

Monitoring of Birdlife by the Guides and the Guards of Niokolo-Koba National Park, Senegal

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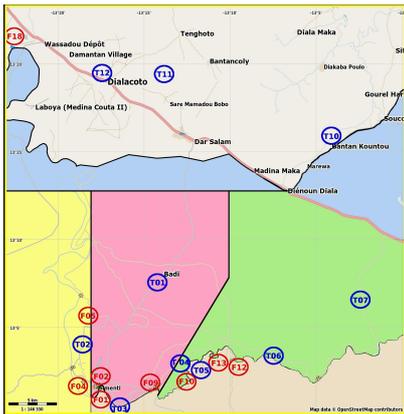
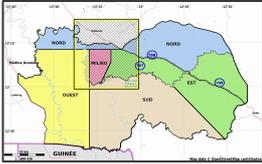


Figure 1: Localisation of the study zone, the sectors, the fixed observation sites and the survey trajectory zones

1. Introduction Niokolo-Koba National Park is one of the most important nature sanctuaries in West Africa. Its exceptional biological (mammals, birds, reptiles, fish and plants), were recognized in 1981 with its designation by UNESCO as a Biosphere Reserve and as a World Heritage site. However, the Park is facing ever more critical anthropogenic stresses; thus in 2007 it was designated as a world heritage site in danger due to the pressures of poaching, encroachment on wetlands by invasive plants, intrusion of livestock and a degradation of visitor infrastructure.

Within the framework of integrated management of the Park, the GIE (cooperative) of the guides of Niokolo-Koba organises the guiding of visitors and supports the park personnel in different activities such as monitoring and sensitisation. With the support of partners, notably the **African Bird Club** and the **Directorate of National Parks of Senegal**, the guides have received training and financial and material assistance enabling them to carry out 12 inventory missions in the Park totalling 193 hours of observation between November 2014 and June 2016. We present in the following sections the data collection methodology, the results obtained and the conclusion.

2. Methodology Conforming with the rules of in Niokolo-Koba National Park (NKNP), observations were carried out while driving along the tracks, by boat on the Gambia River, and from designated observation points, as well as in the close neighbourhood of the Park. Our study zone was subdivided into five sectors (West, Middle, South, North and East), mainly situated for this pilot project in the central and northern parts of the Park. These parts are easily accessible in a day, while the peripheral areas in the south and the west of the Park are much more difficult to reach because of the distances to be covered, and are often inaccessible because of the condition of the tracks or impassible fords, especially during and just after the rainy season. The data were thus collected at nine fixed observation sites (designated as between F01 and F18) and twelve zones of moving survey (T01 to T12). (Figure 1)

3. Results The monitoring permitted the observation of 185 bird species distributed among 70 families. The data collected have already been incorporated into the eBird database. (Figures 2, 3 and 4) The data on raptors have been incorporated into the ARDB (African Raptor DataBank). (Figures 5 et 6)

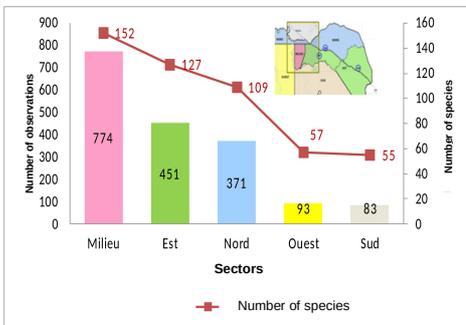


Fig. 2: Observations in the five sectors

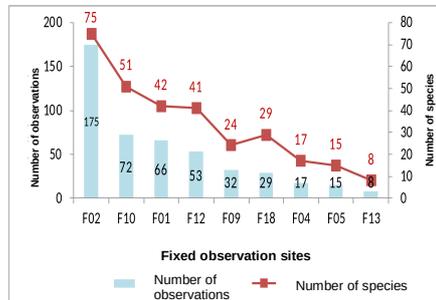


Fig. 3: Observations at the 9 fixed sites

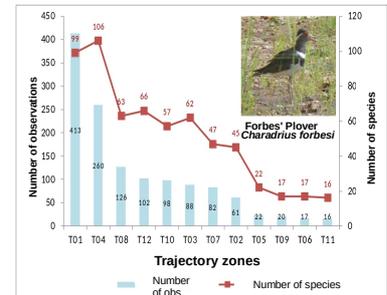


Fig. 4: Observations in the 12 survey trajectory zones

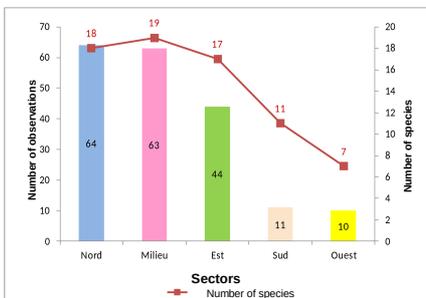


Fig. 5: Observations and counts of raptors in the 5 sectors



Pair of African Hawk-eagles (*Aquila spilogaster*)

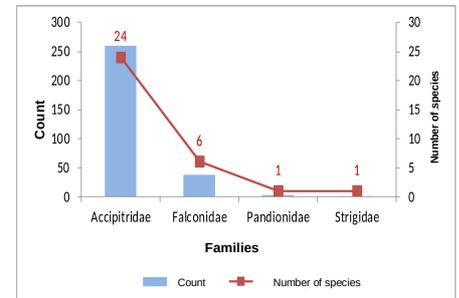


Fig. 6: Observations et counts in the 4 raptor families

4. Conclusion The inventories carried out by the guides and the park guards show that the NKNP hosts considerable ornithological wealth. However, it will be important to ensure regular monitoring of the observation sites and survey trajectories to enable the comparison of results with a view to analysing population trends and to contributing to determination of the status of bird species.

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