AFRICAN RAPTOR DATABANK

first year report: 2013

The African Raptor Databank or ARDB was launched at the 13th PAOC in Arusha, October 2012. The project became possible thanks to the facilitation of The Peregrine Fund and ESRI in supplying important mapping software. A five year period is planned for data gathering to enable comprehensive assessment of the conservation status of each species of African raptor. The project also aims to make use of raptors as ideal indicator species for monitoring the health of African environments.

The project depends on the support of raptor biologists, birdwatchers and general enthusiasts in sharing their observations of African raptors. This is a summary of the data gathering exercises during our first year of operation in 2013. Since the last monthly update in early November 2013, there have been a further 1228 records added to the database during December (Tim Wacher: 769; Andre Botha: 297; Joseph Heymans: 162). This brings the database total to 57,547 records (of which 15,607 are historic records captured from the Snow Atlas). The following table displays contributions by country during 2013.

Country	**Number of records**
South Africa	19103
Tanzania	13001
Chad	2176
Niger	2052
Kenya	1407
Gambia	913
Botswana	894
Cameroon	686
Mozambique	266
Namibia	261
Zambia	232
Central African Republic	197
Benin	166
Zimbabwe	141
Uganda	119
Guinea-Bissau	54
Malawi	40
Ethiopia	18
Rwanda	17
Lesotho	8
Swaziland	8
Nigeria	5
Angola	4
Tunisia	2
Burundi	1

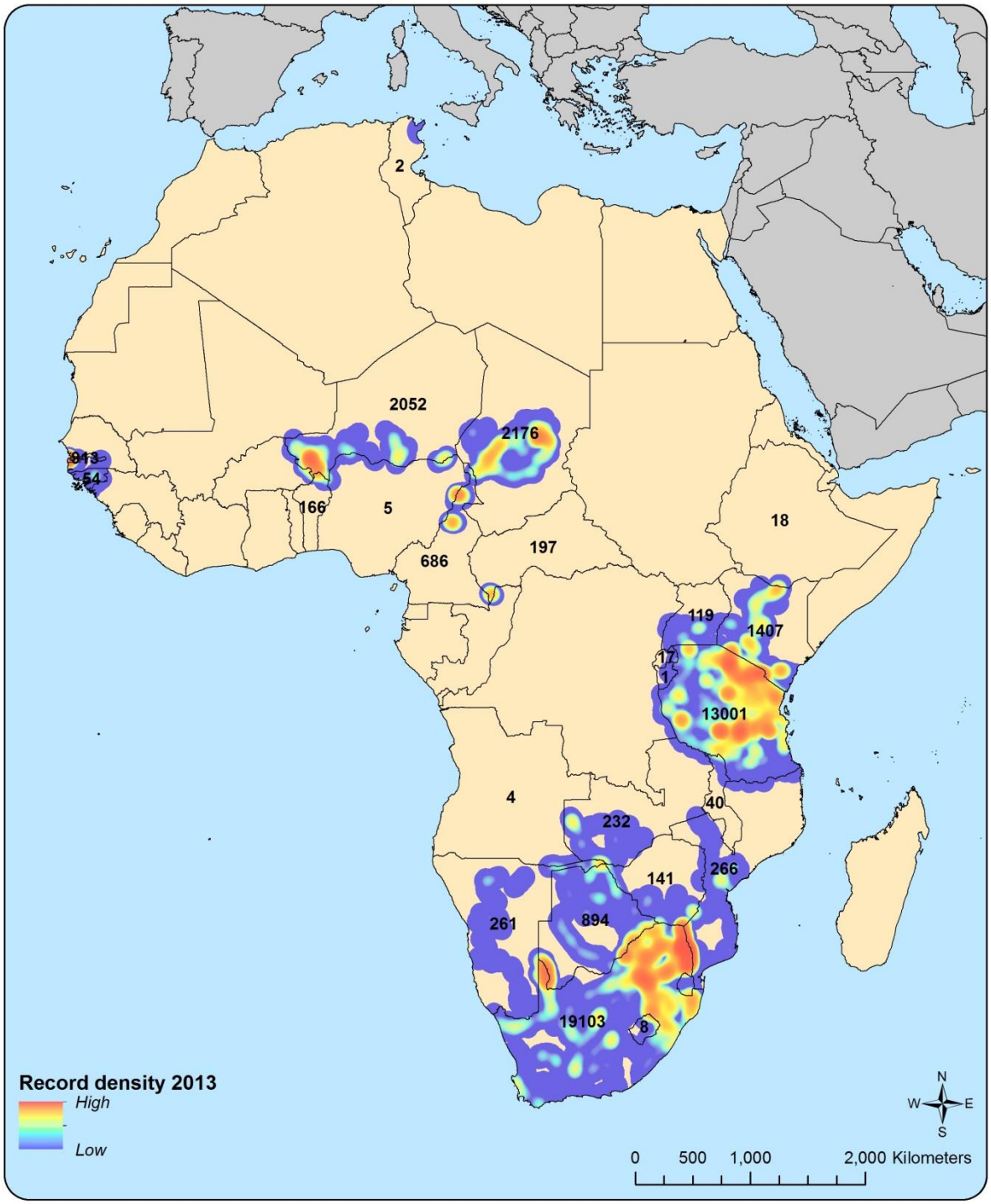
So, if you know anybody recording raptors in the following countries please encourage them to submit their observations to the ARDB:

Countries with no records submitted during 2013	
Algeria	Mali
Burkina Faso	Mauritania
Cape Verde	Mauritius
Comoros	Mayotte
Congo	Morocco
Cote d'Ivoire (Ivory Coast)	Reunion
Djibouti	Saint Helena
Egypt	Sao Tome and Principe
Equatorial Guinea	Senegal
Eritrea	Seychelles
France	Sierra Leone
Gabon	Somalia
Ghana	Spain
Guinea	Sudan
Ile Tromelin	Togo
Liberia	Western Sahara
Libya	Yemen Socotra
Madagascar	Democratic Republic of the Congo

The obvious gaps in the distribution of records (see next page) are the West African forested regions, central lowland rainforest, North Africa and most of the Horn of Africa. It would be great to develop the database to include records from the off-shore islands of Africa where certain raptors are critically endangered and we are developing modules to facilitate the coordination of migration counts at bottleneck sites where raptors funnel into or out of Africa. So please help us fill any of these gaps.

The following two maps display current record density for the recent and historic observations.

AFRICAN RAPTOR DATABANK
2013



habitat INFO
THE PEREGRINE FUND
Conserving Birds of Prey Worldwide
RAPTORS MOU
TANZANIA BIRD ATLAS
Association "Les Amis des Oiseaux"
NiBDaB
ENDANGERED WILDLIFE TRUST
BIRDS OF PREY PROGRAMME
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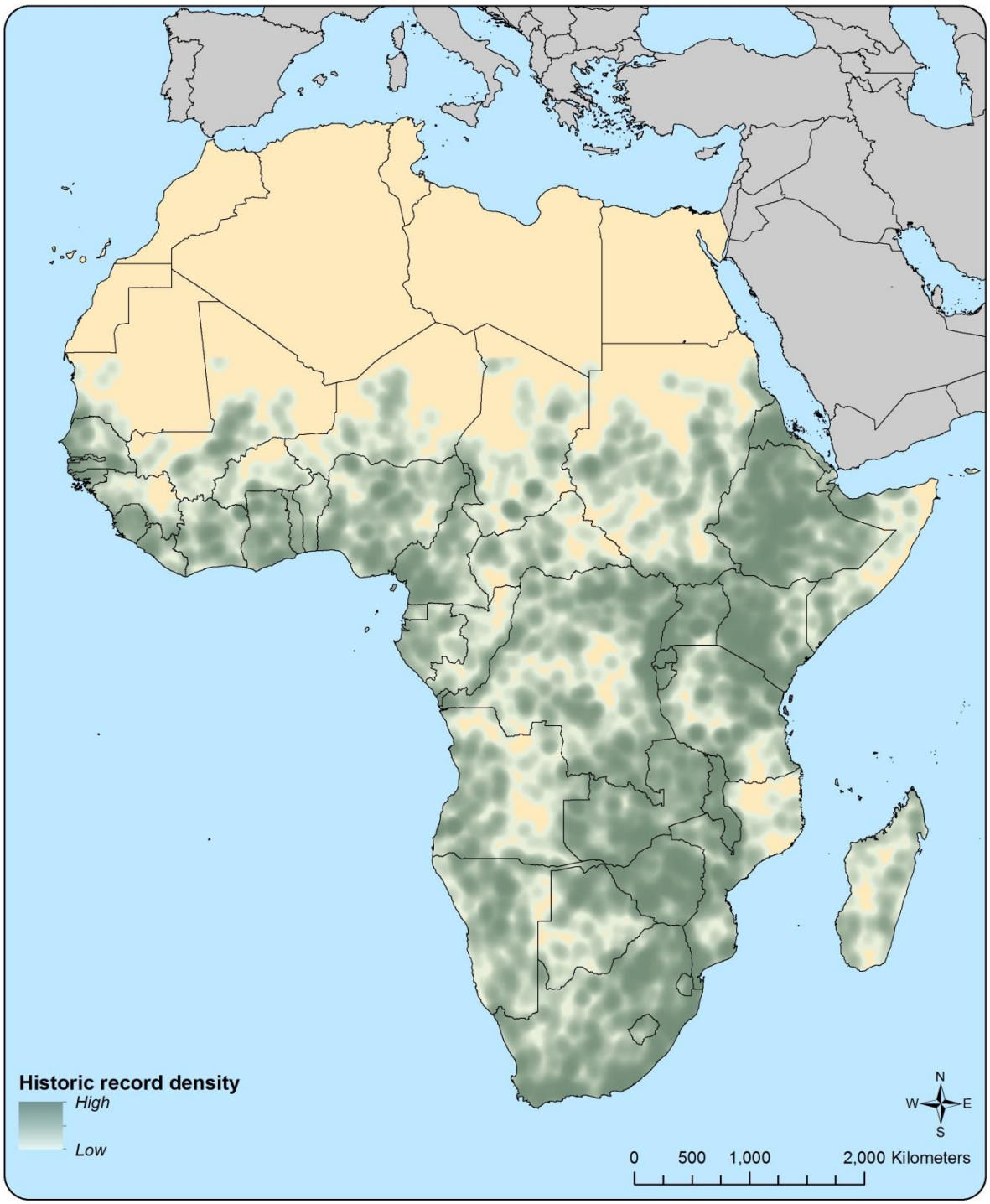
AFRICAN RAPTOR DATABANK

Historic records



habitat INFO

THE PEREGRINE FUND
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RAPTORS MOU

TANZANIA BIRD ATLAS

جمعية أحباء الطيور
Association "Les Amis des Oiseaux"

NiBDaB

ENDANGERED WILDLIFE TRUST
BIRDS OF PREY PROGRAMME

esri

The Peregrine Fund and the Endangered Wildlife Trust are acting as regional coordinators for East and Southern Africa respectively. West and Central Africa are handled most capably and helpfully by Ralph Buij, Joost Brouwer, Clive Barlow. And we welcome Hichem Azafzaf of Association "Les Amis des Oiseaux" (AAO) in Tunisia who has kindly agreed to coordinate contributions from North Africa.

The contributions by source are shown in the diagram on the next page.

Clearly we already have fantastic coverage of especially the savanna and arid savanna areas in: southern Africa, thanks to Andre Botha and Joseph Heymans; Tanzania thanks to the Tanzanian Bird Atlas; Kenya, thanks to Munir Virani, Simon Thomsett, Darcy Ogada; Chad thanks to Tim Wacher and colleagues; Niger thanks to the Niger Bird Atlas. Very important data contributions have also given us coverage of: Gambia and Guinea-Bissau, thanks to Clive Barlow; Cameroon, thanks to Ralph Buij; Central African Republic, thanks to Gus Keys and Rebecca Johns and friends; Uganda, Namibia and Botswana, thanks to the combined efforts of Simon Thomsett and Laila Bahaa el Din. Hichem Azafzaf has sent in the first records from North Africa while Sebastian and Sarah Tham have been the first to use the apps which up till now have only worked with an internet connection.

Special thanks go to Andre Botha for single-handedly sending in more records from southern Africa than the entire Snow Atlas. The participating Bird Atlas projects are clearly a major source of information for the project. We have developed separate datasets for each of these major contributors so that data may be exchanged and updated in both directions.

We have spent much time in 2013 trying to get the schema of the database right to accommodate the great variety of raptor observations and the different methods by which they are gathered. We hope that a lot of this information will, one day, come in from mobile phones and other devices. So to keep the data amounts as small as possible a lot of the data is stored as coded numbers rather than lengthy text. This also helps to provide easy to use drop down lists for rapid entry of consistent info in the field.

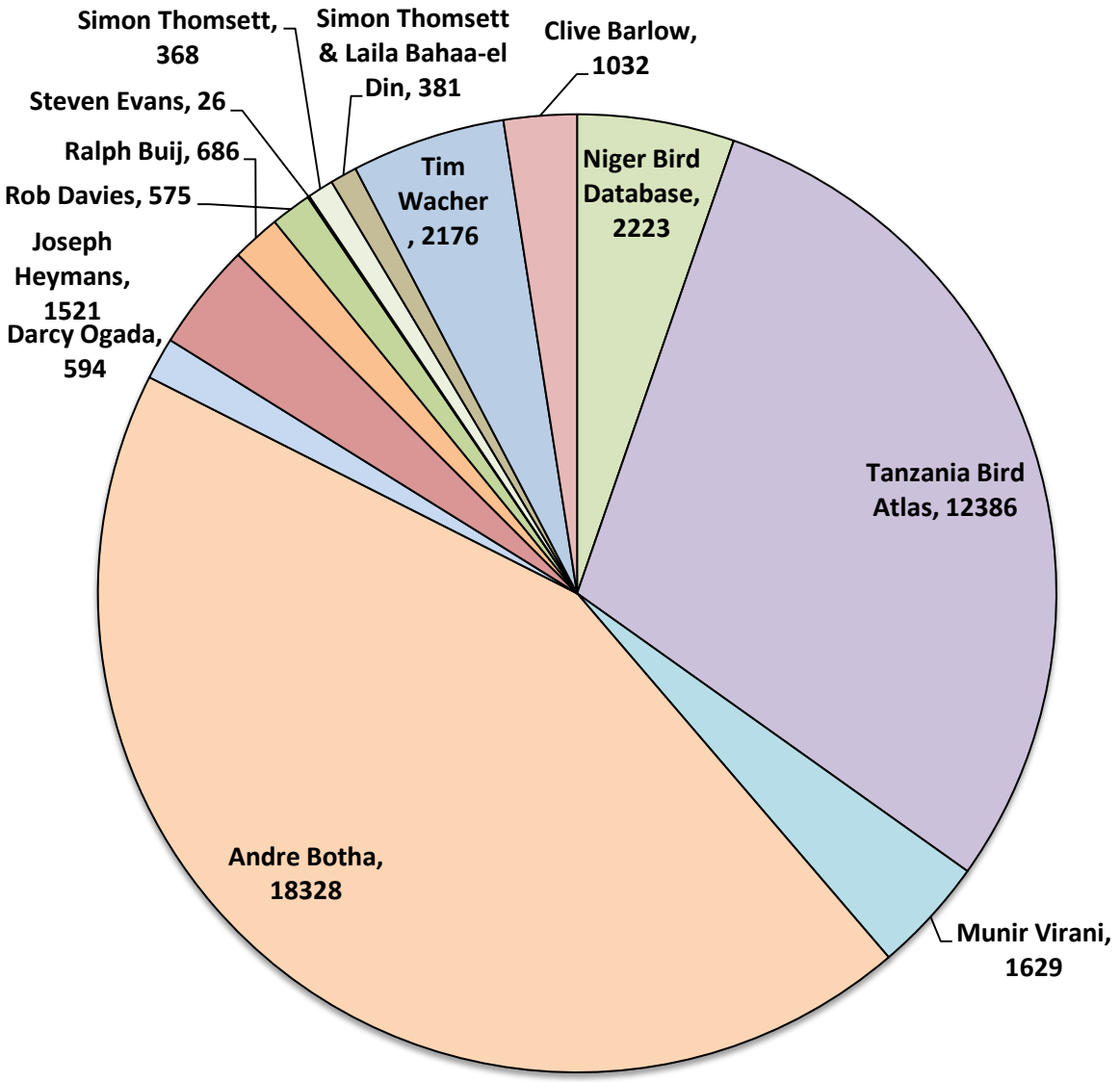
At present though we are receiving most of the data in text format through excel spreadsheets. This takes up considerable time in converting formats so we urge everyone to try out the new apps we are producing in 2014 which should work anywhere in the field (without data connections) and will greatly simplify and facilitate the procedure for recording the raptors that you see.

We have developed two java web interfaces for the project: a public one for viewing all non-secured data at http://gis.habitatinfo.com/java/ardb_viewing/ ; and a private one for you to edit your own records at http://gis.habitatinfo.com/java/ardb_editing/ .

Our first versions of the apps will enable the recording of ad hoc (incidental) sightings but we are also very interested to record more about your observer effort: the time you spend in the field and the distance and routes travelled by car or by foot. If we are armed with this information we are able to make standardised comparisons of raptor densities across regions and across time periods.

At the moment most of the data is coming in as incidental observations by car. Although these observations are extremely valuable because many are obtained by the use of GPS, they would become even more valuable to the ARDB if we are able to tie them to records of observer effort. We urge everyone to try to keep a record of the routes travelled and we will be gearing the apps to enable you to record this as easily as possible.

Records submitted by person/organisation in 2013



The following table presents results from the ARDB, summarising the frequency of observations for the top 20 species from contributions received in 2013:

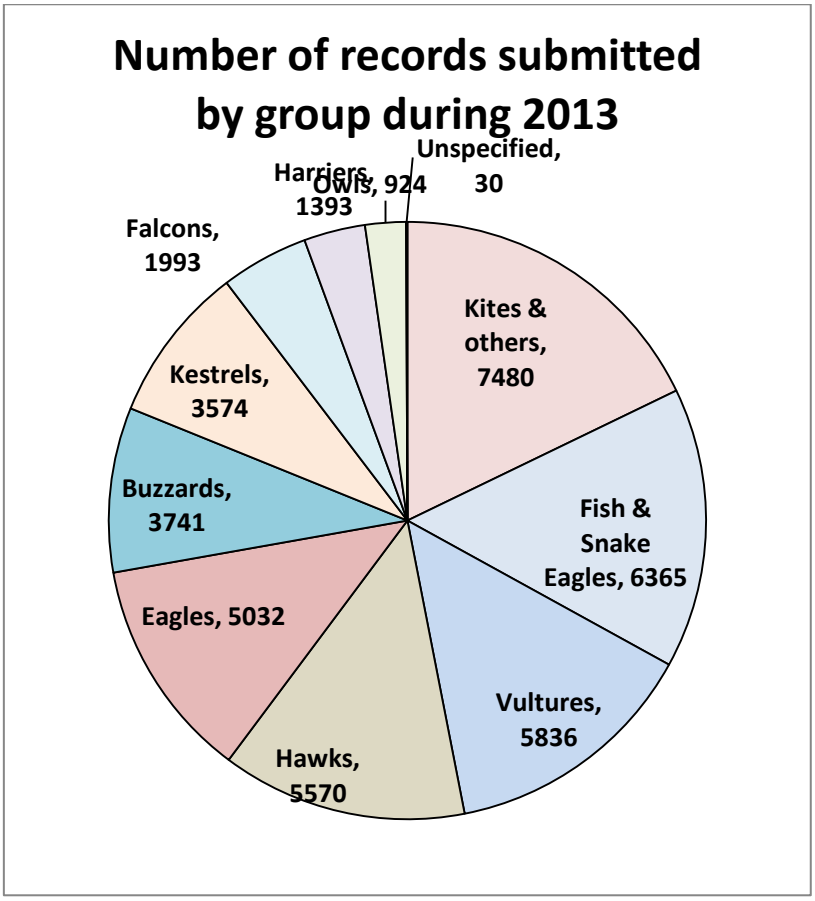
English name	Number of records	Rank
Black-shouldered Kite	3705	1
White-backed Vulture	3039	2
Bateleur	2995	3
Yellow-billed Kite	1620	4
African Fish-eagle	1539	5
Amur Falcon	1381	6
Tawny Eagle	1207	7
Pale Chanting-goshawk	1181	8
Wahlberg's Eagle	1137	9
Black Kite	1123	10
Steppe Buzzard	1038	11
Brown Snake-eagle	988	12
Hooded Vulture	983	13
Augur Buzzard	866	14
Lanner Falcon	793	15
African Harrier-hawk	707	16
Grasshopper Buzzard	690	17
Lizard Buzzard	649	18
Dark Chanting-goshawk	616	19
Gabar Goshawk	604	20

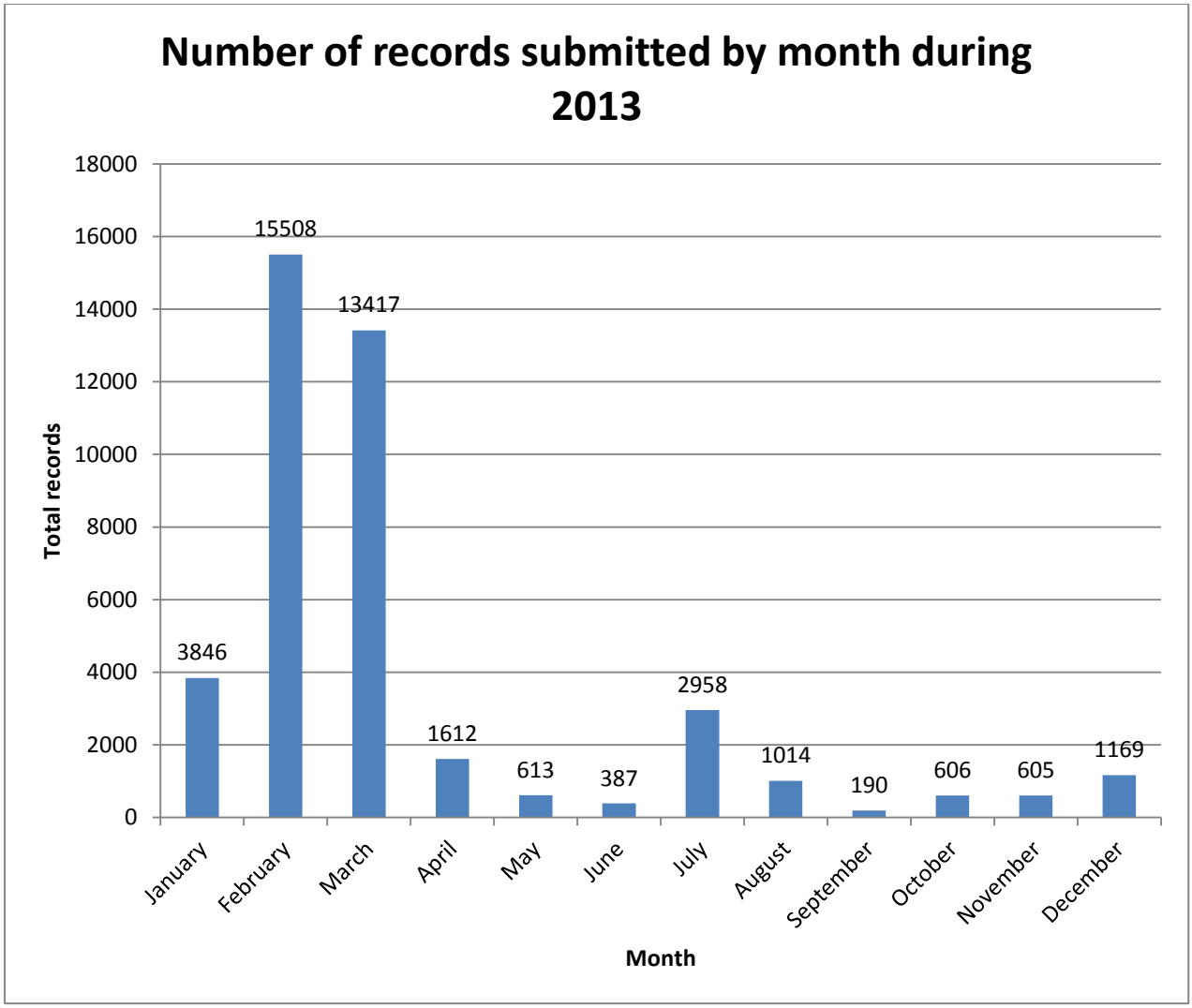
Black-shouldered Kite comes out as the most recorded raptor in Africa, followed by White-backed Vulture and then, to our surprise, Bateleur. This species has lost great parts of its range in southern Africa due the use of poison in predator-control operations. But Darcy Ogada noticed it was one of the few scavenging species that appeared to be doing well in her studies. So it is great to see it emerge as the third most frequent raptor recorded in Africa. But when interpreting the results from the ARDB we will have to take into account issues of detectability. A raptor which prefers to perch on telegraph posts in the open, such as the Black-shouldered Kite, is far more likely to be encountered on a road count, than a small accipiter which seldom emerges from dense forest. Hopefully, when we get to the modelling of distributions and likely densities, we will be able to evaluate detectability indices for each species.

Small accipiters, island raptors and North African species are among those species not yet recorded in the database.

the most recorded raptor in Africa:

Species not submitted during 2013		
Cinereous Vulture	Henst's Goshawk	Hume's Owl
Madagascar Fish-eagle	Northern Goshawk	Tawny Owl
White-tailed Eagle	Madagascar Cuckoo-hawk	Chestnut Owlet
Madagascar Serpent-eagle	Merlin	Chestnut-backed Owlet
Greater Spotted Eagle	Banded Kestrel	Little Owl
Spanish Imperial Eagle	Madagascar Kestrel	Sokoke Scops-owl
Bonelli's Eagle	Mauritius Kestrel	Eurasian Scops-owl
Madagascar Buzzard	Seychelles Kestrel	Pallid Scops-owl
Rough-legged Buzzard	Eurasian Eagle-owl	Madagascar Scops-owl
Archer's Buzzard	Usambara Eagle-owl	Pemba Scops-owl
Oriental Honey-buzzard	Rufous Fishing-owl	Grande Comore Scops-owl
Madagascar Harrier	Abyssinian Owl	Anjouan Scops-owl
Hen Harrier	Madagascar Owl	Seychelles Scops-owl
Madagascar Harrier-hawk	Eurasian Long-eared Owl	Congo Bay-owl
Madagascar Sparrowhawk	Madagascar Red Owl	Shelley's Eagle-owl
Frances's Sparrowhawk	Maned Owl	Albertine Owlet
Chestnut-flanked Sparrowhawk	São Tomé Scops-owl	
Red-thighed Sparrowhawk	Madagascar Hawk-owl	





Following the major contributions from Bird Atlas projects early in the year, monthly submissions have averaged just over 1000 records per month. Thank you so much for all this important help in our first year of operation. Please keep the data coming and please try out the apps we are releasing in 2014 to see if they are for you.

ARDB Team

6 January 2014