

KPSGA Newsletter

June 2014

MESSAGE FROM THE SECRETARIAT

We have seen commitment by members to advance to the next levels of membership viz. Silver and Gold. Over this half of 2014, 30 members have made a transition from the Bronze level to the Silver level and 2 Silver level members to the Gold level. There are also 85 new members on our database at Bronze level.

Poaching is a real problem in our country, and it is a threat to our fauna which is the bedrock of our tourism industry. It is therefore our collective responsibility to remain ever vigilant and support the law enforcement agencies by reporting any unusual observations while we are in the field.

As the busy season begins, we would like to wish all of you the best and funfilled experiences with your guests. Remember that you as guides are the only people charged with the responsibility of professionally bringing to life the wilderness and cultural experiences sought by visitors to Kenya. One of these experiences is the annual wildebeest migration in the Masai Mara which is ensuing now. As usual, we expect our members to conduct themselves in the most responsible way at river crossings where cases of misconduct are rife as people jostle for spaces to get good views of this spectacle.

We would like to thank all the members who have made contributions to this newsletter and encourage all others to do so in the future.

Tom Lesarge Chief Executive Officer

BUSH MATTERS

Bewildering Sightings

Impala Ewe With Horns

Two months ago, near Naibor Camp, I came across and photographed this impala ewe with horns! I have always known female impalas to have no horns. Is it an abnormality?



Stephen Liaram Silver Level Member

Unusual Looking Bird

The bird below was sighted in Samburu National Game Reserve along the Uaso Ng'iro in May. We were a group of guides from Saruni camps on training. We and our trainer could not identify the bird. What could it be?



Saruni Kisemei Silver Level Guide

Could the above two cases be abnormal or prime forms of normalcy? The impala looks normal, but the horns even if they were on a ram are not normal. Being on an ewe makes them more abnormal. One such case was reported in Timbavati Private Game Reserve in South Africa two years ago. Animals such as this impala ewe do experience skewed hormonal levels which result in abnormal growths that masculinize females and feminise males. Testosterone, estrogen and progesterone are called sex hormones, because they are responsible for femininity and masculinity. Testosterone is often called the male hormone, while the later two are referred to as the female hormones. However, both male and female individuals produce all the three hormones, but the levels and patterns of production of the hormones differ between them. Ideally, males produce higher amounts of testosterone which is responsible for masculinity than females and vice versa for the other two hormones. The pattern of production of these hormones is also not haphazard. It is timely and this explains why a male impala would not be born with horns or why a human male is not born with a beard or that deep male voice. Production of higher levels of testosterone by an impala ewe would therefore result in development of male characteristics such as horns. Causes of these hormonal imbalances could be heredity and chemical changes in an individual animal's body.

Safe for the colour of the head, the bird sighted by Mr. Kisemei and his colleagues is a southern black flycatcher. It could be suffering from some colouration abnormality. Colours we observe on birds' feathers are as a result of light refraction from the structure of the feathers, pigmentation or a combination of the two. Three forms of pigments are responsible for colouration in birds, namely: carotenoids, porphyrines and melanins. Since carotenoids are produced by plants, birds acquire carotenoids from plant materials that they eat or by eating products of animals which feed on

plants. Brilliant shades of orange and yellow are as a result of carotenoids. Porphyrines result from modifying amino-acids. They give feathers colour ranges of all shades of red, green, brown and pink. They also fluoresce bright red when exposed to ultraviolet light. Black and other dark shades of birds' colouration are products of melanin. Poor nutrition and genetic discrepancy can lead to unoptimal production of melanin by an individual bird.

Albeit rarely, birds do experience abnormalities in colouration. This colour abnormality is a product of absence or presence of pigments in unusual proportions. While deficient production of melanin particularly leads to partial or total albinism, a deficiency of all pigments results in leucism. The individual bird in this picture is a likely victim of leucism rather than albinism.

Tom Lesarge

Faunal Regions

Introduction

Mammals are classified under six main regions, each bounded by natural barriers of mountain, desert and or sea. The great northern region is called the Palearctic, and comprises Europe and Northern Asia, and is effectively cut off from Africa, not by the Mediterranean Sea but by the expanse of the Sahara Desert, and from South Asia by the Himalayas System. The Americas are divided into two regions; the Neararctic, covering North America, is really a Palearctic sub-region, as it has animals with so much in common with those of the Palearctic that it seems likely that the two areas were one until very recent times.

The Oriental region lies south of the Himalayas and as far as 'Wallace's Line' which runs between Borneo and New Guinea. The other side of the line is the Australasian region. South America is called the Neotropical region.

The last great region, Abyssinian or Ethiopian Region, includes all of Africa south of the Sahara. The fauna of Central and Southern Africa resembles that of distant South Asia rather than that of North Africa and Europe, because of Africa's longer link with the southern continent.

African Fauna

The African fauna, the fauna of the 'Abyssinian/Ethiopian' region, as defined by scientists, is in most instances unrelated to any other for at least the past thirty million years. The climatic changes which followed the creation of the world's great

mountain chains led the ruminants of Africa's forests to emerge on to the grasslands, followed naturally by their predators. Out from the gloom of the great forests crept the small ancestors (Eohippus, Mesohippus and Merychippus) of early horses and zebras – animals who were forced to adapt to life on the plains by running faster and faster to escape their enemies. When these creatures were forest dwellers, they had four toes on the front feet and three on the hind. Gradually, they came to run on the middle toe and the other toes dwindled. Others, who retained two of their four toes, became the antelope, gazelle and deer. These grazing animals also needed better vision to survive and the eyes gradually grew further up the head. Other modifications followed, so that each species was able to survive in its own particular niche in the ecology. Carnivores retained their toes, developed claws and increased their speed with modifications to the spine and the muscles, which together with their forward-looking eyes enabled them to survive as hunters. The age-old battle between prey and predator is the story of Africa, the end of which has still to be told.

The Miocene did not see the end of the volcanic upheavals which had so altered the earth's surface. Eastern Africa underwent a period of dramatic volcanic activity. The earth's crust, forced up by immense pressures from beneath, lifted into a vast dome; great cracks appeared, out of which poured rivers of molten rock. The uplift continued, cracked and dropped down in the centre to form the spectacular Rift Valley system, the dominant features of the Horn of Africa, and the eastern side of Africa.

The two plateau areas which form the sides of the Rift, in what is now Ethiopia, constitute by far the most extensive highland zones in the whole African continent and provide some of the most spectacular mountain scenery in Africa.

The Decline of the Mammals

The peak of mammalian evolution, the 'golden age of mammals' occurred in the Miocene 25 million years ago, and although the Pliocene and Pleistocene ages still had a rich mammalian fauna, it never again reached such spectacular proportions.

From about one million years ago the world was subjected to four ice ages, imposing on the temperate zones' arctic conditions to which the existing flora and fauna had to adapt or perish. The tropical zones underwent corresponding pluvial periods which created the great eroded gorges and gullies of eastern Africa's high plateau. Countless thousands of species adapted to the new conditions, and as many disappeared. Those that survived were to face a greater hazard – Man. With the emergence of man a million years ago, the slow "natural" decline of mammals was dramatically hastened. Man's highly developed brain has been applied to the invention of all manner of methods of destruction- trapping, poisoning, shooting, burning and even flooding. In destroying the animal which he considers to be an enemy, he has also succeeded in destroying countless others. Only four hundred years ago there were approximately 4,226 living species of mammals. Since then 36 have become extinct, and at the moment 120 more of them are in some or imminent danger of extinction.

Philip Keter

Gold Level Guide

Primates

Introduction

The word primate may represent many different things to many different people. When one talks of a primate in West and Central Africa, he is perhaps talking of food – a delicious meal. To some East African people, a primate is a pest that steals crops. In the confines of high priests, primate may be revered as sacred symbol or simply an Archbishop. The fact is a primate is a member of the taxonomic order Primata, a subgroup of mammals that give birth to live young, feed their offspring with milk produced by their mothers, have hair, regulate their body temperatures internally (warm-blooded) and are forward facing creatures. This automatically puts a human being, *Homo sapiens*, or simply modern man as one of the 350 different species that constitute the Order Primata in the Linnaean category. However, at this point in our history, the other 349 species of primate are in dire need of our assistance, compassion and conservation regardless of their sizes. Primates weigh in the range of a 30.6g wee mouse lemur to the hefty 300kg gorilla.

Classification

Primates' classification, like all living things, is in accordance to how closely or distantly they are related to each other. This system of classification is called taxonomy and was introduced by **Carolus Linnaeus** (hence Linnaean category above) in the eighteenth century. The taxonomic system for keeping track of how each organism is related to all others is termed **binomial nonmenclature**, which is similar to our system of assigning a specific call number to all books in a library. That is, the specific scientific names given to every type of organism are internationally recognized and used by all scientists. A good example is *Homo sapiens* (modern man) above. The first word, which is always capitalized, names the **genus** whilst the second is never capitalized and names the **species** – both are usually written in *italics*. Taxonomic classification is an ongoing and dynamic field of science that blends

academic expertise in the disciplines of anatomy, genetics, evolutionary biology and microbiology, among others. All primates share a general set of anatomical features that can be used to distinguish them from the other mammals, with clavicles or collarbones being good examples. Clavicles render easy movement of the primate shoulder, allowing for appropriate manoeuvre during feeding and locomotion. If Charles Darwin's evolutionary process is true, all primates shall one time become bipedal like human and probably the *sapiens* species shall have advance into developing other sophisticated physical features – mental abilities are already unimaginable. The theory of evolution is still a bit of a challenge to modern man especially the religious section of societies that believes Adam was the first man on Earth. Wherever the truth lies, Adam is believed to have been created on 23rd of March 4004 BC – this, I think, was the birthday of Adam. His wife, Eve, was born a few days later.

The most widely accepted current opinion divides the primate order into two suborders, called the Strepsirrhini ('wet-nosed' or 'pre-monkey') and the Haplorrhini. The strepsirrhine group includes all of the prosimians. Tarsiers, monkeys and apes constitute the haplorrhines. Prosimians include lemuriformes (lemurs of Madagascar), chiromyiformes (Aye-Aye, also of Madagascar) and the loriformes, of which lorises of Asia and pottos of Africa are comprised. Many people are confused as to whether or not monkeys and apes are the same thing. Primate is a general term that brings together all members of the order and, therefore, every species of prosimian, monkey and ape is correctly referred to as a primate. However, the terms monkey and ape are used more specifically. The common names, which may be descriptive but are not always accurate, can create confusion. For instance, the Barbary macagues (Macaca sylvanus) of Morocco and along other Atlas mountain range, which are called Barbary apes, are actually monkeys, not apes. There are very few species of ape divided into two groups: the "lesser apes" and the "greater apes." The lesser apes include only the members of the family **Hylobatidae**, the arboreal gibbons of the Far East. The great apes include only the family Hominidae, which comprises Orang-utans (Pongo spp.) of Borneo and Sumatra in Asia, gorilla (Gorilla spp.), chimpanzee (Pan troglodytes), bonobo (Pan paniscus) and a human being (*Homo sapiens*). None of the aforementioned apes should ever be called a monkey. The primate groups such as baboons (specifically drills and mandrills of West Africa), macaques and tamarins are all correctly referred to as monkeys, not apes. Interestingly, cognitive testing of monkeys and apes has revealed one reliable distinction. In many experiments designed to test mirror self-recognition, all the apes have demonstrated the ability to recognize their reflections whereas no monkeys have shown this same capacity despite years of study.

Tailed or Tailless

All apes are tailless. However, their tails are apparent during fetal development. A human being's 10 to 12 vertebrae tail, by the end of six weeks of gestation, cannot be distinguished from the appendage found in species that retain their tails throughout gestation. This tail regresses by end of eight weeks and the vertebrae reduce and fuse to form the coccyx. Coccyx is the tailbone or vestigial skeletal remnant of a tail found in lesser and greater apes, including humans.

Most monkeys do have obvious tails though a small number of their species have extremely small tails or no tails at all. The Barbary macaques, mentioned above, are a good example of this, which helps to explain their confusing common name. Something worth noting is that the tail carrier primates utilize their tails in as greatly varied reasons as dictated by the habitats in which they live. For instance, Africa's colobus monkeys use the tails for balancing and propulsion during their spectacular leaps when traveling between gaps in the forest canopy. Another Africa's monkey, Patas Monkey, uses its tail for balancing whilst speeding away from predation. It posses ground speeds (up to 55km/h) that rivals those of the greyhounds and horses, thus making it the fastest of all primates. The prehensile tails of spider monkeys, capuchin monkeys, howler monkeys and wooly monkeys of the New World function as another hand or foot. Spider monkey's tail has other wide range of uses: this individual has a secure hold with its tail, effectively freeing the hands for foraging. All prehensile tails, except those of capuchins, have a naturally hairless area near the tip, known as a friction pad. This pad is similar to the palm of the hand or foot and has a distinctive print - like human finger print.

Appearance, Perception and Social Behaviour

Primates are simply captivating in their appearance, behaviour, mental abilities and overall complexity. Whilst differences between humans and other species of primate surely exist, there are remarkable and undeniable similarities. Humans and nonhuman primates see the world through the same eyes and feel it through the same hands and feet. All primates also know the value of social relationships, alliances, cooperation and communicating their intentions. We have all been stung by competition and have suffered social rejection. Primates learn from each other, develop traditions, and even show cultural variation in their behaviour. Some nonhuman primates appear to engage in active deception and even base their actions on what they think other individuals know. Non-human primates are able to devise novel solutions to accomplish a specific goal and politically, they are definitely smart. They are endlessly curious, potentially creative, frustrated by boredom, and attracted to new challenges.

References

Ankel-Simons, F. 2000. Primate Anatomy, San Diego: Academic Press.

Cheney, D. L. and R. M. Seyfarth. 1990. How monkeys see the world. Chicago: University of Chicago Press.

Groves, C. 2001. Primate Taxonomy. Washington, D.C.: Smithsonian Institution Press. Napier, J.R, & Napier, P.H, 1985. The Natural History of Primates, Cambridge, Mass, MIT Press.

Rowe, N. 1996. The pictorial guide to the living primates. New York. Pogonias Press.

Swindler, D. R. 1998. Introduction to primates. Seattle: University of Washington Press.

Theodor H. and Helmut Diller, Mammals of Africa including Madagascar, HarperCollinsPublishers.

Philip Keter KPSGA Gold Level Guide

Washington DC, Here We Come

The Smithsonian Folklife Festival 2014 is set to take place in Washington DC from June 25th to 29th and from July 2nd to 6th. Kenya will be showcasing its culture through art craft, traditional architecture, traditional and contemporary music performances, and storytelling on various interesting topics, ranging from the story of Kenya as the cradle of Humankind, conserving our rich and diverse wildlife, and ejoyment of our tourism products.

Two of our members, Edwin Lesoine Selempo and Philip Kibet Rono, both Gold Level members, will be representing Kenya in the festival to specifically tell the stories of experiences of enjoyment of our tourism products from the perspective of a guide who lives that life of bringing to life these experiences on a daily basis. They will tell these stories to the over 1 million people who will be attending the festival at a conversational level. We would like to thank the **Kenya Tourist Board (KTB)** for sponsoring these members to the festival. We have no doubt that they will captivate their audience with their stories, based on their many years of experience in Kenya's wilderness areas.

YOUR RIDICULOUS EXAM ANSWERS

This section is meant to give you a feel of the answers we get in our exams from members. Some are extremely ridiculous. Enjoy!

Q: Other than the African Rock Python, name another constrictor in Kenya? A: Crocodile. Q: Species whose temporal distribution overlaps are said to be _____?

- A: Pathenogenic
- Q: In geology, what is an inselberg?
- A: Outcrops made of icebergs.
- Q: Which is the brightest star in the night sky?

A: The sun.

EXAM DATES

BRONZE 25 th June November SILVER	30 th July	27 th August	24 th September	29 th October	26 th
19 th June GOLD 6 th – 8 th Nor	•	mber 23 rd Octobe	er 20 th Noven	nber	

Dates and venues for any exams to be done outside the stated dates due to demand will be announced in advance.