Supporting safe siting of Renewable Energy Development in Northeast Africa and the Middle East - Migratory Soaring Bird Project

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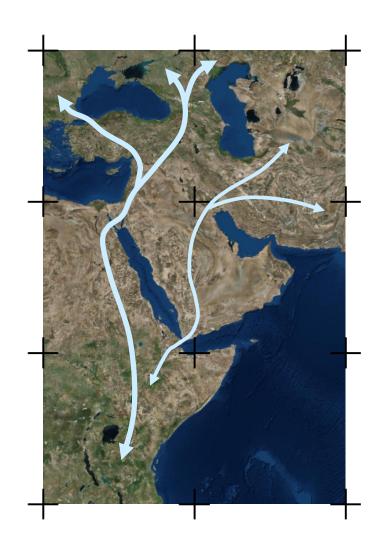




Rift Valley/Red Sea Flyway

- One of the world's most important avian migration routes.
- More than 1.5 million large soaring birds pass through the region each year as they migrate between Africa and Eurasia.

European Honey-buzzard <i>Pernis apivorus</i>	852,000
Black Kite <i>Milvus migrans</i>	37,000
Levant Sparrowhawk Accipiter brevipes	60,000
Common Buzzard Buteo buteo	466,000
Lesser Spotted Eagle Aquila pomarina	142,000
Steppe Eagle Aquila nipalensis	75,000
White Stork Ciconia ciconia	530,000
Black Stork <i>Ciconia nigra</i>	17,000
Great White Pelican Pelecanus	
onocrotalus	66,000





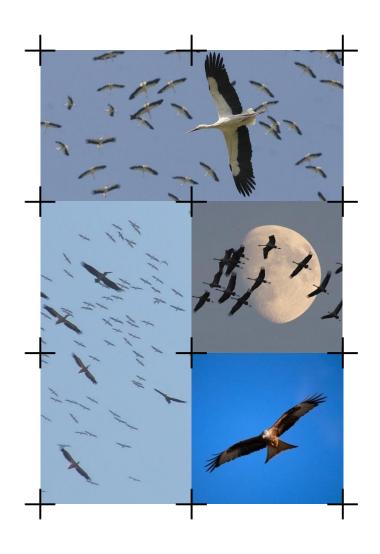






An increasingly perilous journey

- ➤ Ever greater threats along the flyway, including growing collision risk with manmade structures.
- ➤ With wind energy set to expand, it is vital that government agencies, developers and funders take steps to avoid demographicscale impacts on soaring bird species.
- Strategic decision-making over a broad geographical area based on robust ornithological data and expert interpretation is essential.
- Guidance on safe siting





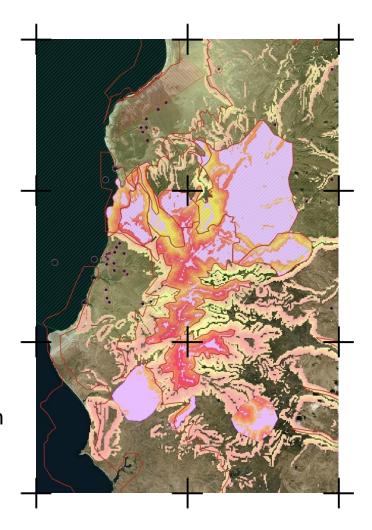




Mapping soaring bird sensitivity

The tool, developed with habitatINFO is an open access repository of spatial ornithological data that:

- Maps bird populations, habitats and flight paths;
- Identifies potentially sensitive locations;
- Avoids the need for costly mitigation and compensatory measures; and
- Informs subsequent impact assessments, such as SEA and EIA, and provides a benchmark against which they can be assessed.



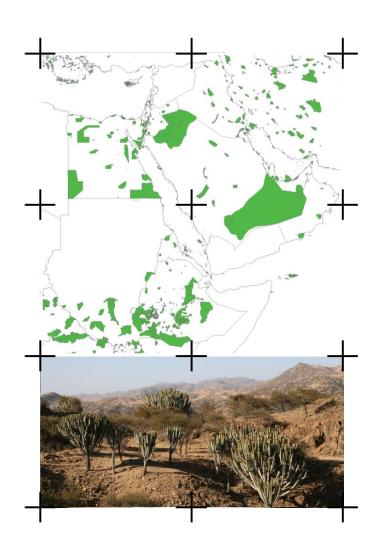






Assembling the datasets

- Access to considerable data through our regional Partners.
- → Important Bird and Biodiversity Areas (IBAs).
- Records from the scientific literature and from Worldbirds.
- Satellite tracking data.
- World Database on Protected Areas (WDPA).









Calculating sensitivity

$$SI = SSS^1 + SSS^2 + SSS^3 \dots SSS^n$$

SSS = SSI x Peak Count / Global Population

 $SSI = SVI \times RL$

SI Sensitivity Index

SSS Species Sensitivity at Site

SSI Species Sensitivity Index

SVI Species Vulnerability Index

RL Red List Index

Outstanding

Very high

High

Medium

Potential

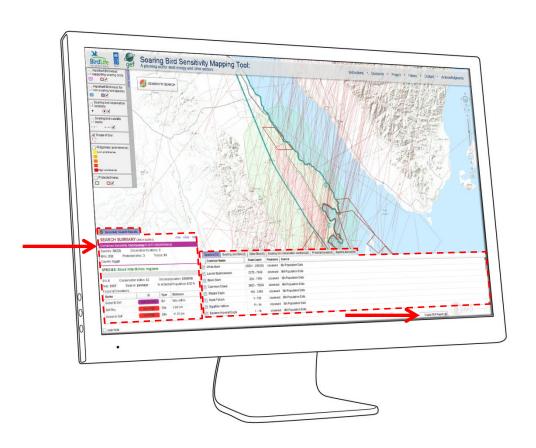
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The Migratory Soaring Bird Sensitivity Mapping Tool



- Can be used in English, Arabic& French.
- Covers the Middle East & Northeast Africa.
- Import or delineate a site polygon.
- > Flexible site buffer.
- Quickly displays, tabulates, summarises & evaluates intersecting data.
- All information downloadable as a PDF report.







Visit the Soaring Bird Sensitivity Mapping Tool at:

tinyurl.com/MSBmap

- ➤ Hoping to expand tool geographically...
- → Hoping to incorporate more satellite tracking data
- ▶ If you have satellite tracking data you would like to contribute in support of safe siting of energy infrastructure please contact: tris.allinson@birdlife.org









MSB Project Guidance on birds and:

- a) Wind Energy
- b) Power lines
- c) Solar Energy



- Governments
- Development banks and financiers
- Developers and consultants
- BirdLife Partners and Civil Society



In English and Arabic



http://www.migratorysoaringbirds.undp.birdlife.org