



African Raptor Databank

Annual review for 2014



**ECKERSTROM
CONSULTING**

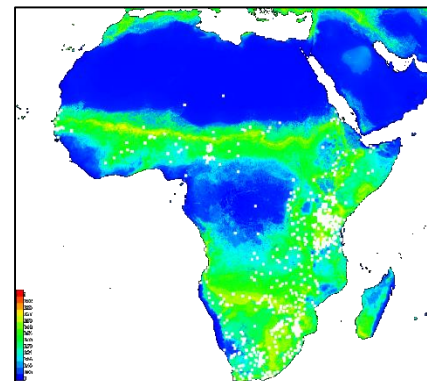


NiBDaB



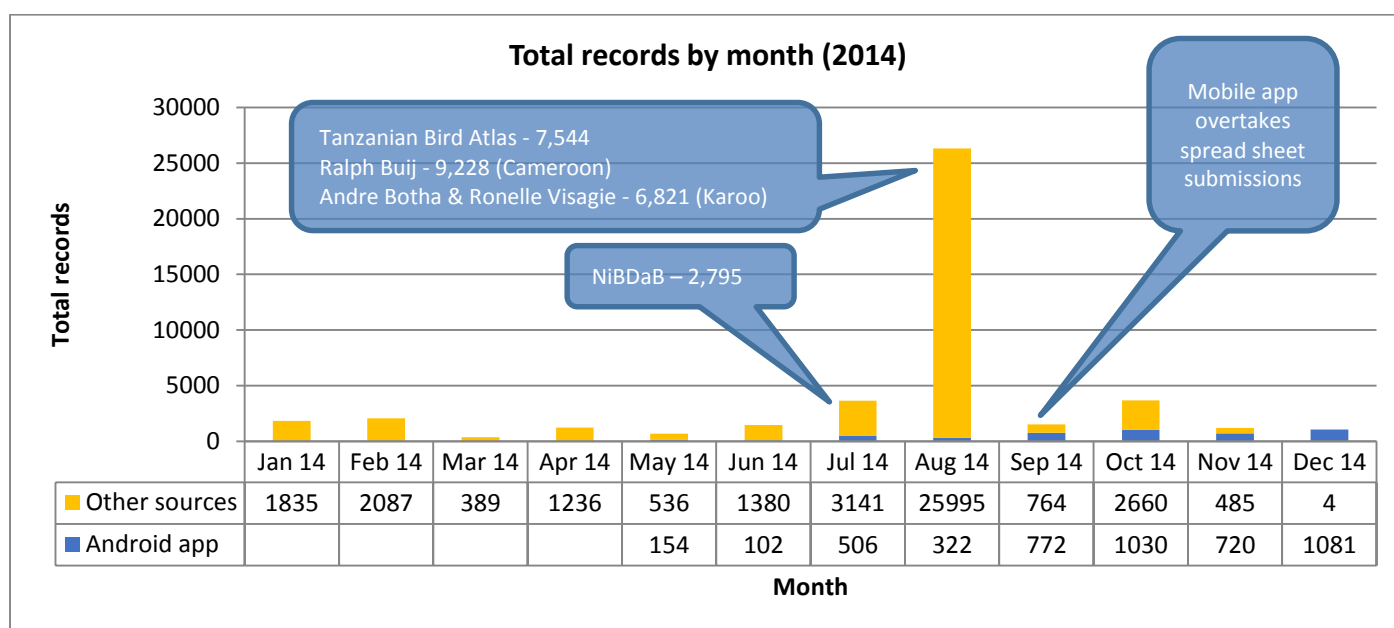
What a year 2014 has been! We've seen the database nearly double in size, the launch of an offline Android app, the ARDB receive its own 'branding' and the beginning of the species distribution modelling stage! Read on for more information and 2014's statistics...

2014 was our second full year of data gathering for the African Raptor Databank project. The plan is to collect data for another two years in order to be able to make sound conservation assessments of each African raptor species in relation to their habitats. We owe sincere thanks to Munir Virani and his team at The Peregrine Fund for honouring their commitment to the project by continuing to provide the crucial server software licence for this period.



We tried to bring forward the analysis and distribution modelling phase with a bid for this phase of the project to the JRS Biodiversity Foundation in February but unfortunately were not successful this time. We have however, made a start with the modelling (see map to right) under our own steam using Maxent software and we are supporting assessments of Cassin's Eagle, Martial Eagle and Secretarybird which should become available in 2015.

2014 has been a fantastic year for data gathering. The database grew by 45,199 records this year representing a growth rate of 107 % for recent records (see the graph below and map overleaf). The total in the database including historical records (15,607) now amounts to 102,971, and this permits us to make a decent start on conservation assessments involving habitat measurement for a large number of species.



**ECKERSTROM
CONSULTING**

We received two highly significant financial contributions during 2014 thanks to the interest of Kurt Eckerstrom of Eckerstrom Consulting in Washington and Nick Williams, Programme Officer for UNEP-CMS Raptors MoU. These organisations provided matched funding to Habitat Info which enabled the development and launch of our first mobile app for recording raptors in the field, available through Google Play Store on the Android platform. UNEP-CMS have kindly undertaken to find further funding to enable the equivalent iOS version which we expect may become available by mid 2015. We thank our developer, Andrew Rayner, for his great perseverance in delivering an amazing piece of software which has proved to be powerful and reliable in both the field and also in relaying data to the server in a secure way. Andrew has donated a significant amount of his own time in making this possible for us. Paul MacDermot and Stu Porter helped with the stunning splash screen for the app featuring a Bateleur soaring over the continent, and we used this to derive our project logo.

To show how any funds received to the ARDB have been allocated, along with other project inputs, we have prepared a financial summary for the period 2012-2014 and this is available at <http://www.habitatinfo.com/ardb-inputs-and-expenditure-2012-2014-first-three-years/>.

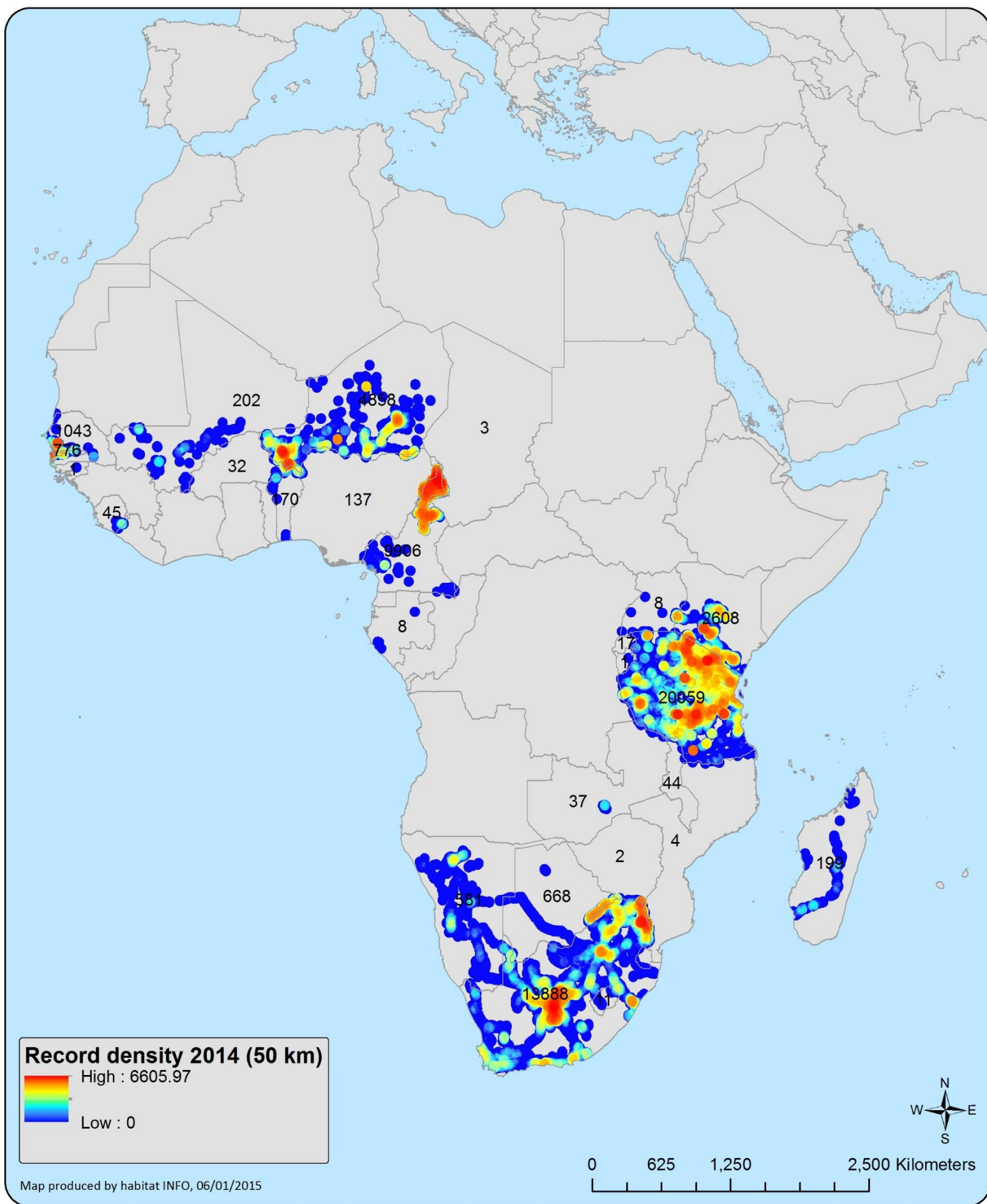


AFRICAN RAPTOR DATABANK

Record density (2014 only)



habitat
INFO



esri

Eckerstrom Consulting

NiBDaB

TANZANIA

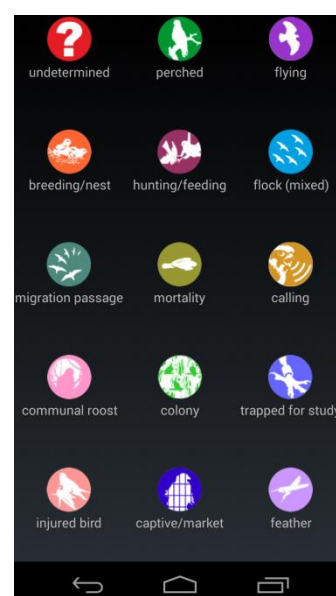
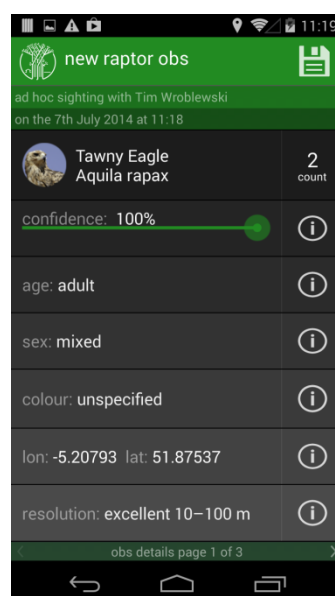
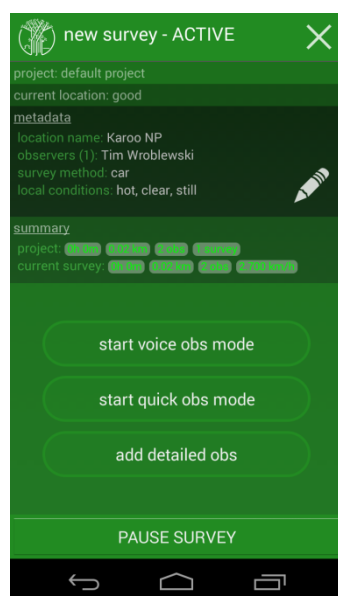
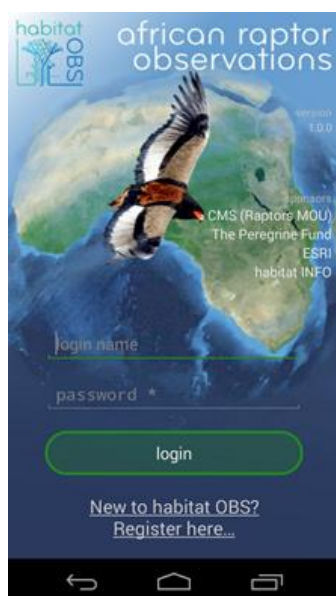
BIRD
ATLAS



Android app contributors (2014)

Bernard Madden	567	Rob Thomson	76	Kyle Mannheim	7
Mark Dixon	495	Dirk van Stuyvenberg	61	Andre van Sittert	6
Andre Botha	469	Aneldi Steenberg	56	Ig Viljoen	6
Steven Evans	319	Pierre duToit	52	RichardJules knocker	6
Mark Brown	310	Ben Hoffman	34	Anthony Archer	4
Darcy Ogada	296	bruce wardsmith	34	ashwell glasson	4
Shannon Hoffman	259	Washington Wachira	27	Joy Clack	4
Loutjie SteenbergSteenberg	244	Munir Virani	25	Gisela Madden	3
Simon Thomsett	242	Stefan van Stuyvenberg	19	danny sapsford	2
Brian Waswala	220	Tim Wroblewski	15	Paul Eslick	2
Lilyarison RenedeRoland	201	Shayne Dalton	14	Robert Smith	2
Walter Jubber	192	Thomas Reed	12	Andrew Pearson	1
Joseph Heymans	134	Rob Simmons	11	Calvin Harris	1
Andy Branfield	121	Troye Weston	11	John Davies	1
Rob Davies	113	Etienne Marais	8	Marc Molle	1

The mobile app 'African Raptor Observations' was launched at the 10th Bird of Prey Programme (EWT) Annual Conference held near Etosha National Park in Namibia during May and became publicly available through Google Play Store in July. The uptake has been great. Since then, 4,687 records have been submitted to the ARDB via the app representing 10 % of all records received during 2014 (see the table above). We are currently receiving an average of 750 records per month via the app, with 1,081 submitted for December.



The app keeps the recording of raptors simple but leverages powerful new technologies to deliver precise locations and functionality. Of real significance is the behind the scenes tracking of observer effort making records submitted considerably more useful. This combined with the addition of features such as 'point and locate' and voice recording makes for a very powerful application. More information is available on our website at <http://goo.gl/FOFYDR> and the app can be downloaded by anyone to their Android device from <http://goo.gl/BN8V1t>. So far our total observer effort from users of the app has amounted to 22,835 km being travelled, over twice around the moon and over 30 days of surveying!

One of the first reports we received, using the app, was a survey for Madagascar, home to some of the world's most endangered raptors. Lily-Arison René de Roland, Marius Rakotondratsima, Russell Thorstrom and Andry Hiankinantsoa of The Peregrine Fund submitted 182 records for a road survey across the island in July. They have since been back and submitted more data too! This is a real milestone as it represents the ARDB's first island species but it also opens up a whole new Biogeographic zone and the power of the app.

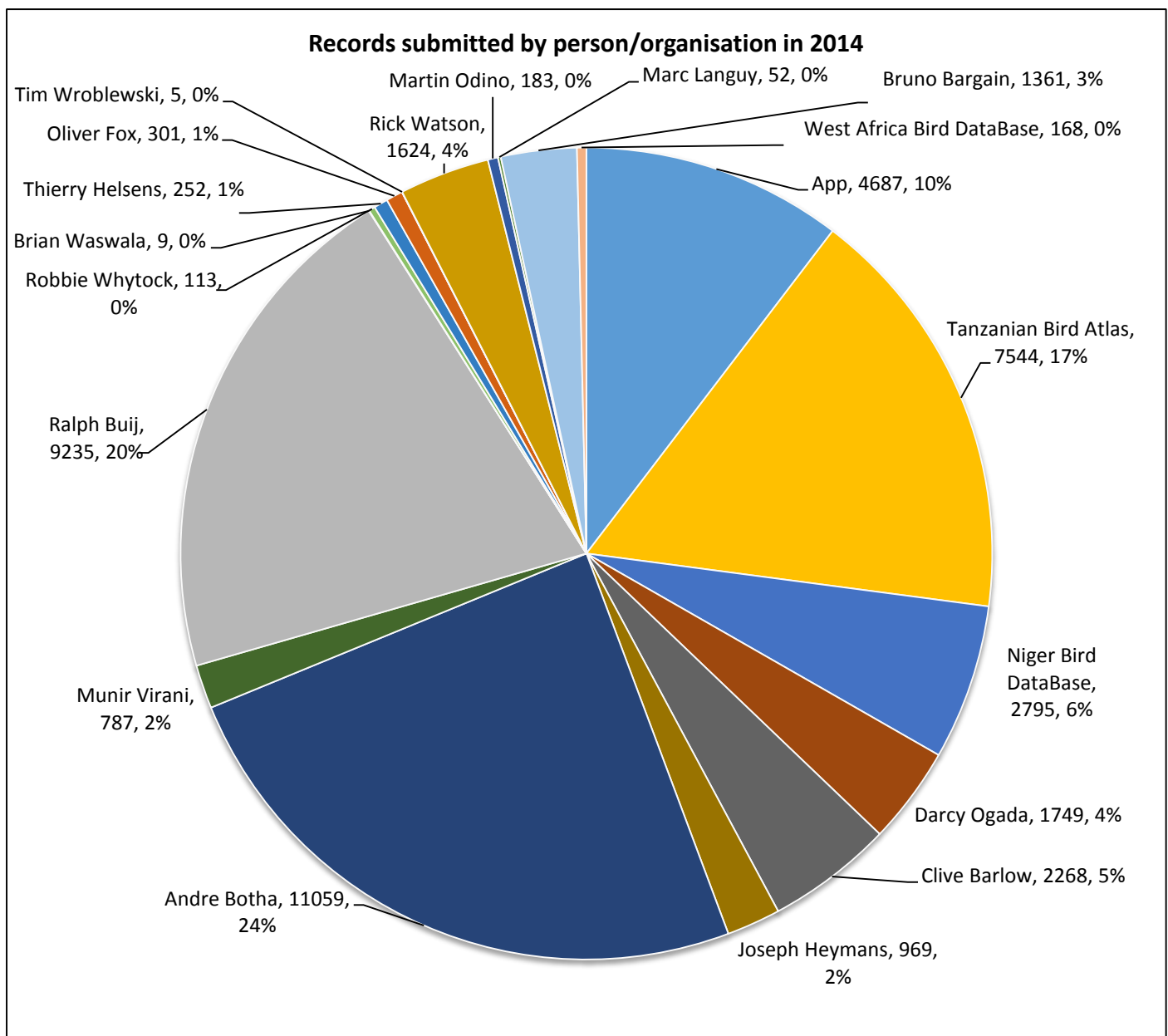
During 2014 our 'African Raptor Observations' app benefited from the following media coverage:

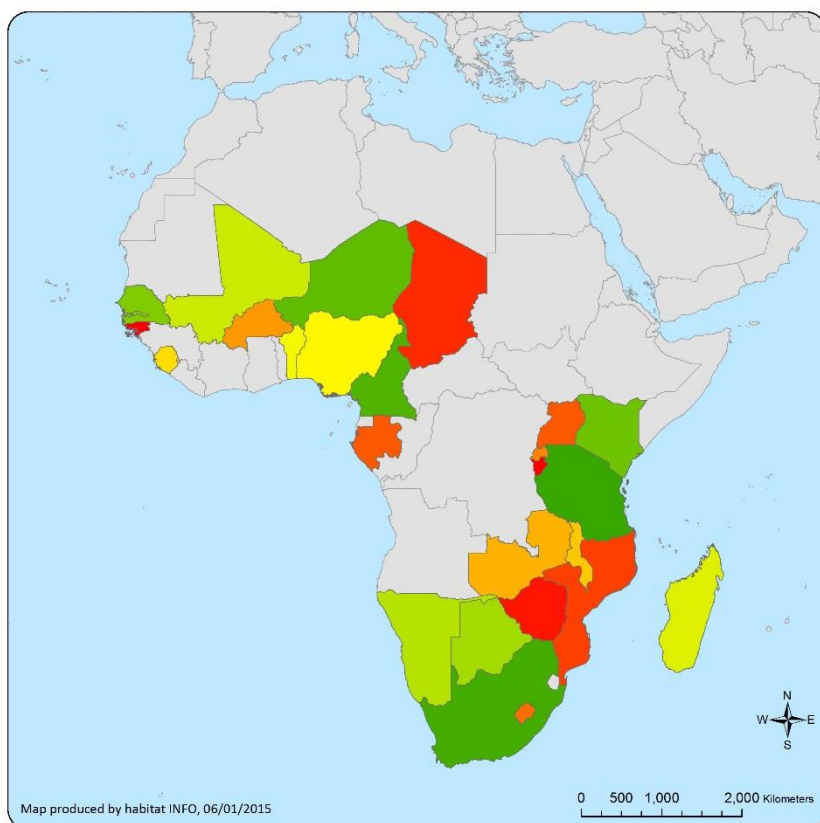
- BBC Radio Wales – Country Focus – 29/6/14
- BBC One Wales – BBC Wales Today – 25/7/14 - <http://goo.gl/xCNPJd>
- BBC News Online – 30/7/14 - <http://goo.gl/cXaSLB>

We've also seen user registrations to the ARDB steadily increase with an average of 32 registrations per month since the launch of the app. We were fortunate that the app was featured in the September/October edition of BirdLife SA's African Birdlife magazine (page 12) which prompted a spike in registrations to 54! Registrations of the app have brought the total number of users registered with the ARDB to 253. Thanks very much to Pam Eckerstrom for helping us prepare the press releases, and Andy Davies for the media leads and referrals.

In addition to the iOS version of the app we have been looking at a next generation app to specifically address the insidious problem of poisoning for vultures and other raptors across Africa which is often closely associated with poaching of rhino and elephant. We are convinced that an offline app could greatly help reduce time delays in addressing incidents of wildlife crime and we are trying various funding routes for this next development.

But the major data contributions during 2014 remain the spreadsheet submissions (see the chart below). We have launched a new spread sheet for data submission this year which is in keeping with the ARDB schema. It includes dropdown choices for field values to help facilitate data entry and to promote data consistency. It also makes it far easier for us to process your data, so please use it as an alternative to the app. It can be downloaded from <http://goo.gl/jiskj6> – if you have any queries or suggestions about this then please get in touch!





Records by country (2014)

Country	Number
Tanzania	20059
South Africa	13888
Cameroon	9906
Niger	4858
Kenya	2608
Senegal	1043
Gambia	776
Botswana	668
Namibia	581
Mali	202
Madagascar	199
Benin	170
Nigeria	137
Sierra Leone	45
Malawi	44
Zambia	37
Burkina Faso	32
Outside Africa	18
Rwanda	17
Lesotho	11
Gabon	8
Uganda	8
Mozambique	4
Chad	3
Zimbabwe	2
Burundi	1
Guinea-Bissau	1

The table to the right shows the countries we have received data for during 2014 (with countries that we previously had no records for in red). The map above shows records per country with green indicating a high number and red a low number.

A large component of the growth during 2014 has come from West and Central Africa. Clive Barlow has helped secure data from two new countries: Senegal (Bruno Bargain), Mali (Thierry Helsen). Clive continues to send data for The Gambia and is trying out the app on his field trips. Two other new countries we received data for in 2014 are Sierra Leone (Robbie Whytock) and Burkina Faso (Thierry Helsen and NiBDab). Ralph Buij has sent us our largest dataset for Central Africa to date amounting to 9,235 records from Cameroon. In combination with Robbie Whytock's records we are beginning to build data for the more forested parts of Africa as well as the savanna regions of West, East and Southern Africa which are now very well represented thanks especially to the ongoing efforts of Joost Brouwer and NibDab (including numerous owl data, and recently records from the West African Bird Database), Darcy Ogada, Simon Thomsett and Munir Virani of The Peregrine Fund, Neil and Liz Baker and the Tanzanian Bird Atlas (including 2,634 owl records!), and Andre Botha of the BOPP. Andre continues to be the most prolific raptor recorder in Africa and he also sent us 6,821 records collected by Ronelle Visagie on road counts through the Karoo. Other contributors are listed in the pie chart. All contributions are gratefully received!

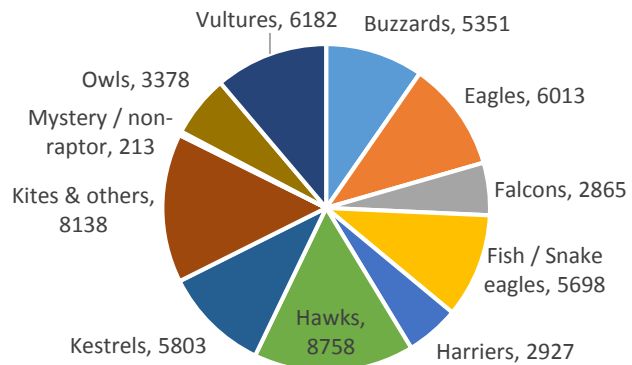
Countries with no recent records (all time)

Algeria	French Southern Territories	Reunion
Cape Verde	Ghana	Saint Helena
Comoros	Guinea	Sao Tome and Principe
Côte d'Ivoire	Liberia	Seychelles
Democratic Republic of the Congo	Libya	Somalia
Djibouti	Mauritania	South Sudan
Egypt	Mauritius	Sudan
Equatorial Guinea	Mayotte	Togo
Eritrea	Morocco	Western Sahara
Ethiopia	Republic of Congo	

Top 20 species (2014)

English name	Number
Pale Chanting-goshawk	3123
Black-shouldered Kite	3121
Black or Yellow-billed Kite	2734
White-backed Vulture	2466
Bateleur	1988
African Fish-eagle	1896
Hooded Vulture	1822
Lesser Kestrel	1704
Grasshopper Buzzard	1648
Western Marsh Harrier	1389
Wahlberg's Eagle	1225
Lanner Falcon	1179
Dark Chanting-goshawk	1167
Augur Buzzard	1126
Greater Kestrel	1088
Gabar Goshawk	971
Tawny Eagle	963
Long-crested Eagle	862
African Harrier-hawk	851
Jackal Buzzard	774

Representation of raptor groups 2014



We had great responses to the calls for sighting records of key species notably Darcy's request for Cassin's Eagle (100 new records for the species); and more recent requests for Martial Eagle and Secretarybird. Rick Watson shared with us georeferenced locations for 1624 Bateleur observations made during his PhD years in the 1980s in Kruger National Park, a valuable record for this species in one of its strongholds.

Pale Chanting Goshawk heads the list of the most commonly recorded raptor in Africa for 2014 (see table above) closely followed by 2013's leader, the Black-shouldered Kite. Both these species prefer to perch on telegraph poles often next to roads so this prominence is associated

with a high detectability. During the modelling exercises we will be able to consider such biases and work towards accurate, habitat-based assessments of total population sizes and conservation assessments for each species. The ARDB hasn't received any data on the species presented in the table below so if you hold any data on them then please send it in!

Species not submitted (all time)

Cinereous Vulture	Henst's Goshawk	Tawny Owl
Madagascar Fish-eagle	Northern Goshawk	Chestnut Owlet
White-tailed Eagle	Madagascar Cuckoo-hawk	Chestnut-backed Owlet
Madagascar Serpent-eagle	Merlin	Pallid Scops-owl
Spanish Imperial Eagle	Banded Kestrel	Madagascar Scops-owl
Socotra Buzzard	Mauritius Kestrel	Pemba Scops-owl
Rough-legged Buzzard	Seychelles Kestrel	Grande Comore Scops-owl
Archer's Buzzard	Eurasian Eagle-owl	Anjouan Scops-owl
Oriental Honey-buzzard	Abyssinian Owl	Seychelles Scops-owl
Reunion Harrier	Madagascar Owl	Congo Bay-owl
Hen Harrier	Eurasian Long-eared Owl	Shelley's Eagle-owl
Madagascar Sparrowhawk	Madagascar Red Owl	Albertine Owlet
Frances's Sparrowhawk	Maned Owl	São Tomé Scops-owl
Chestnut-flanked Sparrowhawk	Hume's Owl	

Lastly, if any of you are able to help with photographs of African raptors we are looking to build a library of these for use in the apps or on the project web pages. We will be happy to credit each photographer on the web pages but this might not be possible on the smaller app graphics. We are lucky to have a volunteer, Tony Farrar, who is helping us every Tuesday to achieve this goal. Tony has been looking on the web for African raptor images and then making contact with the image's owner to request their permission for us to use them for the ARDB, but it is a slow process to get the necessary permissions. Please see the appendix of species for which we are still looking for. If you have photos of any of these that will work in a nice portrait shape (i.e. perched vertically or a flight shot that would work in this shape) and which you would be happy for us to use in the ARDB project, we would be very grateful if you could upload them at the following web link: <http://www.habitatinfo.com/ardb-image-submission/>.

Thank you so much for helping us build the database so considerably in 2014. It would be wonderful if you are able to help us make 2015 another great year for the project.

With best wishes for the New Year,

Tim, Rob & the ARDB team

APPENDIX

Species for which a photo is still required are listed below.

Please submit them online at <http://www.habitatinfo.com/ardb-image-submission/>.

Bearded Vulture	Madagascar Buzzard	Henst's Goshawk	Pel's Fishing-owl
White-backed Vulture	Long-legged Buzzard	Northern Goshawk	Vermiculated Fishing-owl
Rüppell's Vulture	Socotra Buzzard	Black or Yellow-billed Kite	Rufous Fishing-owl
Cape Vulture	Rough-legged Buzzard	Black Kite	Marsh Owl
White-headed Vulture	Jackal Buzzard	Yellow-billed Kite	Short-eared Owl
Lappet-faced Vulture	Archer's Buzzard	Red Kite	Abyssinian Owl
Cinereous Vulture	Red-necked Buzzard	Madagascar Cuckoo-hawk	Madagascar Owl
Egyptian Vulture	Grasshopper Buzzard	African Swallow-tailed Kite	Eurasian Long-eared Owl
Palm-nut Vulture	European Honey-buzzard	Barbary Falcon	Madagascar Red Owl
Secretarybird	Oriental Honey-buzzard	Saker Falcon	Barn Owl
Osprey	African Marsh Harrier	Eleonora's Falcon	African Grass-owl
Madagascar Fish-eagle	Western Marsh Harrier	Taita Falcon	Maned Owl
White-tailed Eagle	Madagascar Harrier	Merlin	Madagascar Hawk-owl
Brown Snake-eagle	Reunion Harrier	African Hobby	Hume's Owl
Black-breasted Snake-eagle	Black Harrier	Eurasian Hobby	Tawny Owl
Beaudouin's Snake-eagle	Montagu's Harrier	Sooty Falcon	Red-chested Owlet
Short-toed Snake-eagle	Pallid Harrier	Amur Falcon	African Barred Owlet
Southern Banded Snake-eagle	Hen Harrier	Red-footed Falcon	Chestnut Owlet
Western Banded Snake-eagle	African Harrier-hawk	Dickinson's Kestrel	Pearl-spotted Owlet
Madagascar Serpent-eagle	Madagascar Harrier-hawk	Banded Kestrel	Chestnut-backed Owlet
Martial Eagle	Long-tailed Hawk	Common Kestrel	Little Owl
Crowned Eagle	Dark Chanting-goshawk	Eurasian Kestrel	White-faced Scops-owl
Steppe Eagle	Pale Chanting-goshawk	Mountain Kestrel	African Scops-owl
Lesser Spotted Eagle	Eastern Pale Chanting-goshawk	Fox Kestrel	Sokoke Scops-owl
Greater Spotted Eagle	Lizard Buzzard	Lesser Kestrel	Eurasian Scops-owl
Spanish Imperial Eagle	Ovambo Sparrowhawk	Madagascar Kestrel	Pallid Scops-owl
Eastern Imperial Eagle	Rufous-breasted Sparrowhawk	Mauritius Kestrel	Sandy Scops-owl
Golden Eagle	Madagascar Sparrowhawk	Seychelles Kestrel	Madagascar Scops-owl
African Hawk-eagle	Shikra	Giant Eagle-owl	Pemba Scops-owl
Bonelli's Eagle	Frances's Sparrowhawk	Cape Eagle-owl	Grande Comore Scops-owl
Ayres's Hawk-eagle	Levant Sparrowhawk	Pharoah Eagle-owl	Anjouan Scops-owl
Cassin's Hawk-eagle	African Goshawk	Eurasian Eagle-owl	Seychelles Scops-owl
Booted Eagle	West African Goshawk	Spotted Eagle-owl	Congo Bay-owl
Wahlberg's Eagle	Chestnut-flanked Sparrowhawk	Greyish Eagle-owl	Shelley's Eagle-owl
Eurasian Buzzard	Little Sparrowhawk	Akun Eagle-owl	Albertine Owlet
Mountain Buzzard	Red-thighed Sparrowhawk	Fraser's Eagle-owl	São Tomé Scops-owl
Forest Buzzard	Black Sparrowhawk	Usambara Eagle-owl	