THE NEED OF TOURIST ON WILDLIFE KNOWLEDGE AT PANG-NGA WILDLIFE BREEDING RESEARCH CENTER

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THE NEEDS OF TOURISTS ON WILDLIFE KNOWLEDGE AT PANG-NGA WILDLIFE BREEDING RESEARCH CENTER.

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ABSTRACT

The purpose of this survey research was to study the interests and needs of tourists on wildlife and on the various types of media that provide wildlife knowledge as well as variables that influence the needs of tourists and the types of media other which disseminate wildlife knowledge. It was conducted through questionnaires applied to 200 tourists age above 15 years at Pang-Nga Wildlife Breeding Research Center. SPSS/PC was used to analyze data on knowledge and attitude to the value of wildlife. Mean, Standard, Deviation, Frequency and Percentage were employed. Comparison between sample groups was conducted by Oneway Anova

The results of this study suggested that need for knowledge was not correlated to ages, occupation, education, wildlife news receipt types of tourist and attitude towards the value of wildlife . Need for knowledge was negative correlated to existing knowledge of wildlife.

The most popular media type among the tourists was the exhibition with 30 Percent of tourists listing it was their first choice, followed by brochures at 26.5 Percent and the third choice was interpretation signs at 18 Percent.

Findings from this research suggest that the tourists who visit Pang-nga Wildlife Breeding Research Center taken interest in a wide variety of wildlife. Therefore, wildlife knowledge presented to the tourists should be profound and appropriate.

KEY WORDS : NEEDS OF KNOWLEDGE/ WILDLIFE/ MEDIA TYPE/ TOURISTS

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ความต้องการความรู้เรื่องสัตว์ป่าของนักท่องเที่ยว ณ สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าพังงา (THE NEEDS OF TOURISTS ON WILDLIFE KNOWLEDGE AT PANG-NGA WILDLIFE BREEDING RESEARCH CENTER)

สุชาวดี ลำภา 4337336 SHED/M

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บทคัดย่อ

การวิจัยในครั้งนี้เป็นการวิจัยเชิงสำรวจ มีวัตถุประสงค์เพื่อศึกษาความสนใจและความต้องการความรู้ในเนื้อหาสาระเรื่องสัตว์ป่าของนักท่องเที่ยว ศึกษารูปแบบของสื่อที่ให้ความรู้เรื่องสัตว์ป่า และศึกษาตัวแปรที่มีอิทธิพลต่อความต้องการความรู้เรื่องสัตว์ป่าและรูปแบบของสื่อในการให้ความรู้เรื่องสัตว์ป่าของนักท่องเที่ยว ณ สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าพังงา โดยใช้แบบสอบถามกับนักท่องเที่ยวที่มีอายุตั้งแต่ 15 ปีขึ้นไป จำนวน 200 คน และวิเคราะห์ข้อมูลด้วยโปรแกรมสำเร็จรูป SPSS/PC การวิเคราะห์ข้อมูลความรู้ และเจตคติเรื่องคุณค่าของสัตว์ป่า ใช้สถิติค่าเฉลี่ย($\overline{X}$) ส่วนเบี่ยงเบนมาตรฐาน (S.D) แจกแจงความถี่ (Frequency) และร้อยละ(Percentage) การเปรียบเทียบค่าเฉลี่ยของกลุ่มตัวอย่างโดยอาศัยการวิเคราะห์ความแปรปรวน (ONEWAY ANOVA)

ผลการวิจัยพบว่า นักท่องเที่ยวมีความต้องการความรู้เนื้อหาสาระเรื่องสัตว์ป่า โดยไม่ขึ้นกับอายุ อาชีพ ระดับการศึกษา การได้รับข่าวสารเรื่องสัตว์ป่า ประเภทนักท่องเที่ยว และเจตคติเรื่องคุณค่าของสัตว์ป่าอย่างมีนัยสำคัญทางสถิติ แต่ขึ้นอยู่กับความรู้ของนักท่องเที่ยวอย่างมีความแตกต่างกันอย่างมีนัยสำคัญทางสถิติ

รูปแบบของสื่อที่นักท่องเที่ยวต้องการมากเป็นอันดับที่ 1 คือ นิทรรศการ ร้อยละ 30 อันดับที่ 2 คือ แผ่นพับ ร้อยละ 26.5 และอันดับที่ 3 คือ ป้ายนิเทศ ร้อยละ 18

จากการวิจัยครั้งนี้พบว่านักท่องเที่ยวที่มาเที่ยว ณ สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าพังงามีความสนใจความรู้เรื่องสัตว์ป่าในหลายรูปแบบ ดังนั้นในการจะให้ความรู้เรื่องสัตว์ป่าแก่นักท่องเที่ยวที่มาเที่ยว จึงควรนำเสนอเนื้อหาความรู้เรื่องสัตว์ป่าให้ลึกซึ้งขึ้นตามความเหมาะสม

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CHAPTER I
INTRODUCTION

1.1 Historical Background

Wildlife had been one of the natural resources that could be replaced each other as similar to trees and grasslands. Some wildlife species in Thailand had currently been extinct, for instance, deer, mountain goats, and others facing the extinction. As being predicted that approximately 320 types out of 2,748 species would become endanger species. The reduction in the animals population had resulted from some species was unable to adjust to the continuous changing in environments as well as other natural disasters, such as, forest fire, flooding, and landslides, including the major cause from being hunted by human. Destruction of the forest had left those animals without homes. Besides, harmful pesticide used for eradicate insect could weaken certain species from long time accumulation of toxic. It also decreased food sources until created inadequate food supplies for wildlife (Situation on environment 1994: 121)

Although, the Division of Forest and Animal Reservation had widely linked its network to protect and suppress more than before, it could not prevent the destruction of forest and animals resources. Nowadays, Forest which had been the source of all essential factors to sustain wildlife, not only water and food resources but also animals sanctuary had been depleted and invaded from trespassing and growing in development. According to the statistics of forest area survey in year 1998, it had revealed that the forest areas were left only 81.07 million rais, equivalence to 25.28 percent of the total areas of the country. Comparing to those in the year 1961, Thailand forest areas had remained 171 million rais or 53 percent of the total areas of the country. Out of these 25.28 percent, 15 percent had been

designated as the reserved forests. As a matter of fact, some reserved forests had been invaded and uprooted until they were no trace of forest remained (Thongchai Charupapat 1997:103). Therefore, it had become the major concern for drastic reduction in the wildlife shelter if it continued further without full collaboration between the government and private sectors in the conservation of forest areas.

Besides the destruction of wildlife's natural habitat that had considered the major cause for reduction in wildlife population, the process of smuggling and illegal trading of wildlife had been the key factors in wildlife's destruction. At present, this process had been illegally practice widely since wildlife were accepted as trading commodities overseas, such as, Zoos, Animal shops, and Overseas Research Centers. These wildlife from the under developed were bought with high prices. As a result, both domestic and overseas illegal smuggling rings had been actively trading wildlife in live animals and carcass of wildlife both domestic and overseas, lives or death. The smuggling had been done inhumanely, such as, killing of mother gibbon just for the young one, or killing tigers, rhinoceros and bulls for certain body parts. Therefore, wildlife 's destruction brought more reduction of wildlife population at the fast pace.

Judging from those wildlife's problems, wildlife were under serious threat although some wild animals could be reproduced since many of them were close to extinction.

Forests that once were being habitat for wildlife had been widely destroyed which caused rapid wildlife extinction. Some of them had migrated into other areas to avoid contact with human. Wildlife in Thailand had been reduced in large numbers that eventually could cause unbalance in nature. Therefore, it was crucial for the people to protect wildlife and solve their problems to reduce the number of wildlife destruction. In doing so, the governmental divisions, public and private sectors as well as the general public should join together to find the most effective way to protect and solve wildlife's problems.

After the passage of Wildlife Reservation and Protection Act in the year 1960, the Royal Forest Department had established the Wildlife Reservation and Protection unit to oversee wildlife's welfare, as being stated in the Act. The responsible areas were suppression, trading, export, import, moving, wildlife reserve areas and hunting prohibited areas, breeding as well as giving knowledge and building their awareness in the participation of wildlife conservation activities. Later, those crucial tasks were extended widely in different areas with more responsibilities. Realizing the increased responsibilities, the Royal Forest Department had founded a new division to replace the old unit. This unit has been named " Wildlife Conservation Division, The Royal Forest Department which directly responsible for wildlife management in Thailand. Another important division, to conserve and manage the forest, national parks and wildlife was the National Environmental Committee and Water Resources. It duties was to plan and regulate policies in order to balance the management of all natural resources including cooperated with both international and domestic divisions to support research education and wildlife management in Thailand.

Besides the public and state enterprise sectors that had involved in the management of wildlife in Thailand, the Faculty of Forestry, Kasetsart University had conducted the research in Biology, Ecology and Wildlife Series Arrangement. Moreover, State Enterprise that had given equally important in the research study and wildlife management through Wildlife Series Arrangement was the Institute of Sciences and Technological Research of Thailand.

In addition, there had been more private organizations with increasing importance in cooperative roles in other areas of wildlife management in Thailand. They had collaborated with the government division and state enterprises, in finance, research, building awareness and value for wildlife conservation as well as public relation activities, such as, nature lover's clubs, foundation for wildlife protection of Thailand, televisions and radio stations as well as tourism journals (Wasin Inkapatanakoon., 1986).

Tourists had become one of the groups who contributed to the reservation and solution of wildlife problems. Each year, Thailand had entertained large numbers tourists both domestic and overseas who had come to spend their time in this country.

During the year 1997-1999, Thailand had established its VISIT THAILAND YEAR, thus there were influx of Thais and foreign tourists coming to Thailand. In the year 2000, nearly 9.5 million tourists had visited Thailand with generated tourism revenues of 285,000 million baht (Tourism Authority of Thailand, 2001:1). These tourists were interested in nature and preferred to roam in the forests, or sailing, and bird watching in reserved forests. In Africa, tourists came for wildlife watching which in turn generated heavy flow of income for the country. For Asia-region, watching wildlife was quite difficult since wild animals searched for their food at night. Also, the forests were dense which made wildlife watching more difficult. Several countries had developed the method to watch wildlife, for instance, getting on elephant back to see tigers and rhinoceros in Nepal. Some built a tower especially for night watch of wildlife. Thus, wildlife had become natural resources to attract tourists (Tawee Nootong, 1988:18-8/18-9)

Since the natural resources were abundant with wildlife, the tourists should be trained for knowledge, awareness, and perception of how important wildlife could benefit mankind. Without human attention, these wildlife could easily be destroyed and quickly reduced in numbers. Dissemination of knowledge on wildlife among tourists could be done in a many ways. When the tourists had gained knowledge, awareness, and perception of how wildlife contributed to the ecosystem, human and natural environment, the tourists would stop to disturb wildlife for instance, smuggling of wildlife, raising wildlife as household pets, and having them for human consumption.

The Wildlife Breeding Research Center for Economics in Pang-nga had been a division of Royal Forest Department. It had been established in order to disseminate wildlife knowledge and explain the academics issue regarding wildlife to school and

university students, general public, and tourists who came to visit the center where those rare and nearly extinct species could be found. The center also hosted other special projects, for instance, sent wildlife back to nature, being role model of wildlife farming, taking care of wildlife that were donated by the people, etc.

For research's purpose, the researcher would like to study the knowledge of wildlife among tourists who spend their times at the Pang-nga Wildlife Breeding Research Center in order to learn which type of natural media presented them with knowledge on wildlife. From the research results, the natural media or tools to disseminate wildlife knowledge could be improved so that the tourists could learn more about wildlife importance to the ecosystem, environment and humans. In return, they could help to conserve wildlife and reduce its destruction.

1.2 Research Objectives

1. To study the interest and needs of tourists on wildlife knowledge at Pang-nga Wildlife Breeding Research Center.
2. To study media types on wildlife knowledge at Pang-nga Wildlife Breeding Research Center.
3. To study the variables which had been influenced the needs on wildlife knowledge among tourists and media types for dissemination of knowledge on wildlife at Pang-nga Wildlife Breeding Research Center.

1.3 Research Questions

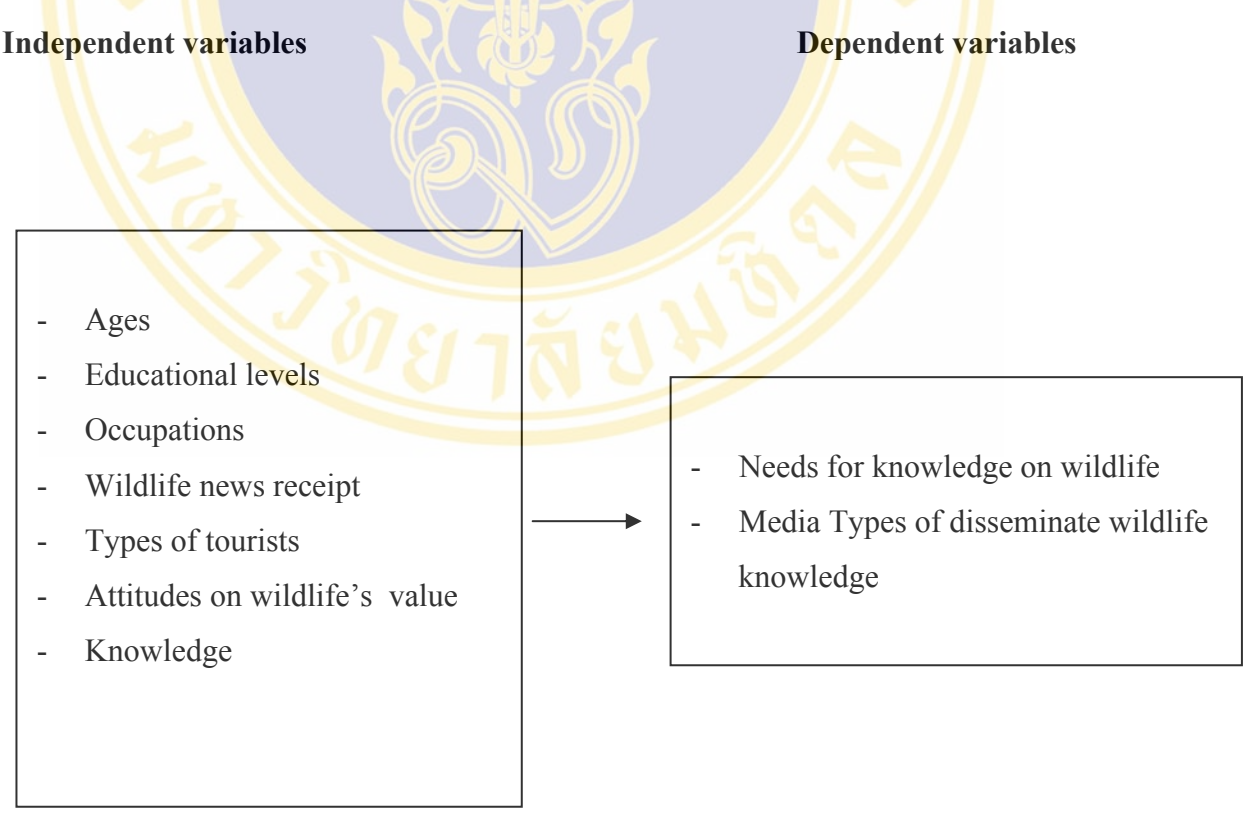
1. What were the interests and the needs of tourists who visited Pang-nga Wildlife Breeding Research Center?
2. What types of media most preferred by the tourists who came to visit Pang-nga Wildlife Breeding Research Center to acquire knowledge on wildlife?
3. What variables were influenced the needs of wildlife knowledge among the tourists who visited Pang-nga Wildlife Breeding Research Center?

1.4 Research Hypothesis

1. Studying variables, such as, ages, educational levels, occupations, wildlife news receipt, types of tourists, attitudes on wildlife's value and knowledge had influenced the needs of tourists on wildlife knowledge at Pang-nga Wildlife Breeding Research Center.

2. Studying variables, such as, ages, educational levels, occupations, wildlife news receipt, types of tourists, attitudes on wildlife's value and knowledge had influenced the needs of tourists on types of media on wildlife at Pang-nga Wildlife Breeding Research Center.

1.5 Research Conceptual Framework



1.6 Research Scope

The research study focused on 200 Thai tourists over 15 years old who visited Pang-nga Wildlife Breeding Research Center

1.7 Operational Definitions

Wildlife referred to all animals including bird, reptiles, mammals, which had been captured as evidences, from donations or nursing under the direct responsible of Pang-nga Wildlife Breeding Research Center, according to the Wildlife Reservation and Protection Act of 1992.

Knowledge on wildlife referred to the facts, rules and regulations, content regarding to wildlife living conditions, habitat, food supplies, life cycle, wildlife behaviors and the importance of wildlife to ecosystem.

Needs for knowledge on wildlife referred to the tourists who came to visit Pang-nga Wildlife Breeding Research Center were interested and needs to know more contents about wildlife regarding to living conditions, habitat, food supplies, life cycle, wildlife behaviors and importance of wildlife to ecosystem.

Types of tourists referred to Thai male and female's tourists who came to visit Pang-nga Wildlife Breeding Research Center either alone or with family, peer group, student group or with touring agency.

Media types referred to the presentation of knowledge on wildlife via brochures, wildlife nature handbook, slides, video, interpretation sign, tape cassettes, persons, and exhibition center at Pang-nga Wildlife Breeding Research Center.

Wildlife News Receipt referred to news received on wildlife from television, radio, newspaper, tourist journal, tourist agency, friends, and the frequency of wildlife news receipt.

Attitudes referred to inclination and emotional feeling that had derived from perception and experiences of tourists regarding to wildlife and being expressed through opinion and behavior towards wildlife value.

1.8 Expected Research Benefits

1. To learn about the needs of tourists on what they wanted to study about wildlife knowledge in order to formulate media for nature interpretation on wildlife appropriately. This could create tourists' interest and concerned wildlife's value toward the ecosystem, man and environment throughout the visit at Pang-nga Wildlife Breeding Research Center.

2. Pang-nga Wildlife Breeding Research Center could apply this research results in the formulation of media for nature interpretation on wildlife appropriately. It would be attractive more tourists to visit here, and they would be perceived more wildlife's value to the ecosystem, human and environment.

CHAPTER II
LITERATURE REVIEWS

The research study entitled "The Needs of Tourists on Wildlife Knowledge at Pang-Nga Wildlife Breeding Research Center" covered the following concepts, theories and relevant research.

2.1 Definition of Wildlife Resources
2.2 The ecological value of Wildlife
2.3 Wildlife and its behaviors
2.4 Pang-nga Wildlife Breeding Research Center
2.5 Tourism and Tourists
2.6 Media Types
2.7 Knowledge and Attitude
2.8 Related Research

2.1 Definition of Wildlife Resources

Wildlife was considered natural resources that could be regenerated to serve human's needs. Wildlife reservation had been referred to the maintenance of wildlife resources through cleverly and sustainable usage with the least waste and equally distributed wildlife resources to obtain the maximum and long lasting benefit for human. At present, the association between human and wildlife had changed abruptly since human had previously depended on nature for his own existence. However, Human had learned to invent things more resemble to nature. At the same time, society had turning more into urban society that no longer closed to nature. As a result of advance technology, human had used own invention to help with his chores in order to create safety and more leisure. Since man needed relaxation both body and mind, he turned himself back to nature. Therefore, wildlife should be key

mechanism to help maintain harmony in nature and its own status quo. Human had tried to conserve and manage wildlife resources as to sustain natural abundance and balance the ecosystem. Since the use of wildlife to benefit human had been rapidly increased. The surrounding environment of wildlife were drastically reduced which in turn lessen wildlife resources that could caused major change in ecosystem. Details of wildlife resources in association with economic development indicated the past data and the present possibilities as well as reflecting the conceptual trend to bring wildlife for economic benefit involved in the country development. Since wildlife population had been severely reduced in numbers, Thailand had passed the Wildlife Reservation and Protection Act Amendment 1992.

Wildlife Definitions

Protection of wildlife was not done only on academic level to expand its species but also on legal side as well in order to control the over exploitation of wildlife. Besides, there had been some cooperation between countries to reserve wildlife.

The academic definition of Wildlife

Chumpon Ngampongsai had stated that "wildlife" referred to wild animals in natural habitat, excluded those wild animals raised as household pets or Zoo animals or in unnatural habitat. Besides, wildlife was included the household animals that had been released in the forest and had already been returned to wilderness. If those wildlife still being friendly to human, they should be considered as household pet (Chumpon Ngampongsai, 1978:2).

Chumpon Ngamponsi had also cited other scholars who defined wildlife in a broad term as the natural born animals with vertebrates. They included Pieces, Birds, Amphibias, Reptiles, and Mammals (Chumpon Ngampongsai, 1978:2).

Wildlife Definitions by Law

Wildlife according to Reservation and Protection Act of 1992 covered "Lands and water animals, birds or insects that were born naturally and lived in the forests or in the water including eggs of wild animals, excluding the animals being used as

carrier and those that were born from such animals." According to Wildlife Reservation and Protection Act of 1992, Wildlife definition consisted of these contents (Chumpon Ngampongsai, 1978:2):

1. All animals, both land and water creatures including birds or insects were under the Protection and Reservation Act of 1992. The reasons for including insects could be their high prices, such as, butterflies that facing the extinction from being taken out of the natural habitat that in turn effected the continue existence of other animals depended on the insects as their main diet, such as, birds and lizards. Therefore, there had been an urgent needed to protect animals, such as, insects.

2. By nature, those wild animals had been born as land and water creatures. According to Wildlife Reservation and Protection Act of 1992, the classification of wildlife and non-wildlife depended on the natural habitat no matter how they had been raised as household pets or wild animals. Those wild animals still possessed wild instinct, such as, tigers, bears and deer. They were different from cats and dogs since the latter had been born and raised as domestic animals that always familiar with human presence.

3. Certain wildlife had been excluded from the Reservation and Protection Act of 1992, those were wild animals used as carrier according to Animals Carrier Act of 1939, such as, elephants, horses, cows, buffaloes, and mules that needed the identification cards including the offspring of those animals to be used mainly for work, not for other purposes.

Wildlife Definitions according to CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora)

The convention had initiated from the ideas to control animal trading since 1960 due to excess hunting and trading of animals without actively control, such as, African elephants, rhinoceros, and many other animals that which were unknown or extinct from the world. The International Union for Conservation of Nature and Natural Resources (IUCN) which was one of the organization under the United Nations had held a conference at Washington D.C, The United States of America in

1972, and 1973. Total of 21 countries signed adoption of this convention (Chumjet Kajanakaesorn, 1996:17).

Key issues of the Convention

To control the export and import of flora and fauna species as listed in the account number 1,2,3 of the Convention(Manop Laoprasert: no printing date):

1. Species attachment in the account number 1 have been prohibited from the trade except in special cases. Since those animals were nearly extinction that must receive permission before entering import the country, accompanied with the export permit from the export country. It must be under the careful consideration whether or not those plants or animals could survive. It was considered illegal act for disobey such Act. These species are Fresh water crocodiles, Salted water crocodiles, Asian elephant, and some rare orchids.

2. Species attachment in account number 2 were allowed for trade since they had not been nearly extinction but needed closely control to avoid damage or reduction of those species. The export country must obtain the export permit and guarantee that each shipment would not threaten the existence of that species, such as, Parrots, Pangolins, Nepentheses spp plant.

3. Species attachment in account number 3 had received protection in each country but also were under the protection of Charter countries as well. The export permit must be accompanied for the export with the letter guarantee that such export would not damage their existence under their natural habitat. These were such animals as Black Buck in Nepal.

CITES convention had given the meaning of wildlife animals under the following terms “Specimen” means (1) Live or dead animals (2) If they were animals as specify in account number 1 and 2, they could covered any parts which could be identified as the species or sub species as referred to account number 3 in the CITES convention as presented by the existence of that species in that states and were under the severe threat that should receive protection between countries (Pradit Chareonsuk, 2000:11).

Wildlife meaning from academic, legal and CITES perspective could be summarized as the consideration of Physiology, Natural habitats, and Ecology as a basis for giving protection to those animals including domestic animals that had been sent back to the wilderness. By law, it also covered the carcass and products from carcass for commercial. According to CITES, Wildlife referred to wild animals or plants in account 1,2,3 that had been under the agreement between countries to provide protection or control that could be seen as nearly extinction, rare or should be under the protection between countries.

In this research, wildlife had been defined as all animals including birds, mammals, reptiles that had been seized from as the evidences and had been given to Pang-nga Wildlife Breeding Research Center as specified by the Wildlife Reservation and Protection Act of 1992.

According to Wildlife Reservation and Protection Act, Wildlife have been categorized into 2 types.

Reserved Animals

Reserved animals according to Wildlife Reservation and Protection Act of 1960 were defined as rare animals. They were 9 species : One horned Rhinocessos, Two horned Rhinoceros, Kuprey , Wild Water buffalo , Eld's deer , Serow , Hog deer , Schomburk deer and Goral. It was later revised after finding that some rare animals were missing or unfound according to the Act of 1992. Additional 7 species were added which allowed the hog deer to be under the protected wildlife since as they could be bred and reproduced as well. Total 15 wild animals were received reserved under the Act of 1992.

1. White-eyed viver martin (Pseudochelidon sirintarae)
2. One horned Rhinocessos (Rhinoceros sondaicus)
3. Two horned Rhinoceros (Dicerorhinus sumatraensis)
4. Kuprey (Bos sauveli)
5. Wild Water buffalo (Bubalus bubalis)
6. Eld's deer (Cervus eldi)
7. Serow (Naemorhedus sumatraensis)

8. Schomburk deer (Cervus schomburgki)
9. Goral (Naemorhedus caudatus)
10. Guruey pitta (Pitta gurneyi)
11. Crane (Grus antigone)
12. Marble cat (Pardofelis marmorata)
13. Tapir (Taprius indicus)
14. Fea muntjak (Muntiacus feai)
15. Dugong (Dugong dugon)

Protected animals

Protected animals referred to wild animals that were defined by the appeared in regulations of the Ministry and were not classified as protected animals as category 1 or category 2 according to the Act of 1960. They had been divided in 7 categories: mammals (189 species), 181 items of birds (771 species), 64 items of reptiles (91 species), amphibian 12 species, fishes 4 species, insects 13 orders, and invertible animals 13 orders. Reserved and protected animals had been prohibited from hunting, taking possession, import and export, excepted when they are being exempted by the rules and the regulations of the government, having an approval by Director General. For instance, for survey, for academic research, for wildlife protection, for general zoo operation, and one has to comply with the regulations specified by the Minister with an approval from the committee. Any non-compliance would be punishable by law (Sawas Wongthirawatr, et al, 1996).

Wildlife Values

Wildlife are resources which could be reproduced and be beneficial for human both directly and indirectly.

Consumption Value: As for consumption, for instance, deer, pigs, bulls, cows, various birds, antler, etc. Some had been used as medicine, for instance, rhinoceros and deer's antter, skull of the mountain goats. Based on the certain beliefs that some organs of wildlife will increase one's sexual energy, for instance,

those in tigers, bears, cobras, monkeys. Some wildlife had become household pets, such as, goats and rabbits.

Economic Value

1. Trading of animal parts, for instance, skin (crocodiles, snakes, python, water monitor).
2. Selling of cute and beautiful wildlife, for instance, birds, monkey, gibbons, squirrels, etc.
3. Incomes from seeing wildlife whether from the open or closed zoo that could generate large annual income from domestic and foreign tourists.

Ornamental Value

Some wildlife's organs may be useful**,** such as, skin for handbags, shoes, handles while horn and bones could be carved and made into necklaces, knives handles, tools handles among other things.

Scientific Value benefit through research in sciences and medicine have been successfully done with animals, for instance, rats, rabbits, monkeys, horses, before actual application with in human. These had been true in pharmacy and medicine in order to test for the effectiveness of the medicine, vaccines. The study on the behaviors and living conditions of some animals have been imitated by human for new invention in technology, for instance, an invention of airplane as being copied from birds.

Recreation value by roaming around both open and closed zoo to see wildlife in their habitat in the Protected areas could bring out the colorful and beauty of animals whether it was their sound or actions that should decreased tension and brought peace.

Benefit from wildlife

1. Pest control for plants and human, such as, birds eat insects and worms. Therefore, birds hunting in large numbers could increase the damage to nature and human property.

2. Forest enemy protection such as insects and worms before they could destroyed the roots of the trees.

3. Seed germination through birds and insects that went from one flower to another.

4. Forest plantation by some animals helping to spread grains, such as, birds, bats, monkeys, and cows

5. Making the soil fertile from dead animal carcass or its waste that could make the trees growing healthy.

Politic: Wildlife could be exchanged as gift between the leader of the countries, for instance, China has given the Pandas to the United States of America as good political gesture (Wisoot Puengchuen, 2001:103-114).

Currently, wildlife population has been decreased and some were almost extinct. Therefore, there had been passing of certain laws and international agreement to protect wildlife. People have realized how importance wildlife to human not only to the environment, but also for consumption, ornaments, incomes, medicine, and research issues for human. As for this research, the researcher perceives the importance of wildlife to ecosystem as well as human.

2.2 The Ecological value of Wildlife

Wildlife ecology (Tawee Nootong and Anut Wongchumyen, 1997:7-14), ecology had been rooted from Greek word, Oikos as homes or living place and Logos referred to education. Thus, ecology was meant for education or knowledge of living place. This included the relationship between each other, between living things and living environment. This had been called Ecosystem. Structure and

elements of ecosystem, such as, sunshine, air, water, soil, minerals and temperature were the element of living and non-living things.

These elements had their function differently but associated in the form of energy rotation and food chain. Thus, another meaning of ecosystem could be element and function of element that were comprised of the structure and food in order to keep alive and keep balancing the ecosystem.

Ecosystem could also mean the association of the living things in any one place and its relation to living environment. As in a pond, we find both plants and animals that could adjust themselves to the surrounding environment that varied from each pond. Wildlife represented natural resources that could be reproduced and had relationship to their various surroundings in their environment within limited areas. Structure of plants, problem in physicality, biology, climate, process of natural evolution, co-living, competition, etc.

These were factors related to basic ecosystem in form of reservation or management of wildlife, in relation to the living things and to other wildlife themselves, or between plant to plant, or between animal to plant. In order to keep balancing nature, the association between the need of foods among living creatures represented a rotation of energy in the society. It had starts from green leaves get energy from the sun with other materials, the plant grows and animals eat these plants, the energy had been transferred to animals. There are other animals that were predators and on the top of food chain were humans. This “food chain” in nature could divide the producer from the consumer in steps. Producers would be in large numbers and consumers would be decreased.

Last stage of consumers would be least. Energy to subside during the cycle of food chain. Therefore, wildlife exploitation must consider the principle of ecosystem, especially in the growth of animal population since the increase or decrease of those population depended on the surrounding factors. The ability to reproduce and extended species including factors resisting to growth, and factors creating dead or happiness to wildlife must be taken into account. Thus, wildlife reservation and management for use would have to be taken into considerations through the surplus of carrying capacity for durable and extend usage. In addition, there must be a consideration on gender and ages.

Wildlife in ecosystem functioned for the benefit of surplus production had been accumulated in plants, namely, consumer or heterotropic. There had been subdivisions into different levels, for instance, herbivores were animals that had developed their digestion system for changing the stored energy from plant tissues to its own tissues. They were insects, rabbits, rats, squirrels, deer, bulls, and elephants. This group had been the most important part of the ecosystem, they could be considered as a key to food chain/life plant. It was the place to store energy that could be drawn for future used and food substance for plant in rotation. If there had been none of these animals, energy and food substance would be stored too long in plants and there should not be any rotation that could disturbed the ecosystem. These animals must develop their special digestion system. These included ceacum, bacteria, omasum, and abomasum. Next division was carnivores as second level consumer, third level consumer, omnivores, scavengers, and cannibalism.

Ecosystem was meant for living things in one place with relation to the surroundings. It could mean the relationship between wildlife themselves or between plant and plant, or wildlife and plant. Ecosystem created balance in nature. Therefore, the purpose of this research was to study the needs of tourists at the Center for the knowledge on wildlife and their importance to ecosystem and to human.

2.3 Wildlife and its behaviors

Most wildlife population would group together with social management. Those groups that lived separately would spread evenly. Social organizing of wildlife were different based on different behaviors as per type, gender, and age of those wildlife with surrounding change as a key. Invertebrate animals would stay together in large numbers, while vertebrate animals could be isolated and spread into wide areas. Different behaviors of wildlife were under the observation, for instance, growth behaviors, feeding, reproduction, young rearing, grouping, competition, surrounding, escaping or avoidance, etc.

The living of wildlife had several related factors, namely, natural wildlife need their survival factors. Social structure of animal population is key element in animal living. Same animal would be born with innate behaviors that entirely different from other animals. Behaviors of same animals were different due to gender, age, and their own experiences. Some wildlife may express their conflicted behaviors easier than others, due to difference in genes and social relation.

Environmental surrounding, such as, water, sunshine, soil, temperature, food, and society (mates, groups, herds) both in physical and biological have influenced the lifestyle and behaviors of wildlife

This research had attempted to study the needs in tourists to know the living and behaviors of wildlife in order to know which media pattern could best convey this information to tourists.

Intraspecies Relationship

Wildlife behaviors arranging as a group could function in 9 systems as follows:

1. Behaviors on water drinking and food taking
2. Behaviors of wildlife that could live in the appropriate surroundings in order to avoid the danger
3. Behaviors on competition, conflicting, losing, avoiding enemies, or self-protecting
4. Behaviors on the reproduction or mating
5. Behaviors on care-taking to the same kinds of animals such as infant rearing
6. Behaviors on attention-gaining or assistance
7. Behaviors on gestation
8. Behaviors on grouping or herding
9. Behaviors on environment check by sensory organs depending on wildlife physical.

The behavior of the same wildlife will also be important for the study, for instance, competition , socializing, sexual relation, and family relation.

Interspecies Relationship

Relation of different wildlife possess a variety of characteristics which can be categorized as follows: (Tawee Nootong and Anut Wongchumyen., 1997:20-21)

1. Neutralism: This was non-association of the different wildlife that coexisted without interfering with one another. For instance, trees and birds.
2. Competition: Competing or competition could take place when 2 population in the society needed the same environmental factors. For instance, they wanted to eat the same thing, to live in the same place, etc. If factors were not adequate to serve the needs. Severe competition would take place that may impact the increasing numbers of either group or both.
3. Mutualism: In this association, different animals could coexist and benefit each other.
4. Protocoooperation: This had been a supplementary relationship, though some animals lived separately, they could still survive on their own.
5. Commensalism: This was the relationship whereby one party gave without any benefit loss, whilst the other only took without disturbing the host.
6. Amensalism: Different wildlife when living together had not done any damage but one party may lose benefit to another.
7. Parasitism: Different wildlife lived together, one would lose while other would gain benefits.
8. Predation: Different wildlife with one party gain the benefits and the other loses, a relationship of predator and prey

Studies on wildlife behaviors have had more to study. Some behaviors took place in animals themselves or they are born with animals. Some are from instinct. As for social behavior, all types of animal want to live in a society with relationship to other members of the same species or different species. Various behaviors

showing among animals for survival and reproduction, expression in group, family, mates, or area coverage, in an aggressive or predominant way.

Behaviors of wildlife in ecosystem

Study of wildlife is necessary to understand the basic knowledge on some wildlife behaviors. These are habitat, egg-laying place, place to feed the youngs, etc. Area coverage for animals can be clarified as follows: (Tawee Nootong and Anut Wongchumyen., 1997:22-24)

1. Home range: This has been the area for animals or animal group population to seek for food and to do daily activity. They may need something necessary for their living or for their protection. Home range might have some competition for protection or may not. Upon being invaded, coverage area will be in different size, depend on types of wildlife, their gender, ages, food, habitat, or seasons.

2. Territory: This has been the area covered by animals that was being protected for one's own living space. Upon invasion, there will be protecting, chasing, or impeding act so that other animals can not get into the area, for instance, an area of reproduction, for nests, or for sleeping place, etc.

3. Critical or key areas: some areas of living have water resources, food resources, or key mineral sources., etc

4. Indicator species: any living stuff in the area with indicator for the quality of that area can tell how fruitful the area is for living.

5. Migration: is a two-way moving for wildlife species or group of wildlife population. They normally do as annually migration. There are emigration and immigration. Animals would contemporary leave their areas to seek food, to lay eggs, to breed the young, or when a crisis gets into normal situation for living

6. Dispersal: the case when wildlife leaves their living areas permanently in order to find more appropriate places to live. For the new places, the dispersal would take place when animals are not fully grown up

7. Homing: The ability of wildlife to return home from distance. An instinct for homing should be studied in details

8. Carrying capacity: The numbers of animal that could live in one area being managed so as not to deteriorate or destroy the area

9. Limiting factor: Referred to any factor which controls or limits the growth of wildlife in terms of climates and living stuff

10. Ecological niche: A duty of variety of living stuff to live together with different roles and duties. This can be known by distribution, adjustment, and behaviors of animals

11. Habitat partitioning: When there are various wildlife living in the same area by natural selection, there is a support on adjustment more. This makes the similar species to avoid any competition that may take place. Differences in living and adjusting of wildlife or between types of resources are called ecology separation. The result is habitat partitioning or can be explained as adaptation.

Wildlife behavior in ecosystem takes place among wildlife could be divided into several groups, for instance, eating, competition, or living together behaviors. All of these indicate many relationships of wildlife to ecosystem of how important they are, of how they can impact human beings, should there be an imbalance. This study is to know the importance of wildlife behaviors to ecosystem in order to transfer the knowledge on wildlife behavior in tourists.

Relationships between wildlife and environment

The increase of population numbers makes an environmental problem and the loss of natural balance caused by damage. The result of natural damage is a damage to human beings in the future. An imbalance towards natural resources has changed key elements for the world, from soil, water, air, energy, sunshines, noise, etc.

The word “environment” means things around us, they can be natural environment as soil, water, air, etc. or they can be artificial environment as cars, houses, buildings, etc.

Wildlife and environment are related both directly and indirectly. Wildlife may get impacted from environmental damage. At the same time, environment has

been impacted from environmental damage as well. In some cases, both wildlife and environment may get impacted from the same thing. For instance, from cutting of forests by human beings usually impact wildlife and environment. But severity of impact may be different. In fact, wildlife may get impacted less from human beings than environment. As wildlife lose their area for food and water seeking, as well as for habitat. But environment will get more impacted, for instance, changing climate, changing temperatures, air pollution, water pollution, soil quality, and the use of deteriorated lands.

Relationship between Wildlife and Man

Human had been associated with wildlife resources for a long time since old ages of not less than 2 million years past. 99 percent of survival in human beings depend on plants which are their food as much as they can find, as well as hunting for meat. From the relation between human beings and wildlife, it had changed at all times until some species were extinct or rare. Human beings then determine the method of reservation and management so that wildlife can be further useful. Usefulness of wildlife can be divided into the followings:(Tawee Nootong, 1988 :10-3)

1. Wildlife as human's food: Meat of wildlife has been the source of protein which is important produces gained from animal residues and can become human food, animal food, fertilizer, medicine, clothing, glue, soaps, bombing material, wool, as well as other ornaments. Countries in western Africa had used 73 percent of meat from wildlife as food (Asibey, 1974 cited in the seminar on Thailand Wildlife, 1988:13-2)
2. Use of animal residues and their produces: there are a variety of animal residues and wildlife produced that were used for the living.
3. Wildlife raising for beauty: There had been many types of wildlife which human preferred to breed, training to speak, medical test, pharmaceutical test, they are those rabbits, dogs, pigs, birds, turtles, or fishes
4. Use of public zoo: zoo is the place to gather various wildlife in cages or enclosures in order to study for species extension and for relaxation

Wildlife and Tourism

Tourism had been one activity that generated income of the country. Most country aimed to increase income from tourism by Wildlife Viewing. Most to tourists went to visit place in different countries, they usually spent money which in turn increase the local income. Wildlife was considered as the natural resource that had been designated as the tourist attraction. Wildlife in Africa lived in the National Park or Wildlife Reservation that quite well known regarding animal's living. Therefore, wildlife had contributed to tourism since it represented the natural resources that attracted the tourist's attention.

The situation of tourism in many countries, Africa, many tourists would like to see wildlife which had brought the country tremendous income. Most tourists had visited wildlife in the natural habitat at the National Park or Wildlife Reserved areas. In Asia, wildlife in their natural surrounding was quite difficult since most large animals out hunting at night. The forest was dense and covered with big trees and traveling could be inconveniently done through mountainous range. However, many countries had developed wildlife tour, such as, sitting on the elephant, seeing wildlife in Napal, such as, tigers or rhinoceros or building the tower to sight the wild animals at night. In Thailand, most tourist pay visit to the Historical Monuments or Objects, such as, Temples or Cities with many Historical Arts or other nature attraction, such as Waterfall. In America or Canada, most people had paid preferred camping. Most forest walk consisted of group of people who actually interested in watching the birds or mammals.

Wildlife was considered natural resources that could be replaced. However, it started to decrease from many factors, both nature and man. The natural disaster, such as, reduction in the foods, flood, wildfire and human disaster, such as poaching, meat for consumption, clothes and ornaments, raising which could cause big reduction in its population and drove it to nearly extinction. To preserve wildlife needed collaboration from all divisions, public as well as private sectors and at the

same time promoted for wildlife knowledge and importance to ecosystem, Nature and Environment.

In another words, wildlife had been associated with human in many ways that was quite important and giving them benefit. However, there had been the drastic reduction and some species were nearly extinction resulted from human and nature, especially human that caused rapid decreasing in numbers. This study was to learn the need of tourists regarding wild life and its behaviors to derive at data that could be used for the formulation of media. It would provide knowledge for tourists or interesting parties to realize the importance of wildlife to ecosystem and human and also the effect to ecosystem when there was the reduction or extinction in wildlife.

2.4 Pang-nga Wildlife Breeding Research Center

Wildlife Breeding Research Center is under the management of The Royal Forest Department with the concept of HRM Royal Patronage wildlife breeding, and the speeches of the King and the Queen of Thailand so as to breed more wildlife and reintroduce to nature for keeping ecosystem in balance, providing foods for people and extra income for the family. With the wildlife reservation and protection Act 1992, private sectors are allowed to set up wildlife breeding.

Wildlife Breeding Research Center must prepare information, guidelines, as well as methods for wildlife breeding, in order to advise the public further. The Center is responsible for administration, planning, controlling, researching, and operating concerned with wildlife breeding. It also made available on the life story and biology of wildlife, improving wildlife genetics, food and nutrition, disease, management of wildlife population by reintroduction. Besides, bringing them out of wilderness, utilization of wildlife, development of tools and equipment, habitat improvement, in order to increase efficiency of carrying capacity, breeding of wildlife promotion as well as proceeding with wildlife to be consistence with National Economic and Social Development Plan, keeping in wildlife which are seized and donated, giving advice and recommendation, care-taking of public zoos and wildlife breeding research centers, as well as helping and solving issues on

wildlife were the duties which could be divided into following tasks: (Chamnan Kaenchan, 2001:39-41).

1. General administration: Responsible for general paper works as well as safeguarding the buildings

2. Wildlife breeding research: Responsible for breeding wildlife that are rare and nearly extinct, economic species research, as well as analyze. Information on wildlife breeding, control, care-taking seized and donated wildlife.

3. Wildlife Food: Responsible for study, research, analyze on food and wildlife nutrition for each animal species. Study food in nature as well as adaptation to wildlife, coordinate, and exchange knowledge and understanding on food and animal nutrition with to governmental and privates.

4. Wildlife disease: Responsible for control, protect, maintain, diagnose disease of wildlife, disease protection in wildlife, physical control of wildlife, use of chemicals, prepare medicine and protection equipment and wildlife treatment, coordinate, exchange information and understanding on protection and treatment of wildlife with related to governmental and privates.

5. Promotion the breeding and reintroduction: Responsible for study the life history, biology, wildlife stuff, promote the conduct of wildlife breeding to the public correctly as per academic content, study information on influence of environmental impact wildlife, research, study, and plan for information analysis and evaluation on, reintroduction coordinate with related to governmental and privates for knowledge exchange and understanding reintroduction.

Pang-nga Wildlife Breeding Center was located at the area of Na Kok forest, Tambon Takdad, Amphur Muang, Pang-nga province. Most of the area contained of lowland rainforest, surrounded by mountains from east to west. Such forest were tropical forests with natural fruitfulness appropriate to be reserved watershed which benefits to agricultural production and available food , water and habitat for various species. The area declared as National Reserved Forest Na Kok in 1967 Ministrial Regulation No. 229 (1967) under The Nation Reserved Forest Act 1964. The area is 2,821 rais in 1994, Mr. Preecha Rakkit, the governor would like to set up bird

garden and wildlife breeding center in the area, it is only 7 kilometers far from the town and suitable for promotion and best for tourism opportunity and natural study for Thais and foreigners, also to conserve Na Kok forest area.

In 1995, Royal Forest Department emphasized the importance of the land , has the permission to set up Pang-nga Wildlife Breeding Center covered 1,573 rais and In 2000, the name had been changed to "Pang-nga Wildlife Breeding Research Center" by the function and under control of National Forest and Wildlife Research Division , Office of Natural Resources Conservation, The Royal Forest Department.

Objectives

1. To preserve rare and endangered species.
2. To study and research on wildlife breeding which are of economic importance
3. To be the center for knowledge of wildlife for school children, students, general public, and tourists
4. To serve the special projects in relation to wildlife, for instance, the reintroduction project, animal farm demonstration, animals being seized or donation

.

Plants and Wildlife

Forests are tropical rainforest and lowland rainforest and healthy. There are vast of important plants as well as a variety of birds, mammals, reptiles, and amphibians.

Wildlife Raised up at the Breeding Center

Mammals, such as Asiatic black bear, Malayanblack bear, porcupines, gibbons, monkeys

Birds, such as, Wild bird, Pheasants, Peacocks, Eagles, Owls

Reptiles, such as, Turtle, Soft-shell turtle, Water monitor

Wildlife's Pang-nga Wildlife Breeding Center are important to ecosystems and environments including economics, as well as being the sources of education and research, in order to gain knowledge on wildlife to school children , students, general public and tourists interested in wildlife .

2. 5 Tourism and Tourists

Dr. Charnwit Kasetsiri (1997:2) stated that tourism is the travelling, without travelling, there is no tourism. While Thailand organization on tourism is called Tourism Authority of Thailand that in England it was known as British Tourism Authority.

The actual meaning of tourism has been defined by World Tourist Organization or WTO, a unit of United Nations in 3 ways:

1. Traveling from the residence to another place temporarily.
2. Traveling is voluntary
3. Traveling for any purpose Intend Traveling but not for occupation or earning income Thus, "tourism" has a wide meaning, not only travel, recreation, enjoy, as mostly understood by majority of people. Travel for seminar, knowledge-seeking, sports, business, as well as for relative visits, are all tourism (Seree Wangpaijit, 1987:2-3)

In the old days, tourism was the activity only for the old groups due to expenditure and traveling was not as convenient as currently. Tourism has become mass tourism with no limit on gender, ages, and economic status. Supporting for mass tourism includes:

- Higher education to arouse human interest and eagerness
- Progress in transportation made it fast and more convenience to travel
- Modern communication technology had helped people to know more about the world and motive them to experience by themselves
- Media types, such as, radio, television, magazine, video, movie, poster, brochure
- Higher standard of living with more purchasing power
- Crowded cities which made people want to go back to nature with clean air and beautiful new surroundings

At present, there had been many conveniences so that people could have more

leisure time to relax. To conclude, people tended to travel that made tourism quite important for economics, society, and politics. Since Thailand has been known for her beautiful natural scenery worth to study. The Tourism Authority of Thailand has defined tourists as follows: (Wantana Suracheevin, 1986:13)

Tourists referred to those people who had traveled to places that were not their permanent place of resident on a temporary basis. Their objective was to rest, visit relatives, study for knowledge and religion, contact business, take part in conference, healthcare, or other operations, without receiving any wages while doing it. Some tourists had stay overnight while other chose not to.

Tourists were travelers whose objectives excluded working and studying. They were neither locals nor residents who stay to study in that place. They had to stay overnight at least one night.

Excursionist were those who visited a place without staying overnight.

Types of tourists

Types of tourists or grouping of tourists were consisted as follows (Ratapon Chaiyarat, 1993:18-21)

1. Personal Traveling

Traveling both domestic and overseas that was arranged by the tourist for himself or the family or himself and his peer group. They may use their own cars or use rented bus. They scheduled their entire trip, places to go, when and where to stop for sightseeing or making own changes as desire. They found own services along the route and never depended on the touring agency or only used them in some area.

2. Tour Group Traveling

These were tourists who had joined the group without prior reservation. They must pay certain sum of money to the tour agency that would arrange for transportation to the hotels as well as provided other services. Itinerary was being fixed and tourists did not need to do anything else. This type of visit, tourists would pay lesser amount but may lack certain freedom in terms of where to go and what

they want to do in limited time. For some person, this could be a big rush. This type of tour was called “Group tour”. However, touring agencies may arrange for a tour in a small group of 2-3 persons or 1 family. They book air ticket, reserve hotel, seek for tour guide, etc.

3. Traveling Duration: According to the World Tourism Organization, this type of traveling could be called excursion.

3.1 Long excursion was a cultural tour or educational tour. It usually referred to staying at one place for weeks or months. If it was a trip for fun, time period may be longer, but changes could occur on places, for instance, a time period of 2-3 months for 11-12 countries visit in Europe.

3.2 Short excursion: It may last 2-3 days or up to 10 days. Excessive Number of excursionists could impact economic. However, in social sciences, it had been quite benefit to those who had limited chance to travel on a long-term basis. Short excursion has become very popular nowadays.

3.3 Excursion: by WTO, excursion means one-day trip which should not exceed 24 hours. There had been no overnight stay. This was special for those living around border line, especially when there had been exchanged rate or tax rate which would yield benefits to one party who wanted to cross the border in order to purchase personal stuff. Excursion was important for domestic travel.

4. Tourism was categorized according to type of vehicles used

These were air transportation travel, sea-train-personal car-bus travel in case of borderline travel, for instance, caravan in which trucks were gathered in groups with 3-4 passengers each truck. They may be friends, family members, etc.

5. Traveling yielded both positive or negative experiences

International travel was important since it could impact the trade balance of those countries. They may be positive or negative travels. It would be positive when the foreigner spent currency in the designated countries. Outbound travel was however on a negative side if their residents travel overseas as the foreign exchange would be more spent overseas.

6. Package tour

At present, tourists were preferred package tour which meant that they would pay certain amount of money to a touring agency for travel cost, lodging cost, and food. However, package tour should be included entrance fees for visiting places. Besides, tourists have had crucial role in solving problem of wildlife since they had been visited many places with natural beauty and wildlife. If the tourists had failed to understand the value of wildlife, the number of wildlife could be reduced or incorrectly supported, such as, raising wild animals as domestic pets or wildlife consumption. Eventually, it may be reduced wildlife population until reaching the critical level and finally extinction.

Seeing the tourist's value, the researcher would like to study Thai tourists without any group separation.

2.6 Media Types

Medium or media came from a Latin word "between". Media was meant for a carrier that brought in the messages from the origin to the receiver. Media of communication currently used were movies, television, radio, sound equipment, pictures, projected stuff, and printed media. When being used for instructional purposes, they were called teaching media.

Format referred to physical form that could be seen or heard, for instance, tape cassette was presented through sound while printing materials in words, and movies in film of 35 millimeter, 16 millimeter, or 8 millimeter.

Slides

Slides had been known for over 300 years ago. Started from drawing pictures on a glass and then put on a projector which was then called Lantern, in size of $3^{1/4}$x4" and is still in use nowadays in theatres. Lantern slides covered with some chemical used in photography. Kodak has later produced slide film in size 35

millimeter which one could get a slide as actual pictures. They were in size 2” x 2” most preferred in the market.

Set of slides may be called slide program and if there is sound equipped, they will be called tape slide or slide equipped with sound. Slides can be short or long, in 10 or 20 or even 100 slides. Slides could be used for publicity, guidelines, stimulating, entertaining, recommending as well as recalling previous memory. Slide equipped with sound would be provided in descriptive words that could be well understood by the audience (Warin Rasamiprom, 1988:86-87).

Benefits of slides

1. Motivated and aroused the interest.
2. Able to see both picture and sound in the same time as the continuation of the stories for better understanding.
3. Created memories that could embed and endure longer than using only media.
4. Slides with music in the background could be used for self-learning, small or large group learning.
5. Slides could be repeatedly seen to get more attention longer than other type of media that also created the sharing of emotion.
6. Slides could be duplicated and distributed to other educational institutes.

Interpretation Sign

Interpretation sign had been used in the exhibition with content of pictures, material, letters, in order to create new knowledge and new information to attract audience. It could also stimulate interests for further detailed study (Chantra Masuwong, 1997:94).

Interpretation sign represented teaching media that combined all other media together, for instance, wording card, graphs, statistics, real materials, 3-dimensions stuff, etc. For the bulletin board itself, it may be made from various types of paper, wood board, and other decorated stuff (Warin Rasamiprom, 1988:56).

Interpretation sign may be different from other announcement boards since the latter contained only one single message mostly while interpretation sign was composed of pictures, materials, or stuff that had been shown as headliners and some short descriptions. The aim was to show the result, short messages on activities of certain institute, presentation for public relations, and information distribution. .

Interpretation sign at institutes could be permanent ones or could be moving ones, as well in different postures.

Benefit of Interpretation Sign

1. They could actually benefit teaching and learning for visibility and understandable.
2. They could arouse interests in alphabets as classified by group order or by group pictures as shown on the bulletin board.
3. They could save time and display materials quickly.

Leaflets (Surasit Wittayarat, 1999: 55)

Leaflets were those printed materials with specific contents on specific issue, for instance, announcement, report, etc. Such message tended to provide information to specific target group. The purpose might be for advertising or public relations.

Another definition of leaflets referred to confidential messages quite different from goods and services advertisement leaflets or an announcement from one of the government divisions.

Leaflets may be one page thus the message has to be complete within the space provided.

Folders

Folders contained printed matters in one-page, having the content related to an organization for tourists.

Content was the form of specific news presentation as introduction to summarized the main point (Prachid Thinbutr, 1996:16).

Folders were similar to leaflets that information was printed on one sheet, one side or two side. They could be folded into 2, 3, or 4 times. The aim was to publicize the business in more details. There were more graphics and colorful pictures on leaflets. (Anant Anantachot, 1988).

The most preferred size has been A_4 or 8.25" x 11.75 " to fit the purpose. The quality of paper should be considered depending on its use and the content. For colorful photographs the paper should be in good quality.

Slightly low quality paper could be used for temporary work. Its aim was to provide information or to persuade readers to understand or agree with the convey message instantly. Thus, message and photographs must be brief and concise, enabled to convey the right messages ((Prachid Thinbutr, 1996:16).

Portable Video

It contained both photographs and sound as similar to movie, but more convenience to operate as well as easily produced in lower cost than the movies.

Videotape or generally known as television tapes or picture tapes. Video functions the same way as tape cassette, for a record of pictures and sound in electronic magnetic tape, it can be deleted and re-recorded as tape cassette (Supatr Songsaengchan, 2000)

The system for sending signal in wireless form and not on air is via portable video or desk video. It can be played back and can choose specific program as wish. The favorite use is videocassette and videodiscs (Warin Rasamiprom, 1988:131). The use of video is to enlarge the pictures clearly via lenses of camera. It can be used any time and can replay the section as needed. One can record their voice on the videotape. Videotape is easily produced and save production times than that in movies or other similar media.

Tape recording

Tape recording is a type of tools for teaching and learning for sound recording which can be re-played. For instance, music sound, speaking sound, etc. It can be

operated same time with movies and slides. It has been the best possible way to convey messages to the audience (Chalongchai Surawattanaboon, 1985:351)

Tape recording is a media type which facilitates the teaching and learning in terms of listening and language skills, as well as other step-activities, etc.

Tape recorder is made from plastic in the type of acetate or polyester. The front is called “base” while another face is covered with oxide powder or Chromium oxide which is non-glossy. It is called the magnetic tape. One could start and stop tape recorder any time they want to and they could eject the tape cassette after finish using the tape (Supatr Songsaengchan, 2000:30).

Among 4 keys communication, source, message, channel/media, and receiver, media has been the most important element in determining the success of the communication. Media create the knowledge, the attitudes, and behaviors in the desired way by the sender to the receiver. Media or channel of communication combined the sender and receiver of the message. Messages flew from the source, person or institute alike, to the receiver, as well person or institute. Since then, “Media” has been used in a wider and more different terms.

Nature Interpretation

Nature Interpretation has become an important instrument for giving knowledge and promoting the understanding among the public. This would support the maintenance of social inheritance by the general public. The learning process took place through the following 7 steps:

1. Giving an opportunity to an individual to know his social inheritance.
2. Enabling individual to understand the reality of relationship and the dependency between himself and social inheritance.
3. Persuading people to get interested in the values of such inheritance that could benefit the public.
4. Demonstrating to the public of how they could get the benefits, both directly and indirectly, by stressing on the objective
5. As soon as the public felt appreciation, they would start to treasure the inheritance.

6. General public would be more careful not to damage such inheritance.
7. Finally, the public would collaborate to guard the inheritance for longevity in order to obtain maximum benefit or waiting for the public to utilize it wisely in the future.

The activities to convey natural messages should not directly employ the natural interpreters. Instead, components of inorganic elements should be used such as, demonstration center for tourists, books, leaflets, maps, walk way, etc.

Criteria on important nature interpretation

1. Uncomplicated and easily understandable in association with other unique features of each National Forest
2. Persuaded the public for direct and indirect experiences with actual objects or events rather than classroom studied.
3. Using extremely experience natural interpreters to lecture and transmit actual natural events to the public to coincide with certain benefit in order to conserve natural resources. These people must be capable in conveying natural meaning to the public. They must be able to adapt things so as to get the public to perceive the benefits of nature toward mankind.
4. Using information and data gained from research to benefit conveying the true messages to match with the public education, as well as to be consistent with the conservation of natural resources.

The creation and the accumulation of materials for natural way to convey the meaning are then important, in order to support the communication between the tourists with the aim to get them to perceive how responsible and how possessive they are to understand nature, so that the tourists will have a sense of belongings and would then like to help preserving natural values forever (Picha Pitayakajornwutr, 1989)

Sharpe (1982 : 112 –11) stated that natural way to convey meaning aimed at 3 key issues:

1. To build awareness among tourists as well as creating satisfaction and understanding the visited areas and respected surrounding environment.

2. To serve as the instrument for managing the area since it had motivated the tourists to be consciously responsible for the use of tourism resources without an impact to the visited areas

3. To publicize the units and the its image among the tourists that would help to build cooperation in various operations

Types of Nature Interpretation

Wells (1997:13) stated that natural way to convey meaning could be classified into 2 types:

1. Personal interpretation: as the natural interpretation through the natural interpreter. This was the direct interpretation of the meaning of nature among tourists for what they see and touch. This was two-way communication, eg. Interpretive talk, interpretive walk, conducted group activity, and slide talk, etc

2. Non-personal interpretation: without any natural interpreter. This has been one-way communication that required equipment with precision to convey messages to tourists. They were self-guiding trail, exhibition, slide-tape program, signs, labels, tourist center, publications eg newsletters, folders, booklets, etc.

Wijit Awakoon (1991:113) has divided the pattern of media into:

1. The spoken words or oral communication: speaking, lecturing, giving speech, mottos, comments, etc. all had placed quite influence on attitudes change. The posture and emotions of the person made think about the change in behavior guideline according to the purpose of that motto.

Advantages of spoken words were to save time and expenses, possess high efficiencies, create fast understanding, build-up human relationship, and speak with adaptation to fit time and event better than any other type.

2. The printed word: can be divided into:

1. leaflets (one-sheet page)

2. folders
3. pamphlets
4. brochures
5. circular
6. correspondence
7. wall street journal wall news paper
8. bulletin
9. books
10. booklets

Sharps (1982 : 112 - 118) stated that the media or natural way to convey meaning are in 2 large groups:

1. Personal service: by which tourists could contact directly with natural way to convey meaning via a type of media, for instance, information duty, conducted group activity, talk to group, and living interpretation

2. Nonpersonal: Referred to a direct contact by tourists, for instance, audio devices slides, videos, movies, etc. and written material such as:

1. Interpretation Signs: To give direction of places, activities, to suggest, to warn, etc about any actions
2. Labels
3. Printed matters eg leaflets, folders, etc
4. Self-guided activities: natural walk way which is a route for tourists to walk in nature and in natural surroundings
5. Indoor exhibit: in natural forest with exhibitions at tourist center
6. Outdoor exhibition: those signs along the walking path or parking area
7. Tourist center: to facilitate the tourists for their knowledge, understanding, etc.
8. Off – site , off season media : to publicize outside the area

Piyathip Pipitwanichtham (1996:4) stated that media needs area officers to be the middle person in presenting information to the tourists, eg talk, guided walk, guided tour, via cars, boats, horses, elephants, or diving. Inclusive as well is guided activities, especially for program of high risks to the tourists and activities which might impact resources, for instance, slide show, campfire walk, and reception.

Katz and Lazarsfeld (1995 , cited in Wantana Suracheevin, 1998:27) stated that interpersonal communication impacts the way the receivers would changed their attitudes and accept it Thus, people have become important elements in learning process for correct knowledge and understanding. It might as well impact the building-up of attitudes when a person unknown about to that fact.

Media brought in the information from source of sending to receivers in a variety of forms, by words, printed matters, natural media, etc, in disseminating knowledge on wildlife in tourists. There should be an interesting and appropriate equipments and tools in order to make presentation attractive. The study aimed to learn about the needs of tourists on which media or equipment would assist them on gaining knowledge on wildlife to further develop and adjust to fit the patterns for knowledge dissemination among tourists.

2.7 Knowledge and Attitude

Definition of Knowledge

Benjamin S. Bloom (1971:271) stated that knowledge is a thing about remembrance on a particular issue. Remembering method or procedures, or structure, objectives, etc. It is stressed on the psychological process of remembrance as a process to combine on the new set-up.

Dictionary of Education (Good 1973: 325) stated that knowledge is to know the fact and truth, rules and regulations which people receive and gather from their experiences.

Somkanae Pohsri (1995) stated that knowledge referred to acknowledgement of facts, rules and regulations related to mankind that were being gathered and expressed from observation or measurement.

Supaporn Ratanasak (1998) stated that knowledge referred to memory of the learning subjects, both specific and general characteristics, such as, methods, priorities, and structure.

Anant Sukonthapirom Na Pattalong (1991:35) stated that knowledge is a part of Cognitive Domain that composed of knowledge, understanding, bringing into use, analysis, and evaluation. It could be divided into 3 levels:

1. Content knowledge: meaning of words, facts on time, events, persons, and places
2. Method and procedure knowledge: on particular issues , such as, rules and regulations and method/procedures on certain thing
3. Conceptual knowledge and structure: such as in lecturing, values, predictions, or interpretation of what we could see and know on theories and structure.

Prapapen Suwan (1991:15) stated that “knowledge” was behaviors on a basic level. Learners only remembered by seeing or hearing.

Knowledge referred to definition, meaning, fact, theories, structure, and problem solving.

Bloom (1971) has divided knowledge into 6 level:

1. Knowledge
   - 1.1 Knowledge in vocabularies, definition, rules, and fact.
   - 1.2 Knowledge in procedures: rules and regulations, priority, and trend in categorizing, criteria, and procedure.
   - 1.3 Knowledge on content: academic principle and extension of it including theories and structure.
2. Comprehension: Ability to interpret and expand the meaning

3. Application: Ability to utilize knowledge

4. Analysis: Ability to divide into sub units, for instance, analyze the value, relationship, and principles

5. Synthesis: Building a new body of knowledge, for example, message synthesis, plan synthesis, and relationship synthesis

6. Evaluation: Ability to decide values in things as per internal criteria or external ones which are determined

In summary, knowledge referred to acknowledgement on facts, rules and regulations, specific issues by human beings through their sensory organs both directly and indirectly. Stimulants and acknowledgement must be clear and it was rather time-consuming. One's knowledge and satisfaction would take place prior to one's behavior. In case of tourists, they needed to have accurate knowledge on the reservation of wildlife to know its impact to mankind and environment as well as their perception on the importance of wildlife reservation towards environment and mankind.

Meaning of Attitude

Attitudes came from a Latin word "Aptus" which was defined as trend and appropriateness. A person was not born with it but gaining from learning and experiences in certain issues, etc. Attitudes could range from plus to minus.

In English, attitudes referred to the feeling and opinion (Joseph Friend and David Guralink , 1975)

Dictionary of Education (Good 1973: 48) referred to attitudes as the trend or potential towards something, some situation or definition. One should form own feelings and emotions for such opinion. Attitudes could not be observed but emotion could be summarized from one's behavior through words or postures.

Prapapen Suwan (1983:14) had summarized that attitudes were an opinion which was stimulated by emotion. When a person was ready to do something, attitudes would automatically made that person adjust himself either prevent himself from showing his values or help to understand the world around him. Past experiences also helped to create attitudes and determinations.

Theppanom Muangman and Sawing Suwan (1996:33) stated that attitudes were preparation for psychological readiness of a person. It has been summarized of opinion. A personal belief should be aroused by emotion, feelings to be ready to do something as well as determined possibility that he would react towards like or dislike.

Suchart Laoboripatr (2000:25) stated that attitudes were the feelings of one person that could be expressed in words or behaviors to reflect that attitudes. One would have different level of attitudes. Attitudes were serious abstract that created practice without motive or drive. Instead, it represented a scale of readiness to reveal how one reacted towards stimulant (Prapapen Suwan, 1991:35).

Kamolrat Lahsuwong (1981:19) referred to “attitudes” as follows:

1. It was originated from learning and experiences.
2. It gave the indication whether a person’s behaviors were good or bad. If it appeared to be good attitudes, there should be a tendency to gain access or to demonstrate such behaviors
3. It could be transmitted from one person to another.
4. It could change since it had derived from learning or experiences of each person. When a person changed, attitudes would also changed.

Robert Travers (cited in Winai Werawattananont 1989:39) stated that attitudes could be categorized into 3 groups:

1. Affective component referred to the immediate feeling when meeting something either like or dislike, love or hate, beautiful or ugly, positive or negative.
2. Cognitive component referred to the process of analysis with reasons from his own thought and being accepted by a person himself. Type of attitudes depends on one's belief or one's feeling as a key
3. Behavior component referred to one's action, for example, not throw away trash on the street. His affective component or cognitive component would make him realize that such action was unacceptable by the society. The error occurred when " one think and doing the opposite".

2.8 Related Research

Public Opinions and Needs

The study of opinions and needs was the expression of each individual after the consideration and evaluation from the surrounding facts. The method of expression depended on the difficulty level of the related issues. For the need of tourists towards the animal's surroundings in the zoo based on the desire for recreation and learning of animal's life. The study of tourist's opinion who had visited the animals in their natural habitat would provide crucial data to reveal the need and problems of the tourists. At the same time, study opinion of tourists in other zoos with similar surroundings could give useful data for further improvement and design appropriate surrounding for the animals and also provided more knowledge to the public.

Related Documents associated with the Study of Public Opinion and Needs

Research examples from the International Zoo of Wolf and Tymitz had shown the acceptance of the surrounding for Zoo animals by the tourists at National Zoological Park at the United States in 1980, aiming to find the way to improve environment in the Zoo as close to nature as possible. It was done through the

interview of tourists to study their needs. Findings that most tourists came to the Zoo with 2 purposes, for recreation and learning of wildlife in their natural habitat.

For the need in learning, the tourists would like to learn the details of wildlife, birth origin and the importance to nature including animals behaviors and the needs of parents who brought their children to the Zoo for field trips and learning through actual experiences.

The study of opinion and needs of tourists were different according to the purposes of education. Based on the relevant study, such as, Brink who had studied the benefit of interpretation signs in different Zoo throughout England in 1987. The research work of Serrell who had also studied the opinion of tourists towards the animal's name displayed in the Zoo at Brookfield, United States of America at 1990. The results had shown the problems that occurred from using the animal's name displayed which could help to solve the problems for better improvement that would yield maximum benefit for the people. Therefore, the study of the tourists opinion to properly manage the Zoo to fit the public's need was widely accepted in the design and methods of improvement (Paruchvanee Kornisranukul: 2001, 45-46).

For the study of particular animals, few scholars had given appropriate guidelines for the Zoo with tightly packed animals population to select animals matching with the activities of the Zoo and the species of animals that would attract tourist's attention and eager to learn more about animal's life. Therefore, this particular research was aiming for the public need, particularly the type of animals and their natural habitat in order to arrange the animals habitats in order to response to the need of tourists who visited the Zoo.

As for the study of the tourist's opinion towards the Zoo in Thailand, there had been limited amount of work in this area and the results from previous studies had indicated the opinion of the public and tourist's satisfaction in many tour sites. It has helped to reveal the nature of problems and the public needs to find the guidelines for further improvement.

CHAPTER III
RESEARCH METHODOLOGY

The purpose of this study was to determine level regarding to wildlife, media types for learning, tourist's attitude towards wildlife's value at the Pang-nga Wildlife Breeding Research Center. The methodology of this study is described as follows.

3.1 Research Population
3.2 Sampling Group
3.3 Research Instruments
3.4 Analysis of Questionnaires Quality
3.5 Data Collection
3.6 Data Analysis

3.1 Research Population

The population were studied from Thai tourists who visited the Pang-nga Wildlife Breeding Research Center.

3.2 Sampling group

The sampling group composed of 200 Thai tourists aged above 15 years old. The data were collected among those who visited the center on Friday, Saturday and Sunday during August 2003 to September 2003.

3.3 Research Instruments

Questionnaires were developed based on related research studies and other documents regarding to wildlife and tourism. The questions composed of 5 sections:

Section 1. Demographic data: The collected data in this section included age, education level, occupation, source of information regarding to wildlife and tourist's type.

Section 2. Attitude towards wildlife: This section composed of number likert-scale items. The standard scoring was set as follows:

	Positive Item	**Negative Item**
Strongly Agree	5 points	1 points
Agree	4 points	2 points
Uncertain	3 points	3 points
Disagree	2 points	4 points
Strongly Disagree	1 point	5 points

Of the 20 items with the total score of 100 points, 3 levels of attitudes were classified according to the cumulative percent.

Points	**Attitude Levels**
0-69	Low
70-79	Medium
80-100	High

Section 3: Knowledge regarding to wildlife: This section composed of questionnaires regarding to wildlife knowledge of tourists through 20 multiple choices items. Each item contained 4 choices; the correct answer was scored as 1 point, wrong answer or no answer for 0 point. The content included the wildlife living conditions, wildlife in relation with ecosystem, man and environment. Of the 20 items with the total correct score of 20 points, 3 levels of knowledge were classified according to the cumulative percent

Scores	Knowledge Level
0-13(0-69)	Low
14-15 (70-79)	Medium
16-20 (80-100)	High

Section 4: Interest and needs of wildlife information: This section covered the needs of the tourists regarding to information and media on wildlife's living conditions and its importance to the ecosystem. The tourists were asked to rate their interest needs from the most to the least level as follows.

Interest Level	Scores
Most Interested	3
Medium	2
Least	1

Section 5: Interest of tourist regarding to wildlife at the Pang-nga Wildlife Breeding Research Center. The tourists were asked to rank their interest level.

The questionnaires were given to the experts and the Thesis Committee to check for content clarity and validity as well as language accuracy before modify revision. The revised questionnaires were pretest with 30 tourists who were not the final survey. Final the questionnaires were subsequently used in this study.

3. 4 Analysis of Questionnaires Quality

Total 30 questionnaires obtained from tourists during pretest stage were checked for validity and reliability prior to the actual application.

Efficiency of Knowledge Section

Scores were given as 1 for correct answer and 0 for incorrect answers. The scores from the highest 25 percent and the lowest 25 percent of the total respondents

were then arranged into the highest and lowest score groups. Item analysis was performed to find the Difficulty Level, Discrimination Power and Reliability.

The formula for Difficulty Index and Discrimination Power were as follows (cited from Boontham Kitpreedaborisut 1991:87).

Difficulty index $P = \frac{PH + PL}{2n}$

Discrimination Power $r = \frac{PH - PL}{n}$

Given P = Difficulty Level

r = Discrimination Power

PH = Number of respondents with correct answers in the highest score groups

PL = Number of respondents with correct answers in the lowest score group

n = Total numbers of right-answer both in high and low- score groups

The criteria for selecting questions for the final version included the item with the Difficulty Level between 0.2-0.8 and Discrimination Power over 0.2 for actual experiment. The knowledge section were also analyzed for Reliability test using Kudre-Richardson KR 21 Coefficient (cited from Puangrat Taweerat, 1985:124).

Reliability:

$$r_{tt} = \frac{K}{K-1} - \left\{ 1 - \sum \frac{S^2_1}{S^2_1} \right\}$$

Given S^2_1 = Variation of score of each question

S^2_1 = Variation of total score

r_{tt} = Reliability of questionnaires

K = Number of items

$\sum S^2_1$ = Sum scores of variance in each item

Efficiency of Attitude Measurement

Finding the Discrimination Power was calculated using t-test formula (cited from Wichien Ketsingh 1987: 115 **).**

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{S^2_H}{n} + \frac{S^2_L}{n}}}$$

Given

$\bar{X}_H$ = Average scores of the highest score group

$\bar{X}_L$ = Average scores of the lowest score group

S^2_H = Variance of the highest score group

S^2_L = Variance of the lowest score group

n = Numbers of respondent in each group

Steps for Relativity Analysis (Wichien Ketsingh 1987: 115):

1. Each section in the questionnaire to be used for analysis must employ the same scoring system. The scoring, for example, may include 1,2,3,4 and 5 for strongly disagree, disagree, uncertain, agree, and strongly agree, respectively.

2. Checking score on each question and then calculate total scores (of each respondent).

3. Arranging the scores of everybody priority from the highest to the lowest scores

4. Separating 2 sample groups into the highest scores and the lowest scores groups at the top 25 percent and the bottom 25 percent. That is arranging the highest scores to the lowest scores into groups 1 to 4 accordingly.

5. Counting scores among those in the groups with the highest scores and the lowest scores and then calculated the mean ($\overline{X}$) and the variation (S) for all contents in each group. Thus, these are2 $\overline{X}$s and 2 SD for the highest score group and the lowest score group.

6. Using the $\overline{X}$ and S for t-test

7. Items with t-value over 1.75 is considered as appropriate Discrimination Power

The reliability of attitude measurement was calculated using Cronbach Alpha (cited from Boontham Kitpreedaborisut 1992: 208) with the following formula:

$$\text{Reliability} \qquad r_u = \frac{K}{K-1}\left\{1 - \frac{\sum S^2_i}{S^2_t}\right\}$$

Given
S^2_i = Variance of scores in each item
S^2_t = Variance of total scores
r_u = Reliability of the questionnaire
K = Numbers of items
$\sum S^2_I$ = Sum of variance of each item

The overall Reliability of the questionnaires used was final in this study at 0.95 percent which indicated as appropriate level.

3.5 Data Collection

Data was collected by the researcher and the research assistants. The questionnaires was distributed among Thai tourists over 15 years old. Data collection lasted for 6 weeks from the 20th of August to 28 of September 2003 by collecting data on Friday, Saturday and Sunday by Accidental Sampling method was employed until completed 200 samples.

3.6 Data Analysis

Collected data from the questionnaires were coded and analyzed by the statistical package SPSS/PC.

1. Personal data including age, occupation, educational level, source of information and type of tourists, were presented as percentage.

2. Knowledge and attitude levels were analyzed and presented as deviation as well as the percentage as appropriate.

3. Comparison of average scores among different groups was done by Oneway Anova and using statistical Turkey method for multiple comparisons any different groups.

CHAPTER IV
RESEARCH RESULTS

This study aimed to study variables influenced the tourists' needs for knowledge on wildlife at Pang-nga Wildlife Breeding Research Center through data analysis from the questionnaires answered by tourists at the breeding research center between August 20th, 2546 to 28th September, 2546. The study were 5 sections:

4.1 General Data of the Sample Group

4.2 Tourists Attitude towards Wildlife's value

4.3 Knowledge on Wildlife of the Tourists

4.4.Tourists Needs on Wildlife Knowledge and Media types

4.5 Tourists Concerned on Wildlife.

4.1 General Data of the Sample Group

The sample group in this research consisted of 200 Thai tourists who visited Pang-nga Wildlife Breeding Research Center. Data collection was done through table with age, educational level, occupation, types of tourists, wildlife news receipt and frequency of wildlife news receipt. Research findings gave the following indications:

Age: The sample group ages were ranged between 15-58 years old, 55.1 % , 15-25 years old, 32.3 %, 26-35 years old , 12.60 %, 6-50 years old The average age founded at 26 years while the most founded ages were 16 years (Table 1).

Educational Level: Most sample tourists 42.3% were High School or equivalence. With Bachelor Degree or equivalence at 27.6%, following by Lower

Secondary School education at 13.3%, Primary School grade 1-6 at 11.2 % and higher than Bachelor Degree at 5.6% (Table 1).

Occupation: 36% were students, 18 % government official and 5% worked for the State Enterprise (Table 1).

Types of Tourists: Most sample visitors were group of friends at 46.7 %, and group of families 41.2 %. The least founded were groups of field trip at 3.5 %.

Wildlife Media: Most sample tourists wildlife news receipt from television at 30 %, newspaper 19.5 %, radio 19 % and leaflet 8 % (Table 1).

Frequency of wildlife news receipt: Most sample tourists received wildlife news every month at 21%, twice a month at 21 % and four times each month at 4 % (Table 1).

Table 1: Numbers and Percentages of Sample Tourists classified according to General Data

General Data	Number	Percentages
Age(years old)		
15-25	109	55.1
26-35	64	32.3
36-50	25	12.6
Total	198	100.0
$\bar{X}$ = 25.62	Mode = 16	S.D = 8.95
Highest = 50 years old	Lowest = 15 years old	
Educational Level		
Grade 1-6	22	11.2
Lower Secondary School	26	13.3
Upper Secondary School	83	42.3
Bachelor Degree/Equivalence	54	27.6
Higher than Bachelor Degree	11	5.6
Total	196	100.0
Occupations:		
Agricultural	33	16.5
State Enterprise	10	5
Merchants	25	12.5
Government Officials	36	18
Company Workers	24	12
College/School Students	72	36
Total	200	100.0

Table 1: Numbers and Percentages of Sample Tourists classified according to General Data **(continued)**

General Data	Numbers	Percentages
Tourists Types		
Friend groups	93	46.7
Mixed Families	17	8.5
Field Trip groups	7	3.5
Family groups	82	41.2
Total	199	100.0
Media		
Radio	38	19
Newspaper	39	19.5
Journal/Magazine	23	11.5
Television	60	30
Leaflet	16	8
Friend/Hearsay	24	12
Total	200	100.0
Receiving News Frequency		
1 Time/Month	84	42
2 Time/Month	42	21
3 Time/Month	19	9.5
4 Time/Month	8	4
5. Over 4 times/Month	33	16.5
6. Others	14	7
Total	200	100.0

4.2 Tourist Attitude towards Wildlife's value

Attitude level of the tourists towards wildlife's value contained 20 questions with 11 positive and 9 negative statements, being measured by scoring.

Findings from table 2 suggested that most tourists had maintained positive attitude towards wildlife's value. They had realized the wildlife's significance contribution to ecosystem and human beings as well as the country's economic. In another words, 68.5% of wildlife had become the ambassador to create good relationship between countries, another 64.5% had played important roles in balancing nature and recycling energy and 60% reduction in wildlife population resulted from being hunted as human foods.

Table 2: Numbers and Percentages of Tourist Attitude towards Wildlife's value

Contents	Mostly Agree	Agree	Uncertain	Not Agree	Mostly Not Agree	Measured
1.Wildlife can be consumed, used in medicine, as ornament and in scientific research (-)	13 (6.5)	55 (27.5)	18 (9.0)	80 **(40.0)**	34 (17.0)	Not Agree
2. Bringing Wildlife for consumption is not considered as wildlife destruction (-)	5 (2.5)	16 (8.0)	10 (5.0)	120 **(60.0)**	49 (24.4)	Not Agree
3. Rare Wildlife species should be raised to promote export (-)	13 (6.5)	30 (15.0)	16 (8.0)	91 **(45.5)**	50 (25.0)	Not Agree
4. Wildlife helps balancing nature (+)	79 (39.5)	114 **(57.0)**	4 (2.0)	- -	3 (1.5)	Agree
5.In economic, wildlife was attractive for tourists to visit in the country (+)	74 (37.0)	112 **(56.0)**	9 (4.5)	3 (1.5)	2 (1.0)	Agree
6. Balancing nature from wildlife helps only scattering plants species (-)	16 (8.0)	45 (22.5)	53 (26.5)	73 **(36.5)**	13 (6.5)	Not Agree
7.Wildlife benefits mankind and ecosystem(+)	69 (34.5)	116 **(58.0)**	10 (5.0)	2 (1.0)	3 (1.5)	Agree
8.Finding the hornbill means the forest has its fertility. (+)	49 (24.5)	113 **(56.5)**	35 (17.5)	2 (1.0)	1 (0.5)	Agree
9.Wildlife tour should be recreation and relaxation. (+)	84 (42.0)	107 **(53.5)**	4 (2.0)	4 (2.0)	1 (0.5)	Agree
10. There has no impact on human when wildlife is being destroyed in large numbers. (-)	8 (4.0)	13 (6.5)	18 (9.0)	88 **(44.0)**	73 (36.5)	Not Agree
11.Wildlife is only benefit to ecosystem. (-)	5 (2.5)	28 (14.0)	47 (23.5)	109 **(54.5)**	11 (5.5)	Not Agree

Table 2: Numbers and Percentage of Tourist attitude towards Wildlife's value **(continued)**

Contents	Mostly Agree	Agree	Uncertain	Not Agree	Mostly Not Agree	Measured
12. Wildlife is useful to distribute plants species. (+)	41 (20.5)	136 **(68.0)**	19 (9.5)	3 (1.5)	1 (0.5)	Agree
13. Purchasing articles made from wildlife carcass for home decoration is considered legal. (-)	13 (6.5)	18 (9.0)	26 (13.0)	85 **(42.5)**	58 (29.0)	Not Agree
14. In politic, wildlife has become ambassador to different countries, such as, elephants, pandas. (+)	30 (15.0)	137 **(68.5)**	22 (11.0)	8 (4.0)	3 (1.5)	Agree
15.Wildlife carcass should not be promoted as food consumption or ornaments. (+)	86 **(43.0)**	80 (40.0)	14 (7.0)	10 (5.0)	10 (5.0)	Mostly Agree
16. Wildlife should be used only in the medical research. (-)	9 (4.5)	21 (10.5)	36 (18.0)	110 **(55.0)**	24 (12.0)	Not Agree
17. Large destruction of wildlife can cause energy cycle in the nature unbalanced. (+)	31 (15.5)	129 **(64.5)**	30 (15.0)	6 (3.0)	4 (2.0)	Agree
18.Individual buys and sells wildlife must be punished by laws.(+)	117 **(58.5)**	68 (34.0)	9 (4.5)	- -	6 (3.0)	Agree
19.Making wildlife carcass as the ornaments is not the cause of reduction in wildlife population. (-)	9 (4.5)	17 (8.5)	21 (10.5)	113 **(56.5)**	40 (20.0)	Not Agree
20. Wildlife extinction or reduction can affect ecological system and human.(+)	58 (29.0)	120 **(60.0)**	17 (8.5)	4 (2.0)	1 (0.5)	Agree

From the scores analysis on the tourist's attitude measurement regarding to wildlife value, the attitude mean scores of tourists and the standard deviation were equal to 78.52% and 7.45%, respectively. Findings 51.50% of tourists possessed high attitude level, following by 38.5% with medium attitude level and the lowest attitude level at 10% as illustrated in Table 3.

Table 3: Numbers and Percentages of the Sample Tourists classified according to attitude level towards wildlife's value.

Attitude Levels	Numbers	Percentages
Low (0-69 points)	20	10
Medium (70-79 points)	77	38.5
High (80-100 points)	103	51.5
Total	**200**	**100.0**

$\overline{X}$ = 78.52 S.D = 7.45

4.3 Knowledge on Wildlife of the Tourists

4.3.1 Wildlife Knowledge: Data derived from questioning tourists at Pang-nga Wildlife Breeding Research Center through 20 questionnaires as illustrated in Table 4.

Table 4 gave the indication of more than 90% of the tourists had fairly known about wildlife, specifically, problems on the reduction of wildlife population (95.5%), following by the content unrelated to wildlife, the effect from wildlife without conservation (94.5%) and the wildlife's areas of contribution to the country (61.5%).

Table 4: Numbers and Percentages of tourists with correct answers regarding to wildlife

Wildlife Knowledge	Correct Answer	Percentage
1. Wildlife definition according to Wildlife Preservation & Protection Act of 1992	158	79.0
2. In which number wildlife is non-essential to the country?	123	61.5
3. What day is the Wildlife Preservation Day of Thailand?	124	62.0
4. Which number shows no relation of wildlife to Ecological system?	131	65.5
5. Which number shows wildlife significance?	177	88.5
6. What cause wildlife reduction?	150	75.0
7. Which number does not show the association on wildlife with the ecological system?	136	68.0
8. Which number effects wildlife habitat?	133	66.5
9. Which number does not show the effect of increasing in human population towards wildlife?	137	68.5
10.Which number represents balancing in nature?	149	74.5
11.What is the effect towards wildlife when the environment had been destroyed?	167	83.5
12. Which bird is being classified according to Wildlife Preservation and Preservation Act of 1992 as the Preservation Wildlife?	128	64.0
13. Which number shows the highest value of wildlife?	176	88.0
14. Which numbers shows the major cause for animal's reduction?	174	87.0
15. Which factor has contributed to the animals 's habitat?	140	70.0
16. Which number contains wildlife to indicate the healthy stage of forest?	142	71.0
17. Which number is irrelevant to Wildlife?	189	94.5
18. Which human's activities caused most destruction of wild life?	168	84.0
19. Which problem is the major cause of reduction in wildlife's population?	191	95.5
20. What will happened if you fail to protect or preserve wildlife?	189	94.5

The knowledge score of the sample tourists were divided into 3 groups: Low level at 0-13 point, medium level at 14-15 points, high level at 16-20 points as illustrated on Table 5.

From Table 5, the most sample tourists with high knowledge were 50 % following by the least knowledge at 32 % and mean knowledge at 18 %, showing standard deviation at 0.89

Table 5: Numbers and Percentages of Tourists classified according to knowledge level

Knowledge Level	Number	Percentage
Low(0-13 points)	64	32.0
Medium(14-15 points)	36	18.0
High(16- 20 points)	100	50.0
Total	**200**	**100.0**

$\overline{X}$ = 15.41 S.D = 3.27

4.4 Tourist Need on Wildlife Knowledge and Media types

Findings from the study revealed the media types most preferred the exhibition, equal to 30%, second following by brochure 27% and the last in level was the advice from the officer 18% as illustrated in Table 6.

Table 6: Media types preferred by Tourists at Pang-nga Wildlife Breeding Research Center

Type of Media	Preferred Media Level					
	1		2		3	
	N	%	N	%	N	%
1. Exhibition	60	30%	37	18.5%	24	12%
2. Leaflet/Brochures	54	27%	53	26.5%	28	14%
3. Tape Cassette	1	0.5%	8	4%	9	4.5%
4. Interpretation Sign	16	8%	24	12%	36	18%
5. VCD	6	3%	13	6.5%	31	15.5%
6. Slide	8	4%	13	6.5%	34	17%
7. Suggestions by nature interpretator	38	19%	40	20%	29	14.5%
8. Wildlife on duplicate Habitat	17	8.5%	12	6%	9	4.5%

From the Wildlife Breeding Center finding from the tourists receive wildlife knowledge from interpretation sign more than another media.

The study of the tourists needs suggested the topic of providing knowledge media was rated high at 41.5% among the tourists while another high rated topic at 45.5% in the uncomplicated media that could be easily understandable as well as 42.0% needed the set up of the Tourists Information Center. Meanwhile the tourists needed for varieties of media remained at medium level of 55% as illustrated in the Table 7.

Table 7: Number and Percentage of Media classified according to tourist preference

Contents	High	Medium	Low
1. Relationship between media provided knowledge with Wildlife at the Research Center.	83 **(41.5)**	66 (33.0)	51 (25.5)
2. Given media is non-complex, easily understandable.	91 **(45.5)**	76 (38.0)	33 (16.5)
3. Different media had provided knowledge regarding to Wildlife at Research Center.	33 (16.5)	110 **(55.0)**	57 (28.5)
4. Officers with knowledge, giving information on wildlife.	28 (14.0)	102 **(51.0)**	70 (35.0)
5. Contents are constantly updated.	25 (12.5)	94 **(47.0)**	81 (40.5)
6. Having information center to provide wildlife news.	84 **(42.0)**	64 (32.0)	52 (26.0)

Findings from the study suggested that 48% of the tourists who took interest in reptile had requested reptile's information while 58.5% and 54.5% of them had fairly interested in the reptile's natural habitat and reptile's reproduction, respectively as illustrated in Table 8

Table 8: Numbers and Percentages of Tourists classified according to the interest in contents of reptile

Contents	High	Medium	Low
1. You are interested in the content of reptile.	78 (39.0)	97 **(48.5)**	25 (12.5)
2. You are interested in the reptile's living styles.	84 (42.0)	99 **(49.5)**	17 (8.5)
3. You need to know about the reptile's natural habitat.	65 (32.5)	117 **(58.5)**	18 (9.0)
4. You need to know about the reptile's reproduction.	57 (28.5)	109 **(54.5)**	34 (17.0)
5. You need to know the type of extinct reptile.	78 **(39.0)**	62 (31.0)	60 (30.0)
6. You want the media to provide knowledge regarding to reptile.	96 **(48.0)**	83 (41.5)	21 (10.5)

Findings from the study suggested that 61% of the tourists were most interested in the content of bird while 50 % in their natural habitat and 47 % in the available media for knowledge on bird.

Also, 55.5 % of the tourist had fairly interested in the bird's natural habitat as illustrated in Table 9.

Table 9: Numbers and Percentages of Tourist classified according to the interest in contents of bird

Contents	High	Medium	Low
1. You are interested in the content of bird.	122 **(61.0)**	73 (36.5)	5 (2.5)
2. You are in the bird living's style.	100 **(50.0)**	94 (47.0)	6 (3.0)
3. You need to know about the bird natural habitat.	76 (38.0)	111 **(55.5)**	13 (6.5)
4. You need to know about the bird's reproduction.	73 (36.5)	79 **(39.5)**	48 (24.0)
5. You need to know about the type of extinct bird.	79 **(39.5)**	49 (24.5)	72 (36.0)
6. You want the media to provide knowledge regarding to the bird.	94 **(47.0)**	85 (42.5)	21 (10.5)

Findings from the study suggested that 63.5% of the tourists were most interested in the content of mammal while 54% in their natural lifestyles while 55.5% had fairly interested in their natural habitat and 44.5% in the available media for knowledge on mammal as illustrated in Table 10.

Table 10: Numbers and Percentages of Tourists classified according to interested in contents of mammal

Contents	High	Medium	Low
1. You are interested in the mammal	127 **(63.5)**	70 (35.0)	3 (1.5)
2. You are interested in the mammal's living styles.	108 **(54.0)**	88 (44.0)	4 (2.0)
3. You need to know about the mammal natural habitat.	80 (40.0)	111 **(55.5)**	9 (4.5)
4. You need to know about mammal's reproduction.	68 (34.0)	86 **(43.0)**	46 (23.0)
5. You need to know about the type of extinct mammal.	80 **(40.0)**	57 (28.5)	63 (31.5)
6. You want the media to provide knowledge regarding to the mammal.	88 (44.0)	89 **(44.5)**	23 (11.5)

4.5 Tourist's Concerned on Wildlife

Findings from the study suggested the tourists were interested in the way to arrange animal's level starting from number one to number four: Asiatic Black Bear 37.5%, Bear 20.5 %, both 3rd and 4th orders belong to Serow 16% and 14%, respectively.

Table 11: Numbers and Percentages of Tourists classified according to interested in the way to arrange animal's level

Mammal	Level 1		Level 2		Level 3		Level 4	
	N	%	N	%	N	%	N	%
Asiatic Black Bear	**75**	**37.5**	20	10.0	15	7.5	11	5.5
Himalayan Black Bear	35	17.5	**41**	**20.5**	21	10.5	16	8.0
Porcupine	13	6.5	17	8.5	30	15.0	15	7.5
Serow	23	11.5	15	7.5	**32**	**16.0**	**28**	**14.0**
Barking Deer	17	8.5	22	11.0	6	3.0	25	12.5
Civet	5	2.5	22	11.0	13	6.5	19	8.5
Linsang	5	2.5	12	6.0	22	11.0	21	10.5
Gibbon	3	1.5	10	5.0	18	9.0	25	12.5
Monkey	14	7.0	15	7.5	10	5.0	21	10.5
Langur	8	4.0	15	7.5	15	7.5	9	4.5
Otter	3	1.5	13	6.5	17	8.5	8	4.0

Findings from the study suggested the most preferred mammal among tourists was the Serow with the information needed on its contribution to ecosystem, reproduction process, foods chain, natural habitat and abundance. As for the animal's lifestyle the tourists were most interested in the content of Himalayan Bear as illustrated in Table 12.

Table 12: Numbers and Percentages of Tourists classified according to contents of mammal

Mammal	Contents					
	Mammal's importance to Ecosystem	**Mammal's Reproduction**	**Mammal's food**	**Living Quarter**	**Life Styles**	**Which mammal suggest healthy nature**
1.Asiatic Black Bear	36 (18.0)	19 (9.5)	19 (9.5)	22 (11.0)	21 (10.5)	22 (11.0)
2.Himalayan Black Bear	29 (14.5)	36 (18.0)	34 (17.0)	26 (13.0)	**33 (16.5)**	28 (14.0)
3. Porcupine	24 (12.0)	22 (11.0)	19 (9.5)	21 (10.5)	18 (9.0)	21 (10.5)
4. Serow	**39 (19.5)**	**41 (20.5)**	**43 (21.5)**	**39 (19.5)**	29 (14.5)	**29 (14.5)**
5.Barking Deer	13 (6.5)	11 (5.5)	10 (5.0)	15 (7.5)	10 (5.0)	12 (6.0)
6. Civet	7 (3.5)	10 (5.0)	12 (6.0)	11 (5.5)	13 (6.5)	15 (7.5)
7. Linsang	15 (7.5)	18 (9.0)	18 (9.0)	17 (8.5)	15 (7.5)	15 (7.5)
8. Gibbon	12 (6.0)	10 (5.0)	18 (9.0)	16 (8.0)	19 (9.5)	13 (6.5)
9. Monkey	10 (5.0)	14 (7.0)	9 (4.5)	12 (6.0)	15 (7.5)	17 (8.5)
10.Leaf monkey	9 (4.5)	8 (4.0)	10 (5.0)	10 (5.0)	18 (9.0)	18 (9.0)
11. Otter	6 (3.0)	11 (5.5)	8 (4.0)	11 (5.5)	9 (4.5)	10 (5.0)

Findings from the study suggested the most preferred bird among 37.5 % of tourists was the Jungle fowl, following by the Pheasant as the 2nd and 3rd level equal to 32.5 % and 19 %, respectively. The 4th level was the Hill myna at 18 % as illustrated in Table 13.

Table 13: Number and Percentage of tourists classified according to interested level of the bird

Bird species	No. 1		No.2		No.3		No. 4	
	N	%	N	%	N	%	N	%
Jungle fowl	75	37.5	19	9.5	19	9.5	15	7.5
Pheasant	65	32.5	56	28.0	38	19.0	12	6.0
Great argus	9	4.5	27	13.5	35	17.5	35	17.5
Hill myna	21	10.5	17	8.5	27	13.5	36	18.0
Eagle	23	11.5	38	19.0	27	13.5	35	17.5
Owl	2	1.0	24	12.0	17	8.5	34	17.0
Bulbul	5	2.5	21	10.5	34	17.0	26	13.0

Findings from the study suggested that most tourists requested presentation under the topics of wildlife contribution to ecosystem, reproduction process, foods available, nature capacity abundance, natural habitat, lifestyles. The most requested information was the Pheasant as illustrated in Table 14.

Table 14: Number and Percentage of Tourists classified according to different contents of the bird

Mammals	Contents					
	Ecosystem importance	**Breeding Process**	**Foods**	**Habitat**	**Life-style**	**Indicator species to fertile nature**
1.Jungle fowl	37 (18.5)	31 (15.5)	26 (13.0)	25 (12.5)	22 (11.0)	23 (11.5)
2. Phesant	**55 (27.5)**	**55 (27.5)**	**54 (27.0)**	**44 (22.0)**	**40 (20.0)**	**48 (24.0)**
3.Great argus	21 (10.5)	24 (12.0)	27 (13.5)	28 (14.0)	30 (15.0)	26 (13.0)
4. Hill myna	19 (9.5)	19 (9.5)	22 (11.0)	30 (15.0)	24 (12.0)	28 (14.0)
5. Eagle	35 (17.5)	30 (15.0)	36 (18.0)	27 (13.5)	29 (14.5)	27 (13.5)
6. Owl	7 (3.5)	9 (4.5)	6 (3.0)	18 (9.0)	24 (12.0)	19 (9.5)
7. Bulbul	26 (13.0)	32 (16.0)	29 (14.5)	28 (14.0)	31 (15.5)	29 (14.5)

Findings from the study suggested that 45 % of the tourists were most interested in the Turtle while both 2nd and 3rd levels belong to Soft-shell turtle 29 % and 28.5 %, respectively. The 4th level was the Water Monitor at 31% as illustrated in Table 15.

Table 15: Numbers and Percentages of Tourists classified according to interested in reptiles

Bird	No. 1		No.2		No.3		No.4	
	N	%	N	%	N	%	N	%
Turtle	**90**	**45.0**	17	8.5	17	8.5	27	13.5
Soft-shell turtle	35	17.5	**58**	**29.0**	**57**	**28.5**	26	13.0
Water monitor	18	9.0	39	19.5	48	24.0	**62**	**31.0**
Snake	31	15.5	22	11.0	31	15.5	46	23.0
Skink	9	4.5	14	7.0	15	7.5	20	10.0
Lizard	17	8.5	50	25.0	29	14.5	18	9.0

Findings from the study of the reptiles suggested the needs for media presentation in the nature capability abundance, foods available, wildlife's importance to the ecosystem, reproduction process and lifestyles. The most requested presentation was the Soft-shell turtle. For the topic of the natural habitat, the most requested information was the Water Monitor as illustrated in Table 16.

Table 16: Numbers and Percentages of tourists classified according to different contents of reptiles

Reptile	Contents					
	Ecosystem importance	**Breeding Process**	**Foods**	**Habitat**	**Life Style**	**Indicator species to fertile nature**
1. Turtle	33 (16.5)	31 (15.5)	29 (14.5)	27 (13.5)	28 (14.0)	29 (14.5)
2. Soft shell turtle	**49 (24.5)**	**48 (24.0)**	**55 (27.5)**	46 (23.0)	**49 (24.5)**	**56 (28.0)**
3.Water monitor	34 (17.0)	29 (14.5)	34 (17.0)	**47 (23.5)**	37 (18.5)	37 (18.5)
4. Snake	33 (16.5)	31 (15.5)	23 (11.5)	32 (16.0)	32 (16.0)	36 (18.0)
5. Skink	13 (16.5)	18 (9.0)	13 (6.5)	13 (6.5)	17 (8.5)	13 (6.50
6. Lizard	38 (19.0)	43 (21.5)	46 (23.0)	35 (17.5)	37 (18.5)	29 (14.5)

Findings from the study as illustrated in Table 17 had suggested that most tourists between 26-35 years old, with the average total scores in the content of wildlife and the mean of the most requested in media at 27.39% and 7.27%, respectively. As for the sample group between 36-50 years old, the average total scores of requested knowledge of wildlife and the mean of the needs for media were at 26.96 % and 7.24 %, respectively.

Table 17: Numbers, Mean and Standard Deviation on the Tourist needs to know wildlife and wildlife media classified according to age

Age class (Year)	Numbers	Needs for Knowledge Scores								Needs for Media Scores	
		Reptiles		Mammals		Birds		Total			
		$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D
15-25	109 (55.1%)	8.72	2.037	8.85	2.031	8.85	2.252	26.42	5.303	6.91	1.494
26-35	64 (32.3%)	8.91	1.900	9.44	2.239	9.05	2.360	27.39	5.726	7.27	1.576
36-50	25 (12.6%)	8.64	1.729	9.08	2.060	9.24	2.047	26.96	4.928	7.24	1.234
Total	198 (100%)	8.77	1.950	9.07	2.110	8.96	2.256	16.80	5.390	7.07	1.495

Findings from the differences between mean through the Anova analysis, the mean of all age groups in the needs for knowledge in wildlife and the needs for media were not having statistically differences as illustrated in Table 18.

Table 18: Scores comparison in different topics classified according to age through ANOVA Analysis

Needed Topics	Sources of ANOVA	d.f	S.S	M.S	F	Sig
1. Reptiles	Between Groups	2	1.932	0.966	0.252	0.777
	Inside Group	196	747.381	3.833		
	Overall	197	749.313			
2 Mammals	Between Groups	2	13.769	6.884	1.555	0.214
	Inside Group	196	863.241	4.427		
	Overall	197	870.016			
3. Birds	Between Groups	2	3.682	1.841	0.359	0.699
	Inside Group	196	999.071	5.123		
	Overall	197	1002.753			
4. All Animals	Between Groups	2	38.537	19.268	0.611	0.518
	Inside Group	196	5684.782	29.153		
	Overall	197	5723.318			
5. Needed for Media	Between Groups	2	6.020	3.010	1.352	0.261
	Inside Group	196	434.127	2.226		
	Overall	197	440.146			

Educational Level of the Sample Group

Findings from 196 sample groups, most sample groups, Upper Secondary School education or equivalence at 42.3 % while the least founded groups belong to the Higher than Bachelor degree at 5.6 %. Detail comparison of quality of education with the needs for knowledge scores in the content and the needs for media were illustrated in Table 19.

Results of the study as illustrated in Table 19 suggested the sample group with highest mean of 28.32 from the total scores of needs to have knowledge in wildlife and the lowest mean of 6.50. As for the sample group with Lower Secondary School education, the lowest mean of 25.23 from the total scores of needs to have for knowledge in wildlife and the sample group with Bachelor Degree or equivalence with the highest mean of needs to have media at 7.44

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Table 19: Numbers, Mean and Standard Deviation on the Tourist needs to know wildlife and wildlife media classified according to age

Educational Level	Number	Needs for Knowledge Scores								Needs for Media scores	
		Reptiles		Mammals		Birds		Total			
		$\overline{X}$	S.D	$\overline{X}$	S.D	$\overline{X}$	S.D	$\overline{X}$	S.D	$\overline{X}$	S.D
Primary 1-6	22 (11.2%)	9.18	1.500	9.91	1.823	9.23	2.022	28.32	3.957	6.50	1.626
Lower Secondary	26 (13.3%)	8.54	1.794	8.23	1.818	8.46	2.596	25.23	4.719	6.88	1.211
Upper Secondary or equivalence	83 (42.3%)	8.98	1.957	9.30	2.134	9.22	20.12	27.49	5.176	7.06	1.509
Bachelor Degree or equivalence	54 (27.6%)	8.39	20.50	8.85	2.167	8.69	23.46	25.93	5.856	7.44	1.313
Higher than Bachelor Degree	11 (5.6%)	8.91	23.43	8.91	26.25	9.09	2.982	26.91	7.063	7.36	1.502
Total	196 (100%)	8.78	1.943	9.08	2.130	8.96	2.247	26.82	5.356	7.10	1.449

Findings from the differences between mean through the Anova analysis, mean of the needs for knowledge in wildlife content among the tourists were not having statistically significant difference as illustrated in Table 20.

Table 20: Scores Comparison in different Topics classified according to Educational Level through ANOVA Analysis

Required Topics	ANOVA Sources	d.f	S.S	M.S	F	Sig
1. Reptiles	Between Groups	4	16.694	4.173	1.108	0.354
	Within Groups	191	719.428	3.767		
	Overall	195				
2. Mammals	Between Groups	4	41.067	10.267	2.324	0.058
	Within Groups	191	843.627	4.417		
	Overall	195	884.694			
3. Birds	Between Groups	4	17.771	4.443	0.878	0.478
	Within Groups	191	966.979	5.063		
	Overall	195	984.750			
4. All Animals	Between Groups	4	196.002	49.001	1.734	0.144
	Within Groups	191	5398.748	28.266		
	Overall	195	5594.750			
5. Needs for Media	Between Groups	4	16.427	4.107	1.997	0.097
	Within Group	191	392.731	2.056		
	Overall	195	409.158			

Sample Group's Occupations

Findings from 200 sample groups that 36 % were High School and College students while the least visited of 10 % were groups from the State Enterprises. Detail comparison of quality of the sample group with the scores of needs for knowledge and media were illustrated in Table 21.

Results of the study as illustrated in Table 21 suggested the sample group who worked as Civil Servants needed knowledge in wildlife and mean of needs to have media at 27.58 % and 7.53 %, respectively. The sample groups who had worked for the State Enterprise were having the lowest mean in the content of wildlife at 24.30 % and the agricultural groups with the lowest scores in the needs to have media at 6.70 %.

Table 21: Numbers, Mean and Standard Deviation on the Tourist needs to know wildlife and wildlife media classified according to occupations

Occupations	Numbers	Needs for Knowledge Scores								Needs for Media	
		Reptiles		Mammals		Birds		Total			
		$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D
Agriculturs	33 (16.5%)	8.67	1.534	9.64	1.868	9.12	2.132	27.42	4.576	6.70	1.649
State Enterprises	10 (5%)	7.70	1.767	8.30	1.947	8.30	2.359	24.30	4.373	6.90	1.197
Merchants	25 (12.5%)	8.88	1.716	8.64	2.018	8.36	1.729	25.88	4.764	6.92	1.631
Civil Servants	36 (18.%)	9.08	2.196	9.22	2.392	9.28	2.690	27.58	6.574	7.53	1.444
Company Employees	24 (12%)	8.46	1.888	8.58	2.394	8.67	2.057	25.71	5.312	7.17	1.049
Students	72 (36%)	8.89	2.080	9.15	2.026	9.08	2.294	27.12	5.355	7.04	1.524
Total	200 (100%)	8.77	1.942	9.07	2.121	8.94	2.256	26.79	5.370	7.07	1.487

Findings from the differences between average scores through the ANOVA analysis, the average scores of the needs for knowledge in wildlife content for the sample group in all occupations were not having statistically differences as illustrated in Table 22.

Table 22: Scores Comparison in different Topics classified according to Occupation through ANOVA Analysis

Required Topics	ANOVA Sources	d.f	S.S	M.S	F	Sig
1. Reptiles	Between Groups	4	16.694	4.173	1.108	0.354
	Within Groups	191	719.428	3.767		
	Overall	195				
2. Mammals	Between Groups	4	41.067	10.267	2.324	0.058
	Within Groups	191	843.627	4.417		
	Overall	195	884.694			
3. Birds	Between Groups	4	17.771	4.443	0.878	0.478
	Within Groups	191	966.979	5.063		
	Overall	195	984.750			
4. All Animals	Between Groups	4	196.002	49.001	1.734	0.144
	Within Groups	191	5398.748	28.266		
	Overall	195	5594.750			
5. Needs for Media	Between Groups	4	16.427	4.107	1.997	0.097
	Within Groups	191	392.731	2.056		
	Overall	195	409.158			

Type of Tourists

Findings from 199 sample groups that the highest group tourists were friends group, following by families group with mean at 46.7 and 41.2, respectively. The least tourists were those who came as the field trips group at 3.5 %. Detail of scores comparison between the tourist type and the needs for knowledge in the content and the needs for media were illustrated in Table 23.

Results of the study as illustrated in Table 23 suggested that the mixed families group had the highest mean of needs for knowledge on wildlife and media at 27.58 % and 7.53 %, respectively. Meanwhile, the family groups had the lowest mean of needs for knowledge on wildlife and media at 26.11 % and 6.91 %, respectively.

Table 23: Numbers, Mean and Standard Deviation on the Tourist needs to know wildlife and wildlife media classified according to tourists group.

Tourist group	Numbers	Needs for Knowledge Scores								Needs for Media Scores	
		Reptiles		Mammals		Birds		Total			
		$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D
friends	93 (46.7%)	8.76	2.061	9.25	2.170	9.14	2.239	27.15	5.583	7.16	1.393
Mixed group between families	17 (8.5%)	8.59	2.599	9.53	2.095	9.35	2.473	27.47	6.453	7.24	1.678
field trips	7 (3.5%)	8.43	1.902	9.14	2.035	9.57	1.988	27.14	4.947	7.00	1.528
Families	82 (41.2%)	8.83	1.662	8.73	2.055	8.55	2.218	26.11	4.884	6.91	1.565
Total	199 (100%)	8.76	1.941	9.06	2.116	8.93	2.251	26.75	5.352	7.06	1.489

Findings from the different between mean through the Anova analysis that the mean of the needs for knowledge in wildlife content among the tourists and the needs for Media were not having statistically differences as illustrated in Table 24.

Table 24: Scores Comparison in Different Topics classified according to Tourist Type through ANOVA Analysis

Required Topics	ANOVA Sources	d.f	S.S	M.S	F	Sig
1. Reptiles	Between Groups	3	1.662	0.554	0.145	0.933
	Within Groups	195	744.237	3.817		
	Overall	198	745.899			
2. Mammals	Between Groups	3	15.890	5.297	1.187	0.316
	Within Groups	195	870.502	4.464		
	Overall	198	886.392			
3. Birds	Between Groups	3	21.931	7.310	1.453	0.229
	Within Groups	195	981.084	5.031		
	Overall	198	1003.015			
4. All Animals	Between Groups	3	58.440	19.480	0.677	0.567
	Within Groups	195	5612.997	28.785		
	Overall	198	5671.437			
5. Required Media Scores	Between Groups	3	3.234	1.078	0.482	0.695
	Within Groups	195	436.042	2.236		
	Overall	198	439.276			

Media Types for Wildlife news receipt among Tourists

Findings from 200 sample groups that most sample groups received Wildlife news from television at 30 % , the least received from brochure or leaflet at 8 %. Detail comparison of media types wildlife news receipt among tourists with the scores of needs for knowledge in the content and the needs for media were illustrated in Table 25.

Results of the study as illustrated in Table 23 suggested that the sample groups who had received wildlife news through friends and hearsay had the highest mean of needs for knowledge on wildlife and media at 29.71 % and 7.38 %, respectively. Meanwhile, the sample groups who had received wildlife news through televisions had the lowest mean of needs for knowledge on wildlife and media at 25.73 % and 6.82 %, respectively.

Table 25: Numbers, Mean and Standard Deviation on the Tourist needs to know wildlife and wildlife media classified according to media types provided wildlife news

Media Type	Numbers	Needs for Knowledge Scores								Needs for Media Scores	
		Reptiles		Mammals		Birds		Total			
		$\overline{X}$	S.D	$\overline{X}$	S.D	$\overline{X}$	S.D	$\overline{X}$	S.D	$\overline{X}$	S.D
Radio	38 (19%)	8.24	1.601	9.03	1.966	8.92	2.032	26.18	4.620	6.95	1.355
Newspaper	39 (19.5%)	8.51	2.175	8.59	2.173	8.74	2.50	25.85	6.162	7.18	1.374
Journal/ Magazine	23 (11.5%)	8.70	1.743	9.78	1.999	8.83	1.946	27.30	4.714	7.26	1.322
Television	60 (30%)	8.67	1.856	8.73	1.939	8.33	2.184	25.73	5.168	6.82	1.610
Brochure/ Leaflet	16 (8%)	9.88	2.335	9.50	2.422	10.00	2.338	29.38	5.402	7.25	1.844
Friend/ Hearsay	24 (12%)	9.67	1.761	9.79	2.395	10.25	2.005	29.71	4.982	7.38	1.469
Total	200 (100%)	8.77	1.942	9.07	2.121	8.94	2.256	26.79	5.370	7.07	1.487

Findings from the differences between mean through the Anova analysis that the mean of the needs for knowledge in wildlife content among the tourists who had received wildlife news from different types of Media were having statistically differences as illustrated in Table 26.

Table 26: Scores Comparison in Different Topics classified according to Wildlife News Receipt from various Media through ANOVA Analysis

Required Topics	ANOVA Sources	d.f	S.S	M.S	F	Sig
1. Reptiles	Between Groups	5	52.977	10.595	2.94	0.014
	Within Groups	194	697.898	3.597	5	
	Overall	199	750.875			
2. Mammals	Between Groups	5	43.006	8.601	1.95	0.087
	Within Groups	194	852.014	4.392	8	
	Overall	199	895.020			
3. Birds	Between Groups	5	83.058	16.612	3.46	0.005
	Within Groups	194	929.337	4.790	8	
	Overall	199	1012.395			
4. All Animals	Between Groups	5	433.081	86.616	3.16	0.009
	Within Group	194	5306.099	27.351	7	
	Overall	199	5739.180			
5. Required Media Scores	Between Groups	5	8.474	1.695	0.76	0.579
	Within Groups	194	431.681	2.225	2	
	Overall	199	440.155			

The sample groups who had received wildlife news through friends and hearsay were having statistically significant difference in the mean but show no statistically significant difference in the sample groups who had received wildlife news through various media as illustrated in Table 27..

Table 27: Scores Comparison in Needs for Knowledge of Sample Group received wildlife's news through different media

All types of Wildlife Media	Averaging Scores of needs for Knowledge	Differences between Media Types					
		Television	Newspaper	Radio	Journal / Magazine	Brochure /Leaflet	Friend / Hearsay
Television	**25.73**	-	**-0.11**	**-0.45**	**-1.57**	**-3.64**	**-3.97***
Newspaper	**25.85**	-	-	**-0.34**	**-1.46**	**-3.53**	**-3.86**
Radio	**26.18**	-	-	-	**-1.12**	**-3.19**	**-3.52**
Journal/ Magazine	**27.30**	-	-	-	-	**-2.07**	**-2.40**
Brochure/ Leaflet	**29.38**	-	-	-	-	-	**-0.33**
Friend/ Hearsay	**29.71**	-	-	-	-	-	-

* Mean of both groups in the needs for knowledge and media types were having statistically difference at 0.05.

Considering the mean of the needs for knowledge on wildlife, the sample groups had received reptile and bird news through various media, with statistically significant differences. The sample groups received reptile news through friends and hearsay with the highest mean of needs to have media at 7.44.

Findings from the mean of needs for knowledge on wildlife suggested that on the content of reptile and bird, the sample group had received news of wildlife through various media with statistically significant difference. As for reptile, the sample groups who had received the news through friends, hearsay and leaflet were having statistically significance difference from the sample groups received news through radio. However, there had been no statistically significant difference from those received through other media as illustrated in Table 28

Table 28: Scores Comparison in Needs for Knowledge of Sample Group received reptile's news through different media

Reptile Media	Averaging Scores of needs for knowledge	Differences between Media Type					
		Radio	News paper	Television	Journal/ Magazine	Friend/ Hearsay	Brochure/ Leaflet
Radio	**8.24**	-	**-0.28**	**-0.43**	**-0.46**	**-1.43***	**-1.64***
Newspaper	**8.51**	-	-	**-015**	**-0.18**	**-1.15**	**-1.36**
Television	**8.67**	-	-	-	**-0.03**	**-1.00**	**-1.21**
Journal / Magazine	**8.70**	-	-	-	-	**-0.97**	**-1.18**
Friend /Hearsay	**9.67**	-	-	-	-	-	**-0.21**
Brochure /Leaflet	**9.88**	-	-	-	-	-	-

* Mean of both groups in the needs for knowledge and media types were having statistically significance differences at 0.05.

As for the bird, the sample groups who had received wildlife news through friends and hearsay were having statistically significant difference in the mean in comparison to the sample groups receiving news through television. However, there was no statistically significant difference in the sample groups who had received wildlife news through various media as illustrated in Table 29.

Table 29: Scores Comparison in Needs for Knowledge of Sample Group received Bird's news through different media

Bird Types	Average Scoring of the needs for knowledge	Differences between Media Types					
		Television	Journal / Magazine	Newspaper	Radio	Brochure /Leaflet	Friend / Hearsay
Television	**8.33**	**-**	**-0.49**	**-0.41**	**-0.59**	**-1.67**	**-1.92***
Journal/ Magazine	**8.83**	**-**	**-**	**0.08**	**-0.09**	**-1.17**	**-1.42**
Newspaper	**8.74**	**-**	**-**	**-**	**-0.18**	**-1.26**	**-1.51**
Radio	**8.92**	**-**	**-**	**-**	**-**	**-1.08**	**-1.33**
Brochure/ Leaflet	**10.00**	**-**	**-**	**-**	**-**	**-**	**-0.25**
Friend/ Hearsay	**10.25**	**-**	**-**	**-**	**-**	**-**	**-**

* Mean of both groups in the needs for knowledge and media types were having statistically difference at 0.05.

Frequency of Wildlife News Receipt among the Tourists

Findings from 200 sample groups that most sample groups received wildlife news once a month at 42%. The least groups received 4 times a month with the highest mean of needs for knowledge and the needs for media at 28.21%. The sample groups received wildlife news twice a month had the lowest mean of needs for knowledge at 26.21% and for other groups at 7.36%. Meanwhile, the sample groups received wildlife news 4 times a month had the lowest scores of needs for media at 6.63%.

Table 30: Numbers, Mean and Standard Deviation on the Tourist needs of knowledge about wildlife and have wildlife media classified according to frequency of provided wildlife news receipt

Frequency of Receiving News	Numbers	Needs for Knowledge Scores								Needs for Media Scores	
		Reptiles		Mammals		Birds		Total			
		$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D
Once a month	84 (42%)	8.65	1.911	8.87	2.121	8.79	2.339	26.31	5.650	7.21	1.432
Twice a month	42 (21%)	8.64	1.832	8.86	1.829	8.71	1.967	26.21	4.729	6.86	1.389
3 times a month	19 (9.5%)	8.89	1.329	9.32	2.358	8.68	1.945	26.89	4.202	7.16	1.119
4 times a month	8 (4%)	8.62	2.615	9.25	1.909	9.13	2.416	27.00	5.880	6.63	2.446
More than 4 times a month	33 (16.5%)	9.00	2.062	9.64	2.133	9.58	2.424	28.21	5.749	6.88	1.728
Others	14 (7%)	9.29	2.585	9.14	2.713	9.36	2.499	27.79	5.820	7.36	1.336
Total	200 (100%)	8.77	1.942	9.07	2.121	8.94	2.256	26.79	5.370	7.07	1.487

Findings from the differences between mean through the Anova analysis, the mean of the frequency in wildlife news receipt and the mean of the needs to have Media were not having statistically differences as illustrated in Table 31.

Table 31: Scores Comparison in different topics classified according to frequency of receiving news through ANOVA Analysis

Required Topics	ANOVA Sources	d.f	S.S	M.S	F	Sig
1. Reptiles	Between Groups	5	7.722	1.544	0.403	0.846
	Within Groups	194	743.153	3.831		
	Overall	199	750.875			
2. Mammals	Between Groups	5	17.362	3.472	0.768	0.574
	Within Groups	194	877.658	4.524		
	Overall	199	895.020			
3. Birds	Between Groups	5	21.426	4.285	0.839	0.524
	Within Groups	194	990.969	5.108		
	Overall	199	1012.395			
4. All Animals	Between Groups	5	114.494	22.899	0.790	0.558
	Within Groups	194	5624.686	28.993		
	Overall	199	5739.180			
5. Needs for Media Scores	Between Groups	5	7.739	1.548	0.694	0.628
	Within Groups	194	432.416	2.229		
	Overall	199	440.155			

Attitude of the Sample Group of Tourists

From the survey of the sample groups, the mean of attitude were equal to 79.31 and 9.43 for the standard deviation with the highest attitude scores founded at 81. In order to give clear perception, testing scores were arranged into 3 levels as illustrated in Table 2. After arranging the groups, the highest attitude remained at 51.5 % and the lowest at 10%. Detail of attitude levels as compared to the needs for knowledge on wildlife and media as illustrated in Table 32.

From the study in table 32, the sample group with medium attitude had the highest and lowest mean in needs for knowledge on wildlife at 27.03 and 7.29, respectively. On the contrary, the sample group with low attitude had the highest mean on the needs for knowledge at 26.10, and the sample groups with high attitude had the mean on the needs for media at 7.29. The sample group with low attitude had the lowest mean on media at 6.30

Table 32:Numbers, Mean and Standard Deviation on the tourist needs of knowledge on wildlife and to have wildlife media classified according to tourist attitude

Tourist's Attitude Level	Numbers	Needs for Knowledge Scores								Needs for Media Scores	
		Reptiles		Mammals		Birds		Total			
		$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D
Low (0- 69 points)	20 (10%)	8.60	2.210	8.50	1.701	9.00	2.103	26.10	5.281	6.30	1.418
Medium (70-79 points)	77 (38.5%)	8.70	1.717	9.27	2.150	9.05	2.182	27.03	4.902	6.96	1.585
High (80-100 points)	103 (51.5%)	8.86	2.058	9.03	2.167	8.85	2.353	26.75	5.747	7.29	1.376
Total	200 (100%)	8.77	1.942	9.07	2.121	8.94	2.256	26.79	5.370	7.07	1.487

Taking the different between mean through the Anova analysis, the mean of the needs for Media in wildlife content among the tourists were having statistically differences as illustrated in Table 33.

Table 33: Numbers, Mean and Standard Deviation on the Tourist needs of knowledge wildlife and wildlife media classified according to attitude towards wildlife's value through ANOVA Analysis

Required Topics	ANOVA Sources	d.f	S.S	M.S	F	Sig
1. Reptiles	Between Groups Within Groups Overall	2 197 199	1.848 749.027 750.875	0.924 3.802	0.243	0.784
2. Mammals	Between Groups Within Groups Overall	2 197 199	9.835 885.185 895.020	4.917 4.493	1.094	0.337
3. Birds	Between Groups Within Groups Overall	2 197 199	1.787 1010.608 1012.395	0.894 5.130	0.174	0.840
4. All Animals	Between Groups Within Groups Overall	2 197 199	13.995 5725.185 5739.180	6.998 29.062	0.241	0.786
5. Needs for Media	Between Groups Within Groups Overall	2 197 199	17.810 422.345 440.155	8.905 2.144	4.154	0.017

The sample group with high attitude level had statistically significant difference from the sample group with low attitude but show no statistically significant difference in the sample group with attitude at the medium level as illustrated in Table 34.

Table 34: Scores Differences in the needs of sample group with different attitudes

All animals media requirement levels	Mean of needs for Media	Differences between the needs for Media Levels		
		Attitude Low	Attitude Medium	Attitude High
Low	**6.30**	-	**-0.66**	**-0.99***
Medium	**6.96**	-	-	**-0.33**
High	**7.29**	-	-	-

* Mean of the needs for Media were having statistically difference at 0.05.

Knowledge Level of Wildlife

Findings from the study suggested that the sample group were having the mean of knowledge at 15.41%, the standard deviation at 3.27 The highest knowledge scores were at 20, clearly indicated the knowledge level of the sample group. In order to derive at the clear perception, the scores were divided into 3 levels (Table 5). After arranging the group, sample group with the highest knowledge level remained at 50 % as contrast with the lowest percentage of the medium knowledge group at 18 %. The details of knowledge level as compared with the needs for knowledge scores in the content of wildlife and the needs for media have been provided in the Table 35.

Table 35: Numbers, Mean and Standard Deviation on the Tourist needs of knowledge wildlife and wildlife media classified according to tourist's knowledge

Tourist's Knowledge Level	Total	Needs for Knowledge Scores								Needs for Media Scores	
		Reptiles		Mammals		Birds		Total			
		$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D	$\bar{X}$	S.D
1. Low (0-13 points)	64 (32%)	8.92	1.854	9.48	2.008	9.41	1.900	27.81	4.724	6.89	1.460
2. Medium (14-15 points)	36 (18%)	9.25	2.130	9.67	2.098	9.53	2.384	28.44	5.921	6.97	1.905
3. High (16-20 points)	100 (50%)	8.51	1.904	8.59	2.109	8.44	2.324	25.54	5.304	7.21	1.328
Total	200	8.77	1.942	9.07	2.121	8.94	2.256	26.79	5.37	7.07	1.487

Taking the different between mean through the ANOVA analysis, mean of the needs for knowledge in wildlife content among the tourists were having statistically differences as illustrated in Table 36.

Table 36: Scores Differences in Varieties of Topics classified according to Level of Wildlife Knowledge through ANOVA Analysis

Required Topics	ANOVA Sources	d.f	S.S	M.S	F	Sig
1. Reptiles	Between Groups	2	16.526	8.263	2.217	0.112
	Within Groups	197	734.349	3.728		
	Overall	199	750.875			
2. Mammals	Between Groups	2	46.846	23.423	5.440	0.005
	Within Groups	197	848.174	4.305		
	Overall	199	895.020			
3. Birds	Between Groups	2	51.345	25.673	5.262	0.006
	Within Groups	197	961.050	4.878		
	Overall	199	1012.395			
4. All Animals	Between Groups	2	321.701	160.851	5.849	0.003
	Within Groups	197	5417.479	27.500		
	Overall	199	5739.180			
5. Needs for Media Scores	Between Groups	2	4.358	2.179	0.985	0.375
	Within Groups	197	435.797	2.212		
	Overall	199	440.155			

The sample group with high level of knowledge had the mean differed from the medium and low level of knowledge with statistically significant different while the mean between the sample group with medium and low level had no statistically significant different.

Judging from the animal's classification, mean indicated the needs for knowledge in mammals and birds were having statistically as illustrated in Table 37.

Table 37: Scores Differences of the needs for knowledge of Sample Group received wildlife news through different media

Knowledge Level	Average Scoring of the needs for knowledge	Differences between Knowledge Level		
		High	Low	Medium
• All Animals				
Low	25.54	-	-2.27*	-2.90*
Medium	27.81	-	-	-0.63
	28.44	-	-	-
• Mammal				
High	8.59	-	-0.89*	-1.08*
Low	9.48	-	-	-0.18
Medium	9.67	-	-	-
• Bird				
High	8.44	-	-0.97*	-1.09*
Low	9.41	-	-	-0.12
Medium	9.53	-	-	-
• Reptile				
• High	8.51	-	-0.41	-0.74
Low	8.92	-	-	-0.33
Medium	9.25	-	-	-

* Mean of the needs for knowledge of both groups was having statistically significance differences at 0.05.

CHAPTER V
DISCUSSION

The research study on the tourist's needs for knowledge on wildlife at Pang-Nga Wildlife Breeding Research Center was aimed at the tourist's interest and needs for knowledge on wildlife as well as media types to disseminate wildlife knowledge. It also included the variables influenced the tourist's needs for knowledge on wildlife at Pang-nga Wildlife Breeding Research Center. Results could be discussed in the following topics:

5.1 Tourist's interest and needs for knowledge on wildlife at Pang-nga Wildlife Breeding Research Center.

5.2 Media types of Wildlife Knowledge for tourists at Pang-nga Wildlife Breeding Research Center

5.3 Research Hypothesis

5.1 Tourist's interest and needs for knowledge on wildlife at Pang-nga Wildlife Breeding Research Center.

Findings from the study that wildlife at Pang-nga Wildlife Breeding Research Center consisted of reptiles, mammals and bird. Therefore, tourists took interest in different wildlife, for example, interested in soft-shell turtle on its importance to ecosystem, Mating, foods, lifestyles and natural abundance. Water monitor was selected to study its natural habitat.

As for mammals, Serow had received wide interest among tourists in its significance towards ecosystem, reproduction, foods, natural habitat and the natural abundance. As for Asiatic Black Bear, the interest was on its lifestyle.

On the content of the bird, Pheasant had received wide interest among tourists in its significance towards ecosystem, reproduction, foods, natural habitat and the natural abundance. As for Asiatic Black Bear, the interest was on its lifestyle.

Findings from the research that both high and low knowledge tourists had shown statistically significant differences in the needs for knowledge on wildlife. In another words, on the needs for knowledge on wildlife, tourists at low knowledge level had high interest and scores since they were eager to search for unknown content while tourists at high knowledge level had quite low scores. According to Prachvanee Korn Isranukul (2001:46) who studied the needs of tourists towards the arrangement of natural habitat for zoo animals as both recreation and learning about wildlife in the zoo. Taking opinion of tourists would help us to understand the needs and concerns of tourists towards the arrangement of natural habitat. Besides, visitor's opinion had partially helped to improve and shape up the natural habitat quite appropriate for the animal's lifestyles and providing education for the public

Therefore, the research must emphasis on the interest and the need of wildlife. If the tourist's interests and needs on wildlife's knowledge were on high level and strong enough to create awareness and make them appreciate the significance of wildlife towards man and environment, the destruction of wildlife could be subsided. Moreover, most tourists aged between 15 –25 years old were school students who must be taught wildlife awareness through providing information that would create conserve mind. Through conservation, wildlife destruction would be reduced and wildlife touring happened with understanding and learning for recreation and enjoyment.

Therefore, wildlife awareness should be promoted through providing knowledge on wildlife to better their future existence.

5.2 Media types of Wildlife Knowledge for tourists at Pang-nga Wildlife Breeding Research Center

Findings from the research suggested that the most needed media type must be able to provide knowledge on wildlife at the Research Center as well as easily understandable, uncomplicated with Information Center available. The highly requested media was Exhibition at 30%, following by the Brochures at 26.5% and interpretation sign at 18 %.

Exhibition was most needed media since it had been the appropriated method for providing knowledge at Pang-nga Wildlife Breeding Research Center through narration under the pictures. It worked quite well when there were insufficient numbers of interpreter to answer questions. This finding was concurred with the study of Surachet Chetmas(1996:55) who had referred to the exhibition as the extended media for continuous presentation, designed to attract all tourists in every ages.

Brochures were the 2nd needed media that could be given to the tourists to be used as information provider while touring happened with learning for recreation and enjoyment, enabled them to understand information regarding to the Research Center as well as interesting wildlife. At the same time, brochures could be given to the potential tourists and used as low cost advertising to attract more tourists. However, some information which contained in the brochures may not be detail enough that sometimes the tourists must request for additional information from the Research Center. According to Prachit Tinbut (1996:16) who stated that the purpose of making brochures had been the available information that could provide precise information interesting enough to draw tourist's attention in short period of time. Therefore, the statements and pictures must be concise and directed to the point as

much as possible. Brochures had become one of the most interesting media to present and provide wildlife's information in order to attract tourist's attention

Interpretation signs were the 3rd needed media. Most signs at Pang-nga Breeding Research Center were interpretation signs with short statements or narration, unable to explain the importance of wildlife in more details. However, the advantages of the interpretation signs were their abilities to motivate the tourist to search for more information on wildlife. According to Juntra Masuvong (1997:94) who stated that the interpretation signs represented presentation's equipment through pictures, materials, including alphabet to provide new information and data to the audiences and thus motivate them to search for more information.

Judging from the research results, each media has possessed own uniqueness. Therefore, wildlife's knowledge presentation should base on each uniqueness that should be match with the contents and needs of tourists. This would draw the tourist's attention as well as create certain benefits.

As for the contents, tourists took interest in different wildlife. Then, the presentation should be created from the derived information on the needs of tourists, enabled to provide both recreation and interesting information on wildlife that was essential for building up awareness among the general public. Furthermore, perception of knowledge level, interest and needs of the tourists could produce effective media. This finding concurred with the study of Surachet Chettamas (1996) who stated that nature interpretation was the service provided by the natural interpreter for the tourists to understand the fact about nature by applying art and technique that easily understandable and through informal language to make the tourist to absorb information from the natural environment.

Therefore, the media types was crucial for drawing tourist's attention and providing knowledge.

5.3 Research Hypothesis

From the 1st hypothesis, " the studied variables of ages, educational levels, occupations, wildlife news receipt, tourist's type, attitude towards wildlife's value and knowledge had influenced the needs for information on wildlife among tourists at Pang-nga Wildlife Breeding Research Center".

Findings from the research revealed that knowledge had influenced the needs for information on wildlife, having statistically significant difference at 0.05 %. The tourists with low level of knowledge had high needs in wildlife information since they were eager to learn about unseen wildlife.

From the 2nd hypothesis, " The studied variables consisted of ages, educational levels, occupations, wildlife news receipt, tourist's type, attitude towards wildlife's value and knowledge. All of these variables had influenced the needs for wildlife's media of the tourists at Pang-nga Wildlife Breeding Research Center".

Findings from this research that attitude had influenced the needs for media among the tourists with the statistically significant differences at 0.05. The tourists with high attitude towards wildlife's value had high needs for wildlife media in different varieties with interesting presentation. Therefore, the current media has been crucial for wildlife presentation to build up attitude regarding to the meaning and value of wildlife through the formulation of appropriate media.

CHAPTER VI
CONCLUSIONS AND RECOMMENDATIONS

At present, Thailand's forest has been drastically reduced by facing the major destruction from over population and deforestation for agricultural. Results from illegal cutting down trees resulted in the reduction of wild animals from the disturbance of the natural habitat, lacking foods or poaching or hunting the animals for foods and ornaments. Some wild animals were facing extinction or already extinct. Recently, there had been wide effort to promote tourism, since both Thai and Foreign tourists took interested in Thai wildlife. Therefore, information should be available not only to provide knowledge and news but also recreation as well as details of animals for all group of tourists to gain maximum benefits and create awareness of wildlife which could result in wildlife conservation and the importance of wildlife to nature and mankind.

Presenting knowledge on wildlife to attract the tourist's attention through media. Each type of media had own uniqueness and ways to present that could provide recreation as well as knowledge on wildlife.

6.1 Summarized Research Results

Findings from the study of the tourist's needs for knowledge on wildlife at Pang-nga Wildlife Breeding Research Center suggested that ages, educational levels, tourists type and attitude had not effected the need for wildlife's knowledge among the tourists. Therefore, giving knowledge on wildlife had no impact towards the needs for knowledge on wildlife among the tourists. Therefore, knowledge on wildlife for tourists at Pang-nga Wildlife Breeding Center were profound and available unlimited.

Media types for wildlife news receipt and the knowledge level had created the effect on the needs for knowledge on wildlife, mainly through television, friends and hearsay. Television has provided convenience for receiving news as well as giving clear perception on wildlife. Therefore, presenting wildlife stories through television could be more interesting and educating.

Prior wildlife experiences that were told by friends and from hearsay could arouse the interest to follow more wildlife's stories. It usually attracted attention since most people believed more in friends.

Findings that the most needed media for tourists at Pang-Nga Wildlife Breeding Research Center were the exhibition, brochure, leaflets, interpretation signs. Although those media were at high cost, they were quite durable without limitation in time and places. Everybody could see at all times and places, such as, brochures and could be wildly advertise. Therefore, the responsible divisions should both public and local private sectors should realize how importance and promote the use of media in giving knowledge of wildlife among tourists as the method to build conscious awareness in Thailand's conservation of nearly extinct wildlife.

Therefore, the study of tourist's needs for knowledge on wildlife was crucial since the information on wildlife could make available for the visitors if we had known in advance of their needs in wildlife, such as, type of wildlife, wildlife importance to mankind. Besides, wildlife's tour could bring enjoyment as well as provide knowledge to build wildlife appreciation.

6.2 Suggestions from the Research

From this research, the presentation of knowledge on wildlife for the tourists at Pang-nga Wildlife Breeding Research Center would be able to present profound knowledge without any limitation.

- Television/ friends and hearsay could be effective media for the needs for knowledge on wildlife. Therefore, media formulation should be creative with varieties of forms for presentation. The contents should be interested, excited and provided vivid imagination on wildlife.
- Survey of tourist's opinion and their needs to create appropriated media and the ability to present wildlife knowledge for the maximum benefit from wildlife tour.
- The National Park of Flora and Fauna had adapted research results to be used for nursing wildlife throughout the country in the similar areas with the same tourism capacity. Many media were formulated with contents appropriated for the need of tourists, school and college

6.3 Suggestions for Further Researches

- Media for providing knowledge on wildlife should be formulated to match with the content of presentation, the forms to provide knowledge and attract tourists.
- Media should be formulated in various types to select the form most appropriate and attract tourist's attention.
- Research should be extended to the development of manual to study wildlife in their natural habitat at Pang-nga Wildlife Breeding Research Center regarding to mammal, bird and reptile, such as, Serow, Jungle Fowl and Pheasant, Soft-shell turtle, Water Monitor, arranging the manual in Thai, English and Chinese.
- Studying on the impact towards wildlife from the excessive number of tourists should be conducted, such as, the process of laying eggs of the Bulbul.

BIBLIOGRAPHY

Bloom ; Benjamin S. J Thomas Hasting and Geroge., F. Madaus Handbook on Formative and Summative Evaluation of Student Learning. New York : Mc Graw – Hill Book Co , 1971.

Cherry, Colin On Human Communication A Review , A Survey and a Criticism 3nd ed. The United States of America : The Massachusetts Institute of Technology, 1978.

Good, Carter V. Dictionary of Education. New York : Mc Graw- Hill Book Company. 1973.

Joseph Friend And David Guralink, Webster's New York Dictionary of American Language (New York : The World Publishing Co. , 1975)

Katz E. and Paul F. Lazarsfeld. Personal Influence. New York : The Free Press, 1955.

Klapper, Joseph T. The effect of communication New York : The Free Press, 1960.

Schram, Wilton. Beliefs, Attitude and Values : a Theory of Organization and Change San Francisco : Jossey – Bass Inc., 1970.

In Thai

กองสถิติและวิจัยการท่องเที่ยวแห่งประเทศไทย สถิติการท่องเที่ยวภายในประเทศภาคใต้ ปี 2543, 2543.

งานทรัพยากรธรรมชาติและแหล่งน้ำ อนุรักษ์สัตว์ป่าเพื่อพัฒนาคุณภาพสิ่งแวดล้อม เอกสารสัมมนา สัตว์ป่าเมืองไทย 24-29 ธันวาคม , 2530.

จุฑา สุทธาภาศ ความต้องการพัฒนาของคณาจารย์ในสถาบันราชภัฏกลุ่มรัตนโกสินทร์ วิทยานิพนธ์ปริญญาศึกษาศาตรมหาบัณฑิต สาขาวิชาประชากรศึกษา บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล , 2543 .

จันทรา มาศสุวงส์ หลักนิทรรศการ สำนักพิมพ์โอเดียนสโตร์ พิมพ์ที่ โอ. เอส. พริ้นติ้งเฮ้าส์ , 2540.

ฉลองชัย สุรวัฒบูรณ์ การเลือกและการใช้สื่อการสอน ภาควิชาเทคโนโลยีการศึกษา คณะศึกษาศาตร์ มหาวิทยาลัยเกษตรศาตร์ , 2528 .

ชุมพล งามผ่องใส ทรัพยากรสัตว์ป่า กรุงเทพฯ : ภาควิชาอนุรักษ์วิทยา มหาวิทยาลัยเกษตรศาสตร์ , 2521.

ชุมเจตน์ กาญจนเกษร การควบคุมการนำเข้าและส่งออกชนิดพันธุ์สัตว์ป่าและสัตว์น้ำ เอกสารรายงานการประชุมวิชาการ ชนิดพันธุ์ต่างถิ่นในประเทศไทย , จัดพิมพ์โดย ศูนย์พันธุวิศวกรรมและเทคโนโลยีชีวภาพแห่งชาติ , 2539.

ชิดจันทร์ หังสสูติ หลักและการจัดการอุตสาหกรรมการท่องเที่ยว ภาควิชาอุตสาหกรรมการบริหาร คณะบริหารธุรกิจ มหาวิทยารามคำแหง หจก. แสงจันทร์การพิมพ์ พิมพ์ครั้งที่ 2 : 2529.

ชำนาญ แก่นจันทร์ ความรู้และทัศนคติต่อการเพาะเลี้ยงสัตว์ป่าของราษฎรที่อาศัยอยู่โดยรอบสถานีเพาะเลี้ยงสัตว์ป่าจุฬาภรณ์ จังหวัดศรีสะเกษ บัณฑิตวิทยาลัย มหาวิทยาลัยเกษตรศาตร์ , 2544.

ทวี หนูทอง ทรัพยากรสัตว์ป่ากับการพัฒนาเศรษฐกิจ ใน การสัมมนา เรื่องสัตว์ป่าเมืองไทย ครั้งที่ 9 คณะวนศาสตร์ มหาวิทยาลัยเกษตรศาสตร์ , 2531.

ทวี หนูทอง และอนุช วงศ์ชุ่มเย็น การจัดการทรัพยากรสัตว์ป่า กองอนุรักษ์สัตว์ป่า กรมป่าไม้, 2540 . (อัดสำเนา)

เทพพนม เมืองแมน และสวิง สุวรรณ พฤติกรรมองค์กร กรุงเทพฯ : ไทยวัฒนาพานิช . 2539.

ธงชัย จารุพพัฒน์ สถานการณ์ป่าไม้ของประเทศไทยในช่วงระยะเวลา 37 ปี (พ.ศ. 2504-2541). ส่วนวิเคราะห์ทรัพยากรป่าไม้ . กรมป่าไม้. กรุงเทพฯ , 2541.

ธนาภรณ์ เมทณีสุดดี ความพึงพอใจของนักท่องเที่ยวชาวต่างประเทศที่มีต่อการรับบริการสื่อวิดีทัศน์ : ศึกษาเฉพาะกรณี วัดพระเชตุพนวิมลมังคลารามราชวรวิหาร วิทยานิพนธ์ปริญญาวิทยาศาสตร์มหาบัณฑิต สาขาวิชาเทคโนโลยีที่เหมาะสมเพื่อการพัฒนาทรัพยากร บัณฑิตวิทยาลัย มหาวิทยาลัยมหิดล, 2543.

ธีรภัทร ประยูรสิทธิ สัตว์ป่าสงวน ใน สัตว์ป่าเมืองไทยก่อนจะเหลือเพียงความทรงจำ สุดารา สุจฉายา, บรรณาธิการ. กรุงเทพมหานคร ; ธีระการพิมพ์ , 2534.

นีออน กลิ่นรัตน์และปรีชา กลิ่นรัตน์ . รายงานการวิจัย “ความเข้าใจในการป้องกันตนให้พ้นจากยาเสพติดให้โทษของนักศึกษาวิทยาลัยครูในภาคตะวันออกเฉียงเหนือ” ขอนแก่น : คณะศึกษาศาสตร์ มหาวิทยาลัยขอนแก่น , 2542.

บุญธรรม กิจปรีดาบริสุทธิ์ . ระเบียบวิธีการวิจัยทางสังคมศาสตร์ . คณะสังคมศาสตร์และมนุษยศาสตร์ มหาวิทยาลัยมหิดล , กรุงเทพฯ . 2531 .

บุญธรรม กิจปรีดาบริสุทธิ์ . ระเบียบวิธีการวิจัยทางสังคมศาสตร์ . พิมพ์ครั้งที่ 8 กรุงเทพฯ : จามจุรีโปรดักท์ . 2547 .

บุญเลิศ อังศิริจินดา และสุดารา สุจฉายา อดีต ปัจจุบันและสถานการณ์การอนุรักษ์สัตว์ป่าเมืองไทย ใน สัตว์ป่าเมืองไทยก่อนจะเหลือเพียงความทรงจำ สุดารา สุจฉายา , บรรณาธิการ . กรุงเทพมหานคร ; ธีระการพิมพ์ , 2534 .

ประชิด ทินบุตร การออกแบบกราฟิก สำนักพิมพ์โอเดียนสโตร์, กรุงเทพฯ , 2539.

ประดิษฐ์ เจริญสุข การบังคับชัพระราชบัญญัติสงวนและคุ้มครองสัตว์ป่า พ.ศ. 2535 ตามอนุสัญญาว่าด้วยการค้าระหว่างประเทศสัตว์ป่าและพืชป่าที่ใกล้สูญพันธุ์ , 2543.

ประภาเพ็ญ สุวรรณ. ทัศนคติ การวัดความเปลี่ยนแปลงและพฤติกรรมอนามัย .
กรุงเทพมหานคร. ไทยวัฒนาพานิช , 2534.

ประเสริฐ คำออน . ความรู้และทัศนคติของเจ้าหน้าที่ส่งเสริมการเกษตรที่สูง ของมูลนิธิโครงการหลวงต่องานอนุรักษ์ทรัพยากรธรรมชาติในจังหวัดเชียงใหม่ . วิทยานิพนธ์ปริญญาโท มหาวิทยาลัยเชียงใหม่, เชียงใหม่. 2539.

พวงรัตน์ ทวีรัตน์ . วิธีการวิจัยทางพฤติกรรมศาสตร์และสังคมศาสตร์. คณะสังคมศาสตร์และมนุษย์ศาสตร์ มหาวิทยาลัยศรีนครินทรวิโรฒ ประสานมิตร. 2535.

พิชา พิทยขจรวุฒิ . การสื่อความหมายธรรมชาติในอุทยานแห่งชาติ. เอกสารการสัมมนา เรื่อง สัตว์ ป่าเมืองไทย คณะวนศาสตร์ มหาวิทยาลัยเกษตรศาสตร์. 2532.

พิทยา ว่องกุล บรรณาธิการ สถานการณ์สิ่งแวดล้อมไทย 2537 บริษัทอมรินทร์พริ้นติ้งแอนด์พับลิชชิ่ง จำกัด (มหาชน) , 2537.

มานพ เลาห์ประเสริฐ. ไซเตส (CITES) กับประเทศไทย. ม.ป.ท : ม.ป.ป.

รัฐพล ไชยรัตน์ บทบาทของภาพถ่ายเพื่อการโฆษณาส่งเสริมธุรกิจท่องเที่ยวในประเทศไทย วิทยานิพนธ์ปริญญานิเทศศาตรมหาบัณฑิต ภาควิชาการสื่อสารมวลชน บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย , 2536.

วศิน อิงคพัฒนากุล. บทบาทของสำนักงานคณะกรรมการสิ่งแวดล้อมแห่งชาติในการอนุรักษ์สัตว์ป่า. เอกสารประกอบสัมมนา เรื่อง สัตว์ป่าเมืองไทย ครั้งที่ 3 มหาวิทยาลัยเกษตรศาสตร์ , 2525.

วารินทร์ รัศมีพรหม สื่อการสอนเทคโนโลยีทางการศึกษาและการสอนร่วมสมัย คณะศึกษาศาตร์ มหาวิทยาลัยศรีนครินทรวิโรฒประสานมิตร โรงพิมพ์ชวนพิมพ์ กรุงเทพ ฯ , 2531.

วิจิตร อาวะกุล เทคนิคการประชาสัมพันธ์ . กรุงเทพมหานคร . พริ้นติ้งเฮ้าส์ , 2534.

วิเชียร เกตุสิงห์ . หลักการใช้เครื่องมือเพื่อการวิเคราะห์ในงานวิจัย . กรุงเทพมหานคร : เรืองอักษร การพิมพ์ , 2530.

วินัย วีระวัฒนานนท์ . สิ่งแวดล้อมและการพัฒนา. กรุงเทพฯ เรือนแก้วการพิมพ์ ,2532.

วิโรจน์ นาคแท้ เอกสารประกอบ สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าเพื่อเศรษฐกิจจังหวัดพังงา, 2543.

วิสูตร พึ่งชื่น “สัตว์ป่า” ใน ทรัพยากรธรรมชาติและสิ่งแวดล้อม บริษัทพัฒนาวิชาการจำกัด (2535) . พิมพ์ครั้งที่ 2 , 2544.

วีระ สกุลทับและคณะ . การอนุรักษ์สิ่งแวดล้อม สำนักงานคณะกรรมการสิ่งแวดล้อมแห่งชาติ กระทรวงวิทยาศาสตร์ เทคโนโลยีและการพลังงาน.

วันทนา สุรชีวิน . การเปิดรับข่าวสาร ความรู้ ทัศนคติ ของนักท่องเที่ยวชาวต่างประเทศกับการเดินทางมาท่องเที่ยวในประเทศไทยปีท่องเที่ยวไทย 2541-2542. วิทยานิพนธ์ปริญญานิเทศศาตรมหาบัณฑิต บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย , 2541.

สมคะเน โพธิ์ศรี . ความคิดเห็นของข้าราชการตำรวจชั้นประทวนของกองบังคับการตำรวจป่าไม้เกี่ยวกับกฎหมายสิ่งแวดล้อมที่เกี่ยวข้องกับทรัพยากรป่าไม้. วิทยานิพนธ์ปริญญาโท มหาวิทยาลัยมหิดล . กรุงเทพฯ , 2538.

สมชาติ สุกฤตยานันท์. ความสัมพันธ์ของการแสวงหาข่าวสารด้นการท่องเที่ยวกับการตัดสินใจเดินทางมาท่องเที่ยวภายในประเทศของนักท่องเที่ยวไทย. วิทยานิพนธ์ปริญญามหาบัณฑิต คณะวารสารศาสตร์และสื่อมวลชน มหาวิทยาลัยธรรมศาสตร์ , 2533.

สมชาย เลี้ยงพรรณ. การอนุรักษ์ทรัพยากรสัตว์ป่าในประเทศไทย . คณะมนุษย์ศาตร์และสังคมศาสตร์มหาวิทยาลัยทักษิณ , 2542.

สวัสดิ์ วงศ์ถิรวัฒน์และคณะ . สัตว์ป่าสงวนของไทย ส่วนอนุรักษ์สัตว์ป่า สำนักอนุรักษ์ทรัพยากรธรรมชาติ กรมป่าไม้ , 2539.

สถิติการท่องเที่ยวแห่งประเทศไทยภาคใต้ปี 2544: กองสถิติและวิจัยการท่องเที่ยวแห่งประเทศไทย.

สิริกาญจน์ ปรับโตวิตโจโย. การเปิดรับข่าวสารการท่องเที่ยวกับการตัดสินใจเดินทางท่องเที่ยวต่างประเทศ วิทยานิพนธ์ปริญญามหาบัณฑิต ภาควิชาการประชาสัมพันธ์ บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย , 2539.

สุรเชษฎ์ เชษฐมาส . คำบรรยายประกอบการสอนวิชาเทคนิคการสื่อความหมายสิ่งแวดล้อม. ภาควิชาอนุรักษ์วิทยา , คณะวนศาสตร์ , มหาวิทยาลัยเกษตรศาตร์. กรุงเทพ ฯ , 2539

สุพัฒน์ ส่องแสงจันทร์ สื่อโสตทัศนในห้องสมุด ภาควิชาบรรณารักษ์ศาสตร์ คณะมนุษย์ศาสตร์ มหาวิทยาลัยศรีนครินทรวิโรฒน์ , สุวีริยาสาส์นพิมพ์ , 2543.

สุรสิทธิ์ วิทยารัฐ การผลิตสื่อสิ่งพิมพ์ โปรแกรมวิชานิเทศศาสตร์ คณะวิทยาการจัดการ สถาบันราชภัฏสวนสุนันทา , 2542.

เสถียร เชยประทับ. การสื่อสารนวกรรม ม.ป.ท., 2525.

เสรี วังส์ไพจิตร. ความรู้ทั่วไปเกี่ยวกับการท่องเที่ยวและปีท่องเที่ยว 2530 จุลสารการท่องเที่ยว 6 (ม.ค. 2530) .

สุชาติ เลาบริพัตร. วิกฤติและทางออกของปัญหาการระบาดยาบ้า. กรุงเทพฯ กองประสานการปฏิบัติการบำบัดรักษาผู้ติดยาและสารเสพติด กรมการแพทย์ กระทรวงสาธารณสุข, 2543.

สุภาพร รัตนสัค. ความรู้ความเข้าใจในกระบวนการร่างรัฐธรรมนูญปี 2540 ของครูโรงเรียนมัธยมศึกษาใน อำเภอเมือง จังหวัดเชียงใหม่ . วิทยานิพนธ์ปริญญาโท มหาวิทยาลัยเชียงใหม่ , 2541.

สุมาลี เทพสุวรรณ. การอนุรักษ์ทรัพยากรธรรมชาติ (Natural Resource Conservation) คณะสิ่งแวดล้อมและทรัพยากรศาสตร์ มหาวิทยาลัยมหิดล , 2542.

องอาจ ฤทธิ์ทองพิทักษ์ . พฤติกรรมการสื่อสารผ่านระบบเวิลด์ไวด์เว็บของนักศึกษาในเขตกรุงเทพมหานคร. วิทยานิพนธ์ปริญญามหาบัณฑิต ภาควิชาการประชาสัมพันธ์ บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย , 2539.

อนันต์ อนันตโชติ . คำบรรยายวิชาการประชาสัมพันธ์ด้านทรัพยากรธรรมชาติ . ภาควิชาการจัดการป่าไม้ คณะวนศาสตร์ มหาวิทยาลัยเกษตรศาสตร์ , 2531.

APPENDIX

แบบสอบถามสำหรับนักท่องเที่ยว

เรื่อง ความต้องการรู้เรื่องสัตว์ป่าของนักท่องเที่ยว ณ สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าเพื่อเศรษฐกิจพังงา

เรียน นักท่องเที่ยวผู้ตอบแบบสอบถาม

แบบสอบถามนี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศึกษาศาสตร์มหาบัณฑิต สาขาสิ่งแวดล้อมศึกษา บัณฑิตวิทยาลัย มหาวิทยามหิดล ซึ่งผลการศึกษาครั้งนี้จะเป็นประโยชน์และสามารถนำไปใช้เป็นแนวทางในการพัฒนารูปแบบการสื่อความหมายธรรมชาติ ณ สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าเพื่อเศรษฐกิจพังงา และนำไปสู่การให้เกิดความรู้ความเข้าใจในชีวิตสัตว์ป่าแก่นักท่องเที่ยวมากขึ้นทำให้มองเห็นคุณค่าความสำคัญของสัตว์ป่ามากขึ้น ดังนั้นผู้วิจัยจึงใคร่ขอความกรุณามายังท่านได้ช่วยตอบแบบสอบถามนี้ ในฐานะที่ท่านเป็นนักท่องเที่ยว ขอได้โปรดตอบแบบสอบถามตามความเป็นจริงและตามความคิดเห็นของท่านให้สมบูรณ์ครบถ้วน เพื่อจะได้นำผลไปใช้ประโยชน์ดังกล่าว

ขอขอบพระคุณในความร่วมมือของท่านเป็นอย่างสูง

นางสาวสุชาวดี ลำภา

นักศึกษาปริญญาโท สาขาสิ่งแวดล้อมศึกษา คณะสังคมศาสตร์และมนุษยศาสตร์

มหาวิทยาลัยมหิดล

วันที่สำรวจ ..... เดือน ..... ปี .....

<u>แบบสอบถามประกอบด้วย 5 ตอนคือ</u>

ตอนที่ 1 ข้อมูลทั่วไป

ตอนที่ 2 แบบวัดเจตคติของนักท่องเที่ยวเรื่องคุณค่าของสัตว์ป่า

ตอนที่ 3 ความรู้เรื่องสัตว์ป่าของนักท่องเที่ยว

ตอนที่ 4 ความต้องการความรู้เรื่องสัตว์ป่าและรูปแบบของสื่อที่นักท่องเที่ยวต้องการ

ตอนที่ 5 ความสนใจเรื่องสัตว์ป่าของนักท่องเที่ยว

แบบสอบถาม

เรื่อง ความต้องการความรู้เรื่องสัตว์ป่าของนักท่องเที่ยวชาวไทย ณ สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าเพื่อเศรษฐกิจพังงา

<u>คำชี้แจง</u> แบบสอบถามนี้เป็นแบบสอบถามสำหรับนักท่องเที่ยวที่มาเที่ยวสถานีวิจัยการเพาะเลี้ยงสัตว์ป่าเพื่อเศรษฐกิจพังงา ซึ่งแบ่งออกเป็น 5 ตอน โดยให้ผู้ตอบแบบสอบถามทำเครื่องหมาย √ ลงในช่อง ( ) และเติมคำลงในช่องว่างแต่ละข้อตามความเป็นจริง

<u>ตอนที่ 1</u> ข้อมูลทั่วไป

1. อายุ ..... ปี
2. ระดับการศึกษา

( ) ประถมศึกษา 1 – 6 ( ) มัธยมศึกษาตอนต้น
( ) มัธยมศึกษาตอนปลายหรือเทียบเท่า ( ) ปริญญาตรีหรือเทียบเท่า
( ) สูงกว่าปริญญาตรี ..... ( ) อื่นๆ.....

3. อาชีพ

( ) เกษตรกรรม ( ) รับราชการ
( ) รัฐวิสาหกิจ ( ) พนักงานบริษัท
( ) ค้าขาย ( ) อื่น ๆ .....

4. ลักษณะกลุ่มเดินทางของท่านในครั้งนี้

( ) กลุ่มเพื่อน ( ) กลุ่มครอบครัว
( ) กลุ่มผสมระหว่างเพื่อนและครอบครัว ( ) มากับบริษัททัวร์
( ) กลุ่มทัศนศึกษา ( ) อื่น ๆ .....

5. ท่านได้รับข้อมูลข่าวสารเรื่องสัตว์ป่าของสถานีวิจัยการเพาะเลี้ยงสัตว์ป่าพังงา จากสื่อใด

( ) วิทยุ / โทรทัศน์ ( ) แผ่นพับ / หนังสือ
( ) บุตรหลานหรือญาติชวน ( ) เพื่อนชวน
( ) อื่น ๆ ระบุ .....

6. ความถี่ท่านได้รับข้อมูลข่าวสารเกี่ยวกับเรื่องสัตว์ป่า

( ) 1 ครั้ง / เดือน ( ) 2 ครั้ง / เดือน
( ) 3 ครั้ง / เดือน ( ) 4 ครั้ง / เดือน
( ) มากกว่า 4 ครั้ง / เดือน ( ) อื่น ๆ โปรดระบุ .....

<u>ตอนที่ 2</u> แบบวัดเจตคติของนักท่องเที่ยวเรื่องคุณค่าของสัตว์ป่า

<u>คำชี้แจ้ง</u> ทำเครื่องหมาย ✓ ลงในช่องที่ตรงกับความรู้สึกหรือความคิดเห็นของท่านมากที่สุดเพียงคำตอบเดียว

เนื้อหา	เห็นด้วยอย่างยิ่ง	เห็นด้วย	ไม่แน่ใจ	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
1.สัตว์ป่าสามารถนำมาทำเป็น อาหาร , ยา , เครื่องประดับและใช้ในการค้นคว้าทดลองทางวิทยาศาสตร์					
2.การนำสัตว์ป่ามาทำเป็นอาหารไม่ถือว่าเป็นการทำลายสัตว์ป่า					
3.ควรมีการขยายพันธุ์สัตว์ป่าที่หายากเพื่อส่งเสริมการส่งออกสัตว์ป่า					
4.สัตว์ป่าเป็นตัวรักษาสมดุลทางธรรมชาติ					
5.ทางด้านเศรษฐกิจสัตว์ป่ามีความสำคัญในการดึงดูดนักท่องเที่ยวให้เข้ามาชมสัตว์ป่าภายในประเทศ					
6. การรักษาสมดุลธรรมชาติของสัตว์ป่า คือการช่วยกระจายพันธุ์พืชเท่านั้น					
7.สัตว์ป่ามีประโยชน์ต่อมนุษย์และระบบนิเวศ					
8.เมื่อพบนกเงือกในป่า ท่านคิดว่าป่านั้นเป็นป่าที่มีสภาพสมบูรณ์					
9.การท่องเที่ยวโดยการชมสัตว์ป่า ช่วยให้เกิดความเพลิดเพลินและผ่อนคลาย					
10.เมื่อสัตว์ป่าถูกทำลายเป็นจำนวนมากไม่มีผลกระทบต่อมนุษย์					

เนื้อหา	เห็นด้วยอย่างยิ่ง	เห็นด้วย	ไม่แน่ใจ	ไม่เห็นด้วย	ไม่เห็นด้วยอย่างยิ่ง
11.สัตว์ป่ามีประโยชน์ต่อระบบนิเวศเท่านั้น					
12.สัตว์ป่ามีส่วนสำคัญในการช่วยกระจายพันธุ์พืช					
13.การซื้อของที่ทำจากซากสัตว์ป่าและนำมาทำเป็นเครื่องประดับภายในบ้านไม่ถือเป็นการทำผิดกฎหมาย					
14.ทางด้านการเมืองสัตว์ป่าเป็นตัวเชื่อมสัมพันธไมตรีระหว่างประเทศได้ เช่น ช้าง หมี แพนด้า					
15.ไม่ควรสนับสนุนการนำซากสัตว์ป่ามาทำเป็นอาหารหรือเครื่องประดับ					
16. การค้นคว้าทางการแพทย์ควรใช้สัตว์ป่าในการทดลองเท่านั้น					
17.เมื่อสัตว์ป่าถูกทำลายเป็นจำนวนมากทำให้การหมุนเวียนของพลังงานในธรรมชาติเกิดความไม่สมดุล					
18.บุคคลที่ซื้อขายสัตว์ป่าควรได้รับการลงโทษทางกฎหมาย					
19.การนำซากสัตว์ป่ามาทำเป็นเครื่องประดับไม่ใช่สาเหตุที่ทำให้สัตว์ป่าลดลง					
20.สัตว์ป่าเมื่อสูญพันธุ์หรือลดลงทำให้มีผลกระทบต่อระบบนิเวศและมนุษย์					

<u>ตอนที่ 3</u> ความรู้เกี่ยวกับสัตว์ป่าของนักท่องเที่ยว

<u>คำชี้แจง</u> กรุณาทำเครื่องหมาย ◯ ล้อมรอบข้อที่ถูกต้องที่สุด

1. ความหมายของสัตว์ป่าตาม พรบ.สงวนและคุ้มครองสัตว์ป่า พ.ศ. 2535 คือ
   ก. สัตว์บกทุกชนิด เช่น ช้าง แรด กระทิง เป็นต้น
   ข. สัตว์ทุกชนิดไม่ว่าสัตว์บก สัตว์น้ำ สัตว์ปีก แมลงหรือแมง ซึ่งเกิดและดำรงชีวิตอยู่ในป่า แต่ไม่รวมถึงสัตว์พาหนะที่ได้จดทำทะเบียนตั๋วรูปพรรณตามกฎหมายว่าด้วยสัตว์พาหนะ
   ค. สัตว์น้ำและสัตว์บกทุกชนิด เช่น ปลาชนิดต่าง และสัตว์บกทุกชนิด
   ง. แมลงและแมงทุกชนิด
2. สัตว์ป่ามีความสำคัญต่อประเทศในด้านต่างๆยกเว้นข้อใด
   ก. ด้านเศรษฐกิจ
   ข. ด้านสังคมและการเมือง
   ค. ด้านสิ่งแวดล้อม
   ง. ด้านการส่งเสริมการส่งออก
3. วันคุ้มครองสัตว์ป่าแห่งชาติของประเทศไทย คือ วันที่เท่าใดของทุกปี
   ก. 24 ธ.ค. ของทุกปี
   ข. 26 ธ.ค. ของทุกปี
   ค. 24 ม.ค. ของทุกปี
   ง. 26 ม.ค. ของทุกปี
4. ข้อใดไม่ใช่ความสำคัญของสัตว์ป่าที่มีต่อระบบนิเวศ
   ก. กำจัดศัตรูทางธรรมชาติที่ทำให้เกิดความเสียหายในระบบนิเวศ
   ข. กระจายพันธุ์พืชต่าง ๆ
   ค. สร้างความเพลิดเพลินให้มนุษย์
   ง. ทำให้เกิดการหมุนเวียนพลังงานในธรรมชาติ
5. ข้อใดคือความสำคัญของสัตว์ป่า
   ก. นำมาเป็นสัตว์เลี้ยงในบ้าน
   ข. ทำเป็นเครื่องประดับภายในบ้าน
   ค. ใช้ในการค้นคว้าวิจัยทางด้านวิทยาศาสตร์และทางด้านการแพทย์
   ง. เป็นสินค้าที่ทำรายได้ให้กับประเทศเป็นอันดับต้น

6. สาเหตุที่ทำให้สัตว์ป่าลดลง คือ
   ก. พื้นที่ป่าลดลงและจำนวนสัตว์ป่าถูกล่าเพิ่มขึ้น
   ข. ขาดบุคลากรและงบประมาณในการดูแลสัตว์ป่า
   ค. มีการประชาสัมพันธ์เผยแพร่ให้ความรู้เรื่องสัตว์ป่า
   ง. สัตว์ป่าที่หายากขยายพันธุ์ได้น้อยลง
7. สัตว์ป่าในระบบนิเวศมีความสัมพันธ์กันแบบต่างๆ ยกเว้นข้อใด
   ก. เป็นความสัมพันธ์ระหว่างสัตว์ต่างชนิดกันอยู่ร่วมกัน ต่างฝ่ายต่างได้ประโยชน์ซึ่งกันและกัน
   ข. เป็นความสัมพันธ์ที่ฝ่ายหนึ่งเป็นผู้ให้โดยมิได้เสียประโยชน์อันใดอีกฝ่ายหนึ่งเป็นผู้รับโดยไม่ก่อความเสียหายให้อีกฝ่ายหนึ่ง
   ค. ไม่มีความสัมพันธ์ใดๆต่อกันเลย
   ง. ความสัมพันธ์ที่สัตว์ป่าต่างชนิดกันต่างฝ่ายต่างอยู่ไม่มีผลใด ๆ ต่อกัน
8. ข้อใดมีผลกระทบต่อการดำรงชีวิตของสัตว์ป่า
   ก. การขยายพันธุ์สัตว์ป่าเพื่อส่งเสริมการส่งออก
   ข. การสร้างโรงงานอุตสาหกรรมใกล้บริเวณแหล่งน้ำ
   ค. การนำสัตว์ป่ามาทดลองทางวิทยาศาสตร์
   ง. การนำสัตว์ป่ามาเป็นสัตว์เลี้ยง
9. การเพิ่มขึ้นของมนุษย์มีผลกระทบต่อสัตว์ป่า ยกเว้นข้อใด
   ก. พื้นที่อยู่อาศัยลดลง
   ข. อาหารของสัตว์ป่าน้อยลง
   ค. ไม่มีผลกระทบอะไรต่อสัตว์ป่า
   ง. สัตว์ป่าถูกล่าเพิ่มมากขึ้น
10. การรักษาสมดุลทางธรรมชาติของสัตว์ป่าคือข้อใด
   ก. เพิ่มศัตรูทางธรรมชาติของระบบนิเวศ
   ข. ทำให้มนุษย์เกิดความเพลิดเพลิน
   ค. ช่วยกระจายพันธุ์พืช
   ง. เป็นอาหารของมนุษย์
11. เมื่อสิ่งแวดล้อมถูกทำลายจะส่งผลกระทบต่อสัตว์ป่าอย่างไร
   ก. จำนวนสัตว์ป่าลดลง
   ข. ถิ่นที่อยู่อาศัยของสัตว์ป่าลดลง

ค. อาหารของสัตว์ป่าหาได้ง่ายขึ้น

ง. แหล่งที่อยู่อาศัย แหล่งอาหาร จำนวนสัตว์ป่าลดลง

12. สัตว์ปีกใดตามพรบ.สงวนและคุ้มครองสัตว์ป่า พ.ศ. 2535 จัดเป็นสัตว์ป่าสงวน

ก. นกเงือก

ข. นกเจ้าฟ้าหญิงสิรินธร

ค. นกกางเขน

ง. นกปรอด

13. ข้อใดคือคุณค่าสูงสุดของสัตว์ป่า

ก. แพร่พันธุ์ให้พืช

ข. ให้ความเพลิดเพลินกับมนุษย์

ค. เป็นสัตว์ทดลอง

ง. ช่วยรักษาสมดุลธรรมชาติ

14. ข้อใดเป็นสาเหตุสำคัญที่ทำให้สัตว์ป่าลดลงมากที่สุด

ก. มีการลักลอบ ฆ่า นำไปทำอาหาร และนำสัตว์ป่าไปขายโดยผิดกฎหมาย

ข. พื้นที่อยู่อาศัยของสัตว์ป่าลดน้อยลง

ค. การเพาะพันธุ์สัตว์ป่าไม่ประสบความสำเร็จ

ง. สัตว์ป่าถูกภัยธรรมชาติคุกคาม เช่น ไฟป่า น้ำท่วม

15. ปัจจัยใดมีผลต่อการดำรงชีวิตของสัตว์ป่าน้อยที่สุด

ก. การลดลงของพื้นที่ป่าไม้

ข. การนำสัตว์ป่าที่พิการมาดูแล

ค. การลักลอบล่าสัตว์ป่า

ง. ไม่มีการประสานงานระหว่างหน่วยงานในการดูแลสัตว์ป่า

16. เมื่อพบสัตว์ป่าในข้อใด ทำให้ท่านทราบว่าป่านนั้นยังมีสภาพป่าที่สมบูรณ์

ก. เลียงผา

ข. นกเงือก

ค. นกเจ้าฟ้าหญิงสิรินธร

ง. นกเอี้ยง

17.ข้อใดไม่จัดว่าเป็นสัตว์ป่า

ก. เสือ

ข. ช้างที่มีตั๋วรูปพรรณ

ค. สมัน

ง. ควายป่า

18. กิจกรรมใดของมนุษย์ที่ทำให้สัตว์ป่าถูกทำลายมากที่สุด

ก. การบุกรุกพื้นที่ป่าเพื่อทำการเกษตร

ข. การเพาะพันธุ์สัตว์ป่า

ค. การท่องเที่ยวดูสัตว์ป่า

ง. การนำสัตว์ป่ามาเลี้ยง

19. ปัญหาที่ทำให้สัตว์ป่าลดลงมากที่สุด คือ

ก. มนุษย์

ข. ธรรมชาติ

ค. สัตว์ป่า

ง. ธรรมชาติและสัตว์ป่า

20. หากท่านไม่ช่วยในการดูแลหรืออนุรักษ์สัตว์ป่าจะเกิดผลกระทบอะไร

ก. ไม่มีผลกระทบต่อมนุษย์

ข. ระบบนิเวศขาดความสมดุลทางธรรมชาติ

ค. ไม่มีเนื้อสัตว์ไว้ประกอบอาหาร

ง. ทำให้เศรษฐกิจของประเทศมีปัญหา

เฉลยคำตอบ

1. ข	2. ง	3. ข	4. ค	5. ค	6. ก	7. ค	8. ข	9. ค	10. ค
11. ง	12. ข	13. ง	14. ก	15. ข	16. ข	17. ข	18. ก	19. ก	20. ข

<u>ตอนที่ 4</u> แบบสอบถามความต้องการความรู้เรื่องสัตว์ป่าและรูปแบบของสื่อที่นักท่องเที่ยวต้องการ

<u>คำชี้แจง</u> กรุณาทำเครื่องหมาย √ ลงในช่อง ( ) หน้าข้อที่ท่านต้องการ

1. เมื่อมาเยี่ยมชมสถานีวิจัย ฯจังหวัดพังงา ท่านต้องการให้มีรูปแบบของสื่อแบบใดที่ควรมี ณ สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าพังงา ในการให้ความรู้ความเข้าใจเรื่องสัตว์ป่า โปรดใส่หมายเลข 1,2,3 เรียงตามลำดับสื่อที่ท่านต้องการจากมากไปน้อย

( ) นิทรรศการ ( ) วิดีทัศน์เรื่องสัตว์ป่า
( ) แผ่นพับ/คู่มือ ( ) สไลด์
( ) คาดเซ็ทเทป ( ) การแนะนำพื้นที่โดยเจ้าหน้าที่
( ) ป้ายนิเทศต่างๆ ( ) การนำสัตว์ป่าจริงมาอยู่ในสถานที่ธรรมชาติจำลอง
( ) อื่น ๆ .....

2. ในการเที่ยวชมสัตว์ป่าที่สถานีวิจัย ฯ จังหวัดพังงา ท่านได้รับความรู้ความเข้าใจเรื่องสัตว์ป่าจากสื่อประเภทใดบ้าง

( ) นิทรรศการ ( ) วิดีทัศน์เรื่องสัตว์ป่า
( ) แผ่นพับ/คู่มือ ( ) สไลด์
( ) การแนะนำพื้นที่โดยเจ้าหน้าที่ ( ) ป้ายนิเทศต่างๆ
( ) อื่น ๆ .....

คำชี้แจง กรุณาทำเครื่องหมาย √ ลงในช่องที่ตรงกับความต้องการของท่าน
รูปแบบของสื่อที่นักท่องเที่ยวต้องการ

เนื้อหา	มาก	ปานกลาง	น้อย
1. สื่อที่ให้ความรู้มีความสัมพันธ์กับสัตว์ป่าที่มีอยู่ในสถานีวิจัยฯ			
2. สื่อที่ให้ ไม่ซับซ้อน ง่ายต่อการทำความเข้าใจ			
3. มีสื่อหลายแบบ ที่ให้ความรู้เรื่องสัตว์ป่า ฯ สถานีวิจัย ฯ			
4. มีเจ้าหน้าที่ให้ความรู้ / ให้ข้อมูล เกี่ยวกับสัตว์ป่า			
5. มีการปรับปรุงเนื้อหาการให้ความรู้สัตว์ป่าเป็นประจำ			
6. มีศูนย์ข้อมูลในการให้ความรู้ข่าวสารเกี่ยวกับสัตว์ป่า			

คำชี้แจง กรุณาทำเครื่องหมาย √ ลงในช่องที่ตรงกับความต้องการของท่านมากที่สุด
ในการเข้าชมสัตว์ป่าที่สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าพังงา ท่านต้องการได้รับความรู้เรื่องสัตว์ป่าประเภทสัตว์เลื้อยคลานในเรื่องใด

- สัตว์เลื้อยคลาน

เนื้อหา	มาก	ปานกลาง	น้อย
1. ท่านสนใจสัตว์ป่าประเภทสัตว์เลื้อยคลาน			
2. ท่านสนใจเกี่ยวกับการดำรงชีวิตของสัตว์เลื้อยคลาน			
3. ท่านต้องการทราบแหล่งที่อยู่อาศัยของสัตว์เลื้อยคลาน			
4. ท่านต้องการทราบวิธีการขยายพันธุ์ของสัตว์เลื้อยคลาน			
5. ท่านต้องการทราบชนิดของสัตว์เลื้อยคลานที่สูญพันธุ์			
6. ท่านอยากให้มีสื่อที่ให้ความรู้เกี่ยวกับเรื่องสัตว์เลื้อยคลาน			

ในการเข้าชมสัตว์ป่าที่สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าพังงาท่านต้องการได้รับความรู้เรื่องสัตว์ป่าประเภทสัตว์ปีกในเรื่องใด

- **สัตว์ปีก**

เนื้อหา	มาก	ปานกลาง	น้อย
1. ท่านสนใจสัตว์ป่าประเภทสัตว์ปีก			
2. ท่านสนใจเกี่ยวกับการดำรงชีวิตของสัตว์ปีก			
3. ท่านต้องการทราบแหล่งที่อยู่อาศัยของสัตว์ปีก			
4. ท่านต้องการทราบวิธีการขยายพันธุ์ของสัตว์ปีก			
5. ท่านต้องการทราบชนิดของสัตว์ปีกที่สูญพันธุ์			
6. ท่านอยากให้มีสื่อที่ให้ความรู้เกี่ยวกับเรื่องสัตว์ปีก			

ในการเข้าชมสัตว์ป่าที่สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าพังงาท่านต้องการได้รับความรู้เรื่องสัตว์ป่าประเภทสัตว์เลี้ยงลูกด้วยนมในเรื่องใด

- **สัตว์เลี้ยงลูกด้วยนม**

เนื้อหา	มาก	ปานกลาง	น้อย
1. ท่านสนใจสัตว์ป่าประเภทสัตว์เลี้ยงลูกด้วยนม			
2. ท่านสนใจเกี่ยวกับการดำรงชีวิตของสัตว์เลี้ยงลูกด้วยนม			
3. ท่านต้องการทราบแหล่งที่อยู่อาศัยของสัตว์เลี้ยงลูกด้วยนม			
4. ท่านต้องการทราบวิธีการขยายพันธุ์ของสัตว์เลี้ยงลูกด้วยนม			
5. ท่านต้องการทราบชนิดของสัตว์เลี้ยงลูกด้วยนมที่สูญพันธุ์			
6. ท่านอยากให้มีสื่อที่ให้ความรู้เกี่ยวกับเรื่องสัตว์เลี้ยงลูกด้วยนม			

<u>ตอนที่ 5</u> ความสนใจเรื่องสัตว์ป่าของนักท่องเที่ยว ณ สถานีวิจัยการเพาะเลี้ยงสัตว์ป่าพังงา

<u>คำชี้แจง</u> ท่านชอบดูสัตว์ชนิดใดในสถานีวิจัย ฯ แห่งนี้ กรุณาเรียงลำดับความชอบโดยใส่หมายเลข 1,2,3,4 ตามลำดับ ในวงเล็บหน้าข้อที่ต้องการ

5.1 สัตว์เลี้ยงลูกด้วยนม

( ) หมีควาย ( ) หมีคน ( ) เม่น ( )เลียงผา

( ) เก้ง ( ) ชะมด ( ) อีเห็น ( ) ชะนี

( ) ลิง ( ) ค่าง ( ) นาก

( ) อื่น ๆ ระบุ .....

ตามที่ท่านได้ใส่หมายเลข 1,2,3,4 ตามลำดับในข้างต้น ท่านสนใจสัตว์ป่าในเรื่องใดกรุณาทำเครื่องหมาย √ ในข้อที่ท่านสนใจ

เนื้อหา	ลำดับสัตว์ที่สนใจ			
	1	2	3	4
1.ความสำคัญของสัตว์เลี้ยงลูกด้วยนมที่มีต่อระบบนิเวศ				
2. วิธีการขยายพันธุ์ของสัตว์เลี้ยงลูกด้วยนม				
3.อาหารสำหรับสัตว์เลี้ยงลูกด้วยนม				
4.สัตว์เลี้ยงลูกด้วยนมอาศัยอยู่ในแหล่งใด				
5.สัตว์เลี้ยงลูกด้วยนมมีการดำเนินชีวิตอย่างไร				
6.สัตว์เลี้ยงลูกด้วยนมชนิดใดที่บ่งบอกสภาพความสมบูรณ์ธรรมชาติ				

5.2 สัตว์ปีก

( ) ไก่ป่า ( ) ไก่ฟ้า ( ) นกหว้า ( ) นกขุนทอง
( ) เหยี่ยว ( ) นกเค้า ( ) นกปรอด ( ) อื่นๆระบุ.....

ตามที่ท่านได้ใส่หมายเลข 1,2,3,4 ตามลำดับในข้างต้น ท่านสนใจสัตว์ป่าในเรื่องใดกรุณาทำเครื่องหมาย √ ในข้อที่ท่านสนใจ

เนื้อหา	**ลำดับสัตว์ที่สนใจ**			
	1	2	3	4
1.ความสำคัญของสัตว์ปีกที่มีต่อระบบนิเวศ				
2. วิธีการขยายพันธุ์ของสัตว์ปีก				
3.อาหารสำหรับสัตว์ปีก				
4.สัตว์ปีกอาศัยอยู่ในบริเวณแหล่งใด				
5.สัตว์ปีกมีการดำเนินชีวิตอย่างไร				
6.สัตว์ปีกชนิดใดที่บ่งบอกสภาพความสมบูรณ์ธรรมชาติ				

5.3 สัตว์เลื้อยคลาน

( ) เต่า ( ) ตะพาบน้ำ ( ) ตะกวด ( ) งู

( ) จิ้งเหลน ( ) กิ้งก่า ( ) อื่น ๆ ระบุ .....

ตามที่ท่านได้ใส่หมายเลข 1,2,3,4 ตามลำดับในข้างต้น ท่านสนใจสัตว์ป่าในเรื่องใดกรุณาทำเครื่องหมาย √ ในข้อที่ท่านสนใจ

เนื้อหา	**ลำดับสัตว์ที่สนใจ**			
	1	2	3	4
1.ความสำคัญของสัตว์เลื้อยคลานที่มีต่อระบบนิเวศ				
2. วิธีการขยายพันธุ์ของสัตว์เลื้อยคลาน				
3.อาหารสำหรับสัตว์เลื้อยคลาน				
4.สัตว์เลื้อยคลานอาศัยอยู่ในบริเวณแหล่งใด				
5.สัตว์เลื้อยคลานมีการดำเนินชีวิตอย่างไร				
6.สัตว์เลื้อยคลานตั้งท้องชนิดใดที่บ่งบอกสภาพความสมบูรณ์ธรรมชาติ				

ข้อเสนอแนะการปรับปรุงสถานีวิจัย ฯ

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ค่าอำนาจจำแนกของแบบทดสอบวัดความรู้เกี่ยวกับสัตว์ป่าของนักท่องเที่ยว

ข้อ	ค่าอำนาจจำแนก (r)	ค่านัยสำคัญ (Sig)	ค่าความเชื่อมั่นเมื่อตัดตัวแปรทิ้ง
1	0.577**	0.010	0.7996
2	0.480*	0.030	0.8106
3	0.258	0.167	0.8325
4	0.577**	0.010	0.8231
5	0.882**	0.000	0.7894
6	0.630**	0.004	0.8079
7	0.882**	0.000	0.7937
8	0.674**	0.002	0.8004
9	0.674**	0.002	0.7978
10	0.775**	0.000	0.7944
11	0.674**	0.002	0.7960
12	0.289	0.139	0.8189
13	0.405	0.060	0.8109
14	0.577**	0.010	0.8041
15	0.750**	0.000	0.7903
16	0.775**	0.000	0.7998
17	0.480*	0.030	0.8106
18	0.378	0.074	0.8137
19	0.258	0.167	0.8140
20	0.378	0.074	0.8127

** ค่าอำนาจจำแนกความรู้มีความแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.01

* ค่าอำนาจจำแนกความรู้มีความแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05

ระดับคะแนนวัดความรู้ของกลุ่มตัวอย่าง 30 คน จำนวน 20 ข้อ

ข้อ / คนที่	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	คะแนนรวม
1	0	0	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	**7**
2	0	1	1	1	0	0	1	1	1	0	0	0	0	0	0	1	0	1	0	0	**8**
3	0	1	1	1	0	0	1	1	1	0	0	0	0	1	0	1	0	1	0	0	**9**
4	1	1	1	1	0	0	0	1	1	1	1	0	0	0	0	1	0	0	0	0	**9**
5	0	0	0	0	0	0	1	1	0	0	1	0	1	0	1	1	1	1	1	1	**10**
6	1	0	0	0	1	1	0	0	0	1	1	1	1	1	1	1	0	0	0	0	**10**
7	1	1	0	0	1	1	0	0	1	1	1	0	0	1	1	0	0	0	1	0	**10**
8	1	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	0	1	0	**10**
9	0	0	0	0	1	0	0	0	1	0	1	1	0	1	1	0	1	1	1	1	**10**
10	0	0	0	1	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	1	**10**
11	1	0	1	0	0	0	1	1	0	1	0	1	1	0	1	1	1	0	1	0	**11**
12	0	0	1	1	1	1	0	0	0	1	0	1	1	1	0	0	1	1	1	0	**11**
13	0	1	0	0	1	1	1	1	0	1	0	0	1	1	1	0	0	1	0	1	**11**
14	1	0	0	1	1	1	0	0	0	0	1	1	1	0	0	0	1	1	1	1	**11**
15	0	1	1	1	1	1	1	0	0	0	0	1	0	0	1	0	1	0	1	1	**11**

ระดับคะแนนวัดความรู้ของกลุ่มตัวอย่าง 30 คน จำนวน 20 ข้อ (ต่อ)

ข้อ / คนที่	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	คะแนนรวม
16	1	1	1	1	1	0	1	1	0	1	1	1	1	0	1	0	1	0	1	1	**16**
17	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	0	1	1	**17**
18	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	**18**
19	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	**18**
20	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	**18**
21	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**18**
22	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	**19**
23	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**19**
24	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**19**
25	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**19**
26	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**20**
27	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**20**
28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**20**
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**20**
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	**20**

แสดงค่าความยากง่าย (P) ค่าอำนาจจำแนก (R)
ของแบบทดสอบวัดความรู้เรื่องสัตว์ป่าของนักท่องเที่ยว จำนวน 30 คน

ข้อ	จำนวนคนที่ตอบถูกกลุ่มสูง (PH)	จำนวนคนที่ตอบถูกกลุ่มต่ำ (PL)	ค่าความยากง่าย (P)	ค่าอำนาจจำแนก (r)
1	15	6	0.35	0.30
2	13	6	0.31	0.23
3	13	7	0.33	0.20
4	15	8	0.38	0.23
5	15	8	0.38	0.23
6	13	7	0.33	0.20
7	13	7	0.33	0.20
8	14	8	0.36	0.20
9	14	7	0.35	0.23
10	15	8	0.38	0.23
11	15	8	0.38	0.23
12	14	8	0.36	0.20
13	14	8	0.36	0.20
14	14	7	0.35	0.23
15	14	8	0.36	0.20
16	14	7	0.35	0.23
17	15	8	0.38	0.23
18	13	7	0.33	0.20
19	15	8	0.38	0.23
20	15	8	0.38	0.23

ค่าความเชื่อมั่นของแบบทดสอบวัดความรู้เกี่ยวกับสัตว์ป่าของนักท่องเที่ยว

ข้อ	ค่าความเชื่อมั่น	ค่าความเชื่อมั่นเมื่อตัดตัวแปรทิ้ง	ค่านัยสำคัญ (Sig)
1	0.577**	0.7996	0.010
2	0.480*	0.8106	0.030
3	0.258	0.8325	0.167
4	0.577**	0.8231	0.010
5	0.882**	0.7894	0.000
6	0.630**	0.8079	0.004
7	0.882**	0.7937	0.000
8	0.674**	0.8004	0.002
9	0.674**	0.7978	0.002
10	0.775**	0.7944	0.000
11	0.674**	0.7960	0.002
12	0.289	0.8189	0.139
13	0.405	0.8109	0.060
14	0.577**	0.8041	0.010
15	0.750**	0.7903	0.000
16	0.775**	0.7998	0.000
17	0.480*	0.8106	0.030
18	0.378	0.8137	0.074
19	0.258	0.8140	0.167
20	0.378	0.8127	0.074

ค่าความเชื่อมั่นของแบบวัดทดสอบความรู้จำนวน 20 ข้อ = 0.81

** ค่าความเชื่อมั่นความรู้มีความแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ0.01

* ค่าความเชื่อมั่นความรู้มีความแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05

BIOGRAPHY

NAME	Miss Suchavadee Lampa
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PLACE OF BIRTH	Chacheongsao, Thailand
INSTITUTIONS ATTENDED	Mahidol University, 1993-1997 : Bachelor of Nursing Mahidol University, 2000-2005 : Master of Education (Environmental Education)
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