TERMS OF REFERENCE

<table>
<thead>
<tr>
<th>Position</th>
<th>Environmental Anthropologist</th>
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<tbody>
<tr>
<td>Location</td>
<td>Archeï and surroundings in the Ennedi Natural and Cultural Reserve (Chad)</td>
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<tr>
<td>Report to</td>
<td>ENCR Executive Board (Director + Deputy Director) Management Unit (Community Department + Biodiversity Department + Operations Department)</td>
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<tr>
<td>Length</td>
<td>5 months</td>
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<td>Starting Date</td>
<td>15/10/2020</td>
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**ENCR:** African Parks is a non-profit conservation organisation that takes on the complete responsibility for the rehabilitation and long-term management of national parks in partnership with governments and local communities. We currently manage 18 national parks and protected areas in 11 countries covering over 14.1 million hectares in: Angola, Benin, Central African Republic, Chad, the Democratic Republic of Congo, Malawi, Mozambique, the Republic of Congo, Rwanda, Zambia and Zimbabwe.

The Republic of Chad and African Parks announced on Monday 19th of February 2018, the signing of an agreement to manage and restore Ennedi Natural and Cultural Reserve, a World Heritage Site situated in the north-east of the country.

**Context:**

Balancing biodiversity conservation and community livelihoods is a major challenge for sustainable management of protected areas (PAs). The Ennedi Natural and Cultural Reserve, with more than 30,000 nomads relying on its natural resources, is a typical example of socio-ecological systems. The Management Unit is therefore looking for synergies between all departments – especially those dealing with biodiversity, conservation and community development – to encourage a revolution of human value towards a sustainable planet where people live in harmony with nature. This is the philosophy of the One Health Project: the final recourse for the iconic crocodiles of the Guelta d’Archeï, a crosscutting project bringing several core activities (veterinary counselling, environmental education, animal husbandry, land use and resource management) together, highlighting the shared fate that links man and nature.

In January 2019, African Parks initiated a crocodilian ecological study in collaboration with the IUCN Crocodile Specialist Group. This preliminary work identified several threats weighing on the natural and cultural elements of the Guelta d’Archeï, all of which African Parks vowed to preserve:

As a relict population that has survived for aeons, the current threat to the survival of *Crocodylus suchus* suggests an anthropogenic root cause. The heavy use of the Guelta d’Archeï as a water source for people and livestock (mainly: dromedary camels, goats, and donkeys) is probably higher than historical rates considering the ever-growing animal husbandry sector. The daily presence of livestock at the guelta means that a significant section of the water and shoreline is unavailable to the crocodiles. Consequently, in addition to the reduction in functional space, essential behaviours such as basking in the sun for thermoregulation become seldom. This insufficient exposition to ultraviolet light can reduce egg fertility rates. To a certain extent, the dromedary camels possibly benefit the fish population in terms of...
providing a source of nutrition via their excrements. However, it is likely that the sheer volume of dromedary camels and resultant dung is over-fertilising the system, and that resultant algal blooms and bacterial action may affect water quality and oxygenation levels. A further knock-on effect of anthropogenic pressure is people bathing and washing clothes in the waters of the Guelta. The use of non-biodegradable soap and detergent leaves the pond murky, affecting water quality and aquatic ecology. A reduction in insects, fish and amphibians would especially affect the survival rate of crocodile hatchlings relying heavily on these organisms as a prey base.

The Guelta d’Archeï is an important source of drinking water for nomads. The clean spring waters become heavily contaminated by the defecation of hundreds of dromedary camels visiting the Guelta on a daily basis. This phenomenon worsens during the course of the dry season as greater numbers of nomads and livestock travelling from afar gather in this biodiversity hotspot. The converging of these extensive animal and human networks creates ideal conditions for infectious disease transmission and the emergence of new zoonoses. There is substantial evidence that dromedary camels are reservoirs for human infection. As a matter of fact, past coronavirus outbreaks such as the Middle East Respiratory Syndrome (MERS)-CoV have been fueled by zoonotic transmission from dromedary camels (Reusken et al. 2016). Although the latter are known to be a source of infection for humans, the routes of direct or indirect zoonotic transmission are yet unknown.

The first phase of the One Health project is a research anthropology survey. The aim of this survey will be to engage communities in a participative approach to conservation development while gathering the necessary data to provide the reserve with a clear, concise and realistic roadmap: an operational proposal made of tangible deliverables. This will enable appropriate monitoring metrics for an effective resource management system that releases pressure on the threatened habitat and species. This type of participative engagement will help establish a sense of local ownership towards a sustainable management of the Guelta d’Archeï, and set, since the beginning, realistic expectations between the ENCR and local communities. Pastoral communities are egalitarian in their local governance therefore a thorough understanding of who is accessing the resources is paramount to enable the setup of a system that maintains equity among all. People well-being and crocodile conservation are inextricably linked, hence, efforts put towards the first will pay dividends to the latter.

Objectives: Engage communities in a participative approach to conservation development, and identify an effective resource management system of the guelta, where a shared fate links man and nature.

Duration of the survey: 5+1 months

- 4,5-months in the field (data collection)
- 0.5-month writing up the final report (analysis and synthesis), which will be the foundation to writeup a local convention for the concerted management of the Guelta d’Archeï.
- 1-month long follow-up survey, which will take place six month after the implementation of the new management system.

Survey geographical range:
60km radius around the Guelta d’Archeï (for an all-encompassing area of use).
Key responsibilities:

- Establish trust-worthy relationships with community leaders within the area of study;
- Leverage these relationships to collect information and understand larger dynamics and trends regarding land use and reliance on natural resources, within the study area;
- Map nomadic routes pivoting around the Guelta d’Archeï and identify other secondary convergence points within the study area (e.g. main pastures);
- Identify all individuals using the Guelta d’Archeï and understand the traditional management system in place;
- Identify the role that the Guelta d’Archeï plays in nomads’ social, traditional and spiritual aspects of life;
- Understand land tenure structures;
- Investigate possible intercommunity conflict around the Guelta;
- Define human-animal local perceptions and interactions;
- Explore alternate management schemes;
- Work with the users of the Guelta to describe their perception of water quality and impact on human health;
- Use multiple survey methodologies such as 1) structured and semi-structured interviews with key informants, 2) focus groups to assess potential management schemes, 3) open-ended and structured questionnaires, and 4) participatory resource mapping;
- Conduct an in-depth assessment of people and livestock gatherings which will provide the necessary knowledge for effective prevention and response mechanisms to the emergence and transmission of zoonoses;

Output:

- Sound qualitative and quantitative data on current traditional land use and resource management, within a 60km area around the Guelta d’Archeï;
- Detailed account of plausible shift management processes;
- A tangible roadmap and toolkit to guide the Reserve Management Unit in the write-up of a local convention and the implementation of a concerted management system;

Desired skills:

- PhD in Environmental Anthropology;
- Experienced in conducting research projects examining the relationships between humans and their environment across space and time;
- Experience engaging with diverse stake-holders;
- Good experience working within traditional pastoral societies;
- Have an in-depth understanding of nomadic pastoralism;
- Good knowledge of the Ennedi Massif, local culture and traditional believes would be a plus;
- Passion for biodiversity conservation;
- Excellent understanding of scientific methodology;
- Excellent analytical and critical skills;
- The ability to gather, assess and interpret data;
- Clear, logical and independent thinking + good ability to construct an argument;
- Knowledgeable about statistical and computing techniques;
- Excellent oral communication and presentation skills + comfortable in leading discussions and group work;
- Time management;
• Good team spirit, good interpersonal skills, working closely with a translator;
• Patient and available with excellent organising and planning skills;
• Experience working in hot and isolated areas;
• Ability and willingness to work in the field, in desert conditions for long periods of time;

**Key Relationship :**
• Translator;
• Park Manager;
• Deputy Park Manager;
• Conservation Manager;
• Community Manager + Assistant Community Manager;
• Field Operations Manager;
• General Staff ;
• Local communities ;

**Signs of success:**
• An improved anthropological understanding of the Guelta d’Archeï and its 60km surroundings is built for African Parks;
• Local communities developed a sense of local ownership towards a sustainable management of the Guelta d’Archeï, and realistic expectations between the ENCR and local communities are established;
• A clear, concise and realistic roadmap, with tangible deliverables, is provided to the ENCR, in order to implement an effective resource management system that releases pressure on the threatened habitat and species;
• Fruitful exchanges took place in a multicultural context, allowing the maintenance and strengthening of good professional relations;

**Application:**
Send,
• An up-to-date CV;
• A cover letter addressed to the Director explaining your interest in the position;
by email to the following address: [rh.tchad@africanparks.org](mailto:rh.tchad@africanparks.org), or drop off at:

**African Parks Tchad**
Quarter Klemat – 2eme Arrondissement
Rue 3258 – Porte 63, N’Djamena, Tchad

**RNCE – African Parks Tchad**
Bureau African Parks a Fada au Quartier EDJI

Submission deadline is 10/09/2020.
Applications received after this deadline will not be considered. Only selected candidates will be notified by email or telephone.