

New maps change the conservation landscape

Title

BirdLife celebrates a decade-long plus partnership with ESRI, the world leading Geographic Information System (GIS) software provider by attending the [ESRI User Conference](#) in San Diego, USA, and looking at the crucial value of mapping for our conservation work, including our new web tools.

Imagine a spreadsheet with thousands - even millions - of rows of data points, collected from all over the world. One single data point is lost and maybe forgotten in a chaotic grey clutter of numbers and symbols.

But what if this single data point happens to have been transmitted from a satellite tracker nestled in ruffly white feathers on the back of an Egyptian Vulture (also bear in mind the effort required to tag such a bird). And what if this same data point directly intersects with another single data point: a proposed location for a wind farm or powerline development.

For the Egyptian Vulture, a globally Endangered species, the intersection of the two data points has a big impact ? literally. For the developer, the wind farm or powerline could quite easily be located elsewhere, if only they know about how important the location is for vultures and for conservation. But imagine trying to read those two data points in that chaotic spreadsheet.

This is why we use maps.

With a map, that single data point comes alive and tells its own story.

That single data point now becomes part of many red lines crossing over a zoomed-in portion of north-east Jordan, within an unprotected Important Bird & Biodiversity Area. The proposed site for development now becomes a black cross on the greeny-brown satellite image, and the map flags to the developer the sensitivity of this particular area.



That single data point becomes visual evidence that BirdLife shows to businesses, and lobbying material BirdLife uses to influence governments and international conventions.

All because we can show it visually on a map.

BirdLife scientists are good at portraying conservation data on maps, and this week (14-18 July 2014) are attending the ESRI User Conference along with 15,000 mapping and business professionals, and showcasing our latest work. ESRI (Environmental Systems Research Institute) is an international supplier of Geographic Information System (GIS) software. The conference theme this year is about "seeing how we can use our collective efforts and GIS as a technology to design and create a better future."

"ESRI make available tools we need to display complex data, allowing us to lift the story out of the numbers, and describe with maps what is happening to our global biodiversity and show why need to protect it," says John Cornell, BirdLife Global Information Management Coordinator.

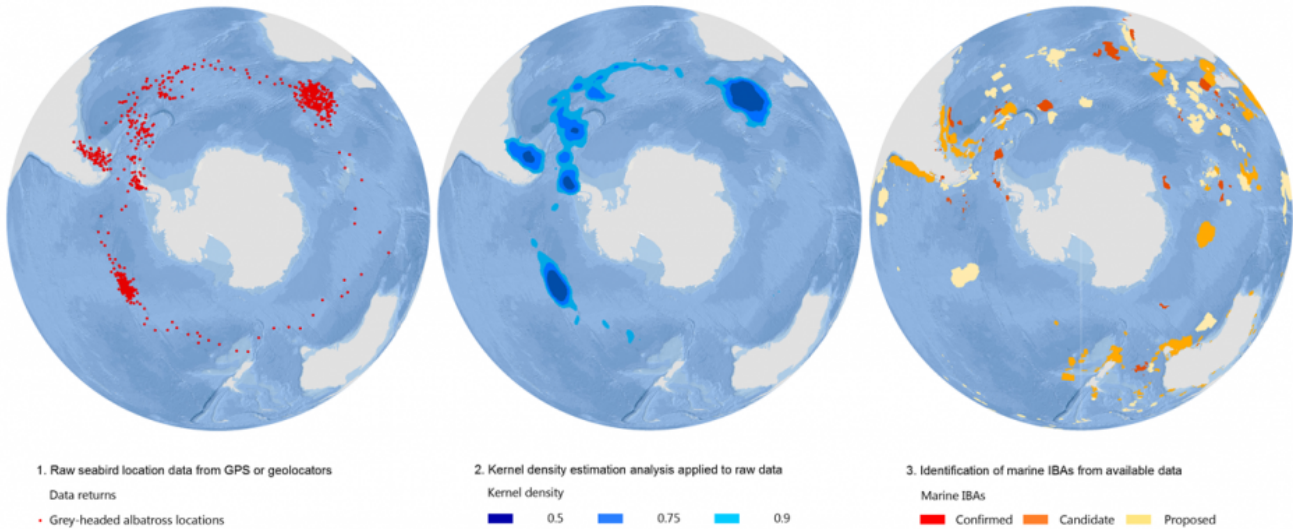
"ESRI mapping software enables us to show the full conservation story. If people can see it, they can engage, pay attention, and make a difference."

As the leading scientific authority on bird conservation science, maps are crucial to our work.

The Vulture example from the start of this article is from our [Soaring Bird Sensitivity Mapping Tool](#), which John will be presenting at the conference. Through our network of regional partners we have been able to collate a huge amount of data on the distribution and status of soaring bird species in the Red Sea/Rift Valley migratory Flyway. The tool allows planning authorities, developers and project funders to visualise and interact with this information, to inform decisions on the safe siting of new developments. It is provided free of charge and aims to dramatically minimise the negative impact on migratory birds in the area.

BirdLife are just about to jointly publish an [Illustrated Checklist of the Birds of the World](#) with Lynx Edicions, which includes a range map (produced using ESRI software) for **every single bird species**. This is not only unprecedented, but a monstrous task. A task that was only possible in our scientists' lifetimes due to the improvements and ease-of-use of mapping software.

Identifying marine Important Bird and Biodiversity Areas (IBAs) using seabird tracking data



A hugely important breakthrough for the future of our oceans, the **e-Atlas of Marine Important Bird Areas** was launched by BirdLife in 2012. Six years in the making and supported by over 1,000 contributors all over the world, this is first ever global inventory of priority sites for marine conservation. Around 3,000 marine Important Bird Areas (IBAs) are, for the first time, collated onto a simple interactive ESRI-powered online map. Spurring other organisations on to follow with atlases for other marine animals, this pioneering endeavour sets a new precedence for achieving international site conservation in the high seas.

"Conservation data can sometime languish in large institutional databases unseen and unused," said John. "But ESRI software allows us to manage, analyse and visualise complex ecological and political data, simply, and to share it with our Partners worldwide in an instant. It's a powerful tool if used correctly.?"

BirdLife will be further raising the conservation flag at the conference. Here are some examples of more of our **mapping products** and **web tools**:

- **Latest news:** ?BirdLife using its expertise in mapping to give guidance to governments?
 - <http://www.birdlife.org/worldwide/news/putting-nature-map-giving-guidance-governments>
- **Soaring Bird Sensitivity Map:** instructional video
 - <http://migratorysoaringbirds.undp.birdlife.org/en/sensitivity-map-instructions>

- **Marine e-Atlas:** more information
 - <http://www.birdlife.org/worldwide/news/birdlife%E2%80%99s-history-objects-11-frontier-marine-conservation>
 - <http://www.birdlife.org/datazone/sowb/casestudy/82>

- **Critical Site Network Tool:** an online tool for the conservation of migratory waterbirds and their habitats
 - <http://dev.unep-wcmc.org/csn/default.html#state=home>
 - <http://wow.wetlands.org/INFORMATIONFLYWAY/tabid/111/language/en-US/Default.aspx>
 - http://wow.wetlands.org/Portals/1/documents/communication/wow_csn_tool_flyer_june_2010

- **Integrated Biodiversity Assessment Tool (IBAT):** an online decision-support tool for business, government and conservation
 - <http://www.birdlife.org/datazone/sowb/casestudy/254>

- **State of the World's Birds reports ?Indicators for our Changing World?:** what birds tell us about the health of the planet, and the impact of the BirdLife International Partnership
 - <http://www.birdlife.org/datazone/userfiles/file/sowb/pubs/SOWB2013.pdf>
 - http://www.youtube.com/watch?v=aYkoz_FGk0U&feature=youtu.be

- **Import Bird & Biodiversity Areas (IBAs) in Danger:**
 - <http://www.birdlife.org/datazone/userfiles/file/IBAs/pubs/IBAsInDanger.pdf>