

Wildlife Rescue, Care and Release



Black shanked douc langur

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Overview

With the disruptions of the COVID-19 pandemic finally in the rearview mirror, the Wildlife Rapid Rescue Team (WRRT) was able to rescue more wildlife and more effectively combat the illegal trade this year. During 2022 the team rescued 2,052 live animals, which was over 500 more than in the previous year, seized three times as many dead animals, collected more than three times as much in fines, and apprehended 38 more offenders than in 2021. Endangered species rescued during the year include tiger cubs, slow loris, pileated gibbons, silvered langurs, pangolins and green peafowl.

After a difficult year at Phnom Tamao Wildlife Rescue Centre (PTWRC), when relations with the Forestry Administration (FA) became strained following the decision from Prime Minister, Samdech Hun Sen to disallow the destruction of the forest surrounding the Centre, towards the end of 2022 normal service



Rescued babies arrive at PTWRC

has gradually resumed. Our rescued wild animals have never gone without, despite the problems we faced and cage construction is resuming now that visitors are returning to Cambodia and our Behind the Scenes Tours are operating again, bringing with them an increase in finances to help look after our animals.



Banteng and calves at Prambei Mom

in Prambei Mom Community Forest, which was the original community forest we started our support.

The wildlife we have released in Angkor in Siem Reap and also at our Wildlife Release Station (WRS) in Koh Kong continues to do well. There was a spate of hunting taking place near WRS towards the end of 2022, which we seem to have dealt with for the time being and we do not seem to have lost any of our regular 'friends'. The animals we are preparing for release, as well as those already enjoying their freedom are all well. Our released gibbons in Angkor are also in good health and in 2022 we released another 2 male otters, born at PTWRC, to accompany the remaining female we released previously. They travel widely through the Park together and there are signs we will be hearing the patter of tiny otter feet in Angkor soon in the New Year.



Life on the wild side in Angkor

Wildlife Rapid Rescue Team

General

In 2001, Wildlife Alliance partnered with the Cambodian Government to create the Wildlife Rapid Rescue Team (WRRT), a special wildlife crime investigation and counter-trafficking unit tasked with cracking down on the extremely cruel illegal trade, which is driving many species to extinction. The WRRT consists of Wildlife Alliance staff, officials from Forestry Administration (FA), Military Police and a Fisheries Administration official, who are committed to combating the illegal wildlife trade nationwide. Information guiding our operations includes an informant network, paid on the basis of the quality of information received, and reports from the public via calls to our Wildlife Crime Hotline and messages to its related Facebook page, through which people report illegally held wildlife. Often Hotline reports lead to confiscations or donations as Cambodians and visitors make efforts to protect wildlife. Staff also investigates Facebook posts advertising the sale of wild animals.

WRRT provides humane care to confiscated wildlife while in transit and, if appropriate, immediately releases animals back into natural habitat. Wildlife which is injured, sick, or habituated to humans is transported to Phnom Tamao Wildlife Rescue Centre (PTWRC). Since its inception, WRRT has rescued more than 75,000 live animals, apprehended over 7,800 offenders and confiscated 80,000+ dead animals and 19,500+ kilos of wildlife meat, significantly disrupting the illegal wildlife trade in Cambodia.

General



Wildlife Rapid Rescue Team

The operational structure of WRRT has remained the same, with Darian Thackwell and Khem Vuthyavong managing the team. Heng Kimchay is the FA leader of the WRRT, with another 3 FA officials. The 8 Military Police are led by Lieutenant Colonel Sou Suret, who has been with the team since its inception, along with MP Pov Sari. One Fisheries Administration official has been seconded to the team, to assist with the confiscation of turtles and other aquatic animals, which are under the jurisdiction of the Department of Fisheries.

There were several changes to the WRRT investigative personnel. Mr Panharit continues to work on the database and we now have 2 dedicated investigators who

gather information on the wildlife trade. This year was a transition year for the investigative structure, the 2 new investigators and Mr Sowichea were trained to investigative techniques and over the months Mr Sowichea was integrated in the operational team, serving as a liaison between the investigators and the law enforcement team. This approach is working well, data is entered into the system in a timely fashion and the investigators are able to concentrate solely on trade. Panharit also helps to address legal matters and assist WRRT on legal aspects and ultimately liaise with the government on matters pertaining to WRRT.



Ivory and other wildlife parts for sale

As well as routine operations on markets, traders' premises and restaurants selling wildlife, the team also conducted operations on ivory traders and on premises carving and selling ivory during 2022. WRRT also supported community patrols in areas of forest we are helping to protect, in Prambei Mom and Metta Tomachiert, Kampong Speu and at another monk's forest, Rukavorn in Odor Meanchey, which hold endangered species, including banteng.

Throughout 2022, WRRT staff received a total of 2,583 phone calls to our 24-hour Wildlife Crime Hotline from our informants, government officials, and members of the public with information or requests for help with situations involving wild animals. In addition, WRRT

office staff is conducting increasing investigations into illegal online advertising of wildlife on Facebook. We received a total of 182 different reports to our Wildlife Crime Hotline Facebook page, detailing wildlife being sold online and places where wildlife was being kept illegally. We identified and reported to Facebook 581 posts of wildlife being illegally sold, and 268 of these posts were removed by Facebook.

Operational details and highlights

2,052 live animals rescued. *

798 operations conducted. *

15,369 dead animals confiscated.

\$34,881 fines collected.

1,147 animals released.

131 offenders apprehended.

536.7 kg meat.

3 motorbikes seized.

**Including donations*

Following a 2-year investigation into a major wildlife trader, in mid-March 2022 the WRRT raided his Phnom Penh home. The operation yielded huge quantities illegal products, including: 100+ lbs. of ivory and 25 lbs. of elephant molars, 90 lbs. of boar tusks, teeth and fur, 78 pieces of deer antlers, and 14 Eastern porcupine stomachs. In addition, large quantities of parts from non-native species and species that are extinct in Cambodia were seized - 70 pieces of tiger and lion skin, 72 tiger whiskers, 4 tiger skin purses and 1 mounted lion head. Due to the high volume and value of wildlife seized, and the obviously foreign origins of some of it, Cambodia's Anti-Corruption Unit (ACU) joined the case. While many cases unfortunately result simply in fines due to low penalties under Forestry Law, the ACU can press charges based on economic crimes so this offender was sent to pre-trial detention and his assets were frozen by the ACU's committee on money laundering. Our Team and ACU officers collaborated for months to identify others in his trafficking network by tracing his



Lion and tiger skin pieces among hundreds of items seized in raid

financial transactions. In July the Phnom Penh Court charged three offenders. The trafficker arrested by our team was sentenced to 2 years imprisonment and a fine of USD \$10,000. Two others were sentenced in abstention and the Court has issued warrants for their arrest. In addition, the Court confiscated 1 car, 1 telephone, 4 plots of land and/or houses and money from 6 different bank accounts. This case represents what we believe are the most serious sentences ever issued for wildlife crimes in Cambodia. The case was covered by a variety of local media outlets, raising public awareness that participating in the illegal wildlife industry can indeed lead to serious consequences. We hope this serves as a strong deterrent from participating in the trade, and is a sign that future offenders will also be prosecuted to the full extent possible.



Tiger confiscation

In mid-June, a local FA official in Preah Sihanouk Province reported 2 tigers being kept in a villa rented by Chinese gentleman. The team applied for a search warrant from the provincial court. This was issued and I accompanied the WRRT, along with Wildlife Alliance vet, Oung Chamroeun, a provincial deputy prosecutor and local authorities to inspect the house. In the ensuing search, the team confiscated the 2 tigers, also 2kg of pangolin scales and a bear paw in wine. The case against the Chinese gentleman was sent to the court. The tigers, which were around 6 months old at the time of seizure, were taken to Phnom Tamao to be cared for by FA.

There is a trend in Cambodia for videographers (VOs) to capture or purchase baby pig-tailed macaques, dress them up, film them and post the videos on YouTube. Stories are created and the macaques are often abused to add content. VO macaque abuse is an issue Wildlife Alliance takes seriously and tries to address. In late-July, following numerous reports of macaques being exploited in this manner, WRRT raided 3 different locations, confiscating a total of 13 macaques. The 3 offenders involved were fined and the macaques were taken to PTWRC to be cared for. In August, the team raided 23 more houses in Siem Reap, which we knew kept macaques to be used in videos and rescued a further 5 macaques from 3 offenders.

There is a trend in Cambodia for videographers (VOs) to capture or purchase baby pig-tailed

WRRT's Wildlife Crime Hotline Facebook page receives numerous reports from concerned citizens every month and sometimes these tips lead to significant busts. Following a Facebook report about a petrol station in Prey Veng Province raising birds and squirrels, in late December the team collaborated with a local deputy prosecutor, military police and police to raid the station. The team confiscated a total of 100 live animals including 4 squirrels and 96 birds of different species (alexandrine parakeets, Asian koels, changeable hawk eagles, cotton pygmy-geese, hill and white-vented mynas, lesser coucal, lesser whistling and spot-billed ducks, spotted and peaceful doves, purple swamphens, red junglefowl, watercocks, and white-breasted waterhens and) and 3 pairs of mounted red muntjac antlers. The live animals were taken to PTWRC for care while the horns



100 live animals rescued from petrol station

were brought to Wildlife Alliance's office to be kept in the evidence room. The owner of the petrol station refused to pay the fine of more than \$5000 USD, therefore his case was sent to the provincial court.

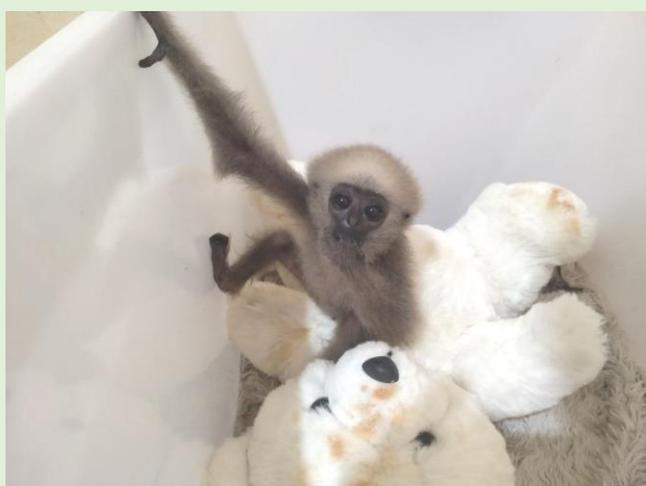
Finances

Personnel Costs:	\$261,283
Operating Costs:	\$144,891
Equipment:	\$21,723
Database:	\$1,782
Operations, including guest house, food, fuel etc.:	\$69,521
Care for rescued wildlife:	\$1,076
Legal support, court documents etc.:	\$15,997
Informant costs:	\$16,994
Vehicle repairs:	\$10,606
Miscellaneous, including office, uniforms, TSU etc.:	\$7,242
Total Operating Costs:	\$144,891
Total Program costs:	<u>\$406.174</u>

Phnom Tamao Wildlife Rescue Centre

Phnom Tamao Wildlife Rescue Centre (PTWRC) was created in 1995 by the Forestry Administration (FA) to care for rescued wildlife in need of a home. It also serves as Cambodia's only national zoo. In many ways it is an inspired choice of location for such a venture. Set in a large forest that is also managed by FA, rescued animals feel at home and thrive here. There is also the opportunity to release appropriate wildlife back into the surrounding forest. Initially, the FA experienced a lack of funding and could not care for the animals properly. However, due to the excellent relationship that now exists between Wildlife Alliance and PTWRC's FA Director, Mr Nhek Ratanapich, the Centre has blossomed into perhaps the best of its kind in the region. Our proud boast is no wild animal is ever turned away and all would be dead without our intervention.

General



Rescued baby gibbon in Nursery

Throughout 2022, a total of 1,153 animals arrived at PTWRC. Arrivals included: 1 northern slow loris, 1 sun bear, 1 sambar, 1 gaur, 1 binturong, 2 Eld's deer, 2 red muntjac, 2 southern serows, 3 smooth-coated otters, 4 Sunda pangolins, 4 common palm civets, 5 golden jackals, 5 Asian porcupine, 12 elongated tortoises, 14 pileated gibbons, 15 silvered langurs, 31 crocodiles, 48 pig-tailed macaques, 64 long-tailed macaques, 377 birds of 49 different species, and 526 pythons.

A total of 64 animals were born at PTWRC this year, including: 10 sambar deer, 6 red muntjac, 6 Eld's deer, 4 smooth-coated otter, 3 silvered langurs, 3 binturong, 2 guar, 2 southern serow, and 2 pileated gibbons, 6 common palm civets, 5 wild pigs, 2 golden

jackal, 2 brush-tailed porcupine, 1 East Asian porcupine. 1 black crowned night heron, 2 Oriental pied hornbills, 2 Alexandrine parakeets and 3 black-necked storks also hatched.

780 animals were released from PTWRC in 2022. This is a smaller number than in previous years, largely because FA rejected many of our requests to release animals. Fortunately, this reluctance reduced by the end of the year. 458 pythons and 131 birds of different species were released into their natural habitat. 5 Eld's deer and 3 sambar deer were released into the Phnom Tamao forest.

The FA took 85 long-tailed macaques and 22 pig-tailed macaques for release offsite.

A total of 476 animals died at PTWRC in 2022. 235 of these were birds of different species, which often arrive sick and stressed after being rescued and do not survive; however, in the third quarter, 66 lesser whistling ducks being cared for by FA keepers died due to infection from over-crowding when they should have been released. In addition, 126 pythons died from over-crowding. Another concern is that unusually high numbers of primates have died this year, likely because the Centre's water is piped from the Tonle Bati, which is becoming increasingly polluted. When we had the water tested, several types of bacteria, parasites and chemical contaminants were identified – a filtration system that will produce water that meets drinking water quality standards is a major priority for 2023.



Gaur with calf born at Phnom Tamao



Lesion on Chhouk's stump

Our resident elephants have caused us a few concerns this year. Chhouk, our disabled male, still has a lesion on the bottom of his stump, caused by chafing of his prosthesis. This requires special care, in addition to the regular twice daily cleanings of his stump and changing of his shoe. Once or twice per week vets have peeled off dead skin that is overgrowing the wound. It is healing better than it was and towards the end of the year we were finally able to take Chhouk off antibiotics. Exceed Worldwide, formerly the Cambodian School of Prosthetics and Orthotics, measured and created a new caste for Chhouk's damaged leg in July and brought two new prostheses for him.

Our other bull, Sakor, at times was breathing very deeply and loudly. Fecal and trunk fluid samples came back negative for pathogens. Sakor went into *musth* in August and then his left temporal gland swelled up, probably a blockage of *musth* secretion. He was treated with antibiotics and the swelling has reduced, but not gone completely. Both Sakor and female Jamran were getting overweight, so we reduced their intake of grass and sugarcane tips and increased the quantity of forest branches in their diet. Sakor lost weight and the labored breathing stopped.

Our efforts to raise alternative funding for Phnom Tamao to complement donations and grants have continued. In October, paintings by Lucky the elephant were featured in an art exhibit at an upscale

hotel in Phnom Penh. Our 'Behind The Scenes Tour' ran throughout the year and the numbers of guests increased as compared with the 2020-2021 pandemic period.

Staff

There are usually little or no changes in Wildlife Alliance staff that support the care for our animals at PTWRC and the different ways in which they give their help. Theary, Narin and Sophea purchase the animal food and essential equipment and truck driver, Kem, delivers it all to the Rescue Centre each day, ensuring that all of our animals are well fed and properly cared for. With COVID-19 no longer posing a threat, overseas guests are beginning to return to Cambodia and the Wildlife Conservation and Awareness Team (WildCAT) has started to get busy again with their Behind the Scenes Tours of the Rescue Centre, bringing in much needed funds. This is not yet at pre-pandemic levels, but by the end of the year things are looking up. WildCATs,



Kem and new food truck



Wildlife Alliance keepers

looked after the elephants, managing bull, Sakor's mood swings and any difficulties encountered by Chhouk, our disabled male elephant. Sol and Vok also care for our young black shanked douc langurs, that most zoos have such difficulty keeping. Tiger keeper, Rong's sole responsibilities are tigress, Fari and our ageing pair of clouded leopards.

Wildlife Alliance vet Oung Chamroeun and FA vet Ruos San continue to ensure the resident animals at PTWRC are in good health and any injuries suffered by new arrivals are taken care of. Oung Chenda, Chamroeun's brother, is still with us on a part time basis and helps when needed. Niki Leroux is our Wildlife Research Biologist, adding a valuable component to the programs, formalizing and documenting aspects of our work.

Vuth, Samedi, Alicia and Casey have been joined by Mary, who moved from her job in eco-tourism in Koh Kong to join us. Liz continues to take care of the proposals and report writing and Daisy deals with the accounting.

Head keeper Try Sitheng continues to supervise the 10 Wildlife Alliance and around 50 FA keepers in his usual exemplary fashion, involving himself in all aspects of Wildlife Alliance' wildlife work at PTWRC and wherever he is needed elsewhere in the country. Sitheng is also an excellent photographer and is the man behind the camera for most of the wildlife photos and videos we need. Pisey, Ran and Par, our Nursery keepers continued with their round the clock care of rescued infants and Seth, Sarim, Sol and Vok



PTWRC vets

Construction

After 2 years with limited construction of new enclosures or major repairs due to greatly reduced funding from our 'Behind The Scenes Tour' during the pandemic, in 2022 it has been essential we recommence construction to meet the Centre's needs. Two new civet enclosures, a leopard cat enclosure, two pangolin enclosures and an otter enclosure were constructed. We also constructed narrow standing stall for our elephants to enable treatment and more accurate health checks. In addition, materials were purchased to construct a new langur facility to house this sensitive species separately from the many baby and juvenile macaques we care for in the Nursery, which can carry diseases that are harmless to them but deadly to langurs. Unfortunately, as of year-end the FA had not granted permission to begin building the langur facility, but we have modified facilities at the Nursery to enable baby langurs to be kept separate from infant macaques and we seem to be avoiding disease transmission from macaques for the time being. As Sakor gets older and stronger his bouts of *musth* become more intense and the damage he does to his enclosure increases. Significant funds were spent this year renewing sleeping stalls, replacing bent steel beams and broken concrete pillars in the elephant enclosure. We have also taken measures to deter Sakor from conducting this kind of damage to his enclosures in the future. Repairs were also needed on enclosures for other species, including otters, gibbons and langurs through the year.



Damage to elephant enclosure caused by Sakor

Forest Protection



Phnom Tamao Community Anti-Poaching Unit

Many animals selected for release at PTWRC are freed directly into the Phnom Tamao Forest surrounding the Centre. They are safeguarded by Community Anti-Poaching Unit (CAPU) patrols, which are necessary to protect from small scale hunting that takes place at times. Throughout 2022, the Phnom Tamao CAPU team patrolled daily and spent 130 nights camping in the forest to deter hunters. They dealt with 5 incidents of feral dogs that were hunting wildlife in the forest and encountered 4 dead animals (2 sambar deer and 2 wild pigs) during patrols. They removed a total of 170 snares and other traps from the forest (including 103 bird traps, 3 wild pig traps and 64 sambar traps). The majority of these snares were removed from February-May, and total snare numbers in 2022 were significantly higher than in 2021. However, the animals in the Phnom Tamao Forest faced a far greater threat than snares this year, after the Government decided to sell the forest to developers and in July began to raze it to the ground, destroying 530 hectares in around 7 days. Wildlife Alliance fought this and with the support from the press, including *Voice of Democracy*, *Southeast Asia Globe*, *Free Radio Asia*, *Khmer Times* and others, who supported us greatly, along with famous Cambodian celebrities and conservationists, plus a huge wave

of anger from local people, on August 7 Prime Minister, Samdech Hun Sen reversed the decision to 'develop' the forest and ordered the area already destroyed to be replanted, which has now been done. On August 19, King Norodom Sihamoni signed a Royal Sub-decree creating the Phnom Tamao Zoological Garden, Protected Forest and Botanical Garden.

Finances

Personnel Costs (excluding Wildlife Alliance managerial staff):	\$194,365
Wildlife Alliance PTWRC keepers, vets, WildCATs, office staff:	\$126,549
FA keepers and officials:	\$43,777
Community Anti-Poaching Units:	\$19,388
Tax	\$4,651
Operating and Equipment Costs:	\$405,717
Construction:	\$24,012
Tiger food:	\$4,985
Elephant food and water:	\$26,689
Food for other animals:	\$128,703
Veterinary equipment, medicines etc:	\$27,401
Infrastructure, equipment, vehicles:	\$121,219
Behind the Scenes Tours:	\$23,244
Logistical costs, fuel, truck repairs etc:	\$21,656
Misc, tax, keeper food and water, office costs, TSU etc:	\$27,808
Total Program Costs:	<u>\$600,082</u>

Community Conservation Support

Community Conservation Support (CCS), Wildlife Alliance's newest program, provides local people who have taken the initiative to protect their local forest and wildlife populations with technical and financial support to sustain their efforts. This help takes different forms depending on the needs at each site, and may include purchase of equipment, the provision of per diems for patrols, interceding with local authorities on their behalf and/or raising the profile of what they are doing to spread the word.

Prambei Mom, Kampong Speu Province

In 2003 the area surrounding Prambei Mom was largely forest. This has mostly gone, leaving only Prambei Mom Community Forest and the surrounding unprotected forested hills. The rest of the area has been cultivated and is mostly sugar cane now. Led by community leader, Soeurn Lai, in 2003, the community started protecting the forest and wildlife there. They had no mandate or support to do this and, at the time, no idea that the banteng living there was an IUCN Red-Listed Endangered species. They just knew that they wanted them to survive. In 2018, Sitheng told me about Prambei Mom,



Drone photo of banteng herd in Prambei Mom

saying they needed some help, and we started our support.



Research biologist Niki setting camera trap

Throughout 2022, we continued our camera trap survey to estimate the size of the banteng population. The photos also document the health of the animals, any snare injuries, new calves born, and the presence of other wildlife and hunters. Since we started our support, banteng numbers have increased, as indicated by the number of calves born. In February, Knowsley Safari visited to test a thermal imaging drone, which we hoped might assist with our population analysis and also to help address night time hunting. In March, Sitheng took his drone to attempt an estimate of the number of banteng. He got great footage of a herd of 22 animals, adults, calves and a huge bull, and also of another smaller herd, but a full

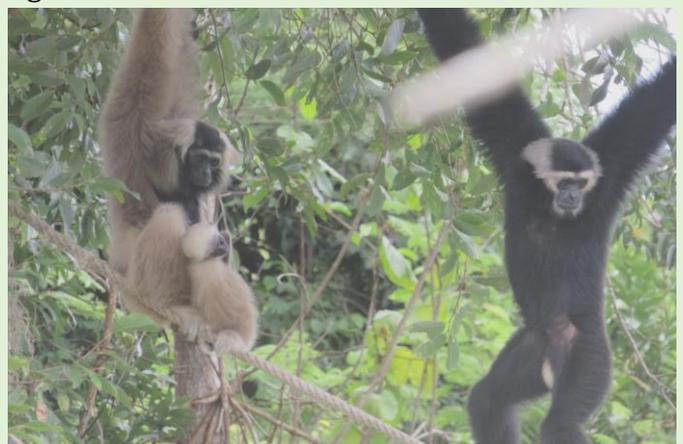
population estimate was not possible due to limited time and the trees prematurely coming into leaf.

Hunting in Prambei Mom has reduced since the height of the pandemic, with about 200 fewer snares removed this year than in 2021. However, hunters are making a new type of snare, a wire spring placed on the ground, which is more difficult to detect than the traditional bent over sapling. This year we changed the patrol strategy to provide more effective coverage. Previously, the rangers' patrolled less frequently and in larger groups. This year the rangers were split into 2 teams of 7, each patrolling 12 days per month. They often patrol at night to try to prevent the nocturnal banteng from entering the sugarcane plantations, causing considerable damage and angering plantation owners, who have threatened to kill the banteng at times. Throughout 2022, the rangers removed a total of 516 snares that will catch larger mammals such as banteng. Only 35 of these snares were inside the Community Forest and the rest were outside in the surrounding plantations. In addition, the rangers removed 62 bird and civet snares.

Metta Tomachiert Forest, Kampong Speu

Once we started supporting Prambei Mom, the news spread and we were contacted by a monk who is protecting a small forest around 30km away. The Venerable Prom Sochiert is extremely gentle and loves all animals, which he feeds, and they often respond when he calls them. In 2021, we transferred a female pileated gibbon, Karona, from Phnom Tamao to Metta Tomachiert as a mate for a solo wild male, Nangaly Soaka, living there. In 2022, we donated hammocks for the patrollers who are trying to help Prom Sochiert protect the forest and animal food for the gibbons and other wildlife he feeds.

The gibbons successfully bonded following Karona's release and she had a baby in July 2022. Tragically, this forest was designated to the Army in late 2021 and despite Nangaly Saoka's valiant efforts to protect his forest, most of it was destroyed this year leaving only about 30-40 hectares surrounding the monk's residence. The gibbons remained in the forest close to the monk's residence and stayed safe, however Karona and the baby disappeared in late-September and have not been seen since. Officially cutting had stopped, but Prom Sochiert informed us that some



Karona and Nangaly with baby

trees were still being selectively cut and hunting, particularly of macaques, was being conducted. It is unknown what happened to Karon and her baby, but it seems certain they can no longer be alive. Male, Nangaly Saoka, is still around, doing his best to keep monk, Prom Sochert and his forest safe.

Rukavorn Forest, Oddar Meanchey

Rukavorn forest is around 30,000 hectares and holds good populations of wildlife including Endangered species, such as green peafowl, gaur, banteng and Eld's deer. The forest was protected by a former monk, the Venerable Bun Saluth, who has received some support from the Prime Minister, Hun Sen, however a serious motorbike accident means he is now less involved in patrols. Monks and community rangers conduct patrols with support from police and army assigned here by the Provincial authorities. There are complaints that Ministry of Environment officials are unhelpful and disruptive.

Wildlife Alliance does not pay monthly patrol per diems here, but provides equipment and uniforms when requested and we are financing the construction of a new ranger station to facilitate patrols in this large area of forest. In the first quarter of 2022 we donated 10 radio transmitters, an aerial and set of repeaters to assist with communication between patrol teams.

Throughout 2022, a total of 396 snares were removed from the forest and many dead animals were encountered in snares, including: 4 sambar deer, 3 banteng, 2 red muntjac, 1 jackal and 1 wild pig. Several illegal fishing camps were also destroyed and boats and equipment seized. The rangers also rescued and released 9 pythons and 1 eagle.



Donating radio equipment

Srae Chis, Kratie - Phnom Prochum Met, Stung Treng - Choum Pich, Stung Treng

During 2022 we began to expand the CCS program by scoping out potential new sites. Three areas in Kratie and Stung Treng provinces - Srae Chis, Phnom Prochum Met, and Choum Pich, were identified as promising. Each of the three sites is a Community Forest under the responsibility of the FA. We are providing the rangers in each area with a small stipend for food and fuel to help implement patrols and have donated them patrol equipment, including hammocks, uniforms, boots, rucksacks, and a Smart phone with an app for taking photos that has embedded time, date, and UTM locations to track illegal activities and wildlife sightings. 5-6 camera traps were placed in each forest for an initial assessment wildlife species present.



Lesser adjutant photographed in Srae Chis

Srae Chis camera traps captured images of sambar, wild boar, muntjac, and lesser adjutant. The rangers also report seeing groups of 10-20 silvered langurs almost every month. Between mid-July and December, the Srae Chis rangers conducted 19 patrols lasting 3-4 days each and removed a total of 315 snares.

Species photographed in Choum Pich include: long-tailed macaque, mouse deer, crab eating mongoose, common palm civet, variable squirrel, Malayan porcupine, wild boar, Bengal monitor lizard, green peafowl and several other bird species. The Choum Pich rangers patrolled 21 days between September and December, only encountering 4 snares. During a November night-patrol,

they chased a motorbike transporting 7 long-tailed macaques but both bikes fell down. The rangers seized a net for catching macaques and a smart phone but the offender escaped.

At Phnom Prochum Met, species photographed thus far include: long-tailed macaque, gaur, banteng, muntjac, wild boar, crested serpent eagle and several other bird species. Between August and December, the rangers patrolled 12 days and removed 26 regular snares and 100 civet snares. In addition, a photo captured in August showed a hunter carrying a gun including clear images of his face. We reported this to the FA official in charge of Prochum Met and the man was apprehended in September. Such information is not always met with such speedy action!

Finances

Personnel Costs:	\$21,850
Infrastructure and Equipment:	\$16,503
Operating Costs:	\$5,058
Total Program costs:	\$43,411

Wildlife Release Station



WRS keeper Vang and parakeets

Cambodia's 2022 rainy season was wetter than usual and it follows that our Wildlife Release Station (WRS), set in the forest 8km from the village of Chi Phat in Koh Kong Province, perhaps one of the wettest places in the country, also received more than its fair share of rain. Early in the year, before the rains set in, we renewed the last 2 guest chalets in preparation for the return of visitors.

A total of 68 new animals arrived at WRS in 2022: 19 blossom-headed parakeets, 18 elongated tortoises, 7 Sunda pangolins, 5 common palm civets, 4 green peafowl, 3 black-shouldered kites, 2 Oriental pied and 2 wreathed hornbills, 1 crested goshawk, 1 hog badger, 1 jungle fowl, 1 leopard cat, 1 pig-tailed macaque, 1 sambar fawn, 1 slow loris, and 1 water

dragon.

1 pangolin escaped, breaking a hole in the cage roof wire and 44 animals were released from WRS this year: 13 blossom-headed parakeets, 18 elongated tortoises, 2 Sunda pangolins, 3 common palm civets, 2 black-shouldered kites, 2 Oriental pied and 1 wreathed hornbills, 1 crested goshawk, 1 leopard cat, and 1 jungle fowl.

One of the year's most notable releases was in late-August, when we finally released the leopard cat that was rescued in 2021 as a kitten by Wildlife Alliance rangers and hand-raised by our WRS keepers. She travelled between 500 and 1,000 meters from camp and we lost her signal after about 3 weeks. The



Keeper Pich with sambar fawn at WRS

surrounding forest is very dense and constant rain makes radio tracking difficult, but she was surviving well before we lost the signal and there is no reason to think she has come to any harm.



Chenda and Oun attach transmitter prior to release

This year we continued to release and radio track Sunda pangolins, monitoring movements and survival rates for our comparative study of hard-versus soft-released pangolins. In early October, a male pangolin from PTWRC was brought to WRS, fitted with a transmitter and hard-released. After about a week, the tracking team found him sleeping in a hole very close to a farmer's field. They returned him to WRS and re-released him the same night. The signal was ultimately lost, but the pangolin appeared to be surviving well. In late-October another male pangolin that was rescued by the WRRT and treated for 2 days at the clinic of our Phnom Penh-based vet was brought to WRS. He was hard-released and tracked, moving about 2 km from WRS before the transmitter fell off and was found about 1.5 km from the Station in mid-

November. Including the pangolins tracked in 2022, thus far we have collected data on a total of 4 hard-released and 2 soft-released pangolins for our study. We need to track another 2 soft-released pangolins before we will have enough data to publish our results. Also, since all hard-released animals have been male and most could only be tracked for 10-14 days, to facilitate a more robust analysis it would be beneficial to collect more data either from additional hard-released males or to hard-release at least 2 females. Unfortunately, we could not collect any data on two female pangolins we had hoped to soft-release this year. One that had been acclimatizing for about a month at WRS escaped in May, breaking a hole in the roof of her enclosure. Another female was fitted with a transmitter in early October, but the tag created a wound, rubbing against the skin and it was removed. She is still in an enclosure at WRS.

Female sun bear, Sopheap, was a little unwell in April and went off her food again in June. We treated her, placing medicine in honey, which she ate and seemed to have recovered. Sadly, she sickened again and died on July 9. Subsequent tests to determine the cause of death were indeterminate, but came back negative for Tuberculosis. We miss her gentle nature. For most of the year we walked young female sun bear, Kolab, (Rose in Khmer), in the forest each day, always accompanied by one of our WRS keepers, Oun, Soern, Pich or Vang, or by Research Biologist Niki, keeping physical contact to a minimum. Kolab has grown and learned her way around the surrounding forest as she spent time foraging for food. She is now an expert climber. Towards the end of the year we decided that daily walks may no longer be the best method, as we hope to release her when she is older and the accompanied walks were increasing her familiarity with humans. Instead, we are increasing her interactions with male sun bear, Micah, and will gradually integrate the two into our large forested sun bear enclosure now that Kolab is bigger.



Soern feeding wreathed hornbill chick



Wild sun bear photographed at WRS

The gentle movements of WRS' resident wildlife are always interesting to monitor, either through Bunthoeun's camera traps, or by visual observation. Wild gibbon families are becoming much more apparent and the 4 resident families are sometimes seen coming quite close to camp. Our resident sambar hinds are sometimes escorted by a different stag to the father of the 2 youngsters. He is reticent, but we see him as the girls come to feed on the waste vegetables staff put down for them every evening. These beautiful deer and the muntjac we released have integrated well with the wildlife that lives around WRS. Camera trap photos show that sun

bears are returning to the area and several times Pich has seen giant black squirrels in the trees as he walks with Kolab.

All these animals are enjoying the safety provided by the Chi Phat Community Anti-Poaching Units (CAPU), comprised of local police, community rangers and Ministry of Environment rangers who patrol the forest surrounding WRS. As the threat from snares has increased since the pandemic, patrols this year have again focused on the forest closest to WRS and very few patrols were conducted of the outer patrol area. Throughout 2022, Chi Phat CAPU rangers patrolled 2,228 km during 328 days and removed a total of 1,871 snares (a significant increase over the 1,360 snares removed in 2021). 360 of the snares removed this year were normal snares set for deer or wild pigs and the remaining 1,511 were civet snares. 95% of all snares were found in the inner patrol area. During their patrols, the rangers encountered 10 dead animals caught in snares: 6 civets, 1 turtle, 1 deer, 1 chicken and strangely 1 gibbon. In the fourth quarter, we discovered a small clearing with discarded hunting apparatus where hunters had captured long-tailed macaques. Gunshots were also heard in the forest nearby WRS over a period of around one month. Professional rangers from the Stung Proat Station patrolled jointly with the community rangers in December to increase the law enforcement presence in the area. Despite the deadly threats posed by snares and hunters, wildlife is still abundant in the forest surrounding WRS and the community rangers recorded 402 significant sightings of wildlife over the year. I have offered a significant reward for the apprehension and conviction of anyone caught hunting around WRS and perhaps because word of my offer has spread, no more gunshots have been heard recently.

Finances

Expenditure for WRS:

Personnel Costs:	\$30,013
Animal keepers, biologist:	\$30,013
Operating Costs:	\$43,290
Construction:	\$7,685
Animal food	\$7,422
Equipment:	\$6,812
Maintenance and supplies:	\$3,166
Tours costs:	\$4,464
Logistical costs, fuel, truck repairs etc:	\$12,560
Total Program costs:	<u>\$73,303</u>

Angkor

Thanks to the great relationship we have with APSARA, the government administration in charge of the UNESCO World Heritage Angkor Archeological Park, our work to release wildlife back into the historic forests of Angkor went well in 2022.

We have always known that with wild gibbons no longer in Angkor we would have to manage our reintroduced pileated gibbons for the first few generations, with a need to be flexible with the solutions we implement to solve any problems that may arise, particularly in respect of pairing up gibbons born in the forest. Baray and Saranick – the first pair we released in 2013 – and their youngest offspring, *Kontes-long*, are all well. Their first-born daughter, *Ping-peeung*, was driven out of the family in 2020 when she reached adulthood, as is natural for these territorial apes. We captured *Ping-peeung* and paired her with a male from Phnom Tamao and released them in a different area of the forest on December 23, 2021. Although captive-born *Bakheng* was a tad slow at first, he has gotten the hang of life in the tree tops over the past year and the pair are exceptionally fond of each other.

Chungruth, Baray and Saranick's second-born, turned 5 years old this year and finally started changing to black, the adult pelage of a male pileated gibbon. Expecting friction between him and his parents, we captured *Chungruth* in October and translocated him to an enclosure at Gate of the Dead, in the territory of *Tevy*, the surviving female from the second pair released. *Tevy*'s partner *Bayon* died in 2021. *Tevy*'s three offspring all appear to be female, and *Chungruth* could make a good partner for *Tevy* or one of her daughters. *Chungruth* is still inside the enclosure, but the gibbons are becoming acquainted with one another. So far *Tevy* seems enamored with *Chungruth*, trying to get his attention from outside the enclosure, but it looks like he prefers *Tevy*'s eldest daughter *Aping*. We will release *Chungruth* once the gibbons are comfortable with each other if this seems to be the appropriate action to take.



Sarin and Rith with Bunthoeun and Chung-ruth



Borey, Pomпой and Mey-ambaugh

The third gibbon pair released, *Pomпой* and *Borey*, had their first baby, *Mey-ambaugh*, in September 2021. All are well and the pair has bonded much more closely since becoming parents.

The green peafowl and great, wretched and Oriental pied hornbills we released in late 2021 have done well this year. The hornbills have been seen flying over the Temples, within the forest and also in the outskirts of Siem Reap City. The peafowl have been occasionally seen, more often heard. A large proportion of the birds released were males and we wanted to augment the population with more birds, hopefully females. In February 2022 we released another female green peafowl that was donated by the Angkor

Centre for the Conservation of Biodiversity (ACCB). She was extremely nervous in the release enclosure and we acclimatized her for only a couple of weeks before giving her the freedom of

the forest. In May, the WRRT brought a female wreathed hornbill, rescued in Ratanakiri, to Angkor. She was very weak when she arrived and she refused all food initially, but when the keepers mixed wild berries with the bananas, papaya and dog food she started to eat everything. We released her in August once she was acclimated to her new environment. The ACCB brought another wreathed hornbill, this time a male, in September, for us to rehabilitate and this bird has also now been released.



Released hornbill on a temple in Siem Reap City

We also released more smooth-coated otters in 2022. Only the original female remained from the pair transferred from Phnom Tamao in 2019 and



Our released otters eating fish

their pups. In November 2021, we transferred two more young male otters from Phnom Tamao and released them in March. They immediately joined the founding female. All three travelled widely in Angkor, but returned most days to eat the live fish we continue to put in their pool, although their occasional absences clearly indicate they are also catching fish for themselves in the lakes and streams of Angkor. Towards the end of the year, they seemed to be staying closer to the enclosure, perhaps realizing the dangers that fishermen's nets and fish traps pose to unwary otters. On two or three occasions the other otters we released previously became caught in illegal fishing nets and we are quite sure this was ultimately what caused their disappearance. I have written to APSARA about the matter, requesting intervention to help keep our animals safe and fishing has been banned in certain areas of Angkor.

Our project to reintroduce wildlife back into the beautiful forests of Angkor seems to have awakened the imagination of some people who wish to offload their unwanted pets here. On three occasions in 2022, wild animals that had been kept as pets (1 pileated gibbon and 2 otters) were brought to Angkor by their owners for release. All of these animals were tame and unsuitable for life in the wild and have been taken to Phnom Tamao for care. Fortunately, our good relationships with the Angkor Zipline staff

and APSARA enabled us to prevent the release of these animals.

Establishing new populations of wildlife previously extirpated from an area is a long-term endeavor and we must make sure we address all of the challenges that arise. There is a long road ahead in our project to restore some of Cambodia's beautiful natural heritage into her primary site of cultural heritage and it should be mentioned that APSARA have always been great partners to cooperate with, attending to many of the political problems as they arise, for example releasing inappropriate animals into this World Heritage Site and addressing the problems that fishermen were presenting to our released otters. Having said this, much can still go wrong, but with most things going smoothly through the year we will simply say "so far so good".

Finances

Expenditure for Angkor:

Personnel Costs:	\$8,120
Animal keepers:	\$5,720
APSARA staff:	\$2,400
Operating Costs:	\$16,404
Construction, equipment:	\$3,854
Animal food:	\$9,137
Logistical costs, fuel, truck repairs, guest house etc:	\$3,098
Miscellaneous, rice etc:	\$315
Total Program costs:	<u>\$24,524</u>

Final Words

As expected, the past year has not been without its problems and there will always be battles to fight if we are to be successful in our work to conserve wildlife and natural resources, both in Cambodia and elsewhere. These difficulties take many different forms, not solely concerning the health and care of the animals we rescue, but also with the offenders who are breaking the law, occasionally with the authorities we cooperate with and sometimes due to unclear legislation. We have coped well and with COVID-19 in recession and an easing of restrictions there are signs of better things in 2023. My heartfelt thanks go to all our friends, who have supported us so loyally through many difficult times – supporters, staff, keepers and the good people of Cambodia – in whatever manner this help is given. We would not have got this far without you!

God bless, stay safe and our very best wishes to you all for 2023.



Many thanks to friends and supporters of our Wildlife Rescue, Care and Release programs in 2022:

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Thanks also to all who give via the internet, particularly those who help on a regular basis. Your kindness helps us to continue with our work to protect the Cambodia wildlife that needs our intervention and help so badly and has enabled us to achieve so much - a truly united effort!