LESSON 1

INTRODUCTION TO ANIMAL HEALTH CARE

AIM

To describe the scope of services offered by animal care services, including veterinary practices.

ANIMAL WELFARE & CONTROL

For the past 10.000 years or more people worldwide have domesticated animals for various reasons, either as pets (to keep them company) or as farm animals (to either work or to provide a product such as meat, wool or dairy produce). Whatever the reason animals are being kept, it is now well accepted that the owners of any animal have a responsibility toward the animal they keep. That responsibility is both a matter of ethics, and increasingly is also a matter of law.

VETERINARY SERVICES

These may include:

- The General Practice Vet
- Specialist Vets
- Pathology Laboratories
- Animal Hospitals
- Government Veterinary Services
- Pharmaceutical Departments
- Educational and Research Organisations

Private Veterinary Practitioners

Private veterinarians may operate a general practice (dealing with most types of animals, and most types of problems), or a specialist service (dealing with only certain types of animals, or services such as artificial insemination or embryo transfer).

Traditionally, private vets are involved in diagnosing disease, and recommending treatment and/or control. In general, government departments only become involved when a serious contagious disease is suspected, when laboratory tests are needed, when public health may be threatened, or when a disease is unexplained & required detailed investigation.

Veterinarians are scientists who have university level training. They are highly skilled professionals. They are commonly supported or assisted by veterinary assistants or nurses who may work in any or all of the following areas:

- Reception and general office duties
- Medical nursing -including investigative procedures
- Surgical nursing
- General cleaning
- Technical maintenance

Traditionally, veterinarians have employed people at various levels to undertake different combinations of these tasks.

The lowest level has been an "Animal attendant" or "Trainee veterinary nurse" who has been responsible for tasks such as:

- Basic office duties such as answering the greeting customers, answering the phone, typing, processing mail etc.
- Basic animal care such as grooming, feeding, cleaning and restraining (eg. placing animals in a cage, or holding them during an examination).

An Animal attendant would normally be closely supervised in their duties, by a veterinary nurse or a veterinarian. An animal attendant might not necessarily have any formal training; but people employed as such are often expected to pursue a course of training to develop further skills and qualify them to work at a higher level as a trainee veterinary nurse, and eventually a qualified veterinary nurse.

Pathology Laboratories

Pathologists conduct scientific investigations into samples sent to them by a vet. These may be tissue samples, blood, etc. taken from a sick animal.



Quarantine Services

Animal quarantine laws vary from country to country.

Because of the seriousness of some diseases and conditions that affect animals, and may impact on human health (i.e. Rabies) or affect livestock production (i.e. Foot and Mouth disease), governments worldwide impose restrictions upon the movement of animals. Restrictions may apply at country, province, shire, state, district or even local levels. *Note: You should research and familiarise yourself with the laws that apply in your country or locality.*

Educational Institution Veterinary Services

The main objectives of university veterinary services are:

- To provide training for undergraduate vet students; and specialist training to post graduates or practicing vets.
- To support and encourage profitability in associated industries (e.g. farming, breeding, etc), through research into animal health & production.

Vocational Colleges are involved with training veterinary assistants and vet nurses, but rarely involved in research to the same degree that universities are.

Both Universities and Vocational colleges may (or may not) be involved in provision of some advisory or consultancy services; whether in a formal way (sick animals might be treated at the institution by students), or in an informal way (staff and/or students may be referred work from anyone inquiring with the institution.



Pharmaceutical Companies

Many pharmaceutical companies will employ veterinarians or others with some training in animal health care in roles such as:

- Conducting field trials (e.g. experiments) for development & registration of new pharmaceutical products
- Marketing and sales
- After sales service -technical advice on products

State Departments of Agriculture

In most countries there are specific Government departments that maintain their own veterinary services that carry out the following roles:

- To protect domesticated animals from significant and contagious diseases.
- To minimise health risks to the public which may arise from contaminated livestock products or from disease in domesticated animals.
- To control the sale of livestock & livestock products.
- To encourage ethical animal welfare practices.
- To control the impact of natural disasters (eg. drought & flood) on farm or other animals.
- To provide extension (advisory) services to animal industries.

SCOPE OF VETERINARY CARE

It is generally accepted that domesticated animals should be provided with proper veterinary care.

When an animal is in a veterinary clinic or hospital, or under the care of a vet, this should involve the following:

- 1. Daily inspection and evaluation of the animal's health and welfare.
- 2. Providing/ensuring appropriate care (This may involve accommodation, feeding, grooming etc).
- 3. Addressing any injuries or disease (This may involve appropriate techniques of diagnosis, prevention, control and treatment).
- 4. Monitoring/delivering surgery and post surgical services.
- 5. Proper use and/or handling (This may involve advising owners, and/or ensuring veterinary staff use appropriate measures for handling, immobilising, anesthetising, administering pharmaceuticals, or euthanasia).

ANIMAL WELFARE AND CARE

Animal welfare has become increasingly prominent in recent times, and is increasingly seen as an important social issue in developed countries.

Organisations such as the RSPCA have been guardians of animal welfare for a very long time.

Veterinarians and others involved with animals in their daily work are commonly responsible for animal welfare (not just curing illness). This may involve participating as key members of ethics committees supervising animal use in research, or in other committees/organisations involved with animal welfare.

Local Government Pound (e.g. Dog Catcher)

Local government is normally responsible for the control of pets and other domestic animals. Laws can vary from one municipality to the next; but they usually control what animals can be kept, how they can be kept, and where they can be kept/taken. Large animals, for example, such as horses, may not be allowed to be kept on small residential properties. In some places, the movement of cats and dogs may be restricted or prohibited.

The Law

In most developed countries, there are many laws that govern the treatment of animals, both domestic and wild. These may cover various things such as:

- Procurement of animals (eg. operation of pet shops, stock markets, etc)
- Breeding
- Keeping or trading in wildlife and domestic animals
- Exporting or importing animals
- Quarantine and or destruction on diseased animals

Breeders

Various well organised breeding schemes exist, which control the pedigree of domesticated animals; maintaining records of parentage, and maintaining a system to verify the blood line.

Holiday Care

Many people have a serious problem with pets when they decide to take a holiday. When this happens, pets are often neglected or abandoned. Apart from being irresponsible and cruel, this treatment of an animal is illegal.

Options include:

- Placing an animal in a commercial care facility such as a boarding kennels or cattery.
- Getting someone in to house sit & look after the animal.
- Ruminants may be put under agistment etc. -but may still need to be checked.

To remove an animal from its "home" may be disorienting, and may cause stress. Often house pets can "fret", leading to abnormal behaviour (including abstaining from eating).

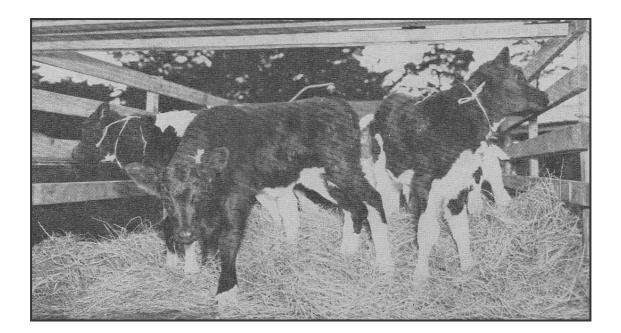
Codes of Practice for Animal Welfare

In most countries there is legislation established with the aim of preventing cruelty to animals. In Australia, for instance, there are Codes of Practice have been set up by various Agriculture departments to clarify what is meant by cruelty of animals.

These codes set down minimum management standards to achieve basic welfare requirements of animals, such as:

- Feed & water needs
- Disease protection
- Protection from extreme weather (eg. cold, heat, rain, etc)
- Protection from physical injury
- Protection from pain.

Failure to meet these codes minimum requirements is rare, but if it does occur, the owner and/or manager of the animal are liable to prosecution in the courts.



Transporting Animals

The driver of a vehicle is responsible for animals' welfare during transport. This may mean that they are expected to drive carefully to reduce any discomfort or injury to animals; and that inspections of stock must be carried out before, after, and during trips. Various other regulations also apply; particularly for young animals, during long trips.

SOME COMMON VETERINARY TERMS

Active ingredient: Veterinary chemical consist of an active chemical (this is the part that does the job) and a solvent (this part carries the active ingredient)

Acute: Short sharp infections or conditions

Antibiotic residues: The small amount of veterinary chemical that remains in the animals body tissues.

Antigen: Substances in vaccines that cause the immune system to produce antibodies.

Attenuated strain: A strain of virus that has been weakened so that it will multiply within an animal and cause antibody production, without causing serious harm to the animal. It is used in live vaccines.

Augment: Means to add or increase. Veterinary chemicals should be used to work with or augment natural control mechanisms not to replace them.

Batch Number: Every veterinary chemical has an expiry date and batch number. It is important to record the batch number so that a breakdown or adverse reaction can be reported.

Body Condition: The amount of muscle and fat covering the body.

Calibration (of veterinary equipment): Must be done to ensure that drenching and vaccination instruments are delivering correct dosage.

Carrier Animal: Animals that appear healthy but are carrying infection which they may pass on to other animals.

Chronic: Chronic infections are long lasting diseases.

Combined vaccines: Give protection against a number of diseases in one dose.

Differential Diagnosis: A list of *possible* causes of a disease

Dystocia: Difficult birth

Eradicate: Get rid of completely

Excrete: Pass out of the body

Immune system: The body system which protects the animal against disease by producing antibodies

Intramuscular: Into the muscle

Infertility: Inability to get pregnant

Insect borne virus: Viruses carried from one animal to another by insects

Metabolic disease: Diseases associated with the animal's metabolism (or energy source)

Personal protective equipment: Equipment such as gloves, over-alls, glasses etc.

Post partum: After giving birth

Primary vaccination: First vaccine given (to be followed by a booster dose)

Scouring: Excess or abnormally watery faeces - May have abnormal smell and colour

Sharps container: Special secure container to receive sharp objects (e.g. scalpels and needles)

Segregate: Keep sick animals apart from healthy animals to prevent the spread of disease

Shelf life: The length of time a veterinary chemical can be stored under correct conditions before it expires

Subcutaneous: Under the skin

Titre: The level of antibodies in the blood. The higher the blood titre the higher the level of immune protection

Vector: Agent which carries an infection e.g. insects, rats

Virulent: A very powerful and harmful disease causing organism



SELF ASSESSMENT

Perform Self Assessment Test 1.1 If you answer incorrectly, review the notes and try the test again.

SET TASK

- 1. Contact several bodies/organisations that are concerned with animal welfare, and obtain any literature or other information which you can, regarding issues such as the following:
- Restrictions placed by local councils upon the keeping of pets.
- Legal requirements placed upon farmers or pet owners, with respect to animal welfare.
- 2. Contact a veterinary practice, service, or hospital; and obtain any information you can about services offered. You might be able to obtain a brochure; or you may need to speak briefly with the receptionist or some other employee, to determine such things as:
- The scope of services they offer
- The facilities which they have
- The types of animals they mainly deal with (and anything they specialise in)



ASSIGNMENT Complete Assignment 1