Makgadikgadi Conservation Initiative: Supporting Africa’s Longest and Botswana’s Largest Mammal Migration

Natural Selection Conservation Trust and Round River Conservation Studies

Aim:
To identify and promote migration routes of least resistance, thereby promoting regional wildlife migrations and corridors and supporting more resilient wildlife populations and migratory wildlife numbers, while establishing long term capacity and adaptability through the diversification of livelihoods.

Background:
The Makgadikgadi-Nxai Pans area is an internationally recognized core wildlife dispersal area within southern Africa. Southeast of the Okavango Delta, the Makgadikgadi-Nxai Pans, a seasonal dispersal designation from the Hwange and Chobe National Parks, Okavango Delta, and the Central Kalahari Game Reserve, is experiencing increasing wildlife populations, an expanding tourist industry and amplified human/wildlife conflicts. Actions are needed to provide for a more accepting and wildlife-friendly rural economy that can improve wildlife corridors that once supported an important seasonal migration of large mammals, while uplifting local communities in a region known for climate, and therefore economic, instability.

Makgadikgadi-Nxai Pans was once central to what is thought to have been the largest and longest migration of large mammals in Africa, namely zebra and wildebeest. Land use changes led to the disruption of this migration several decades ago. Following the recent removal and realignment of fences, studies of the migration patterns of the Burchell’s zebra revealed the astonishing prompt reestablishment of what is now known as the longest large mammal migration in Africa from the border of Namibia and Botswana south to the Makgadikgadi and Nxai Pans and back. Similarly, due to the renewed flows of the Boteti River, elephants are distributing more widely and increasingly in the Makgadikgadi-Nxai Pans, as well as making their way into the Central Kalahari Game Reserve. These renewed wildlife numbers and seasonal movements serve as an example of potential ecological resiliency and recovery in the region.

An important challenge to wildlife is the direct and indirect loss of habitat and connectivity due to Human-Wildlife Conflict (HWC) associated with livestock grazing and agricultural production in key habitat and connectivity areas. We propose to reduce HWC within this region by developing Wildlife-Friendly economic incentives to manage land use in ways that reduce the impacts to wildlife seasonal habitats and movement.

Most communities in this area rely on subsistence agriculture and many wildlife species such as elephant and lion are viewed as a hindrance rather than a benefit. The greatest threats and land use incompatibilities include not only direct wildlife/livestock/human conflicts, but also unsustainable livestock stocking levels resulting in loss of wildlife habitat, restricted wildlife movements from multiple control fences, and a lack of human social well-being. This initiative focuses on each of these land use incompatibilities. A primary goal is to highlight wildlife as a recognized beneficial mechanism for social wellbeing. Linking land use planning to conservation agreements, commodity-based beef programs and a community trust is key to achieving community embracement of sustainable conditions for wildlife alongside their own wellbeing. While the wellbeing of humans and wildlife are intrinsically linked, past land use plans have not reflected this link or outlined mechanisms for supporting it.

The areas outside the Makgadikgadi National Park are sparsely populated with people from different backgrounds and cultures. Wildlife and wilderness tourism is the principal business activity supported by outside sources within the Makgadikgadi/ Nxai Pans area. The principal conservation managers currently involved in this arena include the Makgadikgadi/ Nxai Pans National Parks Staff and Committee and the Botswana Department of Wildlife and National Parks. Initial activities will be devoted to constructing regional conservation assessments for the core wildlife dispersal area, building on previous work conducted by Botswana’s Department of Environmental Affairs and the Centre for
monitoring of wildlife populations and distributions.

4. Identify optimal connectivity of the migration and other wide-ranging wildlife to resources in underutilized protected areas such as the Central Kalahari Game Reserve, as guided through stakeholder engagement and GIS-based decision support tools.

5. Introduce monitoring mechanisms developed with stakeholders for land use compliance and monitoring of wildlife populations and distributions.
Historical wildlife movement, northern Botswana