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OF WILD FAUNA AND FLORA

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PANGOLINS IN WEST AFRICA

1. This document has been submitted by Côte d'Ivoire and Sierra Leone on behalf of the United States Agency for International Development (USAID) in relation to CoP19 Doc. 71.1 and Doc. 71.2. *

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ISSUES BRIEF: THE CURRENT STATUS AND CONSERVATION OPTIONS FOR PANGOLINS IN WEST AFRICA

INTRODUCING PANGOLINS

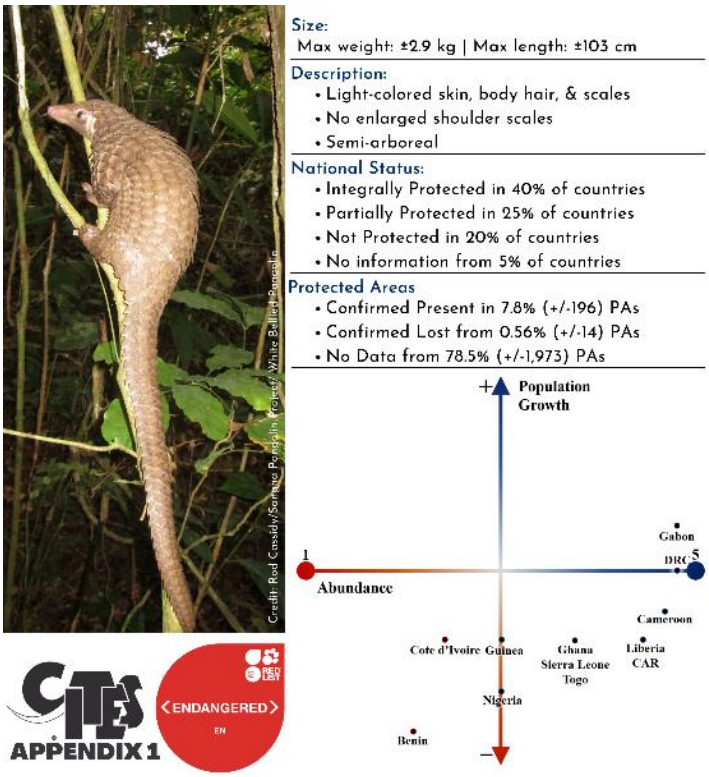
Pangolins, often called "scaly anteaters," are solitary, highly secretive, essentially nocturnal mammals. They are the only mammals wholly covered in scales, which protect them from predators in the wild. Unfortunately, their scales do not protect them from human predators, and pangolins are recognized as the most trafficked wild mammals in the world. Their scales are used for traditional medicine and folk remedies, and their meat is considered a delicacy throughout Africa and Asia.

There are eight species of pangolin in the world. Four of which—white-bellied pangolin, black-bellied pangolin, giant pangolin, and Temminck's pangolin—are found throughout Africa, though only the first

three are found in West Africa. The remaining four species—Indian pangolin, Chinese pangolin, Sunda pangolin, and Philippine pangolin—are distributed across Asia. African and Asian pangolins are easily distinguished by the lack of hair protruding between the scales and the lack of external ear pinnae in African species.

Pangolins are found in a variety of habitats, including dense forests, swamps, and savannah grasslands—and even now use agricultural landscapes, like extensive palm oil plantations. They feed exclusively on colonial insects, mostly ants and termites, and rely on both terrestrial burrows and arboreal tree cavities and other retreats for resting and protection.

Figure 1: White-bellied Pangolin (*Phataginus tricuspis*). Identification, legislative status, and estimated abundance and population trajectory across West and Central Africa.



PANGOLINS ARE UNDER SEVERE PRESSURE IN WEST AFRICA

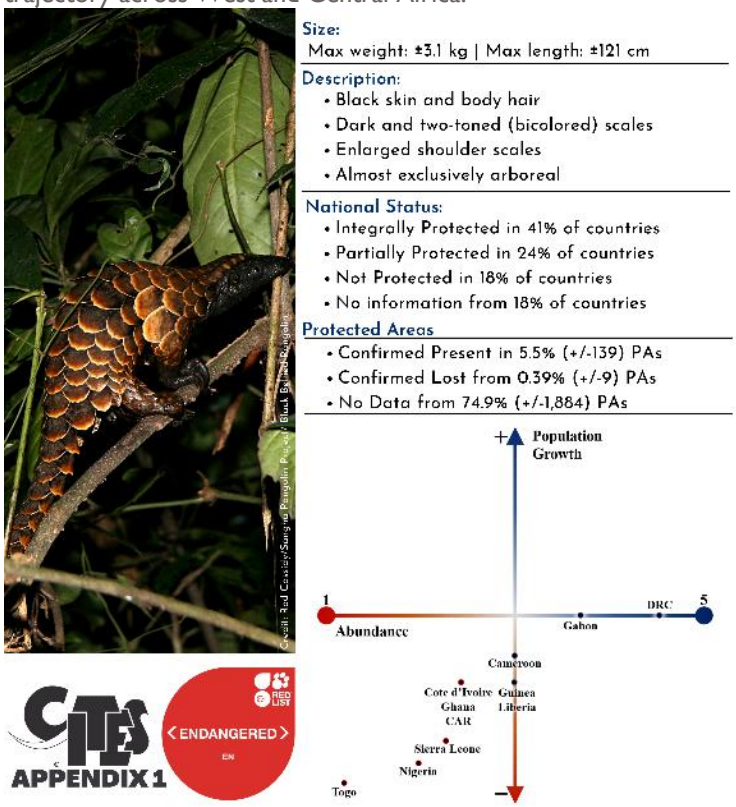
In West Africa, pangolins are confronted by several substantial threats, including habitat loss driven by logging and agriculture, overexploitation for both local consumption and to supply international demand for scales, and non-application of and non-compliance with wildlife laws.

> Given the current levels of trafficking, the absence of regional coordination, and an effectively implemented action plan for pangolin conservation, the effectiveness of CITES and the overall continued existence of pangolins in their known habitats is severely jeopardized.

1. Habitat Loss and Degradation: Habitat loss and degradation, both historic and ongoing, is likely the single largest threat to pangolins in West Africa. For example, West Africa has lost > 90% of its forest cover (Maley, 1996; CILSS, 2016). Habitat loss and degradation in this region is driven by logging and forestry, agricultural development, pollution, mining, and urban development, among other drivers. Though pangolins, particularly the small tree-dwelling species (*Phataginus spp.*), show some resilience to habitat loss and use of agricultural landscapes, they are easily harvested out of plantations, effectively leaving them no safe haven.

2. Hunting, Harvest, and Trade: Pangolins have been hunted, harvested, and traded for food and traditional medicine in West Africa throughout history, with records dating at least as far back as the early 18th century (Labat, 1730; Lawrence, 2020). Contemporarily, pangolin meat is often considered a delicacy or a luxury meat, or is often simply preferred for its taste, and traditional practitioners value their scales and other body parts for purported medicinal, religious, or ceremonial effects. Though all forms of offtake for consumption may threaten pangolins, regional stakeholders generally considered local subsistence hunting to not be a serious threat. However, even reliable and long-term wildmeat market monitoring is likely to underestimate the actual offtake of pangolins for domestic consumption in West (and Central) Africa (Boakye et al., 2016; Ingram et al., 2018; Ingram, Cronin, et al., 2019). In this region, only 10–25% of harvested pangolins may make it to market centers (Fa et al., 1995; Kingdon & Hoffmann, 2013), and even those detected may not come from natural areas local to the market or even the same country (e.g., Bräutigam et al., 1994; Soewu & Ayodele, 2009). In contrast, the increasing focus on pangolins as a commodity for the international market, particularly demand for scales in Asia, may be driving precipitous declines today. USAID WA BiCC found records for ± 139 seizures, totaling ± 230,758 kg of illegally traded African pangolin scales seized on the African continent, in Europe, or, mostly, in East and Southeast Asia.

Figure 2: Black-bellied Pangolin (*Phataginus tetradactyla*). Identification, legislative status, and estimated abundance and population trajectory across West and Central Africa.

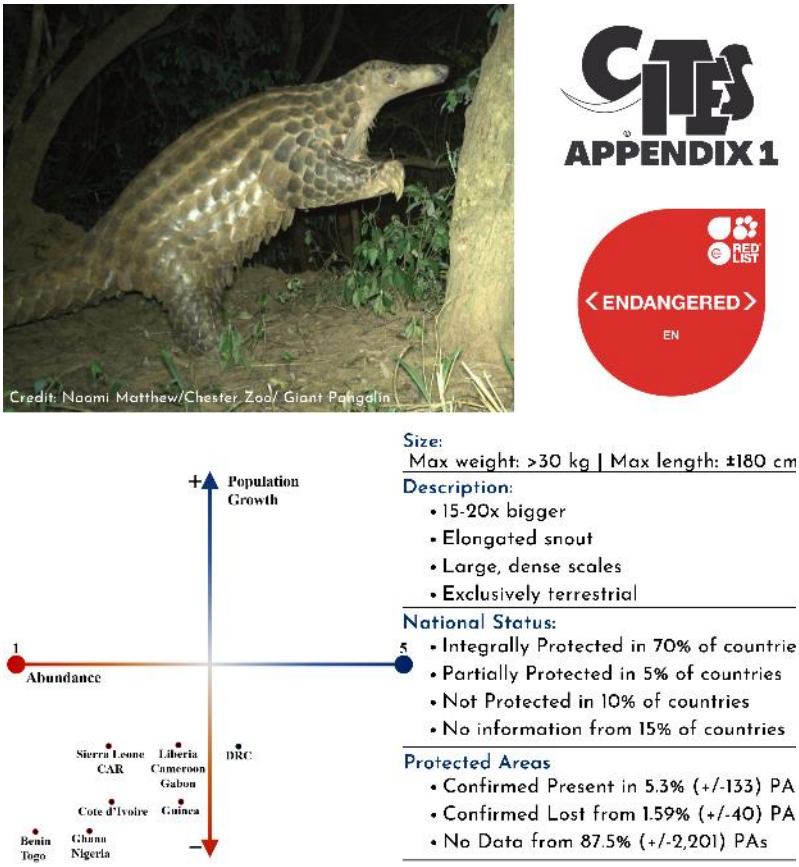


> Based on seizure data only, a minimum of 850,602 pangolins are estimated to have been taken from the wild in Africa to illegally supply East and Southeast Asian market demand since 2009. And, since 2014, there has been an estimated 10-fold increase in seizures of pangolins globally, with a notable shift of primary source from Asia to West and Central Africa (UNODC 2020). As few as 10% of all illicit shipments may be seized, suggesting that as many as 8,506,020 pangolins were removed from the wild in West and Central Africa for the illegal trade during this period.

3. Non-Enforcement of and Non-Compliance with Legal Instruments: Existing legislation related to wildlife and wider biodiversity is largely inadequate in West and Central Africa, though there is a fair amount of country-to-country variation. The weakness of many national legal frameworks hinders range state ability to fulfill obligations to international

agreements like the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). And current national legal frameworks provide little grounding for multilateral, coordinated legal responses to emerging threats (Mallon et al., 2015). West Africa is geographically enormous, culturally and politically diverse, under- and inequitably developed, and highly susceptible to corruption. The region is also experiencing high levels of human population growth (summarized in UNODC, 2019). A UNODC (2019) threat assessment presented to CITES 18th Meeting of the Conference of Parties (CoP) concluded that effective responses to wildlife crime in West Africa are inhibited by a lack of capacity, ranging from financial and personnel, a general lack of awareness, and insufficient legal mandates, among others.

Figure 3: Giant Pangolin (*Smutsia gigantea*). Identification, legislative status, and estimated abundance and population trajectory across West and Central Africa.

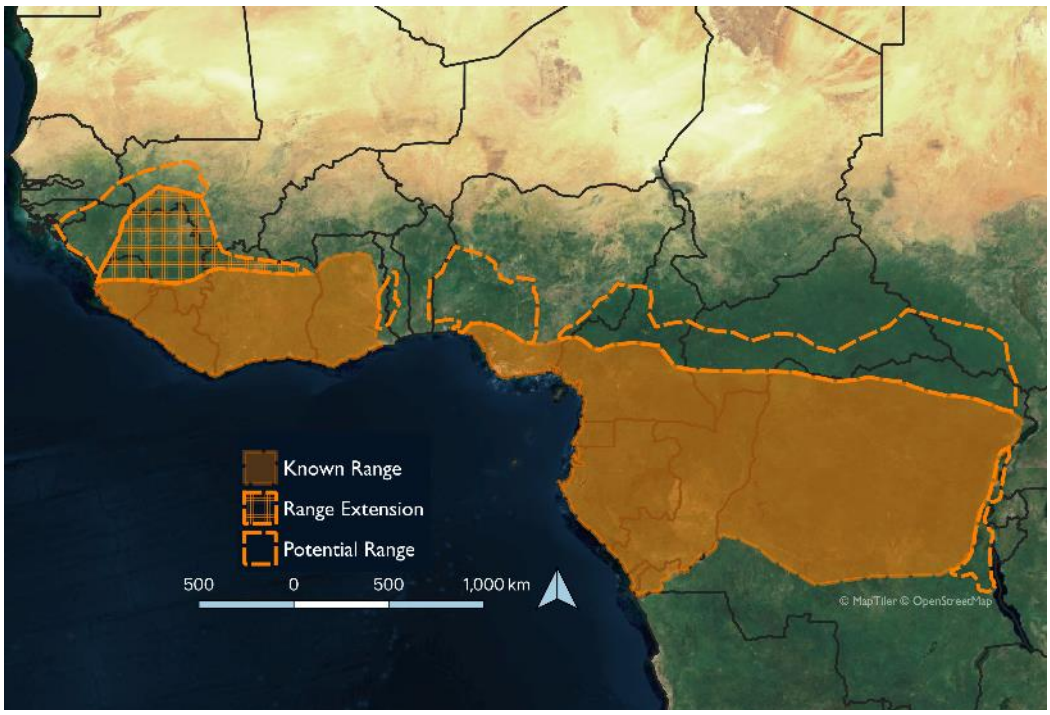


Range state stakeholders largely agreed, identifying non-application of and non-compliance with wildlife, protected areas, and CITES law as significant threats to pangolins in West (and Central) Africa. Unfortunately, there is little access to training across government enforcement agencies, including on legal and species awareness, and limited access to technology at ports. No country in the region appears to have a formalized database for pangolin seizures and other wildlife crime or law enforcement. There is an extreme deficit of wildlife law awareness and capacity within the wildlife and law enforcement agencies of West Africa, let alone the general population. As of yet, there is no standard curriculum on wildlife and CITES law as part of the standard training for customs, border patrol, or specialized trafficking police units. Some of these agencies do receive intermittent training on these topics from the wildlife and CITES Management Authority, but it is not institutionalized enough to make a consistent impact.

4. Lack of Basic Knowledge and Understanding of Pangolins: Pangolin populations in West Africa are clearly declining based on available evidence, resulting in recent changes to the International Union for Conservation of Nature (IUCN) Red List status from Vulnerable (VU) to Endangered (EN) for white-bellied and giant pangolins in 2019 (Ingram, Shirley, et al., 2019; Nixon et al., 2019; Pietersen et al., 2019). However, there is very little direct knowledge of the abundance and population trends of pangolins in West Africa, or anywhere in the world, with few exceptions. While informative, and certainly representative of the global picture, the 2019 Red List assessments were unable to incorporate quantitative or qualitative information from the ground. This is complicated by the fact that in many range states, even trained wildlife biologists and national parks rangers have difficulty distinguishing the three species.

> No West (or Central) African stakeholder has yet implemented a targeted survey for any single pangolin species or population, much less monitored the state of that population over time. Further, until recently, pangolins have not been prioritized by researchers or biodiversity conservation NGOs that typically implement biomonitoring in protected areas.

Figure 4: Black-Bellied Pangolin Distribution. The extensive areas of potentially suitable habitat with no observations underscore the lack of basic knowledge about this species – a similar issue for all West African pangolin species.



CURRENT CONSERVATION ACTION YET TO BEAR FRUIT

All pangolin species today are listed as Critically Endangered, Endangered, or Vulnerable on the IUCN Red List of Threatened Species, including the three species indigenous to West Africa. These assessments of current global status have thrust pangolins into the global limelight and resulted in a series of policy changes favoring their conservation. At CoP17 to CITES (Johannesburg, 2016), all eight pangolin species were transferred from Appendix II to Appendix I, effectively banning all international commercial trade in wild-caught pangolins and their parts and derivatives. The Parties also adopted Resolution Conference 17.10 on the *Conservation of and Trade in Pangolins*, which outlines a series of

more comprehensive protection and management measures for pangolins and urged Parties to implement them within their national territories. Convinced that too little action had been taken, at CoP18 (Geneva, 2019) the Parties agreed to maintain Res. Conf. 17.10 in its original form and adopted four additional decisions aimed to provide further guidance to Parties on implementing *in situ* conservation and better understanding the scale and scope of pangolin trafficking.

West African range states, with the help of the CITES Secretariat, USAID, and partner nongovernmental organizations (NGOs), are working to increase efforts to combat wildlife crime in the region. In 2018, the ECOWAS Member States drafted recommendations for Developing a Coordinated Response to Wildlife Trafficking in West Africa and a Guide for Developing a Counter Wildlife Trafficking Response. Significant progress is being made to improve legislative and law enforcement capacity in West Africa. The USAID West Africa Biodiversity and Climate Change (WA BiCC) program co-organized, with the U.S. State Department and the United Nations Office on Drugs and Crime (UNODC), two workshops in 2017 to educate judges and prosecutors on how to more effectively prosecute wildlife crime (Balinga, 2017). NGO partners, with the governments of Liberia and Côte d'Ivoire, are implementing training workshops on CITES and wildlife law starting in 2020 with funding from the UK, USA, and EU.

The *West African Strategy on Combating Wildlife Crime* (WASCWC) has been validated by the ECOWAS Sector Ministers (October 2020) and will be submitted to the ECOWAS Parliament and the Council of Foreign Ministers by December 2020. This strategy will be integral to guiding action combating wildlife crime in West Africa.

Perhaps the most extensive and widespread interventions for pangolin conservation in West Africa are rescue, rehabilitation, and release operations of wildlife sanctuaries and other concerned organizations. Though pangolin rescues are in their infancy in this region, nearly every country has at least one group involved in this practice. Notable examples include the Libassa Wildlife Sanctuary (Liberia) and SaintMarks Animal Rescue and Shelter (Nigeria). Still, pangolin seizures, rehabilitations, and releases in West Africa suffer from many problems—they happen opportunistically, largely by individuals and organizations without training and minimal access to technical support. Without any formal or otherwise structured pangolin rehabilitation release plans, individuals are hard released despite the latest advice favoring soft releases (Wright & Jimerson, 2020), and there is no monitoring of the released individuals.

To date, no West African range state is implementing *CITES Res. Conf. 17.10 on the Conservation of and Trade in Pangolins*. Would be efforts are hindered by a lack of resources, adequately trained personnel, knowledge, data, and general opportunities for and willingness to collaborate with NGOs.

CHARTING A FUTURE FOR PANGOLIN CONSERVATION IN WEST AFRICA

Despite a few notable early examples (e.g., Rahm, 1956; Pagès 1965, 1970, 1972a,b, 1975; Tahiri-Zagrët 1970a,b; Jones, 1973; Bräutigam et al., 1994; Sodeinde & Adedipe, 1994; Akpona et al., 2008), pangolin research, conservation, and management is in its infancy in West (and Central) Africa. Nevertheless, >100 individuals were identified affiliated with 38 NGOs, 14 academic institutions, and 31 government agencies that are either actively working with or in a position to implement strong conservation and

research programs on pangolins in West Africa. Though pangolins are not yet priority species at the national or regional level, targeted action is increasing, particularly in the NGO and academic sectors.

On this institutional and individual foundation, effective pangolin conservation in West Africa should consider interventions ranging from policy reform and increased application of wildlife and protected areas laws to inter-agency awareness raising, public outreach, research, and increased engagement for community-driven approaches implemented by diverse stakeholders, including from government, NGO, and academic institutions.

> Further work is needed to understand what tactics will effectively motivate behavior change for pangolins, and biodiversity conservation at large, in West and Central Africa. Regardless of which interventions are ultimately prioritized, any approaches that do not motivate behavior change in target constituents will likely be ineffective in the long-term.

Research and Monitoring – Research into West (and Central) African pangolins should focus on information that leads to better management, including filling specific knowledge gaps on basic species ecology, distribution, socioeconomic drivers of consumption at multiple scales, and domestic and international supply chains and trafficking pathways. Range states should identify 10 reference sites for long-term population monitoring and evaluate livelihoods and consumption alternatives. Ideally, research and monitoring will be tied to science capacity-building (e.g., postgraduate student training), law enforcement, and participatory conservation approaches.

Figure 5: White-bellied Pangolin in a radio telemetry research program in the Forêts des Marais de Tanoe-Ehy, Côte d'Ivoire.

Photo credit: Brou Guy-Mathieu Assovi/Project Mecistops.

Rescue and Rehabilitation – West (and Central) African pangolin range states should evaluate and amend, where necessary, legislative frameworks that facilitate legal, conservation-oriented wildlife rescue and rehab facilities. Pangolin rescue and rehab stakeholders should formalize plans following guidance by the IUCN Species Survival Commission, including the One Plan Approach. Pangolin rescuers and rehabilitators should formalize a regional network to better communicate lessons learned, cooperate for

improved success, and feed into a regional database that range state authorities can use for annual reporting to CITES as part of their obligations under Res. Conf. 17.10.

Legislation – West (and Central) African pangolin range states should ensure that their domestic legislation encompasses pangolins, including with up-to-date taxonomy and according protection at a level that will help ensure a future for pangolins. Legislative mechanisms should be updated to ensure both seamless implementation of CITES and adequate capacity to make seizures, arrests, and prosecutions; and authorize cross-sectoral partnerships and rescue facilities. West African countries should consider adoption or adaptation of the Species Working Group of Liberia, EAGLE Network, and African Parks models as successful CSPs for wildlife and protected areas management and wildlife law enforcement. All stakeholders should strive to elevate awareness of legal frameworks and mandates for pangolin conservation across government agencies, the private sector, and the general public.

There is simply no data on pangolin presence/absence from as many as 2,201 (87.5%) protected areas throughout West and Central Africa. The very first critical step is confirming presence/likely presence in each extensive national network to identify potential hotspots of pangolin abundance for protection, which would benefit from consistent monitoring and targeted law enforcement and anti-poaching efforts.

Law Enforcement – Stakeholders for pangolin conservation in West (and Central) Africa should formalize and/or strengthen inter-governmental and cross-sectoral partnerships for cooperative wildlife crime law enforcement. Ideally, this will include integrating health sector representatives to address emerging risks of zoonotic disease; raising awareness and building capacity with national police, customs, and port authorities; and strengthening transboundary cooperation. Increased enforcement at known pangolin and wildmeat trading hotspots and patrols in pangolin population hotspots may lead to reduced opportunities for pangolin poaching and increased opportunities for deterrence. Range state authorities across the region should individually and cooperatively maintain pangolin databases—including seizure, arrest, and prosecution databases—leading to increased intelligence-led policing.

Figure 6: Young black-bellied pangolin undergoing rehabilitation by the Sangha Pangolin Project, Dzanga Sangha National Park, Central African Republic.

Photo Credit: Alessandra Sikand/Sangha Pangolin Project

Other – In collaboration with the NGO and civil society sectors, West (and Central) African range state authorities should develop and implement demand reduction and behavior change strategies combined with alternatives to pangolin consumption and commercialization; strengthen community-based initiatives and participatory approaches for pangolin

and habitat conservation; and implement stronger legal and commercial incentives for private sector (e.g., oil palm, cacao) engagement in pangolin and species conservation. Ghana's CREMA system and Cote d'Ivoire's *Foret des Marais de Tanoé-Ehy* (FMTE) are community conservation models that encourage sustainable natural resource use and livelihoods options to balance conservation and development. Improved communications strategies and awareness raising for pangolin conservation will undoubtedly garner public support these endeavors.

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