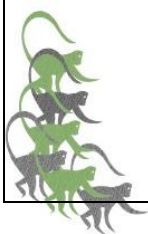




West African Primate Conservation Action **ANNUAL REPORT 2021**

www.wapca.org



Message from the WAPCA-Programme Manager

2021 remained challenging for all of us, as further waves and lockdowns hit the world over, we did our best to maintain the positivity that carried us through 2020, and carry out all activities as planned. As Programme Manager based in the UK, I was able to visit Ghana twice in 2021.

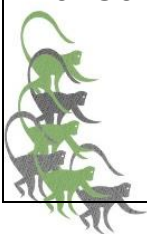
It was a delight to grow the team this year, with Veronica Dandzo-Adzagudu and Charles Afosah joining us as Project Support Officer, and Cape Three Point Project Lead respectively. They have both been fantastic assets to the team, and I am highly impressed with their motivation and work ethic already.

We have undergone a small rebrand with a new logo (see page 7). The logo captures our vision in four steps;

- **Discover** - new populations through comprehensive survey work;
- **Protect** - through community driven and sustainable action;
- **Reinforce** - with two captive breeding sites managed by the European Association of Zoos & Aquaria (EAZA) breeding programme;
- **Connecting** - nature with adults and children alike, so that they are inspired to care for the planet they share, not own.

2021 has also seen great development in newer projects particularly our work in Cape Three Point Forest Reserve with project partners Hen Mpoano. We have really enjoyed the Friends For Wildlife Programme which connects schools in Ghana with international counterparts. Collaborating with the education team at Five Sisters Zoo: two schools, one in Ghana and one in Scotland, have been sharing letters, artwork, and lessons over the year with great success on both continents.

We were pleased to welcome a new birth at the Endangered Primate Breeding Centre, and the transfer of a breeding female, Kate, from Landau Zoo in Germany to Ghana, despite the covid restrictions. It was unfortunate that the intended breeding male passed away, but we were able to mix her with another young female and in 2022, will join them with a new male – Klaus! I am especially pleased to welcome Kate, as she is the daughter of Conchita, a female mangabey I hand reared 14 years ago! Conchita went to Landau



Zoo on a breeding recommendation with Charles, a rescued ex-pet, who Landau Zoo received from WAPCA in 2007. WAPCA are privileged and proud to be contributing to this diversifying of genes and receiving offspring back to Ghana.

Despite Covid we have hosted a number of interns, which we are always grateful for. We have a new partnership with the African Leadership University and will be receiving interns yearly from their cohorts. This year Joseph and Naomi were a great addition to the team and were particularly appreciated during the organising and running of Mangabey Awareness Day – MAD! MAD this year was held at Cape Three Point Forest Reserve and again was a huge success – bringing all the communities together in celebration of wildlife.

We are also pleased to announce a second Conservation Agreement. This agreement has been signed between the Ankasa-Tano CREMA and Yayra Glover Limited. This ensures that the cocoa farmers will receive a fair price for their cocoa and an additional premium for applying organic practices. The agreement also ensures that Yayra Glover will pay an additional premium into the CREMA Conservation Fund, to pay for conservation activities, creating self-sustainable conservation action.

2021 however was not all joyful. We lost our dear friend Nana Paul Kudjo aka Frenchman.



**WAPCA Chairman with
Frenchman in 2019**

I know many of you will have met Frenchman when visiting Ghana, where he welcomed everyone with a smile and an interesting life story. Frenchman was a stable fixture for our field work, his visitor accommodation being the central venue for workshops, meetings, and trainings. His was so much more than just a venue. Frenchman was an excellent mediator and would often bring feuding communities or leaders together to find a resolution. He was a champion of biodiversity conservation, you'd often find a rescued animal in his house! His advice and support to WAPCA over the many years has been invaluable, I am privileged to have known him and we will all miss him very much.

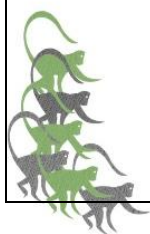
Thank you to our two Boards, advisors, supporters, members and friends who make this all this possible. Thanks to the WAPCA team for their hard work & dedication in 2021.

Best Wishes for 2022,

Andrea Dempsey

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What is WAPCA?

West African Primate Conservation Action (WAPCA) is an initiative of several European Zoos spearhead by Heidelberg Zoo, and the Zoological Society for the Conservation of Species and Populations (ZGAP)

What is our objective?

WAPCA's objective is to effectively preserve primate habitat in the Upper Guinean Rainforest of West Africa, which is under serious threat of destruction. WAPCA has been promoting the protection of Critically Endangered primates in Ghana and Côte d'Ivoire since 2001 and in 2007 established WAPCA Ghana, a local NGO which is managed in partnership with the Wildlife Division of the Ghana Forestry Commission.

How do we do this?

WAPCA Ghana's activities have integrated various approaches to primate conservation, categorized into the following four disciplines:

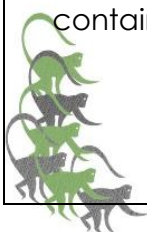
- 1. In-situ** – community empowered, holistic conservation in wild primate habitat.
- 2. Ex-situ** – captive breeding at the Endangered Primate Breeding Centre, as part of Accra Zoo and the Forested Enclosure at Kumasi Zoo.
- 3. Education** – engage, inspire and empower people through the zoos, outreach programmes and community based projects.
- 4. Research** – developing cohesive and complimentary multi-disciplined research through the WAPCA Research Group, creating a better understanding of Ghana's primate landscape and how to better protect them and care for them in captivity.

Who do we do this with?

WAPCA works closely with the Wildlife Division (WD) of the Ghana Forestry Commission which is a full managing partner of WAPCA Ghana. Other collaborating partners include; Noe's Man & Nature, Research and Actions for the Safeguard of Primates in Côte d'Ivoire (RASAP-CI), and The University of Barcelona.

Where do we do this?

The Upper Guinean Rainforest constitutes a 350 km wide strip of West African coastal rainforest stretching from Sierra Leone to the Ghana-Togo border and is listed as one of the IUCN's 25 Key Biodiversity Areas, WWF's Global Spot region, a CI Biodiversity Hotspot, and a Birdlife International's Important Bird Area. The IUCN 25 Key Biodiversity Areas cover only 1.4 % of the earth's surface but contain more than 60% of all animal and plant species found on this planet.



The Upper Guinean Rainforest is one of the most biologically diverse ecosystems on the African continent supporting over 1800 endemic plants, 31 endemic threatened birds, 35 endemic threatened mammals, and 49 endemic threatened amphibians. As well as our focal primate species it is home to lesser spot-nose monkey (*Cercopithecus cephus petaurista*), Lowe's monkey (*Cercopithecus mona lowei*), and olive colobus (*Procolobus verus*) as well as a as well as other unique mammals such as zebra duiker (*Cephalophus zebra*), royal antelope (*Neotragus pygmaeus*), Liberian mongoose (*Liberiictis kuhni*), Dephwa mouse (*Dephomys eburnea*), white-throated shrew (*Crocidura wimmeri*) and the Togo mouse (*Leimacomys buettneri*).

What are our focal species?

- Miss Waldron's Red Colobus (Pictured here)
(*Procolobus badius waldroni*)
Status: *Critically Endangered*
- Roloway Monkey
(*Cercopithecus Roloway*)
Status: *Critically Endangered*
- White-naped Mangabey,
(*Cercocebus lunulatus*)
Status: *Endangered*
- White thighed black and white Colobus
(*Colobus vellerosus*)
Status: *Critically Endangered*



Within the eastern region of the Upper Guinean rainforest that extends from Côte d'Ivoire to Ghana, there resides a distinct community of primates endemic to the area, including the Critically Endangered (and possibly extinct) Miss Waldron's red colobus, the roloway monkey and the white-thighed black and white colobus – both Critically Endangered, and the Endangered white-naped mangabey which are listed amongst the world's 25 most Endangered primates. While Miss Waldron's red colobus may already be extinct, the roloway monkey and white-naped mangabey (pictured below) appear to be following the same path towards extinction. Additional endemic primates include the *Critically Endangered* Western chimpanzee (*Pan troglodytes verus*), the *Near Threatened* olive colobus (*Procolobus verus*), the lesser spot-nose monkey (*Cercopithecus petaurista petaurista*), the Lowe's monkey (*Cercopithecus mona lowei*).



West African primate illustrations by
artist Stephen D. Nash

What are the threats?

The prime threats come from loss of habitat, and poaching or hunting of the animals.

Deforestation is the greatest threat to both the environment and wildlife dependent upon the rainforests of West Africa. According to a recent CEPF Ecosystem Report, the Upper Guinean Forests has been reduced to a mere 15% of its original forest cover. Logging, unsustainable and poor practice agriculture in cocoa and palm oil, illegal mining (termed “galamsey”), and human encroachment have left fragmented remnants of rainforest. Studies of legal and illegal logging in Ghana have shown an increase of 600% over 15 years. As you would imagine, illegal logging is the most devastating, being wholly unmanaged with no discretion for tree species, age, or size. One third of illegal logging is carried out by licensed companies who either take more than their quota or in protected areas. The remaining two thirds is down to illegal chainsaw operators, operating any way they can access by road. According Global Forest Watch, Ghana lost more than half a million hectares between 2001 and 2014 - around 9% of its total forest cover.

Extensive bush meat hunting for both local consumption and export to other countries is similarly devastating. Estimates of the bush meat trade run as high as \$400 million per year in Ghana and \$500 million in Côte d'Ivoire, causing a massive decline in the wildlife populations of West Africa. Wildlife populations in Ghana and Côte d'Ivoire are disappearing at such an alarming rate that many of the remaining rainforest habitats have become nearly devoid of mammal species, causing conservationist to now label these forests as “empty forests”.

The unique fauna and flora found within these areas of rainforest have long been under the stress of deforestation and overhunting and with diminishing forest cover in which to retreat, wildlife within these sparse forests are increasingly finding they've no place left to hide.



Who makes WAPCA possible?

Zoo Heidelberg serves as the managing body for WAPCA. WAPCA membership dues provide the crucial funding for all WAPCA Ghana core operating expenses and also provide significant funding for rainforest protection activities in Côte d'Ivoire. Zoological Collections who become members or support us in one off donations demonstrates the important role the modern zoo plays in conservation as they adopt an One Plan Approach whereby the two worlds of in-situ and ex-situ become more and more interlinked. As a visitor supporting good zoos similarly enables them to support us in our work

Our members, who we are incredible grateful to are:

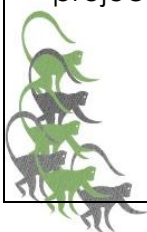
- **Zoo Heidelberg**
- **Zoo de Mulhouse**
- **Parc Zoològic de Barcelona**
- **Dublin Zoo**
- **Zoo Landau**
- **Allwetterzoo Münster**
- **Zoologische Gesellschaft für Arten-und Populationsschutz (ZGAP)**
- **Zoo La Palmyre**
- **La Vallée des Singes, Romagne**
- **Zoo Bojnice**
- **Twycross Zoo**
- **Zoo Duisburg**
- **Rotterdam Zoo**
- **Gaia Zoo**
- **Fundacion Bioparc**
- **Ouwehands Rhenen**
- **Zoo Kosice**



If you are interested in becoming a member or supporting WAPCA please do not hesitate to contact WAPCA Secretary Sandra Reichler, who can facilitate your support.

Sandra.Reichler@Heidelberg.de

For EAZA members, please feel free to attend our annual meeting at the EAZA Conference in Helsinki this year where the Programme Manager would be more than happy to discuss the project and funding options.



2021 ACTIVITIES REPORT

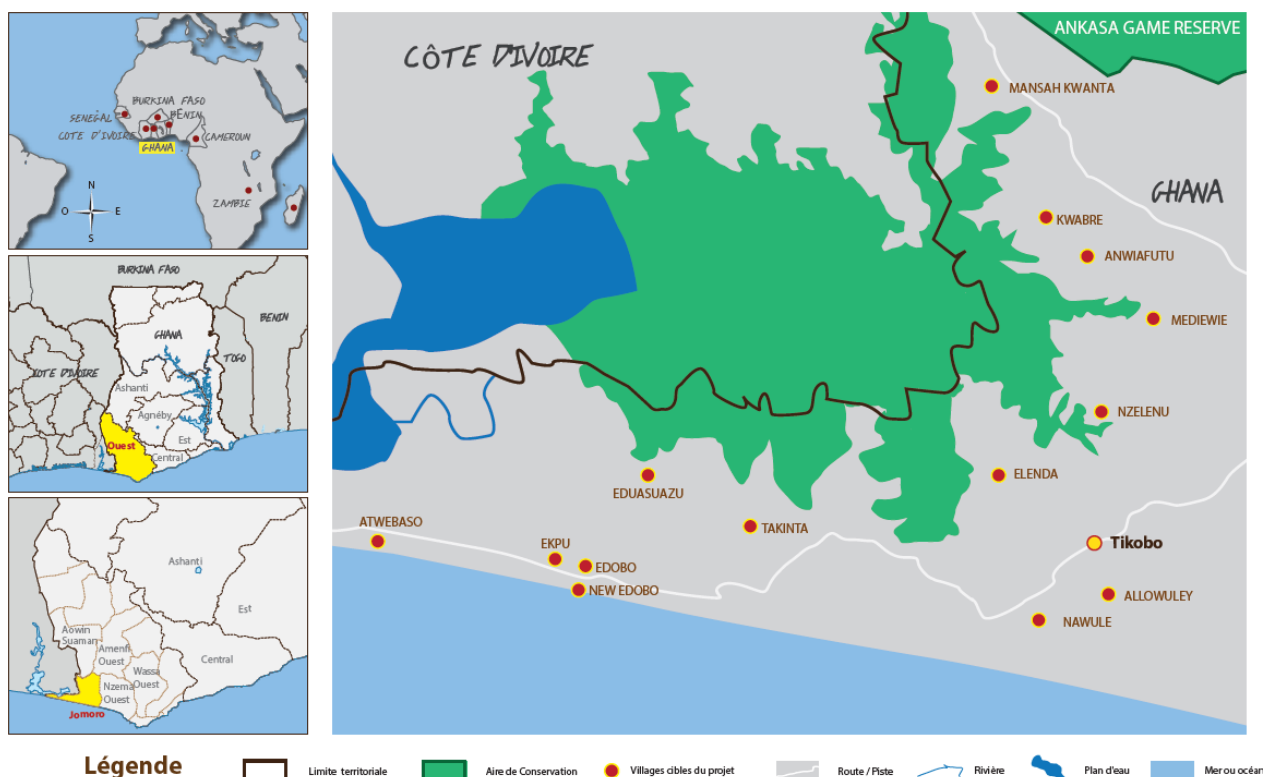
WAPCA IN ACTION CREATING VIABLE LONG-TERM SOLUTIONS

TRANS-BORDER COMMUNITY-MANAGED RAINFOREST PROJECT

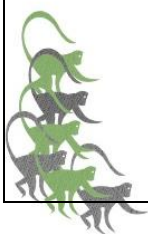
by Project Support Officer – Veronica Dandzo-Adzagudu

Protecting the Last Remaining Primate Habitats in Ghana

The Kwabre Rainforest is a 2,500 hectare corridor of community-owned virgin rainforest which lies along the Tanoé River, directly opposite to the Tanoé Forest in Côte d'Ivoire. This very special rainforest is home to a number of Endangered primates including the white-naped mangabey (*Cercocebus lunulatus*), white-thighed black & white colobus (*Colobus vellerosus*), the olive colobus (*Procolobus verus*) and the Critically Endangered Roloway monkey, which is listed on the 25 Most Endangered Primates of the World. WAPCA has been working in this area since 2012 when a primate survey rediscovered a population of Roloway after it was considered locally extinct. WAPCA works with the communities that surround the rainforest, empowering them to create a Community Resource Management Area (CREMA) which legally allows the communities to manage their natural resources and protect the Kwabre from destruction.



WAPCA, in partnership with the 14 communities, the Research and Actions for the Conservation of Primates in Côte d'Ivoire (RASAP-CI), Savannah Fruits Company, Yayra Glover Cocoa and Noe's Man & Nature. Thanks to them and funding from Tulsa Zoo, Critical Ecosystems Partnership Fund, French Development Bank and IUCN PPI programme, we have been working hard this year to maintain and develop our key goals:



Our Project Goals:



Cocoa beans drying in the sun

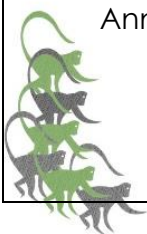
- 1) Protect and enhance the 2,500 hectares of community-owned virgin rainforest through the transformation of the Kwabre Rainforest into a federated Community Resource Management Area (CREMA)
- 2) Reduce illegal activities in the rainforest through the training and implementation of community patrols,
- 3) Improve the health of the rainforest through the reforestation of areas degraded by illegal lumbering and mining
- 4) Create sustainable community-managed agro-forestry plantations, to reduce harvesting of forest products and clear-cutting of virgin forests for large scale export commodities
- 5) Lay the foundation for a Trans-border Community-managed Forest Reserve between the Kwabre Rainforest in Ghana, and the Tanoé Community Forests in Côte d'Ivoire.
- 6) Develop sustainable livelihoods and promote green value chains in organic cocoa and organic coconut oil.

1. Community Resource Management Area



The number of communities constituting the Ankasa-Tano CREMA has increased tremendously from 10 communities when the CREMA was established in 2014, to 31 communities at the end of 2021, demonstrating the acceptance of the CREMA project within the Ankasa-Tano landscape. These 31 communities comprise of 16 major communities with 15 sub-communities.

To ensure autonomy of the Ankasa-Tano CREMA and better management of all related projects, lessons and skills learnt from trainings organized in financial management, leadership and organisational skills for various groups including Processor Groups, CRMC, CEC, cocoa and coconut farmer groups have applied judiciously in the management of the CREMA project. Most especially, the CREMA Executive Committee through the application of financial management and record keeping skills was able to account for the CREMA's financial expenses throughout the year 2021 at the CREMA's Annual General Meeting in a transparent manner.



Testimonies like the following were given by CREMA members who participated in capacity building trainings:

"At the processing centre, the group have started contributing towards opening a bank account, taking records of everything we buy or want to do. This is something we didn't use to do but now we are doing it due to knowledge acquired through the training and it is helping us a lot." – Agness Elliam (VCO Processor, Ellenda)

A Conservation Fund Management Plan has been developed to guide management of funds generated from Conservation Agreements with private sector partners.



CREMA Annual General Meeting held in 2021

2. Community Rainforest Protection Teams

The Community Rainforest Protection Team have worked tirelessly throughout the year, conducting a total of 459 local patrols and 55 joint patrols in the Ankasa-Tano Community Rainforest. The patrol team commenced with the use of the Event Book for collecting biodiversity data and monitoring illegal activities. The In-situ Project Coordinator organized refresher trainings for 18 patrollers in the use of Event Book and Cybertracker.



During the year, 23 chainsaws and a total of 5,635 lumbers were seized and patrollers made 25 arrests for illegal lumbering. Other illegal activities recorded during patrols included poaching activities, fuel wood collection, and charcoal production. Three endangered primates, namely the white-naped mangabey, rolaway, and black & white colobus, were encountered by the patrollers during local patrols.

Boards seized from illegal loggers by patrollers

3. Reforestation &

4. Sustainable Community-managed Agro-forestry Plantations

Following the re-establishment of seven community nurseries in the previous years to produce seedlings for reforestation and agroforestry purposes, a total of 2,375 matured tree seedlings of eight tree species namely; Emire, Framo, Nyankom, Baku, Prekese, Nsoko, Cedrela and the vulnerable *Khaya senegalensis* were distributed to 75 community members for planting in agroforestry plots.

In addition, two thousand (2,000) matured tree seedlings have been planted in community plantations established in three of the CREMA communities namely, Ellenda, Gyegyekrom and Nawule. Unfortunately due to high water level in the forest, planting of seedlings in the buffer and core zones did not happen this year. We look forward to planting seedlings in these areas as well in the coming year.

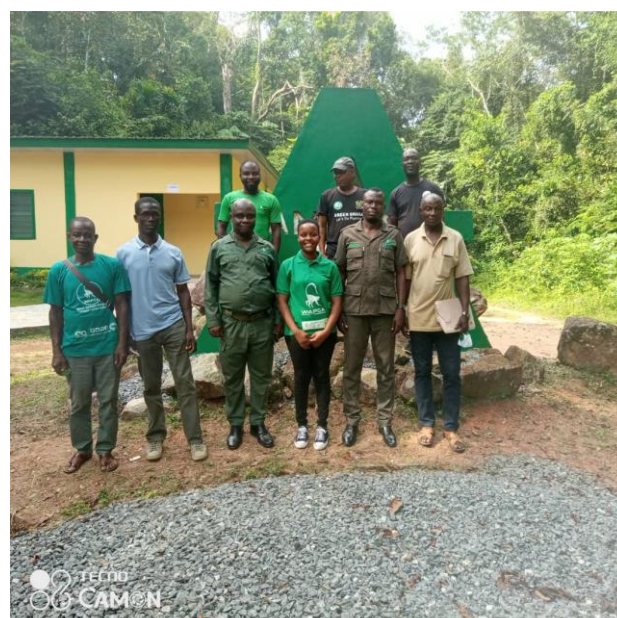


Community Nursery

5. Transborder Collaboration with Côte d'Ivoire

Before the end of the year, the Steering Committees on both the Ghana and Cote d'Ivoire sides met to validate the transborder forest management plan in their respective countries due to COVID-19 pandemic and related border restrictions.

Further concerns raised by the Ghana Steering Committee had to be addressed before the plan could be fully validated by both countries. Upon thorough discussions by relevant stakeholders and experts, these concerns were addressed. The plan is set to be validated in the first month of 2022.



Ghana Steering Committee met to validate transborder forest management plan

6. Develop sustainable livelihoods and promote green value chains in organic cocoa and organic coconut oil in partnership with Man & Nature

Organic Coconut Oil Green Value Chain: WAPCA continued to work in partnership with Noe to bolster support for the Ankasa-Tano CREMA in the development of the coconut green value chain within the Ankasa-Tano landscape.

The number of coconut farmers involved under the organic coconut GVC remained at 200 (162 males and 38 females) with a total of 2002 hectares of organic coconut farms registered. Our coconut farmers produced and sold over 4,000,000 coconuts by the end of 2021.

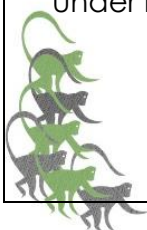


Fair For Life Dunbar at the processing centre

The Savanna Fruits Company (SFC) continued with payment of premiums on every coconut bought from registered coconut farmers. Thus, a farmer received a total profit of GHS 47,612/€6000, almost three times the profit a non-project farmer would earn on average.

As part of the Conservation Agreement between SFC and the Ankasa-Tano CREMA, SFC contributed over GHS 7,000 to the CREMA's conservation fund which would enable the CREMA carry out its conservation activities. An organic certification audit was successfully conducted by Ecocert for the organic coconut Green Value Chain. Savanna Fruits Company also contribute to a Fair For Life fund, allowing communities to purchase items for community development, in 2021 they provided the farmers with cutlasses (machetes) and wellington boots.

Despite challenges with water availability at the coconut oil processing center, at least 47,000 litres of Virgin Organic Oil was produced during the period by the 79 processors comprising 10 males and 69 females. Fire extinguishers of different sizes and smoke detectors were fixed at the centre for easy identification of fire and control. Fans have been fixed in the machine rooms, splitting room, grating room, and working office to ensure better air circulation. The office has also been furnished with 3 office chairs and an office Table. Towards the establishment of a coconut charcoal production unit, the CREMA has acquired additional 3 acres of land which is under registration at the Municipal Assembly and Lands Commission.



Organic Cocoa Green Value Chain:

The CREMA successfully signed a conservation agreement with Yayra Glover Limited at a well-attended ceremony held in Anwiafutu, where the CREMA committed to protecting and sustainably managing the Ankasa-Tano forest. For its part, Yayra Glover Ltd provide extension support to registered cocoa farmers and buy their organic cocoa at a premium price.



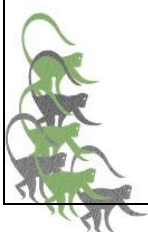
Signing of the Conservation Agreement

In 2021, an additional 24 cocoa farmers (2 males and 22 females) joined green value chain, bringing the total number cocoa farmers to 553 - 440 males and 113 females - registered under the cocoa GVC by the end of year. As a result, an additional 11 acres of cocoa farms were registered, summing up to a total of 2037 acres of cocoa farmlands registered under the cocoa GVC project so far.



Cocoa farmers received bio-fertilizer and bio-insecticide at trainings organized by YGL

Yayra Glover organised a total of 67 trainings for the registered cocoa farmers in all participating communities. The trainings centred on Blackpod Control, General maintenance of cocoa farm, Buffer zone and pre-audit training, tree and ground management, and shade tree.



7. Environmental Awareness Raising



WAPCA and Wildlife Division Staff on local radio

WAPCA successfully held over 16 radio programs in collaboration with representatives from diverse stakeholders including Ghana Wildlife Division, organic coconut oil Processors, CREMA Executives, Yayra Glover, Ministry of Food and Agriculture and Concern Nzema. Topics discussed during these radio programs included cocoa and coconut green value chain development, Conservation Agreements and other project components under the ECONOBIO project. Key events such as Mangabey Awareness Day, World Wildlife Day, close season for hunting were also discussed.

The importance of biodiversity conservation and role of fringe communities play in conservation were also discussed. Listeners were given the chance to also contribute to the discussion, with an average of 10 different calls to the program. People from different walks of life called in to ask questions, make contributions and suggestions which testifies the success of the radio program. Communities from Different District called to ask about the possible supply of tree seedlings. The radio program has been a tool for reaching out to approximately 10,000 people within the project area and beyond which has helped to educate people on environmental issues, CREMA organisation and its activities in ensuring the sustainable management of the Ankasa-Tano Forest.

During the first half of 2021, WAPCA received the devastating news about a proposed Petroleum Infrastructure Master Plan which the Government of Ghana intends to be establish in the Jomoro District in the Western region of Ghana. The plan expects to cover 20,000 acres of the Jomoro land, overlapping with 2,500 acres of the Ankasa-Tano CREMA land and portions of the Ankasa-Tano Community Rainforest. WAPCA staff and representatives from Noe and SFC attended two stakeholder validation workshops held in the Western and Greater Accra regions, where participants presented recommendations on an environmental report were produced by the Environmental Protection Agency, Ghana.



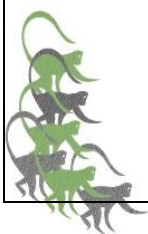
EPA Stakeholder Validation Meeting

It was envisaged that the clearly stated devastating environmental and socio-economic losses would impact the CREMA project and contribute to deforestation and primate extirpation in the Ankasa-Tano Community Rainforest. Therefore, WAPCA in collaboration with the Concerned Nzema Citizens Group took advantage of radio platforms to alert people within the Jomoro district on impacts of the proposed hub and possible solutions.

WAPCA staff and Conservation Ambassadors raised awareness on the adverse impact of petroleum hubs in four CREMA communities using a one-on-one approach. The team also had a meeting with the CREMA Executive where a presentation on the impacts of the proposed petroleum hubs were highlighted. This was to ensure that the CREMA Executive would be well-informed to take a better stand on this matter. A recording on the expected impact made in the Nzema language was distributed to local radio stations in other CREMA communities to ensure the message reached all CREMA communities. The team received varying responses from the local people. While some people had high expectations to secure jobs when the hub is established, others were not in favour of the hub and requested that awareness creation on the matter should be heightened to ensure that the local people really understand all facets of expected impacts on the well-being of the local people.



Petroleum hub sensitization



2021 ACTIVITIES REPORT

WAPCA IN ACTION CREATING VIABLE LONG-TERM SOLUTIONS

CAPE THREE POINT FOREST RESERVE

By Project Lead – Charles Afosah

The Cape Three Point Forest Reserve is one of the last coastal forests in West Africa. Recognized as a Global Significant Biodiversity Area {GSBA}, Key Biodiversity Area (KBA) and an Important Bird Area (IBA) it is also one of the last refuges for three highly threatened primates; the rolaway monkey, *Cercopithecus rolaway* – Critically Endangered, the white-thighed colobus, *Colobus vellerosus* – Critically Endangered and the white-naped mangabey, *Cercocebus lunulatus* - Endangered. The last captured on camera traps for the first time ever in 2018 by the WAPCA Research Group, comprising of students from Chester University, funded by Twycross Zoo.



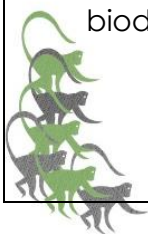
Camera trap image

With the confirmation of these species in the forest, it was imperative to engage with the local communities and government to increase the protection. The forest, classified as a Reserve, has the lowest level of government protection resulting in devastating levels of illegal logging, mining, clearing for agriculture and hunting with guns and dogs.

Partnering with Hen Mpoano, a local NGO already working in the region and who had recently completed a Management Plan for the area and connecting wetlands, WAPCA began project activities on the 1st of January 2021, appointing Charles Afosah as Project Lead.

The following preliminary project objectives were set:

1. Reenergize the dormant Community Management Resource Area (CREMA).
2. Training, Capacity building and Support of Community Forest Monitoring Team (CFMT).
3. Identify nursery sites within communities, select community members to be trained in nursery husbandry and seedling care. Saplings grown will be used in the forest, buffer zone delineation and community harvest.
4. Engage with all members of the communities to raise awareness of the importance of biodiversity through film screenings and other conservation education activities.



For project success and sustainability, it is vital to be holistic in design; improving the socioeconomic status of the area (reducing the need to enter the forest to supplement poor income) and ensuring that the communities benefit from protecting the environment. To that end it is planned to expand the project objectives to include:

1. Development of sustainable livelihoods and the promotion of Green Value Chains, fostering partnerships with the private sector to ensure fair prices and Conservation Agreements. Farmers will also be trained in Good Agricultural Practices, to ensure good yield within the existing farm, reducing the need to increase farm size and encroach into the forest.
2. Develop an ecotourism working group to develop opportunities around the Reserve and increase revenue.

In 2021 following achievements were made:

1. Reenergize the dormant Community Resource Management Area (CREMA)

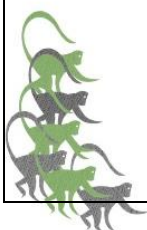
The CREMA Executive Committee (CEC) members had two general meetings in Adalaso, to discuss some pertinent issues related to the protection of forest resources and the enforcement of forest laws.

One key objective of the CEC meetings was to brainstorm on the election of the eleven Community Resource Management Committee (CRMC)s, the 2 sub-CECs and ultimately, the CEC. However, prior to the election was the need to expand the membership of the executives in the CREMA constitution. The CEC, therefore, reviewed the constitution to allow for eleven CRMC members per community, instead of seven. The intention was to make the CRMCs more representative of the different groups within the community.

Following up on the decision of the CEC, seven communities have conducted elections for their new CRMC members. In each community, six positions were contested: Vice Chairman, Secretary, Assistant Secretary, Treasurer, Financial Secretary and Organizing Secretary.



CREMA meeting



During this period, selected CEC members paid a courtesy call to the newly appointed Manager of the Takoradi District of the Forest Service Division at his office in Takoradi. The call was meant to welcome the District Manager and to highlight some key enforcement issues in the Cape Three Points forest reserve that required attention. They also urged the Forestry Division Service to speed up the benefit-sharing mechanism with the CREMA.



WAPCA staff, Hen Mpoano staff, FSD staff and CEC meeting at Takoradi

2.Training, Capacity building and support of Community Forest Monitoring Team (CRMT)



Newly trained patrol team

WAPCA together with Hen Mpoano recruited an additional eighteen community monitoring teams from eight communities, which increases the number of fringe forest patrol communities from eleven to eighteen. The twenty-two community Monitoring Teams that already existed had an additional eighteen

newly recruited Community Monitoring Patrol teams joining in the protection of Cape Three Points Forest Reserve. Thirty-Six Community Monitoring Teams were trained, and capacity was built for them to perform their duties in a standard and professional manner. Two different training and one capacity building workshop were conducted, the Wildlife Service Division and Forestry Division Service staffs trained the CFMT in both technical and theoretical methods of patrols. young able men were given the kind of skills and techniques that will help in patrols in the forest Reserve.

The organization provided the CFMT with the needed patrol Equipment such as a machetes, rain coats, wellington boots and a Global Positioning System for data collection, and to take Geotagged photos on patrols.

The purpose of SMART tools usage in their patrols is to monitor and do data analysis on patrols, and respond to any hotspot identify for illegal activities. An intensive patrol has been started in both Eastern and Western blocks of the landscape to collect data on patrols and to curb the level of illegal activities in the reserve. Since the Community Forest Monitoring Team started their work there has been a sort of calm in the Landscape based on monitoring and supervision from the WAPCA Project Lead.

3. Implementation of Awareness Campaign Programmes

WAPCA signed a 12-month radio broadcasting contract with Oyga FM in Agona Nkwanta to raise awareness of key conservation issues in the Cape Three Points Landscape. The aim of the radio program was to reach a larger audience beyond the forest fringe communities, running twice every month on Thursday afternoon. It is part of WAPCA's commitment to raising awareness campaigns in addition to one-on-one community engagement and sensitization.



Radio programme – Oyga FM

The radio program aims to produce and broadcast interactive Programmes on biodiversity, conservation education, primate programs conservation, animal welfare, land use, and climate change resilience featuring practitioner or experts from diverse backgrounds.

The platform allowed these experts to educate the communities about the threats and importance of the Cape Three Point Forest Reserve and the opportunity is given to the listener to contribute and ask questions during call-in sessions. The radio program has had a positive impact on the behavior of the communities towards the landscape.

WAPCA joined the Eco Awareness Festival celebration on Sea Turtles and Cape Three Points Forest Conservation at Escape three Point with the Nsemaba school drama group to raise awareness campaign within the fringe communities.

The Project Lead has been supporting the Education and Research Coordinator on the Friends for Wildlife school exchange program in the area of letter writings, animals and trees species identification at the basic level to enhance conservation education awareness among school children in Ghana and Scotland.

Nsemaba School Group

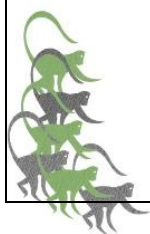


4. Restoring the degraded area of the Cape Three Point Forest Reserve

In the initiative to restore the degraded areas of the Cape Three Forest Reserve, WAPCA has acquired six different nurseries sites it is currently working on to raise tree seedlings and plant them in the degraded areas, buffer zones, and along the boundary lines of the forest reserve. Other seedlings will be provided to the community member who have an interest in planting trees within the communities. WAPCA and Hen Mpoano social responsibility took delivery of over 2000 tree seedlings from Forestry Service Division as part of Green Ghana Day. These seedlings were planted within the communities by Nurses, school children and teachers and distributed some to community members who requested them.



Tree planting activities



2021 ACTIVITIES REPORT

WAPCA IN ACTION CREATING VIABLE LONG-TERM SOLUTIONS

EX-SITU CONSERVATION

By Exsitu Project Coordinator – Foster Poasangma

1. ENDANGERED PRIMATE BREEDING CENTRE

The Wildlife Division of the Ghana Forestry Commission maintains the Accra Zoo in the capital city, which is located in a large urban forest known as the Achimota Forest. In 2005, WAPCA constructed an Endangered Primate Breeding Centre (EPBC) on the Accra Zoo premises to house confiscated and orphaned monkeys, placing them into social breeding groups. The Centre currently has 18 mangabeys, in four groups and one male Roloway. Both species are part of the European Breeding Programme, and we have made a number of exchanges between Ghana and Europe, playing a vital role in maintaining the genetic viability of the captive populations.

WELCOMES AND FAREWELLS

Gift of the Year - WAPCA has recorded a new addition to the reserve population of white-naped mangabeys at our Endangered primate Breeding Centre within Accra zoo. A female baby with



Baby Esi

the temporary name 'Esi' which signifies the day she was born in a local language (Twi) in Ghana. Baby Esi was born to Mother Ivy, and Father Yaw – their first offspring together. To celebrate this gift, WAPCA is planning an event "Breakfast with the monkeys" which will take place at the Accra Zoo. This event is intended to serve as a naming ceremony for the new baby and the participants will have the opportunity to participate in a game draw with name choices where the lucky winner will have his/her chosen name given to the baby.

We also received two breeding recommendations from the EEP Coordinator, Maria Teresa Abello to receive Kate, an adult female from the Landau Zoo in Germany and Lisa, a young adult female from the group in the Forested enclosure in Kumasi Zoo. Before each of these females were integrated into the family, they were each subjected to a series of strategic introductions. All these was possible with the assistance from Nuria Badiella, the Research and Education Coordinator and the support and cooperation from the zoo managers and their staff in both Accra and Kumasi. We are ever grateful to them.



Lisa grooming Kate

This year saw the unexpected death of Mensah. Mensah was born on the 7th February, 2006. . He became suddenly very ill and despite all efforts of the Accra Zoo staff and Veterinary Team he passed away. Mensah was a calm monkey, who easily got along with the new females introduced to him. Also, Fatima our oldest monkey at the centre was euthanized based on the recommendation from the Veterinary doctors. This decision was taken due to the deterioration of her health conditions as a result of age and so it was necessary to put her to sleep.

CENTRE IMPROVEMENTS



Quarantine enclosure

To ensure the safety and welfare of animals in captivity, it is important to pay close attention to the housing units. To achieve this objective, WAPCA was able to construct three quarantine facilities for the primates with funding support from IUCN and Gaia Nature Fund. These enclosures will serve as a quarantine unit for all primates which are confiscated. This will allow the veterinary department to monitor the health conditions to prevent possible transmission of diseases to other animals at the zoo. The enclosures were constructed with a tiled floor, allowing keepers to wash it each day while the animals are quarantined. Thanks to the support of Yorkshire Wildlife Park Foundation, WAPCA has refurbished the existing patas monkey enclosure at the zoo. The enclosure currently houses 12 patas monkeys and 4 green monkeys. It was quite urgent to effect the refurbishment because, the old enclosure had old chain link wire mesh ,torn at several parts and this posed a danger to both the animals and Zoo keepers. As WAPCA uphold a high standard animal welfare for all animals in captivity, it came into assist with the refurbishment.

DONATIONS

During the transfer of Lisa, an adult female from the group in the Forested Enclosure in Kumasi Zoo to EPBC, WAPCA received a service donation in term of free usage of a minibus from Comexas Ghana. The service was very instrumental in this exercise as it eliminated inconveniences and provided a fast and reliable transport for the animal. WAPCA will forever remain grateful to Comexas for this kind gesture and look forward to having amazing partnership.

As an NGO, we highly appreciate every single assistance from private individuals as well as corporate entities. Through 2021, we were privilege to receive donation of



Transporting Lisa

used tires from Rana/Dunlop tires. This donation came a time when WAPCA needed to enrich the primate enclosures with climbing systems. We had a total of 37 used tires which we hung in the enclosures to provide climbing opportunities for the animals as this enhances their natural behaviour and improves their welfare.

WAPCA also received a kind donation of 20L litres of light green paint from Premier Steel Ltd. To keep the structures from corroding/or rusting, it very necessary to regularly paint the surfaces. After the completion of the quarantine enclosures, we have started painting the basement with the donated paint with assistance from Ash, the volunteer.



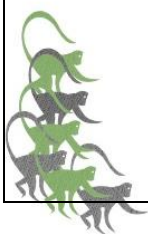
Tyre donation

VOLUNTEERS & VISITORS



The surge in Covid 19 cases from the beginning of the year has had a negative impact in terms of restriction on travels especially from foreign nationals into the country. This drastically denied us of receiving many volunteers this year. However, WAPCA was able to secure vacancy for two volunteers. Caroline's Son, a passionate animal lover who came in to conduct a behavioural study on the reserved population of primates held at the centre. Unfortunately, he could not complete his study due to

interruption from his main academic work. During the latter part of the year, we had Dastmalchi Ash, who is resident in Ghana expressed interest to volunteer with WAPCA. He has been instrumental in assisting with preparation of enrichment items and implementing, and painting of newly constructed quarantine enclosure.



PRIMATE PET TRADE

Trading in wildlife is an age-old problem globally which for the past decade conservation bodies and other interested institutions have joined the fight in combating. Ghana of course is not let off the hook. Wildlife - especially primates - are constantly being removed from their natural habitat by poachers and introduced into the pet trade market either as meat for consumption, or to be used as pets. These engagements poses a serious threat to the population of these species as well as possible disease transmission between humans and these animals.

WAPCA, in complementing our mission of safeguarding the endangered primates and their habits in West Africa, have started a project focusing on the primate pet trade in Ghana. The goal is to obtain a greater understanding of the situation. The primary objectives are;

- To understand the general perception of Ghanaians on primate pet trade.
- To understand their level of awareness of disease transmission human and non-human primates.
- To ascertain their knowledge of regulations and laws governing wildlife trade.

The trade is dominated by the patas monkey, the green monkey and the spot-nosed, often infants are sold at the side of the road in poor condition.

It is hoped by having a greater understanding we can develop education and awareness material that will reduce the trade. In the meantime, WAPCA has joined efforts with the Wildlife Division of the Forestry Commission to confiscate monkeys either from traders or individuals keeping them as pet. In the long term we hope to be able to release the primates in a protected area and believe over time with effective confiscation and penalties, coupled with education, we can nip the trade in the bud.



A patas for sale

2. FORESTED ENCLOSURE



Forested Enclosure

After many years of planning, 2018 saw the completion of the 0.4ha Forested Enclosure within the walls of the Kumasi Zoo. The enclosure houses a family unit of white-naped mangabeys totalling one breeding male, one breeding female, a retired breeding female and their collective six offspring. The Enclosure was created so we can understand the adaptation mangabeys develop in a natural habitat; space use, diet, and group composition. This information will then contribute to a conservation translocation feasibility study.



NEW HOME FOR LISA

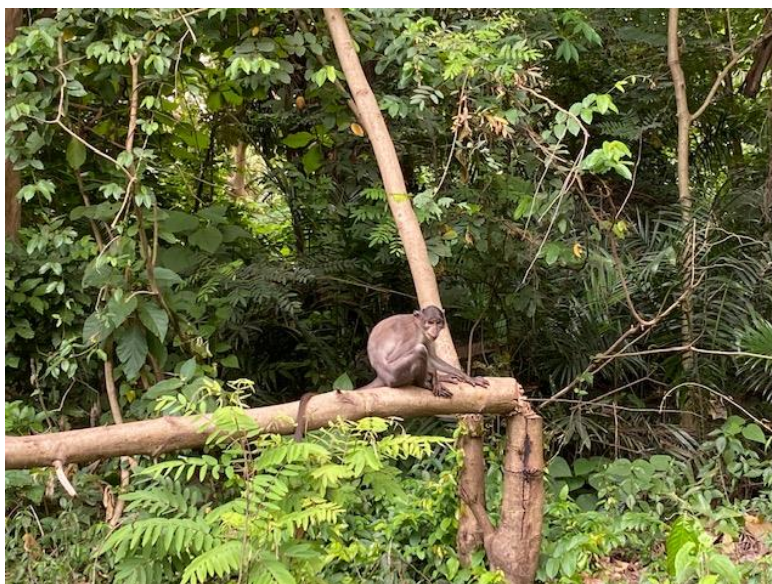
As mentioned earlier in my report, it was recommended that Lisa should be transferred from the Forested Enclosure to Accra Zoo, to be the second breeding female for Mensah.

To avoid manual restraint which would put much stress on the animal and perhaps introduce some psychological effect, it was necessitated to target train Lisa into the transfer box, purpose built in one of the enclosure tunnels. I improvised a training stick which has a plastic rubber tied to one end of it. With high value food like egg, I reward the animal when stationed correctly and touched the rubber end with its mouth. Lisa turned out to be slow learner as opposed to Yaw who I target trained in 2020, and so it took me approximately 4 days to finally gain her confidence and get her to sit in the transfer box. On the day of the transfer, it was quite easy getting her safely locked in the transfer box and Lisas journey to Accra was stress free.

*Lisa stationed in the transfer box,
touching target with her hand for reward.*

KEEPING UP APPEARANCES.

The year has seen a number of repairs at the Forested Enclosure ranging from furniture in the satellite enclosure to electric fence maintenance. The Zookeepers at Kumasi Zoo undertake daily checks to ensure that the enclosure is secure, identifying any repairs immediately. Usually during heavy storms, falling trees sometimes damage the wires, destroying some of the bobbins holding them. These broken bobbins are often replaced to ensure the fence functions properly for the animals to be regularly let out into the enclosure. A new regulator was also replaced in the course of the year, as the old one could not work efficiently to get the battery charged to power the fence. A company specialising in felling trees was contracted to take the overlapping trees down as well as prune all the branches to avoid animals climbing to escape. This was done efficiently and we did not record any felling tree on the fence which usually breaks the bobbins.



Enjoying the Forested Enclosure

2021 ACTIVITIES REPORT

WAPCA IN ACTION CREATING VIABLE LONG-TERM SOLUTIONS

The Conservation Translocation and Population Restoration of White-naped Mangabeys, *Cercocebus lunulatus*, in their Indigenous Range of Ghana, West Africa by Programme Manager, Andrea Dempsey

The purpose of this project is to understand the potential and put WAPCA in a position, if determined as a clear conservation tool, to translocate groups and/or individuals of *Cercocebus lunulatus* into their indigenous range.

The aim is to restore the population through:

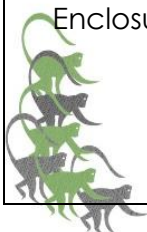
- 1) Reinforcement**, the intentional movement and release of an organism into an existing population of con-specifics with the aim to enhance population viability through increased population size, increased genetic diversity and/or increased representation of specific demographic groups or stages.
- 2) Reintroduction**, the intentional movement and release of an organism inside its indigenous range from which it has disappeared with the aim to re-establish a viable population of the focal species.

WAPCA will create a reintroduction working group and following the IUCN Guidelines for Reintroductions and Other Conservation Translocations, will look to undertake FOUR key activities, which are crucial to inform or proceed onto the next stages.

1. Habitat Assessment: A forty day 'recce' survey carried in and around the Kwabre Community Rainforest. Data collected will include primate presence, illegal activity, holding capacity and vegetation study. Data collected will be combined with annual surveys conducted since 2014 to identify suitable release sites (i.e. low human disturbance, presence of other mangabeys, feeding trees and water sources). In addition, systematically survey the historical range, using foot surveys, camera traps and audio recordings to find other potential release sites.

2. Socioeconomic study: Interviews in all 18 communities surrounding the Community Forest will be undertaken. We aim to interview 10% of each community population (~ 40 individuals/community), representing the communities demographic to determine community attitudes and values, motivations and expectations, behaviours and behavioural change, and the anticipated costs and benefits of the translocation. Results will also be used to design appropriate community outreach, awareness, and training programmes.

3. Species Adaption: Data collection of a 7.2 group of mangabeys held in the 0.4ha Forested Enclosure as discussed below in detail.



4. Disease and Parasite Management: Working in partnership with Wildlife Vets International to ensure that should WAPCA find the introduction of mangabeys be the most effective conservation tool, it is done so with rigorous safety measure in place for both captive and wild populations.

5. Monitoring. To provide techniques to best measure the performance of released mangabeys against objectives, to assess impacts, and provide the basis for adjusting objectives or adapting management regimes or activating an exit strategy.



In 2021 we were successful in a funding bid to IUCN Central & West African Programme (IUCN-PACO) to support our feasibility study into the conservation translocation project, together with our partnership with Wildlife Vets International WAPCA has been able to make significant steps in understanding the potential of such a translocation and if deemed appropriate in a position to do so with due diligence. Highlights from the year have included:

Lets try that again!

In 2020 a team from Wildlife Vets International visited Ghana, unfortunately at exactly that same moment a global pandemic began resulting the trip curtailed and meetings cancelled. However in 2021 we were pleased to welcome back Vet Nurse Mathew Rendle to Ghana to complete the scoping visit from 2020.

Matthew was able to hold some crucial meetings with key people; the Executive Office of the Wildlife Division of the Forestry Commission of Ghana with the Executive Director present and with Head Wildlife Veterinary Officer Dr Ziekah, also Kumasi Zoo Manager. The meetings facilitated a general introduction to the conservation translocation project, the disease risk analysis (DRA), permits required and the long-term collaboration between WVI and the veterinary team in Ghana, including other potential projects between WVI and Wildlife Division. The meetings were incredibly positive, with lots of ideas for collaboration and really pleased with the DRA and how the conservation translocation project will facilitate promotion of work in Ghana and adaptable methods for other species.



*Seated L-R Executive Director, WAPCA Prog. Mgr & Matthew Rendle
Standing L-R Dr Ziekah, Mr Faruk - Operations Mgr & Mr Tamanja (Accra Zoo Manager)*

Matthew was also able to visit the Forested Enclosure at Kumasi Zoo. The trip allowed him to have a better understanding of how the animals are housed and how that might impact the screening process and how the group should be managed to maintain good biosecurity. The trip also gave the opportunity for in-depth discussions with Dr Ziekah, who also gave WVI a tour of the new clinic and quarantine facilities currently under construction. The quarantine facilities, supported by the IUCN funding, will ensure that when rescued, confiscated or imports come into the zoo they can be screened ensuring the biosecurity of the animals is secured.



Meanwhile in Accra, Mathew visited the EPBC and donated a clinical bag, containing veterinary consumables such as needles, syringes, sample tubes, wound dressings as well equipment for catheterisations, airway management, IVFT and general examination. The bag also included anaesthetic drugs, which are impossible to obtain in Ghana and will make any procedure under anaesthetic much safer. WAPCA team and the veterinary department were delighted with the donation and very grateful to WVI for it as it will keep this population well managed so that we can also consider them



Matthew donating the bag to WAPCA

Thanks to the IUCN funding and support from Gaia Nature Fund we were able to build new quarantine facility at the EPBC with Accra Zoo. Like in Kumasi this ensures that the biosecurity at the zoo is maintained through good screening practices for animals coming onto site.



In 2021 we have also been investigating monitoring tools to develop a Best Practice Guidelines for post released primates. We are looking at four methods; camera trapping, radio collaring, audio recording and thermal imaging. For thermal imaging we pleased to be partnering with Wildlifetek and working with Zoological Society of London, Dublin Zoo and Yorkshire Wildlife Park to gather reference material and trial different equipment. Wildlifetek team will then travel to Ghana to continue the trailing the equipment realistic climate and habitat at the Forested Enclosure.

2021 ACTIVITIES REPORT

WAPCA IN ACTION CREATING VIABLE LONG-TERM SOLUTIONS

WAPCA RESEARCH & EDUCATION

by Research & Education Coordinator Núria Badiella

2021 has been an amazing year of activities in the research and education fields both in the Endangered Primate Breeding Centre and communities in the Western Region.

At the centre a few students from the University of Ghana joined us to study the primates' behaviour, and at the Forested enclosure our intern finalised her data collection and we mounted two awareness signboards. In Cape Three Points one of the local schools started an amazing exchange program with a Scottish school, and this year the Cape Three Points-Princess Town CREMA joined us to celebrate Mangabey Awareness Day. In the Ankasa-Tano Community Rainforest we conducted the biennial survey that was postponed after the covid pandemic. Finally, two international interns and two students assisted us in analysing the data of Kwabre biennial surveys through desktop studies. All the above would not have been possible without WAPCA's incredible teamwork.

1. EDUCATION

NEW SIGNS AT KUMASI ZOO

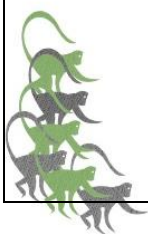


Signboards mounted at Kumasi Zoo

Kumasi Zoo and WAPCA have been collaborating for several years now, and promoting the mangabey conservation project managed by WAPCA among zoo visitors is important for both organizations. This year we set two signboards within the zoo: one about the WAPCA One Plan approach to primate conservation, which highlights all the stakeholders involved in the project; and the second one about one of our focal species, the white-naped mangabey, held in the forested enclosure at Kumasi Zoo.

MY CITY MY FOREST

MCMF project implementation started in September 2018 and saw an end in August 2019. Funded by WAZA Nature Connect grant it aimed to connect urban families from four different communities of Accra (capital city of Ghana) with the environment through a series of activities, while helping them play a part in conservation. The activities included two workshops on the importance of trees and waste recycling and three activities; a beach clean-up, a visit to the zoo to learn about wildlife conservation and a final tree planting exercise. The results of the project were evaluated through a survey provided by Zoowise, which showed a positive impact on the views of participants towards nature.



At the end of the project, communities were awarded seed funding for a community-led project according to their results in the activities conducted. Achimota community project was concluded in 2020 and in 2021 we finalized the remaining community projects in La, Nima and Narhman. La community schools lacked waste bins and used to burn their waste on the school compound once lectures were over. With the new bins donated to them, the schools have now been able to join the metropolitan waste collection system.



Two out of the five schools in La community receiving the waste bins.

Narhman community dedicated four Saturdays to create awareness among twenty children from the community' school about environmental issues. The program consisted of four sessions and a final one where a certificate was given to participants. Becoming eco-conscious was the main aim of the program and the participants showed a significant interest into learning how to do better in their community. At the end of the program, they created posters with potential solutions for common environmental issues such as deforestation, air and water pollution, and biodiversity loss.

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Participants of Narhman community preparing the advocacy poster by teams (middle); and two of the groups presenting their final work (L and R)



Waste collection point at the community of Nima

At Nima, the community has been able to build a small waste management enclosure where they segregate different materials that people collect from the street and sewers. Mainly working with plastic refuse, this waste will be then sold to bigger enterprises who are into recycling and the community will get economic benefit for it as well as become cleaner.

MANGABEY AWARENESS DAY AT CAPE THREE POINTS

As the pandemic was more stable during 2021, we were able to resume our Mangabey Awareness Day celebration on 1st August with aim to create awareness of this species among the Cape Three Points – Princess Town CREMA. Nsemeba School in Cape Three Points was the host of our fun activities' day with the Cape Three Points – Princess Town CREMA.



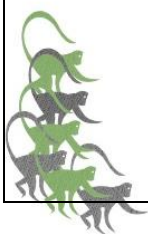
Wildlife Division and WAPCA teams during MAD21

Among our distinguished guests we had the chiefs of all CREMA communities as well as representatives of our partner organizations, this included the Hen Mpoano team and the Regional Manager of the Wildlife Division in Takoradi.

MAD21 started with an awareness march through the nearby communities to highlight the importance of protecting biodiversity and specially the endangered primates.



MAD March through the CREMA communities



Followed by a few speeches to highlight the importance of the Cape Three Points Forest Reserve and its conservation.

Educative speeches to give hints for the conservation quiz. The MAD21 Football League was also full of fun and saw the Aketekyi community take the trophy. And Seremowu showed their commitment towards biodiversity protection by winning the Conservation Quiz among the other CREMA communities. Congratulations to all MAD21 Winners.

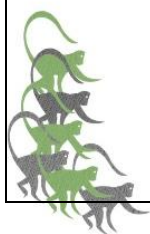
The Nsemeba School kids also had a packed day learning the Mangabey Song, creating face masks, and playing the clean-up competition. For the great work they did the school was awarded a renovation of their well, several reading books for the library, as well as a second-hand computer for the school facilities to use. The students also prepared a drama to create awareness on the effects of anthropogenic activities on biodiversity and their dance group maintained the MAD public engaged throughout the event. An extraordinary engagement of our MAD21 host.



(L-R) MAD clean up competition, participants showing their mangabey face masks, and award presentation to the Nsemeba School Head Master.



Wildlife conservation awareness drama by Nsemeba Basic School





Prior to the celebration, our online MAD Pack was also uploaded into our website, and it is now available for downloading at no cost. A full range of activities are available for kids and adults, together with some general information about all mangabey species. Checkout our page to access the activities on www.wapca.org/mad and join us to celebrate MAD worldwide.

MAD Pack activities on WAPCA's website

INTERNS FROM ALU

Naomi and Joseph, two students from the African Leadership University in Rwanda, joined WAPCA from May to August to assist WAPCA at the EPBC as well as research and education projects. They participated in different activities such as reviewing the primates' diet, reviewing the survey equipment, planning and designing MAD21 materials, and other office tasks. It was a great exchange for both the interns and WAPCA, and we are happy to continue this partnership with the African Leadership University to train future conservationists.



ALU interns Joseph and Naomi

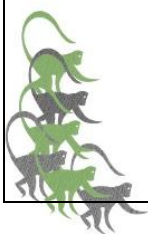
FRIENDS FOR WILDLIFE

WAPCA and Nsemeba School in Ghana and Five Sisters Zoo and Dedridge School outside Edinburgh in Scotland launched the Friends for Wildlife project in July 2021. Inspired by the PenPal idea, the students exchange letters on wildlife topics and present results of their wildlife activities with the other school to exchange knowledge on the wildlife species in both countries and reflect on how to better conserve them. The program started in July 2021 when the Nsemeba School wrote a presentation letter stating their favourite animal to their Scottish friends.



Introduction letters exchanged by Nsemeba and Dedridge Schools.

After receiving the first letters from Dedridge School to Ghana we conducted a project pre-evaluation which consisted of three activities: find Ghana and Scotland on the map; distribute animals between Ghana, Scotland, somewhere else, or domestic animals; and drawing of the most endangered animal in each country. Half of Nsemeba pupils were familiar with the mangabeys being in Ghana.





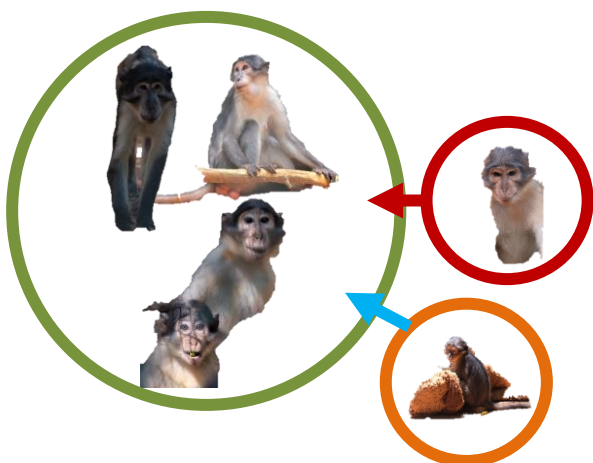
Friends for Wildlife project participants from Nsemeba Basic School

By the end of 2021 both schools had been busy working on their second letter on the topic what would happen if all animals went extinct, and our first activity to create four posters to know the animals in your area.

2. RESEARCH

EPBC STUDIES

At the Endangered Primate Breeding Centre Ape's group (6 individuals) had social instability due to Klaus and Kwame becoming mature individuals and Ape not being able to mate the only female in the group - named Accra. This brought some conflict within the troop, and we wanted to understand the situation to be able to better manage the group and reduce tensions. Two students from the University of Ghana (UG) joined WAPCA to monitor this group's behaviour to see if the feeding strategy used was perpetuating the conflict within them.



Ape's troop composition: green circle includes Ape, Accra and offspring Klaus and Austin; red circle Kwame; orange circle Yellow (both wild)

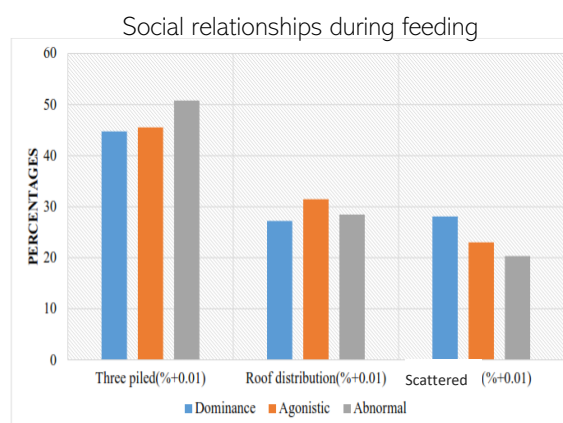


Figure 9: Comparison of the agonistic, dominance and abnormal behaviours of the three different feeding types.

Feeding strategies' influence on behavior of *Cercocebus lunulatus* study results: least conflict on randomly distributed food, no significant differences found.

Finally, as one female at the EPBC, Ivy, had been showing some abnormal behaviours in previous years, we wanted to find out if her condition had improved after implementing some changes in her environment. Some of the changes could not be controlled as much as we wanted, this included the feeding strategy, visual barrier to reduce contact with neighbouring groups.

change in troop alpha male, and her first offspring becoming more independent. Another student from UG was able to assist us in this comparative study between 2019 and 2021 data.

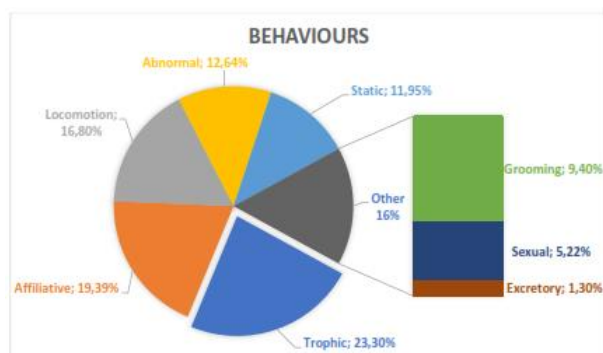


Figure 5: Daily activity time budget of the adult female white-naped mangabey

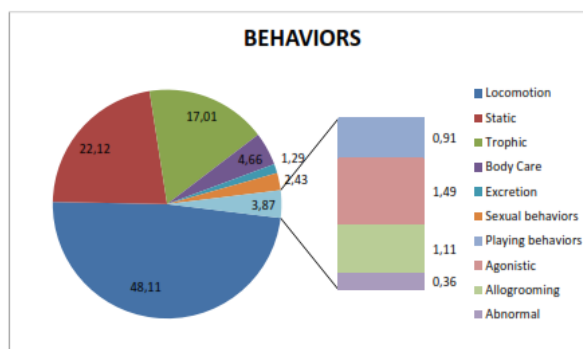


Figure 7: Daily activity time budget of the adult female white-naped mangabey

Comparative results from 2019 study (left) and 2021 (right)

In 2019 the first student found out that 12.64% of the female daily activity budget was dedicated to abnormal behavior, and in 2021 only 0.36% of the daily activity budget was dedicated to abnormal behavior. This showed a great improvement on the animal welfare over this two-year period.

KWABRE SURVEY

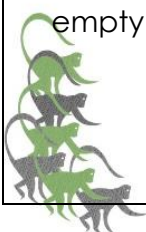
The biennial survey at the Ankasa-Tano Community Rainforest was conducted from March to April 2021 with the aim to continue monitoring the primate populations as well as the anthropogenic activities ongoing within the CREMA communities.

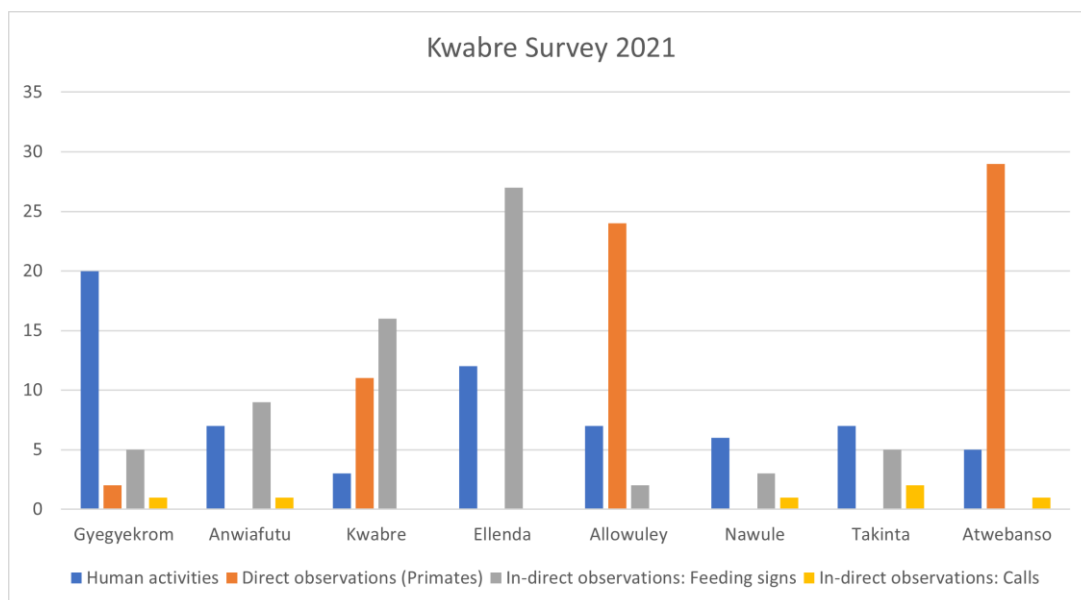
The survey this year was led by Rockson Acolatse, joined by Selassie Tsorgalli and two community members from the Ankasa-Tano CREMA. Rockson has been appointed as the WAPCA Survey Team leader aiming to have a consistent methodology throughout all our primate surveys across Ghana.



(L-R) Survey team, trap found and remaining boards from illegal logging activities in the Ankasa-Tano Community Rainforest

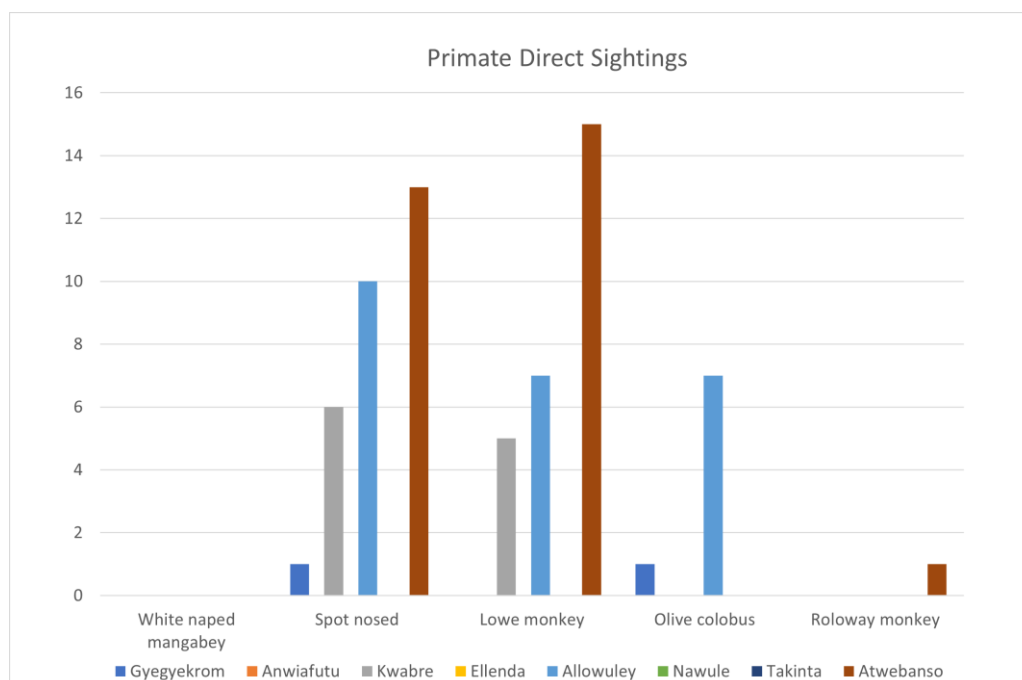
They visited eight forest areas neighbouring the CREMA communities of Gyegyekrom, Kwabre, Anwiafutu, Ellenda, Allowuley, Naule, Takinta and Atwebanso. The findings suggest that hunting with guns is a common activity within the area, followed by logging, hunting with traps, and charcoal production. The community with highest human activity was Gyegyekrom where most empty gun cartridges were found, and the least was Kwabre.





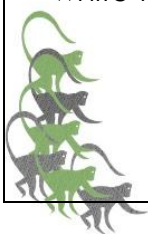
Observations per community during the Ankasa-Tano Community Rainforest survey

Sixty six direct sightings of primates were recorded during this survey period, however, none of them white-naped mangabeys. Lesser spot-nosed and Lowe's monkeys were the most common followed by the olive colobus. A Roloway was seen in Atwebanso area. Feeding signs found were also more common for Forest Guenons.



Primate direct sightings per community during the Ankasa-Tano Community Rainforest survey

Additionally, by the end of the year two interns, Nathanael Witsey and Adriana Luna, joined us to further analyze the data from the Kwabre surveys. Adriana is analyzing the trends of primates and anthropogenic activities encounters through the years (2012 up to 2021) and Nathanael is creating maps that will guide WAPCA on choosing a potential site for a future translocation of white-naped mangabeys.



PRIMATE SURVEYS

In November WAPCA's Research & Education Coordinator together with the Project Support Officer travelled to Somanya to make official the partnership formed between WAPCA and the University of Environment and Sustainable Development.



(L-R) Signing of the MOU by UESD Representative, Edward Wiafe, and Nuria Badiella, WAPCA R&E Coordinator; Representatives of UESD and WAPCA attending the ceremony.

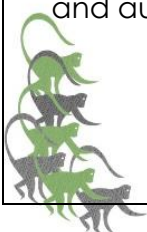
This partnership was established in order to create a permanent research team to conduct primate surveys to determine current home range of WAPCA's focal species, i.e. the Roloway monkey, white-naped mangabey, white-thighed colobus, and Miss. Waldron's colobus. Furthermore the partnership looks to ensure consistent methodology and data quality throughout the primate surveys.

The first survey to take place after the agreement was signed was at Kalakpa Resource Reserve (KRR), located near Ho in the Volta Region of Ghana. WAPCA was reached out by the Kalakpa Club, an organization working on the protection of KRR, as they wanted to determine if the white-thighed colobus is still present within the reserve. Finding the white-thighed colobus within the KRR would increase its biological value as it is classified by the IUCN as a critically endangered species.



(L-R) Survey team in the Kalakpa Resource Reserve led by Rockson Acolatse, ranger Amstrong and two community members, William and Stanley; Entrance to the Kalakpa Resource Reserve.

The team started the survey in mid December, spending a little over a month to confirm the presence or absence of the colobus in the reserve. Reconnaissance transects, camera traps and audio recorders were used for the survey ending in January 2022.



FORESTED ENCLOSURE



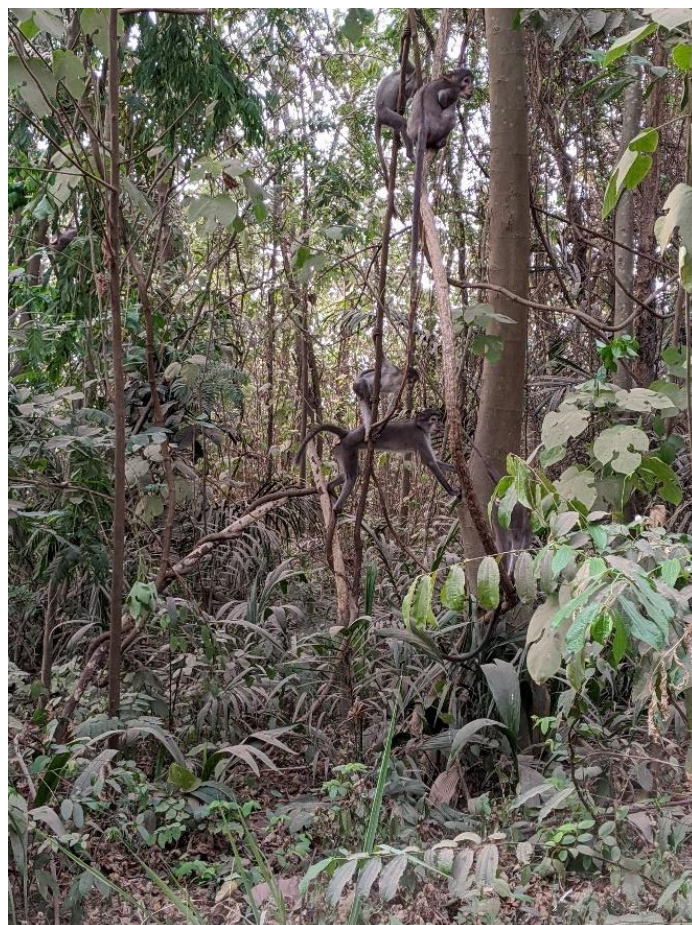
Seda Kavlak

Seda Kavlak finalized her internship with us in March 2021 after three complete months of data collection on the behaviour of the mangabeys and their diet.

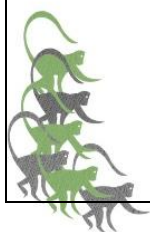
Seda's data together with all the data available from previous years was analysed by Martha Body, a student from the University of West England, who was interested in looking at the hierarchy between individuals of the troop, their activity budget and the use of space within the enclosure. The results suggest that moving the troop from Accra to Kumasi created an unstable hierarchy within the troop. Considering that the alpha male took a longer time to travel to Kumasi, this instability would be understandable. Additionally, the contraception used for one of the breeding females also seems to have an effect in her rank. As the size of the forested enclosure is benefiting the group but is not as big of what

their home range would be, once the troop had spent quite some time within the area, they use all the enclosure areas, though they have preferences of some over the others which is also depending on the age and sex of the individuals.

Another student from the University of Chester has started a study on social networks within the troop, which hopefully will assist us identify key individuals within the troop, as well as those strong relationships between them. This would be relevant for the future translocation of mangabeys into the forest, as for it we would need a strong bond between those individuals selected to ensure their chance of survival.



White-naped mangabeys in the forested enclosure



IN OTHER WAPCA NEWS.....

Welcome New Team Members!

This past year we were delighted to welcome two new members of the team. Veronica Dandzo-Adzagudu joined us in June as our Project Support Officer, to give support to our coordinators, particularly with our field teams and with fundraising. Veronica has a Masters in Environmental Management from Stirling University, UK and joined us from Institute of Nature and Environmental Conservation. Charles Afosah joined us in January and is our Project Lead for our Cape Three Point Forest Reserve project. Charles has a degree in Development Studies and has extensive experience in community development work.



Charles, Foster, Andrea, Veronica, Nuria, David & Martin

Conferences

Despite limitations imposed by the ongoing pandemic, WAPCA was still able to participate at a number of conferences both in person and virtually. Exsitu Project Coordinator Foster Poasangma attended the 5th Africa Animal Welfare conference in Accra, and the Programme Manager both attended and presented at the IUCN World Conservation Congress, funded by IUCN's PPI programme.



PPI funded participants at WCC

Ghana Board Chairman Retires

In 2021 our Ghana Board Chairman stepped down from his position and resigned from the Board after five years as our Chairman and 13 years on the Board. WAPCA thanks David Tettey for his service, and wish him all the best for the future.



Making the news

Publications & Press

Núria Badiella-Giménez, Bright Obeng Kankam, and Llorenç Badiella. "Influence Of Visitors On The Time Budget, Ranging And Strata Use Of Lowe's Monkey (*Cercopithecus Loweii*) At Boabeng-Fiema Monkey Sanctuary, Ghana." *Zoological Studies* 60.2021 (2021).

We also appeared on local television – a two minute news story on our work.

ACKNOWLEDGEMENTS

The West African Primate Conservation Action was formed by a consortium of European zoos and conservation organizations. WAPCA began working in Ghana in 2001, with additional activities commencing in Ivory Coast in 2004. In 2007, WAPCA established the local NGO, WAPCA Ghana. WAPCA Ghana operates in full partnership with the Wildlife Division of the Ghana Forestry Commission. We would like to thank the Wildlife Division for all their support over the past year, without which the activities and achievements of WAPCA Ghana would not be possible.



WAPCA BOARD OF DIRECTORS

West African Primate Conservation Action Ghana would also like to formally thank our board members for all their support and advice throughout 2021. The WAPCA boards are the backbone of our organization and it is through their support and advice that WAPCA Ghana is able to have a positive effect on preservation of West African primate habitat and the successful breeding of Endangered West African primates.

WAPCA EUROPE BOARD

WAPCA's global activities are overseen by the WAPCA Europe Board of Directors which includes the following members:

Dr. Klaus Wuennemann-Chairman of the Board
 Dra. M^aTeresa Abelló Poveda -Vice Chair of the Board
 Dr Brice Lefaux -Secretary
 Mrs Sandra Reichler-Treasurer
 Mr Roland Wirth- Advisor to the Board
 Mr Tjerk terMeulen – Advisor to the Board
 Dr Matt Hartley – Advisor to the Board

WAPCA GHANA BOARD

WAPCA Ghana is a local NGO, overseen by a Ghanaian board of directors, who advise on WAPCA's Ghana's in situ and ex situ activities. The WAPCA Ghana Board of Directors includes the following members:

Mr David Nuku Tetey – Chairman of the Board
 Mrs Vivian Nuhu – Vice Chair of the Board

Board Members:

Prof. Erasmus Owusu	Mrs Carly Edwards
Dr Richard Suu-Ire	Mr Stephen Tamanja
Dr Selorm Tetey	Dr Edward Wiafe
Dr Meyir Ziekah	Mrs Chaachele Ponu
Mrs Andrea Dempsey - Secretary	

ACKNOWLEDGEMENTS

THANK YOU WAPCA MEMBERS!

It is the support of WAPCA membership that has allowed WAPCA to implement vital *in situ* and *ex situ* conservation efforts throughout the year. Zoo Heidelberg serves as the managing body for WAPCA. Funds for specific projects are acquired through major sponsor donations.



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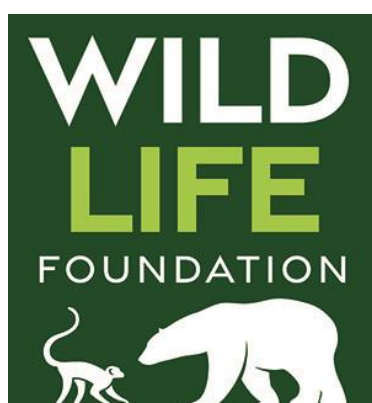
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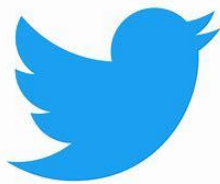
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