

Wildlife Rescue, Care and Release



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Overview

Although COVID-19 restrictions prevented the Wildlife Rapid Rescue Team (WRRT) from conducting operations around the country during the early months of 2021, as the year progressed and COVID cases dropped, WRRT operations resumed on a more normal basis, ultimately rescuing more than 1,500 live wild animals from the illegal wildlife trade, including sun bears, black bears, otters, gibbons and silvered langurs. The team released 993 animals, seized over 5,000 dead animals, 553 kilos of wild meat and body parts, collected \$9,909 in fines and apprehended 93 traders.

Our work to care for rescued wildlife at Phnom Tamao Wildlife Rescue Centre (PTWRC) continued with only a few difficulties during the year. We managed to deliver animal food and to care for our animals despite police road blocks within Phnom Penh and along National Road 2, on occasions with the help of WRRT, who acted as escorts whenever necessary. It is uncertain why the Forestry Administration appeared not to be granting permission to release rescued animals towards the end of the year. We will be addressing this problem in 2022.

Our new Community Conservation Support (CCS) program has made progress. By the end of the year we were seeing less banteng with snare wounds at Prambei Mom and we may have managed to help stop the conversion of the forest at Metta Tomerchiet, for the time being, at least.

We continue to ensure the safety and well-being of our released animals at our wildlife release sites in Koh Kong and Angkor. Our project to radio track released pangolins to assess the effectiveness of our release protocols continues. This could be hampered by a lack of data due to the reduction in the number of rescued pangolins, as the species becomes more scarce. Another baby pileated gibbon born in Angkor, brought the number of births of the species in the Angkor forest to seven. We also released all three species of hornbills found in Cambodia, which were donated to us by a Cambodian gentleman, back into Angkor, along with 8 Endangered green peafowl, given to us by the Angkor Centre for the Conservation of Biodiversity (ACCB). Continued sightings of the released birds indicates that they are surviving.

Wildlife Rapid Rescue Team

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



WRRT releasing turtles

has rescued more than 70,000 live animals, apprehended over 7,700 offenders and confiscated more than 60,000 dead animals and 18,000 kilos of wildlife meat, significantly disrupting the illegal wildlife trade in Cambodia.

General

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 also 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. At the start of 2021 we lost our investigator and database manager, Dara. Following this we hired Mr Panharit, to work solely on the database. We also hired a new investigator, to gather information on the wildlife trade. This approach is working well, data is entered into the system in a timely fashion and the investigator is able to concentrate solely on trade. Later in the year a further two investigators were employed. In September 2021, Panharit was assigned to work more on legal matters in order that he can learn and eventually assist WRRT with legal aspects and



WRRT raids known trader's premises

ultimately liaise with the government on matters pertaining to WRRT.

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 2021.

WRRT also supported community patrols in areas of forest we are helping to protect, in Prambei Mom and Metta Tomerchiert, Kampong Speu and at another monk's forest, Rukavorn in Odor Meanchey, which hold endangered species, including banteng.



Kimchhay inspecting stall selling ivory

Operation details

1,533 live animals rescued.

721 operations conducted, including donations.

5,040 dead animals confiscated.

\$9,909 fines collected.

993 animals released.

93 traders apprehended.

753 kg meat.

Vehicles, bikes and hunting equipment confiscated.

Most of the live animals rescued during the year were immediately released back into safe, appropriate habitat. Species rescued included 1 clouded leopard, 1 sun bear, 2 black bears, 4 silvered langurs, 3 black and red shanked douc langurs, 1 pileated gibbon, 7 leopard cats, 7 common palm civets, 1 Asiatic jackal, 5 smooth coated otters, 8 pangolins, 849 birds of different species and many reptiles including



Donated sun bear cub

310 pythons and 160 other snakes including cobras, 149 tortoises and turtles of different species and 4 monitor lizards. In August, WRRT was granted a search warrant for an ivory carving workshop in Phnom Penh and the house next door, which was previously raided in November 2020, based on information that they were continuing to trade. During the inspection, the team confiscated over 100 pieces of raw and carved ivory, totaling 4.2 kg. Both house owners were put into pre-trial detention.

COVID-19 hit Cambodia hard during the first half of 2021, but restrictions lifted in the 2nd part of the year and WRRT operations were able to continue on a more regular basis, which led to increased operations and hence confiscations

In 2022 we intend to recruit 4 additional staff to patrol with the team. These will probably be civilians, whose duty will be to ensure that wildlife is properly cared for and also to collaborate on investigations. We will also hire someone to work on the online trade, whenever possible, collaborating with the platforms, helping to get posts and accounts related to the illegal wildlife trade deleted.

Finances

Expenditure

Personnel Costs:	<u>\$213,214.93</u>
Operating Costs:	
Equipment:	\$2,405
Database:	\$2,871
Operations, including guest house, food, fuel etc	\$44,307.7
Care for rescued wildlife:	\$1,670.04
Legal support, court documents etc:	\$15,855
Informant costs:	\$12,788.13
Vehicle repairs:	\$14,133.10
Miscellaneous, including office costs, uniforms, TSU etc:	\$26,691.38
Total Operating Costs:	<u>\$120,721.35</u>
Total Program costs:	<u>\$333,936.28</u>

Phnom Tamao Wildlife Rescue Centre



Elds deer at Main Lake at Phnom Tamao

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 the 2,300 hectare Phnom Tamao Protected Forest, rescued animals feel at home and thrive. 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

At the start of the year the COVID-19 pandemic continued its rampage, but dissipated considerably over the later months and we have managed to continue our care for rescue wildlife at Phnom Tamao Wildlife Rescue Centre without too many difficulties.

Throughout 2021, a total of 1,270 new animals arrived at PTWRC through confiscation or donation. New additions included: 2 northern slow loris, 3 sambar deer, 4 black bears, 6 pileated gibbons, 10 smooth coated otters, 10 silvered langurs, 12 leopard cats, 305 birds of different species, 1/3 of which were raptors, 313 long-tailed and 27 pig-tailed macaques, and 495 pythons.



Rescued leopard cat kittens brought to PTWRC

67 animals were born at PTWRC in 2021, including: 1 serow, 2 brush-tailed porcupine, 2 common palm civet, 3 Eld's deer, 3 smooth-coated otters, 3 purple swamphen, 4 red muntjac, 4 silvered langur, 5 pileated gibbon, and 7 sambar. 5 painted storks and 2 woolly-necked storks hatched in our very large water bird aviary. The captive breeding program for crocodiles, managed by Fauna and Flora International, also produced 26 crocodiles this year.

973 animals were released, either within the surrounding forest or elsewhere. These included 455 long-tailed and 14 pig-tailed macaques released by FA. Wildlife Alliance has no control over where these animals are taken. 369 pythons were released into natural habitat at various sites around the country. 6 Eld's deer from our captive breeding program for this Endangered species were released into Phnom Tamao Protected Forest to bolster the herds of released deer already living there. 101 released animals were birds of different species, including parakeets, starlings, kites, storks, hornbills, buzzards, and mynahs. Towards the end of the year, 2 smooth-coated otters were transferred to Angkor Archeological Park and will be released after they complete acclimatization and introduction to our released otters already in



Black shouldered kite - ready to flye

Angkor. 2 red muntjac were released, 1 of these at Phnom Tamao and another, a young female hand-raised at the Nursery, was taken to our Wildlife Release Station in Koh Kong. This year, some animals were also released at our Community Conservation Support sites. In January, a female pileated gibbon was taken to Metta Tomachiert Forest in Kampong Speu for acclimatization and release as a mate for a wild male there, whose partner had died. Black-shouldered kites, hand raised at PTWRC, were released at Prambei Mom Community Forest in March.

We faced some challenges with our resident elephants this



Muntjac released at WRS

year. Towards the end of January, bull Sakor became lethargic and suffered from bouts of diarrhea. We medicated him and the other elephants with anti-parasitic treatment and Sakor made a full recovery. He shares his enclosure with female Jamran, a solid citizen who is sturdy enough to take Sakor's occasional prods with his tusks.

In March the Cambodian School of Prosthetics and Orthotics (CSPO) came to measure the damaged leg of Chhouk, our disabled male elephant and two weeks later they brought his new shoe. It fitted perfectly! Chhouk shares his enclosure with Lucky and the two play games that often end up with Chhouk's prostheses getting damaged or broken. CSPO are always ready to conduct the necessary repairs, which are becoming more expensive as he gets bigger. Towards the end of the year Chhouk suffered from serious abrasions to his shoulder and the sole of his stump. We continue to treat these and they are slowly getting better.



"...our little band..."

arrived. We named him You-ee and he is now fully integrated into the troupe. A baby red-shanked douc was brought to PTWRC by WRRT in September. Within a month Vok and Sol, the two elephant keepers who are caring for these delicate primates, were taking her down to the enclosure to meet the other doucs each day. Predictably, she has been named You-F. Although a year younger than the others, she too is now fully integrated into our little band of doucs.

Staff

Unsung heroes, 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 none of our animals went without. Our ancient food truck is experiencing problems and our end of year fund raising efforts, implemented by the Wildlife Conservation and Awareness Team (WildCAT), Liz and Claire managed to secure sufficient funds to purchase a new vehicle, which should be in operation shortly into the New Year. Meanwhile WildCATs, Vuth, Samedi, Alicia and Casey have continued to struggle through the adversities of COVID-19

and towards the end of the year tourism showed a very small upturn, which could indicate some improvements in our financial situation during the coming year.

You-bee and other black-shanked douc langurs that arrived in 2020 continue to grow. Early in 2021, Vok and Sol, the elephant keepers who care for these primates, were concerned for You-A, the male. He has always been less energetic and weaker than the three girls and he has a pronounced pot-belly. We started feeding him natural yogurt for extra protein and benign bacteria and he is now as lively as the girls! At the end of January a new young male douc langur was

brought to Phnom Tamao by WRRT. He was much healthier than the others had been when they



Sitheng, Kem and old food truck



WildCATS and keepers at Khmer New Year

Head keeper Try Sitheng supervised 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 elsewhere in the country. Pisey, Ran and Par, our Nursery keepers continued with their round the clock care of rescued infants and Seth, Sarim, Sol and Vok looked after the elephants, managing bull, Sakor's mood swings and any difficulties encountered by Chhouk, our disabled male elephant. The death of male tiger Toto, caused by failing kidneys due to the advancing years, leaves us with just one tigress, Pharee. She and a pair of clouded leopards are cat keeper Mr Rong's sole

responsibilities nowadays.

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 comes to help when he is needed.

Construction

As in 2020, due to a reduction in the amount of available funds as a result of the pandemic, we continued with our policy to reduce the number of new enclosures we built, preferring to repair or customize existing enclosures when necessary. Rescued smooth coated otters continue to arrive at PTWRC, which made it necessary for us to construct a new otter enclosure. We also built 2 pangolin cages at our Nursery. These animals are escape artists and also, due to their high value in the illegal trade, they are in danger of being stolen if they are not kept in a secure area. These were the only totally new cages we built in 2021. Repairs were carried out on otter, gibbon and silvered langur enclosures and also on the bird aviaries. Bull elephant, Sakor, came into musth, which as usual culminated in some necessary repairs to the elephant enclosures.



Rearranged elephant enclosure

Forest Protection



Treatment for snared sambar

In early 2021, hunting seemed to increase in the Phnom Tamao Protected Forest (PTPF). A sambar stag was found snared around the neck in April by the Community Anti-Poaching Unit (CAPU) rangers, implemented by Wildlife Alliance. It is very rare for animals to be snared within PTPF and wildlife captured in this manner usually does not survive. However, following treatment, the sambar was strong enough to clear his enclosure fence during the night and disappear back into the forest and we have not seen him again. Snares appear to have increased this year in many areas patrolled by Wildlife Alliance teams, likely

driven by the worsening socio-economic impacts of the COVID-19 pandemic in 2021. However this does not seem to be the case at PTWRC. In 2020 the figures for all types of snares collected by our rangers – deer, wild pig, small mammals and birds – was 166 snares and during 2021 it was only 51. However during the year we dismissed the former manager of the patrol teams because he was taking insufficient interest in the patrols and replaced him with our ever-present head keeper, Sitheng, and Mr Narong, another dependable FA official working at PTWRC. The changes made to the management of CAPU have been successful and forest crime at Phnom Tamao now appears to be reducing. The other proviso concerning snare figures is that we have had great difficulty in getting clear numbers from all our CAPU and reports between the rangers and their direct supervisors can vary widely. We are gradually managing to address this.



Training for rangers

While patrols are being conducted more efficiently, there is always room for improvement and towards the end of October we asked the Chi Phat CAPU team that patrols around WRS in Koh Kong to visit PTWRC and share their knowledge and experience with the Phnom Tamao rangers. This proved to be an interesting experience all around and a benefit for both groups.

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Finances

Expenditure

Personnel Costs (excluding Wildlife Alliance managerial staff):	\$166,662
Wildlife Alliance PTWRC keepers, vets, WildCATs, office staff:	\$118,056
FA keepers and officials:	\$28,596
Community Anti-Poaching Units:	\$20,010
Operating Costs:	\$241,499
Construction:	\$12,777
Tiger food:	\$11,259
Elephant food and water:	\$16,044
Food for other animals:	\$135,316
Veterinary equipment, medicines etc:	\$13,842
CAPU equipment:	\$3,521
Behind the Scenes Tours:	\$8,317
Logistical costs, fuel, truck repairs etc:	\$19,052
Miscellaneous, keeper food and water, office costs, TSU etc:	\$21,371
Total Program costs:	<u>\$408,161</u>

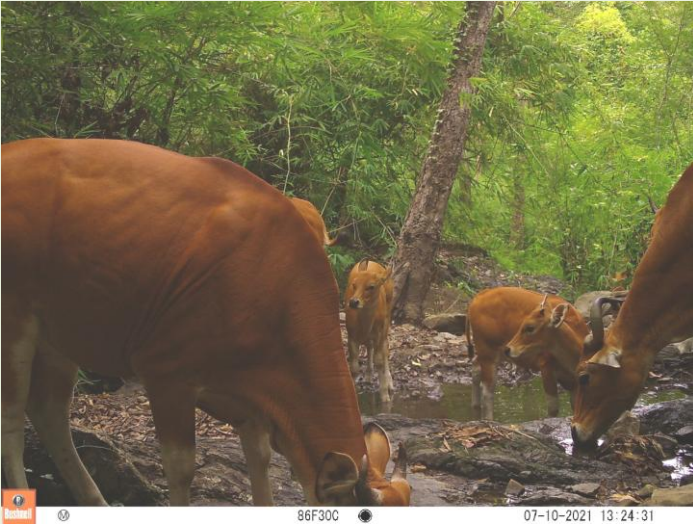
Community Conservation Support

Wildlife Alliance’s new Community Conservation Support (CCS) 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 raising the profile of what they are doing to spread the word.

Prambei Mom, Kampong Speu Province

Led by Soeurn Li, in 2003, villagers started protecting the Prambei Mom Community Forest (PMCF) and the wild banteng herds there because wildlife was being hunted and the forest was being lost to sugar cane plantations. They had no mandate or support to do this and at the time they had no idea that banteng is an IUCN Red-Listed Endangered species. They just wanted them to survive. In 2018 we heard about this and started our support.



Banteng drinking at natural water source

The area has only a few natural water sources and in 2021, we constructed two more pools to ensure the banteng and other wildlife species have sufficient drinking water, making a total of 4 pools that we have built in Prambei Mom. IMB Solar once again donated solar panels and a solar water pump to keep both pools full. This new water source has a dual benefit. Overspill from the pool is watering the dry grass, which is now fresh and green, to some degree replacing the food from the sugarcane plantation that is now less accessible to the banteng since the owners constructed a fence to keep them out.

We continue to monitor the banteng health and herd demographics using camera traps. In 2021

dry season, there were fewer banteng photographed in single photos, but at the end of the year there were 4 or 5 new calves seen and no new animals were photographed with snare injuries. The exception to reduced visits to pools and natural water sources seems to be the last pool we built, which could indicate that the animals have merely been able to spread out more, as they now have more sites to drink from. Banteng are coming to the fourth pool to drink in larger numbers, perhaps 7 or 8 animals at a time and females with young have also been filmed. In October, for the first time, a large bull gaur was photographed drinking at this pool! This species is increasingly rare in Cambodia due to hunting and snares and no gaur were reported in PMCF for many years.

The PMCF community rangers continued their Community Anti-Poaching Unit (CAPU) patrols throughout 2021. Unfortunately, snare numbers increased greatly in 2021 as compared with 2020, likely as a result of the worsening socio-economic impacts of the pandemic in Cambodia. The previous year 328 snares were collected. In 2021 the figure more than doubled to 718! Almost all of these were found in the



Prambei Mom CAPU with snares removed from forest

neighboring sugar cane plantations, which we are addressing. There was an increase in

numbers of snared banteng up to June 2021, when we saw 6 animals with snare injuries. One of these animals, an old bull subsequently died. A meeting, led by the Thporng District Governor, was held in August between local authorities, plantation workers and management, FA officials, and Wildlife Alliance regarding the snares and hunting in Prambei Mom. The meeting was good and the District

Governor was most supportive and helpful – he expressed his gratitude and embarrassment that foreigners had come to his country to help conserve wildlife – and in the final quarter of 2021 no new animals were seen with snare injuries and snare numbers collected by the rangers was reducing. To broaden awareness of the snaring epidemic and its impact on the PMCF banteng, our [article](#) analyzing CAPU patrol and camera trap data was published in the *Cambodian Journal of Natural History*.

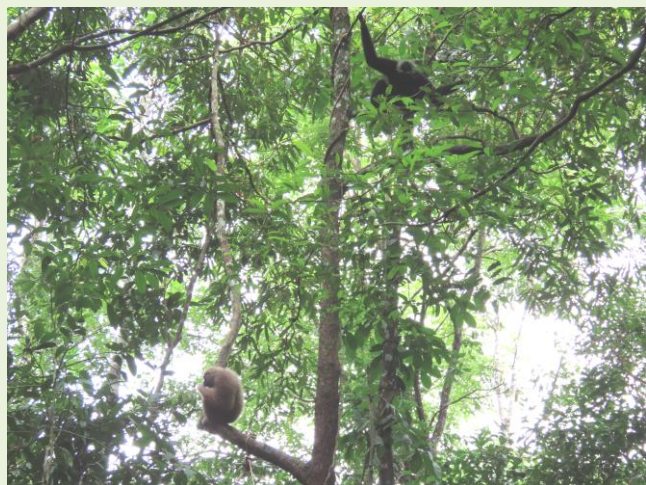
Prey Srai Bos (also known as Metta Tomachiert), Kampong Speu Province

Once we started supporting the PMCF rangers, news spread and we were contacted by a monk who lives in a small area of forest around 30 km away. Venerable Prom Sochiert, who has no influence or power to protect this forest, other than the respect that most Cambodians have for these religious men, is extremely gentle and loves all animals. The forest there has been reduced greatly and we are doing our best, in different ways, to help protect what is left.

Last year Prom Sochiert mentioned that there was a male pileated gibbon in the forest who lost his mate. The monk requested we bring a female from PTWRC. Mr Nhek Ratanapich, the PTWRC Director, agreed that we could attempt a release at Metta Tomachiert and a suitable female candidate was identified. The release enclosure was completed in 2020 and in January we transferred the female gibbon. Within a week the wild male, named Nangaly Saoka by the monk, was visiting her acclimatization enclosure!



Prom Sochiert, Bunthoeun and Sitheng



Karona and Nangaly Saoka

Prom Sochiert named the female gibbon Karona and looked after her well, feeding her twice each day in her enclosure. In late May we released Karona and for the first two days following her release neither of the gibbons came to feed. We were all both happy and relieved when Prom Sochiert phoned to tell us that both gibbons were feeding together at the basket beside the enclosure! They now come to feed every day and they travel through the forest together. There are few examples of wild gibbons pairing up with captive animals and this project is very unusual and a first for Cambodia. A [video](#) about their 'love story' that we posted on Facebook was viewed over 2,000 times and attracted a lot of positive public attention for the site, which is important because the forest is under threat.

In September, we learned Metta Tomachiert had been designated to the army and parts of the forest were already being cleared. In October, local people turned up in protest and we arranged a media tour of the site for Hong Meas TV to document the story of the monk who, resplendent in orange robes, enters the forest and calls the animals mimicking the songs of gibbons and peafowl. A few days after the news piece aired on television, Prom Sochiert was told that his small patch of forest is safe and the bulldozers have stopped for the time being....

Prey Rukavorn, Odor Meanchey Province



Bun Saluth and patrol team

Rukavorn Forest in Odor Meanchey Province is around 30,000 hectares and holds good populations of wildlife including Endangered species, such as banteng and Eld’s deer. The forest has been protected for many years by another monk, the Venerable Bun Saluth, who is famous in Cambodia and has received awards for his work and some support from Prime Minister Hun Sen. Bun Saluth is now no longer a monk, but is still protecting this forest. Wildlife Alliance does not give monthly per diems to rangers here, but provides support as requested.

In 2021, we helped to finance construction of a new ranger station to provide a base to facilitate patrols in this large area of forest. In addition, we donated

5 camera traps in January that Bun Saluth placed in relevant places and he is now sending us photographs of wildlife, including banteng of all ages. Later in the year Wildlife Alliance donated 3 motorbikes to help with patrols and we also purchased patrol equipment, including tarps for tents, boots, torches, uniforms and mosquito spray, for the Rukavorn forest rangers.

Finances

Expenditure

Personnel Costs:	\$16,874
FA officials:	\$1,200
Community Anti-Poaching Units:	\$15,674
Operating Costs:	\$27,462.04
Construction (pools, enclosure):	\$4,950
CAPU equipment (patrol bikes, icoms) and uniforms:	\$18,373.28
Animal food	\$1,200
Logistical costs, fuel, truck repairs etc:	\$2,939.76
Total Program costs:	<u>\$44,336.04</u>

Wildlife Release Station

Wildlife Alliance’s Wildlife Release Station (WRS) is a place of tranquility and it is always a pleasure to spend a little time here. Roth Bunthoeun, who manages WRS, has placed camera traps in the forest close to the station to monitor our released and resident wild animals. Wildlife caught on camera around the area include sun bear, green peafowl, a red muntjac with her fawn, sambar, Asian porcupines with their babies, mouse deer, leopard cats, common palm civets, large spotted civets, mongoose, jungle fowl, brush-tailed porcupines and wild pigs, as well as the occasional clouded leopard, all enjoying the protection and safety we continue to provide. In May, for the first time, we recorded a photo of a hog badger. WRS is



Checking the accounts at WRS



Jo-er

surrounded by families of pileated gibbons, perhaps 5 families. Some of these gibbons are now venturing closer to camp and they can sometimes be seen from the visitors' eating area. Great hornbill, *Jo-er*, named by our staff at WRS, which means 'plastic' in Khmer, is well and clearly prefers human company to that of his own kind, as he has stayed around following his release. He is usually quite gentle and usually comes to share our meals. Many of the other animals we have released are also still with us, although most are not as tame as *Jo-er*. We still see our Oriental pied hornbills and mynah birds on occasions and our sambar female and her 2 offspring still visits to take the food we continue to provide

for them, accompanied by the wild stag.

A total of 29 new animals arrived at WRS in 2021 and 28 were released. In February one of our forest patrol units brought us a young male pig-tailed macaque who we integrated with the other two youngsters and released them together the next month. An adult female great hornbill was brought to WRS from nearby Botum Sakor in March and was quickly released because she was extremely wild, clearly distressed and refused all food. She flew off over the trees and we have not seen her again. Similarly, 2 Oriental pied hornbills, brought to WRS by rangers from Stung Proat station, were released immediately because they were extremely nervous and rehabilitation in an enclosure would have been stressful and of no benefit. In March we transferred a young red muntjac that was injured when we released her at the Nursery at PTWRC, to WRS for acclimatization and we released her at the end of July. She is still extremely tame and completely unafraid of people, staying around WRS, where she is safe. Two baby wreathed hornbills that arrived early in 2021 were successfully hand-raised and released by year-end. They are extremely tame and now share the territory around camp with *Jo-er*, putting up with the occasional act of dominance



Mr Oun with *Somnang*

from the larger great hornbill. In May a baby small Indian civet was brought to WRS by the Stung Proat patrol team. We called him *Somnang*, meaning 'Lucky' in Khmer, after the ranger who brought him to WRS. He was released in September. The keepers also hand-raised a leopard cat kitten brought in July by rangers from Botum Sakor and she has grown well. In September, we transferred 5 mynah birds from PTWRC to WRS for acclimatization and as soon as they arrived mynah birds we had previously released, that we had not seen near camp for months visited to check out the new arrivals!



Niki with *Kolap*

Sun bears, Sopheap and Micah, are in fine condition although the trees in their 1ha forested enclosure are now looking the worse for wear! In September, the WRRT brought a small sun bear cub to WRS. We call her *Kolap*, meaning 'Rose', and she is a delight! She was not particularly strong when she arrived, but her condition quickly improved. Ultimately we hope she will ultimately return to the forest and she is walked for most of the day by Research Biologist, Niki, or Soeurn, Oun, Vang or Pich, our keepers at WRS. Even at such a young age she is an expert

climber and seems to be more capable of descending trees than Micah when first he arrived with us. Her rehabilitation has progressed well and when I visited WRS in December, I spent hours with her in the forest, but *Kolab* made no attempt to make contact with me, as she went about her business, foraging for termites and other insects. We are avoiding contact with her and this is just what we want!



Attaching transmitter

We continued tracking hard and soft released pangolins throughout 2021, gathering data for our comparative study of the behavior and survival rates of released animals using each method. Niki spent much of the year down at WRS to help Soeurn, Vang and Oun with this. In March we released female Leroux, who was born at WRS and ten days later we released a wild-born male we had rehabilitated. We tracked them both successfully until the transmitter batteries failed in early May. Leroux proved to be easier to track than the male, going no further than 1.5km. This could be because males are more nomadic or could be because Leroux was born in an enclosure at WRS, making her stay closer. Two males were donated by the Angkor Centre for the Conservation of Biodiversity in May. One has been paired with a remaining female and the other has been released. An infant was born in December, following his release!

We released a total of 6 pangolins during 2021, 3 hard released and 3 soft released. All but one of these (a hard release) had a transmitter fitted, enabling us to track them. One of the hard released animals was found dead shortly following release, the other we quickly lost contact with. One of our pangolin releases was filmed by the BBC in the series *Our Changing Planet*, due to be aired in 2022. It was much easier to track the pangolins that had been in our care for several months and they seem to survive better, but it is too early in our study for us to make any definitive statements on this aspect.



Mother pangolin and baby

In early 2021, hunting pressures in the forest surrounding WRS increased and we made some adjustments to the Chi Phat CAPU team that patrols the area. As at PMCF, hunting and numbers of snares removed around WRS were much greater than in 2020. A total of 1,360 snares were removed by the Chi Phat CAPU during 2021, comprising 576 civet snares and 784 snares set to capture other wildlife. In April and May, while tracking released pangolins WRS staff came across 2 'in use' hunting camps, with evidence of dogs in both camps. Stung Proat rangers assisted CAPU in patrolling to remove the snares these hunters had set and on two separate occasions they apprehended teams of hunters with dogs and confiscated home-made guns. It appears that with the loss of tourism and other forms of income due to the pandemic, people are resorting to conducting more illegal activities in the forest. Kong Li now leads the CAPU and mid-year we enlisted a police



CAPU with collected snares

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officer as his deputy. Fortunately, after a sharp increase in snares during the first half of the year, snare numbers were lower towards the end of the year.

Angkor



Releasing wreathed hornbills

them, in baskets high in the trees around the enclosures for the hornbills and on the ground for the peafowl. They return singly to feed, but they do not come back every day and must be finding their own food in the forest. We receive regular reports of wreathed or great hornbills flying over Angkor Wat and the peafowl are sometimes seen from the road. All has gone well so far. The day after the birds' release the Angkor Centre for the Conservation of Biodiversity brought another 4 green peafowl bred at their Centre and we hard-released them at Lake Santamea, a wild and less visited site within Angkor Thom. These peafowl were extremely nervous and would have fared poorly inside an enclosure. They left immediately and are seen now and again not far from the release site.

Our family of otters was extremely mobile throughout the year and on several occasions did not return for food for 2-4 days, and they are clearly catching their own food easily enough now. In January they were seen traveling along a stream that leads into Siem Reap city and also in Lake Santamea, 3 kms from their release enclosure. Smooth-coated otters are nomadic by nature and we expected this. February 9 was the last time we saw the family of four together. Two days later only the female and two grown pups returned. The male has not been seen since and it is uncertain what happened to him. On most days the three remaining otters return to their old release enclosure to eat the fish we provide, but it is uncertain where they now call home. Sometimes they split, with one of the younger otters taking himself off on his own from time to time. The otter reintroduction was always going to need genetic back up if it was going to be sustainable and early in 2021 two unrelated male otter pups born at PTWRC were selected for release in Angkor and were placed in an 'off show' enclosure at PTWRC to ensure they did not become too humanized. We built a small cage inside the existing otter release enclosure in Angkor and in November we transferred the young males into the new cage for acclimatization. Initially there was little contact from the resident otter family, but



Otters released in Angkor

gradually they started taking an interest in the new arrivals. We have seen no aggression between the two groups, and will open the door, making the full introduction sometime in 2022.

2021 was an eventful year for our released gibbons and their wild-born offspring. Baray and Saranick, the first gibbon pair we released, and *Chung-ruth* and *Kontes-long*, their two offspring that remain with them are well. There is an abundance of fruit in their territory in Tanei and sometimes the family does not show up for the food we continue to provide. In truth the gibbons no longer need this, but it helps to ensure they remain in the selected release area, which is safe. In May some of the silvered langurs we released in 2018 ventured into Baray's domain. He quickly showed them the door!



***Ping-peeung* released**

Ping-peeung reached adulthood in 2020 and was recaptured after being driven out of the family unit by her parents. She spent most of 2021 in an enclosure near Dai Chhnang Gate with her new partner Bakheng, a younger male transferred from PTWRC. The pair are very fond of each other and are often seen grooming, despite a wide age difference. After a year of pair bonding and acclimatization for Bakheng, on December 23 we released them. *Ping-peeung* left almost immediately, but Bakheng, having been born in captivity at PTWRC, was extremely hesitant. *Ping-peeung* loitered around in the branches above, clearly waiting for the much younger male to join

her, which, after several days he ultimately decided to do. These two now comprise the fourth pair of pileated gibbons enjoying the forests of Angkor and they are doing well.

Bayon and Tevy was the second pair of gibbons released in Angkor. Their first and second born, *Aping* and *Kandop*, are both well, as is Tevy's 3rd baby, *Dun-kow*, born in August 2020. First born *Aping* is 5 years old and is ready to make her own way in the world. We intend to capture *Chung-ruth*, the young male born to Saranik and introduce him to *Aping*. Sadly, Bayon passed away in March 2021 leaving female Tevy with no partner. Baray was rescued as an adult, straight from the forest – the only adult wild gibbon we have ever rescued – and was therefore fully conversant with looking after himself. He looked healthy although a little thin, his teeth and general condition looked good when we found his body, and we do not know what caused his death.

Pomпой and Borey, the third pair of gibbons released are also well. Borey was very slow to undergo the change of coat color to black, marking adulthood in male pileated gibbons, but has now mostly made the change. This pair is more reticent around humans than the other gibbons and really only trust Sarin and his son Rith who bring their food each day. Rith was worried in early September when female Pomпой did not come for her evening feed, but the following morning she appeared with a newborn infant clinging to her. We have called their firstborn *May-ambaugh*, or Butterfly, in keeping with the insect theme for all the gibbons born in



Pomпой with *May-ambaugh*

Angkor, which now total 7 with the new arrival.

Finances

Expenditure for WRS and Angkor:

Personnel Costs:	\$21,547
Animal keepers:	\$21,547
Operating Costs:	\$51,773.55
Construction:	\$13,161.67
Animal food	\$10,835.46
Medicines:	\$862
Equipment:	\$9,497.89
Staff food/water:	\$2,470.80
Field costs (surveys/equipment):	\$4,815.72
Logistical costs, fuel, truck repairs etc:	\$5,449.02
Travel and communication:	\$4,680.99
Total Program costs:	<u>\$73,320.55</u>

Final Words

It could have been a troublesome year due to the continued pandemic and one or two other difficulties. We have reduced costs where we can, but we have not cut corners and once again, we have coped with all adversities placed in our path. WRRT is back on track, operating normally once again and in 2022 we will be expanding certain aspects of the team, such as information gathering capacity and in our attempts to address the problems posed by Facebook advertising. None of our rescued wild animals at Phnom Tamao went hungry, with the provision of animal food and medicines continuing throughout the year without interruption. Our animals, both inside the enclosures and outside, are doing well, as indicated by the continued births we are experiencing. As an example, our black necked storks built a nest and have now hatched and raised chicks for the first time – an unusual event for any zoo or rescue centre. Our wildlife release programs in Angkor, Siem Reap and at WRS in Koh Kong are both progressing well despite the logistics and the police roadblocks. Another baby gibbon was born in Angkor, bringing a total of 7 infants born to released gibbons in Angkor since the start of the program. The arrival of rescued sun bear cub, *Kolap*, at WRS gives us hope that we will be successful in releasing this species at last. She is progressing well as she slowly reverts to a new life in the forest. We are also making progress in our research into the care and release of rescued pangolins, which may help with the survival of this increasingly endangered species in the future.

I guess we are all feeling a little bruised by the events of the past 2 years, but we have coped well and with COVID-19 in recession and an easing of restrictions in Cambodia we hope for better things in 2022. My heartfelt thanks go to all our friends, who have supported us so loyally through these difficult times – supporters, staff and keepers – in whatever manner your help is given. We would never have made it without you and I feel we have not let you down!

God bless, stay safe and our very best wishes to you all for 2022.



Many thanks to friends and supporters of our Wildlife Rescue and Care programs in 2021:

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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