

## Predicting potential Wattled Crane (*Bugeranus carunculatus*) distribution within the Okavango Delta, Botswana using maximum entropy

The International Union for Conservation of Nature rates the Wattled Crane as “vulnerable” and estimates population of mature individuals to range from 6000 to 6300. These have the same conservation status as elephant (*Loxodonta africana*) and lion (*Panthera leo*) but they have a narrow habitat suitability range. In Botswana, the bird is categorized as an endangered species. Therefore, it is of great significance to study the species as a proactive conservation measure for its survival. The Wattled Crane acts as a key bioindicator of Okavango Delta wetland system status. Due to erratic flows of floodwaters from Angolan highlands the population in Botswana have been irregularly nomadic in response to water availability. The birds were sighted in previously conducted aerial surveys in the early 2000's and most recent extensive resurveying within the Okavango Delta in 2019. The data was overlaid with changes in landcover over the years to assess extent of relation. The Wattled Crane was found to confine itself in permanently waterlogged areas. There have been mushrooming tourism enterprises within the study area over the years. There is need to further extend monitoring sites to other temporary water catchments in northern Botswana in the summer season for potential use by Wattled Cranes.