Non-Government Schools Animal Ethics Committee

ANIMAL CARE INFORMATION SHEET

The document provides guidelines and requirements for handling ducks and geese in educational settings, focusing on activities such as artificial insemination, medication administration, and general care.

Ducks and Geese	 Muscovy Duck - This Photo by Unknown Author is licensed under CC BY-SA
Scientific Name:	***Anas sp (duck) and Anser sp (goose)***
Activities requiring School Principal approval only:	Measurement of body weight, body proportions and growth Measurement of heart rate and respiration (non- invasive) Capture, restraint and handling of ducks and geese Training of ducks and geese for showing/competition Collection of faecal samples (non-invasive) Measurement of mild dietary effects including palatability Administration of drenches and oral and topical treatments
Activities requiring NGSAEC approval *prior* to the commencement of the activity:	Administration of subcutaneous and intramuscular injections Beak trimming Collection of blood (invasive) Semen collection from ducks and geese Artificial insemination of ducks and geese
Approval Level:	Where an activity is not listed in this **Animal Care Information Sheet (ACIS)**, advice must be sought from the Non-Government Schools Animal Ethics Committee (NGSAEC) and confirmed before it can be undertaken.
Authority:	**Independent and Catholic Schools** – Non-Government Schools Animal Ethics Committee
Disclaimer:	This document is reviewed annually. You should check the website regularly to ensure that you are meeting the most recent recommendations. If you note any concerns with the information provided (inadequate, incorrect) please contact the NGSAEC.
Licensing Requirement:	Check the Department for Environment and Water website for further details www.environment.sa.gov.au
Compliance Requirement:	The keeping of this species requires approval from the School Principal or the NGSAEC. It is recommended that this **Animal Care Information Sheet (ACIS)** be followed as a minimum in the provision of appropriate care and housing for this species.
General Information:	A variety of breeds of ducks and geese are used in schools for meat (ducks and geese) and egg (ducks only) production. Common goose breeds include the Toulouse, Emden, Chinese, African, Roman/German and Sebastopal. Common duck breeds include the meat breeds of Pekin, Aylesbury and Rouen, the egg breeds of

	Indian Runner and Khaki Campbell and dual-purpose breeds of Muscovy and Orpingtons. Male ducks are called drakes and male geese are called gander. Schools that wish to maintain a duck or goose enterprise need to select a breed suitable for what they which to produce, their local climatic conditions, facilities available and market accessibility for any outputs.
Physical Attributes:	• **Size:** ducks up to 60 cm in length, geese up to 90 cm • **Weight:** drake 1 – 5 kg, duck 800gms – 4 kg; • gander 4 –14 kg, goose 4 kg–9kg • **Age at adult size:** 6-12 months • **Weight at birth:** approximately 50 g • **Body temperature:** 40ºC – 41ºC • **Heart rate:** 180-340 beats/minute
Behaviour:	The normal behaviour of ducks or geese is to be alert with a level carriage. They often waddle about and peck as they investigate the surroundings. They emit characteristic quacking or honking noises when their territories are entered. Female ducks quack but drakes usually make a soft raspy sound and are quiet. Ducks and geese are inquisitive so avoid access to items that should not be ingested such as coins, nails and other lead or zinc objects like loose wire.
Environment:	**Housing/Space**: Ducks and geese appreciate a ranging situation but can also be raised successfully in intensive situations. Geese should be provided with a minimum of 1 m^2 per bird. Bedding should be clean, dry litter in the form of rice hulls, shavings from non-treated timber, straw, or sand. The area should be checked and cleaned as required. Little cleaning is required if the litter is deep and kept dry. Ventilation is required to prevent ammonia build-up in intensive situations. Ducks require little assistance in setting up their nests. Nesting boxes 300 mm x 400 mm with 400 mm-high sides or, if available, plastic drums of approximately 25 L capacity with the bases cut out, leaving small lips to hold back nesting materials, can be provided. One nesting box or drum can service three or four birds. The nest should be dark and be large enough to isolate one bird from another to avoid egg damage and aggressive behaviour during nesting time. **Water:** A pond that is deep enough to enable the ducks to dabble regularly is an advantage. If there is no pond, a water container large enough to enable ducks to immerse their heads and dabble is required. In young ducks and geese, before adult feathers are developed, caution must be taken when letting ducklings and goslings swim as their down is not waterproof and they can drown easily. Swimming should be restricted to a shallow trough with easy exit points and should be monitored. During the brooding period, the ducklings and goslings need warmth, shelter, fresh air, proper food, and clean water. **Temperature**: Ducks and geese prefer temperatures between 20 - 28°C. Temperatures below 10 ºC and above 32 ºC cause stress. **Lighting:** Birds kept in sheds must not be kept in the dark. **Covering:** Ducks and geese need protection from predators including dogs. **Shelter**: Ducks and geese must be provided with shelter from the elements. Draughts and chilling winds should be avoided. **Cleaning:** Contaminated bedding and faeces should be removed regularly to avoid ammonia build up. Pond water should be cleaned regularly and drinking water changed daily.
Feeding:	**Diet**: Use commercial duck pellets for growing ducks. For adult ducks chopped grass and greens should make up 50% of the diet with parrot pellets or an appropriate alternative provided daily.

	Daily requirements: Geese consume 250 g-300 g per day when on commercial rations only, or less if they also graze on grass. Ducks require 120 g-150 g of mash or pellets per day. These requirements do vary with quality of diet, breed and physiological status of bird and environmental conditions so check with Animal Industry representatives and product labelling Dark leafy green and yellow vegetables (e.g. spinach, silver beet, carrots etc.) and fruit as well as a protein source (e.g. legumes) can also be included in the daily diet. Demand feeding is preferred, but feed should be supplied at least twice per day (morning and evening). Do not force feed. Like domestic chickens, goslings and ducklings require high-protein foods. At all times, water must be cool, clean, and fresh and of acceptable quality and enough. As ducks drink five times the amount of food they eat and use water to wash their food, it must be always available. **Equipment:** Food and water feeders, and automatic nipple drinkers.
Breeding:	• **Range of breeding ages:** ducks from six months, geese from 12 months. • **Incubation period**: ducks 28 days (Muscovy ducks 35 days), geese 35 days. Schools are advised to contact an experienced poultry Veterinarian or Animal industry representative before embarking on duck or geese farming enterprise.
Handling:	**Humans**: Ducks and geese must be handled calmly to prevent distress and injury. Handling should be kept to a minimum and towels can be used to assist with holding wings and sharp-clawed feet when required. Do not pick up ducks or geese by the neck, feet, or wings, rather use a towel over the top of the wings to prevent flapping and lift the body from underneath. **Equipment:** towels and gloves can be used to aid with catching ducks and geese **Transport**: Ducks and geese must not be lifted or carried by the head, neck, wing feathers or tail feathers unless supported under the breast. Legs of poultry must not be tied. See AEC Poultry transport Compliance checklist and Section B 10: Poultry transport of the Australian Animal Welfare Standards and Guidelines – Land Transport of Livestock document listed in the Resources section of this document.
Hygiene:	After handling or working with ducks or geese, thoroughly wash hands with soap and running water for at least 15 seconds. Dry hands with clean paper towel or an air dryer. Turn off the tap with the paper towel if possible.
Disease prevention:	Schools are encouraged to seek advice from Veterinarians and Animal Industry Representatives and to develop an animal management plan. This plan should outline a calendar of routine husbandry events and treatments (e.g. vaccinations) the school will undertake throughout the year. This is particularly important not only for poultry welfare but to ensure compliance with withholding periods where poultry are utilised for meat production. Treatments must be documented in the appropriate records. Schools should also develop a farm biosecurity plan to assess risks to their enterprise. Consideration should be given to other animal species being kept at the school.
Signs of Illness:	**Indicators:** • inactivity, with head under wing, feathers ruffled or isolated from group; • frequent shutting of eyes; • little response when touched, pushed, or pecked at by other birds; • reduced feeding and/or water intake; • lethargy; • failure to thrive or grow; • lameness; • change in behaviour;

	• reduced growth or egg production; or • diarrhoea or poor faecal production. Bird health should be monitored at least daily and preferably more often. Common conditions seen in ducks and geese include traumatic bite wounds from predators, heavy metal toxicity from ingesting metallic objects containing lead and zinc, Pododermatitis or 'bumble foot,' a bacterial infection in feet, parasites and reproductive problems including egg binding. Other less common issues can include Botulism, paralysis caused by a bacterial toxin in stagnant pools and decaying organic matter, Psittacosis (now called Chlamydophilosis), a disease humans can catch from birds and mating injuries in males if several drakes are trying to mate with one female, especially with Muscovy drakes.
Treatments:	Schools are encouraged to develop relationships with veterinarians and animal industry representatives (e.g. fodder store) familiar with poultry. These contacts can be used for disease diagnoses, treatment options and dietary, husbandry and welfare advice. Veterinarians can also assist with emergencies, particularly where euthanasia is needed. Treatments must be documented in the appropriate records.
Euthanasia:	Where an injury or illness is such that recovery is unlikely then poultry must be euthanised by a Veterinarian. Schools should contact their local Veterinarian to discuss emergency treatment options prior to an event occurring when keeping poultry.
Disposal/fate planning:	Poultry that are no longer required must be re-homed. Ducks and geese can be sold privately at auction or consigned to abattoirs. They must **NEVER** be released into the wild.
Holiday and weekend care:	It is preferred that poultry remain onsite for quarantine reasons and are not mixed with other livestock offsite, while being used for school activities. Poultry can be taken offsite however with the permission of the school Principal and the carers and on advice from a Veterinarian. Staff should provide carers with animal care and record-keeping instructions, emergency contacts and provide appropriate equipment and food. Poultry must be checked daily, records kept and any problems reported to the school immediately whether kept onsite or taken offsite.
Approved activities:	Where an activity is not listed in this ACIS, advice must be sought from the NGSAEC and confirmed before it can be undertaken.
Activity:	**Measurement of body weight, body proportions and growth of ducks and geese**
Objective:	To instruct students in the measurement of body weight of ducks and geese Only use birds that are accustomed to being handled. Young birds can be weighed directly using a towel and scales or a box. Older birds may need to be restrained in a light cardboard box. For growers and adult birds, a spring balance with a suitable scale is required for weighing. The reading should be taken as quickly as possible so that the bird can be returned to a normal position. Growth is usually measured by body weight changes. Changes in growth can be shown by photographing or drawing a bird against an appropriate background grid or scale. Use enough birds to determine individual differences. Videotaping or digital imaging can also show a bird's growth.
Activity:	**Measurement of heart rate and respiration (non-invasive) of ducks and geese**
Objective:	To instruct students in the measurement of respiration and heart rate of ducks and geese. As birds have a very high pulse rate, it is difficult to measure. A stethoscope is required. For the measurement of the respiration rate, it is best to observe birds in warm weather as indications of respiration are more obvious. Observe and record a bird

	with its beak naturally open and the tongue moving. The number of tongue movements can be recorded.
Activity:	**Capture, restraint and handling of ducks and geese**
Objective:	To instruct students in safe and humane handling methods to enable procedures and close observation. Birds should be captured and handled only when necessary. Use birds that have become accustomed to handling from an early age. Avoid chasing birds as this agitates them and causes them to pile up in corners. If a catching hook is used, a bird should be drawn towards the handler firmly but not so quickly as to damage shank, leg, or joints. Firmly and quietly transfer the bird to the holding position. The holding position involves restraining one hock joint between the index finger and thumb, and the other hock joint between the third and fourth fingers. The bird's breast, or keel bone, sits comfortably on the palm of the hand with the bird's head pointing towards the handler's body and the vent away. When walking with a bird, its head can be tucked under the carrier's upper arm. The non-holding arm can be used to assist with restraining the bird and prevent the wings from flapping. **Ducks**: Care must be taken in catching ducks to avoid creating panic and subsequent injury or smothering of the birds. The proper handling of ducks requires special skill, and it should be undertaken only by competent persons who have been appropriately trained. In hot weather, handling or movement of ducks should be carried out during the coolest part of the day. Day-old and young ducklings should be picked up bodily in the palm of the hand or if handling groups by the neck. Older ducks should be lifted by the neck or wings and they should be supported either by taking the weight of the bird by a hand placed under its body, or by holding the bird with a hand on either side of its body with the wings in the closed position. Once sufficiently developed, lifting by the wings is the best method, providing support is given under their body. Ducks must not be lifted by a single wing. Ducks must never be held or lifted by the legs. Geese should always be caught by the neck and must never be caught by the legs
Activity:	**Training of ducks and geese for showing/competition**
Objective:	To instruct students in the appropriate methods of training domestic poultry to regular human handling in cage facilities Qualified instructors must have the safety and welfare of animals as the principles of operation. Inhumane procedures must not be used. Procedures should be adapted to the specific bird and animals not suitable for training should be excluded from the activity.
Activity:	**Collection of faecal samples (non-invasive) from ducks and geese**
Objective:	To instruct students in procedures for the collection of faecal samples from ducks and geese. Faeces can be collected from the ground. A face-mask over the collector's nose and mouth is required when shoveling poultry manure. Gloves should be worn and proper hygiene procedures during and after this activity should be followed. Faeces are most collected for parasite investigations.
Activity:	**Measurement of mild dietary effects including palatability**
Objective:	To observe the impact of adapted diets including palatability investigations on affected ducks and geese. Variation to diet can be achieved by using commercially prepared foods, which use a different formula to the usual one provided. Any variation to the diet should be an enhancement to, rather than deprivation of, the diet. The minimum level of protein, energy or fat selected for the trial must be the minimum acceptable for the life stage of the bird type. The trial period should not be longer than is necessary to achieve a clearly observable result. Ten to fourteen days is sufficient for young birds, after which

	the birds should be returned to their normal diet. Where comparative food trials are being undertaken, no less than the minimum protein levels should be fed to birds. The maximum amount of protein permitted is 20% above the minimum levels. For adult birds, use a variety of commercially prepared layer pellets and mash, ensuring a plentiful supply of clean fresh water. Observe two adult birds in separate pens and record the food selection of the birds.
Activity:	**Administration of drenches, oral and topical treatments to ducks and geese**
Objective:	To demonstrate the procedures for the different methods of medication administration (e.g. for control of external parasites affecting poultry) Oral medications to be administered may include worming compounds and vitamin and mineral supplements. However, the need for these should always be discussed in consultation with a Veterinarian or other industry representative prior to administering. A balanced diet will often preclude the need for these medications to be given. If deemed necessary, they may be administered in the feed or water depending on instructions. If water-based treatments are to be used, water is withdrawn from birds overnight to increase their thirst. Avoid water withdrawal during the day, particularly in hot weather. Drink containers need to be suitably anchored to prevent tipping. Medication administration needs to be documented in appropriate records. External medications should be stored and used in strict accordance with the manufacturer's instructions including protective clothing. School staff must also ensure that they use correct animal weights to determine correct dosage or rate and recommended methods of administration as per the label. Expiry dates and withholding periods must be strictly observed.
Activity:	**Administration of subcutaneous and intramuscular injections**
Objective:	To instruct students in the administration of injections of medications used for treatments for ducks and geese Medication administration by injection needs to be documented in appropriate records. External medications should be stored and used in strict accordance with the manufacturer's instructions including protective clothing. School staff must also ensure that they use correct animal weights to determine correct dosage or rate and recommended methods of administration as per the label. Expiry dates and withholding periods must be strictly observed.
Activity:	**Beak trimming of ducks**
Objective:	***Beak trimming is deemed to be a painful process so schools should ALWAYS discuss and consider the welfare implications of undertaking beak trimming with a Veterinarian or industry expert prior to undertaking this activity.*** Ideally schools should use individual flocks of animals that have been raised together to reduce the effects of pecking issues in flocks, ensure it is done at the earliest age possible, that beak trimming must be minimal and should only be done if pecking and cannibalism is unable to be controlled by other means. Other management procedures that reduce or remove the need to beak trim are strongly encouraged (e.g. genetic selection, feed modification, management of stocking density etc.). Beak trimming is the removal of approximately one-quarter to one-third of the upper beak or both upper and lower beak of a bird. Beak trimming is performed as part of an overall strategy to reduce peck injuries and death when raising groups of poultry. Beak trimming may be performed on many species including laying hens, turkeys, ducks, and quail. It is not reported to be performed in geese.
Activity:	**Collection of blood (invasive)**
Objective:	To demonstrate the appropriate technique for blood collection from ducks and geese.

	All equipment should be ready prior to capturing geese and ducks for restraint for blood collection. Only experienced staff should be instructing students on the technique.
Activity:	**Semen collection from ducks and geese**
Objective:	To demonstrate the appropriate technique of semen collection from ducks and geese. Semen collection in poultry requires skill and experience. If a school wishes to demonstrate the collection of semen and/or artificial insemination to students, they must ensure they must develop a strong relationship with a poultry Veterinarian and utilise an experienced operator with appropriate qualifications and experience to demonstrate. All the equipment should be ready prior to capturing ducks or geese for restraint for semen collection.
Activity:	**Artificial insemination of ducks and geese**
Objective:	To demonstrate the appropriate method of artificial insemination for ducks and geese. Semen collection in poultry requires skill and experience. If a school wishes to demonstrate the collection of semen and/or artificial insemination to students, they must develop a strong relationship with a poultry Veterinarian and ensure they utilise an experienced operator with appropriate qualifications and experience to demonstrate. All the equipment should be ready prior to capturing ducks or geese for restraint for semen collection. ***Veterinarians must only perform Laparoscopic AI***
Resources:	**Australian Animal Welfare Standards and Guidelines – Land transport of Livestock** www.animalwelfarestandards.net.au/files/2015/12/Land-transport-of- livestock-Standards-and-Guidelines-Version-1.-1-21-September-2012.pdf **Duck breeds and breeding – Dept. of Primary Industries NSW** www.dpi.nsw.gov.au/animals-and-livestock/poultry-and-birds/species/duck-raising/breeds-and-breeding **Goose breeds and breeding – Dept. of Primary Industries NSW** www.dpi.nsw.gov.au/animals-and-livestock/poultry-and-birds/species/geese-raising/breeds-and-breeding **Duck care - Bird Vet Melbourne** www.bird-vet.com/DuckCare-DuckVet.aspx **General Care of Geese - Nelson Road Veterinary Clinic** www.nelsonroadvet.com/articles/livestock/fowl/the-general-care-of-geese/ **Implications of beak trimming** www.avma.org/KB/Resources/LiteratureReviews/Pages/beak-trimming- bgnd.aspx **Ducks and Biosecurity – Farm Biosecurity** www.farmbiosecurity.com.au/industry/ducks/
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