

# I LOVE TIGER ~ Conservation Let's Go

■ Feng-Chi Fu, Hung-Chih Tsai, Hsiao-Wei Kao

Taipei Zoo currently is home to nine captive tigers. Five are inside the Conservation & Research Center (four male individuals and one female). Keepers jokingly refer them as the awesome Tiger WuZi (meaning five tigers in Chinese), a play-on-words to the famous golfer Tiger Woods. The female was bred by the zoo and is ten years old. The four males were brought here after abandoned by a circus in 2006. The males are named after their species "Ben Ben", "Ga Ga", "La La" and "Hu Hu" (Chinese for tiger). As tigers are essentially solitary aside from mating and cub

rearing times, these five each have their own separate indoor activity areas.

The ideal ways to bring out the best in tigers are: feeding enrichment, behavior enrichment, and environmental enrichment. Feeding enrichment refers to replacement of the conventional food-in-the-feeder approach with different food and feeding methods varied daily as stimulations, for instance pork ribs on Mondays, leg of lamb on Tuesdays and felid feeds or pig liver

on Wednesdays. Keepers also hide meat and prey items throughout the enclosures as well. The purpose of doing so is to increase exercise and vary feeding periods, as tigers do not eat every day in the wild. Another reason is to arouse the diversity of hunting behaviors they possess in the wild. Behavior enrichment refers to design stimulations to encourage natural behaviors, such as hanging balls to encourage playing. Environment enrichment refers to building

enclosures imitating their natural habitats so that captive animals can be positively reinforced to behave as they would in the wild.



Ben Ben



Ga Ga



La La



Hu Hu



## The Forest Imp – Chinese Leopard Cat

■ Mei-Ting Chen

Is Chinese leopard cat a tiger species? No, no, and no! Although its Chinese name ShiHu contains the word tiger (Hu means tiger), it is very distinct from its cousin the tiger, the largest of all felid species. The Chinese leopard cat is about the same size as the domestic cat you and I have at home and weighs between 3-6 kilograms. They have rounded ears and a short muzzle, and a tail about 40-50% of the total body length. Their colors range from grayish brown to yellowish brown, with black spots running on the body, limbs and tail. Don't you agree that these characteristics are similar to the grayish brown tabby we have at home? Occasionally people mistake them for domestic cats, but never so by the keenly observant you though! The white stripping on their forehead and inner eye corners are extremely distinctive, so are the white spots behind the ears, the very characteristic communicating of a wild felid species. Moreover, they have short, fluffy tails ringed with black spots, which are sharply different to the black bands house tabbies have at the tip of theirs. Chinese leopard cats are also called the Money Cats or Chinese Cats, for the brownish spots they have on their pale brown pelts are shaped and sized like coins. They are also called mountain cats because they occur to mountainous regions.



## The Most Beautiful Night Stalker – Clouded Leopard

■ Shi-Chia Cheng

In 2001 customs officials seized a rare felid animal – a clouded leopard, during a raid for illegal imports from Southeast Asia and turned her over to Taipei Zoo for rescue and quarantine, thus began a new chapter in her life. The veterinarians estimated her to be a little more than one year old at the time, based on her appearance, body size and dental conditions. Keepers named her YunXin (Yun meaning cloud, Xin meaning new), hoping that with her arrival the zoo would be renewed and refreshed every day; and making progress.

The majority of felid species are nocturnal, and the clouded leopard is no exception. There is a trick to get a glimpse of this animal at the display area however! If you want to see YunXin during the day at the Formosan Animal Area, she'd be most likely resting and catching up on her sleep; you'll need to search under dense shades or below tree trunks. If you come during twilight close to dusk when she's getting active to start her day, it'll be easier to spot her around the display area. Don't think YunXin with her mouth wide open and all her long sharp canine teeth showing, and take her as just a true predator by nature; she's got a shy and adorable side too! A little secret according to her keeper: YunXin likes to hear soft, gentle female voice, and when she's in a really good mood, she answers back with the purring sound exclusive to cats.



TAIPEI ZOO

2010-1

# 抱 動物園 報



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Read more about "Felids" special coverage in the No.118 issue of the Taipei Zoo Magazine!

# TAIPEI ZOO PAPER



## Just Love Felids!

### Taipei Zoo Exhibits Felidae 2010

■ Hsin-Chieh Tang, Hsiu-Yin Lin

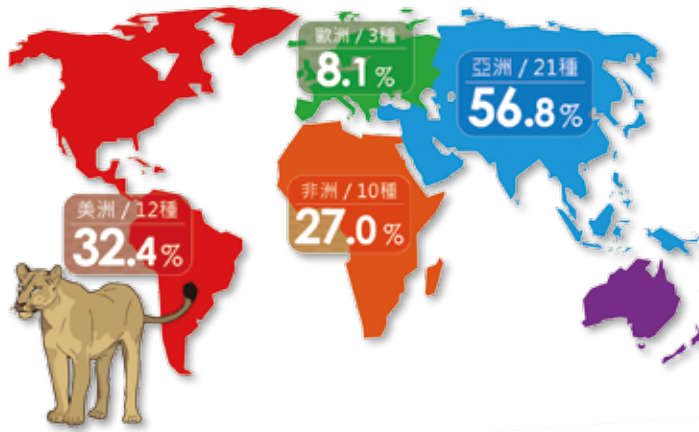
Reaching 146-290 cm in body length, tail as long as 72-109 cm and weighing between 75-325 kg, the tiger is the largest felid species in physical size and weighs the heaviest. They are magnificent and have beautiful orange coats that are patterned with black stripes accented with white. The mark akin to the Chinese character "wang" (meaning king) on their foreheads adds to their regal appearance. The tiger is regarded as the king of cat family.



Tigers are largely native to eastern and southern Asia regions, occurring to areas including China, Siberia, Korea, India, Bangladesh, Thailand and Malaysia. There are a total of eight recent subspecies in the world, three of which are now extinct – the Bali Tiger, the Javan Tiger and the Caspian Tiger. There are five surviving subspecies left. All the subspecies are distinctively different in skull shape, fur and body size. For instance the South China Tiger has forward-tilting eye sockets and relatively small skull; the Siberian Tiger is the biggest in body size and has the thickest, densest and palest pelage due to its adaptation to cold climate; the Sumatran Tiger is distinguished by the longest cheek tufts-can, and the Bengal Tiger has the brightest coat of them all.

Tiger has been an important element to the Chinese way of life and culture since ancient times. Many symbolic meanings, customs, myths and legends, as well as religious belief are still deeply influenced today. A person who killed a tiger instantly gained the status of a hero; tiger-hunting was a special sport favored by kings and aristocrats for the act depicted bravery and masculinity; classic tales such as Hu Gu Po (Evil Night Aunt Tigress), Wu Song Fights the Tiger, and Jou Chu Eradicates Three Evils, also have profound impacts on the people's impression about the tiger too.

In Taiwan, tiger deity or Lord Tiger is customarily placed beside the main deity, generally the God of Land or The God of Medicine, for worship. This is widely due to popular belief that the guardian deity of a place is in charge, and can tame the tiger as his ride. The same legend holds true for God of City Protector and Mazu the Goddess of Sea too. However as Lord Tiger is typically placed inconspicuously below the worshipping altar, the next time you visit any of the abovementioned temple, don't forget to pay your respect to Lord Tiger too.





Adventures in Insect Wonderland Exhibition

I-Hsin Wu

Taipei Zoo and Insect Museum Digital Archives (NTU) cooperated in the design of the Adventures in Insect Wonderland Exhibition, bringing the Taiwan e-Learning and Digital Archives Program(TELDAP) to life so that visitors could experience the rich contents interactively. Insect images in 3D digital models, online inquiries about Entomology, shows in animation and arrays of value-added product displays are here too, helping visitors to better understand the significance and value of digital archiving.

This exhibition is a context extension of the Alice in Insectland, previously published by the TELDAP. Brand new visual design is used to turn the exhibit into an open storybook house for the public to journey into a world of fairytales. Plots such as "Adventure in Heart Forest", "Wander into Diamond Town", "Valley of Spades – Insect Camp", "The Pollen Restaurant", "The Little Shepard" and "An Ant's Tale" are in diverse, interactive educational formats, designed to navigate the audience through the mystical wonders of insect world!

This exhibit is from February 6th to June 20th. Live at-station game plays are available on weekends and holidays, where the public can find out how to collect pollens like a bee, how insects attract a mate, compete with cockroaches to see who runs faster, and learn how to roll a dung ball like a dung beetle. Students from the Graduate Institute of Entomology of NTU are recruited especially to teach the primary school curriculum every



Thursday, leading students to experience the insects in this exhibition personally. Every one is invited to the Adventures in Insect Wonderland.



呂佩瑛

Why Go Elsewhere When Maokong Beckons South of Town

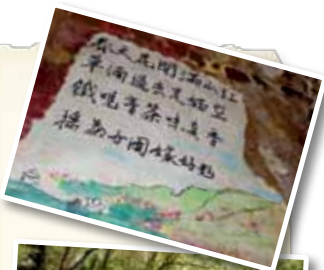
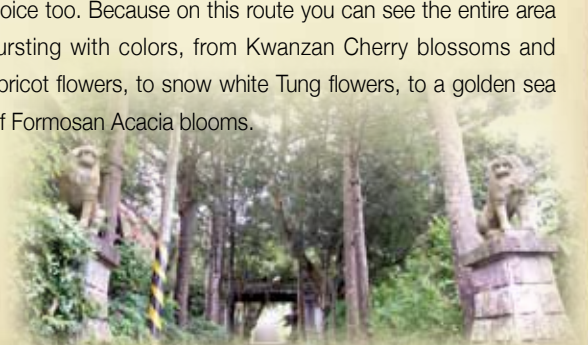
Shwu-Ying Lin

The Maokong gondola begins its system service from the Taipei Zoo Station, passes through a hill to Zhinan Temple, follows by a slow descent to the lowest point in the valley before gradually ascends to the terminal – Maokong Station. Through this circuit one passes through a total of eight tribes residing inside the Zhinan Mountain region.

The term "Maokong" refers to pothole formations in topography. Potholes are formed by ample water rushing through rapidly over time. Maokong is a good example of such. It was scoured and pitted by the runoffs from the ErGe Mountain. The name comes from "jiǎu-khang" in Taiwanese, which means "crease aperture". Truth be told, there are many exciting jiǎu-khangs in the northern vicinity for instance the DaHua Potholes in Keelung River, BengShan River in Shiding, ShenKeng's Arouyang River, TuCheng's LongQuan River, and the LiuLiao River in ErMei County, Hsinchu. Maokong just beat them to the punch and claimed the name for itself in Muzha.

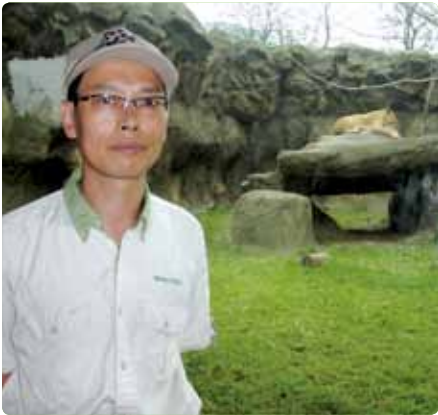
Stroll to the left of the Maokong Station you'll reach the Tian'en Temple; if continuing forward you then come to the decorated archway of Taipei Tea Promotion Center bearing the sign "ShanShuiYiuQing", there is a small trail across from the archway, which leads to a wooden platform, the perfect spot to glaze at the stars.

Going to the right from Maokong Station you will come to the ZhangShan Temple by taking the Camphor Tree Trail at the left side of SanXuan Temple. You can then take the FeiLong Trail to cut through the Round Top Circle, go pass the acacia forest, and come down via the National Chengchi University's Back Entrance Walkway. This is an excellent choice too. Because on this route you can see the entire area bursting with colors, from Kwanzan Cherry blossoms and apricot flowers, to snow white Tung flowers, to a golden sea of Formosan Acacia blooms.



Animal Cuteness - Adorable Tales about African Lions

Sung-Lin Wu, Hung-Seng shiu



I heard that the naughty cub "Laienban" got stuck in a tree once, causing his mom Fuan much consternation. What exactly happened?

Laienban is very naughty and playful, and gets into as many troubles as any energetic, mischief-making little boy. He often teases his siblings, snapping at them to make them attack him. Once while playing, Laienban leaped onto a Royal Poinciana tree (Delonix regia) and started climbing. The higher he went the more fun he had. Suddenly, he realized he was too far up and was afraid to come down. Mom became agitated then; she paced and paced under the tree and kept raising her head to call after him. At last, he slid down little by little, bottoms first. After this, he still climbs trees, just never as high up.

What interesting things happen between lioness FuAn and her cubs?

The three cubs are very playful. There are times when the triplets still want to play but all mom wants to do is lie down and rest. They leap on top of Fuan, nipping at her skin and even going after the fur on her tail. Sometimes she'd swish her tail left and right, and the cubs would chase after it running back and forth. When they get tired of playing, they snuggle back into their mom's embrace for suckle before finally settling down to rest.



If the public wants to see FuAn and her triplets, when's a good time?

Currently different lions are on display at different times. Every Tuesday, Thursday, Saturday and Sunday, Fuan and her cubs are on display. On Monday, Wednesday and Friday, you'll find the lion couple Fuqing and Anmei on display.



Treatment of Chronic Renal Failure of Felid Animals

An-Hsing Lee

Taipei Zoo is home to many big cats, ranging in physical size there are lions, tigers, leopards, jaguars, cheetahs, clouded leopards, pumas, Lynx, bobcats, Bengal cats, leopard cats, etc. Felids in captive environments where food supplies are plentiful tend to live longer. When they get old, they start developing kidney diseases just like humans do. The most common is chronic renal failure (CRF). Hence treating this condition is a task critical to the care of felids at the zoo.

Clinical signs of CRF include frequent urination, increased thirst, poor appetite, weight loss, poor coat, salivation, oral ulcers, vomiting and dehydration. In most cases it is caused by chronic pyelonephritis, focal glomerulosclerosis, or amyloidosis. Typically the kidney diseases and the changes in the kidneys are irreversible. Treatment is therefore usually aimed at managing the disease and its complications, and trying to slow down its progression. For the felids coping with CRF, timely and appropriate treatment measures can both effectively increase the quality of life and improve life span.



Classification, Geographical Distribution and Conservation of Felids

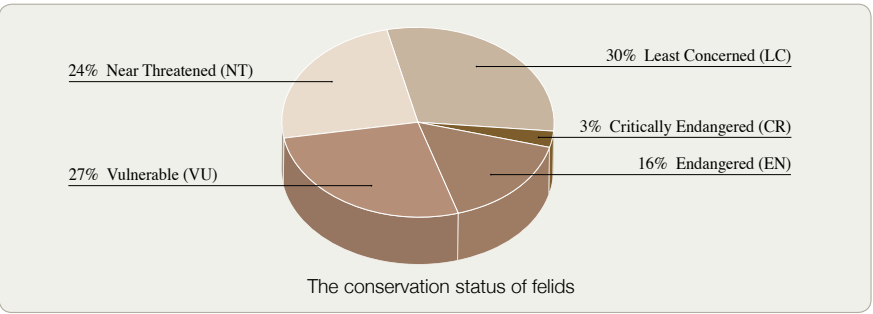
Szu-Lung Chen



Felids which belong to the suborder Feliformia of Carnivora are the strictest carnivores of all mammal families. There are a total of 37 species in 14 genera today, accounting 13.2% of all families in the Carnivora order, second only to the Mustelidae family with 57 species in 22 genera. Felids are also top predators in the food chain of any ecosystem.

Felids are distributed throughout the Holarctic Region, Neotropical Region, Tropical Africa and the Oriental Region. Nonetheless following human activities domestic cats have now spread worldwide. Some domestic cat species even cause extinctions of other species living on islands. Asia is the continent with the heaviest felid distributions, 21 species in total, accounting about 56.8% of the entire population. America seconds with 12 species or 32.4%; followed by Africa with 10 species or 27.0%. The least number of felids are found in Europe, only 3 species or 8.1%.

According to the latest IUCN's red list of categories covering 37 felid species, one is classified as critically endangered (Iberian Lynx), six are endangered (Andean mountain cat, tiger, Bornean cat, snow leopard, flat-headed cat and the fishing cat) and 10 are vulnerable. Practically without any natural enemies, the main reason felids are verging on extinction is because humans hunt and kill them for their beautiful coats. If man would stop killing and reach out a helping hand, these beautiful and mysterious felids could be spared of the horrible fate of extinction.



Read more about "Felids" special coverage in the No.118 issue of the Taipei Zoo Magazine!

Plants with Tiger Names in the Year of the Tiger

Yi-Ming Chen

[Plants named after different parts of tiger body]

These are plants named with the analogy to different parts of tiger's body for their appearances and shapes. Those belonging to ancient Chinese naming category in order from head to tail are tiger-head lily, tiger-eye tree, tiger-ear grass, tiger whisker, tiger whisker grass, tiger palm, etc.; family members include nine-head lion grass, lion-head ginseng, cat's eye grass, and leopard's foot. Those belonging to modern Chinese naming category are tiger-head citrus, tiger-head stone, tiger-tail fern, tiger-claw bean, tiger-tail orchid, water-tiger tail, tiger-tail grass, red-flower golden tiger tail, etc.; family members include cat-whisker grass, dawu cat's eye grass, and green cat's eye grass.



[Plants named after tiger stripes]

These are plants named with the analogy to the striping patterns on the tiger's body. Those belonging to ancient Chinese naming category include tiger-skin lily, tiger stick and tiger bean. Those belonging the modern Chinese naming category are tiger-striped orchid, big tiger-striped pineapple, small tiger seven, tiger-spotted wood, and O's tiger skin cedar; family members are the likes of leopard stripped orchid and money leopard.

[Plants named after tiger thistles]

These are plants with thistles and as the tiger is not thorny hence are named for their extending meanings. Those belonging to ancient Chinese naming category include tiger thistle, flower-separate tiger thistle and tiger thorny-tip; family members include cat's thorn. Those belonging to modern Chinese naming category include tiger thistle aralia, tiger thorn, narrow-leaved tiger thorn, granny-tiger thistle, tiger heart and vine-tiger thistle; family members include people-biting cat. According to An Illustrated Book on Plants and Pictorial Diagrams (Wu Qijun, 1848): tiger thistles keep the tiger away, hence were named for their extended meanings", a clear citing that all plants with



the word thistle or thorn in their Chinese name are plants to watch out for, and should not come too close.

[Plants named after tiger behaviors]

These plants may have gotten their names originally for their habits, or have medicinal functions as powerful as tiger's behaviors. They include wall-climbing tiger, tiger bites yellow, three-prong tiger, five tigers coming down the mountain, wooden tiger, tiger linen, tiger roll, tiger hemp and tiger cream; family members are the likes of nine-head lion with flower growth, and mountain cat fern.

