

PET INDUSTRY



Lee Seong Wei • Wendy Wee

PET INDUSTRY

Lee Seong Wei
Wendy Wee

PET INDUSTRY

Lee Seong Wei
Wendy Wee

First Printing 2010

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy recording, or any information storage and retrieval system, without permission in writing from the publisher.

Published By:
Penerbit UMK
Universiti Malaysia Kelantan,
Karung Berkunci 36,
16100 Pengkalan Chepa, Kelantan
Tel: 09 7717187 Faks: 09 7717182
E-mel: penerbitan@umk.edu.my

Perpustakaan Negara Malaysia

Printed By:
Double Minute Enterprise
2325, Taman Paduka,
Jalan Wakaf Stan,
16150 Kubang Kerian, Kelantan

ISBN: 978-983-57820-4-6

PREFACE

For a long time ago, animals from the wild have been domesticated and bred for appropriate behavior and desired physical traits, especially the mammals and fish. Cats and dogs become the favourite of all when most people seek the pleasure of pet keeping for companion. Nevertheless, reptiles, amphibians and birds are too developed into such popular pet nowadays.

This book is intended for use as an introductory text for students as well as general readers who are interested in pet keeping and keen to venture into the pet industry. In general, this book addresses the status of pet industry in Malaysia, criteria for pet selection, care and management for different pets particularly on nutrition, reproduction and health, arising issues on pet rights and welfare, and also prospective careers in pet industry.

It is the sincere hope of the authors that this comprehensive content could enlighten readers on pet industry and further contribute to improve the future prospects of the industry.

Lee Seong Wei, Ph.D.
Department of Agro Industry
Faculty of Agro Industry and Natural Resources
Universiti Malaysia Kelantan

CONTENTS

Chapter	TITLE	PAGE
1.0	Introduction to pets	1
1.1	Selecting a pet	2
2.0	Cats (Feline)	4
2.1	History domestic cat	4
2.2	Types of cats	5
2.3	Caring a cat	9
3.0	Dogs (Canine)	13
3.1	History of domestic dog	13
3.2	Types of dogs	14
3.3	Caring a dog	21
4.0	Companion Birds	29
4.1	History and species	29
4.2	Caring Bird	31
5.0	Reptiles	33
5.1	Iguana	33
5.2	Tortoises and Turtles	37
6.0	Amphibians	40
6.1	History and Species	40
6.2	Salamander	40
6.3	Frog	41
7.0	Mammals: Rabbit, Ferret, Hamster, Gerbils, Mice, Rats, Guinea Pigs and Chinchillas	43
7.1	Rabbit	43
7.2	Ferret	55
7.3	Hamsters	57
7.4	Gerbils	60
7.5	Mice	61
7.6	Rats	62
7.7	Guinea Pigs	63
7.8	Chinchillas	65
8.0	Ornamental Fish	69
8.1	Introduction	69
8.2	Caring fish as pet	71
9.0	Pet nutrition	73
9.1	The basic nutrition requirement of pet	73
9.2	General on animal digestion system	74
10.0	Safety precaution in handling pet	76
10.1	Safety guidelines in handling pet	76
10.2	Risks in handling pet	76
11.0	Pet rights and welfare	79
11.1	History	79
11.2	Current issues in pet industry	80
12.0	Prospective careers in pet industry	81
12.1	Introduction	81
12.2	Types of careers	81
13.0	References	83
14.0	Glossary	87

INTRODUCTION TO PET INDUSTRY

There are several definitions for pet. For instance, a pet can be a dog, cat, or other animals that provides health benefits to a person. They may help to relieve stress or serve a more active role, such as guide dogs for blind person and trained dogs to detect telephone or doorbell sounds for deaf person or seizures in epileptic persons and signal for help (Mosby's Medical Dictionary, 2009). Another definition of pet can be dog, cat, pleasure horse, bird, mouse, guinea pig and exotic species kept by humans for companion, amusement, psychological support, extrovert display and all of the other functions that humans need to share with animals of other species; companions who will not take emotional or psychological advantage of the person and will, for the most part, stay faithful (Saunders Comprehensive Veterinary Dictionary, 2007).

The relationship of animal as human pet began very long time ago. History documented that dog became pet of human since 12,000 years ago whereas cat was recorded as 3,500 years ago. Nowadays, pet industry is a big business. It is estimated pet industry turnover is more than USD 300 billion per year. In Malaysia, pet industry generates sales about 50 million per year. The promotions of having pet and pet trade were carried on whole year. For instance, there are several events that organized annually as shown in Table 1.1. Pet industry is not only involving in breed and sale animal but also pet accessories such as pet food, pet cage, pet cage equipments like drinking bottle, pet consultancy service, veterinarian service and etc. Common pets are dogs, cats, birds, horses, fish, ferrets, rabbits, hamsters, guinea pig, gerbils, turtles, snakes, lizards and birds. Table 1.2 shows the characteristics of pet according to four different groups.

Table 1.1. Pet industry exhibition organized by various countries

Exhibition/Event/Show	Host/organizer/country
Aquariya Expo	Dubai, UAE
Pet Expo – Romania	Bucharest, Romania
Global Pet Expo	Orlando, Florida, USA
Pet World Malaysia	Kuala Lumpur, Malaysia
World of Pet Supplies	Hong Kong, China
SuperZoo	Mandalay Bay Las Vegas, USA
Interzoo	Nuremburg, Germany

Table 1.2 shows the characteristics of pet according to four different groups.

Group	Characteristic
Mammalian	<ul style="list-style-type: none"> • Body fully or less covered with hair • Well developed brain • Possess glands
Reptilian	<ul style="list-style-type: none"> • Cold blooded • Body covered with scale or horny plate
Bird	<ul style="list-style-type: none"> • Warm blooded • Has two wings, feather and lay eggs
Fish	<ul style="list-style-type: none"> • Possess gill to breath • Body covered with or without scale

1.1 Selecting a pet

Before a person planning to have a pet, he must know type of pet that he is interested, place or shop to obtain the pet, the financial ability of the future owner to support the pet food, space, medicine health and acceptable of his family in adopting the pet. Once the becoming pet owner makes decision in selecting the desired pet, he can go to pet shop to select the pet or go straight to pet breeder. However, it is better to get advice from experienced person before having a pet. Friend and neighbour can be good helpers in this case. After having a pet, the pet owner has to prepare a specific place and space for the pet to avoid the pet from interfere other family members, neighbour and community and vice versa. Having a space for pet is costly. The cost of space is increasing parallel to the pet size and the activity of the pet. The pet owner must plan a monthly budget for the pet. The budget should included pet food, toys, treatment and etc. However, the budget is depending on the ability of the owner. The pet owner should plans his time for allocated his time to spend on his pet such as cleaning the pet and the pet house, play with the pet or the pet become abandoned. The pet owner has also decided the purpose of having pet. The purpose of having pet can be as companion, hunting such as dog, having fun or for business such as breeding the pet and selling it's offspring. Overall, the becoming pet owner should do some home work before having a pet.

CHAPTER 2

CATS (FELINE)

2.1 History of domestic cat

Cat shared similar ancestor with dog that is Miacis. From Miacis, it was started to evolve to be cynodictis, profelis, dinictis, proailurus, normal cat, felis and become today domestic cat. Figure 2.1 shows the flowchart of cat family. Nowadays, there are several species of cats such as African wild cat (*Felis libyca*), Jungle cat (*Felis chaus*) and European wild cat (*Felis silvestris*). In this chapter we will discuss about domestic cat that became a favourite pet and can be found in almost family in the world.

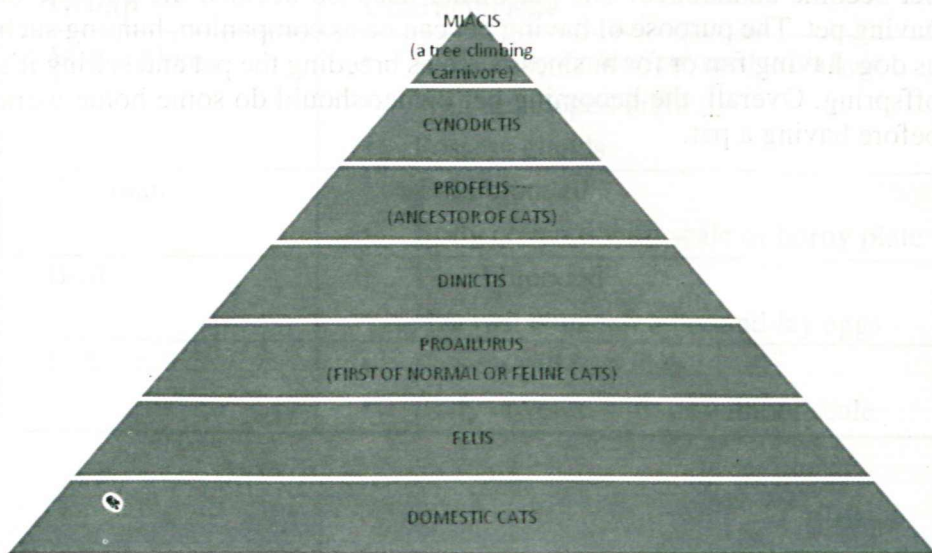


Figure 2.1: Family tree of domestic cat

2.2 Types of cats

Nowadays, there are two groups of domestic cat namely shorthaired and longhaired cat. Table 2.1 shows the description of various strains of domestic cat that available in the market.

Table 2.1. Description of modern cat

Shorthaired Group	
Name of cat	Description
Abyssinian	Abyssinian is originated from England. It can be found in red and blue in color. It is very active and not afraid of water.
American Shorthair	American shorthair is originated from England and brought to USA. It can be available in 34 colors and patterns
American Wirehair	American wirehair is originated from New York since 1966. It has curly hair and should not be brushed and combed. Therefore, it is need attention to take care of its fur.
Bombay Breed	Bombay Breed is a cat that obtained through cross breeding between Sable Burmese and Black American Shorthair. It has rounded head and board forehead.
Burmese	Burmese is originated from USA since 1930. This strain of cat is generated through cross breeding between Burma and Siamese cat. It is a bossy, stubborn and easy get angry cat. Therefore, it is not suitable as a children pet.
British Shorthair	British Shorthair has a long history since Roman. It likes to spend more time for sleep. It is available in 18 colors and patterns.
Chartreux	Chartreux is originated from Africa and brought to France. This cat can be found in gray blue in color with the color of eye gold to cooper. This cat is suitable as pet for children since it is well temperate.
Colorpoint	This cat is developed in England since 1947. It has dark point on its body and extremities color on nose,

	ear, feet and tail. This strain of cat needs more attention from its owner.
Cornish Rex	Cornish Rex is originated from England since 1950. It can be found in 28 colors and patterns. The fur of this cat should be handled gently since it possesses curly fur in which easy damage.
Devon Rex	Devon Rex is a strain of cat that produced from cross breeding between domestic cat and stray cat. They have 34 patterns and colors. It has short face and wedge-shaped with pronounced cheekbone.
Egyptian Mau	Egyptian Mau is started to breed since 1400 B.C and imported to USA since 1953. It was appeared in silver, bronze and smoke color. This cat is well temperate that is suitable to be as children pet.
Exotic Shorthair	Exotic shorthair is developed through cross breeding between Persian and American Shorthair. This is a well temperate cat in which suitable to be as children pet. It has large and round eye with nose is short and deep break.
Havana Brown	Havana Brown is developed through cross breeding between black domestic short hair and seal point Siamese cat. It can be found in brown and mahogany in color.
Japanese Bobtail	Japanese Bobtail is originated from Japan. It is a well temperate cat in which suitable to be used as a children pet. It has 23 patterns and colors.
Korat	Korat is originated from Thailand in which it is sold at high price. Therefore, it is rare to adopt as a pet. It is available in silver blue in color with its eye color is luminous green.
Malayan	Malayan is seem like Burmese but appeared in sable brown in color. It is a stubborn and bossy cat but can be an outstanding companion.
Manx	Manx is originated from Isle of Man in which is located between England and Ireland. The special feature of this cat is no tail.
Ocicat	Ocicat is a strain of cat that obtained through cross breeding between Siamese and Abyssinian since 1964. It is a gentle and friendly cat that available in

	8 patterns and colors. It is suitable to be as a children pet.
Oriental Shorthair	Oriental Shorthair is a cat that can be available in solid, shaded, smoke and tabby in color. It is talkative and playful cat in which suitable to be as a family pet.
Russian Blue	Russian Blue has many other names such as Archangel, Spanish Blue, Maltese Blue and English Blue. This cat is unfriendly to stranger but it is well temperate and not afraid to dog. Therefore, it is suitable to be a children pet. It has a large ear and green colour of its eyes.
Scottish Fold	Scottish Fold is believed a natural mutant cat in which is started to breed since 1961 and originated from Scotland. It is a friendly cat to other cat and dog and well temperate. Therefore, it can become a excellent family pet. It is available in 23 colors and patterns with the special feature of this cat is its folded ear.
Siamese	Siamese is a Thai royalty cat and is started to breed since 1350 A.D. It is a talkative, loyal and fearless cat. The special features of this cat are possesses dark pigmentation on its body and its face. The owner has to pay more attention to its health since this cat is prone to respiratory and heart disease.
Singapura	Singapura is originated from Singapore. It is an active cat and social cat. It has ticked fur and can be found in yellow and ivory color. Its eye can be in green or yellow in color.
Snowshoe	Showshoe is a cat originated from Philadelphia, USA. It is a social cat and excellent house pet. The features of this cat are white tipped front paw and white chest.
Sphynx	Sphynx is a hairless cat. It is started to breed since 1800. This cat is fully depend on people to survive. The owner must pay more attention to this cat as its unable to keep fat and hairless, therefore, it is easy to get cold. It need a lot of food to maintain its body temperature especially in temperate country.
Tonkinese	Tonkinese is started to breed since 1950s. It is obtained through cross breeding between Siamese and Burmese cat. It is a clever and active cat in which can be an excellent house pet. The special features of

	this cat are possess densely color on its face and legs. The owner need to more take care of its health since it's prone to have respiratory disease.
Longhaired Breed Group	
Balinese & Javanese	Balinese & Javanese have similar characteristic like Siamese. The different between these cats and Siamese is both Balinese and Javanese possess a long hair.
Birman	Birman is an intelligent and social cat. It possesses a long and silky hair. It is a well temperate cat therefore is suitable to be a children cat.
Cymric	Cymric is a long fur Manx cat. It possesses a similar characteristic like Manx cat. It is a well temperate and intelligent cat. Therefore, it is suitable to be as a children pet.
Himalayan & Kashmir	Himalayan/Kashmir cat is obtained through cross breeding between Siamese, Persian and Burma. This strain of cat is started to breed since 1930. It can be an excellent family pet.
Maine Coon	Maine Coon is an American native cat. It is a friendly cat and can be a good human companion cat. It is available in brown tabby color.
Norwegian Forest Cat	Norwegian Forest Cat is a Norway native cat. It is an intelligent and well temperate cat. It possesses a long and flowing tail. It can be an excellent family cat.
Persian	Persian is the most popular cat among cat lover. This cat is intelligent and well temperate. It can be a good human companion. The owner has to pay more attention in caring cat fur. Persian can divide into 6 groups based on its appearance. Breeder is advice not to breed white Persian cat because most of them are born deaf.
Ragdoll	Ragdoll is obtained through cross breeding between white Persian and Birman. This strain of cat is started to breed since 1960. It is an active and intelligent cat.
Somali	Somali is started to breed since 1960. It is obtained through cross breeding among Abyssinian cat. It is an active, intelligent and friendly cat. It can be a good family cat.

Tiffany	Tiffany is obtained through cross breeding between Himalayan and Burmese and originated from England. It is an active and loyal to its owner. However, very few of these cats can be found in the world.
Turkish Angora	Turkish Angora is originated from Turkey. It is an intelligent and polite cat in which it is easy to train. However, it is tedious in caring this cat because it prefer a clean place to stay.

2.3 Caring a cat

2.3.1 Caring a cat

There are 3 types of cat foods that available in the market namely dry food, semi moisture food and canned food. As a carnivore animal, cat is need high protein diet. In general, cat canned food contain 75 % water, high in fat and more palatable compare to dry and semi moisture food. Cat semi moisture food is cheaper than canned food in which the protein in this food is derived from vegetable. Semi moisture food possesses about 30 % water content. Dry food is the cheapest food among the cat foods that available in the market. It contains only 10 % of moisture, less protein and less fat compared to canned and semi moisture foods. Therefore, other food supplements such as milk and plenty of water should give to the cat. Otherwise, the cat may face health problem.

2.3.2 Cat health management

Cat is prone to various common cat diseases namely infection/non infection disease, internal/external parasite and fungal disease. In this chapter, we will discuss about various types of cat diseases and their treatments as well.

Feline panleukopenia is a cat disease due to parvovirus in which the likelihood of this disease infected young kitten

is very high. This disease will end up with death if the infected cat did not receive any treatment. This disease can spread through direct contact or contaminated food and water. The infected cats will lose appetite, lose weight, the increasing of body temperature, lethargy, vomiting/diarrhea and dehydration. Vaccine is the best way to prevent this disease whereas no antibiotic can be used to combat this disease.

Feline herpesvirus/calicivirus is a respiratory disease due to virus infection. This disease can spread by direct contact. Vaccination can be used to prevent this disease.

Feline Infectious Peritonitis is a cat disease due to coronavirus. This disease is only known by the year 1950 and can spread through direct contact with the infected cat. No clinical signs were found in the infected cat. The symptoms of the infected cat are loss appetite, lose weight and increasing the body temperature. This disease may end up with death due to internal organ failures. The vaccine of this disease is developed only after 1991.

Feline leukaemia is a cat disease due to RNA virus. This disease only found in the areas that have a huge quantity of cat population and contaminated water and food. The infected cat may die if did not received treatment. Vaccine can be used as prevention of this disease.

Feline Enteric Coronavirus is a disease that most attack kitten and can spread by contaminated feces. The symptoms of this disease are vomiting/diarrhea and mild fever. No treatment is available for this disease.

The causative agent of Feline Pneumonitis is *Chlamydia psittaci*. The infected cat will suffer runny eye and nose. Vaccine is available for this disease.

Rabies is a common disease among warm blooded animal. This disease can prevent by using vaccination at the age of 12 weeks and 18 weeks of kitten. Vaccination should be continue given for every 3 years.

There are 2 non infectious diseases in which commonly infected in cat. There are Feline Urologic Syndrome and Entropion. Feline Urologic Syndrome is a urinary problem in cat. This disease is due to unbalance diet such as lack of water intake. Insufficient water intake may lead to stone forming in the kidney system of cat. High concentration of salt in diet can also contribute to this disease. Entropion is common infected in Persian cat in which the eyeball is sinking into its eye socket and caused conjunctivitis and keratitis. Persian cat is likelihood infected by wet eye in which the infected cat will have tear overflow at the inner of eye. This disease is due to excessive tear production block the tear canal.

There are internal and external parasites that can infect cat. Internal parasites of cat are toxoplasmosis, ascarid/hookworm and tapeworm. Toxoplasmosis in cat is due to *Toxoplasma gondii*, a protozoa that can spread through eating raw meat or contact with contaminated feces. The infected cat will suffer fever, difficult to breath, muscle painful and unable to move, anemia and abortion can occur for pregnant cat. It is also a zoonotic parasite in which human can also infected by this parasite. No treatment is available for this disease.

Cat is also prone to be infected by ascarids, *Toxocara cati*, and hookworm, *Ancylostoma tubacforme*. This disease can spread through direct contact with contaminated feces or vertical transmission from mother to kitten during milking. Deworming drug can be used as the treatment for this disease.