



NLC is BirdLife in Cambodia



ANNUAL REPORT 2022

Highlight Key Achievements

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Acronym

CEO:	Chief Executive Officer
CEPF:	Critical Ecosystem Partnership Fund
CPA:	Community Protected Area
ELC:	Economic Land Concession
GI:	Giant Ibis
KNCF:	Keidenren Natural Conservation Foundation
KRRC:	Krong Buk Ratanakiri Rubber Development Joint Stock Company
LWS:	Lomphat Wildlife Sanctuary
LCG:	Local Conservation Group
MoE:	Ministry of Environment
NLC:	NatureLife Cambodia
NTFP:	Non-Timber Forest Product
PDoE:	Provincial Department of Environment
REDD+:	Reducing emissions from deforestation and forest degradation
SBCG:	SreChrey Biodiversity Conservation Group
USAID-MB:	USAID-Morodok Baitang
WSI:	White Shouldered Ibis

MESSAGE FROM CEO OF NATURELIFE CAMBODIA

NatureLife Cambodia's 2022 annual report highlights the key achievements of our projects from January to December 2022. The year 2022 was a significant year of NatureLife Cambodia because the handing-over process from BirdLife International was completed and we fully function as an official partner of BirdLife International in Cambodia



**Mr. Bou Vorsak,
Chief Executive Officer**

As a national conservation non-governmental organization in Cambodia, we will continue to implement our 10 years Programme strategy (2017-2027) which cover five main programs including Prevent Extinction, Conserve Habitat and Site, Conserving the migratory bird, local engagement and livelihood, and capacity building.

After the Covid-19 pandemic camp down in the first quarter of 2022, NatureLife Cambodia's staff has worked hard and produced several outputs that contribute to biodiversity conservation, however, the notable achievements are:

- Establish new species working groups to prevent the extinction of Giant Ibis, White Shouldered Ibis, and Sarus Crane.
- Listing Lomphat Wildlife Sanctuary REDD+ project with Verra and officially launching the project
- Crane Rice scheme is scaling up and benefits 100 local households and provides supplemental food to Sarus Crane.
- Establish and strengthen the capacity of 5 Community Protected Areas (CPAs) and 3 Local Conservation Groups (LCGs), e.g., Toul Neang Sav Plov Loung CPA signed 15 years management agreement with the Ministry of Environment.
- Publish a paper about the status of yellow-breasted bunting in Boeung Prek Lapouv protected landscape

NatureLife Cambodia is governed by governing board and executed by an executive committee with support from the management committee. Our full-time staff was increased from 4 people in 2017 to 21 people in 2022. Administrative and financial policies were improved to fit the requirement while the organization grow up.

Taking this opportunity, in my mandate as Chief Executive Officer, I would thanks to the financial support from all our donors and the collaborative efforts of the Ministry of Environment and our non-government partners, we are hopeful that Cambodia's bird endangered species and its habitats are protected and maintained. Finally, we are also would like to thank our governing board and staff who strongly believe in NatureLife Cambodia mission. Our journey not finish, we will continue working together toward our vision "**Together for nature and people living in greater harmony**"

ABOUT NATURELIFE CAMBODIA

NatureLife Cambodia is BirdLife International's official partner in Cambodia. NatureLife Cambodia (NLC) was officially registered with the Cambodian Ministry of Interior as a national non-governmental organization in February 2017, before BirdLife International's governing Global Council approved NLC to become the national BirdLife Partner for Cambodia on the 9th of December, 2020. The organization was established with technical support from BirdLife International and financial support from the Critical Ecosystem Partnership Fund (CEPF) of the IUCN. NLC was founded with 12 members, of whom 10 were formerly key staff in the BirdLife International Cambodia Programme.

The establishment of NLC forms a key part of BirdLife International's transitional strategy for its work in Cambodia to be led by a local conservation organization. In the second year of NLC's operation as a local NGO in Cambodia, it has signed a memorandum of understanding with The Wildfowl and Wetland Trust (WWT) as well as continuing to implement the existing BirdLife International Cambodia Programme projects in the Lower Mekong Delta. NLC has secured funding from donors such as the Darwin Initiative, The European Union, Oxfam, KNCF, CEPF, IUCN-NL, and the Asian Center for Biodiversity.

In the Anlung Pring and Boeung Prek Lapouv protected landscapes of the Cambodian Lower Mekong Delta Region, NLC is playing a leading role in integrating environmental conservation and biodiversity into the primary school curriculums and conducts awareness-raising activities to enhance support from communities for local nature conservation and sustainable use of natural resources. NLC is also one of the founders of the Cambodia Bird Festival and a project partner of the international vulture conservation consortium; Saving Asian Vultures from Extinction (SAVE).

On the 1st January 2021, BirdLife effectively transferred all Cambodian assets, staff, creditability, and liabilities, along with its ongoing projects in Lomphat Wildlife Sanctuary, the Cambodian Mekong Delta Region, and Tonle Sap Biosphere Reserve to NatureLife Cambodia. This handing-over process has strengthened the role and capacity of the NLC team to advance key conservation priorities at national and sub-national levels. NatureLife Cambodia assumed responsibility for ensuring and maintaining the functioning of national conservation networks, such as the Cambodia Vulture Working Group, and has been at the forefront of the drafting of avian Species Action Plans, as well as successfully negotiating for pro-conservation policies at the top level of national governance, for example, the banning of a vulture-killing veterinary drug in 2019. Alongside this, the NLC team has successfully advocated and facilitated the designation of, a variety of formally protected areas, including the Stung Sen Ramsar Site, multiple Community Protected Areas, Boeung Prek Lapouv and Anlung Pring Protected Landscapes, and Siem Pang Wildlife Sanctuary. As part of the BirdLife International family in Southeast Asia, NLC is also able to network widely across the Indo-Burma region with other BirdLife partners, to leverage additional expertise and resources for conserving migratory or wide-ranging species in the region.

Our vision: Together for nature and people living in greater harmony

Our mission is to conserve Cambodia’s biodiversity by managing natural resources sustainably for the benefit of all.

NatureLife Cambodia is working to achieve the following **objectives**:

- To maintain and preserve wildlife in Cambodia,
- To conserve sites and habitats for biodiversity
- To sustain ecological systems that enrich people' lives,
- To contribute to the alleviation of poverty by enhancing the sustainable use of natural resources
- To Build capacity and promote conservation work among Cambodian citizens.



NLC staff

HIGHLIGHTS KEY ACHIEVEMENTS OF PROJECTS OF NATURELIFE CAMBODIA IN 2022

LOMPHAT WILDLIFE SANCTUARY

Lomphat Wildlife Sanctuary covers approximately 250,000 ha. The current NLC's project utilizes field monitoring staff and nine technical staff to work and cover parts of this enormous landscape. Our work focuses on three main components 1). Site management and law enforcement (SMLE)—In this component, we work closely with PDoEs (Ratanakiri and Mondulkiri province) by supporting, providing capacity building, and equipping the rangers to enforce the law enforcement to protect and conserve the natural resources. We supported four sub-stations: one at Mondulkiri (O'Roveak), and three at Ratanakiri, (O'Rohar, Lomphat, and Sre Chrey). The total number of rangers is 23, including the LWS director and deputy directors. The law enforcement teams used the SMART book to record data and patrol information. The data of patrol events were compiled and entered into the SMART desktop stored and produced the report. 2). Biodiversity conservation and protection (BCP)—We focus on flagship species such as Giant Ibis, white-shouldered ibis, Sarus crane, and vulture by conducting several activities such as nest finding and monitoring, roost counting, *trapaeng* (seasonal wetland) monitoring, awareness-raising, and other species recording. 3). Local community empowerment and livelihood improvement (LCELI)—currently, NLC has supported three Community Protected Areas (CPAs); O'Rey CPA, Veal Kambor CPA, and O'koki CPA, and a local community called Sre Chrey Biodiversity Conservation Group (SBCG). NLC offered the sub-grant to all CPAs and SBCG to implement their management plan. In addition, NLC provides a sub-grant to Sansam Mlup Prey (SMP) to pilot ibis rice at two target villages.



Forest type in Lomphat Wildlife Sanctuary

Key Achievements within 2022:**1. Site Management**

- Supported and worked with 23 LWS rangers from four different sub-station of Ratanakiri and Mondulkiri province to conduct monthly patrols. SMART mobile was used to support these patrol activities.
- Developed and built the Rangers sub-station including two meeting halls, one Rangers base station, three bathrooms, three camp platforms, and one big pond at Roveak sub-stations, solar batteries, and other office equipment.
- Provided the patrol equipment such as hammocks, GPS batteries, first-aid kits, boots, backpack bags, Smartphones, and battery storages (power banks).
- Supported LWS- Ratanakiri site to install 10 LWS boundary poles, 45 core zone boundary poles, and provide one core zone pole template.
- Supported all four ranger stations to conduct monthly meetings.

Table 1: The summary of the patrol event

Patrol effort	O'Roveak	O'Rohar	Lomphat	Sre Chrey	Total
Number Patrol	44	104	79	80	307
Number Day	124	179	107	95	505
Number Night	72	55	31	17	175
Distance (km)	3683	5716	3392	2336	15127
Number Hour	1419	1956	1142	1065	5582

Table 2: The summary of patrol result

Description	Amount	Comment/Notice
Chainsaw confiscated	15 Chainsaws	LWS ranger teams confiscated 15 chainsaws in 2022, (Mondulkiri team 5 chainsaws and Ratanakiri 10 chainsaws).
Timber confiscated	141.84m ³	LWS ranger teams have stopped and confiscated 141.84m ³ (Mondulkiri 97.64m ³ Ratanakiri 44.2m ³).
Snares/Traps removed	686 snares	432 snares were removed by Mondulkiri team and 254 snares were removed by Ratanakiri team,
Land encroachment	19 cases	6 cases in Mondulkiri site and 13 cases in Ratanakiri site.
Illegal building (house, cottage, hut....)	5	5 illegal buildings (houses, cottages) were destroyed by patrol teams. 1 by the Mondulkiri patrol team and 4 by the Ratanakiri team.
Live animals rescued and released	5 cases	34 live birds were rescued, 33 by Mondulkiri and 1 by the Ratanakiri team.

Dead animal confiscated	9 cases	LWS patrol team cracked down 9 cases of wildlife poaching, 8 by Mondulkiri team and 1 by Ratanakiri team.
Illegal logging/poaching camps destroyed	13 camps	13 poaching camps were destroyed, 10 by Mondulkiri and 3 by Ratanakiri team.
Crop remove/ Destroy	132 crops	132 crops (cashews, casava, banana) were removed by the Ratanakiri patrol team.
Pole/barbed wire/fence removed	336 fence poles	In 2022, Ratanakiri team removed 336 fence poles from LWS.
Military-style rifles confiscated	2 guns	2 military-style rifles were found and confiscated by the Modulkiri patrol team.
Homemade gun confiscated	5	4 homemade guns were found and confiscated by Mondulkiri and 1 by Ratanakiri patrol team.
Motorbike confiscated	11	11 Motorbikes were confiscated by Mondulkiri team.
Tractor/Hand tractor	4	4 hand tractors were confiscated by Ratanakiri patrol team.
Fishing gear equipment confiscated	14	14 Illegal electric fishing shocks were confiscated by Ratanakiri patrol team.
Boat and Machine	2	2 boats and machines were confiscated by Ratanakiri team.
File lawsuit to court	9	Ratanakiri patrol team sent 9 cases to the court
Offenders arrested	14	12 offenders were arrested by Mondulkiri and 2 by Ratanakiri patrol team.
Written warning	2	2 people got a written warning from Ratanakiri patrol team.
Verbal Warning	43	43 people got a verbal warning to stop entering in LWS core zone without permission, 25 people by Mondulkiri, and 18 by Ratanakiri patrol team.



Patrol equipment providing



LWS Boundary poles installation



Roveak Rangers' station building



Confiscated equipment (left) and illegal logging crackdown (right)

2. LWS Stakeholder meeting

In 2022, NLC organized the LWS stakeholder meeting focused on effective sanctuary management. The meeting was conducted in collaboration with Ratanakiri- PDoE. The representative of the LWS CPA federation, O'Rey CPA, Seda CPA, and O'koki CPA were invited to join the meeting. The meeting was presided by H.E. Lun Sopheap, the deputy governor of Ratanakiri province, Mr. Hem Socheth, deputy general of the general directorate of Natural Protected Area of MoE, director of the Department of Conservation of the East Mekong Protected Area, PDOE of both provinces, CEO of NLC, district governors, commune chief, and other relevant key stakeholders, the total number of participants was 44 people including 3 females. the meeting aimed to share the results of the implementation with stakeholders and continue to strengthen cooperation between stakeholders

to participate in the protection and conservation of natural resources, raising the level of knowledge and improving the lives of local people, define the mechanisms and solutions to the issues raised and to strengthen the implementation of the protection and conservation of the Lomphat Wildlife Sanctuary with high efficiency; and to promote the participation and cooperation of all stakeholders in managing LWS.



LWS stakeholder meeting in Ratanakiri provincial department of environment

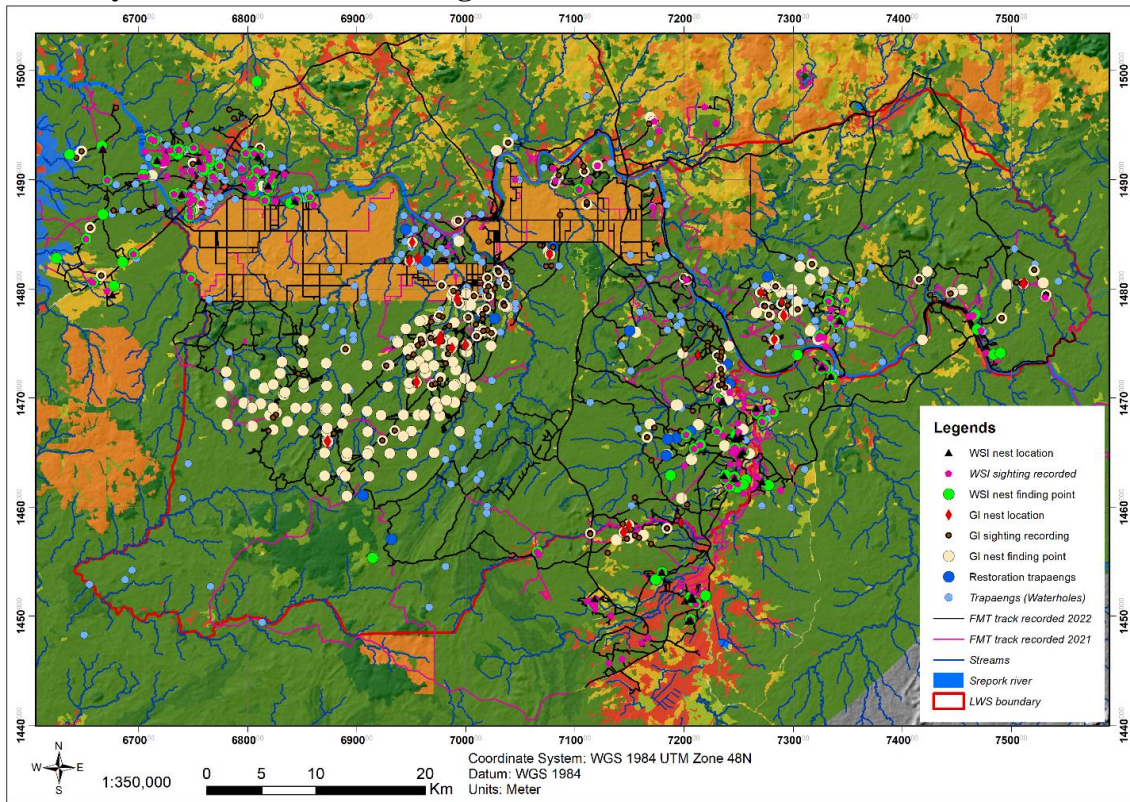
3. Ratanakiri zero snare campaign

On 4th September 2022, NLC in partnership with Conservation International, Fauna & Flora International, Angkor Centre for Conservation of Biodiversity, and other partners organized the 6th campaign of Zero Snaring in Ratanakiri. There were 395 participants presided by H.E, Neth Pheaktra, undersecretary of state of Ministry of Environment officials, Ratanakiri governor, Ratanakiri departments, NGOs, media people, Private sectors, district governors, militaries arm forces, commune council, CPA member, teachers, and student. Several activities such as, the Zero-snaring banner launching at Lomphat district, a field visit to key biodiversity hot spot of Lomphat and O Rey CPA, press conference, role play, the speech of key speakers, remark of Ratanakiri provincial governor, and lastly the open remark provided by H.E Pheaktra. Campaign marching was from the venue to Ratanakiri market, it attracted more people along the road. At least 20 articles were released about this event. Profile of NatureLife Cambodia in Ratanakiri was promoted.



Ratanakiri Zero Snaring campaign event

4. Biodiversity research and monitoring

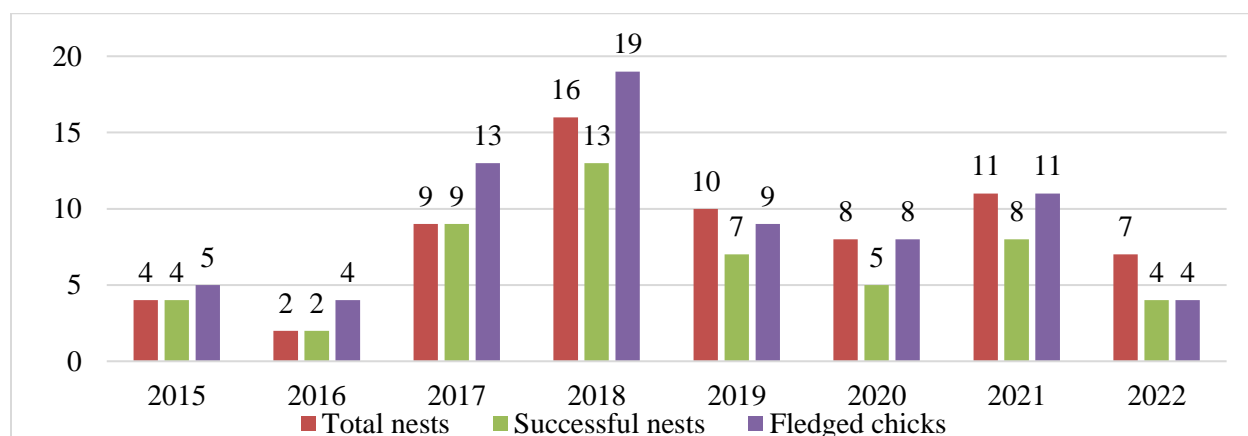


The map of biodiversity data survey task in LWS, 2022

4.1. Nest finding and monitoring

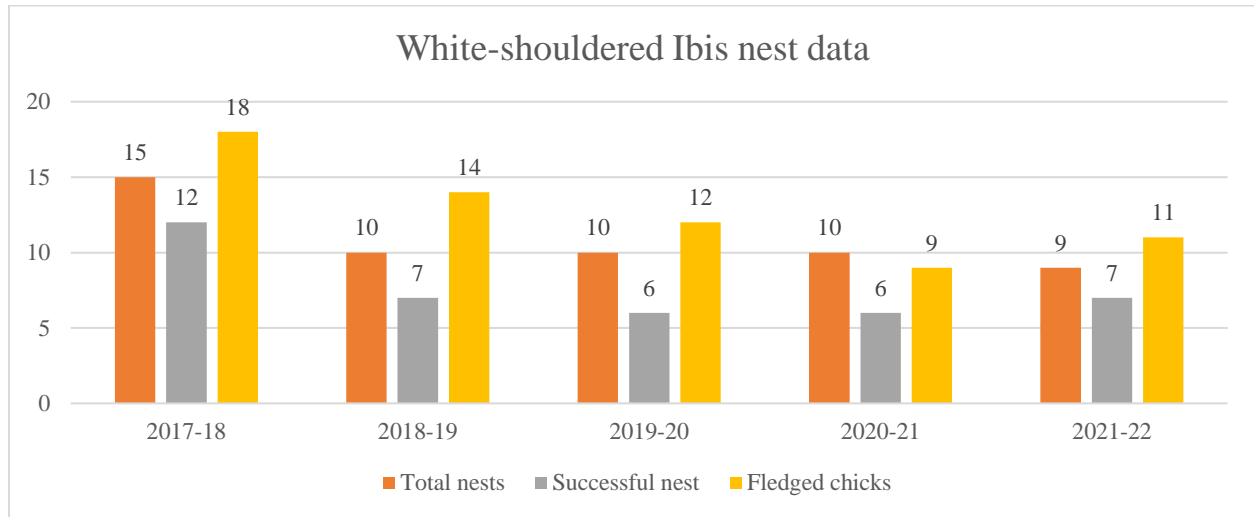
In 2022, the LWS-Biodiversity team conducted the nest searching and monitoring for key flagship species such as giant ibis *Thaumatibis gigantea*, white-shouldered ibis *Pseudibis davisoni*, Sarus crane *Antigone antigone*, lesser adjutant *Leptoptilos javanicus* and Asian woolly-necked stork *Ciconia episcopus*. As a result:

Giant Ibis (GI): We started nest searching in the rainy season from May to October at 28 locations mostly inside the LWS. Seven nest pairs were found and monitored by the field monitoring team. By the end of the breeding season, four nests were confirmed to have successfully fledged with a total of four chicks fledged (average number of chicks per nest = 1). Three nests failed to fledge chicks; two of these failed for unknown, possibly natural reasons (nests 1 and 2, see table below), however, one nest (nest 4) failed due to disturbance from illegal logging (giving each nest a 57.14% chance of fledging successfully).



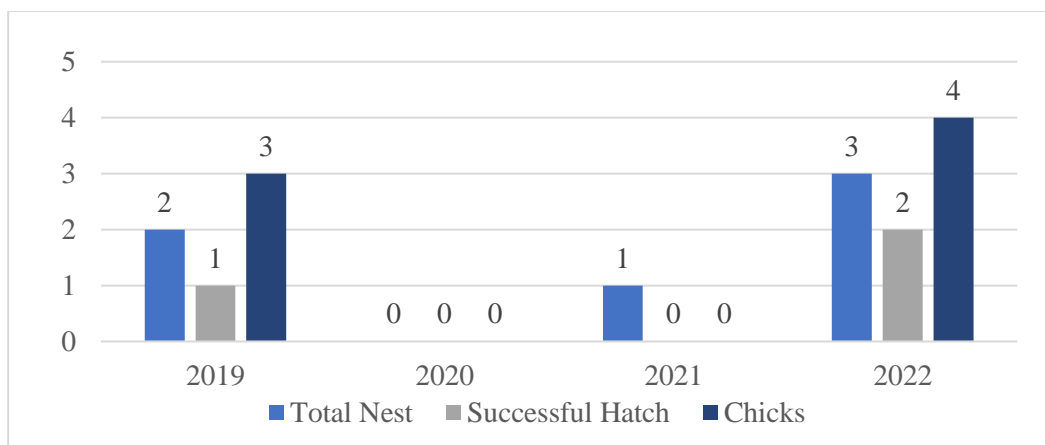
Giant Ibis nest data in LWS

White-shouldered Ibis (WSI): the biodiversity team conducted nest searching and monitoring for WSI from late November 2021 to late April. By the end of the breeding season, nine WSI nest pairs were found and monitored. Nests were located mostly outside LWS and near rice fields. Two nests were only found inside the sanctuary. An important location located in Sre Angkrong commune that used to have a few nests every season, there was only one nest found. In this season, 4 nests were found in Rayor commune's rice field area, which means this area is holding various significant factors for WSI in their breeding season. Sre Chrey's rice field area is still important, however, due to high threats, the number of nests dropped. Two nests were found in this area. By the end of the breeding season, 7 nests were confirmed to have successfully fledged with a total of 11 chicks fledged (average number of chicks per nest = 1.22). Two nests were abandoned due to unknown reasons. We assumed that they abandoned their nests due to human disturbance because we found evidence of plows near their nests. We found high threats, especially human disturbance at all nesting sites of white-shouldered ibis.



White-shouldered ibis nest data in LWS

Sarus Crane (SC): Sarus Crane breeds in the wet season from May to October. In Cambodia, this large bird is mostly found building their nest on the ground in the grass field of a dry dipterocarp forest. Among breeding areas in the northern and northeastern parts of Cambodia, Lomphat wildlife sanctuary is one of them, where NLC is working to conserve biodiversity. In this sanctuary, the first Sarus crane nest was recorded in 2019 by NLC. However, the nest was recorded a long time ago and this sanctuary is always known as a good breeding habitat for Sarus crane. In 2022, three nests were found inside the sanctuary. The amount was higher than the previous year. By the end of this breeding season, 2 nests were successfully fledged with 4 chicks (average number of chicks per nest = 1.33 and successful percentage = 66.66%). One nest was abandoned due to an unknown reason. However, on the first abandoned day, the pair of a parent was found foraging near there. We did not find much evidence other than some small pieces of eggshell. We kept monitoring the nest until the parent left the nesting area to see if the chick already hatched, however, we did not find it.



Sarus Crane nest data in LWS

Camera trap monitoring may be an excellent option to monitor the progress of Sarus crane nests. There is not much experience to draw from here, however, in 2022 our team in Lomphat Wildlife Sanctuary placed a camera trap at a nest in the sanctuary after the nest had been discovered in the mid-breeding season after the chick had hatched. Based on the testimony of the team, the placement of the camera did not disturb the cranes to any significant degree, not more than simply monitoring the nest visually would have. The data recovered from the camera trap at the end of the season provided very useful data including the growth of chicks, their activities in and surrounding their nest, and the times that they leave and return to their nests. With this data, it was possible to make an accurate estimation of fledgling survival/recruitment, which would not have been possible to do with a high degree of certainty otherwise. Furthermore, in the case of threats and/or mortality occurring, camera traps may be the only way to collect this data accurately. This protocol, therefore, recommends this as a very advantageous method to monitor nests.

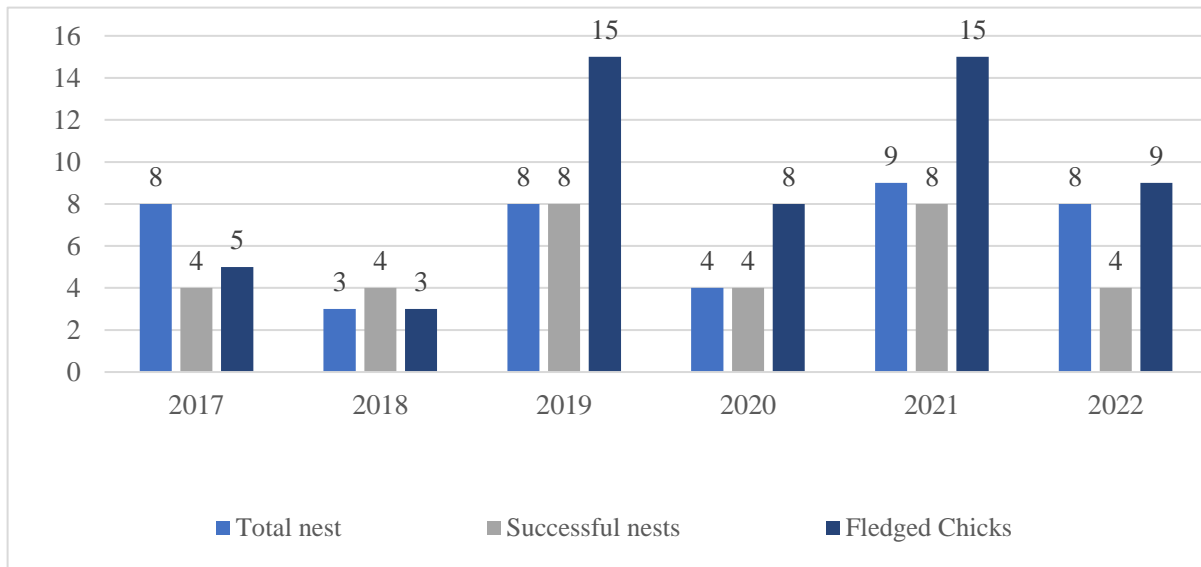
Camera settings: The camera trap was set automatically to record the date and time and to operate 24h per day with the 30s between photographs. The camera was placed around 6m from the nest's edge to maximize encounters and the height of the camera trap of around 60cm from the ground. The data was retrieved from the camera once a week or twice a month after the chick hatched.



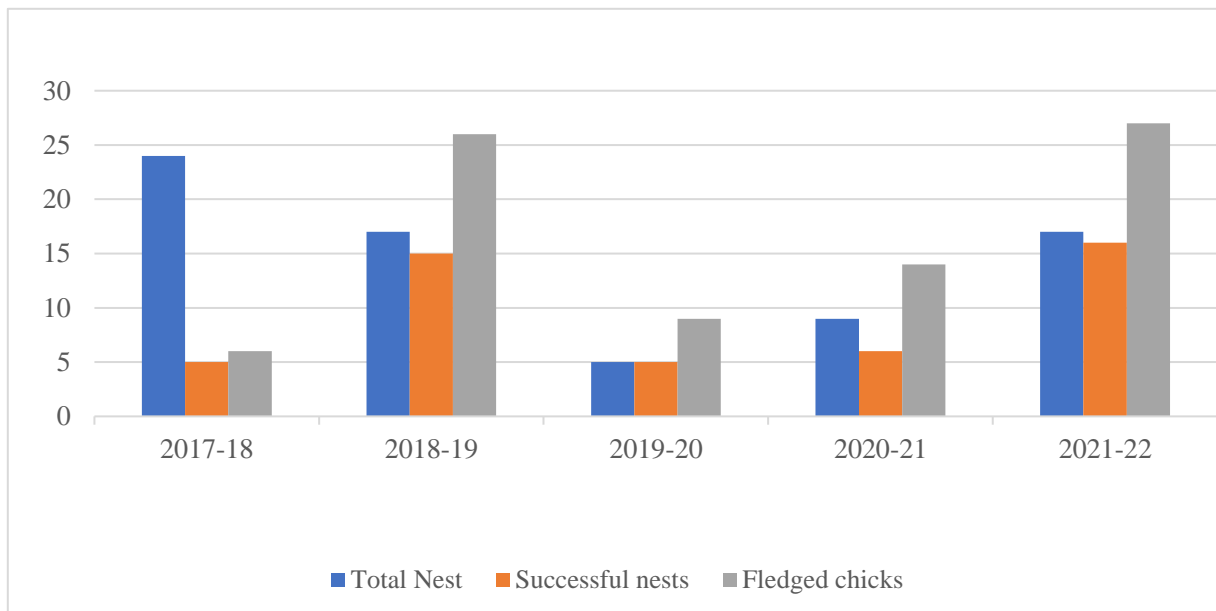
Sarus crane nest monitored by camera trap

Lesser Adjutant and Woolly-necked Stork: By the end of the breeding season of 2021-2022, the total number of nests of a vulnerable bird Lesser Adjutant was 17 nests. Sixteen nests of Lesser Adjutant were successfully fledged with 27 chicks. One nest was confirmed as a failure due to an unknown reason. Lesser adjutant builds their nests in a colony and the biggest colony this year consisted of 6 nests. In LWS, lesser adjutant nests are found widely across, however, only three areas are found in recent years including Veal Kambor, O'koki CPA, and Phnom Raveak.

Another bird that we recorded information on their nests is the Woolly-necked Stork. At the end of the 2022 breeding season, 8 nests of this near-threatened bird were recorded. Four nests were successfully fledged with 9 chicks, unfortunately, 3 nests failed due to an unknown reason and 1 nest was due to chick collection. Although they are not critically endangered birds as both ibises, those nests were regularly monitored by our staff. The below graphs were the lesser adjutant on the left and the woolly-necked Stork on the right.



Lesser adjutant nest data in LWS from 2017 to 2022



Woolly-neck stork nest data in LWS from 2017 to 2022

4.2. Roost Searching and Census

Giant Ibis Census: In 2022, the biodiversity team conducted the Giant Ibis census at 57 *trapaengs* (natural waterholes). A total of 18 days over January, February, and March 2022, with six survey days in each month falling between the 22nd and 27th of the month. A total of 13 monitoring personnel were involved in carrying out the surveys over this period, including seven permanent NatureLife Cambodia staff assisted by nine local community members.

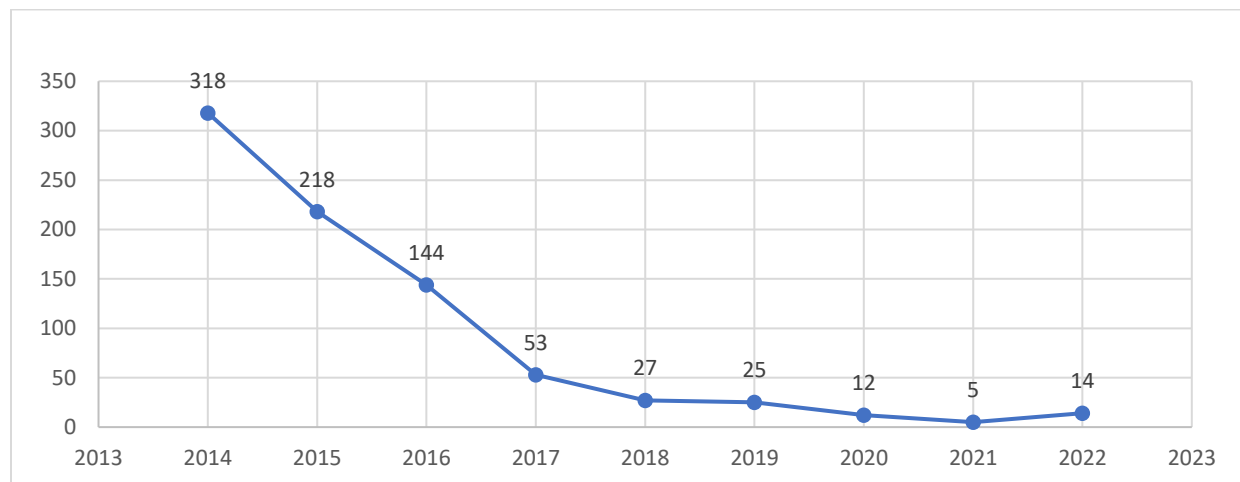
The results of the surveys in each of the six groups, and for the total aggregated area, are displayed in the below table.

Table 3: Giant Ibis census result

Trapaeng Group	January 2022				February 2022				March 2022			
	No. of detections			Estim. Birds	No. of detections			Estim. Birds	No. of detections			Estim. Birds
	Visual	Calls	Total		Visual	Calls	Total		Visual	Calls	Total	
1	0	12	12 (23)	12	6	6	12 (28)	12	7	5	12 (28)	12
2	2	4	6 (15)	6	2	0	2 (2)	2	0	0	0 (0)	0
3	0	4	4 (4)	4	0	2	2 (2)	2	2	2	4 (4)	4
4	0	1	1 (1)	1	4	0	4 (4)	4	4	0	4 (4)	4
5	0	2	2 (2)	2	2	0	2 (4)	2	0	0	0 (0)	0
6	1	4	5 (5)	5	2	0	2 (2)	2	2	0	2 (2)	2
Total	3	27	30 (50)	30	16	8	24 (42)	24	15	7	22 (38)	22

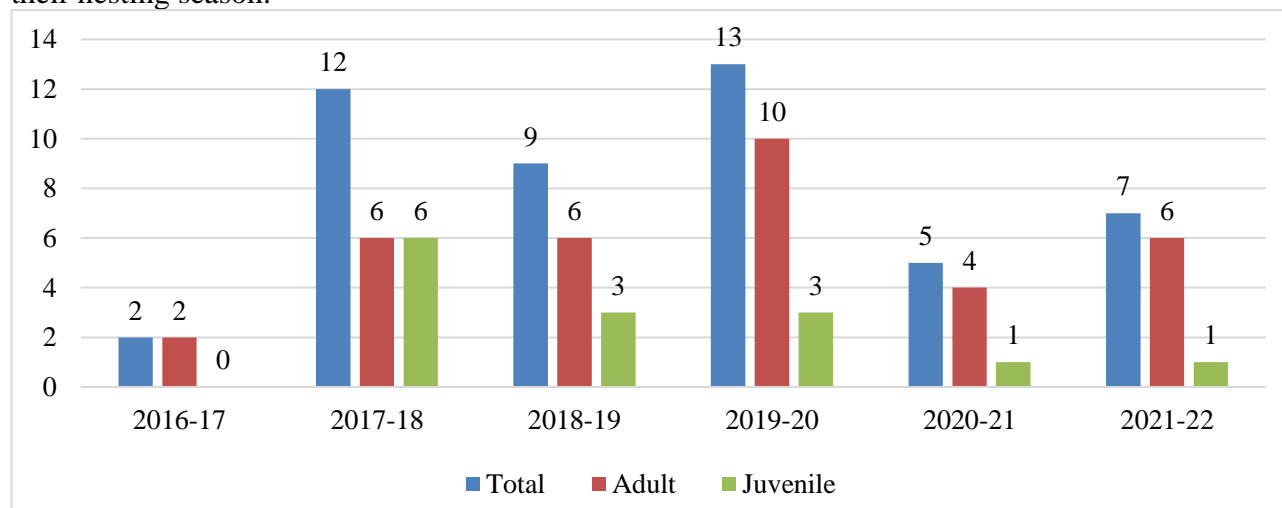
White-shouldered Ibis Census: By the conclusion of the 2022 census season in Lomphat Wildlife Sanctuary, the highest single count of white-shouldered ibis recorded was only 14 individuals. Over the whole of season 6 communal roosts were recorded as visited by white-shouldered ibis during census surveys, namely; O'Andong, Sre Phum Chamroeun, Sre Pu Chan, Toul Khmoch, Sre Tr. Chrey, and Sre Ta Msuk.

These results are still concerning although the total count increased from the last counting season with regards to the overall trend and represents the low totals of census counts or roost sites found in Lomphat Wildlife Sanctuary in over 10 years of monitoring. Since 2014 however, the counts have been for 7 consecutive years declined precipitously. The decline is so steep, with counts often halving from one year to the next until this year that it experienced increasing. It is difficult to make any firm conclusions as to the cause.



White Shouldered Ibis population trend in Lomphat landscape

Sarus Crane Census: LWS is one of the nesting sites in the eastern plain of Cambodia for Sarus crane alongside Chhep and Kulen Promtep Wildlife Sanctuary, which are in the northern plain. LWS is also a foraging site in the non-breeding season for Sarus Crane. Since they are regularly seen using the sanctuary in the non-breeding season, the Lomphat Team has joined the dry season census by conducting the census once a month from December to May. The result of the 2021-22 non-breeding season census showed that the highest number is 7 individuals, consisting of 6 adults and 1 juvenile. The highest count was in May and it was understandable since it was the start of their nesting season.



Result of annual Sarus crane census in LWS from 2016 to 2022

4.3. Trapaeng (waterhole) restoration and monitoring

Trapaeng restoration: Trapaengs are very important for wild animals in dry dipterocarp forests because they mostly depend on these waterholes for drinking and foraging in the dry season. Therefore, trapaengs are being dug up to deepen them so that they can store water longer in the dry season. In 2022, NatureLife Cambodia restored 10 trapaengs in the Lomphat Wildlife Sanctuary

under the support of CEPF. The list of trapaengs that were selected for digging up is in the below table. Those waterholes were selected based on ecological importance for biodiversity, especially key birds, the depth of the waterhole, and the amount of vegetation. Before the digging activities started, we conducted village meetings at 6 villages (Sre Chouk, Thmey, Sre Chrey, Srepork Thom, Roveak, and Kaeng Sann villages) that were involved in the restoration area of the 10 selected trapaeng. The village meeting aimed to announce the trapaeng restoration project to local people and the authorities; to spread awareness about the importance of trapaengs to dry forest ecology; to ask for permission and consultation from the local people and authorities for the project; and to offer the opportunity for people to join the trapaeng digging teams. The below table is the list of 10 restoration trapaengs.

Table 4: The list of Trapaeng restoration in LWS, 2022

No	Tr. Name	Co_X	Co_Y	Core layer Volume	Middle layer Volum	Outside layer Volume	Shape	Started Date	Finished Date	No. of participants
1	Tr. Krapue Skorm	702634	1477283	10m*10m*0.75m	20m*15m*0.5m	30m*20m*0.3m	Rectangle	19-Mar-22	26-Mar-22	10
2	Tr. Alung Prang	697472	1475751	10m*10m*0.75m	20m*15m*0.5m	30m*20m*0.3m	Rectangle	19-Mar-22	24-Mar-22	11
3	Tr. Sakun	724194	1471290	10m*10m*0.75m	20m*15m*0.5m	30m*20m*0.3m	Rectangle	15-Mar-22	6-Apr-22	10
4	Tr. Pak Vaen	718478	1466236	10m*10m*0.75m	20m*15m*0.5m	30m*20m*0.3m	Rectangle	20-Mar-22	24-Mar-22	20
5	Tr. Romaeng	718366	1464722	10m*10m*0.75m	20m*15m*0.5m	30m*20m*0.3m	Rectangle	15-Mar-22	19-Mar-22	20
6	Tr. Ta Yaem	723952	1473094	10m*10m*0.75m	20m*15m*0.5m	30m*20m*0.3m	Rectangle	13-Mar-22	18-Mar-22	10
7	Tr. M'Rach	727643	1481120	10m*10m*0.75m	20m*15m*0.5m	30m*20m*0.3m	Rectangle	1-Apr-22	7-Apr-22	10
8	Tr. Kokoh	690569	1461057	10m*10m*0.75m	20m*15m*0.5m	30m*20m*0.3m	Rectangle	19-Mar-22	28-Mar-22	10
9	Tr. Trorb	693186	1457041	10m*10m*0.75m	20m*15m*0.5m	30m*20m*0.3m	Rectangle	19-Mar-22	26-Mar-22	10
10	Tr. Nang Nhav	707995	1483840	10m*10m*0.75m	20m*15m*0.5m	30m*20m*0.3m	Rectangle	17-Feb-22	26-Feb-22	11

Trapaeng monitoring: The biodiversity team conducted twist time per month to collect and observe the restored and non-restored trapaeng. In the new trapaeng monitoring season of 2021-2022, 26 trapaengs are selected for monitoring including 7 restoration and 21 non-restoration trapaengs. All selected trapaengs were planned to monitor twice a month or once in 2 weeks as in previous years. However, only 8 trapaengs were monitored properly and completed all required data namely, Sokin, Trach Thom, Kra Nhanh, Khtum, Ahlum Trayorng, Krapoer Skorm, Snagke Thom, and Tunsong Thom. The reason that many trapaengs were not monitored properly was that it overlaid another activity, which was the Giant ibis non-breeding census.

Trapaeng monitoring in the 2021-2022 season was usually conducted from December 2021 to April 2022. After monitoring for five months, the result showed that the non-restoration trapaengs dropped water levels faster than restoration trapaengs, especially between February and March. However, most of the monitoring trapaengs did not completely dry up due to early rain. It started raining in March and even more in April that bringing some trapaeng back to being full or half of water. Besides water level, we also monitored the amount of grass, mud, legal and illegal activities, livestock, and wildlife. Throughout the whole season, four key species were recorded during the monitoring including White-shouldered Ibis, Lesser Adjutant, Sarus Crane, and Woolly-necked Stork. Most of the animals were recorded at non-restoration trapaengs.

In 2022, we deployed eight camera traps at seven restored trapaengs and one non-restored trapaeng. The camera traps deployment aimed to monitor wildlife and other human activities. Natural waterholes were not monitored by camera traps. Camera traps were placed at waterholes during the dry season from December to May. All camera traps were set to automatically record the date and time and to operate 24h per day with the 30s between photographs. All cameras were placed 2-15m from the water's edge to maximize the encounter. They all were moved to follow the recession of water. The memory of the camera traps was changed twice a month. As a result, at the end of the monitoring season, we recorded 28 wildlife species including 5 mammals and 23 bird species. Among the recording species, there are three globally threatened birds namely; giant ibis, white-shouldered ibis, and lesser adjutant. We could also see water recession through camera trap photos. A few illegal and legal activities were recorded. Moreover, many livestock were found using trapaengs. Seeing the result, we can conclude that wild animals still kept coming to use digging trapaengs.

Table 5: Camera trap deployment at restoration Trapaeng in LWS, 2022

No.	CAMERA_ID	Location	Deployment Date	Retrieval/failed Date
1	LWSBL01	Tr. Khtum	19-Jan-22	03-May-22
2	LWSBL03	Tr. Russey	19-Jan-22	29-May-22
3	LWSBL04	Tr. Sangke	19-Jan-22	29-May-22
4	LWSBL05	Tr. Nang Nam	18-Jan-22	28-May-22
5	LWSBL06	Tr. Trach Thom	18-Jan-22	27-May-22
6	LWSBL07	Tr. Kra Nanh	18-Jan-22	27-May-22
7	LWSBL08	Tr. Sokin	23-Jan-22	27-May-22
8	LWSBL09	Tr. Khtum	03-May-22	29-May-22

4.4. Camera Trapping for Eld's Deer

Eld's Deer monitoring was a new activity for the biodiversity monitoring team. Sightings of this endangered species were reported many times by our field staff, local people, CPA members, rangers, and others. However, we never have photos of their sightings. Two main areas that reported their sightings are Kaeng Sann and Sre Chrey.

To search for Eld's deer sightings, we initially deployed 3 camera traps in Sre Chrey areas. They were deployed at tr. Ramaeng, tr. Chantol Phnom, and Toul Sre Ta Sen. Unfortunately, two camera traps were burned by a forest fire in February. The last remaining camera was retrieved in May. To search for more of their sighting, we deployed three camera traps again in June 2022, in which two cameras were in a new location. In this second deployment, two cameras were collected back in August and another one was in September.

After two-timing deployments, we recorded their appearance three times with 4 individuals. Among the 4 individuals, we could identify that there are 1 male and three females. All of them were recorded at the same location. After recording their sightings, we plan to do Eld’s deer population and density survey in LWS. We will use camera traps and line transect methods to survey in 2023.

Table 6: The list of camera trap deployment in LWS to observe the Eld’s deer

No.	CAMERA_ID	Location	Deployment Date	Retrieval/failed Date
1	BL01	Tr. Ramaeng	24-Nov-21	10-Feb-22
2	BL05	Toul Sre Ta Sen	24-Nov-21	04-May-22
3	BL10	Tr. Chantol Phnom	16-Dec-21	07-Feb-22
4	LWSBL03	Plov Chit O	07-Jun-22	06-Aug-22
5	LWSBL04	Plov Chit O	07-Jun-22	06-Aug-22
6	LWSBL05	Toul Sre Ta Sen	07-Jun-22	11-Sep-22



Male Eld’s deer was captured by camera trap

4.5. Vulture sighting in LWS 2022

In 2022, we recorded two species of vulture including Red-headed Vulture and White-rumped Vulture with a total number of 17 and 8, respectively. We also recorded 3 unidentifiable vultures this year. Sightings of vultures were recorded 12 times at 11 different locations. Most of the sightings were recorded in the dry season near Sre Chrey and Mchu Nga villages. The last time recorded their sighting was in December 2022.

Table 7: Vulture sighting records in LWS in 2022

Date	Location	Species	Total Record	Activities
8-Mar-22	Sre Rayor	Red-headed Vulture	5	Scavenging
10-Mar-22	Krum Hun Rayor	Red-headed Vulture	5	Scavenging
24-May-22	Sre Chrey	White-rumped Vulture	2	Flying high
30-Jul-22	Chamka Pu Thoeun	Red-headed Vulture	1	Flying high
23-Jul-22	Wat Sre Chrey	White-rumped Vulture	1	Flying high
23-Nov-22	Sre Pu Soeung	Red-headed Vulture	3	Flying high
23-Nov-22	Tr. Snor	Red-headed Vulture	1	Flying high
23-Nov-22	Tr. Snor	White-rumped Vulture	2	Flying high
23-Nov-22	Sre Ta Nat	Red-headed Vulture	1	Flying high
23-Nov-22	Tumnob Sre Chrey	Unknown Vulture	3	Flying high
6-Dec-22	Sre Pu Chan	Red-headed Vulture	1	Flying low
8-Dec-22	Sre Ta Bun	White-rumped Vulture	3	Flying high

4.6. Flagship species awareness raising

In 2022, the biodiversity monitoring team conducted 11 awareness events at 11 villages located near targeted areas. The main objective of the awareness is to publicize the breeding season of white-shouldered ibis and vultures to local people by expecting them to help protect nests and report to us if they accidentally find nests. We also added some important information about other key bird species including giant ibis, Sarus crane, green peafowl, and lesser adjutant. As a result, there were 230 people, including 136 women joined the event.

4.7. Biodiversity record

In addition to the priority work, the field monitoring team has another important work, which is to record biodiversity. The team is required to record biodiversity during their fieldwork activities. For information, they need to record, such as animal species, UTM, numbers of animals, names of recording locations, habitats of species, and their activities.

By the end of 2022, 62 wild animal species were recorded by our biodiversity team. Among the 62 species, 11 are globally threatened species, and 7 are nearly threatened species. Only three mammals and one reptile were recorded; the other 58 species of bird.



NLC staff and local communities conduct Giant Ibis nest searching

5. Community empowerment and livelihood improvement

In 2022, NLC provided a series of training to three community protected areas (CPAs) and one local conservation group (LCG), named Veal Kambor CPA, O'Rey CPA, and O'koki CPA and one LCG named Sre Chrey Biodiversity Conservation group. NLC focused on three main points in community competence: community capacity building and empowerment; community livelihood improvement; forest and biodiversity protection; and stakeholder and network connection.

5.1. Community Empowerment and capacity building

In other to improve CPA capacity, the meeting, workshops, training, and other events were organized for the CPA committees.

- Three pieces of training such as natural resources protection and conservation, good governance and financial management, and CPA management plan development were provided to CPAs, Phnom Tuntang community forest, and SBCG committee and

members. 56 people, including 17 females joined the training. They're from O'Rey CPA, O'koki CPA, Veal Kambor CPA, Sre Chrey biodiversity conservation group, and Phnom tuntang community.

- The meeting, 34 meetings were organized at the CPAs and SBCG. 630 people, including 148 females attended the meeting. The meetings event such as monthly meetings, quarterly meetings, CPA network meetings, and CPA stakeholder meetings.
- Outreach: at least 15 awareness raisings were conducted at 13 target villages. at least 453 villagers, including 245 females joined the event. The outreach season was LWS flagship and its habitat conservation and protection, Ibis rice, and the importance of LWS and PA law.



Okoki CPA management plan development training

5.2. Community livelihood improvement

- NLC sub-granted to SMP to implement the pilot project of Ibis rice at two villages in the Lomphat wildlife sanctuary, Sre Chrey, and Srepork Thom village. 2022 is the second year of ibis rice implementation. The number of farmers in both villages increased from 72 households in 2021 to 102 households in 2022. SMP also promoted the Ibis rice scheme at two more villages named Thmey of Chei Otdam Commune,

Lumphat district, Ratanakiri province, and Roveak of Roya commune, Koh Nhek district, Mondulkiri province. There were 19 households from those both villages who joined the project.

- 58 new households were joining Ibis Rice in 2022. 102 land parcels were demarcated equaling 173.23 hectares (including rice fields 59 parcels equal 145.46 hectares, croplands 7 parcels equal 20.33 hectares, and settlement 46 parcels equal 7.44 hectares).
- The training on the internal control system (ICS) was provided to 21 VMN members, including 5 females.



Ibis rice farmers at their rice fields during the harvesting season

5.3. Community Protected Area Network and CPA stakeholder engagement

- 28 January 2022, NLC organized a meeting at the Lomphat district administrative on the co-management and conservation of natural resources in the Veal Kambor CPA. The meeting was led by Mr. Nou The, the Lomphat district governor. 23 participants have joined the meeting including three Lompart district officers, the Ratanakiri-PDoE deputy director, LWS director, Chey Odam commune council, village chiefs, Vealkambor CPA committees, NLC staff, and the stone companies representatives.

The meeting aimed to build up communication amount CPA, local authorities, NGOs, and mining companies. All partners brief the report to the meeting. As a result, the companies and CPA have known each other and shared their contact. The meeting agreed on three points for future work in co-management and conservation of the natural resource in Veal Kambor CPA.

- On April 28, 2022, two O'Koki CPA committees were invited to join the meeting at the LWS office of Ratanakiri PDoE. As a result, nine participants joined the meeting, including two O'Koki CPA committees, two LWS officials, one community office of PDoE, and four NLC staff. The meeting discussed the topic: "Cooperation to strengthen the management of natural resources in the protected area of the O'Koki community." This meeting aims to strengthen the cooperation and implementation of CPA's activities and the relationship between the CPA Committee, Lomphat Wildlife Sanctuary Office, and the Community Committee of the O'koki Protected Area.
- On December 26, 2022, NLC collaborated with PDoE and USAID-MB to organize the LWS CPA stakeholder network quarterly meeting at Yark Loam meeting hall of the Department of Environment. 29 participants, including the 3 women have joined the meeting. The participants were from the deputy director of PDoE, two LWS management teams of the LWS office of PDoE, two district governors, four chiefs of the commune, 11 CPAs committees (O'Rey, O'koki, Veal Kambor, Seda), 2 Sre Chrey Biodiversity conservation group, 1 USAID-MB, and 4 NLC staffs. The purpose of the quarterly meeting of the community protected area network in the Lomphat Wildlife Sanctuary is to: To Strengthen the relationship and communication among CPA and CPA, CPAs and local authorities, and other key stakeholders. To strengthen and improve the capacity of the CPA committee and CPA network committees. To raise their concern about CPA management and challenge in CPA area management to key stakeholders to define the resolution; and to share the experience
- O'Rey CPA committee organized four meetings with Hoang Anh Lomphat ELC to discuss the ELC request for road repair, canal, and power grid pole removal. 51 people joined the meeting.



LWS CPA network meeting

5.4. Community forest patrol

In 2022, O Rey CPA, Veal Kambor CPA, O’koki CAP, and SBCG conducted their monthly patrol and biodiversity record and monitoring. The patrolling is three times per month for patrolling by one time it three days and two nigh and the activity on purposes purpose of forest patrol is to protect the forest, collect information and observe the foraging site, nest, roost, and Trapaeng monitoring of key bird species. During the patrol the community committee encountered illegal activities: O’rey CPA 18 cases, Veal Kambor CPA 13 cases, O’koki CPA 30 cases, and SBCG 9 cases (the illegal cases detailed in Table 8). They also recorded the biodiversity especially the critically endangered species and vulnerable recorded such as Giant Ibis, White shoulder Ibis, Red headed Vulture, White-rumped Vulture, Black-Shanked Douc Langur, Green Peafowl, Indochinese Silvered Langur, Lesser Adjutant and Sarus Crane.



CPA committee conducted monthly forest patrol

Table 8: The summarized result of CPAs and SBCG patrol event

CPAs	Patrol member	Female	Ranger	villager	#. Patrol event	#. Patrol day	#. Patrol night	Illegal encounter
SBCG	47	0	0	0	36	105	72	9
VKB	75	11	0	0	36	102	66	13
O’koki	94	12	10	3	36	108	72	30
O’rey	96	7	0	1	36	108	72	18

Table 9: Action and Illegal cases crank-downed by CPA patrol teams

Evident crackdown CPA	Okoki	Orey	VKB	SBCG	Others
Logging	8	1	10	2	157 trees were cut down
Removed snaring	7	11	3	4	347 snares were removed by CPA
Removed animal shock wire	4	0	0	0	13 kg animal shock wire was removed by CPA
Removed bird net	1	2	0	0	5 bird nets were removed by CPA
Illegal fishing	1	2	0	0	
Land encroachment	3	0	0	3	About 6.4 H were cut down
Illegal building house in CPA	0	2	0	0	
Removed illegal camp	1	0	0	0	
Provided education	5	0	0	0	12 people into CPA were educated by CPA



O’Koki CPA committee handed over the evident of illegal logging to the LWS rangers

5.5. O’Koki management plan development

To support O’Koki CPA management plan development, NLC led and supported the CPA committee to do some activities such as CPA management plan development training, forest inventory, and socio-economic data collection.

- In August 2022, 19 people, including 5 females joined the training on CPA management plan development.
- 51 plots were selected and conducted the forest inventory. O Koki forest inventory report development is 60% finished.
- There were 206 households interviewed for NTFP use and socio-economic survey. The report is developed with about 20% finishing.
- The O’Koki CPA management plan is developed with about 30% finishing.



O’Koki CPA committee and villagers conducted the forest inventory.

6. Private sector engagement

6.1. Phnom Tontang community forestry and Krong Buk Ratanakiri Rubber Development Joint Stock Company

The Phnom Tontang is a forest land area located inside the economic land concession called Krong Buk Ratanakiri Rubber Development Joint Stock Company (KRRC). The forest area is about 1056 hectares, where the people from Chann and Kanat villages always access the forest to collect forest products and non-timber forest products for their daily use. To protect and conserve the Phnom Tontang forest, NLC is supporting the communities of Chhan, Chhuy, and Kanat villages for forest patrol and awareness-raising to the locals and support to establish community forestry. Below is the result of the activities:

- Five consultation meetings on the process of Phnom Tontang community forestry establishment were organized at the village level and district levels. 472 people, including 195 women, joined the meeting. The participants were the district governor/duty governor, commune chief/council, forestry administration officer, officers of the land department, communal police officers, village chiefs, community volunteers, village elders, and villagers. They agreed in principle to establish Phnom Tontang community forestry.
- Three training topics (natural resource and conservation, good governance and financial management, and video recording and editing) were provided to the Phnom Tontang communities. 12 people, including 4 women, attended the training.

- Three awareness seasons were organized at Chhan and Kanat villages. The topic was community forestry establishment and natural resource conservation. There were 238 people, including 70 women joined the event.
- In 2022, the Chhan and Kanat villagers conducted 36 patrol events equaled 105 days. There 145 illegal cases were encountered: 57 cases of land encroachments, 59 cases of logging, 8 cases of snare and trap (16 snares were removed) and 25 illegal camps were removed, and five people were educated by the patrol team.
- In 2022, the patrol team of PTCF recorded 48 bird and mammal species including the globally threatened species such as Black-Shanked Douc Langur, Green Peafowl, Brown Fish-owl, Great Slaty Woodpecker, Great Hornbill, Yellow-cheeked Crested Gibbon, Northern Pig-tailed Macaque, and Long-tailed Macaque.
- NLC has supported Chhan and Kanat villagers to build a communication platform and negotiate with Krong Buk Ratanakiri Rubber Development Joint Stock Company for financial support to establish Phnom Tontang community forestry. By the end of 2022, this company agreed in principle to provide financial support to these indigenous communities through NLC.



PTCF committee conducted monthly patrol

6.2. Hoang Anh Lumphat ELC of Thagrigo group

Five meetings between Ratanakiri provincial governor, key stakeholders, and Hoang Anh Lumphat ELC were organized. Two meetings were presided by H.E. Lun Sopheap, deputy governor of Ratanakiri province, and the other three meetings were held on at the Thagrigo office at Hoang Anh Andong Meas. The main point of discussion is to update the progress of the proposed area for Sarus crane and Giant Ibis conservation. As a result, the result of the meeting

1. The new owner of Hoang Anh Lumphat ELC agreed to keep 270 ha but request to cut from their leasing land to avoid paying the annual leasing fee. They will work with the Ratanakiri provincial department of agricultural forestry and fishery to find the suitable approach
2. No more buffer zone between the conservation area and the banana plantation. The previously agreed to keep 200 meters as the buffer, the company will plant bananas but no worker houses will be built in this former buffer area. To ensure the boundary of the area is divided, the company will dig a ditch and build a fence in collaboration with NLC.
3. Map of this Sarus Crane and Giant Ibis conservation area will be developed by Ratanakiri provincial Department of land management and signed by the CEO of the company and Ratanakiri provincial authorities including (Provincial Hall, Department of Land, Department of Agricultural Forestry and Fishery, Department of Environment) to be used as future reference.
4. 16 December 2022 minute meeting will be signed by the CEO of the company for use as future reference.
5. NLC will raise funds for building the monitoring tower and gate to this conservation area.



Meeting on the proposed area for Sarus crane and Giant Ibis in Hoang Ang Lomphat ELC.

6.3. Volunteer Guidelines on Mitigating socio-environmental risks workshop

In 2022, NLC organized the dissemination workshop on the Volunteer Guidelines on mitigating socio-environmental risks for Vietnamese outward investors in agriculture in the Mekong subregion. The workshop was presided by H.E. Mar Vichet (Deputy governor of Ratanakiri province), Mrs. Phean Soaphean (CEO of Oxfam Cambodia), and Mr. Bou Vorsak (CEO of NatureLife Cambodia). There were 61 participants including 14 women have joined the workshop. The participants were from PDoE, PDAFF, district governors, commune councils, village chiefs, CPA committees, private sectors, NGOs, and other relevant stakeholders. The workshop had four main objectives:

- To disseminate and share the implementation of voluntary guidelines to Vietnamese investors and other foreign investors, relevant stakeholders, and institutions around Ratanakiri province.
- To encourage foreign investors who are running business projects in Ratanakiri to implement the voluntary principles that ensure the development of high social and environmental responsibility and to participate in peacefully solving various problems and impacts.
- To build relationships and cooperation in the implementation of project activities between sub-national government institutions, institutions/departments, the private sector, investors, civil society organizations, and local communities.
- To enhance the participation of all stakeholders that ensure green and sustainable development.

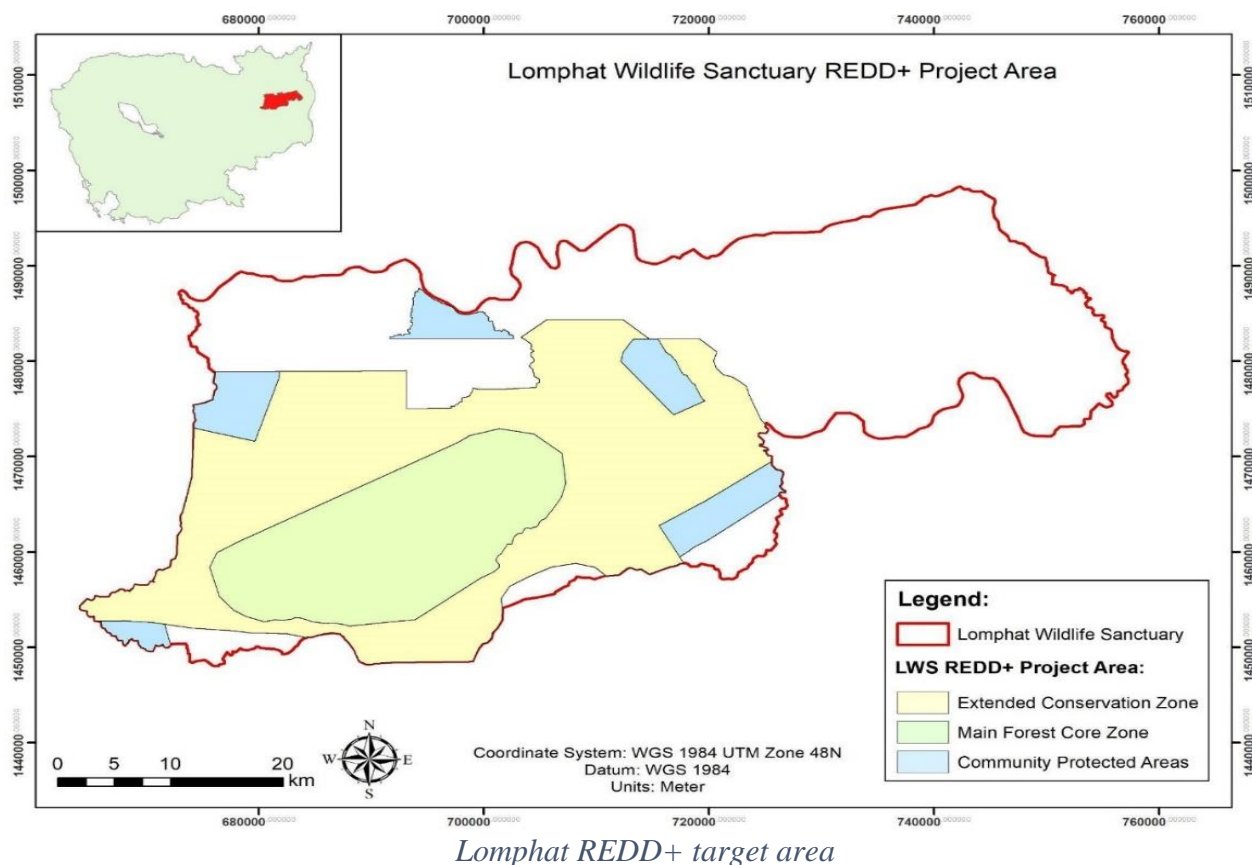
The workshop was presented by PanNature for the voluntary guideline and experience and voluntary guideline implemented sharing by the representative of Krong Bunk rubber plantation company



Dissemination workshop on the Volunteer Guidelines on mitigating socio-environmental risks

LOMPHAT WILDLIFE SANCTUARY REDD+ PROJECT

REDD+¹ and the voluntary carbon market are international efforts to innovatively address the increasingly worrisome problem of global climate change. Lomphat REDD+ initiative was considered an effective strategy to overcome deforestation and forest degradation within the area as well as adjoining meaningfully to access long-term sustainable finance for forest protection. In 2018, BirdLife International developed its Lomphat strategy that intends to mobilize additional funding sources throughout the REDD + project initiative which has been well-defined as the most appropriate mechanism for dealing with the financial insufficient, refining natural resources for stabilizing and providing improvements for the community livelihoods. This REDD+ initiative project has also vastly contributed to the 3rd strategic direction of Cambodia's Climate Change Strategic Plan (CCCSP).



Key Achievements within 2022:

1. Forming the NLC REDD+ team

- The Senior REDD+ Development Coordinator was recruited to replace the resigned one. Senior FPIC, Livelihood and Community Officer, Value Chain and Cooperation Officer,

¹ “Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks” (REDD+)

and Support Community Officers were recruited. They commenced with NLC in early January 2023.

2. LWS REDD+ Project Development

- Project Listing: the REDD+ project in Lomphat Wildlife Sanctuary was listed in the project pipeline as “Under Development” by Verra in July 2022.
- Initial Emission Reduction Assessment: this initial assessment was conducted in association with BirdLife International and the technical partner, EarthShot Labs. The preliminary findings suggested that 136,537 hectares of LWS have the potential for developing REDD+ Project and suggested that an LWS REDD+ project could reduce 550,298.85 tCO₂e for the first five-year validation period (2019-2023) with an average annual GHG emission reduction of 110,059.77 tCO₂e (for five years).
- LWS REDD+ Project Launching



Lomphat REDD+ project kickoff workshop

To officially launch the project, a workshop event was held by NatureLife Cambodia at the Phumi Khmer Resort, in Banlung City in Ratanakiri province on the 23rd of November 2022. During the workshop several talks and speeches were given by guest speakers, including H.E. Choub Paris (Under-Secretary of State and National REDD+ Focal Person), Mr. Bou Vorsak (CEO of the implementing organization, NatureLife Cambodia), Mrs. Vaneska Litz, (Chief of Party for the project donor organization, USAID Morodok Baiting), H.E. Ma Vichet (Deputy Governor of Ratanakiri Province), and H.E. Chan Ratana (Deputy Governor of Mondulakiri Province). The main objectives of the workshop were to introduce the LWS REDD+ project to all stakeholder participants and review the project’s goal, objectives and key activities, project expectations, and strategic direction. The workshop also provided a platform to request and receive questions, input, and feedback from all

participants in order to establish broad agreements and guide implementation for the next steps and action plan. There were 84 participants attended the meeting and all the major stakeholder groups that were invited were represented at the event, which was conducted in the Khmer language throughout. The project was well-received, with many positive comments coming from a variety of stakeholder participants, with strong support coming for the project's potential to both effectively conserve the unique and irreplaceable flora and fauna of LWS, contribute to global emissions reduction targets, and importantly provide tangible social, financial and developmental benefits for local communities.

3. Successfully Applied for Unique Entity ID

One of the conditions for an organization to apply for funds from USAID has to obtain a Unique Entity ID from SAM.gov in advance. The Unique Entity ID is used to identify the organization to federal government agencies or to register the organization on SAM.gov. NatureLife Cambodia applied for funds to USAID through USAID Morodok Baitang. Therefore, it must obtain the Unique Entity ID. NLC successfully obtained the Unique Entity ID “YL5KWT7BQ739” on 17th October 2022.

Jeudi.Say

From: donotreply@sam.gov
Sent: Monday, October 17, 2022 9:30 AM
To: jeudi.say@naturelifecambodia.org
Subject: SAM.gov | You have received a Unique Entity ID for NATURELIFE CAMBODIA

Jeudi Say,

You have successfully received a Unique Entity ID for:

NATURELIFE CAMBODIA
UNIQUE ENTITY ID: YL5KWT7BQ739

You have been assigned the UEI Data Entry Role in the Entity Registration domain with this entity. You can use the Unique Entity ID to identify your entity to federal government agencies or to register your entity on SAM.gov.

Your Unique Entity ID does not expire and does not need to be renewed. You can update your entity information by signing in to SAM.gov and going to your Entity Management Workspace.

If you have additional questions, please go to the [Federal Service Desk](#).

Do not reply to this auto-generated email.

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4. Collaboration between Project Proponent and Project Implementing Partner

8 representatives from the Ministry of Environment (MoE), BirdLife International (BLI), BirdLife Asia (BLA), and NLC had a meeting with the project proponent represented by H.E. Choup Paris, Under Secretary of State, Chairman of REDD+ Taskforce, National Focal Point for UNFCCC and Mr. Leng Chivin, Director of Department of GIS on 26 October 2022 at the Ministry of Environment. They were Mr. Bou Vorsak, CEO, and Mr. Say Jeudi, Senior REDD+ Development Coordinator from NLC; Mr. Vinayagan Dharmarajah, Regional Director and Dr. Lahiru S. Wijedasa, Asia Forest Coordinator from BLA; Mr. Richard Grimmett, Director of Conservation, and Mr. Andrew Kirkby,

Head of Forest Programme from BLI. The purpose of the meeting is to understand the position of the Royal Government of Cambodia on the REDD+ Project and the pre-buyer's condition.

- MoE and NLC agreed to conduct the kick-off workshop to launch REDD+ Project in LWS on **23 November 2022 in Ratanakiri Provincial Town.**
- Shared the progress of the REDD+ Project including MoE authorized BirdLife International to develop and implement the REDD+ project in LWS and the project was listed in the project pipeline by VERRA.
- Result of emission reduction assessment shows that
 - REDD+ Project Area: 136,537 hectares (forest area: 132,448 hectares),
 - Medium Annual Deforestation Rate Scenario for Project Area: 1.44%,
 - Estimates include risk reductions as per best practice: 20% reduction for contribution to the buffer pool, 15% reduction for leakage, 20% for uncertainty, and 20% reduction for effectiveness index,
 - Annual average of ER (tCO₂e/year) based on Medium Scenario after discount: 147,745.75 tCO₂e/year (5-year crediting period).
- Citibank's offer: we have received an offer from Citibank to pre-buy credits generated by the project. Citibank is a global investment bank and financial services company. The proposal received pre-buy 50% of credits issued annually at \$8.5 Y1-5 (5-year term) and zero risk to the project or partners if the project fails to deliver required VERs

On behalf of the MoE, H.E. Choup Paris expressed strong support and appreciated BirdLife International/NatureLife Cambodia's work in LWS. The result of rapid assessment of emission reduction is quite low, Compared to the experience on REDD+ in KSWs and Southern Cardamom. However, he is delighted to accept the preliminary result in terms of Verra's methodology because the actual emission reduction will be made during the development of the project design document (PDD). MoE is delighted with Citi Bank's offer but the price is quite low compared to the current price that the carbon credit sold. He suggested negotiating for a price increase.

5. Signed Fund Agreement with USAID Morodok Baitang

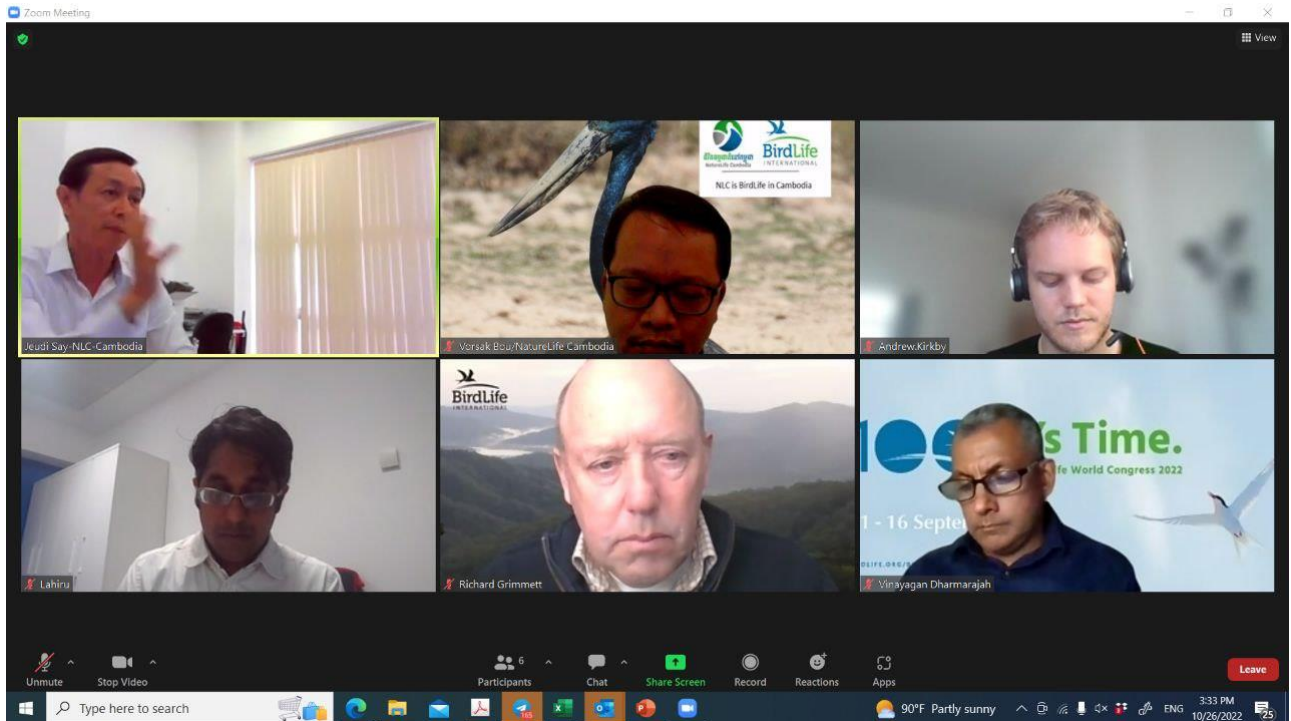
On November 1, 2022, NLC signed the grant agreement with the USAID Morodok Baitang project which will provide support to NLC for 2 years from 2022 to 2024 to undertake critical outreach to communities and collection of information that is needed to develop the REDD+ project.

6. Information Education and Communication

- A case study short article outlining a successful output from the Kick-off event - "Stakeholder Collaboration is the key to LWS REDD+ Project Success" was produced and shared through communication channels.
- A Summary Factsheet was produced which provides a more general summary of project information and is aimed at a general audience of government and private stakeholders in both Khmer and English languages and an accompanying LWS REDD+ Project Leaflet, which contains more detailed REDD+ project information.
- In collaboration with BirdLife International, we finalized the Factsheet for Investors, a promotional material for potential carbon credit pre-buyers/investors, which gives a summary of relevant promotional information that can be used for outreach to potential carbon credits investors and can be distributed in both hard copy and digital copy.



Meeting with H.E Choup Paris, National REDD+ focal point in January 2022



Meeting between BirdLife International, NLC, and MoE

BOEUNG PREK LAPOUV PROTECTED LANDSCAPE

Boeung Prek Lapouv (BPL) Protected Landscape is one of the few remaining seasonally inundated grasslands in the Cambodian Lower Mekong. The site is 8,305 ha and supports rich biodiversity, including Black-faced spoonbill, Greater adjutant, and Bengal florican. It is also a vital feeding ground for the declining South-East Asian population of Sarus crane and probably the only important site in Indochina for Yellow Breasted Bunting during their wintering migration. Over 6,000 people are dependent upon BPL for their livelihoods, with local natural resources making up 74% of food provisioning services for local people. BPL is located in the Koh Andeth and Borey Chulsar districts of the Takeo province in the western floodplain of the Bassac River, a distributary of the Mekong River.



Sarus Crane feeding in BPL

Key Achievements within 2022:

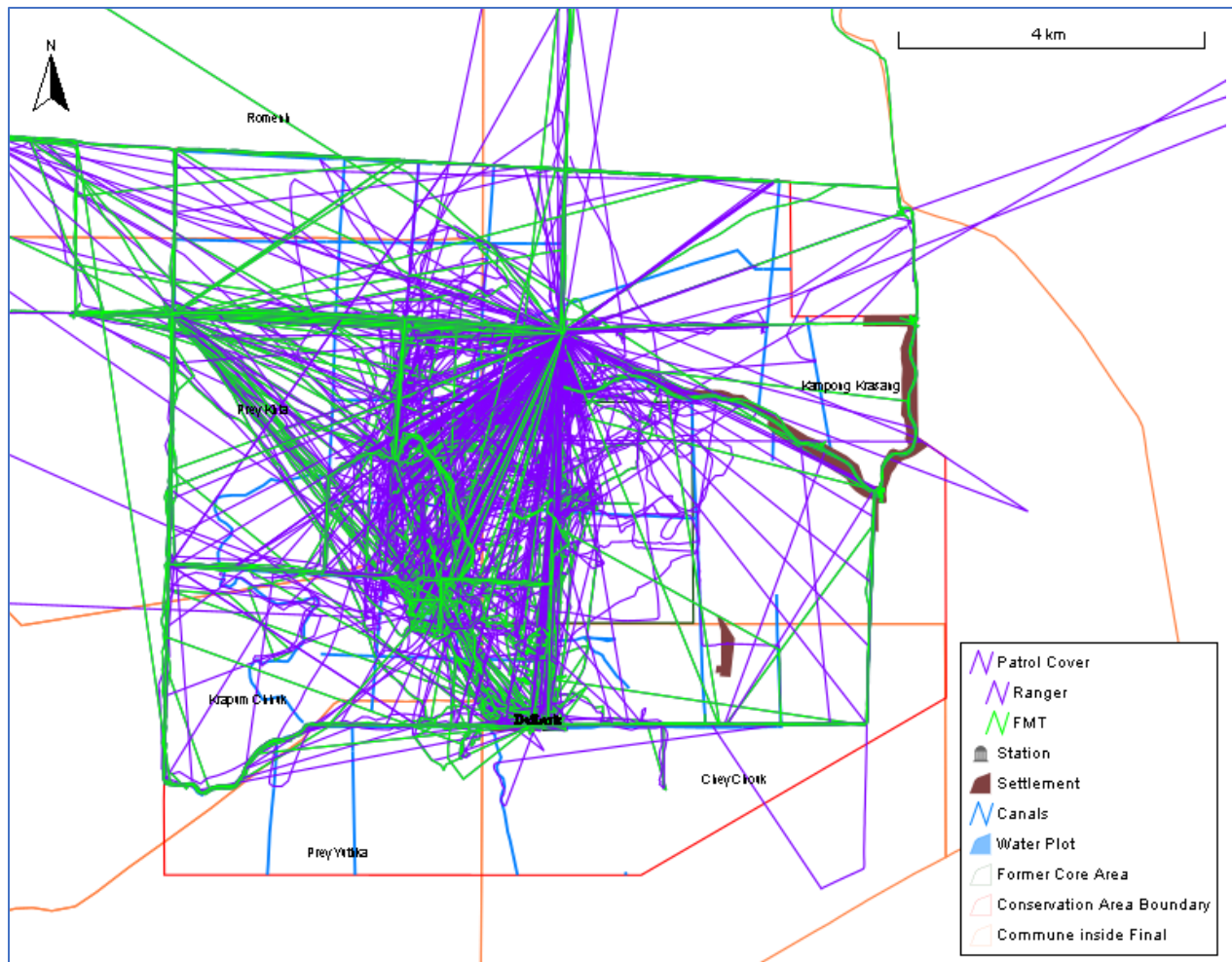
NLC have supported Rangers and FMTs in BPL for conducting daily patrol and monitoring and working with surrounding local school and communities to do the awareness and education program.

1. Site Management

- 2022 is the second year of implementing SMART mobile data collection in BPL and the result as below:

Table 10: The patrol performance of rangers and FMTs in BPL in 2022

Team	Number of Patrols	Number of Days	Number of Nights	Number of Patrol Hours	Distance (km)
FMT	175	175	0	1052	3011
Ranger	217	229	12	1110	3424
Total	392	404	12	2162	6435



The map of patrol and Monitoring coverage in BPL in 2022

Table 11 The table of patrol results in 2022

No	Description	Amount	Comment/Notice
1	Land Clearance	8 Cases	5 cases are poles demarcation destroyed, and the other 3 cases were on the old clearance since 2017 (continue planting rice on the clearance area). The court has concluded the case of land cleared in 2017-2018 in BPL and sentenced five years of nine offenders. But the cleared area is still cultivating rice usually.
2	Fishing Observation	37 Cases	16 cases are illegal fishing and have been informed to remove from the protected area (Broes 100 Net and Electric Rod).
3	Fire	01 Cases	Rangers team extinguished the fire and it burnt out around 0.41Ha.
4	Domestic Animal	16 cases	Domestic animals in BPL are mostly buffalo, which disturbs the wetland while it is over control and overgrazed. Department of Environment of Takeo Province has worked with the local authority and District governor to take awareness and verbal warning to all buffalo owners (mostly businessmen who buy hundreds of buffalo and bring them into BPL wetland)
5	Collecting Wetland Resource	40 cases	Mostly local people collect water lilies and harvest grass in BPL in the flooded season.

- The responding letter to reject the proposal from the district about the restoration of two canals in BPL was issued and announced to the community around BPL in late 2022. The letter mentioned letting local authorities and communities wait until finish BPL zoning work.
- The monthly reflection was conducted regularly to report the patrol result and develop a work plan for the next month and refresh the methodology in using SMART Mobile for patrol data collection.
- The ranger and FMTs in both sites were invited to the online training in late December 2022. We have invited Mr. Sou Sontara, deputy director of the department of Inspection and Law Enforcement, Ministry of Environment as the trainer. Due to the protected area law being in the process of amendment, the training is not too deep on the law, but we conduct an open question related to the general process of cracking down on any illegal activities in the protected area, supported documents, the right of justice police (rangers), civil people (NGOs), and the zonation of the protected area.

2. Education and Awareness

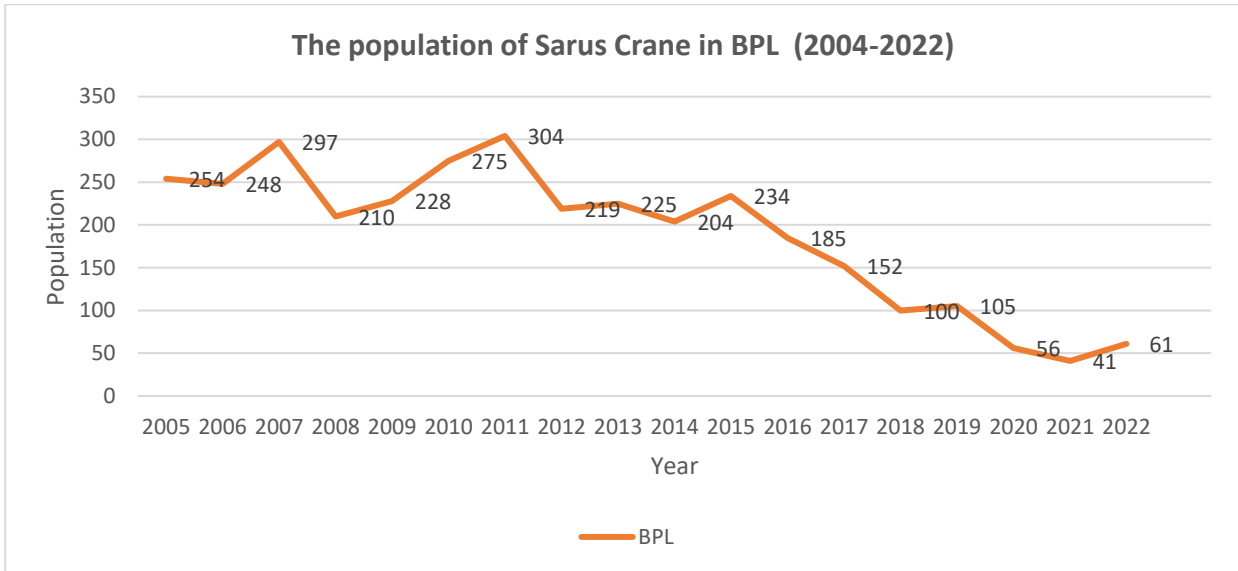
- **Environmental and Sarus Crane Education at Schools:**
 - Intergrade the Environmental and Sarus Crane Education is implemented in the three targeted primary schools

- Finished 10 lessons of Environment and Sarus Crane Education in Banteay Tlay, Sangkom Meanchey, and Kdol Chrum primary school in grades 4 to 6.
- Conduct the meeting with 14 teachers for assessment test preparation on Environment Education and Sarus Crane Conservation. Totally, 313 kids joined this competition and around 76% =169 kids who have passed this test. However, only 105 kids got the higher score from number 1st to number 5th and received the award from NLC.
- Supporting materials (hand-protected gloves, student books, A4 paper, colors, plastic bags, and markers) contributed to these three schools.
- Celebrated Crane festival in BPL to raise awareness about the importance of wetlands and waterbirds, the negative impact of human activities and agriculture hazardous wastes management with local people and target schools. Presided by Mr. Lim Vath, deputy director of BPL, this event was joined by 219 people (i.e., teachers, rangers, village chief, and kids)
- **Community Awareness:**
 - Community Awareness conducted by hosted a small meeting and audio broadcasting in and around Boeung Prek Lapouv with participants of 15-30 local villagers. This is aimed to raise local communities' awareness related to the negative impact of human activities and importance of BPL, Sarus Crane, and other waterbirds. The meeting and broadcasting were conducted six months from late December to early June 2022 with 9 targeted villages (Kdul Chrum, Sangkom, Meanchey, Bontey Slek, Chombok Em, Chroy Pon, Dara Kom, Bontey Tlay, Dey Lerk, and Keo Kampleng). Each village have been raising the awareness one time per months according to the protocol developed by NatureLife Cambodia. As a result, the total number of participants who participated in this series of meetings was 946.
 - Conducted interview with 281 households for collecting the data as part of baseline surveys about the knowledge of the local community on the sustainable use of natural resources in Boeung Prek Lapouv. We finish the data entry, and the report will be developed in the next quarter of 2023.

3. Species and habitat monitoring

- The Boeung Prek Lapouv still plays a key important role in supporting Yellow-breasted Bunting in Cambodia during its wintering migration. In 2022, we observed Yellow-breasted Bunting from late December 2021 until the end of April and early May with the maximum recorded of over 5000 individuals. The manuscript titled “Emerging evidence shows global importance of Boeung Prek Lapouv Protected Landscape, Cambodia for Yellow-breasted Bunting *Emberiza aureola*” has been published in The Cambodia Journal of Natural History (CJNH).
- 75 species of bird have been recorded in Boeung Prek Lapouv in 2022 including 01 Critically endangered (Yellow-breasted Bunting), 01 endangered (Greater Adjutant), and 01 Vulnerable (Sarus Crane).

- The Asian Waterbirds Census has been conducted annually, a total of 90 bird species was recorded in 2022, and no presence of the Black-faced Spoonbill.
- The Sarus Crane Census was conducted in 2021-2022 with the maximum record of 61 birds (including 06 Juveniles) in December 2022.



Result of Sarus Crane Census in BPL from 2005 to 2022

- The mimosa control program was created with the guidance of the protocol. According to the management period from 2019 to February 2022 on the 40ha size, a total of 35 quadrats was monitored throughout 2019 to 2022. And plush 32 ha of Adhoc plots, located behind DeiLerk village. Based on Mimosa pigra management by cutting mature stems with seasonal flood control, it showed that the mortality rate of stem is 98% and potential stem regrowth about 2%. This method contributed on average about \$9.44 per hectare and its cost can be varied between plots based on dense of Mimosa pigra. Learning from this fruitful result, we have selected a new area with some part overlap in the previous management project. The total 129 ha of shrubland with mixes between Mimosa pigra, tall grass, and seasonal grassland was cleared (Pre- flood) by using the cutting mature stems method. This method was suggested and used to implement in BPL since long time ago with an effective result. There are 9 plots (200mX200m) designed for the quadrat survey about stem mortality. In conclusion, 45 quadrat (1X1m) was monitored and measured for the rate of growing stem. There are 155 bags (5kg size) of fruit collected and burned. The result can't be concluded in one year project period.
- Birds still use BPL as a nesting site. The study of bird nests has been conducted in BPL Protected Landscape in November 2022.

Table 12 The result of bird counting in BPL in 2022

No	Bird Species	Number of Nests		
		Incubate	Hatched	Total
1	Asian Open Bill	741	0	741
2	Black Ground Night Herron	0	791	791
3	Grey Heron	0	322	322
4	Intermediate Egret	0	25	25
5	Little Egret	0	75	75
6	Little Cormorant	39	463	502
7	Oriental Darter	30	45	75
8	Purple Heron	0	296	296
Total all Nests				2827

- The bird flu occurred in 2022 and was monitored properly in cooperation with the WCS-Wild Health Net Project. One Spot-billed Pelican was sent to the laboratory with a negative result of AIV. But more than 400 Asian Open Billed were found dead, and 5 to 10 died every day for about a week, we sent to a laboratory with the result of positive Avian Influenza.
- The water management plot was managed properly with daily monitoring and recorded water level. We stored water inside the management plot for about a month longer than outside, but Crane did not feed inside our management plot.



Ranger in Patrol (left) Illegal Electric Rod Confiscated (right)



DoE and local authority checking Land Clear Monthly meeting in BPL



Wildlife Health Monitoring in BPL



The visit of H.E Net Pheaktra to BPL



Mimosa pigra control in BPL



Yellow-breasted Bunting in roosting in BPL



Environmental and Sarus Crane Education at primary schools, located around BPL.



Village awareness raising



The Crane Festival was celebrated in Sangkom Meanchey and Bontey Tlay primary schools.

ANLUNG PRING PROTECTED LANDSCAPE

Anlung Pring Protected Landscape had been established and managed by the Forestry Administration (FA) of the Ministry of Agriculture Forestry and Fishery (MAFF) with the Wildfowl & Wetland Trust and BirdLife International Cambodia Programme (BirdLife) between 2004- 2016. This site was transferred to the Ministry of Environment (MoE) in early 2016. The Protected Landscape is located in Kampong Trach District of Kampot Province and covers a total area of 217 ha, approximately one kilometer from the border with Vietnam within the lower Mekong Floodplain. The area is low-lying with an elevation range of 0.0–3.5m above sea level and is influenced by a small river that experiences tidal influences, even though the site is approximately 20 km from the Gulf of Thailand.

The characteristic habitat of this site is mostly sedges, interspersed with *Melaleuca* scrub. It is a prime feeding ground for the South-East Asian population of Sarus crane between the months of November and May. This conservation area is divided into two parts by a road embankment; the first of which is the Northern part covers 33ha and the other parts of which Southern part covers 184ha.



Sarus Crane feeding in paddy field with local buffalo.

Key Achievements within 2022:

1. Site Management

NLC has supported rangers and FMT to do law enforcement patrol and biodiversity monitoring in AP, as the result of 2022, there were listed below:

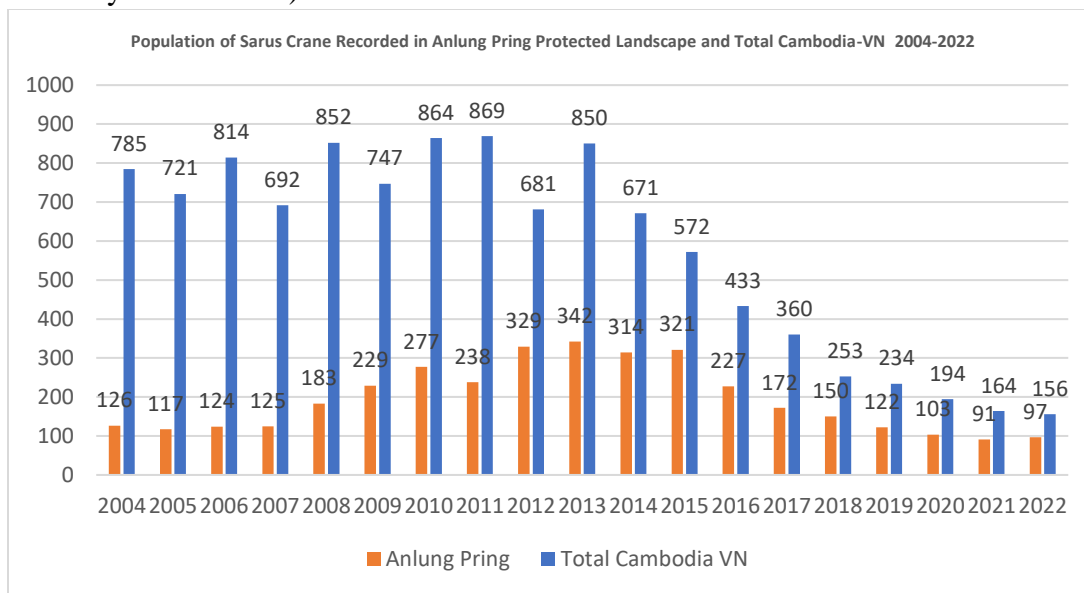
- SMART Mobile is fully implemented in 2022, based on the result, 157 patrols were carried out on 157 days, covered on distance of 840 Km, and spent 300 hours in the field.
- Two Cases of illegal bird nets were cracked own in 2022, one destroyed 20 bamboo poles without seeing the owner (along the international border of Cambodia and Vietnam), and the other case was located between Phnom Prasat commune and Boeng Sala Khang Cheung

Commune. This case is about bird nets that were committed by 20 local people (about 2000m in length). The Ranger team work with local authorities and educated all of them (local people) to stop these illegal bird nets.

- The monthly meeting was conducted regularly to report the result of patrol and monitoring and develop a work plan for the next month.
- There are two cases of land encroaching in Anlung Pring, one installed a boundary pole inside the boundary of AP with a length of 40 meters and the offender agreed to remove out. The other case is cleared Melaluca Shrub in the area of 0.48ha and offender runaways (migration). DoE of Kampot province and local authority have working on this but the offender moved to live in another province.
- The infrastructures were developed in Anlung Pring, the government installed the power line across the protected area and resize the road in AP. We met with the constructor to minimize the impact on Sarus Crane and agreed to not construct during the presence of Sarus Crane in the reserve.

2. Species and habitat monitoring

- The Asian Waterbirds Census has been conducted annually. A total of 34 bird species were recorded in 2022. The Black-tailed Godwit (Near Threatened Species) still accesses Anlung Pring as previously.
- The Sarus Crane Census was conducted in 2021-2022 with the maximum recorded of 97 birds (including 11 juveniles) in February 2022. The total number of Sarus Crane recorded in Cambodia and Vietnam was only 156 birds which indicate that over 62% of cranes are using this small wetland in none breeding season.
- Cooperated with the WCS’s vet team for wildlife health monitoring in Anlung Pring. The monitoring team has conducted two field monitoring in Anlung Pring during 2022 (in February and October).



The population of Sarus Crane in Anlung Pring compared to Cambodia Vietnam Population

3. Education and awareness raising

- Establish Crane Education Centre in Anlung Pring with clear monitoring and protocol in 2022. We have worked with 05 primary schools and one secondary school surrounding Anlung Pring to bring school kids to study about the importance of AP wetland, Sarus Crane, and how we can help to protect this small wetland. Totally 832 kids (305 girls) accessed our educated center. They are from Tmor berk, Phnom Rep, Chress, Anlung Thngian, Koh Tnout primary schools; and Tmor Berk Secondary School.
- Agriculture hazardous Waste management was enlarged in 2022 with a total of 29 small boxes installed, with 50 printed labels and stuck on (attract local people to put waste in small boxes). We have collected hazardous waste from these 29 small boxes around Anlung Pring with a total amount of 1003 bottles/bags to store in the big storage system in Kampong Trach district. In late February 2022, all AHW was disposed with the capable dispose system, installed by the Ministry of Environment at Kep province.
- Installed three signboards to promote Anlung Pring Protected landscape and Sarus Crane conservation with a message to encourage local communities to manage agricultural wastes at Koh Tnout, Koh Chamka, and Chress villages.
- 327 local people joined our village meetings to conduct awareness about agriculture hazardous wastes management and safeguard protection during using pesticides.
- The baseline survey to understand the local attitude toward agriculture hazardous waste management was conducted in late 2021 and finalized its report in March 2022. As a result, 141 households from three target villages (Chress, Koh Tnout, Koh Chamka) were interviewed. This survey was organized into small farmers' groups, which consist of 5 to 10 households per group and split-up male and female groups. The Chress village has 4 groups, Koh Chamka has 4 groups and Koh Tnout has 5 groups. The results of these surveys show that 70% of farmers kept their wastes (bags and bottles of pesticides) in storages box at rice fields because they have participated in the awareness meeting conducted by NLC. Another 18% of farmers chose to throw waste away, 6% of farmers burned the AHW because they did not know about the AHW management and not seen storage boxes in their rice fields. The project should collaborate with authorities to do more awareness-raising about the negative impact of agricultural hazardous waste and provide an orientation on the appropriate knowledge on the application of agrochemicals as well as technical methods to reduce pesticides use and add more storages boxes to other rice fields and ensure that the wastes are collected properly.
- Celebrated the 2022 Crane Festival in AP to raise awareness about the importance of wetland, waterbirds, and agriculture hazardous wastes management with local people and school kids. Presided by Kampong Trach deputy governor and joined by 319 people (i.e. local authority, local communities, school kids, NGO partners, and reporters).

4. Community empowerment

- Collaborated with CRDT to establish 5 saving groups with 77 participants in three village (Koh Thout, Chress, and Koh Chamka village) by providing capital of 470\$ for each group. By the end of 2022, each group have increased their saving amount from 700-2500\$ in each group.
- We keep supporting and monitoring the recycling business and encourage local people to manage their plastic waste. This business is run by a field monitoring team and right now their capital has increased to 337.5 US\$.

5. Crane Rice Initiative

This new initiative is led and implemented by NLC with support from BirdLife International, Ministry of Environment, and CRDT. The key achievements in 2022 include:

- Enlarged Crane Rice to 100 household farmers of Communities's Crane rice members. The total farmland increased to 106 hectares, located in 5 villages such as Koh Chamkar, Chress, Koh Tnoat, Prah Tro-Hoeng, and Anlung Pring village.
- The map of the rice field location is completed digitized and produced, the total 266 plots of farmland were mapped with a total land area of 106 hectares.
- Provided seed and fertilizer to collaborated farmers, Pong Lorlok 1263 kg, Sambork Kanteum 13116 Kg, and organic fertilizer 19000Kg.
- Provided five technical training to collaborated farmers. These Five trainings including i) Proper use of chemical fertilizer and pesticide, ii) Integrated pest management (IPM) in rice production, iii) The use of organic fertilizer, iv) Organic fertilizer providing meetings, and v) internal controlling system training.
- In 2022, 94 households planted Crane rice in a total area of 103.30 hectares (Sambok Kantoem: 95.17 ha and Pong Lor Lork: 8.13 ha), 04 household vacation the farmland due to much rainfall (total size 2.2 hectares), and 02 households resigned (concern of losing farmland to the protected are).
- Result of monitoring Communities Crane Rice in 2022,

Table 13: Result of 2022 community crane rice

Description	Pong Lorlork	Sombork Kanteum	Remark
Rice Damaged	1.36 ha	13.68 ha	Saline soil
Failed 12 Criterias	0	0	5 families (2 resigned and 3 Apply difference varieties (1 Red-Jasmine and 2 IR)
Harvested	6.77 ha	81.49 ha	Total 88.26

- A total of US\$555.66 was paid as compensation for the farmers who left rice 5% in the field for Sarus Crane foraging.
- NLC worked with the local buyer to buy rice from collaborated farmers with premium prices (5% higher than the market's price).

- The Compliant Protocol was produced, and Community Crane Rice compliant system is in place. Four crane rice farmers were formed, one group in Koh Tnout and Prah Tro-Hoeng villages, one group in Chress village, and two groups in Koh Chamka village.
- The leased land plays a very important role in providing supplemental food for Sarus Crane. NLC keeps planting rice on the leased land from local people, covering an area of 18.41 hectares. In 2022, we are piloting a new variety called Red-Jasmine that will be best-selling in the market on an area of 1.14 hectares. We continue observing this variety whether Sarus cranes forage or not.
- Harvested on the leasing land, 50% of the rice was harvested and we got Sombok Kateum 3115 Kg, Pong Lorlok 5276 Kg, and Red-Jasmine 496Kg fresh rice.
- Promote products, assess the markets, and set up the system to promote the ‘Crane Rice’ at provincial and national markets Communities base Eco-Lead Tourist, and in Kampot Tourist information center. Promoted Crane Rice on digital platforms such as social media, Food delivery companies (Nham24, Food Panda, Tonle Sap) to make the customer more convenient to order products, promotede Crane Rice to networking (Bird Lover) and partnership organization.



Patrol team and village awareness raising.



Farmer's rice field measurement and Plowing



Seed and Fertilizer distribution to Crane Rice famers



Farmers conducted seed sowing



Monitoring Crane Rice



Harvesting Crane Rice



The photo of Crane Rice Production



Buying Crane Rice from farmers



Crane foraged in Crane Rice Field



Crane Rice supply Chain and Marketing



Awareness and educating at Crane Education Center



Saving group meeting (left) and Recycling waste buying (Right)

STUNG SEN RAMSAR SITE

Stung Sen has been designated as the fifth Ramsar Site in Cambodia since November 2018 with a coverage size of 9,293 ha in Phat Sanday Commune, Kampong Svay District, Kampong Thom Province. The Ramsar Site sits on intact areas of unique seasonally flooded freshwater swamp forest along with the southeastern edge of the Tonle Sap Great Lake, which is enclosed by gallery forests, low-stature shrubland, inundated/submerged trees, and extensive mats of herbaceous, aquatic vegetation. The water exchange between the Mekong River, the Stung Sen River, and the Tonle Sap Great Lake have a strong influence on the vegetation and regular flooding cycle in Stung Sen Ramsar Site. This Ramsar site has an exceptionally high level of aquatic productivity that supports human livelihoods and unique biodiversity processes.



Drone-captured view of Tong Chong Kong, a fish conservation pool in Stung Sen Ramsar site



Waterfowl species were spotted at Stung Sen Ramsar site during the monthly patrol

At Stung Sen Ramsar site, NLC works closely with Kampong Thom Provincial Department of Environment to support government rangers of two stations, one Community Protected Area (CPA), and one local conservation group (LCG).

Key Achievements within 2022:

1. CPA Establishment and Community Participation

With the effort in promoting the long-term participation of local communities in site management, NLC has strengthened an existing CPA and established a new LCG, namely Toul Neang Sav Plov Loung and Phsort to work closely with government rangers at Stung Sen Ramsar site.

- **Toul Neang Sav Plov Loung CPA**

- Toul Neang Sav Plov Loung CPA has been fully set up with official documents from the Ministry of Environment (MoE), including a 15-year CPA management agreement with MoE, a 5-year Management Plan, and zonation, a Recognition Degree (Prakas), an amended bylaw, and organizational structure with recognition and endorsement by relevant stakeholders, authorities, and MoE.
- The CPA committees have received a series of training and technical support to enhance knowledge and skills on gender issues, the value of wetlands, biodiversity monitoring, data collection, and report writing so that they will have developed a better understanding and act for sustainable CPA management and wetland conservation.
- Additional resources have been provided by partners and NGOs for CPA management and development, including financial support for the guarding tower, a mini-trust fund, and a shared budget for the headquarter.
- Financial resources have been allocated to improve the infrastructure of Toul Neang Sav Plov Loung CPA, which included a new floating headquarter, two 35-m fishing dykes at the conservation zone, and one signboard and three boundary poles.



Signing Agreement Ceremony between Toul Neang Sav Plov Loung CPA and MoE (left) and Installing boundary poles activities at Toul Neang Sav Plov Loung CPA (right)

- **Phsort LCG**

- The proposal for Phsort CPA establishment was rejected regardless of the endorsement from the Phat Sanday Commune chief and Stung Sen Ramsar Site Manager. The concerns of rejection laid upon the facts that i) Phsort is not registered as a village yet as there's no official recognition/papers, while the residents have been known as fishermen in this sub-village located in the core area of Stung Sen Ramsar Site; ii) More support to this community group can encourage the outside people to live there and create more pressure of the critical habitats; and iii) Kampong Svay District has the plan to relocate Phsort residents to Toul Neang Sav Plov Loung village, approximately 30 km from the proposed CPA site. With this distance, it is ineligible to establish based on the CPA Establishment Guideline.
- Phsort was alternatively formed as a local conservation group (LCG) to allow local villagers to participate with rangers and Toul Neang Sav Plov Loung CPA committees in conserving Stung Sen Ramsar site by monitoring biodiversity and reporting any illegal cases around their area regularly on a monthly basis. Within a 9-month period, 3 members of Phsort LCG recorded 45 bird species, two of which are endangered, and reported one illegal fishing around their area.
- Phsort LCG has received a series of training and technical support to enhance knowledge and skills on biodiversity monitoring and data collection, gender issues, the value of wetlands, and report writing so that they will have developed a better understanding and act for sustainable site management and wetland conservation.



Workshops are given to the committees of Toul Neang Sav Plov Loung CPA and Phsort FMT by the project staff

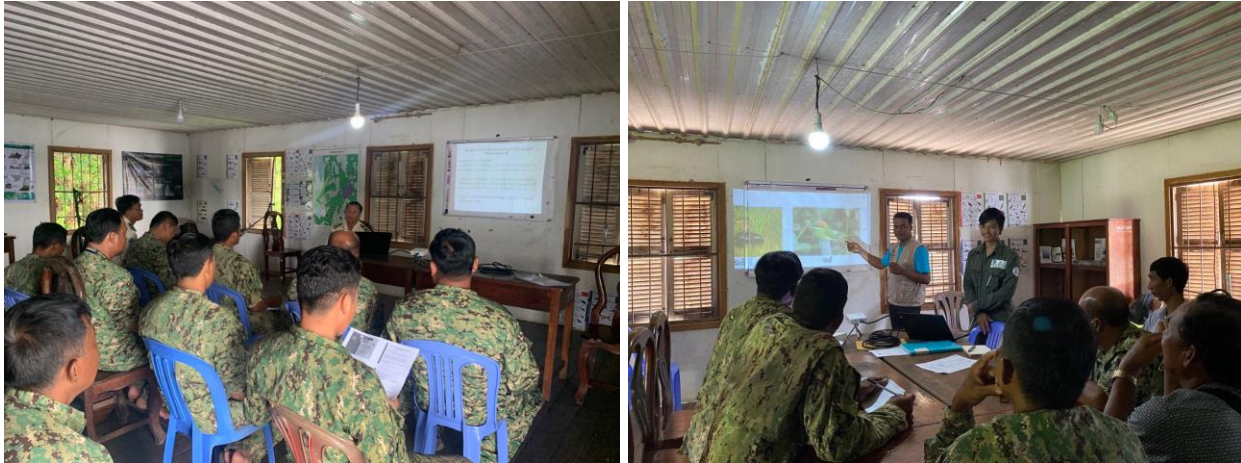


Project staff demonstrates data collection on the field (left) and Phsort FMT member is taking notes during the practice after the demonstration (right).

2. Site Management and Capacity Building of Government Rangers

Through the cooperation with Kampong Thom Provincial Department of Environment, NLC has supported in building capacity and assisting government rangers to better manage Stung Sen Ramsar site by working together with relevant stakeholders on the ground:

- Law Enforcement Training was conducted to reflect legal procedures in documenting natural resource illegal cases and Protected Area Law to government rangers at Stung Sen Ramsar site so that rangers have a better understanding and compliance with the law on protected areas and relevant legal documents to enhance law enforcement, especially the interception of natural resource crime cases in accordance with legal procedures and effectiveness and avoid possible conflict with relevant authorities on the same site.
- The bird identification training course was conducted to share and build the concrete capacity of rangers in bird monitoring and photography, including methods of bird identification, combined with hands-on techniques for recording birds in wetlands and concrete skills in data collection and taking good photos of bird species.
- A stakeholder forum was organized at Stung Sen Ramsar site with 51 participants from multiple stakeholders, including government rangers, NGOs, local authorities, community leaders, and local villagers on a round table to share project progress updates, site and CPA management updates, experience, and resources and to improve local connections and network, which contributes to efforts towards addressing key challenges and building cooperation.
- An advisory meeting was organized at Kampong Thom Provincial Department of Environment to report on the progress of the project, consult for recommendations and solutions to the challenges as well as to prepare further plans for the projects in the Ramsar site.



Law enforcement training (left) and Bird Identification workshop are provided to rangers (right)



Stakeholder Forum at Stung Sen Ramsar site (left) and Advisory Meeting with Director and Site managers of Kampong Thom Provincial Department of Environment (right)

SMART Patrol and Results

The knowledge and skills on SMART Mobile have been applied by the government rangers at Stung Sen Ramsar site and Toul Neang Sav Plov Loung CPA to which they have collectively worked together with effective data collection on the field and improved report development. The training, however, was provided in cooperation with the Wildlife Conservation Society (WCS) as additional equipment and tools were provided to support rangers and CPA committees for better practices and effective data collection.

With support from NLC, government rangers of two stations at Stung Sen Ramsar site and one CPA have conducted regular monthly patrols and applied SMART patrol for law enforcement and biodiversity monitoring. In 2022, 11 rangers have completed 146 patrols (one day equals one patrol), covered approximately 4387 km of distance, recorded 63 bird species and 2 mammal species (10 globally threatened species), and intercepted 31 illegal cases, including illegal fishing, land encroachment, and illegal lotus plantation. Meanwhile, the 9 committees of Toul Neang Sav Plov

Loung CPA have completed 86 patrols, recorded 30 bird species and 2 mammal species (4 globally threatened species), and reported 66 illegal cases to rangers at Stung Sen Ramsar site.

Table14: Types of Equipment and Tools provided to rangers and TPL CPA at Stung Sen Ramsar site

Item	Government Rangers	Community Protected Area	Total Items
Machine Boat	1	-	1
Laptops	1	-	1
Smart Phones	2	1	3
Binocular	-	1	1
GPS	2	1	3
Boots	9	9	18



Rangers of Stung Sen receive a laptop from project staff (left) and committees of TPL CPA receive a pair of boots during SMART Mobile Workshop

Table 15: List of Globally Endangered Species of birds and Mammal recorded by rangers of Stung Sen in 2022

N.O	Bird Species	Status	# of individual
1	Asian Golden Weaver	NT	23
2	Lesser Adjutant	VN	3
3	Black-headed Ibis	NT	9
4	Painted Stork	NT	8
5	Oriental Darter	NT	25
6	Greater Adjutant	EN	6
7	Grey-headed Fish Eagle	NT	4
8	Spot-billed Pelican	NT	10
	Mammal Species	Status	# of Individual
1	Indochinese Silvered Langur	EN	24
2	Long-tailed Macaque	EN	6

Table 18: Illegal cases intercepted by rangers of Stung Sen Ramsar site in 2022

Action Taken	Illegal Fishing Gears	Number of Incidents	Number of Cases	Length (m)
Destroyed	Mosquito Net	15	19	2032
	Electrocuting devices, explosive stuff, All kind of poison	1		
	Fish Trap (Narrow)	3		
Observed	Lop Tol/Lop Prueh Douen	7	6	6
Removed	Fish Trap (Narrow)	4	6	1140



NLC staff demonstrates on filling patrol info on SMART Mobile (left) and Joint Patrol of rangers and CPA committees (right)



Rangers of Stugn Sen Ramsar site remove illegal fishing net in the core zone during patrol

3. Project Documentary

With the cooperation with the Wildlife Conservation Society through an EU-funded project, the video on the effort of NLC, government rangers, and Toul Neang Sav Plov Loung CPA in Stung Sen Ramsar site highlighting the theme of “Nature Conservation Heroes” was finalized and released to the public on Facebook to celebrate the World Nature Conservation Day on July 28th, 2022. The clip was then shared on NatureLife’s Facebook page as on the Ministry of Environment’s Facebook page, which it has rolled out and reached more than 613 k (thousand) views. The key message to the public spotlighted the hard work and sacrifice of NGOs, rangers, and Community Protected Area, and invited them to share support in helping nature conservation heroes. Please refer the link below for the documentary on Our Tonle Sap’s Facebook page:

<https://www.facebook.com/ourtonlesap/videos/503002638264140>

4. Evaluation result

Through cooperation with FishBio, comprehensive evaluations were carried out at Toul Neang Sav Plov Loung CPA to evaluate the ecological outcomes and biodiversity impacts of the projects. The findings from the baseline and end-line surveys showed that the sample site within the area managed by Toul Neang Sav Plov Loung Community Protected Area (CPA) harbored higher biodiversity and a greater relative abundance of fish compared to the sample site outside of the CPA. In addition, the fish caught in the Toul Neang Sav Plov Loung sample site showed higher biodiversity during end-line sampling. Between baseline and end-line sampling, at least 26 distinct species, representing 11 different families were captured. This included 17 species from 11 families (one globally threatened species) captured during baseline sampling and 19 species from 9 families captured during end-line sampling.

Another evaluation workshop was the Ramsar Site Management Effectiveness Tracking Tools (R-METT). It was conducted to assess and evaluate progress in the management effectiveness of Stung Sen Ramsar site compared to the baseline assessment conducted at the project start. Overall, the management resources and capacity have been generally improved with one point increase in the end-line evaluation compared to the baseline survey back in 2021, including better data resources and documents, capacity and skills of site rangers, and existing projects at the sites.

Table19: List of fish species captured during the fish survey by FishBio

Family	Scientific Name	IUCN Red List Status	IUCN Red List Population Trend	Count	Biomass (grams)
Ambassidae	<i>Parambassis wolffii</i>	Least Concern	Unknown	3	71.4
Anabantidae	<i>Anabas testudineus</i>	Least Concern	Unknown	323	9476.7
Bagridae	<i>Mystus velifer</i>	Not Listed	Not Listed	291	3164
Channidae	<i>Channa striata</i>	Least Concern	Stable	9	1490.4
Clariidae	<i>Clarias macrocephalus</i> *	Near Threatened	Decreasing	-	-
Cyprinidae	<i>Barbonymus schwanefeldii</i>	Least Concern	Unknown	1	10.5

<i>Leptobarbus hoevenii</i>	Least Concern	Unknown	1	18	98
<i>Leptobarbus rubripinna</i> *	Data Deficient	Unknown	-	-	-
<i>Puntioplites falcifer</i>	Least Concern	Unknown	4	113.4	65
Mastacembelidae	<i>Macrognathus semiocellatus</i>	Least Concern	Stable	1	64.71
Notopteridae	<i>Notopterus notopterus</i>	Least Concern	Stable	1	62.4
Osphronemidae	<i>Trichopodus microlepis</i>	Least Concern	Stable	40	1323.1
<i>Trichopodus pectoralis</i>	Least Concern	Decreasing	4	445.2	94
Osphronemidae	<i>Trichopodus trichopterus</i>	Least Concern	Unknown	187	1855
Pangasiidae	<i>Pseudolais pleurotaenia</i>	Least Concern	Stable	1	14.1
Siluriade Siluridae	<i>Ompok siluroides</i>	Least Concern	Stable	34	2596.4
<i>Micronema cheveyi</i>	Data Deficient	Unknown	1	19	
11 Families	17 Species			901 individuals	20.72 kg



NLC staff explains the criteria and questionnaires to participants during R-METT Workshop

BOEUNG TONLE CHHMAR RAMSAR SITE

Boeung Tonle Chhmar Ramsar site is situated in the northeast of the Tonle Sap Lake with permanently open water surrounded by a system of canals and flooded forests that become the Tonle Sap Lake during the rainy season. This Ramsar site covers an area of 28,000 hectares of Kampong Thom and Siem Reap provinces and is also part of the Tonle Sap Biosphere Reserve. Boeung Tonle Chhmar Ramsar site plays a key role in hydrology and biology in the natural processes of two major rivers, namely Stung Stong and Stung Chikreng, which is geographically well suited to support a large collection of species of plants, fish, and aquatic birds, most of which are listed as endangered or endangered.



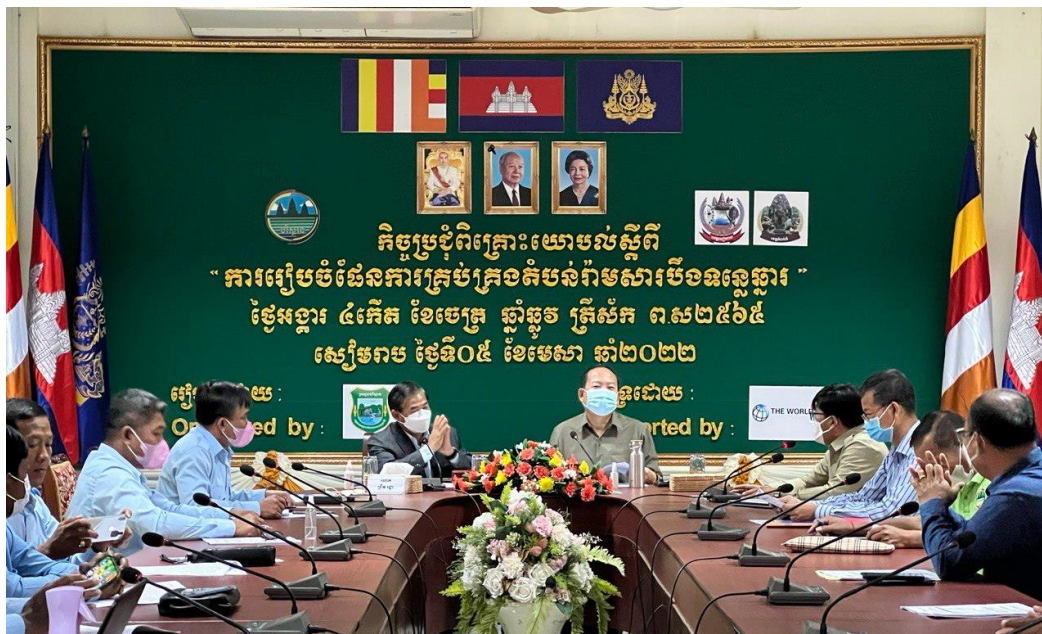
Rangers' floating station during flooding season (left) and waterfowl forages at a drying pool (right)

At Boeung Tonle Chhma Ramsar site, NLC works closely with Kampong Thom Provincial Department of Environment to support government rangers of three stations and one Community Protected Area (CPA).

Key Achievements within 2022:

1. Zonation and Management Plan Development

NLC has continued to participate in key important consultation meetings and contributed key inputs and documents in the development of the Zonation and Management Plan of Boeung Tonle Chhmar Ramsar site, including a consultation meeting on April 5th, 2022 to final review the draft Management Plan and collect inputs from key stakeholders to produce a final draft in which an agreement to remove 630 hectares of additional area in Zoning Map and Management Plan was made to be consistent with the sub-degree and adjustments on the contents and terms in the Draft Management Plan and another consultation in July 2022 to finalize the draft of the zoning map and management plan. To date, the management plan has been approved and endorsed by the Ministry of Environment while zonation is currently under final review.



Consultation Meeting on Zonation and Management Plan Development of Boeung Tonle Chhmar

2. Site Management and Capacity Building of Government Rangers

Through the cooperation with Kampong Thom Provincial Department of Environment, NLC has supported in building capacity and assisting government rangers to better manage Boeung Tonle Chhma Ramsar site with remarkable outcomes below:

- 8 rangers from Boeung Tonle Chhmar Ramsar site were invited to join a Law Enforcement Training together with rangers at Stung Sen Ramsar site to reflect on legal procedures in documenting natural resource illegal cases and Protected Area Law and build a better understanding and compliance with the law on protected areas and relevant legal documents to enhance law enforcement, especially the interception of natural resource crime cases in accordance with legal procedures and effectiveness and avoid possible conflict with relevant authorities on the same site.
- Bird Identification training course was also provided to government rangers of Boeng Tonle Chhmar to share and build the concrete capacity in bird monitoring and photography, including methods of bird identification, combined with hands-on techniques for recording birds in wetlands and concrete skills in data collection and taking good photos of bird species.
- The workshop on Ramsar Site Management Effectiveness Tracking Tools (R-METT) was conducted to assess and evaluate progress in the management effectiveness of Boeung Tonle Chhma Ramsar site in developing baseline evaluation on management condition, site assessment, data resources and documents, capacity and skills of site rangers, and existing projects at the sites.



NatureLife staff explains the process of evaluating R-METT (left) and Bird Identification workshop to rangers (right)

SMART Patrol and Result

The knowledge and skills on SMART Mobile have been applied by the government rangers at Boeng Tonle Chhma Ramsar site and Balot CPA to which they have collectively worked together with effective data collection on the field and improved report development. The training, however, was provided in cooperation with the Wildlife Conservation Society (WCS) as additional equipment and tools were provided to support rangers and CPA committees for better practices and effective data collection.

With support from NLC, government rangers of three stations at Boeung Tonle Chhma Ramsar site and one CPA have conducted regular monthly patrols and applied SMART patrol for law enforcement and biodiversity monitoring. In 2022, 13 rangers completed 291 patrols (one day equals one patrol), covered approximately 9919 km of distance, recorded 65 bird species and 3 mammal species (9 globally threatened species), and intercepted 133 illegal fishing cases. Meanwhile, the 9 committees of Balot CPA started monthly patrols in August and completed 21 patrols, and recorded 24 bird species (2 globally threatened species).

Table 20: Types of Equipment and Tools provided to rangers and TPL CPA at Boeng Tonle Chhmar

Item	Government Rangers	Community Protected Area	Number of Items
Machine Boat	2	-	2
Laptops	1	-	2
Smart Phones	3	1	4
Binocular	-	1	1
GPS	3	1	4
Boots	13	-	13



Rangers of Boeng Tonle Chhmar receive a laptop from project staff (left) and committees of Balot CPA receive a GPS during workshop on patrol protocol

Table 21: List of globally endangered species of bird recorded by rangers of Boeng Tonle Chhmar in 2022

N.O	Bird Species	Status	# of individual
1	Asian Golden Weaver	NT	300
2	Black-headed Ibis	NT	80
3	Black-necked Stork	NT	9
4	Lesser Adjutant	VU	5
5	Painted Stork	NT	1
6	Spot-billed Pelican	NT	20
7	Oriental Darter	NT	26
8	Greater Adjutant	EN	9
9	Grey-headed Fish Eagle	NT	3

Table 22: List of Globally Endangered Species recorded by Balot CPA

N.O	Bird Species	Status	Number of Individual
1	Oriental Dater	NT	10
2	Grey headed fish Eagle	NT	4

Table 23: Illegal cases intercepted by rangers of Boeng Tonle Chhmar Ramsar site in 2022

Action Taken for items	Type of Illegal fishing gear	# of Items	# of cases	Length (m)
Destroyed	Encircling fishing nets less than 3cm	19	8	680
	Fence Seine	14	15	1,940
	Fishing Net	32	88	5,906
	Bongkol Chhnok	2	2	240
	Electrocuting devices explosive stuff or all kinds of poisonous	2	5	160
Confiscated	Fixed net or all kinds of boa nets	1	1	200
	Battery	1	10	
	Mechanized pushing scoop	5	6	6.5
	Mechanized pushing scoop basket	14	12	3.3
	Encircling fishing nets less than 3cm	2	2	300
	Electric rob	8	8	-
	Electric inverter	63	6	-
	Electric wire	3	3	75
Informed to remove	Freshwater trawling or push net	1	1	-
	All kinds of net with mesh sizes bigger	9	7	-
	fishing Net	4	4	270
	Fixed net or all kinds of boa nets	3	3	350
	Encircling fishing net less than 3 cm	2	2	-
	Mechanized pushing scoop basket	2	2	-
	Manh/push net with mechanic	1	1	-
Removed	Fixed net or all kinds of boa nets	1	1	100
	Fishing Net	18	18	1,705
	Fence Seine	2	2	700
	Encircling fishing nets less than 3 cm	1	1	100

In early October 2022, Rangers at Boeung Tonle Chhmar Ramsar site spotted and captured a wild cat during their monthly patrol, which is the first record of a fishing cat in Tonle Sap. The fishing cat is classified as vulnerable species on IUCN red list due to the decline in their population. The record of the fishing cat has brought up fabulous news to prove that this Ramsar site not only provides

spawning habitats for fish and waterbirds but also supports key habitats for mammal species. NLC endorses the Ministry of Environment to develop a zoning and management plan for the Boeung Tonle Chhmar Ramsar site to ensure the effectiveness of site management and conservation. This fishing cat record will contribute to the zoning justification.



SMART officers demonstrate how to fill patrol data in the Mobile app to the committee of Balot CPA (left) and a fishing cat spotted by rangers during patrol (right)

3. CPA Establishment and Community Participation

In 2022, NLC expanded to support another Community Protected Area (namely Balot) in the project to cooperate with government rangers at Boeung Tonle Chhma Ramsar site. Balot is an existing CPA established in 2004 over the area of 65 ha of Peam Bang Commune, Stung District, Kampong Thom Province. This CPA is the only CPA at Boeung Tonle Chhmar Ramsar Site. Due to the expired key documents of this CPA, since May 2022 NLC has been working to promote long-term participation by reviewing and updating key documents and supporting regular patrol inside the CPA and Ramsar site with the following outcomes:

- An election was conducted to recruit new committee members of Balot CPA and reactivate membership of committees that have expired since 2009 and to secure recognition from all stakeholders. This election was made possible in collaboration with the Local Community Development Office of the Kampong Thom Provincial Department of Environment and local authorities. As a result, 9 candidates were elected as new committee members, one of whom is a woman being a treasurer with an official endorsement by Peam Bang commune chief on June 06th, 2022.
- The proposal for official recognition from the Ministry of Environment has been developed with 49 members on the list with endorsement from the commune chief, Kampong Thom Provincial Department of Environment, and is currently under review by the Ministry of Environment.
- The bylaw of Balot CPA has been updated with the inputs from stakeholders through a consultation meeting with CPA committees and members, the commune chief, village chief,

government rangers, and IUCN-Cambodia and has now been recognized by the commune chief for official use.

- To prepare the committees of Balot CPA for regular patrol, NLC held a consultative meeting to introduce patrol protocol to present its goals and plans for monthly patrols in accordance with the situation, location, and human resources of the community. This protocol includes prioritizing locations in the community area for conducting monthly patrols, determining the number of patrols and participants, identifying procedures of data collection and management, writing reports, and planning and conducting monthly meetings. As a result, Balot CPA began its first monthly patrol in early August 2022 and conducts four patrols per month, specifically two biodiversity monitoring patrols and two law enforcement patrols. 4 to 5 members have attended each patrol while NatureLife Cambodia has provided technical support and budget.
- Work plans and activities for developing the management plan of Balot CPA have been produced while a zoning map has been drafted through consultation and ground check to observe the potential of the area, forest cover, biodiversity patrol data, and the need for sustainable extraction.



Project staff and committees of Balot CPA identify potential areas for zonation (left) and ground check inside the fish conservation zone of Balot CPA (right)



Consultation Meeting to update by-law of Balot CPA with key stakeholders



Interception Action on Illegal Fishing cases by rangers of Boeng Tonle Chhmar in 2022

FLAGSHIP SPECIES CONSERVATION PROJECT

Cambodia Vulture Working Group.

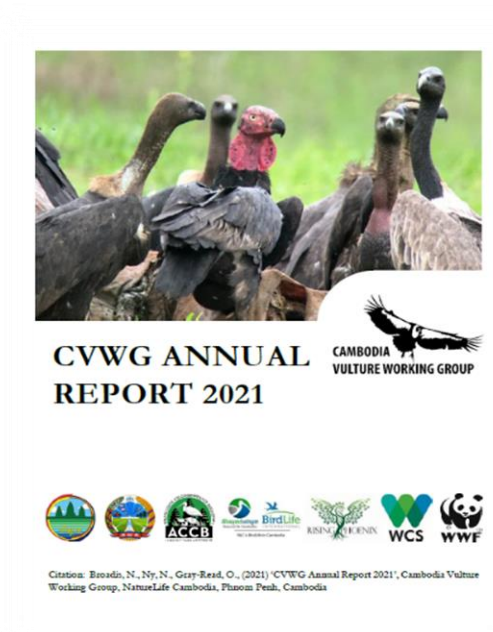
The vulture conservation project is implemented by a partnership (BirdLife/NatureLife, WWF, WCS, and ACCB). Three vulture species are resident in Cambodia; White-rumped Vulture (WRV) (*Gyps bengalensis*), Slender-billed Vulture (SBV) (*Gyps tenuirostris*), and Red-headed Vulture (RHV) (*Sarcogyps calvus*) are now restricted to small populations in Cambodia and Myanmar (Clements et al., 2012; Sum and Loveridge, 2016; Hla et al., 2011). The core members of the Cambodia Vulture Working Group (CVWG) consist of the Angkor Centre for Conservation Biodiversity (ACCB), the World Wild for Fund (WWF) Cambodia, Wildlife Conservation Society (WCS) Cambodia Program, Rising Phoenix Company, Ministry of Environment (MoE), Ministry of Agriculture, Forestry and Fisheries (MAFF) are coordinated by NatureLife Cambodia. Vulture conservation in Cambodia follows the strategies set out in the national guiding document ‘Cambodia Vulture Action Plan, which is produced by the CVWG and covers ten years action plan. The current plan covers the period from 2016 to 2025 (succeeding the 2006-2015 Action Plan). The actions undertaken include; nest protection and monitoring, carcass and prey surveys, mitigation of the threat posed by the illegal poisoning of wild and domestic animals, working with relevant stakeholders to control the use of veterinary drugs harmful to vultures, community-level awareness-raising to promote the benefits of vultures and to discourage all persecution activities and habitat destruction, and the publication of a scientific paper in Bird Conservation International titled ‘Poisoning causing the decline in South-East Asia’s largest vulture population’ (Loveridge et al, 2018) which reviews and analyses Cambodia Vulture population trends and primary threats.



Cambodia Vulture Working Group Meeting

Key Achievements within 2022:

- Authors from NLC with one WCS co-author developed the CVWG Annual Report for 2021 and shared it with all stakeholders.
- 2022 data from coordinated national census counts may suggest that the resident populations of Cambodian Vultures are stabilizing.
- NLC set up telegram groups for communication on issues related to poisoning and conservation information sharing.
- Connection with SAVE – get the opportunity for the tagging training.
- CVWG meeting is the platform for members to coordinate a variety of conservation actions, including awareness events, poisoning incident response and training, and the 18th year of coordinated national census counts and population monitoring.
- CVWG Quarterly Partners Meetings: Through the 2022 period, NLC has organized and held three CVWG Quarterly partners meetings. The meetings took place on the 7th of April, the 18th of August, and the 15th of December.
- CVWG Annual Report 2021: We have developed CVWG annual report every year and in 2022 we develop the 2021 CVWG annual report. The Annual Report was developed by two authors from NatureLife Cambodia, Oliver Gray-Read and Ny Naiky, and one from WCS, Nev Broadis. The report collected and presented all supplemental feeding sites, census, nest protection and monitoring, poisoning, and awareness data from all five partners, as well as providing a population estimate and trend analysis. After we are developing the report, it was shared widely with CVWG members, and government bodies such as the FA and MoE, and is available to any other relevant stakeholders.



The cover of 2021 CVWG

- **Poisoning response workshop:** On 11th of August 2022, NLC and WCS have collaborate with WWF at MFF to conduct poisoning response protocol training at Kratie Province. The training had two objectives: I) For field actors be able to identify and safely respond to wildlife mortality/morbidity and poisoning events, II) for field actors to fully understand the reporting line of the wildlife mortality/morbidity and poisoning case for quick action. We spent a full day in training, in the morning we focus on the theory and the methodology of the poisoning response protocol, and in the evening, we conducted a field study. After completing training on methodology and conducting the activities in the field, the participants could: identify behaviors of animal deaths associated with poisoning or other causes, know how to clean a poisoning scene, know how to record and report poisoning cases encountered, able to understand and follow the poisoning protocols clearly, and a reporting line of the wildlife mortality/morbidity and poisoning case for quick action in the province was identified and improved.

Summary Report of CVWG Poisoning
Protocol Training Workshop

Kratie Province | 11th of August 2022

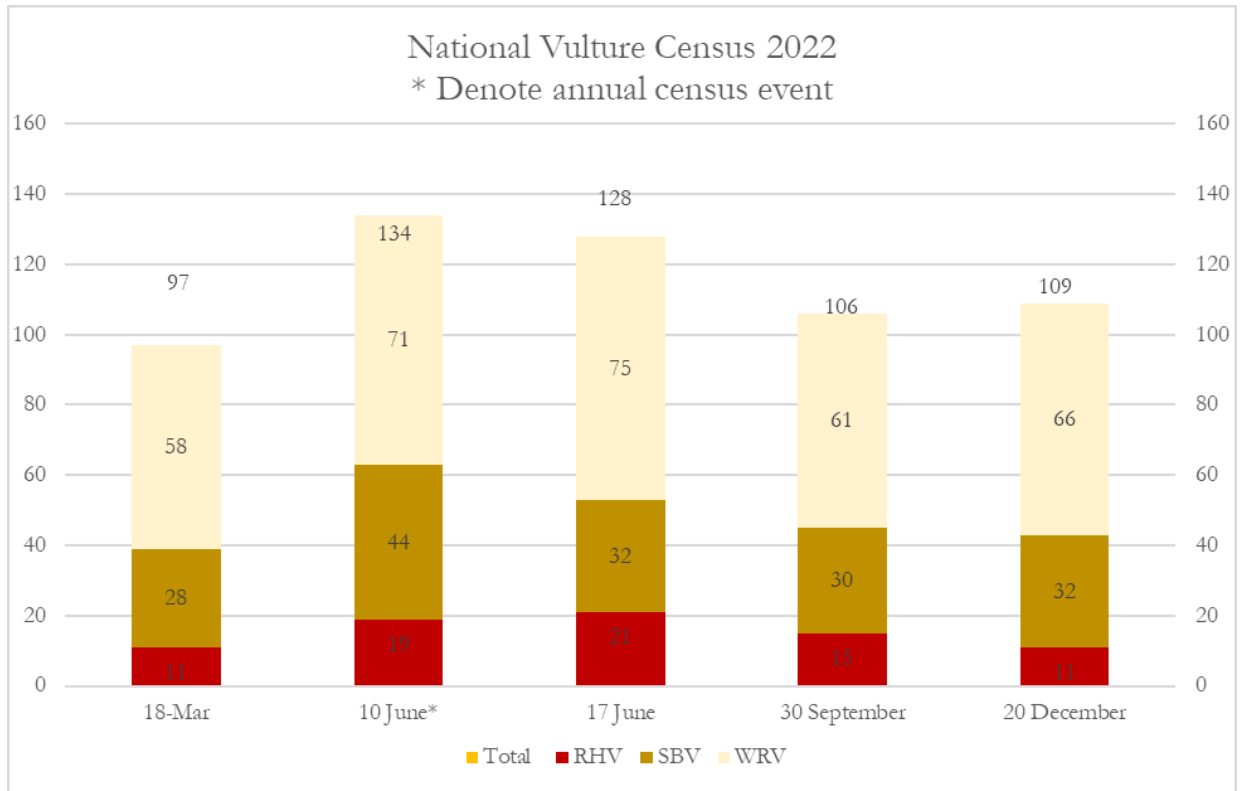


Report produced by NatureLife Cambodia on behalf of the CVWG.
31 August 2022

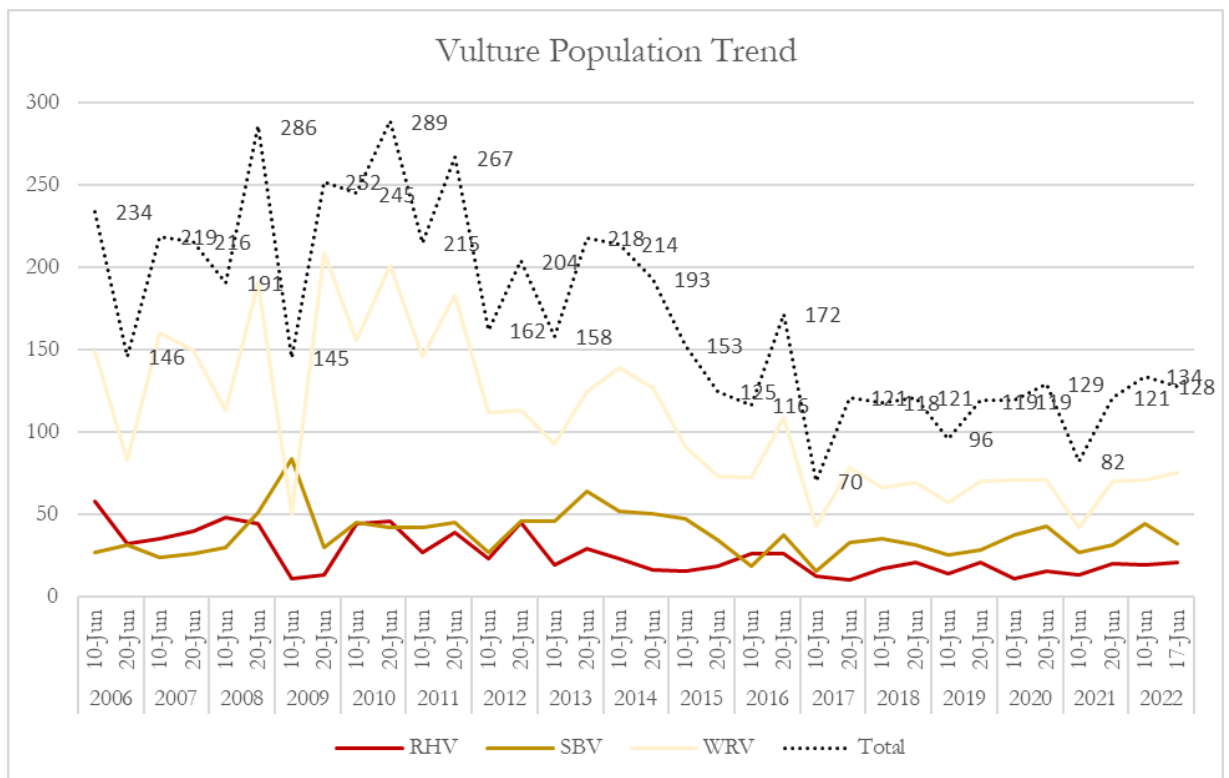


Vulture carcass (right) and training report (left)

- **Diclofenac and other NSAIDs monitoring result:** Following the discovery that veterinary use of non-steroidal anti-inflammatory drugs (NSAIDs) had decimated South Asian populations of vultures in the past few decades, monitoring veterinary use of vulture toxic NSAIDs in Cambodia has been an important part of CVWG vulture conservation efforts. Before 2021, the last comprehensive veterinary NSAID survey conducted in Cambodia was in 2014/15, when CVWG partner ACCB discovered the first case of a vulture toxic NSAID (diclofenac) on the Cambodian market chain in the capital city Phnom Penh in 2018 and have banning diclofenac in Cambodia in 2019. Since banning diclofenac in 2019 until now, CVWG has not found diclofenac available in Cambodia.
- Vulture Census was conducted regularly please see the result in the following chart:



Result of Vulture Census in 2022 (Sources CVWG)

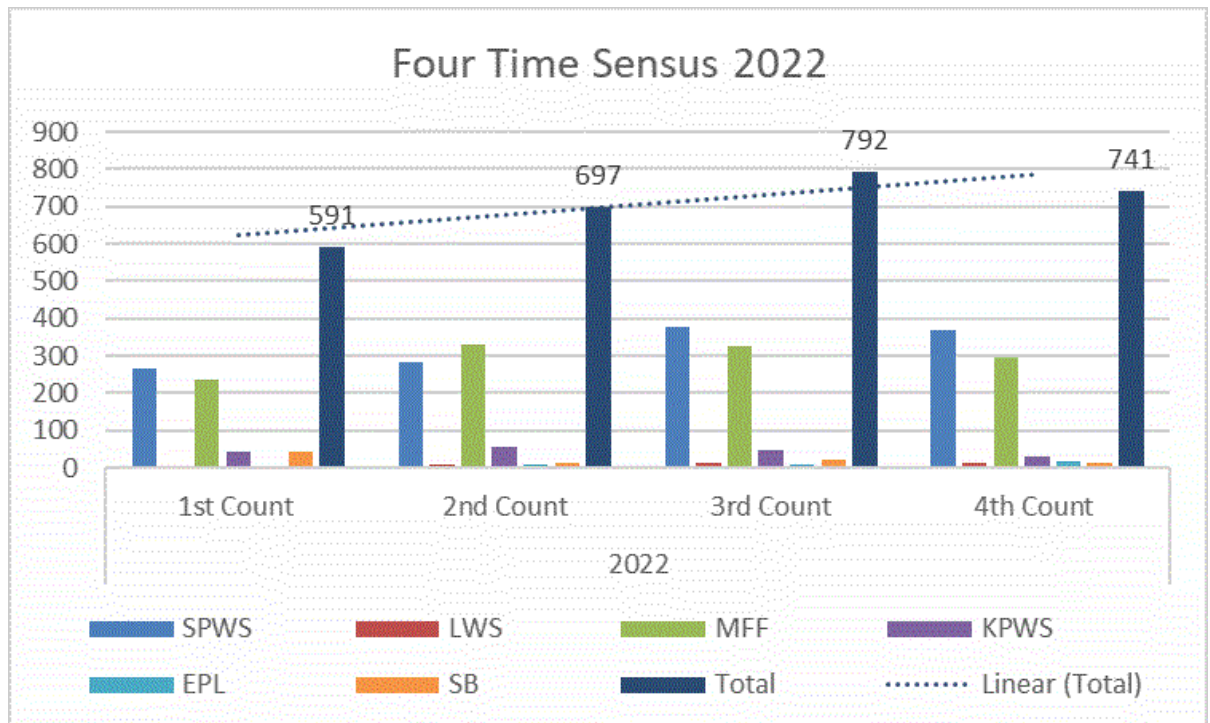


Vulture population trend from 2006 to 2022 (Sources CVWG)

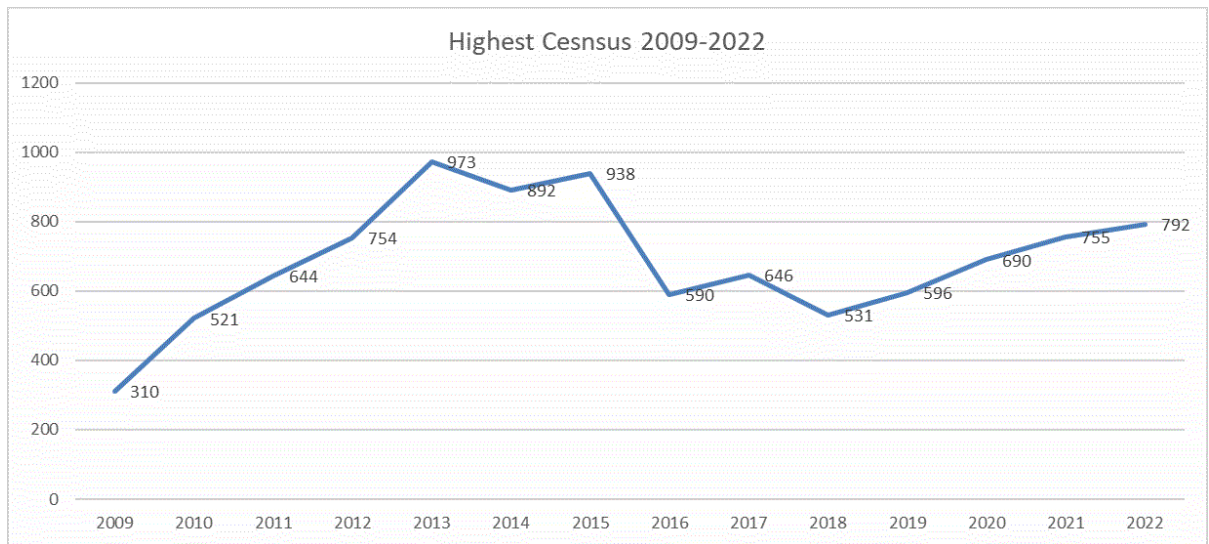
CAMBODIA IBIS WORKING GROUP

The critically endangered ibises, White-shouldered ibis (*Pseudibis davisoni*) and the Giant ibis (*Thaumatibis gigantea*), are residents of Cambodia. The White-shouldered ibis is native to small regions of Southeast Asia. To prevent the extinction of White-shouldered ibis and Giant ibis in Cambodia, the conservation organization and the Ministry of Environment agreed to establish the Cambodia Ibis Working Group (CIWG). After we agree to create the Cambodia Ibis Working Group (CIWG), during the reporting period several milestones have been produced:

- Key Conservation NGOs including NLC, WWF, WCS, ACCB, and Rising Phoenix agreed to be the core members of CIWG
- Three CIWG meetings have been done with the minute report development and shared to CIWG members.
- Developed the structure of CIWG that has included the Aim, Object, mission, and role of all members. The ministerial decree to establish CIWG was developed.
- The logo of CIWG was finalized.
- White Shouldered Ibis census was conducted with the participation of all members. Please see the census result in the following chart:



White Shouldered Ibis Census result 2022 (Sources CIWG)



Result of White Shouldered Ibis census from 2009 to 2022

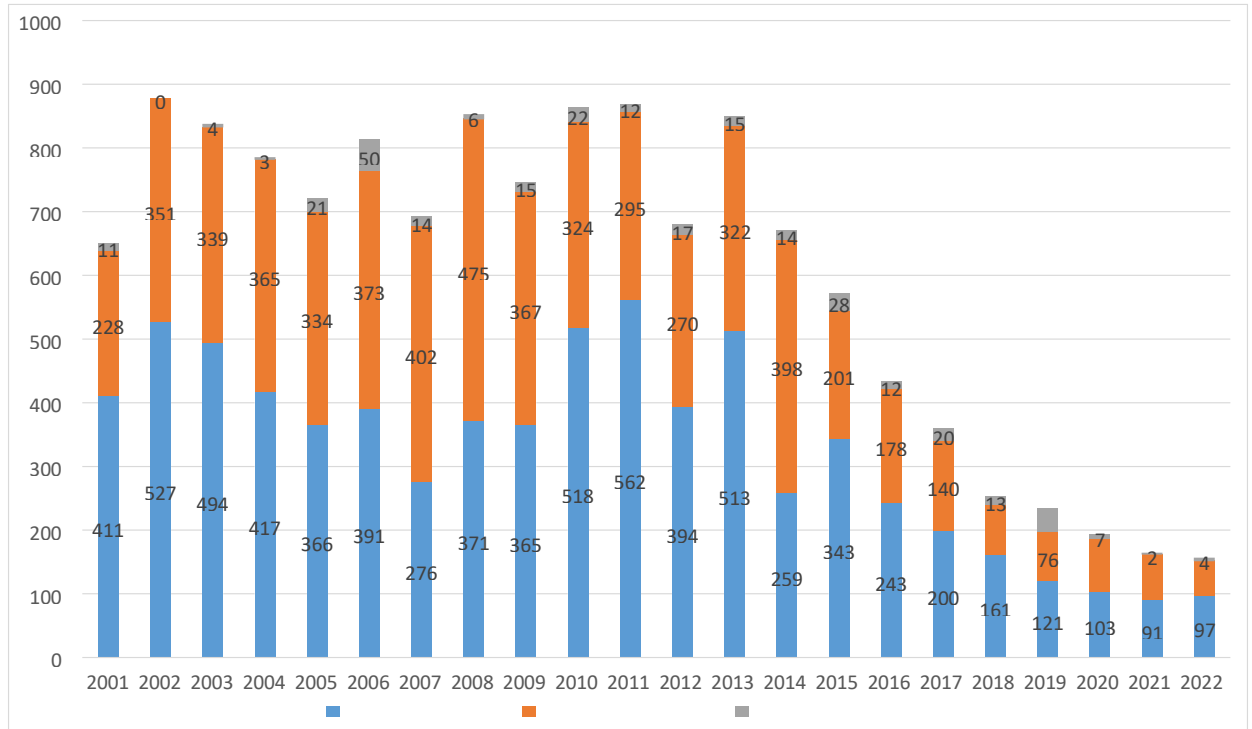


Cambodia Ibis Working Group Meeting

CAMBODIA SARUS CRANE WORKING GROUP

The Sarus crane (*Antigone antigone*) is the tallest flying bird. The two distinct populations of Sarus cranes occur in Southeast Asia: the northern population in China and Myanmar, and the southern population in Cambodia and Vietnam. The Sarus Crane Vietnam-Cambodia population are declining by about 82% during the past 9 years (averaging a decline of 9% per year). To prevent the extinction of this species, NLC has collaborated with the Ministry of Environment to create the Sarus Crane Working Group (SCWG). After we agree to create SCWG, during the reporting period several milestones have been produced:

- Key Conservation NGOs including NLC, WCS, WWF, ACCB, ICF, and WWT agreed to be the key members of SCWG. The ministerial decree to establish SCWG was developed.
- A workshop to prioritize the Cambodia Sarus Crane Conservation Action Plan was done and the 10 years Cambodia Sarus Crane Conservation Action Plan was drafted with inputs from key stakeholders
- Sarus Crane Census was organized with the participation of key members. Please see the census result in the following chart:



Coordinated counts of Eastern Sarus Cranes during the non-breeding season in Cambodia and Vietnam 2001-2022. Data are the highest count in a given year. (sources WCS, ICF, and NLC)



Consultation workshop on Sarus Crane Conservation in Cambodia

STORY OF THE YEAR

Rare Birds Population Shows Signs of Increase



White-shouldered Ibis in Lomphat Wildlife Sanctuary (Photo: Thol Sovannarith)

The White-shouldered Ibis is one of the rarest birds in the world and faces a high risk of global extinction if threats continue, including hunting trapping and habitat loss. From a global population of only perhaps 1,000 birds, a coordinated census across Cambodia in 2022 recorded 792 birds, nearly 80% of the global population.

The White-shouldered Ibis (*Pseudibis davisoni*) was once found across Southeast Asia, but today the species is restricted to the dry forest landscapes of northern and eastern Cambodia, and another much smaller relict population on the island of Borneo. The species is classed as Critically Endangered, the highest category of threat for a species, on the IUCN Red List.

In 2009, the Ministry of Environment (MoE), Forestry Administration, and conservation organizations started to jointly monitor the Cambodian White-shouldered Ibis population by counting the birds in their wet season roosts. Conducted monthly from July to October, the ibis are counted as they first enter and then leave then roost the following morning. This makes estimating both the

population size and the trend possible. From the highest count in 2013 of 973 birds, the numbers recorded have declined to 531 in 2018, a decrease of 47%. During those five years Cambodia suffered high levels of deforestation for economic land concessions. This habitat loss, combined with disturbance at nesting and roosting sites, has had a significant impact on the Cambodian population.

In 2022, for the fourth year in a row, the census counts show higher numbers. This result is very encouraging suggesting that conservation measures, or better counting at least in some areas may account for the higher total.

The highest counts are recorded at Siem Pang Wildlife Sanctuary (377) and the Mekong Flooded Forest (326). Smaller counts are made at Koh Srolay, Kulen Promtep, Lomphat, Srepok, and Phnom Prich Wildlife Sanctuaries. The annual census surveys are coordinated by the members of the Cambodian Ibis Working Group (CIWG), made up of the Ministry of Environment, Forestry Administration, Angkor Centre for the Conservation of Biodiversity (ACCB), NatureLife Cambodia, Rising Phoenix, Wildlife Conservation Society (WCS), and World-Wide Fund for Nature (WWF).

H.E. Net Pheaktra, Secretary of State and Spokesperson, Ministry of Environment said “The Royal Government of Cambodia thanks all Conservation’s partners to join efforts to protect and conserve natural resources and wildlife, as the result shows an increase in the number of wildlife species including White-shouldered Ibis. This demonstrates the effectiveness of the implementation action plan of the Ministry of Environment and an organization partner and the demonstrated improvement of natural resource conservation in Cambodia, people awareness raising and the changing public attitude with wildlife. The Ministry of Environment and NGO partners will continue their effort to provide safe habitats to wildlife through law enforcement, local economic supporting, and other education campaigns to change public behavior. The Ministry of Environment continues to aware on people to stop trapping, hunting, eating wildlife meat, and wildlife trade.”

World Wide Fund for Nature (WWF) Cambodia Country Director Mr. Seng Teak congratulates the rising number of White-shouldered Ibis population trends in Cambodia – a result of concerted efforts in conserving this critically endangered species in the world. With at least 326 white-shouldered Ibis recorded along with 17 roosting sites in Sambo Wildlife Sanctuary, the number of white-shouldered Ibis population in the Mekong Flooded Forest has increased by 29% in 2022 from 252 birds in 2021. “WWF is delighted and congratulates the positive result of the White-shouldered Ibis survey. We thank Ministry of Environment, all members of the Cambodian Ibis Working Group (CIWG), local community and relevant stakeholders who involved in this conservation efforts,” he continued, “As a member of CIWG, WWF commits to working together with responsible authorities, NGO partners and local communities to safeguard this critically endangered bird species through support to law enforcement and community-based habitat and nest protection. We stand ready to collaborate on the joint conservation action efforts to thrive for stronger survival of this rare species.”

Mr. Jonathan Charles Eames OBE, CEO of Rising Phoenix Co. Ltd. said “At Rising Phoenix we make a great effort not only to count roosts but have taken steps to protect the largest roost site which falls outside Siem Pang Wildlife Sanctuary. Our dedicated team devotes significant time and resources to finding and monitoring white-shouldered Ibis nests and finds about 45 per annum.”

Mr. Bou Vorsak, Director of NatureLife/BirdLife in Cambodia said “Cambodia supports the largest population of White-shouldered Ibis in the world, the 2022 census result indicates a promising future. NatureLife Cambodia would like to thank the Ministry of Environment for leading the Cambodia Ibis Working Group. We are delighted to support this species working group to develop and implement the Cambodian ibis conservation action plan to protect the critically endangered ibises from extinction”.



White-shouldered Ibis in roosting-Siem Pang wildlife sanctuary (Photo: Vann Vorackchet)

Lomphat REDD+ Project Kicks-Off in Ratanakiri

23rd of November 2022 marked the official launch of the Lomphat REDD+ Project and was held at Phumi Khmer Resort, Banlung City in Ratanakiri Province, attended by 84 participants from project partners and key stakeholder groups.

The Project Kick Start Workshop for the Lomphat Wildlife Sanctuary (LWS) REDD+ Project follows the authorization from the Ministry of Environment on the 10th of December 2021 for BirdLife International/NatureLife Cambodia to develop and implement the project with financial support from USAID Morodok Baitang.

The event featured welcome speeches and introductory talks by a number of important persons critical to the project's implementation, including H.E. Choup Paris, the RGC Under-Secretary of State and National Redd+ Focal Person; H.E. the Provincial Deputy Governor of Ratanakiri Mar Vichet; H.E. the Provincial Deputy Governor of Mondulakiri Chan Ratana; Vaneska Litz, the Chief of Party for USAID Morodok Baitang; and Vorsak Bou, the CEO of NatureLife Cambodia.

The distinguished speakers emphasized the opportunities that the project brings to not only deliver significant emissions reductions and protection of Lomphat's threatened forest landscapes but also benefit to local community livelihoods and sustainable development of the area that the project can provide.

In particular, H.E. Paris noted that at the global level within the framework of UNFCCC, recent Cambodian REDD+ projects have been acclaimed for standing out for their success in implementing projects and delivering carbon credits to the market. He also declared that Lomphat REDD+ project is the first REDD+ project of Ratanakiri province and request all stakeholders to support it to ensure the project's success.

Chief of Party Vaneska Litz added that USAID Morodok Baitang decided to support this project in recognition of NatureLife Cambodia/BirdLife's long-standing commitment to the conservation of Lomphat Wildlife Sanctuary, and assured participants that USAID Morodok Baitang is equally committed to conservation and future of the sanctuary.

In attendance were a variety of key stakeholder groups, such as the Deputy governors and Chiefs at District, Commune, and Village levels, the Provincial Directors of LWS, MoE personnel including ranger and enforcement teams, representatives of Community Protected Area committees and Community-based Organisations in LWS, related Provincial Departments as well as representatives from the private sector and NGO stakeholders.

The event was an important step in bringing together representatives of all main stakeholder groups to introduce the project and to promote shared understanding and commitment to project objectives among the project partners for the next steps and activities.

During the workshop the project's goals, objectives, expectations, and roadmap were presented, reviewed, and discussed, followed by sessions to field questions from participants and to collect inputs from participants in order to integrate them into the strategic direction of the project and establish a solid agreement for the work ahead.

Also, the workshop covered and discussed the commitment to collaborate in undertaking extensive work to complete FPIC (Free, Prior, and Informed Consent) consultations, social and biological impact assessments, and grievance mechanisms to protect the rights of the communities in the project area.

H.E. Chan Ratana, Deputy Governor of Mondulkiri province reiterated that in the name of the Provincial Governor, the Royal Government of Cambodia expressed his strong support for the development and implementation of REDD+ project. In closing the workshop and on behalf of all participants, he then announced the official launching of the project. We are very pleased to report that the project received great support and encouragement from participants, and greatly looking forward to delivering this important project.



Participant in Lomphat REDD+ Kickoff workshop

Together, end the snaring crisis and wildlife trades in the natural forest of Cambodia

Ratanakiri, 04 September 2022 – The Ministry of Environment (MoE), Ratanakiri Provincial Department of Environment, Ratanakiri Provincial Administration, NatureLife Cambodia (BirdLife in Cambodia), Conservation International- Cambodia, Fauna & Flora International (FFI), World Wildlife Fund (WWF), Angkor Centre for Conservation of Biodiversity (ACCB), Wild Earth Allies (WEA), and Samsom Mlup Prey, have organized a Zero-Snaring Campaign event in Ratanakiri province to cease the snaring crisis and wildlife hunting within Cambodia’s protected areas and to prevent the extinction.

The "**Zero-Snaring Campaign**" officially began in March 2022 in Phnom Penh, initiated and led by the Ministry of Environment, and supported by conservation and development partners. The Zero-Snaring Campaign lasted six months and took place in 6 target provinces, including Stung Treng, Preah Vihear, Kratie, Mondulakiri, Kampong Thom, and Ratanakiri.

Ratanakiri is the sixth and last province to hold this campaign before this campaign will conclude in Phnom Penh in October 2022. Ratanakiri Province, located in the Northeast of the country, is rich in natural resources and wildlife however in the last decades, hunting, snaring, and poisoning have been identified as key threats that led to a notable decrease in wildlife population and some species are at the edge of extinction. Consumption of wildlife meat is a motivating factor for snaring and wildlife trade.

Today's campaign is conducted in parallel with **International Vulture Awareness Day**. The result of the last national vulture census, organized by the Cambodia Vulture Working Group (CVWG) on 10 July 2022, recorded 134 individuals (of which 19 Red-headed Vultures, 44 Slender-billed Vultures, and 71 White-rumped Vultures). Ratanakiri is one of the Cambodian vulture’s home range provinces, however, CVWG expresses its concern about the current hunting, snaring, and poisoning that continue to occur in this province, this pressure lead to a significant decrease in the vulture population sighted in Ratanakiri and will be declined in near future.

“The Zero-Snaring Campaign is a joint effort between the Ministry of Environment, relevant authorities, and NGO partners in conservation and development sectors, with the aim to eradicate all types of snaring from Cambodia’s Protected Areas, creating a haven for wildlife and biodiversity safe from the threat of snaring, and supporting ecosystem sustainability,” said His Excellency Neth Pheaktra, Secretary of State to the Ministry of Environment and the Chairman of the Zero-Snaring Campaign. “Wildlife plays a crucial role in sustaining the ecological system. The loss of wildlife and biodiversity causes imbalances in the ecosystem. Wildlife is also a significant contributor to the development of ecotourism that supports local economic development, creating jobs and income opportunities for the local communities. We will further commit our collective efforts to end the snaring crisis, while urging all wild meat consumers to say no to bushmeat and participate in conserving all wildlife animal species,” His Excellency Secretary of State added.

“Cambodia is the leading country in Southeast Asia region to take concrete action to tackle the snaring crisis, which is a major driver of wildlife decline and extinction of some important wild animal species,” said Mr. Seng Teak, WWF-Cambodia Country Director. “Collective actions are needed to address this crisis, coupled with implementing environmental education and public awareness programs, strengthening law enforcement efforts, increasing the penalties for wildlife

criminals, and developing more alternative livelihoods initiatives for local communities,” Mr. Teak added.

“We have supported the management and conservation activities in Lomphat Wildlife Sanctuary since 2005, the monitoring result showed that hunting is increasing in the last few years. In 2016, at least five vultures died due to poisoning. Increasing the access of humans in the protected area is the main factor leading to an increase the snaring and poisonings” Said **Mr. Bou Vorsak, Chief Executive Officer of NatureLife Cambodia**, “To reduce this wildlife threat, we have worked with all stakeholders (including economic land concession holders) to conduct awareness about laws and importance of wildlife conservation and also support rangers and local communities to conduct law enforcement patrol and remove the snares from key habitats”

“Snaring to capture wildlife is a significant problem across the country, especially in the forests of Ratanakiri. Much of this is to feed consumers looking to eat wild meat, but the impact on biodiversity is extreme and we risk the forests becoming empty if this continues. We hope that this campaign has raised awareness across the country and will therefore help to reduce demand. Said **Mr. Jackson Frechette, CI-Cambodia landscape Director**. “Veun Sai Siem Pang National Park has an estimated 389 groups (~1,556 individuals) of northern yellow-cheeked gibbons. The ongoing population monitoring indicates that the forests of Veun Sai Siem Pang NP, Virachey NP, and Siem Pang WS have populations of northern yellow-checked crested gibbons at natural densities. This area is likely a global stronghold for this endangered species.”, he added.

“Snares are the biggest threat to wildlife in Cambodia’s forests. Cheap, easy to deploy, difficult to detect, and indiscriminate, snares are emptying protected areas of the wildlife they are meant to protect,” said **Pablo Sinovas, Country Director, FFI Cambodia**. “Action is needed now to reduce the demand for wild meat driving much of the snaring, and to strengthen enforcement.”

“Cambodia is known as one of the biodiversity hotspots in Southeast Asia. Some Cambodian biodiversity has been under pressure from threats. Of these, snares have been identified as one of the most serious threats to wildlife that play an important role as keystone species in ecosystems. On behalf of Wild Earth Allies, I would like to fully support the Zero Snare Campaign and call for Cambodians to stop wildlife hunting and wildlife trade,” said **Mr. Tuy Sereivathana, Programme Director of Wild Earth Allies Cambodia**.

“Snares are unselective and responsible for killing and severely injuring a wide range of species, from mammals to birds, in our forests. If the demand for the illegal bushmeat trade continues so will the snaring. Through effective law enforcement, in combination with education, we need to reduce the demand for bush meat and snaring” said **Ms. Christel Griffioen, country director for Angkor Centre for Conservation of Biodiversity**. “Annually, on the first Saturday of September, we also celebrate International Vulture Awareness Day to raise awareness about vultures. Cambodia is home to three Critically Endangered vulture species, and vulture populations worldwide, Cambodia including, are declining rapidly. Not eating bushmeat is one way you can help protect Cambodia’s vultures”, she added.

The Ministry of Environment in collaboration with partners is working to provide alternative livelihoods, including agricultural, agroforestry, and ecotourism initiatives, to the local people living

adjacent to protected areas who are traditionally dependent on collecting non-timber forest products, and traditional hunting for meat and trade. This effort will also seek to transform people’s preferences and attitudes toward wildlife consumption to protect public health from future pandemic risks.

“To improve their livelihood, the local communities can engage with the Ibis rice initiative instead of snaring and hunting,” said **Mr. Keo Soheat, Executive director of Sansom Mlup Prey**



Zero snaring Campaign in Ratanakiri

NATURELIFE CAMBODIA FINANCIAL REPORT**FINANCIAL STATEMENT IN 2022****RECEIPTS**

Fund Received from donors	833,062.63
Other income	30,010.92
Total Receipts	863,073.55

DISBURSEMENTS

Personnel costs	300,105.50
Office supplies / Materials / Utilities	6,008.11
Telecom / Post / Internet	4,525.56
Community conservation	240,173.79
Workshops / Meetings	50,588.65
Equipment and supplies	42,515.47
Travel	33,065.23
Overhead	8,023.57
Audit	2,200.00
Sub-grant	38,412.56
Total Disbursement	725,618.44

Surplus / (Deficit) of receipts over disbursements	137,455.11
Fund balance as at beginning of year	203,416.75

Fund balance as at end of year	340,871.86
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Represented by:

Cash at bank (CPB)	303,354.78
Cash at bank (ACLEDA)	8,439.34
Cash on hand	5,874.29
Staff & Sub-grant advance	23,203.45
Office rental deposit	0.00
Total	340,871.86

NATURELIFE CAMBODIA STAFF 2022

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18	មួង ប៊ុនម៉ាត	Mourng Bunmart	Community Support Officer	088 510 2210
19	មាស បញ្ញា	Meas Panha	FMT Supporter	096 791 5301
20	សៀន សុភី	Souen Sophy	Cleaner	017 603 084
21	ប៊ុន ធី	Bun Thy	Guard	088 448 1116

PARTNER AND DONORS

NatureLife Cambodia would like to acknowledge the support from the following partners and donors:

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NGOs partners



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