

Queensland Schools Animal Ethics Committee

An independent committee formed by Department of Education, Queensland Catholic Education Commission and Independent Schools Queensland

# Capture and handling of aquatic animals in natural environments

# STANDARD OPERATING PROCEDURE Approved 15 November 2023

This Standard Operating Procedure (SOP) applies to the capture, handling, tagging, release or humane killing of fish and other aquatic animals in their natural habitat as part of a scientific discipline (e.g. marine science, aquatic practices, environmental science). In accordance with the definition of 'animal' under the *Animal Care and Protection Act 2001* (Qld) (the Act), and for the purpose of this SOP, 'animal' includes any live aquatic vertebrate or cephalopod (e.g. octopus, squid, cuttlefish). Where 'fish' are referred to in this SOP, the inclusion of other aquatic 'animals' (as defined by the Act) is inferred.

This SOP does not apply to: i) observation of these animals in their natural habitat (e.g. rock pools) without abnormal disruption of habitat; ii) recreational fishing not undertaken as part of a science discipline; or iii) capture and handling of other live aquatic creatures not defined as 'animals' under the Act (e.g. crayfish, molluscs) as these activities do not require animal ethics approval.

Approval to conduct activities under this SOP is conditional upon curriculum justification for this use of animals being documented by the activity leader and reviewed by the principal.

Schools may undertake the approved activities outlined in this SOP once authorised to do so by the Queensland Schools Animal Ethics Committee (QSAEC) Animal Ethics Officer.

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#### 1.1. LEGAL OBLIGATIONS

Schools have legal obligations under the <u>Animal Care and Protection Act 2001 (Qld)</u>, the <u>Animal Care and</u> <u>Protection Regulation 2023 (Qld)</u>, and the <u>Australian code for the care and use of animals for scientific</u> <u>purposes</u>, <u>8th edition 2013 (updated 2021)</u> (Cwlth) (the Code), including:

- ensuring persons in charge of an animal fulfil their duty of care to that animal
- obtaining animal ethics approval prior to conducting scientific activities involving animals and acting in accordance with that approval once granted
- reporting on the use of animals for scientific purposes.

Non-compliance with this legislation may result in schools receiving a maximum fine of 2000 penalty units. (Penalty unit value is notified in the <u>Penalties and Sentences Regulation 2015 (QId)</u>).

All Queenslanders have a 'general biosecurity obligation' under the <u>Biosecurity Act 2014 (Qld)</u>. Schools are responsible for <u>managing biosecurity risks</u> that are under their control and that they know about, or should reasonably be expected to know about. Contact Biosecurity Queensland on 13 25 23 for advice on managing specific risks or to report <u>notifiable incidents</u>.

#### 1.2. DUTY OF CARE FOR ANIMALS

If you are in charge of an animal, you have a duty of care to that animal - no matter why you are in charge of it, what you are using it for or how long it will be in your care. All decisions and actions involving the care and use of animals for scientific purposes must be underpinned by respect for animals. This respect is demonstrated by:

- using animals only when justified
- supporting the wellbeing of the animals involved
- avoiding or minimising harm, including pain and distress, to those animals
- applying high standards of scientific integrity
- applying the principles of <u>Replacement, Reduction and Refinement</u> (the 3Rs) at all stages of animal care and use through:
  - o **replacement** of animals with other methods (alternatives)
  - reduction in numbers of animals used
  - o refinement of techniques used, in order to minimise adverse impacts on animals
- knowing and accepting one's responsibilities.

#### 1.3. CURRICULUM JUSTIFICATION FOR THE USE OF ANIMALS IN EDUCATION

It is the teacher's responsibility to provide a curriculum justification for any learning activity that involves the use of animals, including activities approved under a SOP. The use of animals must provide an added component to the learning that is neither trivial nor available in other ways, and there must be evidence to support this position. Planning documents should clearly identify how the use of animals is essential to achieving the learning objectives. The justification should consider: whether non-animal alternatives (e.g. crayfish, molluscs) could achieve the same learning objectives; the minimum number of animals necessary to achieve the objectives; the impact on the animal/s involved; and whether the potential effects on the wellbeing of the animals are justified by the potential benefits of their use.

The QSAEC, when undertaking a site visit at the school, may request to see documentation detailing the curriculum justification for the use of animals.

If there are viable alternatives to animal use that meet the learning objectives, they must be used in preference to using animals. At all times the impact on the animal/s should be considered and, where appropriate, discussed with the students in an age-appropriate way.

Activities outside the scope of this SOP **must be considered by QSAEC before approval can be granted.** To seek approval to conduct activities additional to those approved under this SOP, or to modify an activity approved in this SOP, submit a <u>Modification, SOP variation or amendment form</u> in conjunction with the Activity Notification Form at the last page of this SOP. **Please note**: The QSAEC will **not** approve any activities classified as Category 4 in the <u>Categories of</u> <u>animal use</u>.

#### 1.4. ANIMAL HEALTH AND WELFARE

<u>Responsibilities of school personnel under the Code</u> details obligations of staff under animal welfare legislation to promote the responsible care and use of animals for scientific purposes.

An **unexpected adverse event** is any event that may have a negative impact on the wellbeing of an animal and was not foreshadowed in the approved proposal, SOP or subsequent documents to the QSAEC.

An unexpected adverse event may result from different causes, and includes but is not limited to:

- death of an animal, or group of animals, that was not expected (e.g. during surgery or anaesthesia, or after a procedure or treatment)
- adverse effects following a procedure or treatment that were not expected
- adverse effects in a larger number of animals than predicted during the planning of the project or activity, based on the number of animals actually used, not the number approved for the study
- a greater level of pain or distress than was predicted during the planning of the project or activity
- power failures, inclement weather, emergency situations or other factors external to the project or activity that have a negative impact on the welfare of the animals.

In the event of an unexpected adverse event or emergency, prompt action must be taken to address any adverse impacts on the animal/s. Alleviating unanticipated pain and distress must take precedence over an individual animal reaching the planned endpoint of the project, or the continuation or completion of the project. Emergency treatment may be required and, if necessary, animals must be humanely killed without delay.

In response to an unexpected adverse event, action and investigation by the activity leader or facility manager is required to ensure students, staff, or other animals are not inadvertently affected. The specific response will depend on the animal and the circumstances. It may require seeking advice from a veterinarian to determine the best course of action (e.g. necropsy of the dead animal by the vet), removal of the deceased animal (e.g. by the supplier), or diagnostic investigations of facility or management practices to determine cause of death (e.g. water testing of fish tank, checking of ventilation).

All adverse events provide opportunities for students to learn from the experience. Activity leaders should optimise student learning outcomes (incidental and planned) by focussing on the learning potential of a specific event (e.g. prevention, animal welfare, diagnostic tools, treatment, security, harm minimisation).

Notify the QSAEC within 7 days of the event, using an Unexpected adverse event report.

**Please note:** Necropsy of a dead animal is not an approved activity under this SOP due to the potential health and Biosecurity risks and must only be performed by a competent person. QSAEC recommends that if a necropsy is required it is performed by a vet

Further advice about reporting unexpected adverse events is available on the <u>Department of Agriculture and</u> <u>Fisheries (DAF) website</u>.

#### 1.5. STUDENT AND STAFF HEALTH

Those involved in the care and use of animals should make themselves aware of the potential disease hazards and other associated occupational health and safety issues, and manage risks according to the school's risk management process. Apart from injuries which may occur due to handling animals, there are a variety of infectious diseases (zoonoses) that are transmissible from various animals to humans.

Zoonotic diseases are common and the illnesses they cause can be serious. They can be spread by direct contact with animals, for example via bites or scratches, or through contact with animal faeces, bodily fluids, airborne particles, birth products, or enclosures contaminated with these materials.

Staff should familiarise themselves with the zoonoses the animals in their care may potentially transmit, the routes of transmission and what activities may potentially expose staff or students to infection. This research will inform the risk assessment to determine how to manage these risks or determine whether the activity should be conducted at all.

For comprehensive advice regarding zoonotic diseases and precautionary measures to minimise risks to staff and students, refer to <u>Animal observation and handling</u>, <u>Animal contact guidelines - reducing the risk to human health 2014 (Interim)</u> and <u>Preventing zoonoses</u>.

<u>Risk management</u> of animal activities ensures the health, safety and wellbeing of students, staff and others involved. If a <u>Curriculum Activity Risk Assessment activity guideline</u> exists, that guideline must be adhered to at a minimum. Risks associated with <u>zoonotic diseases</u> carried by animals must be identified and measures planned to allow activities to be conducted with an acceptable level of residual risk.

Any incident or injury that occurs in association with an activity must be reported, recorded and notified in accordance with the school's health and safety incident recording procedures (e.g. state schools must adhere to the <u>Health</u>, <u>safety and wellbeing incident management procedure</u>).

#### 1.6. RECORDKEEPING

Schools must keep a <u>school-based animal activity register</u> which includes records relating to their use of animals for scientific purposes for seven years for audit purposes. This includes:

- scientific user registration (for non-state schools)
- signed applications, activity notification forms and modifications
- approval responses from QSAEC
- signed QSAEC reports (e.g. annual completion reporting, unexpected adverse events, complaints)

Clear and accurate records relevant to the particular species used in the activity/s should be readily available, including, as relevant:

- animal identification records (e.g. number of each species caught/kept in each tank)
- dates and sources of acquisition of each batch/tank
- fate plan and disposal details and dates for each batch/tank
- feeding logs (times/amount) for each tank
- water quality and equipment monitoring logs for each tank
- dates and types of husbandry practices carried out
- treatment records (include chemical/medication administration details and any veterinary treatment provided)
- emergency contacts and procedures.

# SECTION 2 | QUALIFICATIONS, SKILLS AND EXPERIENCE

Any teacher conducting scientific animal activity must have competency in the particular procedure and:

- a relevant science or science education qualification (e.g. Agricultural Science, Biological Science) or
- relevant science or science education experience as deemed appropriate by the school principal (generally 2 years' experience).

For new or inexperienced teachers (with less than two years' experience), all activities must be conducted under the supervision of a Science or Agricultural Science Head of Department (HOD) or suitably experienced person.

Where direct supervision of a suitably experienced person is not available, a new or inexperienced teacher must:

- identify a mentor, e.g. a Science or Agriculture HOD from a neighbouring school
- provide planning documents to the mentor.

Persons deemed to be suitably qualified must have:

- conducted risk assessments on the procedure/s to be carried out
- found the procedure/s to be safe and humane considering animal and student welfare
- considered the maturity and suitability of the student/s involved in the activity.

Teachers should ensure that animal users, including students, staff and volunteers, are provided with adequate prior instruction in specific activities to enable appropriate care of an animal and to minimise risk of undue stress or harm to an animal.

# SECTION 3 | STANDARDS OF PRACTICE

#### 3.1. CAPTURE AND HANDLING OF AQUATIC ANIMALS

This SOP applies to the capture, handling, tagging, release or humane killing of fish and other aquatic animals in their natural habitat as part of a scientific discipline (e.g. marine science, aquatic practices, environmental science). In accordance with the definition of 'animal' under the Act, and for the purpose of this SOP, 'animal' includes any live aquatic vertebrate or cephalopod (e.g. octopus, squid, cuttlefish). Where 'fish' are referred to in this SOP, the inclusion of other aquatic 'animals' as defined by the Act is inferred.

Catch and Release of fish is a practice involving some disturbance to animals and involves the use of minimally-invasive techniques to observe, identify, measure, record or tag the catch. Through practising the least intrusive fish handling and <u>fish release techniques</u> and utilising improved fishing tackle (e.g. barbless hooks), this technique maximises the welfare of fish (and non-targeted creatures), protects fish habitats, and satisfies fishing regulations.

Fish may be caught using <u>lines, nets or traps</u>. Captured animals may be held briefly on site in tanks or other enclosures.

Measurement of size and weight of the fish may be conducted before the fish are returned to the water. Effective <u>catch and release</u> fishing techniques avoid excessive fish fighting and handling times.

Catch and keep refers to capture and handling of fish intended for consumption or further scientific use (e.g. dissection). Responsible fishing guidelines are available in the <u>National code of practice for recreational and</u> <u>sport fishing</u>. Prohibitions related to <u>protected and no-take species</u> must be adhered to. **Please note:** Capture of native fish for use in aquaculture or aquaponics activities is not covered by this SOP.

Animal ethics approval is not required for: i) observation of animals in their natural habitat (e.g. rock pools) without abnormal disruption of habitat; ii) recreational fishing not undertaken as part of a science discipline; or iii) capture and handling of other live aquatic creatures not defined as 'animals' under the Act (e.g. crayfish, molluscs). While this SOP does not apply to such activities, animal welfare and duty of care considerations are due to all live creatures.

#### 3.2. PHYSICAL ATTRIBUTES OF FISH

Refer to <u>species identification</u> for information about freshwater and tidal water fish and prohibitions on possession of specific species.

Contemporary studies are being conducted into the mental attributes of aquatic animals, including their capacity to experience pain and distress. School practice should be informed by the findings of up-to-date, published, peer-reviewed research or evidence from well-established, reputable sources.

#### 3.3. RULES AND REGULATIONS, PERMITS AND LICENCES

Activity leaders must comply with <u>rules and regulations</u> relating to fishing equipment, catch limits and closures, size and possession limits for tidal and fresh waters. Capture of <u>tagged fish</u> must be reported.

A Stocked Impoundment Permit may be required to <u>fish in stocked dams</u>. A <u>General Fisheries Permit</u> will be required for activities that are not allowed under another type of authority.

Non-native fish should never be released into waterways. Under the *Biosecurity Act 2014* (Qld), sightings of <u>noxious fish</u> must be reported within 24 hours of the sighting. <u>Pest fish</u> should also be reported. Noxious and pest fish must not be kept, hatched, reared or sold, used as bait or taken home for consumption or any other purpose. If caught, these species must be immediately humanely killed and disposed of responsibly away from the water body.

#### 3.4. HANDLING

Handling of live fish should be minimised. Skin, scale and slime layers are easily damaged by nets, dry hands and dry surfaces, leaving fish vulnerable to fungal skin infections. Throat ligaments and gills are easily damaged by poor handling techniques.

Select nets that are non-abrasive (e.g. rubber-coated or lightweight mesh) as fish can easily damage themselves in a hard plastic-style net.

Care must be taken to ensure that a fish is out of water for the shortest possible time and that its body weight is supported. It may be necessary to 'swim' the fish, moving water over the gills, to help it recover before release.

Personal protective equipment should be used as appropriate, as indicated in the CARA activity guidelines for <u>marine organism activities</u>.

All traps should be sterilised between trapping events using the prescribed best practice (e.g. use of detergent, sun drying).

#### 3.5. NORMAL BEHAVIOUR

Normal behaviour varies with species. Please consult other references for information on the species under observation to allow for normal behaviour.

#### 3.6. SUPERVISION AND MONITORING

Supervision of students – to ensure responsible animal handling, to minimise the impact of the procedure on the animals, and to provide ongoing monitoring of student and animal wellbeing – will vary according to the age and competency of students, type and purpose of activity undertaken, equipment in use, and environmental conditions such as weather.

#### 3.7. DISEASE PREVENTION

Aquatic animals live immersed within an environment of potential pathogens. Transmission of zoonoses to students, staff or other animals must be minimised. Refer to <u>Animal contact guidelines – reducing the risk to</u> <u>human health 2014 (Interim)</u> and <u>Preventing zoonoses</u> for relevant preventative measures.

#### 3.8. SIGNS OF ILLNESS

Fish will deteriorate rapidly if they become ill or are in inadequate conditions. Signs of illness include skin lesions, spots, fin erosion, ulcers or growths, floating, listing, swelling of the body cavity and swimming upside down.

Sick animals should be immediately isolated and a decision made about release, continued quarantine or euthanasia.

Refer to <u>NSW Department of Education Fish — Aquaculture</u> for more information about signs of illness in fish.

#### 3.9. HUMANE KILLING AND EUTHANASIA

Deaths for the purpose of consumption or dissection are an expected outcome under this SOP and do not have to be reported to QSAEC on an Unexpected adverse event report as individual incidents. However, full records of animals collected, euthanised and disposed of are to be kept and included in annual activity completion reporting.

#### HUMANE KILLING FOR CONSUMPTION

All fish that are caught for eating must be handled carefully to reduce stress and humanely killed as soon as possible after capture.

Fish should remain in water until immediately prior to humane killing, the preferred method for which is spiking (also known as pithing or iki-jime). This involves driving a sharp spike (e.g. ice pick, sharpened screwdriver) into the brain of the fish. The spike should be placed in a position to penetrate the brain of the fish and then pushed quickly and firmly into the skull. The impact of the spike should produce immediate unconsciousness. The spike should then be moved from side to side to destroy the brain. Visit <a href="http://www.ikijime.com/">http://www.ikijime.com/</a> or <a href="https://www.youtube.com/watch?v=cBAzhUiJ4ys">https://www.ikijime.com/</a> or <a href="https://www.youtube.com/watch?v=cBAzhUiJ4ys">https://www.youtube.com/watch?v=cBAzhUiJ4ys</a> for a detailed description of this process.

Alternatively, fish may be killed humanely by percussive stunning followed by severing of the spinal cord, usually by decapitation. Percussive stunning involves a forceful and accurate blow to the head with a blunt instrument. The force required will depend on the size of the fish. The blow should be aimed just above the eyes to impact on the brain. The effectiveness of the stun should be checked and another blow applied if the fish is not unconscious.

Reference: What is the most humane way to kill a fish intended for eating?, RSPCA

#### HUMANE KILLING FOR DISSECTION

The decision about which method to use will be determined by the need to preserve the fish as a whole. Use of anaesthetic overdose using Aqui-S or clove oil will preserve the fish whole, while spiking and percussive stunning will destroy the brain. Use of Aqui-S or clove oil is not recommended for fish intended for eating as questions exist about the carcinogenic potential of eugenol products.

#### EUTHANASIA

Where a fish is so sick, diseased or injured that recovery is unlikely or undesirable on humane grounds, euthanasia must be arranged by a person competent in the technique for fish. Approved methods under this SOP are spiking, percussive stunning followed by severing of the spinal cord, or use of Aqui-S or clove oil.

The following methods are not suitable for killing fish as they do not result in a rapid or humane death: chilling with ice in holding water; carbon dioxide in holding water; chilling with ice and carbon dioxide in holding water; salt or ammonia baths; asphyxiation by removal from water; or bleeding out without stunning.

#### 3.10. TRANSPORT

Transport of live fish is outside the scope of this SOP. Care must be taken to ensure that dead fish being transported for consumption/dissection are adequately refrigerated and hygienically transported.

#### 3.11. DISPOSAL

Use of the catch and release technique allows for return of fish to their natural habitat, with the proviso that non-native fish should never be released into waterways.

Unused bait, fish tissue and carcasses should be disposed of hygienically, in accordance with local council regulations.

**Note:** Instructor:student and student:animal ratios cannot always be specified with accuracy given the wide variety of class sizes, student ages and settings in which activities are being conducted. While ratios stated in this document for dissection are minimum requirements, careful consideration must be given to determine ratios that are most effective in supporting and safeguarding animal wellbeing.

#### 4.1. CAPTURE, RESTRAINT AND HANDLING

Category 3 – mod	Category 3 – moderate to high impact						
Activity	Objective	3R activities	Ratios	References			
Capture, restraint and handling	To instruct students in the procedures for capture, restraint and handling of fish	Modelling, simulations, sampling	Instructors:Students 1:30 instructing 1:5 supervising Students:Animals 5:1 observing 1:1 performing	3.4 Handling: A National code of practice for recreational and sport fishing			

Students are instructed in appropriate methods of catching, trapping, scooping and handling fish.

Gloves and protective clothing should be used when required. Hands and arms must be thoroughly washed before and after handling any animals to reduce risk of infection to animals or transfer of zoonoses to users. Hands and equipment must also be washed between handling different groups of animals with an unknown disease status. Detergents are not recommended for hand washing as they may be toxic to aquatic animals.

The species being handled must be investigated by the activity leader and any additional risks, like stings, bites and potential zoonoses, must be risk-assessed prior to students handling the particular species.

Wear gloves and protective clothing when required.

When handling fish, use equipment that will minimise stress, physical harm and external damage to the animal and catch and hold the animal effectively. For animals with large scales or sharp spines, use a net with a fine mesh to minimise spines or scales catching in the net. Use a net appropriate for the size of fish. Try to catch only one animal at a time as more animals in the net will scrape against each other and cause external damage.

Ensure that nets, hands and any equipment that is going to come into contact with the animals are wet at all times, and that equipment is in good repair. This will minimise damage to the mucous layer.

When netting large or fast fish, two nets are recommended to reduce the time taken to effect capture and thereby reduce stress. The help of another person can also help to ensure a quick, gentle capture. When being netted, fish should be raised from, and lowered into, the water slowly.

Fish must not be out of the water for more than three minutes.

# 4.2. OBSERVATION OF EXTERNAL ANATOMY, NORMAL BEHAVIOUR AND CONDITION

Category 2 – low impact						
Activity	Objective	3R activities	Ratios	References		
Observation of external anatomy, normal behaviour and condition	To instruct students in the procedures for the observation of external anatomy, normal behaviour and condition	Theoretical learning, modelling, simulations	Instructors:Students 1:30 instructing 1:5 supervising Students:Animals 30:1 observing 1:1 performing			

# 4.3. MEASUREMENT OF BODY WEIGHT AND SIZE

Category 3 – moderate to high impact						
Activity	Objective	3R activities	Ratios	References		
Measurement of body weight and size	To instruct students to measure body weight and size	Modelling, simulations, sampling, non-invasive procedures not requiring handling	Instructors:Students 1:30 instructing 1:5 supervising Students:Animals 5:1 observing 1:1 performing	NSW Department of Primary Industries <u>How to</u> <u>weigh your fish</u> <u>with a ruler</u>		

Weight estimates for certain species can be calculated using length/weight relationship data available at <u>http://www.dpi.nsw.gov.au/fishing/recreational/fishing-skills/weigh</u>. Individual fish weights will vary depending on age, sex, season and recent feeding activity.

#### 4.4. TAGGING FISH

Category 3 – moderate to high impact						
Activity	Objective	3R activities	Ratios	References		
Tagging	To instruct students in tagging fish	Theoretical learning, modelling, step- by-step guides, simulations	Instructors:Students 1:30 instructing Students:Animals 30:1 observing	DAF <u>Tagged fish;</u> <u>Suntag</u>		

Tagging is a technique for stock assessment undertaken as part of habitat rehabilitation or environmental studies.

#### 4.5. RELEASE FISH TO NATIVE HABITAT

Category 2 – low impact						
Activity	Objective	3R activities	Ratios	References		
Release fish to native habitat	To instruct students in the procedure to release fish to the habitat from which they were taken	Modelling	Instructors:Students 1:30 instructing 1:5 supervising Students:Animals 30:1 observing 5:1 performing	3.3 Rules and regulations, permits and licences		

This activity relates only to the return of fish captured and restrained briefly using catch and release techniques. Fish used in school aquariums, aquaponics or aquaculture tanks cannot be released into waterways without the approval of the local water authority.

#### 4.6. HUMANE KILLING OR EUTHANASIA

Category 3 – mod	Category 3 – moderate to high impact						
Activity	Objective	3R activities	Ratios	References			
Humane killing or euthanasia	To instruct students in humane methods for killing or euthanasing fish	Theoretical learning, modelling, simulations, sampling	Instructors:Students 1:30 instructing Students:Animals 30:1 observing	3.9 Humane killing.and euthanasia			

# 4.7. FISH/SQUID DISSECTION

Category 3 – moderate to high impact						
Activity	Objective	3R activities	Ratios	References		
Fish/squid dissection	To instruct students in the dissection of fish/squid	Theoretical learning, modelling, simulations	Instructors:Students 1:30 instructing 1:3 supervising Students:Animals 30:1 observing 3:1 performing	3.9 Humane killing.and euthanasia		

Ensure appropriate personal protective equipment (e.g. gloves, aprons, safety glasses) are worn and benches and equipment are disinfected prior to and following the dissection.

Upon completion of the dissection activity, all animal tissue used in the procedure must be placed into plastic bags. The plastic bags may be sealed and stored in the freezer until the time of disposal.

All the plastic-encased animal tissue is to be placed in the garbage disposal service or medical disposal system used within the school site.

#### 4.8. PREPARE FISH FOR CONSUMPTION

Category 2 – low impact						
Activity	Objective	3R activities	Ratios	References		
Prepare fish for consumption	To instruct students in techniques to prepare fish (i.e. clean, gut, scale, skin, fillet, store) for consumption	Modelling, videos, simulations	Instructors: Students 1:30 instructing 1:5 supervising Students: Animals 30:1 observing 1:1 performing	3.9 Humane killing and euthanasia		

Care should be taken to ensure that fish intended for consumption are caught when water quality is good.

# **SECTION 5 | GLOSSARY**

3R activities	Animals used for teaching and training are not being used to discover, prove or develop new ideas and techniques but to communicate scientific concepts and to develop manual skills and expertise in specific techniques. 3R activities provide opportunities to communicate scientific concepts and develop technical skills and expertise, ensuring animals are used only when necessary and minimising the impact on animals used.
Alternatives to animal use	Replacement of animals with other methods/activities for educative purposes must be sought and used whenever possible.
Aquatic animals	Marine and freshwater vertebrates and cephalopods.
DAF	Queensland Department of Agriculture and Fisheries
Fish	For the purposes of this SOP, 'fish' infers the inclusion of other aquatic 'animals' (as defined by the Act).
QSAEC	Queensland Schools Animal Ethics Committee
Ratios	Instructor: student and student: animal ratios stated in this document are suggested minimum requirements.
Supervision	Supervision in all instances means supervision by a suitably qualified person familiar with the procedures as well as normal and abnormal animal responses.
The Act	Animal Care and Protection Act 2001 (Qld)
The Code	<u>Australian code for the care and use of animals for scientific purposes</u> , 8 <sup>th</sup> edition 2013 (updated 2021)

- Department of Agriculture and Fisheries Tagged fish
   https://www.daf.gld.gov.au/business-priorities/fisheries/recreational/recreational-fishing-rules/tagged-fish
- Department of Agriculture and Fisheries Recreational fishing https://www.daf.qld.gov.au/fisheries/recreational/tips-responsibilities/how-to-release-fish-for-survival
- Department of Agriculture and Fisheries Report a biosecurity pest or disease <u>https://www.daf.qld.gov.au/contact/report-a-biosecurity-pest-or-disease</u>
- Iki jime How to care for your catch <u>https://www.youtube.com/watch?v=cBAzhUiJ4ys</u>
- Iki jime Humane killing of fish <u>http://www.ikijime.com/</u>
- NSW Department of Education Animals in Schools Fish Aquaculture
   <u>https://education.nsw.gov.au/teaching-and-learning/animals-in-schools/animals-in-schools-species/fish-aquaculture
  </u>
- NSW Department of Primary Industries Fishing skills http://www.dpi.nsw.gov.au/fishing/recreational/fishing-skills/
- Queensland Government Business Queensland Pest and invasive animals
   <u>https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/biosecurity/animals/invasive</u>
- Queensland Government Recreational fishing https://www.qld.gov.au/recreation/activities/boating-fishing/rec-fishing
- Recfish Australia A national code of practice for recreational and sport fishing
   <u>https://www.ansaqld.com.au/wp-content/uploads/2014/06/recfish\_australia\_ncop\_brochure.pdf</u>
- RSPCA What is the most humane way to kill a fish intended for eating?
   <u>http://kb.rspca.org.au/What-is-the-most-humane-way-to-kill-a-fish-intended-for-eating\_451.html</u>
- Suntag
   <u>http://suntag.org.au/</u>

# CAPTURE AND HANDLING OF AQUATIC ANIMALS IN NATURAL ENVIRONMENTS

# STANDARD OPERATING PROCEDURE

## **APPLICATION/ACTIVITY NOTIFICATION FORM**

SCHOOL						
ACTIVITY LEADER'S NAME						
PHONE	EMAIL					
SCHOOLING SECTOR/ SCIENTIFIC USE	R REGISTR	ATION NUMBER	(ISSUED BY DAF)			
STATE SCHOOL SUR000102		;	L ISQ			
ACTIVITY TITLE						
CURRICULUM JUSTIFICATION				YEAR LEVEL/S		
SPECIES OF ANIMAL/S INTENDED TO B Note: Bycatch is expected and should be limite to capture animals.		ique being used				
NUMBER OF ANIMALS EXPECTED TO B Note: List the estimated number of animals to b number caught (including bycatch) is reported i for the year when submitting the Activity comple	e caught and h the number	of animals used				
DECLARATION BY THE ACTIVITY LEAD	ĒR					
I acknowledge that I am the teacher appointed/ agree that: I and all others involved are familiar, and v	vill comply, wi	th the <u>Animal Care a</u>	and Protection Act 2001 (Q	ld), the Animal Care and Protectio	<u>on</u>	
<ul> <li><u>Regulation 2023 (Qld)</u> and the <u>Australian of</u></li> <li>I have read and understood the <u>Responsit</u></li> </ul>				8th edition 2013 (updated 2021).		
No animal will be used in this activity exce						
Adequate resources will be available to ur	dertake the p	roject.				
Health risks and infection controls have be	en considere	d and assessed.				
All staff members and students involved in their ethical and legal responsibilities and their ethical and legal responsibilities.				ry tasks with care and knowledge	of	
Unexpected adverse events will be repo	orted within 7	' days of occurrend	e as per the conditions of	described in this SOP.		
I agree that I have considered the 3Rs of anima	l welfare:					
• <b>replacement</b> of animals with other method	ls (alternative	s)				
• <b>reduction</b> in numbers of animals used						
refinement of techniques used, in order to	reduce adve	rse impacts on anim	als.			
ACTIVITY LEADER'S SIGNATURE			Ι			
PRINCIPAL'S NAME			I have read a	nd approved this application.		
PRINCIPAL'S SIGNATURE				is application will be held for 7 yea	are	
DATE		1 1	for audit purpose		0 10	
	All fields must be complete before lodging this form.					

Email this signed Application/Activity notification form only to animal.ethics@ged.gld.gov.au.

Ensure that you keep a signed copy of this application on file in your school's animal register for auditing purposes.