

嘉道理农场暨植物园位于香港最高山脉大帽山北坡下。园内清溪汇流，翠林环抱，还有不少果园和梯田，以及各种保育及教育设施，是一家独特的公私营合作机构。

本园于1956年成立，当年的目标是向贫苦农民提供农业辅助，帮助他们自力更生。1995年，香港立法局（现为立法会）通过嘉道理农场暨植物园公司条例（第1156章），本园正式成为保育及教育中心，致力于推广香港和邻近地区的保育及永续生活，并推行各类计划促进动植物保育和有机农业。本园的使命是“大众与环境和谐并存”。

Kadoorie Farm and Botanic Garden (KFBG) is situated on the northern slopes of Hong Kong's highest mountain—Tai Mo Shan. Within KFBG are streams, woodlands, orchards and vegetable terraces—together with conservation and education facilities.

KFBG was established in 1956 to provide agricultural aid to farmers in need of support to help them lead independent lives. KFBG has become a unique public-private partnership, incorporated and designated as a conservation and education centre by KFBG Ordinance (Cap 1156) that is passed by the Legislative Council of Hong Kong in 1995. Since then, KFBG has been focusing on promoting conservation and sustainable living in Hong Kong and the region, with programmes on flora and fauna conservation and the promotion of organic agricultural practices. KFBG's mission statement is “To harmonise our relationship with the environment”.

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KADOORIE CONSERVATION CHINA 嘉道理中国保育



OUR WORK

我们的工作

SPECIES
CONSERVATION
物种保护

HABITAT
CONSERVATION
生境保护

AWARENESS
RAISING
提高公众意识

CAPACITY
BUILDING
人才培育

BIODIVERSITY
STUDIES
生物多样性研究

SUSTAINABILITY
PROMOTION
推广永续理念

嘉道理中国保育（KCC）为香港环保机构嘉道理农场暨植物园辖下部门之一。成立于1998年，KCC以减缓中国及邻近地区的生物多样性消失和推广可持续理念为宗旨，在国内外开展各类保育项目，包括保护和研究自然生态系统及濒危物种、培育当地人才，提高社区保育意识和推广可持续生活模式。2019年，我们正式在中国内地注册为境外非政府组织，目前正在开展的项目遍布中国的海南、云南、广东、北京，以及柬埔寨桔井等地。

Kadoorie Conservation China (KCC) is a department of Kadoorie Farm and Botanic Garden—a Hong Kong-based environmental NGO. Founded in 1998, KCC aims to minimise the loss of biodiversity and promote sustainability in China and the region. On-going projects include protection and study of natural ecosystems and endangered species, capacity building of local partners, awareness-raising and promotion of sustainability in local communities. In 2019, we officially registered as an overseas NGO in China, and currently have projects in Hainan, Yunnan, Guangdong, Beijing of China, and Kratie of Cambodia.

TIMELINE 历史里程

1998

华南生物多样性研究队成立，在接下来5年考察超过50个林区。
South China Biodiversity Team formed and surveyed over 50 forest sites in the following 5 years.



设立“生物多样性奖学金”，12年来共资助45位内地研究生完成动植物保育相关的研究课题。
Launched the “Biodiversity Studentship Scheme” in China. Funded 45 postgraduate biodiversity research in 12 years.

2000

开展为期三年的广东省野生动物市场调查，为野生动物贸易研究提供重要资料。
Launched a 3-year wildlife market survey in Guangdong and provided vital information for wildlife trade studies.



2002

首次在野外使用红外相机，是中国首批使用此技术的团队之一。
One of the first teams in China to deploy camera traps in field survey.

2003

在海南霸王岭保护区组织海南长臂猿首次同步种群调查，并开展长期保育项目。
Launched the first Hainan Gibbon population census at Hainan Bawangling Nature Reserve, and commenced our long-term conservation project.



2005

带队开展历时三个月的海南鹦哥岭综合资源考察，发现大片原始雨林及丰富生物多样性。
Led a 3-month biodiversity expedition to the unexplored Yinggeling forest in Hainan and discovered extensive intact forest and high biodiversity.

成立海南长臂猿监测队及开展栖息地恢复项目。
Established the Hainan Gibbon monitoring team and launched habitat enhancement project.

2006

在广西中越边境地区重新发现在中国已消失半个世纪的东黑冠长臂猿。
Rediscovered the Cao-vit Gibbon for China along the Sino-Vietnamese border in Guangxi.



2008

重新发现被IUCN评为野外灭绝的云南闭壳龟野生种群。
Rediscovered a wild population of Yunnan Box Turtle, which was declared extinct by IUCN.



2009

在广西西大明山开展中国第一个犀鸟保育项目。
Launched the first hornbill conservation project in China at Guangxi Xidamingshan Nature Reserve.

2011

开展“雨林使者”公众科学项目，鼓励海南公众直接参与保育工作。
Launched the Rainforest Ambassador Citizen Science Programme in Hainan to promote public participation in conservation.

2012

经过6年社区工作的努力，海南鹦哥岭成立首个社区禁渔区，并重新引入当地灭绝的倒刺鲃。
After 6 years of community work, the first community fish sanctuary was established at Yinggeling in Hainan, and reintroduced the locally-extirpated Red-faced Giant Barb.



2013

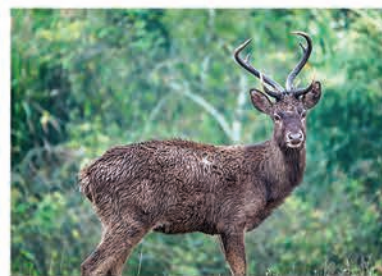
获委任为全球性保育基金CEPF的区域执行团队，协助国内机构开展项目。
Appointed as Regional Implementation Team to manage China projects for Critical Ecosystem Partnership Fund.

2014

鹦哥岭在KCC全力协助下晋升为国家级自然保护区。
Yinggeling was upgraded to a national nature reserve with strong support from KCC.

2015

在海南邦溪保护区开展海南坡鹿保护项目。
Launched the Hainan Eld's Deer conservation project at Hainan Bangxi Nature Reserve.



2016

《高黎贡山腾冲生物多样性》中英双语图鉴出版，总结了历时两年的科研考察成果。
Published bilingual field guide “Biodiversity of Tengchong, Gaoligongshan” to showcase the results of our 2-year field survey.

2017

在柬埔寨东部平原开展KCC首个海外保育项目。
Launched KCC's first overseas project in the Eastern Plains Landscape of Cambodia.

2018

在柬埔寨与国际鸟盟合办坡鹿保护国际研讨会。
Co-hosted the International Eld's Deer Conservation Workshop in Cambodia with BirdLife International.

2019

经过13年的持续推动，俄贤岭正式成为海南首个石灰岩森林保护区。
After 13 years of continuous support, Exianling become the first limestone forest reserve for Hainan.



2020

与IUCN水獭专家组和四川唐家河保护区合办第14届国际水獭研讨会。
Co-hosted the 14th International Otter Congress with IUCN SSC Otter Specialist Group and Sichuan Tangjiahe Nature Reserve.

海南长臂猿四十年来首次组成第五个家庭群，数量突破30只。
Hainan Gibbon formed the 5th family group and exceeded 30 individuals for the first time since the 1980s.



海南长臂猿雄性通体黑色；雌性呈金黄色，头顶有黑色斑块。Mature male Hainan Gibbon is completely black and female is golden-buff with a black crown.

HAINAN GIBBON

海南长臂猿

Year launched 启动年份	Global population 全球种群数量	全球最濒危灵长类 THE WORLD'S RAREST PRIMATE	No. of trees planted 栽种的树苗数量	IUCN status IUCN保护级别
2003	30+		80,000+	CR 极危

2003年，KCC在海南省林业局的邀请下开始参与海南岛特有种海南长臂猿（*Nomascus hainanus*）的保育工作。在我们筹办的首次同步种群调查中，确认其数量仅余2群13只，情况岌岌可危。针对各种威胁，我们随即联同海南霸王岭国家级自然保护区实施了一系列就地保育措施，包括植树以恢复其栖息地、成立两支海南长臂猿监测队和开展社区生计和宣教工作。另外，我们共资助了7名科研人员进行有关海南长臂猿的各项研究，以助完善我们的保护行动。经过多年的努力，海南长臂猿正逐渐恢复，其数量在2020年已增加超过一倍，达至5群超过30只。

In 2003, KCC was invited by the local authority to take an active role in saving the Hainan Gibbon (*Nomascus hainanus*), which is endemic to Hainan Island. We launched the first population census and only confirmed the presence of 13 individuals in 2 groups. To save the species from extinction, together with Hainan Bawangling National Nature Reserve, we planted trees to restore degraded habitat, established two gibbon monitoring teams and conducted community livelihood and outreach programmes. KCC also funded 7 research projects covering different aspects of the species to enhance our conservation actions. With our determined effort, the gibbon population has increased to five groups of over 30 individuals in 2020.



高黎贡长臂猿雄性通体黑色而雌性为棕灰色，两条浓浓的白眉是它们重要的识别特征。Adult males of Gaoligong Gibbon are black while adult females are brownish-grey. Both sexes have iconic white eyebrows.



GAOLIGONG GIBBON

高黎贡长臂猿

Year launched 启动年份	China population 中国种群数量	Year described 命名年份	Isolated subpopulations 亚种群数目	IUCN status IUCN保护级别
2015	<150	2017	15 (In China 中国境内)	EN 濒危

高黎贡长臂猿 (*Hoolock tianxing*)，又名天行长臂猿，在中国现在仅分布于云南保山、腾冲，以及盈江一带。最新的野外调查显示中国的数量不足150头，分成多个隔离的亚种群，生存状况不容乐观。自2016年，KCC与云南高黎贡山国家级自然保护区保山管护局腾冲分局建立了长臂猿监测队以长期监测保护区内的长臂猿，也就是目前中国已知高黎贡长臂猿最大的亚种群。2019年，我们与保护区开展第二轮野外调查，确认腾冲境内仅剩两个长臂猿亚种群，分别有7个和5-6个家庭群，总数量约40只。

The Gaoligong Gibbon (*Hoolock tianxing*), also known as the Skywalker Gibbon, is only found in Yunnan's Baoshan, Tengchong and Yingjiang in China. The latest survey in China revealed that there are less than 150 individuals scattered in isolated subpopulations. Since 2016, KCC has been supporting the Tengchong Bureau of Gaoligongshan National Nature Reserve to establish a gibbon monitoring team to protect the largest known subpopulation in China. Our surveys in 2019 confirmed that only two subpopulations are left in Tengchong, with seven and 5-6 families respectively, totalling around 40 individuals.

HAINAN ELD'S DEER

海南坡鹿

大型草食动物往往是猎人的主要目标，低地生境又易受开发破坏，使坡鹿（*Rucervus eldii*）面临重大威胁。海南岛的坡鹿数量在1976年曾锐减至50头以下，虽然其数量已有所恢复，但日益缩小并退化的生境和持续的盗猎问题仍然令海南坡鹿的未来充满挑战。KCC与海南邦溪省级自然保护区自2015年起开展合作，透过改善栖息地、优化管理、人员培训和增建巡护设施来提高管理水平，并通过宣传和沟通为保护工作争取更多资源及社会认同。邦溪的坡鹿数量在数年内已增加一倍，栖息地质量和团队能力也明显提高。为推动坡鹿的全球保育，KCC正与多个国内外机构合作，对坡鹿的保护遗传学、生态学等开展研究，2018年更在柬埔寨主办坡鹿保护国际研讨会及成立国际保护交流网络。

Herbivores are popular hunting targets and lowlands are susceptible to development, which make the Eld's Deer (*Rucervus eldii*) one of the most threatened deers worldwide. The Hainan population dropped to less than 50 in 1976, and although the population has rebounded, persisting problems of habitat degradation and poaching are threatening its long-term survival. KCC started working with Hainan Bangxi Provincial Nature Reserve in 2015 to alleviate these threats, with a multi-pronged approach of habitat enhancement, management advisory, capacity building, patrol facilities construction, awareness raising and lobbying. The deer population in Bangxi had doubled in the past few years, and the habitat quality and management level have markedly improved. KCC is also collaborating with various domestic and international institutions to study the conservation genetics and ecology of the deer for better informed conservation action. In 2018, KCC held an international conference and initiated a range-wide network to bridge Eld's Deer managers and practitioners globally.

Year launched
启动年份

2015

Hainan Population
海南种群数量

800

Current Hainan habitat
现有海南栖息地

15km²

Bow-shaped
antlers of stags
雄性的弓状鹿角



IUCN status
IUCN保护级别

EN 濒危

OTTERS 水獭

自2012年起，KCC开始系统地调查中国三种水獭的生存状况。经过数年摸索后，2016年我们终于在云南盈江记录到亚洲小爪水獭（*Aonyx cinereus*），还在人口密集的珠江口发现欧亚水獭（*Lutra lutra*）的残存种群。2017年初，我们与海南吊罗山林业局合作成立了中国首支亚洲小爪水獭监测队，开始对保护区及周边的水獭进行调查与监测。2019年，我们与世界自然保护联盟物种生存委员会水獭专家组以及四川唐家河国家级自然保护区在唐家河合办了第十四届国际水獭研讨会，过百位来自近30个国家和地区的科研及保育工作者共聚一堂，为全球水獭保育共商对策。

KCC has been studying the three otter species in China since 2012. In 2016, we finally recorded the Asian Small-clawed Otter (*Aonyx cinereus*) in Yunnan's Yingjiang, and discovered a remnant population of Eurasian Otter (*Lutra lutra*) in the busy Pearl River Delta of Guangdong. In 2017, we established the nation's first Asian Small-clawed Otter monitoring team in Diaoluoshan of Hainan to monitor and protect the dwindling otter population. In 2019, we partnered with the IUCN SSC Otter Specialist Group and Sichuan Tangjiahe National Nature Reserve to convene the 14th International Otter Congress; over 100 delegates from some 30 countries/regions gathered to discuss conservation and research efforts for otter species worldwide

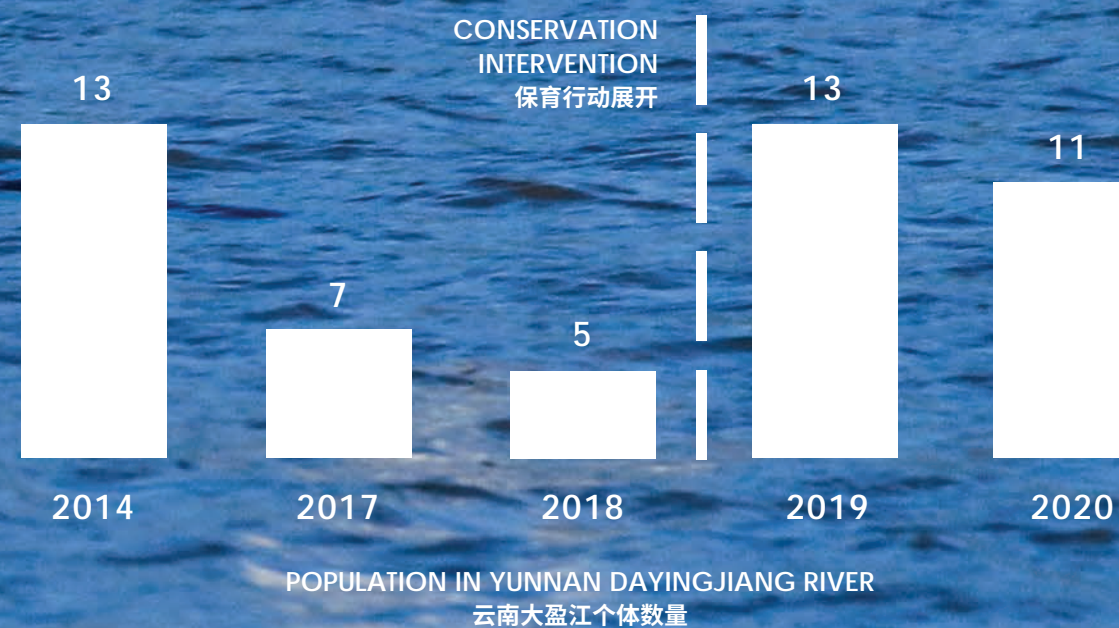
珠江口的欧亚水獭
Eurasian Otter (*Lutra lutra*) from the Pearl River Delta



RIVER TERN 河燕鸥

河燕鸥 (*Sterna aurantia*) 在东南亚的种群正以惊人速度剧减，而中国的种群也不能幸免，近年仅在云南西部的大盈江流域有零星繁殖记录。为守护中国最后的繁殖种群，KCC与云南铜壁关省级自然保护区在2019年起，共同发起了国内首个针对河燕鸥的保护项目，行动包括全国首次的数量调查、与水电站协调泄洪和围网以保护繁殖沙洲、聘请护巢员进行全天候监测和提升周边村民的保育意识。在各级相关政府部门、社区群众、观鸟爱好者及国际保育组织的积极参与下，成功守护了中国仅存的河燕鸥离巢迁飞。

River Tern (*Sterna aurantia*) populations have been declining rapidly across Southeast Asia, and the China population is no exception. Dayingjiang River in western Yunnan supports the last known breeding birds of China, but numbers have also dramatically declined. KCC and Yunnan Tongbiguan Provincial Nature Reserve collaborated since 2019 to save the species from the verge of extinction in China. We launched the nation's first population survey, negotiated with hydropower station for a safe water discharge regime, recruited community nest protectors and fenced nesting sandbars to protect breeding birds, and conducted awareness-raising campaigns in surrounding communities. With support from the relevant government agencies, local communities, birdwatchers and international conservation NGO, our concerted efforts successfully safeguarded the last river terns in China.





TOP 上：冠斑犀鸟 Oriental Pied Hornbill (*Anthracoceros albirostris*)
 BOTTOM LEFT 左下：花冠皱盔犀鸟 Wreathed Hornbill (*Rhyticeros undulatus*)
 BOTTOM RIGHT 右下：双角犀鸟 Great Hornbill (*Buceros bicornis*)



HORNBILLS 犀鸟

犀鸟是亚洲最大型的森林鸟类之一，也是重要的种子传播者，对维持和恢复热带森林贡献良多。它们多依赖大树的树洞营巢繁殖，因此森林破坏对其影响尤其明显。偷猎及伐木等活动导致中国五种犀鸟的分布和数量大为萎缩，现今只残存在少数偏远林区，数量稀少，保护行动刻不容缓。KCC自2009年起开展各项中国犀鸟的保护工作，项目点包括广西西大明山自治区级自然保护区及云南铜壁关省级自然保护区。我们也分别在2011和2015年召开“中国犀鸟保育国际研讨会”，让国内外专家藉此交流犀鸟保育与研究经验，并向保护区和相关政府部门提出保护建议。

Hornbills are some of the largest birds in Asian forests; they are important seed dispersers and keystone species to maintain forest health. They nest almost exclusively in large tree cavities, thus are extremely vulnerable to forest destruction. Hunting and forest loss have greatly decimated the populations of all five hornbill species in China and they only survive in a few remote forest tracts now. To save these majestic birds from extinction, KCC started our hornbill projects in Guangxi Xidamingshan Provincial Nature Reserve and Yunnan Tongbiquan Provincial Nature Reserve since 2009. We also organised two workshops in 2011 and 2015, respectively, during which Chinese and international experts shared knowledge in hornbill conservation and research, and made conservation recommendations to relevant protected areas and government departments.

GAUR

印度野牛

印度野牛 (*Bos gaurus*) 是一种生活在东南亚及南亚的热带森林牛科动物，体重可达一吨。中国的印度野牛仅分布于云南南部和西藏南部，其中云南的种群只有约二百头。2019年起，KCC与云南省绿色环境发展基金会及西双版纳傣族自治州勐海县林业局合作，共同在勐海县启动了印度野牛社区保护地的建设工作，希望有效地保护并壮大国内最后的印度野牛种群。

Gaur (*Bos gaurus*) is a massive wild cattle native to tropical forests of Southeast and South Asia, weighing up to one tonne. In China, they are found only in southern Yunnan and southern Tibet, and the Yunnan population is estimated at around 200 individuals. In 2019, together with the Yunnan Green Environment Development Foundation and Forestry Department of Xishuangbanna Menghai County, KCC launched a project in a community forest of Menghai to safeguard one of the last Gaur populations of the country.



NORTHERN CHEVROTAIN

威氏小麂鹿

麂鹿是一类体形只有兔子大小的热带亚洲有蹄类动物，中国是其分布北缘，仅在云南南部的西双版纳有记录，对其状况、生态及分类的研究甚少。2019年起，KCC与云南西双版纳国家级自然保护区合作，透过加强宣传及监测力度，减少麂鹿重点分布区的人为干扰。近年来，学者通过对比头骨标本，认为西双版纳地区的麂鹿为威氏小麂鹿 (*Tragulus williamsoni*)，但此分类地位有待进一步证实。KCC计划连同有关专家继续深入研究，以解决西双版纳麂鹿的分类问题。

Chevrotain, or mousedeer, is a group of small hoofed animals native to tropical Asia and China is its northernmost distribution. In China, it is only found in Xishuangbanna (a.k.a. Banna) in southern Yunnan but little is known on its status, ecology and taxonomy. Since 2019, KCC has been collaborating with Yunnan Xishuangbanna National Nature Reserve to raise local awareness and strengthen monitoring effort in order to reduce human disturbances in key chevrotain habitats. Recent research suggests that the Banna population belongs to Northern Chevrotain (*Tragulus williamsoni*) based on skull analysis, but this proposed taxonomy requires further confirmation. KCC is working with researchers to clarify the true identity of the Banna chevrotain.



柬埔寨是全球生物多样性热点，湄公河以东辽阔的落叶龙脑香林更被誉为“亚洲的塞伦盖蒂草原”，是东南亚大型鸟兽群落保存最完好和面积最大的旱生森林生态系统，也是许多濒危物种最后的栖息地，备受国际保育人士重视。在柬埔寨政府的“经济特许地”政策下，大面积的天然林被国内外投资商开发为大型农场；该政策被认为是近年柬埔寨森林面积大幅减少的主因之一，对当地的生物多样性、环境、农村生计的影响也引起了很大的国际关注。2017年，KCC受海南省农业厅邀请，在柬埔寨东部桔井省的一个中资特许地开展生物多样性保护工作。我们期望通过科学、创新、合理、永续利用的理念，为柬埔寨特许地利用管理探索一种可持续的管理模式。

Cambodia is a global biodiversity hotspot. Depicted as the “Serengeti of Asia”, the vast expanse of deciduous dipterocarp forest (DDF) east of the mighty Mekong is the largest tract of intact dry forest in Southeast Asia, supporting a full complement of megafauna. The many globally threatened species living in DDF ecosystem has attracted much international conservation attention in recent years. The proliferation of Economic Land Concessions (ELCs), a government economic policy, is regarded as one of the major drivers of deforestation in Cambodia; under the ELC policy, domestic and international investors are granted permissions to clear large tracts of natural forest for agroindustry, which has drawn a lot of criticisms due to impacts on biodiversity, environment and local livelihoods. In 2017, KCC was invited by the Hainan Provincial Department of Agriculture to start biodiversity conservation work in a Chinese-owned ELC in Kratie Province of eastern Cambodia, with the aim to explore an innovative, practical and sustainable model of agriculture development in ELCs that also conserves the amazing biodiversity of the country.

EASTERN PLAINS LANDSCAPE, CAMBODIA 柬埔寨东部平原



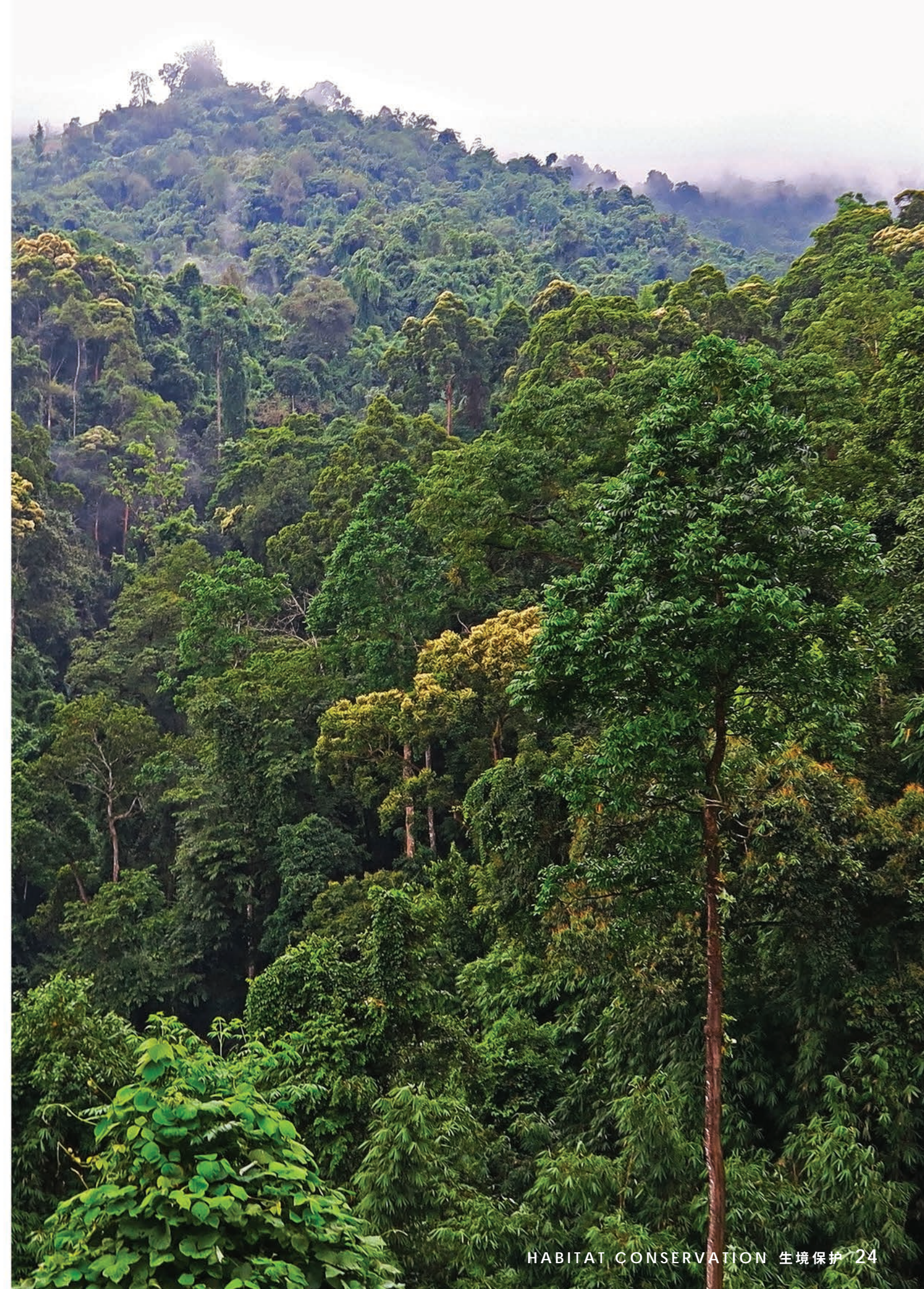
TOP LEFT 左上: 自2019年起, KCC资助和培训了一支由当地村民组成的森林巡护队伍, 至今已缴获大量伐木工具和摧毁数以百计的捕猎工具。KCC has funded and trained a community forest patrol team since 2019. The team has already seized hundreds of logging and hunting tools.

BOTTOM LEFT 左下: 常见于项目点半常绿季雨林内的黑腿白臀叶猴 (*Pygathrix nigripes*) ; 它是全球濒危物种, 也是世界上色彩最丰富的灵长类之一。The globally Endangered Black-shanked Douc Langur (*Pygathrix nigripes*) is not uncommon in the semi-evergreen rainforest of the project site. It is one of the most colourful primates on earth.

RIGHT 右: 全球濒危的绿孔雀 (*Pavo muticus*) 在我们项目点有一个健康的种群。A flock of globally Endangered Green Peafowl (*Pavo muticus*), which is common in our project site.



LEFT 左：全球濒危的蜂猴（*Nycticebus bengalensis*）在铜壁关还有一定数量。
The Endangered Bengal Slow Loris (*Nycticebus bengalensis*) is not too rare in Tongbiguan Nature Reserve.
RIGHT 右：铜壁关的龙脑香热带雨林。
Dipterocarp rainforest in Tongbiguan Nature Reserve.



TONGBIGUAN RAINFOREST, YUNNAN

云南铜壁关雨林

铜壁关省级自然保护区位于云南西南边陲，是伊洛瓦底江在中国境内唯一的热带区域，拥有中国面积最大的龙脑香热带雨林，生物多样性极其丰富。保护区也是中国已知唯一有双角犀鸟（*Buceros bicornis*）、花冠皱盔犀鸟（*Rhyticeros undulatus*）和大灰啄木鸟（*Mulleripicus pulverulentus*）繁殖的地方，但周边少数民族的生活模式对森林资源的依赖程度较高，加上相邻的缅甸林区近年破坏严重，整个区域的生态系统正在逐渐退化。KCC正与保护区合作，积极推动周边社区参与保育，推动建立社区保护地和生态旅游，凝聚社群力量，以更好地保护当地独特的生物多样性。

Tongbiguan Provincial Nature Reserve sits in the southwestern corner of Yunnan and is the only tropical region of the Irrawaddy River in China, supporting a rich and unique biodiversity including the largest patch of dipterocarp rainforest in China. It is also the only site in China where breeding of the Great Hornbill (*Buceros bicornis*), Wreathed Hornbill (*Rhyticeros undulatus*) and Great Slaty Woodpecker (*Mulleripicus pulverulentus*) is currently confirmed. The ethnic minority groups residing in the area rely heavily on forest resources, and the once verdant rainforests across the river in Myanmar have experienced severe deforestation, and the ecosystem of the whole region is being degraded. KCC has been actively collaborating with the Reserve to better protect its unique biodiversity by promoting community protected areas and ecotourism initiatives in the local communities.



LEFT 左：高黎贡山南北绵延600公里，海拔落差达五千米，复杂的地形和微气候孕育出丰富的生物多样性。Gaoligongshan spans more than 600 km, with an elevation drop of 5000 m. The complex terrain and diverse microclimate support rich biodiversity.

RIGHT 右：2014年，我们拍摄到云南首批云猫（*Pardofelis marmorata*）的野外照片。We captured the first photographic record of Marbled Cat (*Pardofelis marmorata*) in Yunnan in 2014.

GAOLIGONGSHAN, YUNNAN 云南高黎贡山

高黎贡山与缅甸山水相连，北接青藏高原，向南申延至中南半岛，亦是伊洛瓦底江和怒江的分水岭；古北界与印马界的动植物在此交汇融合，是不折不扣的生物多样性宝地。自2014年，KCC与云南高黎贡山国家级自然保护区保山管护局腾冲分局开展合作，对当地的生物多样性进行系统调查，为保护区各级人员进行能力培训和优化保育宣传工作，并针对区内的高黎贡长臂猿（*Hoolock tianxing*）进行长期监测及保护（7-8页）。生物多样性调查工作目前已取得不少令人惊喜的成果，包括时隔30年后在云南再次记录到云猫（*Pardofelis marmorata*）、发现了中国大型兽类新纪录红鬃羚（*Capricornis rubidus*）及发表了多个科学新种及中国新纪录。调查成果已陆续以科学文章和图鉴等形式发布。

Gaoligongshan is located in western Yunnan bordering Myanmar, extending from the Tibetan Plateau to Indochina, forming the watershed of the Irrawaddy and the Salween Rivers. It lies at the crossroads of the Palearctic and Indo-Malayan Realms and is considered one of the world's richest biodiversity hotspots. Since 2014, KCC has been collaborating with the Tengchong Bureau of Gaoligongshan National Nature Reserve. Our intensive biodiversity inventory of this majestic massif yielded a number of exciting discoveries, including the rediscovery of Marbled Cat (*Pardofelis marmorata*) for Yunnan after 30 years, the first record of Red Serow (*Capricornis rubidus*) for China, , and discovery of a number of new-to-science species and new records for China. Capacity building of reserve staff, enhancement of publicity materials and monitoring of the Gaoligong Gibbon (*Hoolock tianxing*) are other aspects of our collaboration (see P. 7-8). Results of our surveys are being shared with the wider community via a photographic field guide and scientific publications.

TOP 上：海南俄贤岭省级自然保护区
Hainan Exianling Provincial Nature Reserve
MIDDLE 中：海南鹦哥岭国家级自然保护区
Hainan Yinggeling National Nature Reserve
BOTTOM 下：海口羊山湿地 Yangshan Wetland, Haikou

FACILITATE ESTABLISHMENT OF PROTECTED AREAS 推动保护地成立

KCC一直致力推动中国保护地的成立建立与建设。2003年，团队首次考察海南鹦哥岭，发现这片华南最大的连片原始热带森林拥有无可替代的保育价值。2005年，我们和海南省林业局组织开展历时三个多月的综合资源考察，发现了大量珍稀物种，包括不少科学新种和超过160个海南或中国新纪录。2006-2016年间，KCC派遣专家直接参与鹦哥岭自然保护区的管理，协助其晋升国家级并成为全国优秀保护区。

此外，KCC在2006年与海南省林业局合办了“海南石灰岩生境保护研讨会”，以唤醒各界对此独特生态系统的关注，并且全力保护海南面积最大、林相最佳的俄贤岭石灰岩森林，资助建设管理站、培训护林员和提供设备，同时资助有关的科研工作。经过十多年的努力，俄贤岭终在2019年成为海南首个石灰岩森林类型的保护区。

KCC的公众科学项目也成功令社会各界关注海口市羊山湿地在生态和文化保护上的重要性，继而促使相关部门建立五源河、美舍河国家湿地公园，另有数个省级湿地公园和保护小区也已经建立或筹建中。

KCC has been wholeheartedly supporting the establishment of protected areas in China. In 2003, we conducted a pilot survey at Yinggeling and was amazed by the rich biodiversity of this largest tract of primary rainforest in South China. In 2005, the Forestry Department of Hainan Province and KCC led a 3-month biodiversity expedition in Yinggeling, and made many exciting discoveries, including several new species and over 160 new Hainan or China records. From 2006 to 2016, KCC assigned a conservation biologist to assist in reserve management, making Yinggeling one of the best nature reserves in the country.

To raise awareness in conserving the threatened limestone ecosystem of Hainan, KCC co-organised the workshop “Hainan Limestone Habitats and their Biodiversity” with the forestry department in 2006. We have been heavily involved in protecting the best-preserved limestone forest in Hainan, Exianling, by funding the construction of a ranger station, providing training and equipment to rangers, and supporting various field research. In 2019, Exianling finally become Hainan's first limestone forest nature reserve.

Our citizen science project also raised the profile of Haikou Yangshan Wetland amongst the Hainan public and authorities; several national and provincial wetland parks have been established or are being gazetted.





LEFT 左: KCC率领30多人的考察团队深入鹦哥岭林区开展野外调查。KCC led a 30-strong expedition team to conduct field survey in the unexplored Yinggeling forest.

RIGHT 右: KCC团队深入云南林区放置红外相机。The KCC team crossing a rapid to install camera traps deep in a Yunnan forest.

FIELD EXPEDITIONS 野外调查

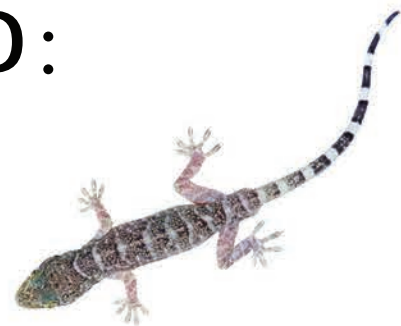
华南地区长期受严重人为干扰，完好的森林都隐藏于偏远山区。要评估区内的保育需要和动植物的最新状况，由固定的专家团队对各林区进行快速调查是高效的方法。自1998年，KCC与伙伴机构合作，调查了华南超过60个林区，及后将考察范围逐步扩大至更多省份，近年更远赴柬埔寨开展调查。我们至今共发现及描述了超过50个昆虫、鱼类、两栖类、爬行类、兽类和植物的科学新种；超过100个国家或区域的动植物新纪录；拍摄到全球首张比氏鼯鼠 (*Biswamoyopterus* sp.) 的野外照片和重新发现在中国消失了半个世纪的东黑冠长臂猿 (*Nomascus nasutus*) 和云南闭壳龟 (*Cuora yunnanensis*) 等。我们已正式发表了过百篇科学文章，为研究和保护中国及邻近地区的生物多样性提供重要及最新资料。

The vast South China region has experienced sustained and severe human disturbance, and remaining good-quality forests are scattered in remote mountains. Rapid survey by a fixed team of specialists is an efficient method to prioritise conservation needs and understand the current status and distribution of the region's flora and fauna. Since 1998, KCC and partners have conducted rapid biodiversity assessments in over 60 forest sites throughout South China, and subsequently expanded our survey coverage to more provinces and recently to Cambodia. Our surveys yielded a wealth of exciting results, including the discovery of over 50 insect, fish, amphibian, reptile, mammal and plant species that are new to science and over 100 new national/regional records; photographed the world's first image of a living *Biswamoyopterus* flying squirrel, rediscovered the Cao-vit Gibbon (*Nomascus nasutus*) and Yunnan Box Turtle (*Cuora yunnanensis*) which have disappeared in China for half a century. To date, we have published over a hundred scientific publications, providing important updates on the conservation values and threats of China and the region.



NEW TAXA DISCOVERED:
发现的新种:

54+





CAMERA TRAP SURVEY

红外相机调查

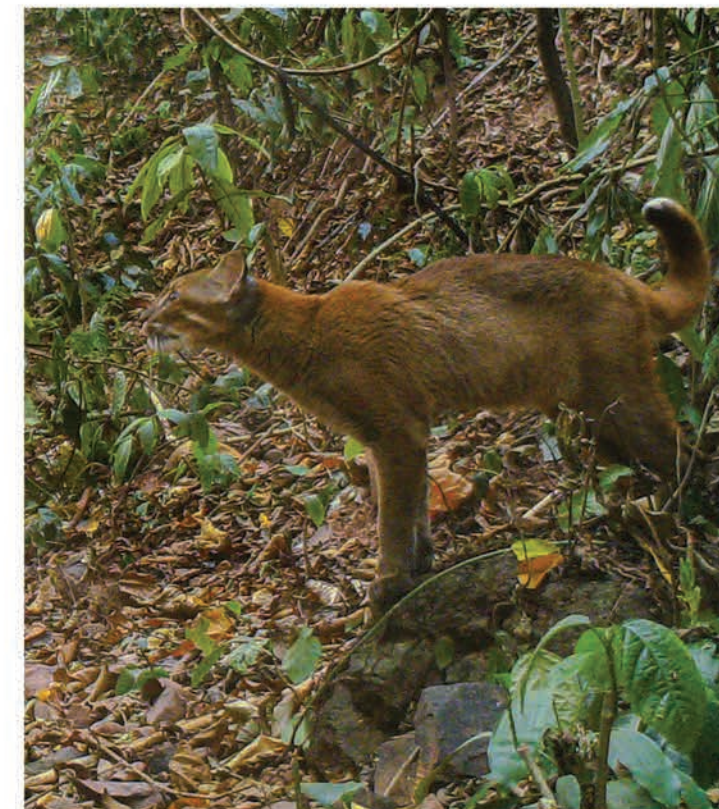
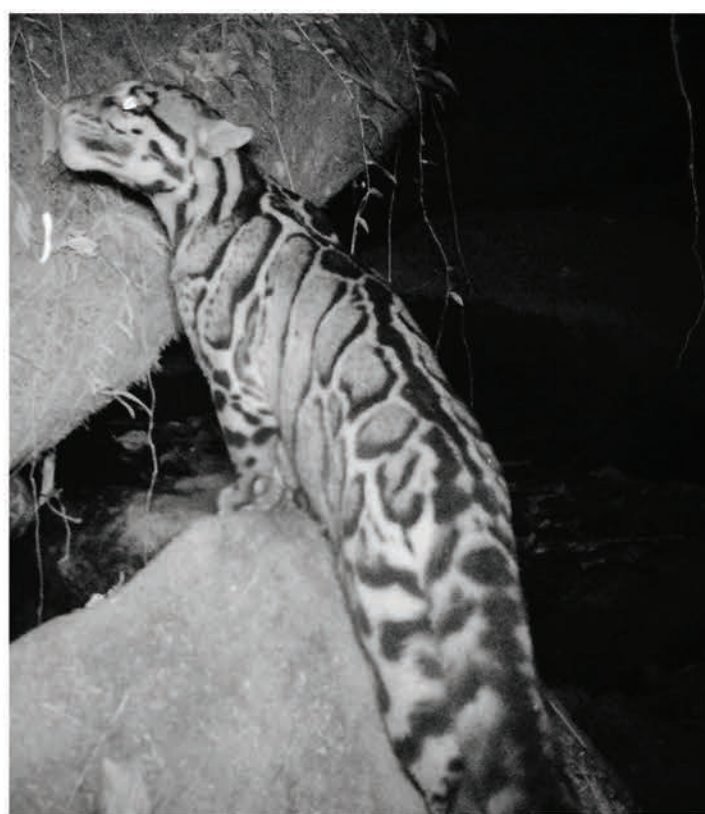
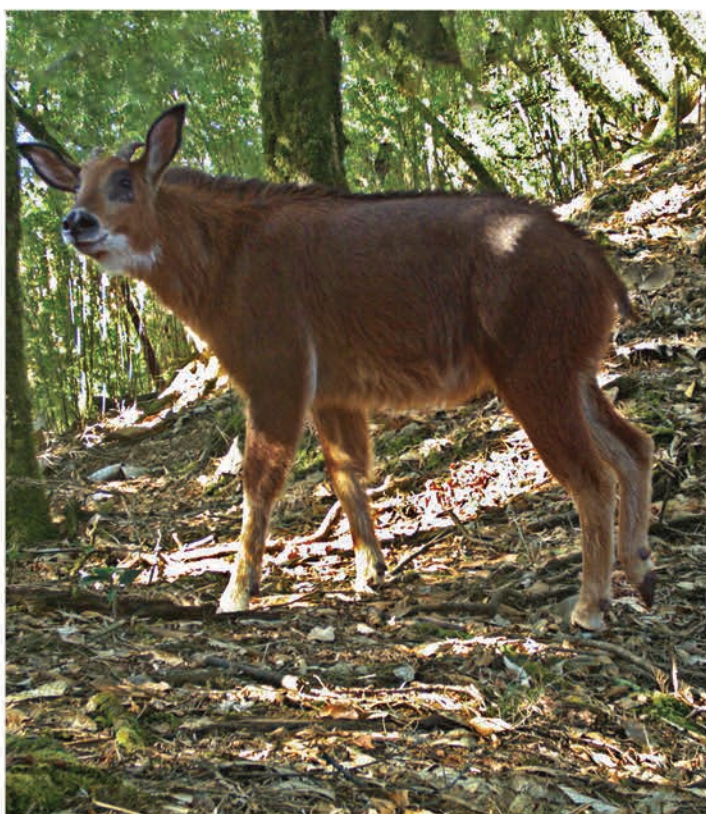
自2002年，KCC在海南、云南、广西、广东、江西和安徽等多个省份，以及柬埔寨桔井省，采用红外相机调查和研究野生动物，是中国首批使用此野外调查技术的团队之一。我们近二十年来的调查数据不仅为多个保护地提供了重要的本底资料和保护依据，同时也获得了一系列隐秘物种的珍贵影像资料，如贡山麂（*Muntiacus gongshanensis*）、缟灵猫（*Chrotogale owstoni*）和高黎贡林猬（*Mesechinus wangi*）等，为这些动物的最新分布及状况提供了重要信息。

KCC has been using camera traps to survey and study wildlife since 2002 and is one of the first teams to deploy this technique in China. We have been deploying camera trapping technology in Hainan, Yunnan, Guangxi, Guangdong, Jiangxi and Anhui provinces of China, as well as in Kratie of Cambodia. Over the years, our surveys obtained invaluable information for the planning and conservation work in many nature reserves, and also collected rare images of some enigmatic species, such as the Gongshan Muntjac (*Muntiacus gongshanensis*), Owston's Civet (*Chrotogale owstoni*) and Gaoligong Forest Hedgehog (*Mesechinus wangi*), providing us with solid evidence to update their status and distribution.

TOP 上：柬埔寨一群带幼崽的爪哇野牛（*Bos javanicus*）。A herd of Banteng (*Bos javanicus*) with calves in Cambodia.

BOTTOM 下：KCC是中国首批使用红外相机调查技术的团队之一。KCC is one of the first teams to deploy camera trapping technique in China.





1. 安徽麝 (*Moschus anhuiensis*) 是世界上分布区域最狭窄的麝，仅见于华东的大别山区，被列为全球濒危物种。Anhui Musk Deer (*Moschus anhuiensis*) is endemic to Mt. Dabieshan in eastern China and has the narrowest distribution range among all musk deer species, and is listed as globally Endangered.
2. 2017年KCC在云南盈江拍摄到的中国首张马来熊 (*Helarctos malayanus*) 野外照片。中国过往从未有过野外活体记录，这照片见证它自1972年后，时隔45年重新被发现。The first image of Sun Bear (*Helarctos malayanus*) in China, taken by KCC in Yunnan's Yingjiang in 2017, representing a rediscovery of this species after an absence of 45 years since 1972.
3. 2017年在云南高黎贡山拍摄到的中国大型兽类新纪录红鬃羚 (*Capricornis rubidus*)。其主要分布区在缅甸北部，以往国内并无确切记录。Camera trap photo of a Red Serow (*Capricornis rubidus*) from Yunnan's Gaoligongshan taken in 2017. It was known from northern Myanmar and its presence in China has never been previously confirmed.
4. 在云南盈江拍摄到的云豹 (*Neofelis nebulosa*) 是十分罕见的中型猫科动物，被世界自然保护联盟列为易危物种。Photo of a Clouded Leopard (*Neofelis nebulosa*) camera-trapped in Yunnan's Yingjiang. It is a rare mid-sized felid listed as Vulnerable by the IUCN Red List.
5. 缟灵猫 (*Chrotogale owstoni*) 是世界上最神秘的动物之一，在中国的记录极少。2019年我们有幸在云南西双版纳国家级自然保护区用红外相机拍摄到这一全球濒危物种。Owston's Civet (*Chrotogale owstoni*) is one of the most mysterious mammals in the world. We are lucky to camera-trap this endangered civet in Yunnan Xishuangbanna National Nature Reserve in 2019.
6. 亚洲金猫 (*Catopuma temminckii*) 曾广泛分布于中国黄河以南的山林中，如今种群和分布区严重缩减，近年来只在青藏高原东麓及西南边境有记录。图片于2020年摄于云南西双版纳。The Asian Golden Cat (*Catopuma temminckii*) once ranged across the south of the Yellow River. However, the current population and distribution have greatly reduced, with only a handful of records in the eastern foothill of the Tibetan Plateau and along the southwestern international border. Photo taken in Xishuangbanna in 2020.

1 2 | 5 6
3 4 |

HAINAN WATERBIRD SURVEY

海南水鸟调查

海南岛处于东亚——澳大利西亚迁飞区之中，岛上大面积和多样化的湿地生境为各种水鸟提供了栖息地，可惜大部份湿地并未受保护，其保育价值也未被认识。自2003年起，KCC连同海南省林业局及其他伙伴，每年冬季在全岛进行水鸟同步调查。截至2020年，调查过的湿地累计超过100个，共记录水鸟89种，其中14种为海南省新纪录，也确认了一些全球濒危物种包括黑脸琵鹭（*Platalea minor*）新的越冬地。有关部门因此认识了这些湿地的重要保育价值，并建立新的保护区。调查同时也为海南培养了一批鸟类调查人员，他们当中有不少已经成为保护区和非政府组织的骨干成员。

Hainan Island is part of the East Asian-Australasian Flyway for migratory birds. Its diverse and extensive wetlands provide suitable wintering grounds for different waterbirds. Many of these sites are unprotected and their conservation values are not fully recognised. Since 2003, KCC partnered with the Forestry Department of Hainan Province and other collaborators to conduct annual wintering waterbird survey throughout the island. Up to 2020, we have surveyed over 100 sites and recorded a total of 89 species, with 14 being new island records. We also discovered some new wintering sites for globally threatened species, such as those of the Black-faced Spoonbill (*Platalea minor*). The conservation values of these sites have since been recognised and some have been designated as nature reserves. The surveys also trained up local birders, some of whom are now core members of nature reserves and non-governmental organisations.

PROMOTE SUSTAINABLE AGRICULTURE TECHNIQUES

推广永续农业技术

KCC与多个伙伴合作促进永续农业在中国的研究和发展，提供经费与技术研究稻鸭共育、覆盖免耕等生态农业技术，并向农户推广成功的技术。

KCC也连同海南的保护区伙伴在周边村落推广混农林业，探索农民经济与生态保护双赢的农业模式。我们在橡胶林下套种耐阴的益智（*Alpinia oxyphylla*）和海南柃叶（*Phrynium hainanense*）等本土作物，也混种土沉香（*Aquilaria sinensis*）和降香黄檀（*Dalbergia odorifera*）等高价值本土树种，还在人工林下养殖原生的东方蜜蜂海南亚种（*Apis cerana hainanensis*）和无刺蜂（*Trigona* spp.）为林下作物传粉。复杂的混农林系统能增加作物多样性，对抗市场波动带来的经济损失、增加人工林的生物多样性和土壤肥力、防止水土流失、并减少农药使用。这类橡胶混农林系统已逐渐被广大海南农民接受。

KCC has been collaborating with various partners to research and promote sustainable agriculture in China, but sponsored research to advance sustainable techniques such as rice-duck farming and plastic mulch technology, and promoted the successful models to farmers.

Together with partner nature reserves in Hainan, KCC promoted analogue agroforestry which minimises environmental impacts while ensuring income sources for the farmers. The ecological and economic values of monoculture rubber plantation is enhanced by planting native shade-tolerant herbs with economic value such as bitter cardamom (*Alpinia oxyphylla*) and dumpling leaf (*Phrynium hainanense*) under existing rubber fields, and mixing it with high value native trees like rosewood (*Dalbergia odorifera*) and agarwood (*Aquilaria sinensis*). To further increase the ecosystem services and economic values, beehives of the native Hainan Honey Bee (*Apis cerana hainanensis*) and stingless bees (*Trigona* spp.) that pollinate many native plants are put into the mix. The diversification of crops not only increases farmers' income, but also improves plantation biodiversity, soil fertility and moisture retention, prevents soil erosion, and deters the use of chemicals. This rubber agroforestry system is now widely adopted by Hainan's farmers in their plantations.





OUTREACH ACTIVITIES 宣传及推广活动



People engaged
参与人数

31,000

Activities organised
活动场次

24

*2015-2019年的重点产出 Key figures from 2015 to 2019

公众的认同、支持与参与是保育的关键，所以我们根据各项目的不同主题和受众，以游园会、宣传摊位、展览、工作坊、放映会、讲座、壁画、社交媒体、宣传品和出版物等不同方式去提高公众的保护意识和参与。我们会与项目伙伴共同筹划这些活动，也会邀请志愿者和实习生来协助执行，让他们累积相关的经验和专业知识。

Recognition, support and participation from the public is key to successful conservation. We have developed different awareness raising programmes to cater for different targets and audiences, approaches include funfair, roadshow, exhibition, workshop, film show, sharing, mural painting, social media, publication and other printed materials. We engaged our project partners, volunteers and interns in these activities, so their knowledge and awareness were also enhanced during the process.

BRINGING ART INTO CONSERVATION 让艺术融入保育

近年我们将艺术融入保育工作，引领大众以不同角度欣赏自然。2015年起，我们在项目点周边以壁画宣扬保育信息，海南的白沙县青松乡、佳西和邦溪，还有云南高黎贡山和柬埔寨的小村落都有我们创作的壁画。我们与艺术家和村民在墙上描绘森林的风光及当地的动植物，引领村民珍视与他们为邻的鸟兽虫鱼。壁画除了有温馨提示作用外，也为村落带来色彩与话题，大受村民及保护区欢迎。

我们也会与插画家合作，推出以濒危物种保育为主题的故事书，如以海南长臂猿为题的《森林乐猿》和介绍海南坡鹿的《丘陵传说》，并派发到周边学校和社区。其他艺术活动包括国际水獭研讨会标志设计比赛和长臂猿纸塑升级再造工作坊等。

KCC encourages the general public to appreciate nature through art. We have been creating murals to promote conversation since 2015, which can be found in Qingsong Township, Jiayi and Bangxi in Hainan, Gaoligongshan in Yunnan and a small village in Cambodia. Together with artists and interested villagers, verdant forests and local wildlife were vividly depicted on walls, which we hope would instigate the locals to value the beauty of their forests and biodiversity. The murals might fade later, but hopefully the seeds of protecting nature could bear fruits.

We also work with illustrators to produce children's books on wildlife conservation and distribute to target schools and communities, such as the Hainan Gibbon and Hainan Eld's Deer storybooks. Other art activities include logo design competition for the International Otter Congress and the paper-mache gibbon upcycling workshop.



CAPACITY BUILDING

人才培育

提升保护区的管理水平是KCC重点工作之一。我们在功能区规划、资源管理、科研监测和社区工作各个范畴中为不同保护区提出针对性建议，也会为前线人员提供实用的野外培训，内容涵盖日常巡护及生物多样性调查技巧、物种鉴定和野外设备使用等，不少护林员已被培养成本土专家，直接参与科研工作。另外，我们也会支持合适的林业人员到国内外优秀的保护区及研讨会交流学习。

Enhancing the management capacity of nature reserves is one of KCC's priorities. We advise our reserve partners in the aspects of protected area planning, resource management, research and monitoring, and community-based conservation. KCC also provides practical trainings for frontline staff in patrol and survey techniques, species identification and the use of field equipment; some of them have received advanced training to become local experts or "parataxonomists" and are taking part in scientific research. We also organise local and overseas study tours for selected partners.

RESEARCH & COLLABORATION

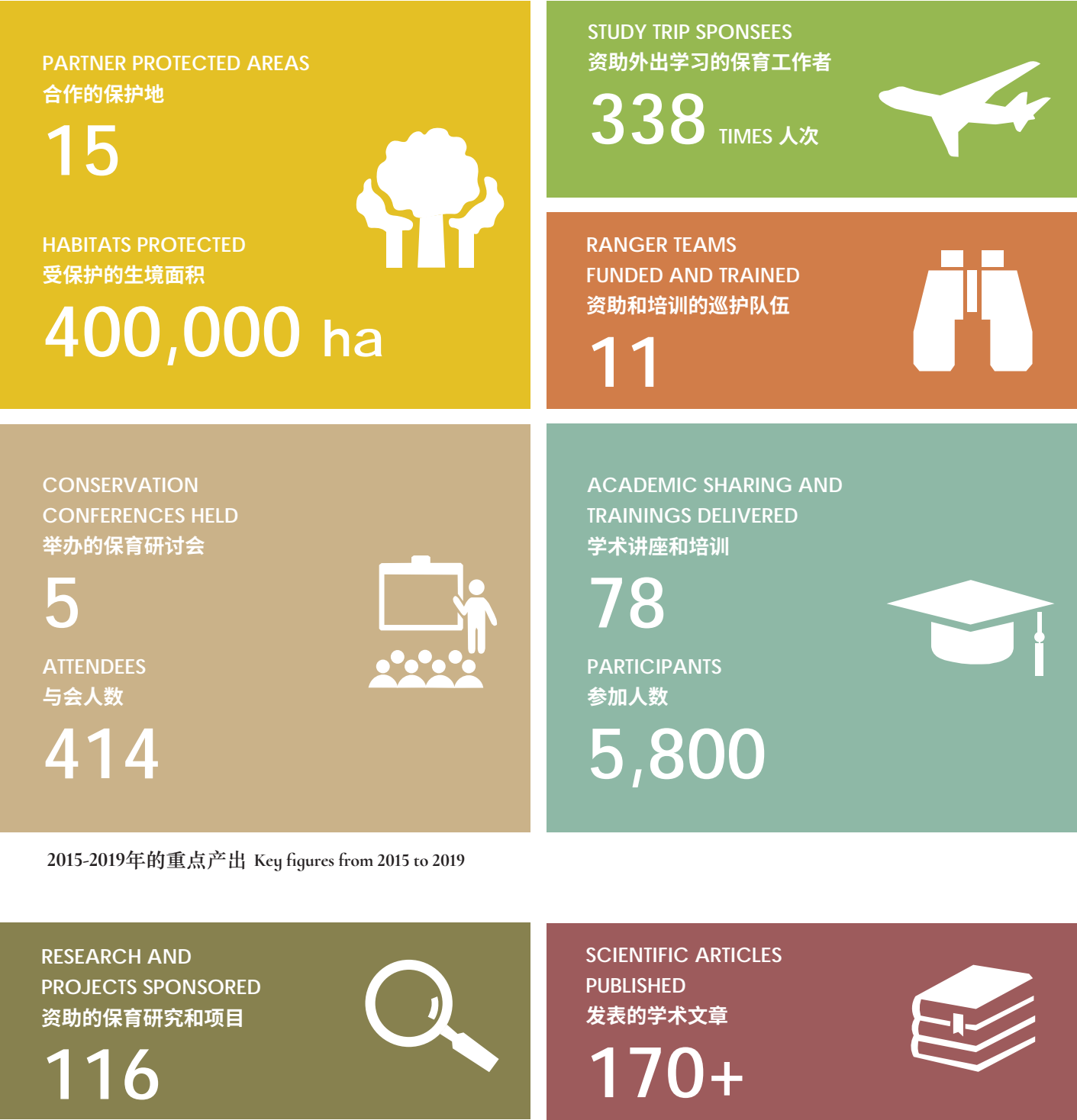
科研与合作

在保护过程中，我们需要对目标物种和它们依赖的生态系统有深入认识，因此我们开展了一系列的基础研究，除了与科研单位合作外，也资助一些具保育意义的科研项目。研究内容包括种群状况、食性与营养学分析、社会行为、栖息地选择、潜在栖息地模型、系统发育学和遗传学等。野外的应用技术有无人机、热成像、无线电颈圈和地理信息系统等。2014-2019年，KCC也曾担任全球性保育基金——关键生态系统伙伴基金（CEPF）的中国项目执行团队，协调国内机构申请并开展保育项目。

In conservation, scientific knowledge about the target species and their dependent ecosystems is crucial. KCC conducts, many via collaboration, a range of scientific studies, including population status, diet and nutrition, social behaviour, habitat selection, habitat modelling, phylogenetics and genetic work. We also funded researchers conducting studies of direct relevance to conservation. Field techniques employed include conservation drone, thermal imaging, GPS tracking collar and GIS. In 2014-2019, KCC was part of the Indo-Burma Regional Implementation Team for the global conservation grant Critical Ecosystem Partnership Fund, and was responsible for overseeing the application and implementation of projects in China.

KEY FIGURES

重点产出



2015-2019年的重点产出 Key figures from 2015 to 2019

1998-2019年的重点产出 Key figures from 1998 to 2019

MAP OF PROJECT SITES

项目地图

TO HARMONISE OUR
RELATIONSHIP WITH THE
ENVIRONMENT
大众与环境和谐并存

中缅生物多样性热点
Indo-Burma Biodiversity Hotspot

1. 海口羊山湿地
Haikou Yangshan Wetland

2. 邦溪省级自然保护区
Bangxi Provincial Nature Reserve

3. 大田国家级自然保护区
Datian National Nature Reserve

4. 俄贤岭省级自然保护区
Exianling Provincial Nature Reserve

5. 佳西省级自然保护区
Jiaxi Provincial Nature Reserve

6. 霸王岭国家级自然保护区
Bawangling National Nature Reserve

7. 鹦哥岭国家级自然保护区
Yinggeling National Nature Reserve

8. 吊罗山国家级自然保护区
Diaoluoshan National Nature Reserve

9. 广东水獭保育
Guangdong Otter Conservation

10. 西大明山自治区级自然保护区
Xidamingshan Provincial Nature Reserve

11. 弄岗国家级自然保护区
Nonggang National Nature Reserve

12. 西双版纳国家级自然保护区
Xishuangbanna National Nature Reserve

13. 云南印度野牛保育
Yunnan Gaur Conservation

14. 云南闭壳龟保育
Yunnan Box Turtle Conservation

15. 铜壁关省级自然保护区
Tongbiguan Provincial Nature Reserve

16. 高黎贡山国家级自然保护区
Gaoligongshan National Nature Reserve

17. 滇西北红外相机调查
Northwest Yunnan Camera Trap Survey

18. “永续农业先锋”计划
Sustainable Agriculture Pioneers Scheme

19. 唐家河国家级自然保护区
Tangjiahe National Nature Reserve

20. 天马国家级自然保护区
Tianma National Nature Reserve

21. 山西华北豹保育
Shanxi North Chinese Leopard Conservation

22. 北京西山实验林场
Xishan Experimental Forest Farm of Beijing

23. 柬埔寨生物多样性保育
Cambodia Biodiversity Conservation