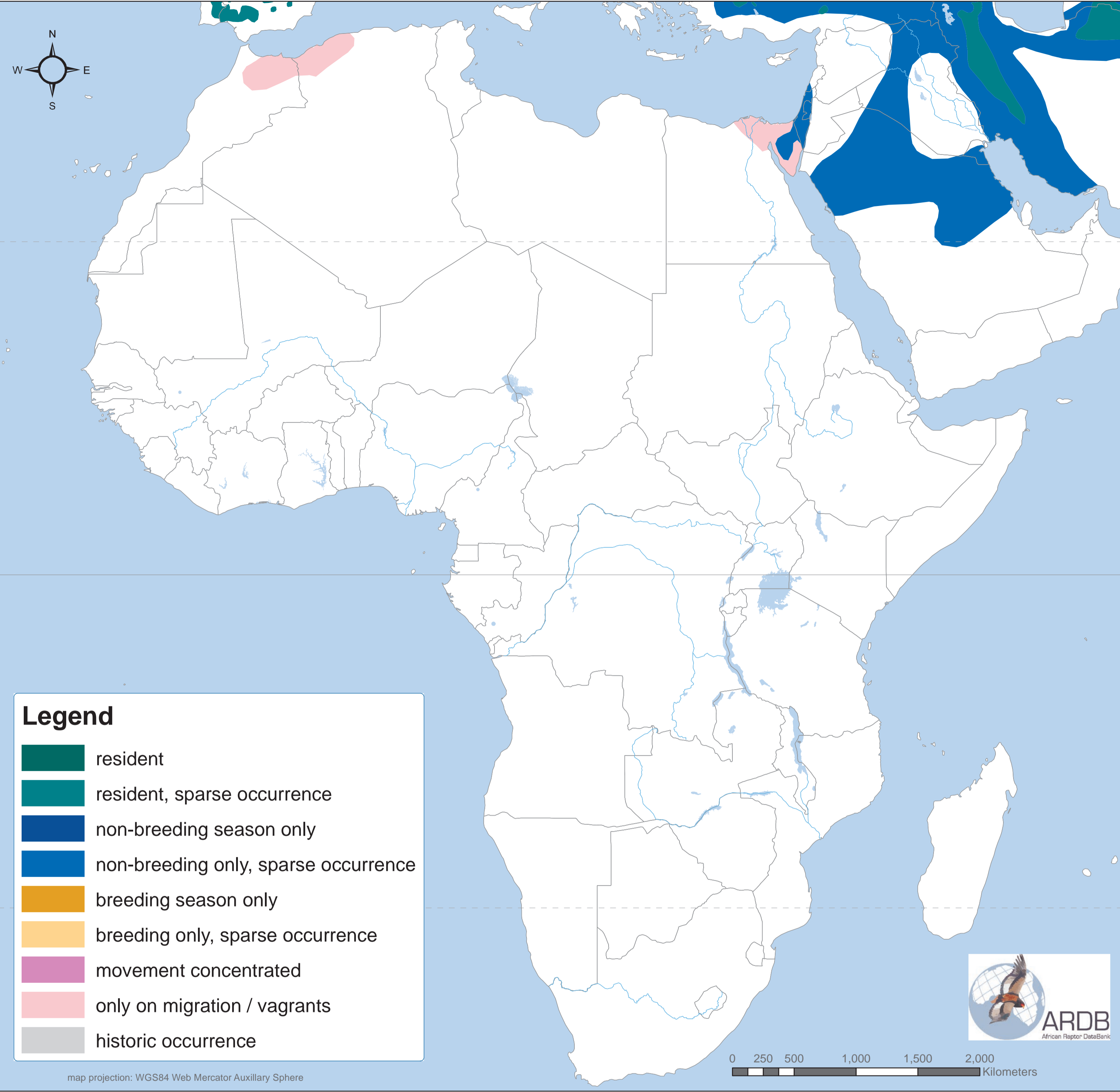


range map: Cinereous Vulture



Legend

- resident
- resident, sparse occurrence
- non-breeding season only
- non-breeding only, sparse occurrence
- breeding season only
- breeding only, sparse occurrence
- movement concentrated
- only on migration / vagrants
- historic occurrence



0 250 500 1,000 1,500 2,000 Kilometers

map projection: WGS84 Web Mercator Auxillary Sphere



METHODS:
 As part of the African Raptor Databank project, range maps were captured from Kemp and Kemp (1998) and compared with Birdlife range maps (Birdlife International and NatureServe 2015). Historic ranges were inferred by digitizing all 16k data points from the Snow Atlas (Snow, D.W. 1978) which represent collections in the British Museum of Natural History up to the end of 1977. Historic points were buffered by 100km to estimate formerly inhabited areas. Some additional historic records were sourced elsewhere particularly for Namibia (Chris Brown in litt. 2017). Current ranges were derived from the afore-mentioned range maps plus 100km buffers around recent (1978 onwards) sighting data points from the African Raptor Databank. In 2015 the ARDB rangemaps for vultures were updated by expert consultation using online webmaps, organized by Darcy Ogada and The Peregrine Fund and supplied to Birdlife to inform uplisting for certain species on the IUCN RedList. In 2016-2017 a concerted effort was made to collate new vulture sightings from surveys and new tracklog data from movement studies of tagged vultures into the ARDB. Tracklogs were sourced on > 200 tagged individuals of eight species. ARDB rangemaps were finally reviewed and edited to incorporate these new data. Range types were classified into: resident (green), present only in the breeding season (orange), present only in the non-breeding season (blue), vagrant or movement only (lilac) and historic occurrence (grey). Distribution modelling using Maxent software (Phillips et al. 2017) was performed on historic and recent observations of vultures from the ARDB. Occupied habitat for each species was defined by extracting likelihood values > 0.25 which approximated the 10 percentile training presence in most of the models. These extracts were used to colour code the range maps further whereby dark colours indicate likely occupancy within the range and pale colours indicate sparse occurrence.

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