3 動物保育與研究 Animal Conservation and Research

動物經營管理

1. 動物飼養展示與繁殖

園區飼養展示之動物以脊椎動物為主，共約367種2,354隻（未計算昆蟲、部分魚類及農委會收容計畫動物）。本年度內保育繁殖計畫成果，累計達39種92隻動物個體，繁殖二趾樹獺、人猿、小爪水獺、小貓熊、弓角羚羊、加拿大河狸、白手長臂猿、羊駝、侏儒河馬、長頸鹿、查普曼斑馬、梅花鹿、無尾熊、臺灣山羌、馴化驢、褐狐猴、大紅鶴、青鸞、帝雉、紅領綠鸚鵡、紅藍吸蜜鸚鵡、埃及雁、棕櫚鳳頭鸚鵡、葵花鳳頭鸚鵡、黑天鵝、黑頸冠鶴、黃魚鴞、領角鴞及藍孔雀等瀕臨絕種或珍貴稀有之野生動物。其中本（104）年本園首次成功繁殖小貓熊幼獸4隻及小爪水獺幼獸5隻，考量動物福祉及自然習性，經保育員仔細觀察動物哺育狀況評估後，均由母獸自然哺育，幼獸離乳後，本園強化食物種類調配及移動、攀爬、小爪水獺下水游泳等訓練。此外，小貓熊、小爪水獺幼獸開放展示後，均分別安排多次動物保育解說，提升國人動物保育教育深度及廣度，成為極佳保育行銷與生命教育素材。

飼育動物數量統計表

種類 / 時間	哺乳類		鳥 類		爬蟲類		兩棲類		魚 類		總 計	
	種數	隻數	種數	隻數	種數	隻數	種數	隻數	種數	隻數	種數	隻數
104年底	104	821	118	717	113	568	26	216	6	32	367	2354

Animal 0peration and Management

1. Animal Feeding Exhibition and Breeding

The animals in the feeding exhibition are mainly vertebrates, a total of around 367 species, 2,354 animals (not counting insects, part of the fish species, and the animals in the COA Housing Plan). The results of this year's conservation and breeding plan, the accumulated count reached 39 species, 92 individual animals, breeding Linnaeus's two-toed sloth (*Choloepus didactylus*), Borean orangutan (*Pongo pygmaeus*), Asian small-clawed otter (*Aonyx cinerea*), red panda (*Ailurus fulgens*), addax (*Addax nasomaculatus*), Canadian beaver (*Castor canadensis*), lar gibbon (*Hylobates lar*), alpacas (*Vicugna vicugna*), pygmy hippopotamus (*Choeropsis liberiensis*), giraffe (*Giraffa camelopardalis*), plains zebra (*Equus quagga burchellii*), sika deer (*Cervus nippon*), koala (*Phascolarctos cinereus*), Formosan Reeves' muntjac (*Muntiacus reevesi micurus*), domesticated donkeys (*Equus asinus*), brown lemur (*Eulemur fulvus*), greater flamingo (*Phoenicopterus roseus*), great argus (*Argusianus argus*), Mikado pheasant (*Syrmaticus mikado*), rose-ringed parakeet (*Psittacula krameri*), red-and-blue lory (*Eos histrio*), Egyptian geese (*Alopochen aegyptiaca*), palm cockatoo (*Probosciger aterrimus*), sulphur-crested cockatoo (*Cacatua galerita*), black swan (*Cygnus atratus*), black crowned crane (*Balearica pavonina*), tawny fish-owl (*Ketupa flavipes*), Collared scops-owl (*Otus lettia*), Indian peafowl (*Pavo cristatus*), and other endangered or rare wild animals, among which the Zoo successfully bred four baby red pandas and five baby Asian small-clawed otters for the first time. Considering the animals' welfare and natural habits and characteristics, through the keepers' careful observation and assessment of the animal feeding situations, they were all natural-fed by their mothers. After the babies have been weaned, the Zoo enhanced the blend of food variety and movement and climbing, as well as the swimming training of Asian small-clawed otters, etc. In addition, after the exhibitions of baby red pandas and Asian small-clawed otters were opened, multiple animal conservation explanations were arranged for both to enhance the depth and breadth of animal conservation education of the people in Taiwan, thus, becoming excellent conservation marketing and materials for life education.

Statistics of Animals

Category / Time	Mammals		Birds		Reptiles		Amphibians		Fish		Total	
	Species	Numbers	Species	Numbers	Species	Numbers	Species	Numbers	Species	Numbers	Species	Numbers
End of 2015	104	821	118	717	113	568	26	216	6	32	367	2354



2. 動物醫療保健及防疫

在動物醫療保健方面，除執行日常突發性之外傷及內科疾病治療外，依計畫進行動物的健康檢查及疾病監測預防等工作，並協助處理中央農政單位查緝沒入之保育類動物、國內民眾贈入及國內外動物園業間交換的動物檢疫工作，計41隻；另救傷動物101隻，協助地方政府照顧收容穿山甲、臺灣山羌、長鬃山羊、大赤鼯鼠、赤腹松鼠、鳳頭蒼鷹、臺灣藍鵲、領角鴞、蜂鷹、紫嘯鶇、鵰獾和白鼻心等動物，以及多次協助臺北市鳥會和桃園縣政府治療救傷之鳥類及其他哺乳動物。



年內購置動物白內障手術用儀器及顯微手術系統組、正立顯微鏡、包藥機、醫療影像即時傳輸系統、動物專用電子式血壓計、地磅、空針輸液幫浦等儀器設備，用於動物醫療影像及臨床檢驗診斷、動物麻醉及急救和住院照護與人工繁殖工作等，得以針對立即性及潛在性的醫療問題進行治療，並透過影像診斷及強化麻醉操作準確性，得以提升動物的麻醉操作安全性及動物疾病診斷準確率，並強化本園人工繁殖保育研究工作。

3. 保育類野生動物收容

本園野生動物收容中心專責收容保育主管機關查獲之走私與違法獵捕、販售與展示的保育類野生動物。本年度協助支援保育類查緝案件現場鑑定出勤9人次共17處，協助刑事偵查案件鑑定物種16次19種633隻，協助臺北市動物保護處圖像鑑定17次26種，並持續協助各縣市政府相關單位所委託處理之野生動物救傷，與持續照養歷年所委託收容之各類動物，包含熊科動物、大型貓科動物、鳥類(鸚鵡)、靈長類動物、兩棲爬蟲動物，計111種1,659隻；另提供收容動物專業技術研習與教育觀摩活動等解說導覽服務，導覽參觀43個團體，共1,047人次，參訪與研習團體多為國內生物相關科系師生、地方保育主管機關、動物保護處、動植物防檢局、保安警察第七總隊及來自大陸與全球的動物園等單位。

協助地方保育主管機關執行野生動物辨識、捕捉、保定等培訓課程，共6場次750人；提供相關單位動物照顧飼養、鑑定、動物福利提升、野生動物保育觀念與宣導等專業諮詢服務約52次。

2. Animal Health Care and Epidemic Prevention

In animal health care, other than perforing unexpected traumatic injuries and medical treatment, the zoo also carries out routine animal health care check-ups, and disease surveillance/preventive programs. We also assisted in treating endangered species animals confiscated by central agricultural agencies, and performed quarantines on animals donated by the public or animals arrived from other foreign zoos through animal exchange programs. A total of 41 animals are counted for in the aforementioned programs. Another 101 animals including Formosan pangolin (*Manis pentadactyla pentadactyla*), Formosan Reeves' muntjac (*Muntiacus reevesi micurus*), Formosan serow (*Capricornis swinhoei*), Indian giant flying squirrel (*Petaurista philippensis grandis*), red-bellied tree squirrel (*Callosciurus erythraeus thaiwanensis*), crested goshawk (*Accipiter trivirgatus formosae*), Formosan magpie (*Urocissa caerulea*), Collared scops-owl (*Otus lettia*), Orientaed honey-buzzard (*Pernis ptilorhynchus*), blue whistling-thrush (*Myophonus caeruleus*), Formosan ferret-badger (*Melogale moschata subaurantiaca*), masked palm civet (*Paguma larvata taivana*), that are rescued by the local government agencies were treated by our veterinary team. The veterinary team also assisted in treating wild birds and mammals rescued by the the Wild Bird Society of Taipei and Taoyuan County Government from time to time.

During this year, we have acquired the Phacoemulsification Laser Cataract Surgery instrument and microsurgical system set, optical microscopes, medicine packaging machines, real-time medical imaging transmission systems, veterinary electronic sphygmomanometers, weigh stations, empty-needle fluid-infusion pumps and other equipments. These instruments are facilitating our medical imaging and clinical diagnosis, animal anesthesia and rescue, hospitalization and artificial breeding and allowing us to solve immediate or potential problems. Furthermore, we were able to improve animals' safety during anesthesia, promote accuracy in disease diagnosis and enhance the conservation work of artificial breeding through imaging diagnosis and better anesthesia manipulation.

3. Protected Wildlife Accommodations

The Wildlife Rescue Center of the Zoo is dedicated to accommodating protected wild animals that were smuggled, illegally hunted, sold, and displayed that the conservation authorities seized. This year, there were 17 locations where 9 personnel were on duty assisting in supporting the investigation and seizing cases of protected species with on-site identification; there were 16 times where we assisted in criminal investigation cases with identification of 19 species, 633 animals; there were 17 times where we assisted the Taipei City Animal Protection Office with image authentication of 26 species, and we also continued to assist in the processing of saving injured wildlife commissioned by the related units of various county and city governments, and continued to accommodate and take care of various animals commissioned from the previous years, including the bear family, large cat family, bird species (parrots), primates, amphibians, and reptiles, with a count of 111 species, 1,659 animals. In addition, we provided accommodated animal professional and technical seminars, educational observational activities, and other explanatory guided tours. 43 groups, a total of 1,047 people attended the guided visitations, and most of the groups that visited and came for studies were domestic teachers and students in biologically-related departments, and those from local conservation authorities, Animal Protection Offices, Bureau of Animal and Plant Health Inspection and Quarantine, The Seventh Special Police Corps, the zoos from the Mainland and around the world, and other units.

There were six times that we assisted local conservation authorities in executing the training courses of identifying, capturing, and restraining wild animals, where 750 people attended. There were around 52 times that we provided professional inquiry service on animal care, feeding, identification, animal welfare enhancement, wildlife conservation concepts and propagations.

4. 動物引進及交換

為更新動物血緣與增加教育展示效益，持續與國內外重要動物園或照養機構進行動物繁殖合作、交換或互贈，除直接與個別重點動物園的動物交流合作外，並由於本園近年展現於亞洲地區動物族群管理的推動成果與專業能力，歐洲動物園暨水族館協會（EAZA, European Association of Zoos and Aquariums）2014年通過本園加入其轄下的大猩猩物種保育計畫（Gorilla EEP, European Endangered Species Programme），以及索馬里非洲野驢物種保育計畫（Somali Wild Ass EEP），並開始進行這兩個瀕危物種的動物調度引進，本年度已順利引入非洲野驢；另國際交流的突破，也開啟未來加入格利威斑馬、侏儒河馬、印度犀牛、網紋長頸鹿、馬來長吻鱷、蒙古野馬等保育合作計畫的可行性。

本年度計引進鳥類6種10隻、哺乳類5種12隻、爬蟲類5種16隻，並續與印度甘地動物園、大陸福州大貓熊研究中心、新加坡裕廊鳥園、維也納動物園、韓國首爾動物園、日本圓山動物園、釧路市動物園、多摩動物園及澳洲庫倫賓野生動物收容中心等等洽談動物交流中，重要成果如下：

- ◆新竹動物園動物暫置移入：馬來熊2雄1雌，人猿1雄1雌。
- ◆與新竹動物園合作繁殖移入：熊鷹1雌。
- ◆與雉類協會借殖計畫借殖移入：帝雉1對。
- ◆高雄鳳山民眾贈入：馬來長吻鱷1雄。
- ◆民眾贈入：夜鷺4隻
- ◆國立科學博物館竹山車籠埔斷層保護園區借展借出（4月25日至5月18日）：穿山甲1雄。

非洲野驢

- ◆金門國家公園救傷移入：栗喉蜂虎1隻。
- ◆集集特生中心救傷移入：長鬃山羊1雌。
- ◆日本圓山動物園交換案：換入揚子鱷3隻。
- ◆自法國波格雷野生動物園、蒙彼利埃動物園，和捷克拉貝河畔烏斯季動物園，借殖展移入：非洲野驢1雄2雌。
- ◆慈湖救傷移入：白天鵝1雄。
- ◆查緝沒入：大天堂鳥1雌、中國眼鏡蛇8隻。
- ◆購入：黑尾草原犬鼠1雄2雌。
- ◆與屏東辜嚴倬雲植物保種中心之保育合作案：交換出金雞4雄、白鷴2對及藍腹鷴2對。
- ◆因應動物園百周年特展自野生動物收容中心移入：黃腿象龜2隻、緬甸星龜1對。

揚子鱷

4. Introduction and Exchange of Animals

In order to increase the gene diversity and the effectiveness of educational displays, we continue to proceed with animal breeding cooperation, exchange and gifting of animals with important domestic and international zoos or wildlife institutions. In addition to directly exchanging and cooperating with the animals of individual key zoos, and since the Zoo has shown promotional achievements and professional competences of Asian regional animal species management in recent years, EAZA passed the Zoo in joining its purviews, namely Gorilla EEP and Somali Wild Ass EEP, in 2014. Therefore, we started proceeding with the dispatching and introducing of these two endangered species. This year, we have successfully introduced the African wild ass (*Equus africanus*). Another breakthrough in international exchanges also opened the feasibility of adding Grévy's zebra (*Equus grevyi*), pygmy hippopotamus (*Choeropsis liberiensis*), Indian rhinoceros (*Rhinoceros unicornis*), reticulated giraffe (*Giraffa camelopardalis reticulata*), Tomistoma (*Tomistoma schlegelii*), Przewalski's horse (*Equus przewalskii*), etc., into the conservation cooperation plan.

The animal count introduced this year for birds is 6 species, 10 individuals, for mammals is 5 species, 12 individuals, and for reptiles is 5 species, 16 individuals. And we continued to discuss animal exchanges with Gandhi Zoological Park in India, Fuzhou Panda Research Centre in Mainland, Jurong Bird Park in Singapore, Vienna Zoo (Tiergarten Schönbrunn) in Austria, Seoul Grand Park Zoo in South Korea, Sapporo Maruyama Zoo, Kushiro Zoo, and Tama Zoological Park in Japan, and Currumbin Wildlife Sanctuary in Australia, etc. The important results are as follows:

- ◆Animals from Hsinchu Zoo temporarily moved to the Zoo: 2 male and 1 female sun bears (*Helarctos malayanus*), 1 male and 1 female Borean orangutans (*Pongo pygmaeus*).
- ◆Cooperated with Hsinchu Zoo to breed and move to the Zoo: 1 female mountain hawk-eagle (*Nisaetus nipalensis*).
- ◆Relocation breeding plan from Pheasants Association to move to the Zoo and breed: 1 pair of Mikado pheasants (*Syrmaticus mikado*).
- ◆Gifting from persons from Fengshan, Kaohsiung: 1 male Tomistoma (*Tomistoma schlegelii*).
- ◆Gifting from persons: 4 black-crowned night herons (*Nycticorax nycticorax*).
- ◆Chelungpu Fault Preservation Park in Jhushan, National Museum of Natural Science borrowed for exhibition (Apr. 25th – May 18th): 1 male Formosan pangolin (*Manis pentadactyla*).
- ◆Injured animals saved by Kinmen National Park and moved to the Zoo: 1 blue-tailed bee-eater (*Merops philippinus*).
- ◆Injured animals saved by Endemic Species Research Institute in Chichi and moved to the Zoo: 1 female Formosan serow (*Capricornis swinhoei*).
- ◆Exchange case with Sapporo Maruyama Zoo in Japan: Received 3 Chinese alligators (*Alligator sinensis*).
- ◆Moved from Safari de Peaugres (Peaugres Safari) and Parc zoologique de Montpellier (Montpellier Zoological Park) in France, and Zoologická zahrada Ústí nad Labem (Ústí nad Labem Zoological Gardens) in Czech Republic to the Zoo for breeding exhibition: 1 male and 2 female African wild asses (*Equus africanus*).
- ◆Injured animals saved at the Cihu Mausoleum and moved to the Zoo: 1 male whooper swan (*Cygnus cygnus*).
- ◆Investigated and confiscated: 1 female greater bird-of-paradise (*Paradisaea apoda*), 8 Chinese cobras (*Naja atra*).
- ◆Purchased: 1 male and 2 female black-tailed prairie dogs (*Cynomys ludovicians*).
- ◆Conservation Cooperation Case with Dr. Cecilia Koo Botanic Conservation Center in Pingtung: Gave 4 male golden pheasants (*Chrysolophus pictus*), 2 pairs of silver pheasants (*Lophura nycthemera*), and 2 pairs of Swinhoe's pheasants (*Lophura swinhoii*).
- ◆Moved from the Wildlife Rescue Center to the Zoo in response to the Zoo's 100th Anniversary Special Exhibition: 2 Yellow-footed tortoise (*Chelonoides denticulatus*), 1 pair of Burmese Star Tortoise (*Geochelone platynota*).

5. 臺灣地區重點物種域外族群整合

持續推動公私立機構合作的臺灣地區重點物種域外族群整合工作，重要進展如下：

●臺灣黑熊復育計畫

2015年「臺灣黑熊復育工作小組」分別於1月、6月及12月計召開3次工作會議，重要進展有：

(1) **族群管理**：黑熊族群管理計畫延續原配對個體，皆進行自然配對並輔以賀爾蒙監測是否懷孕；其他8隻非核心配對年輕個體，規劃未來2至3年啟動配對計畫。

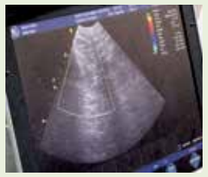
(2) **賀爾蒙監測**：本園協助低海拔試驗站母熊之糞便樣本中孕酮分析，目前已建立參考數據。

(3) **人工繁殖操作**：本園利用黑熊進行健檢機會，操作並示範黑熊人工繁殖技術。

●熊科動物人工繁殖工作坊

2015年6月10日及11日辦理為期2天的「熊科動物人工繁殖工作坊」，深入討論黑熊繁殖行為、賀爾蒙監測、健檢醫療、環境修繕問題，操作並示範黑熊人工採精及精液保存技術，以保存種源亦可培訓熊科動物保育繁殖人才，並加強族群管理的觀念。

研討會與會人數含國內大專院校生物、獸醫、保育教育等相關科系及相關領域夥伴計80人。實作課程因名額限制，除本園獸醫等支援人力外，臺灣動物園暨水族館協會(TAZA, Taiwan Association of Zoos and Aquariums)相關獸醫等與會人員計8人。



5. *Ex Situ* Population Integration of Focal Species in the Taiwan Region

The important progress of Taiwan Region Focal Species *Ex Situ* Population Integration Work, which continues to propagate the cooperation of public and private institutions, is as follows:

●Formosan black bear (*Ursus thibetanus formosanus*) Repopulation Plan

In 2015, the "Formosan black bear Repopulation Working Group" held three work meetings, respectively in January, June, and December, where the important progresses are:

(1) Population Management: the Formosan black bear population management plan continued from the original paired individuals, where natural pairing was carried out for all and were supplemented with hormones to monitor whether they've become pregnant; for the other non-core pairings of 8 young individuals, the plan is to start the pairing plan in the next two to three years.

(2) Hormone Monitoring: The Zoo assisted the Low Altitude Experimental Station with the progesterone analysis in the stool sample of female bears, and the reference data have currently been established.

(3) Operation of Artificial Breeding: The Zoo used the opportunity during the conducting of health checks on Formosan black bear to operate and demonstrate artificial breeding techniques on Formosan black bears.

●Bear Family Artificial Breeding Workshop

The "Bear Family Artificial Breeding Workshop" that lasted for two days was held from June 10th to 11th, 2015 with in-depth discussions on the breeding behaviors of Formosan black bears, hormone monitoring, health checks and medical treatments, environmental restoration issues, as well as operations and demonstrations of artificial insemination of Formosan black bears and semen preservation techniques, preserving the seed soures, while also training bear family conservation and breeding specialists, and strengthening the concept of population management.

The number of seminar participants was 80 people, and those included people from domestic colleges and universities in biology, veterinary, conservation education, and other related majors and also partners from related fields. Due to restrictions on the number of attendees for the practical course, in addition to the veterinarians and other support personnel from the Zoo, the count of the related veterinarians from Taiwan Association of Zoos and Aquariums (TAZA) was 8 people.

●臺灣地區人猿族群管理計畫

（1）本園與新竹市立動物園於2015年3月簽署「臺北市立動物園/新竹市立動物園動物暫置與合作繁殖協議書」，3月9日新竹市立動物園調度人猿2隻(1雄、1雌)至本園。在合作協議架構下，也為這2隻人猿進行各項健康評估、食物及環境豐富化、行為訓練、生理及繁殖行為觀察，使動物得到更好的健康醫療照顧。

（2）於2015年12月14日召開「臺灣地區人猿族群管理計畫工作小組」會議，其重要決議為：A.人猿為東南亞動物園暨水族館協會（SEAZA, South East Asian Zoos and Aquariums Association）在亞洲區的保育重點物種，因此對於人猿的保育規格應提升至國際層級來關切。B.各單位加入區域性的人猿保育計畫，合作進行東南亞各國人猿的遺傳分析及族群管理，提升國際保育的地位。C.各單位對於典藏人猿的目的須統一規劃方向。D.簽訂臺灣地區人猿保育借殖（展）合作計畫協議書，俾利後續辦理動物個體調度之行政依據。E.因目前東南亞區域性婆羅洲人猿域外族群管理協調人員（SSC, SEAZA Species Coordinator）由本園指派之專人擔任，為方便資訊整合，臺灣地區人猿協調人員由該專人擔任。

6. 推動亞洲區域物種族群管理計畫

本園持續推動亞洲區域物種族群管理計畫（RSMP, Regional Species Management Plan），於去(2014)年亞洲重點動物園間達成人猿族群區域間合作計畫啟動及發展方向共識後，本年針對有關人猿族群管理合作計畫詳細內容，持續與日本動物園暨水族館協會（JAZA, Japanese Association of Zoos and Aquariums）、泰國地區動物園組織協會（ZPO, Zoological Park Organization of Thailand）、新加坡動物園、香港海洋公園、韓國首爾動物園協商，並透過中國動物園協會（CAZG, Chinese Association of Zoological Gardens）及東南亞動物園暨水族館協會（SEAZA）聯繫收集這些區域之人猿血統書資料。2015年東南亞動物園暨水族館協會（SEAZA）年會中，正式成立族群管理委員會，選定婆羅洲人猿及馬來貘為示範物種，本園指派之專人亦被選為同時擔任東南亞動物園暨水族館協會(SEAZA）物種管理委員會（SSMC, SEAZA Species Management Committee）委員、婆羅洲人猿血統書管理者（SSK, SEAZA Studbook Keeper）及婆羅洲人猿族群管理協調人員（SSC, SEAZA Species Coordinator）。

● Orangutan Population Management Plan in the Taiwan Region

(1) The Zoo signed the “Taipei Zoo/Hsinchu Zoo Agreement on Temporary Placement and Breeding Cooperation of Animals” with Hsinchu Zoo in March 2015. On March 9th, Hsinchu Zoo dispatched two Borean orangutans(1 male and 1 female) to the Zoo. Under the framework of the Cooperation Agreement, we also carried out various types of health assessments, food and environment enrichment, behavior training, and observation of physiological and reproductive behaviors for these two Borean orangutans, so that the animals can obtain a better health and medical care.

(2) On December 14th, 2015, the “Taiwan Region Orangutan Population Management Plan Working Group” meeting was held, where the important resolutions were: i. Orangutans are the conservation focal species in the Asian region for South East Asian Zoos and Association (SEAZA); therefore, for the conservation specifications of orangutans, the concern should be raised to the international level. ii. Various units join the regional orangutan conservation plan, working together to conduct the genetic analysis and Population management of the orangutans from various Southeast Asian countries and to raise the international conservation status. iii. The various units must unify the planning direction on the purpose of collecting information on orangutans. iv. The Taiwan Region Orangutan Conservation and Relocation Breeding (Exhibition) Cooperation Plan Agreement was signed for the convenience of the follow-up handling of the administrative basis for dispatching individual animals. v. Because currently the SEAZA Species Coordinator (SSC) of Southeast Asian regional Bornean orangutans is a specialist appointed by the Zoo, for the convenience of information integration, said specialist also holds the position of the Orangutan Coordinator in the Taiwan region.

6. Promote Asian Regional Species Management Plan

The Zoo continued to promote Asian Regional Species Management Plan (RSMP) and after achieving a consensus with key zoos in Asia on orangutan population regional cooperation plan initiation and development direction last year (2014), focusing on the detailed content related to orangutan population management cooperation plan this year, we continued to consult with the Japanese Association of Zoos and Aquariums (JAZA), Zoological Park Organization of Thailand (ZPO), Wildlife Reserves Singapore, Ocean Park Hong Kong, and Seoul Grand Park Zoo in South Korea. Through contact with the Chinese Association of Zoological Gardens (CAZG) and SEAZA, the studbook information of the orangutans in these regions was collected. In 2015, at the SEAZA Annual Conference, the species management committee was officially formed.

The Bornean orangutans and Malayan tapirs (*Tapirus indicus*) were chosen as the demonstration species, while the specialist that the Zoo appointed was selected to simultaneously be a committee member of the SEAZA Species Management Committee (SSMC), the SEAZA Studbook Keeper (SSK) of the Bornean orangutans, and the SEAZA Species Coordinator (SSC) of the Bornean orangutans.

7. 展示場更新暨開展

●非洲野驢展示

2014年5月13日本園正式加入歐洲動物園暨水族館協會所屬「索馬利非洲野驢物種保育計畫（Somali Wild Ass EEP, European Endangered Species Programme）」，2015年6月14日自歐洲引入非洲野驢3隻入園，為本園首度透過參與國際物種保育計畫引入之物種，協助建立起該跨國、跨機構保育計畫在亞洲的第一個衛星族群。2015年8月5日於沙漠動物區非洲野驢展場前舉辦開展活動，現場有教育駐站、動物屁股造型圖像解說看板等。

為了引進此極度瀕危物種，本園於2013年12月啟動沙漠區動物環境改造計畫，透過諮詢歐洲動物園暨水族館協會所屬「索馬利非洲野驢物種保育計畫委員會（Somali Wild Ass EEP Committee）」，針對馬科及羚羊動物混種生活的空間需求，重新設計改造沙漠動物區。

戶外展示場部分，打通原本屬於弓角羚羊的3個狹長的戶外展示區，改為符合草食動物棲地的開闊環境；移植並盡量保留原有植栽提供動物遮蔭、環繞奔跑的自然元素；使用特殊硬質地坪，將原本的森林草原景觀改為較接近乾燥地區的沙漠意象，亦提供有蹄類動物磨蹄的功能；新增沙坑及水池，保持動物能翻滾、休息、飲水、護蹄的區域等，都是為了讓非洲野驢與弓角羚羊能順利的生活在同一個展場，有效利用空間並展現更自然的景觀。

室內部分則重新打造為馬科動物的管理空間，考量動物休息、醫療、運送，以及容易乾燥、清理、通風等功能，活化原本利用頻度較低的欄舍、打通壕溝以利大型機具通過、設計部分工作區域未來可改做動物臨時收容空間等，所投注心力不亞於戶外展示場。

此戶外及室內改造計畫共歷時8個月時間設計、3個月時間施工，充分利用國外經驗並配合臺灣氣候，改建出適合非洲野驢的生活空間，更通過歐洲動物園暨水族館協會所屬「索馬利非洲野驢物種保育計畫委員會」的審查，同意本園引進非洲野驢。

●揚子鱷展示

經過跨國的聯繫與努力，睽違數十年的揚子鱷，再度現身本園，3隻來自日本北海道圓山動物園的揚子鱷，9月11日起正式在本園兩棲爬蟲動物館展出。

7. Renewal and Launching of Exhibition Sites

●Exhibition of African Wild Asses (*Equus africanus*)

On May 13th, 2014, the Zoo officially joined the Somali Wild Ass EEP of EAZA and introduced three African wild asses (*Equus africanus*) from Europe on June 14th, 2015, which is the first time the Zoo has introduced species through participating in international species conservation plan, assisting in establishing said transnational, interagency conservation plan as the first satellite group in Asia. The exhibition opening event was held at the Desert Animal Area in front of the African Wild Ass Exhibition Site on August 5th, 2015 and there were education stations and animal ass-shaped graphic commentary billboards, etc., at the site.

In order to introduce these critically endangered species, the Zoo initiated the Desert Area Animal Environment Renovation Plan in December 2013. Through consultations with the Somali Wild Ass EEP Committee of EAZA, we redesigned and renovated the Desert Animal Area according to the hybrid animal living space requirements for the horse family and the antelopes.

In terms of the outdoor exhibition site, the three long and narrow outdoor exhibition areas of the addax (*Addax nasomaculatus*) were opened up and changed to an open environment that complies with the habitat of herbivores. We transplanted and tried to keep the original plants so as to provide the natural elements of shade and running environment for the animals. We used special hard flooring and changed the original forest-steppe landscape to desert imagery that is closer to the dry areas, so as to provide the function of hoof-grinding for ungulates. We added sandpits and ponds and maintained the areas where animals can tumble, rest, drink water, and take care of hoofs. These are all so that the African wild asses and addax can successfully live in the same exhibition site. We effectively used the space and exhibited a more natural landscape.

For the indoor part, we reconstructed a management space for the horse family. Taking into consideration the resting, medical care, and transport of animals, as well as functions of being prone to dryness, cleaning, and ventilation, we activated the housing stalls that were originally of lower usage frequency, opened up trenches in order to facilitate a path for large-scale machinery to pass through, and designed part of the work area so that they can be changed to temporary animal accommodation space, etc. The energy placed is just as much as the outdoor exhibition sites.

The design of this outdoor and indoor renovation plan lasted for eight months, and the construction lasted for three months. Fully using foreign experience, along with Taiwan's climate, we reconstructed a living space suitable for African wild asses and even passed the review of the Somali Wild Ass EEP Committee of EAZA, where they agreed for the Zoo to introduce the African wild asses.

●Exhibition of Chinese Alligators (*Alligator sinensis*)

Through transnational contacts and efforts, after many decades, the Chinese alligators (*Alligator sinensis*) have once again appeared at the Zoo. The three Chinese alligators from Sapporo Maruyama Zoo in Japan are officially exhibited at the Zoo's Amphibian and Reptile House starting from September 11th.

8. 本土域內外保育推展—臺北赤蛙保育計畫

本園投注於本土珍稀兩棲類的域內與域外保育已10餘年，對「臺北赤蛙」的保育工作推動不遺餘力。基於臺北赤蛙族群保育的急迫性與復育的重要價值，臺北市政府與新北市政府雙方特將「臺北赤蛙復育與棲地營造計畫」自104年起納入「雙北合作平臺」中「環境資源組」子項議題，由本園與新北市政府農業局共同合作，透過雙方綿密的合作與資源的整合，更有效地朝向臺北赤蛙復育的目標發展。

9. 與學術界建教合作及推廣教育

續與臺灣大學等獸醫學院在動物診療技術方面，保持密切建教合作關係，並舉辦臺北市立動物園病理研討會，進行前一年度死亡病例研討，增進臨床醫療與病理交流與連結，提升動物醫療品質。年內多位學者專家來園指導，邀請臺灣大學獸醫學院麻醉指導謝青峰獸醫師演講「小動物麻醉機使用」；臺大獸醫學院伍敬和醫師講授犬貓泌尿道結石診斷治療教育訓練；中興大學陳冠升、林以樂老師及林建良獸醫講授動物關節炎診療、關節炎影像學及中央靜脈導管設置與抗生素使用等課程；臺灣大學附設動物醫院羅珮盈及謝富閔獸醫協助雲豹麻醉醫療超音波及內科會診；許萬盛醫師指導斷層掃描病例判讀研討；榮總小兒科吳醫師來園指導新生人猿人工哺育技術；臺灣大學附設動物醫院林中惠獸醫演講「小動物心肺功能評估及臨床檢查技術」，臺灣大學附設動物醫院葉力森教授來園指導蒙古野馬麻醉醫療等。除與獸醫界的合作外，亦透過與人醫的交流與合作，以及積極運用中醫於野生動物醫療，加速提升野生動物的診療技術。

8. *In* and *Ex Situ* Conservation Expansion in Local –Taipei Grass Frog (*Hylarana taipehensis*) Conservation Plan

The Zoo has placed efforts for more than ten years in *in* and *ex situ* conservation of rare local amphibians and spared no efforts in the promotion of the conservation work of "Taipei grass frog (*Hylarana taipehensis*)." Due to the urgency of the Taipei grass frog population conservation and the important value with repopulation, starting in 2015, both the Taipei City Government and the New Taipei City Government included the "Taipei Grass frog Repopulation and Habitat Construction Plan" into the "Environmental and Resource Group" subtopic of "Taipei and New Taipei Cooperation Platform," where the Zoo cooperated together with the Agriculture Department, New Taipei City Government. Through meticulous cooperation and resource integration of both parties, we headed more effectively towards the development of the goal of Taipei grass frog repopulation.

9. School-Enterprise Cooperation with Academia and Promoting Education

Continuing to maintain close school-enterprise cooperation relationship with Schools of Veterinary Medicine with Universities such as National Taiwan University in terms of animal medical technology, and held Taipei Zoo Pathology Seminar, proceeding with the discussion on the death cases of the previous year, to enhance clinical, medical, and pathological exchanges and connections, improving the quality of animal health care. Within the year, many scholars and professionals came to the Zoo to instruct us; we invited veterinarian Ching-Feng Hsieh, anesthetic instructor at the School of Veterinary Medicine, National Taiwan University, to speak on "Anesthesia Machine Use on Small Animals," veterinarian Ching-Ho Wu from the School of Veterinary Medicine, National Taiwan University, to teach educational training of diagnosis and treatment for urinary tract stones of dogs and cats, assistant professors Kuan-Sheng Chen and Yi-Lo Lin and veterinarian Jian-Liang Lin from National Chung Hsing University to teach courses on animal arthritis diagnosis and treatment, arthritis imaging, the setting of central venous catheter, and the use of antibiotics, etc., veterinarians Pei-Ying Lo and Fu-Ming Hsieh from The National Taiwan University Veterinary Hospital to assist in the anesthetic medical ultrasound and medical consultations of the clouded leopards (*Neofelis nebulosa*), physician Wan-Sheng Hsu to instruct and hold a seminar on the interpretation of tomography cases; Dr. Wu from the Department of Pediatrics, Veterans General Hospital to the Zoo to instruct on the artificial feeding techniques for newborn orangutans, veterinarian Chung-Hui Lin from The National Taiwan University Veterinary Hospital to speak on "The Assessment of Cardiopulmonary Functions in Small Animals and Clinical Examination Techniques," and professor Lih-Sen Yeh from The National Taiwan University Veterinary Hospital to the Zoo to instruct on anesthetic medical treatment of Przewalski's horse (*Equus przewalskii*), etc. In addition to the cooperation with veterinarians, also through the exchanges and cooperation with human doctors and actively applying Chinese medicine on the medical treatment of wild animals, advancing our clinical techniques in wild animals .

Also, cooperation between school and enterprise and promotion of education with other related institutions, or provision of internships for domestic veterinarians and domestic and international university students in school of veterinary medicine, including: 1 veterinary intern from The University of Melbourne in Australia in January, 1 Nanjing Hongshan Forest Zoo veterinarian for veterinary

另與其他相關機構建教合作及教育推廣，或提供國內獸醫師及國內外獸醫系大學生前來實習，包括：1月份澳洲墨爾本大學獸醫實習生1名；6月份南京紅山森林動物園獸醫業務見習觀摩1名、加拿大麥基爾大學獸醫實習生1名；7月份法國、英國及加拿大等4名獸醫實習生；8月英國及美國獸醫實習生2名；9月英國及美國共2位獸醫實習生2名。提供國內各大學獸醫學、生物相關、觀光遊憩管理等科系學生，進行整學期實習或為期1-2個月的寒暑期實習。如：德霖技術學院休閒管理系大三的2位同學來動物園實習（實習期間:2/2-8/31），7-8月實習生及候鳥計畫實習學生計61人，提供學生野生動物醫療、生物學、生態學等觀摩學習。

協助各單位辦理之演講及課程有： 8月協助比較病理醫學會辦理年度研討會。

國際合作與交流

於臺北辦理「2015瀕危小型食肉目動物繁殖和再引入國際研討會」、「2015野生動物域外保育族群管理會議」及相關專業工作坊，邀集國內外的專家學者與會，進行國際專業交流，積極發展國內與國際間的保育合作，擴大保育互動網絡與合作機制，形成更緊密的保育夥伴關係，以利跨國推動專業事務，並為本土野生動物域內保育開拓新契機。

此外，指派人員進行國際合作與交流，推展重點有：參與東南亞動物園協會（SEAZA, South East Asian Zoos Association）章程會議及理事會議，共同建全會務，提升協會運作效能，年內東南亞動物園協會更名為「東南亞動物園暨水族館協會」（SEAZA, South East Asian Zoos and Aquariums Association）；參與其年會並大力推動人猿域外族群管理計畫；為提升圈養野生動物福祉，派員參與國際環境豐富化會議；積極拓展焦點物種保育繁殖交流，派員參與巨猿類分類諮詢專家群會議，並參與歐洲動物園及水族館年會，期為本園焦點物種族群管理開拓新契機；持續培訓及累積本園飼養大貓熊之飼育及繁殖實務技能，投入大貓熊專業領域保育科學研究，並積極參與大貓熊相關之國際性會議及分享本園相關研究資訊；本年度指派出席國際會議及研討會計12梯次36人次；指派參與之觀摩與交流計5梯次10人次。

透過保育合作協定、合作備忘錄等之簽署，與各界建立長期研究合作關係，如：本園與日本旭川市旭山動物園簽訂「婆羅洲侏儒象保育合作備忘錄」。

business training and observation and 1 veterinary intern from McGill University in Canada in June, 4 veterinary interns from France, the United Kingdom, and Canada in July, 2 veterinary interns from the United Kingdom and the United States in August, and 2 veterinary interns from the United Kingdom and the United States in September. Providing students from department of veterinary science, bio-related departments, department of tourism and recreation management at various domestic universities to intern for a whole semester or for 1-2 months during the winter or summer vacation. For example: 2 juniors from the Department of Recreation Business Management, De Lin Institute of Technology came to the Zoo to intern (internship period: February 2nd – August 31st), and the number of interns and Taiwan Tech Trek interns from July-August totaled 61 people, providing students observational learning, such as wildlife medical care, biology, and ecology.

Assisted various units in handling speeches and courses include: assisting Chinese Society of Comparative Pathology in handling the annual seminar in August.

International Cooperation and Exchanges

We handled “The International Conference for the Breeding and Reintroduction of Endangered Small Carnivores,” “2015 Conference on Regional Species Management Programs,” and related professional workshops, and invited domestic and international professionals and scholars to participate. We conducted international and professional exchanges, actively developed conservation cooperation both at home and abroad, and expanded conservation interactive network and cooperation mechanisms, forming tighter conservation partnership relations, in order to facilitate the promotion of professional matters across nations, while opening up new opportunities for the *in situ* conservation of local wildlife.

In addition, the focus of propagation of the appointed personnel with the proceeding with international cooperation and exchanges includes: participating in the South East Asian Zoos Association (SEAZA) constitution meeting and board meeting to jointly complete the affairs of the Association and enhance the operational efficiency of the Association and, during the year, South East Asian Zoos Association changed its name to “**South East Asian Zoos and Aquariums Association** (SEAZA)” and participating in its annual conference to greatly promote the orangutan regional population management plan; to enhance the welfare of captive wildlife, personnel was dispatched to attend The International Conference on Environmental Enrichment; to actively expand the conservation and breeding exchanges of focus animal species, personnel was dispatched to attend the EAZA Midyear Great Ape TAG Meeting and to attend the EAZA Annual Conference, expecting to open up new opportunities for the Zoo on focus animal species management; continuing to train and accumulate the substantive skills in rearing and breeding of giant pandas at the Zoo, investing in the professional field of conservation scientific research of giant pandas , and actively participating in international meetings related to giant pandas and sharing related research information from the Zoo. There were 12 international conferences and seminars that we appointed 36 personnel to attend this year. There were 5 observations and exchanges that we appointed 10 personnel to participate in.

Through the signing of conservation cooperation agreements and memorandums of cooperation, etc., long-term research partnerships were established with various sectors, such as: signing the “Memorandum of Cooperation in Conservation of Borneo Pygmy Elephants (*Elephas maximus borneensis*)” with Asahiyama Zoo in Japan.

1. 參加國際性會議

月份	會議名稱	參與人數
4	赴馬來西亞檳城太平動物園參加東南亞動物園協會（SEAZA）章程會議	1
5	赴歐洲（德國、比利時、法國）參加巨猿類分類諮詢專家群會議（EAZA midyear Great Ape TAG meeting）與洽談物種族群管理合作計畫	2
5	赴中國大陸北京參加2015國際環境豐富化會議	5
6	赴英國懷特島參加2015年馬達加斯加動植物保育群（MFG）年會	2
7	赴新加坡參加2015東南亞動物園協會（SEAZA）理事會議	1
9	赴歐洲(波蘭、德國、匈牙利)參加歐洲動物園暨水族館協會年會（2015 EAZA annual conference）與洽談物種族群管理合作計畫	2
9	赴美國參加美國動物園獸醫協會（AAZV）2015年年會	2
10	赴阿拉伯聯合大公國參加保育繁殖專家群（CBSG）2015年年會及世界動物園暨水族館協會（WAZA）第70屆年會	2
10	赴緬甸參加2015亞洲保育醫學會（ASCM）年會	2
10	赴新加坡參加2015年東南亞動物園暨水族館協會（SEAZA）年會	8
11	赴中國大陸參加第四屆兩岸四地大貓熊保育教育學術研討會	4
12	赴韓國參加2015第5屆亞洲動物園教育者研討會（AZEC）	5

2. 觀摩與交流

104年度外派參與之觀摩與交流一覽表

月份	名稱	參與人數
4	赴日本釧路動物園觀摩交流丹頂鶴繁殖計畫	2
5	赴聖地牙哥觀摩動物管理與洽談保育合作計畫	1
9	赴馬來西亞沙巴執行國際焦點物種域內保育計畫	2
11	赴中國大陸福州及廣州執行國際焦點物種域內保育計畫	3
12	赴中國大陸辦理104-105年度遊客列車採購案廠驗	2

巨猿類分類諮詢專家群會議（EAZA midyear Great Ape TAG meeting）


2015年馬達加斯加動植物保育群（MFG）年會

1. Participation in International Conferences

Month	Conference Name	No. of Participants
Apr.	Went to the Zoo Taiping and Night Safari of Malaysia to attend the SEAZA Charter Meeting	1
May	Went to Europe (Germany, Belgium, and France) to attend the EAZA Midyear Great Ape TAG Meeting and discussed the Animal Species Management Cooperation Plan	2
May	Went to Beijing in the Mainland to attend The International Conference on Environmental Enrichment	5
Jun.	Went to Isle of Wight, Great Britain to attend the 2015 Madagascar Fauna and Flora Group (MFG) Annual Conference	2
Jul.	Went to Singapore to attend the 2015 SEAZA Board of Directors Meeting	1
Sep.	Went to Europe (Poland, Germany, and Hungary) to attend the EAZA Annual Conference and discussed the Animal Species Management Cooperation Plan	2
Sep.	Went to the United States to attend the 2015 American Association of Zoo Veterinarians (AAZV) Annual Conference	2
Oct.	Went to the United Arab Emirates to attend the 2015 Conservation Breeding Specialist Group (CBSG) Annual Conference and the 70th World Association of Zoos and Aquariums (WAZA) Annual Conference	2
Oct.	Went to Myanmar to attend the 2015 Asian Society of Conservation Medicine (ASCM) Annual Conference	2
Oct.	Went to Singapore to attend the 2015 SEAZA Annual Conference	8
Nov.	Went to Mainland China to attend the 4th Cross-Strait Giant Panda Conservation Education Symposium	4
Dec.	Went to South Korea to attend the 2015 5th Asian Zoo Educators' Conference (AZEC)	5

2. Observation and Exchanges

List of Observations and Exchanges in 2015 that Dispatched Personnel Attended

Month	Name	No. of Participants
Apr.	Went to Kushiro Zoo in Japan for observations and exchanges in Red-Crowned Crane (*Grus japonensis*) Breeding Plan	2
May.	Went to San Diego to observe animal management and discuss Conservation Cooperation Plan	1
Sep.	Went to Sabah, Malaysia, to carry out the International Focal Species *In Situ* Conservation Plan	2
Nov.	Went to Fuzhou and Guangzhou of Mainland China to carry out the International Focal Species *In Situ* Conservation Plan	3
Dec.	Went to Mainland China to execute the 2015-2016 tourist train procurement case plant inspection	2

3. 辦理國際會議及專業研討會

●6月22-23日於本園辦理「2015瀕危小型食肉目動物繁殖和再引入國際研討會」，並於22日舉辦「歐亞水獺域外保育工作坊」、「保育教育工作坊」2場工作坊，將歐亞水獺及石虎保育議題納入重點研討。為推動臺灣野生動物復育與重返原棲地的保育行動，導入國外保育機構進行整合保育的經驗，積極建構國內外保育專家的合作網絡，轉化為國內野生動物整合保育的借鏡與助力。

此次研討會以小型食肉目動物繁殖和再引入保育計畫為主軸，內容涵蓋歐亞水獺、石虎、椰子貓和其他小型食肉目動物的的保育、繁殖和社區保育教育行動等域內域外案例與成果。來自荷蘭水獺基金會、德國科隆動物園、英國貝爾福斯特動物園、日本琉球大學、井之頭恩賜公園、多摩動物公園、韓國水獺研究中心、新加坡野生動物保護區、泰國動物園協會、臺灣大學、靜宜大學、特有生物研究保育中心、新竹林區管理處和野聲環境生態顧問有限公司等不同專業機構的專家和學者共約202人，在此次研討會的15場專題演講中分享他們推動或執行瀕危物種重返原棲地的進展、過程與經驗。同時，也期待經由此次難得的機會，邀集國內外的專家學者與會，積極發展國內與國際間的保育合作，彼此間形成緊密的國際與跨領域保育夥伴，擴大保育互動網絡與合作機制，並於6月25-27日分別到金門、苗栗、集集辦理水獺、石虎在地保育工作坊，延續保育教育效益。

●本年度延續2014年族群管理研討的方向一以巨猿類的繁殖保育合作為著力重點，104年10月26日至10月29日舉辦「2015野生動物域外保育族群管理會議」(2015 Conference on Regional Species Management Programs)，議題主軸為靈長類等重點物種域外保育研究、物種保育行動計畫與再引入案例分享，會議邀約EAZA、AZA(美洲動物園暨水族館協會，Association of Zoos and Aquariums)、ZAA(澳洲動物園暨水族館協會，Zoo and Aquarium Association Australasia)、SEAZA、ZPO及JAZA各區域性代表專家進行交流，致力建構本園成為國際族群管理保育合作平臺。會議期間開設不同主題重點進行訓練或研討，10月26日為「族群管理訓練課程:基礎班」，計6個國家、41位國內外學員參加；10月27日至10月28日為「專題演講」，主題為靈長類等重點

3. Holding of International Conferences and Professional Seminars

●On June 22nd to 23rd, handled "2015 The International Conference for the Breeding and Reintroduction of Endangered Small Carnivores" at the Zoo, and held two workshops, namely "*Ex Situ* Conservation of Otter Workshop" and "Education Workshop," on the 22nd, including the conservation issues of Eurasian otters (*Lutra lutra*) and leopard cats (*Prionailurus bengalensis*) as the focus of the seminar. In order to promote the conservation action of repopulation and returning to the original habitats for Taiwan wildlife, we introduced the experience of integrated conservation carried out by foreign conservation agencies and actively constructed the cooperation network for domestic and international conservation experts, transforming into an aid and assistance to the domestic wildlife one plan approach conservation.

●The main focus of this seminar was on the conservation plan on breeding and reintroduction of small carnivores, where the content covers the conservation, breeding, community conservation educational action, and other cases and achievements *in* and *ex situ* on Eurasian otters, leopard cats , Asian palm civets (*Paradoxurus hermaphroditus*), and other small carnivores. A total of 202 experts and scholars from Stichting Otterstation Nederland (Dutch Otterstation Foundation), Kölner Zoo (Cologne Zoo) in Germany, Belfast Zoological Gardens in the United Kingdom, University of the Ryukyus, Inokashira Park, and Tama Zoological Park in Japan, Korean Otter Research Center in South Korea, Wildlife Reserves Singapore in Singapore, Zoological Park Organization of Thailand in Thailand, National Taiwan University, Providence University, Endemic Species Research Institute, Hsinchu Forest District Office, Formosan Wild Sound Conservation Science Center Co., Ltd., and other professional institutions shared their progress, process, and experience on the promotion and execution of the return of endangered species back to the original habitats in the 15 keynote speeches at this seminar. At the same time, through this rare opportunity, we also invited domestic experts and scholars to attend, with the hopes of actively developing the conservation cooperation both domestically and internationally, so as to form a tighter international and cross-disciplinary conservation partners with each other and expand the conservation interactive network and cooperation mechanism. And we held the otter and leopard cat local conservation workshops respectively at Kinmen, Miaoli, and Jiji from June 25th to 27th as a continuation of conservation educational benefits.

●This year, in continuation of the direction of research of 2014 species management – with the breeding and conservation cooperation of great apes as the key focus, the "2015 Conference on Regional Species Management Programs" was held

物種域外保育研究、物種保育行動計畫與再引入案例分享，計14個國家、114位國內外貴賓參加，以及「區域性人猿族群管理計畫座談」，計12個國家、27位國內外專家學者與會座談；10月29日為「巨猿類心臟醫療訓練課程」，計7個國家、66位國內外專家學者與貴賓參加；「人猿工作坊：雌性人猿繁殖分析及管理」，計4個國家、15位國內外專家學者與會座談，以及「族群管理訓練課程:進階班」，計4個國家、29位國內外學員參加。

4. 其他專業交流

- 大連森林動物園鐘磊部長等計14人蒞園參訪。
- 大貓熊專家學者黃炎總工程師及何勝山先生來園指導大貓熊人工繁殖事宜。
- 澳洲庫倫賓野生動物保護區獸醫Michael Pyne與野生動物專家Dr.Bruce Cook及其基金會董事Saskia Lafebre來園商談未來合約，加強雙方合作及血統書的建立等事宜。

2015野生動物域外保育族群管理會議

from October 26th to 29th, 2015. The main issues focused on the *ex situ* conservation research of primates and other key species and the sharing of cases on species conservation action plan and reintroduction. We invited various regional representative experts from EAZA, Association of Zoos and Aquariums (AZA), Zoo and Aquarium Association (ZAA) of Australasia, SEAZA, ZPO, and JAZA to the meeting to conduct exchanges, committing to build the Zoo to become a cooperation platform for international species management conservation. During the meeting, different key topics were opened to conduct training or discussions. On October 26th, we had the "Population Management Training Course (Part 1)," where a total of 41 domestic and international participants from 6 countries attended. From October 27th to 28th, we had "keynote speeches" with the themes on the conservation research of primates and other key species *ex situ conservation* and the sharing of cases on species conservation action plan and reintroduction, where a total of 114 domestic and international guests from 14 countries attended, and had "Orangutan RSMP Meeting," where a total of 27 domestic and international experts and scholars from 12 countries attended and had an informal discussion. On October 29th, we had "Great Ape Heart Project Training Course," where a total of 66 domestic and international experts, scholars, and guests from 7 countries attended, had "Orangutan Workshop: Breeding Analysis and Management of Female Orangutans," where a total of 15 domestic and international experts and scholars from 4 countries attended and had an informal discussion, and had "Population Management Training Course (Part 2)," where a total of 29 domestic and international participants from 4 countries attended.

4.Other Professional Exchanges

- A total of 14 people, including Minister Lei Zhong, from Dalian Forest Zoo came to the Zoo to visit.
- Engineer Yan Huang, expert and scholar on giant pandas, and Mr. Sheng-Shan He came to the Zoo to instruct on artificial breeding matters of giant pandas.
- Veterinarian Michael Pyne, wildlife expert Dr. Bruce Cook, and director of foundation Soskia Lafebre of Currumbin Wildlife Sanctuary in Australia came to the Zoo to discuss the future contract, strengthen the cooperation between both parties, establish the studbook, and for other matters.
- The volunteer personnel of Beijing Zoo visited the volunteers of the Volunteer Team at the Zoo to observe the volunteer morning meetings and duty operations and make exchanges on volunteer team management experience.
- The director and a group of people from ZPO came to the Zoo to visit.
- Naoya Honda, rearing and breeding expert on amphibians, reptiles, and large birds of prey, from Sapporo Maruyama Zoo in Japan came to the Zoo to present a keynote speech on the "Rearing and Breeding of Chinese Alligators"
- 41 people from the International Veterinary Students' Association (IVSA) came to the Zoo to visit.

- 北京動物園志工幹部拜訪本園服務隊志工，觀摩志工早會及勤務運作，交流志工隊經營經驗。
- 泰國國家動物園管理局理事長一行人蒞園參訪。
- 日本北海道圓山動物園兩棲爬蟲和大型猛禽飼養繁殖專家本田直也（Naoya Honda），蒞園發表「揚子鱷的飼養繁殖」專題演講。
- 國際獸醫學生協會41人蒞園參訪。
- 韓國Jeonju city zoo 整體規劃團隊蒞園，參訪全園各區並討論動物園展示邏輯、組織架構與管理策略。
- 韓國首爾兒童公園附屬動物園10人蒞園，參訪本園之動物展示設計、醫療中心及解說環境規劃等設施。
- 澳洲昆士蘭大學獸醫科學院Dr.Christina Wynne Collins 參觀穿山甲展示場與作業區。
- 國立臺灣博物館陳濟民館長帶領國際博物館領域專業人士計19人蒞園參訪。
- 北京市公園管理中心代表團張永主任等7人蒞園參訪，觀摩園區動物展示暨遊客動線與服務。
- 南京紅山森林動物園馬可部長等5人蒞園參訪交流。
- 德國伍玻塔動物園（Zoo Wüppertal）Dr.Andre Marcel，蒞園發表「貓科動物族群管理」、「吸血蟲之醫療應用」、「伍玻塔動物園園區展示計畫」專題演講。
- 為推動國內外動物園合作保育行動與專業技術交流，邀請法國 Haute Touche 野生動物園副園長 Yann Locatelli 蒞園進行梅花鹿域外保育技術座談會，強化本園草食獸族群管理技術與國際經驗交流，並發表「從考古學到生物技術—aute Touche 動物園的研究展望」專題演講。
- 中國大陸山東煙台動物園園長等2人蒞園參訪交流。
- 新竹市立動物園園長與日本東山動物園等7人蒞園參訪交流。

- The whole planning team from Jeonju City Zoo in South Korea came to the Zoo to visit all areas in the Zoo and discuss the logic of exhibition, organizational structure, and management strategies for the Zoo.
- 10 people from the Zoo of Seoul Children's Grand Park in South Korea came to the Zoo to visit the Zoo's animal exhibition design, the Medical Center, environmental planning explanation, and other facilities.
- Dr. Christina Wynne Collins from the School of Veterinary Science of The University of Queensland visited the pangolin exhibition site and operating area.
- Chi-Ming Chen, Director of National Taiwan Museum, led a group of professionals in the field of international museum, with a total of 19 people, and came to the Zoo to visit.
- Representative group with director Yong Zhang from Beijing Municipal Administration Center of Parks, a total of 7 people, came to the Zoo to visit and observe the animal exhibitions in the Zoo area and the tourist traffic flow and service.
- 5 people, including Minister Ke Ma, from Nanjing Hongshan Forest Zoo came to the Zoo to visit and make exchanges.
- Dr. Andre Stadler from Zoo Wüppertal came to the Zoo to present the keynote speeches of "Population Management of the Cat Family," "Medical Application of blood sucking bugs (assassin bugs)," and "Exhibition Plan of Wüppertal Zoo."

- In order to promote the cooperation conservational actions in domestic and international zoos and the exchanges of technical expertise, we invited Yann Locatelli, Deputy Manager of the Réserve Zoologique de la Haute-Touche (Haute Touche Zoological Park), to come to the Zoo to conduct a seminar on the *ex situ* conservation techniques of sika (*Cervus nippon*) to strengthen the population management techniques of herbivorous animals and for exchanges on international experience, and also to give a keynote speech on "From Archaeology to Biotechnology – The Research Prospects for Haute Touche Zoological Park."
- 2 people, including the Director, from Yantai Nanshan Park Zoo in Mainland China came to the Zoo to visit and make exchanges.
- Director of Hsinchu Zoo and people from Higashiyama Zoo and Botanical Gardens, a total of 7 people, came to the Zoo to visit and make exchanges.