consideration should be made for the alleviation of harm to, or the distress felt by, the animals as a result of the manipulation through the use of anaesthesia, analgesia, or humane destruction/euthanasia.
- 14.9 Manipulation of animals will not be undertaken unless there is good reason to believe that the work will add to the understanding of biological functions or behaviour, the understanding of ecological functions, or will improve knowledge on the health and welfare of humans and/or animals and the productivity of animals.
- 14.10 Endangered or threatened species will not be used unless the findings are expected to assist the survival or effective management of such species. Approval from DoC/Iwi for work on NZ endangered or threatened species should be included in applications.
- 14.11 Individual animals should not be subjected to more manipulations than are necessary to achieve the objective of the experiment.
- 14.12 Applicants are required to inform the AEC of adverse effects or unacceptable suffering (i.e., exceeding the impact applied for) that occur during the study immediately or as soon as practicable. The AEC has the power to halt studies that, if continued, would lead to unacceptable suffering in the animals. This authority to suspend or revoke project approvals overrides that of the project applicant.
- 14.13 The collection and transport of animals must be done in such a way as to minimise distress.
- 14.14 Appropriate arrangements must be made for the final disposal of the animals, whether by retention alive within the unit, release from captivity, or disposal to some other organisation.

15. Data to be recorded and kept by Project Leaders

- 15.1 All project leaders involved in or responsible for manipulations on live animals must ensure that all required records are kept according to the Animal Welfare (Records and Statistics) Regulations. This includes but is not limited to: the names of the species used, the numbers of each species used, the source and fate of all animals used, non-compliances, adverse events, veterinary treatments and results as well as any other information the AEC considers relevant.

- 15.2 These records are to be available at any time to anyone authorised by the DG of MPI or to any inspector appointed under the Animal Welfare Act 1999.

16. Complaints procedures

- 16.1 Complaints concerning any activities covered by this CEC or about the AEC, will be investigated fairly and promptly by the AEC. Complaints may arise from AEC members, staff or the public and will be addressed as follows. Complaints must be forwarded to the AWO who will, within 14 days of notification, make some preliminary investigations into the complaint, notify all members of the AEC of those details, and seek feedback on investigations or actions required. Where the matter is serious the Chair will call an AEC meeting to decide on the appropriate action and notify the CEO. Where the complaint involves the AWO, then the complaint should be directed to the Chair. The AEC will respond to the complainant in writing within 28 days of notification.
- 16.2 Complaints will be dealt with in confidence.
- 16.3 Where a complaint is brought to the attention of the AEC that requires urgent remedial action, then the Chair may require immediate action to be taken to address that complaint.
- 16.4 Where the AEC has good cause, it may suspend or revoke approved applications or take remedial action if necessary. This may include stopping any manipulation if it is believed that unnecessary suffering is being experienced by animals and requiring euthanasia if suffering cannot be alleviated adequately.
- 16.5 When warranted, the AEC will refer matters to the appropriate compliance authority. Such action will require approval from the Chair and/or the CEO.

17. Certification

- 17.1 This Code of Ethical Conduct has been prepared, scrutinized and accepted by the NIWA AEC.

Signed 

Date - 2nd September 2019

Dr Michael Bruce
Chair
NIWA Animal Ethics Committee

This to certify that the CEC holder undertakes to conform with the requirements of the Animal Welfare Act 1999 and will ensure that all persons involved in the animal manipulations and carrying out of these activities are appropriate persons according to that Act. It is accepted that the CEC holder is also responsible for distributing information on the requirement of the Act to the Animal Ethics Committee to help ensure that the Animal Ethics Committee follows the requirements of the law.