



Lecture title: History and Breeds

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Summary:

What is Animal Husbandry?

The word "Animal" includes any of the various organisms belonging to the kingdom Animalia, distinguished from plant kingdom by their:

1. non-photosynthetic methods of nutrition.
2. non-cellulosic cell membrane and centralized nervous system.

we talk of animal husbandry, we mean only those domesticated animals which are reared mostly for economic or for recreation purposes in any particular region, such as Cattle, buffalo, sheep, goat, yak, camel, pig, horse, dog, poultry etc.

The word "Husbandry" comes from the management of domestic affair, but at present the word is also used in management of farming such as Crop husbandry and Animal husbandry. The term used in connection with animal husbandry includes:

1. proper feeding.
2. breeding.
3. health care.
4. housing and many other activities.

Thus "Animal Husbandry" may be defined as a science as well as an art of management including scientific feeding, breeding, housing, health care of common domestic animals aiming for maximum returns.

Taxonomy

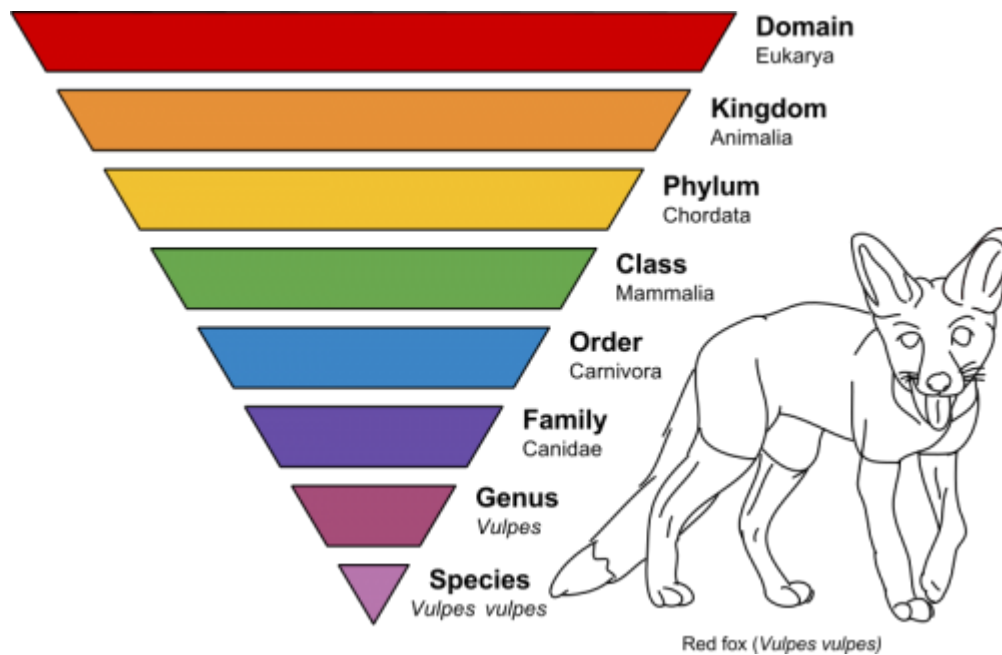
Taxonomy is the science of classification applied to living things and it involves their identification, naming, and arrangement. The system of classification devised by Linnaeus (1707-1798), a Swedish botanist, has now been accepted universally as a means of reference.

In this system each individual type of organism is called a **species**. Species or organism having close similarities are arranged in a group known as a **genus** (pi.



genera). Genera with similar characteristics are put in the same **family**, similar families into **orders** and orders into **classes**.

This system uses two Latin names to describe each organism. The generic name refers to its genus and is written with a capital letter and the specific names indicate its species and is written with a small letter.



Zoological Classification of Common Domestic Animals

Common Name	Scientific Name	Kingdom	Phylum	Class	Order	Family
Dog	<i>Canis lupus familiaris</i>	Animalia	Chordata	Mammalia	Carnivora	Canidae
Cat	<i>Felis catus</i>	Animalia	Chordata	Mammalia	Carnivora	Felidae
Cattle	<i>Bos taurus</i>	Animalia	Chordata	Mammalia	Artiodactyla	Bovidae
Horse	<i>Equus ferus caballus</i>	Animalia	Chordata	Mammalia	Perissodactyla	Equidae
Sheep	<i>Ovis aries</i>	Animalia	Chordata	Mammalia	Artiodactyla	Bovidae
Goat	<i>Capra hircus</i>	Animalia	Chordata	Mammalia	Artiodactyla	Bovidae
Pig	<i>Sus scrofa domesticus</i>	Animalia	Chordata	Mammalia	Artiodactyla	Suidae
Chicken	<i>Gallus gallus domesticus</i>	Animalia	Chordata	Aves	Galliformes	Phasianidae



Duck	Anas platyrhynchos domesticus	Animalia	Chordata	Aves	Anseriformes	Anatidae
Rabbit	Oryctolagus cuniculus domesticus	Animalia	Chordata	Mammalia	Lagomorpha	Leporidae

Table of Gestation Periods

Species	(days)	Spsects	(days)	(months)
Livestock		Wild Animals		
Ass	365	Ape, Barbary	210	
Cattle-		Bear, black		7
Angus	281	Bison		9
Ayrshire	279	Camel	410	
Brown Swiss	290	Coyote	60-64	
Charolais	289	Deer, Virginia	197-220	
Guernsey	283	Elephant		20-22
Hereford	285	Elk, Wapiti		Q/a
Holstein	279	Giraffe		14-15
Jersey	279	Hare	88	
Red Poll	285	Hippopotamus	225-250	
Shorthorn	282	Kangaroo, red	32-34**	
INDIAN	28 2	Leopard	92-95	
Goat	148-156	Lion	108	
Horse, heavy	333-345	Llama		11
Horse, light	330-337	Marmoset	140-150	
Pig	112-120	Monkey, macaque	150-180	
Sheep:		Moose	240-250	
Mutton breeds	144-147	Musk ox		9



Wool breeds	148-151	Opossum	12-13	
		Panther	90-93	
Pets		Porcupine		
Cat	59-68	Pronghorn		
Dog	56-68	Raccoon		
Guinea pig	58-75	Reindeer		
Hamster	15-18	Rhinoceros.	r 112 230-240	
Mouse	19-31	African	63	
Rabbit	30-35	Seal	530-550	7-8
Rat	21-30	Shrew	20	11
Fur Animals		Skunk	62-65	
Chinchilla	105-115	Squirrel, grey	44	
Ferret	42	Tapir	390-400	
Fisher	338-358	Tiger	105-113	
Fox	49-55	Walrus		12
Marten. European	236-274	Whale, sperm		16
Pine Marten	220-265	Wolf	60-63	
Mink	40-75	Woodchuck	31-32	
Muskrat	28-30			
Nutria (coypu)	120-134			
Otter	270-300			



Stallion	37.6°C	99.7	37.2-38.1	99.0-100.6
Mare	37.8°C	100	37.3-38.2	99.1-100.8
Donkey	37.4°C	99.3	36.4-38.4	97.5-101.1
Camel	37.5°C	99.5	34.2-40.7	93.6-105.3
Beef cow	38.3°C	101	36.7-39.1	98.0-102.4
Dairy cow	38.6°C	101.5	38.0-39.3	100.4-102.8
Sheep	39.1°C	102.3	38.3-39.9	100.9-103.8
Goat	39.1°C	102.3	38.5-39.7	101.3-103.5
Pig	39.2°C	102.5	38.7-39.8	101.6-103.6
Dog	38.9°C	102	37.9-39.9	100.2-103.8
Cat	38.6°C	101.5	38.1-39.2	100.5-102.5
Rabbit	39.5°C	103.1	38.6-40.1	101.5-104.2
Chicken (daylight)	41.7°C	107.1	40.6-43.0	105.0-109.4

Definition of animal husbandry terms

- 1. ATP:** Adenosine triphosphate, a high energy organic phosphate of great importance in energy transfer in cellular reactions. Universal energy currency of cells.
- 2. Artificial insemination:** The injection of mechanically procured semen into the reproductive tract of the female without coition and with the aid of mechanical or surgical instruments.
- 3. Atrophy:** A defect or failure of nutrition or physiological function manifested as a wasting away or diminution in size of cell, tissue, organ, or part.
- 4. Dual-purpose animal:** One which is kept for both milk and meat production.



5. Balanced ration The feed or combination of feeds that will supply the daily nutrient requirements of an animal.

6. Bedding: Leaves or straw which is given to animals to lie on.

7. Dentition: Refers to the dental pattern in various species of animals. A dental formula includes both the numbers and types of teeth, temporary and permanent, in both the upper and lower jaw.

8. Domestication: To bring a wild animal or fowl under control and to improve it through careful selection, mating and handling so that its products or services become more useful to humans.

9. Dry cow: A cow that is not producing milk.

10. Dysgenesis: A defect in breeding so that hybrids cannot mate between themselves but may produce offspring with members of either family of their parents. Such offspring are sterile.

11. Dystocia: Abnormal or difficult labor at parturition, causing difficulty in delivering the fetus and placenta.

12. Ear-notching: A notch or series of notches made in the ear of animal as a means of identification.

13. Embryo: A young organism in the early stages of development. In animals, the period from fertilization until life is noted.

14. Estrous cycle: The period from one estrus, or heat period, to the next.

15. Estrus: The period of heat or sexual excitement in the female.



16. Excrement (feces): Waste material discharged from the body, especially from the alimentary canal.

17. Fleece (Wool): The entire coat of wool as it comes from the sheep or while still on the live animal.

18. Lactation period: The number of days a cow secretes milk following each parturition.

19. Milk letdown (milking): The squeezing of milk out of the udder tissue into the gland and teat cisterns.

20. Milk replacer: A feed material for young animals which has many of the nutritive characteristics of milk, is fed in a fluid form, and contains an appreciable level of nonfat dry milk solids.

Key Features of Domestic Animals

1. Determine Your Purpose for the Animal

The first step is identifying why you want the animal:

A. Companionship: Dogs, cats, or rabbits are common choices.

B. Work or Utility: For example, herding dogs, draft horses, or guard animals.

C. Food Production: Cattle, chickens, goats, or pigs for milk, eggs, meat, or other products.

D. Emotional Support: Certain dog breeds are ideal for emotional support and therapy.

2. Consider the Species and Breed

Different species and breeds have unique traits. Research their characteristics to match your needs:



A. Behavior and Temperament: Some breeds are more docile (e.g., Labradors), while others are more independent (e.g., Siamese cats).

B. Growth Rate and Size: Large animals like cattle or Great Danes require more space and resources than smaller animals like goats or terriers.

C. Production Characteristics: For livestock, consider milk yield (e.g., Holstein cows), egg production (e.g., Leghorn chickens), or meat quality (e.g., Angus cattle).

3. Match the Animal to Your Lifestyle

Your living situation plays a significant role in breed selection:

A. Space Availability: Large animals need spacious environments (e.g., horses), while small pets like cats or rabbits can thrive in apartments.

B. Activity Level: High-energy breeds suit active individuals, while low-energy breeds are better for quieter lifestyles.

C. Climate Suitability: Some breeds are adapted to specific climates. For example, Siberian Huskies thrive in cold climates but may struggle in hot regions.

4. Assess Care Requirements

Different breeds have varying care needs:

A. Feeding and Nutrition: Larger animals or high-production livestock require more feed and specialized diets.

B. Grooming Needs: Long-haired breeds (e.g., Persian cats) require frequent grooming compared to short-haired ones.

C. Health Considerations: Some breeds are prone to genetic health issues. For example:

Bulldogs often face respiratory problems.

Dairy cattle like Holsteins may require intensive health management.



5. Evaluate Costs

Owning an animal comes with financial responsibilities:

A. Initial Costs: Purchasing purebred animals is often more expensive than adopting mixed breeds or rescues.

B. Ongoing Costs: Include food, veterinary care, grooming, housing (kennels, barns), and training.

6. Plan for Long-Term Commitment

Domestic animals often live many years:

A. Dogs can live 10–15 years depending on the breed.

B. Livestock like cattle may live up to 20 years if not raised for production purposes.