

symposium

ZOOLOGICAL SOCIETY OF LONDON
REGENTS PARK, LONDON, NW1 4RY



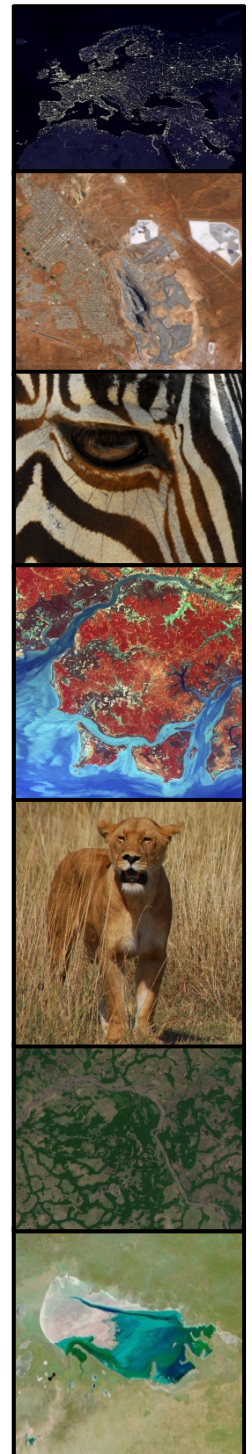
22 and 23 May 2014

REMOTE SENSING FOR CONSERVATION: USES, PROSPECTS AND CHALLENGES

Organised by

Nathalie Pettorelli, Zoological Society of London; Martin Wegmann, University of Wurzburg & DLR; Woody Turner, NASA

The usefulness of remote sensing science to inform conservation biology and environmental management has been highlighted by many; however the remote sensing and conservation communities have only recently started to coordinate their agendas. Such synchronization is key to improving the potential for remote sensing data to effectively support environmental management decisions. This symposium will illustrate how integrative approaches allow a better ecological understanding of the mechanisms shaping current changes in biodiversity patterns, while triggering innovative approaches, new research directions in remote sensing science and the development of new remote sensing products. It will also demonstrate how ecological knowledge and satellite-based information on environmental conditions can be effectively combined to address a wide array of current conservation needs. By bringing together a range of stakeholders spanning academic experts in remote sensing and ecology, including conservation NGO representatives, policy makers and space agency representatives, it will highlight how knowledge exchange is at the heart of the future development of both disciplines.



- 8.30 REGISTRATION OPENS**
- 8.55 **Welcome**
Nathalie Pettorelli, Zoological Society of London, UK
- 9.00 **Keynote: What don't we know? Thinking about the missing information**
Jonathan Baillie, Zoological Society of London, UK
- 9.30 **Keynote: Remote Sensing for Conservation: New Directions**
Woody Turner, NASA, USA
- 10.00 **POSTER SESSION (TEA/COFFEE)**
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SESSION I: SATELLITES TO MONITOR PRESSURES ON BIODIVERSITY

Chair: TBC

- 10.30 **Oil in the Sahara: mapping anthropogenic threats to Saharan biodiversity from space**
Thomas Rabeil, Sahara Conservation Fund, France
- 11.00 **The NDVI and its potential to track pressures and their impact on biodiversity**
Nathalie Pettorelli, Zoological Society of London, UK
- 11.30 **Combining land cover change and fragmentation analyses to track habitat degradation**
Martin Wegmann, CEOS Biodiversity, DLR, Department of Remote Sensing, Wuerzburg, Germany
- 12.00 **The Global Urban Footprint – a new worldwide human settlements layer to assess anthropogenic disturbances**
Thomas Esch, German Aerospace centre (DLR), Germany
- 12.30 LUNCH**
- 13.30 **Monitoring fires from space**
Diane Davies, NASA, USA
- 14.00 **Detecting and monitoring threats to marine biodiversity**
Frank Muller-Karger, University of South Florida, USA
- 14.30 **Benefits of hyperspectral remote sensing for tracking plant invasions**
Kate He, Murray State University, USA
- 15.00 **POSTER SESSION (TEA/COFFEE)**
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SESSION II: SATELLITES TO MONITOR THE STATE OF BIODIVERSITY

Chair: TBC

- 15.30 **Measuring and monitoring changes in land cover**
Lucy Bastin, Aston University, UK
- 16.00 **Remote sensing and the management of rare ecosystems: mangroves as a study case**
Temilola Fatoyinbo, NASA, USA
- 16.30 **Counting animals from above: technical advances to monitor populations from flying platforms**
Peter Reinartz, German Aerospace centre (DLR), Germany
- 17.00 POSTER SESSION with cash bar. Symposium end of day one (18.30)
- 19.00 **SYMPOSIUM DINNER – tickets to be booked in advance**

SESSION II: SATELLITES TO MONITOR THE STATE OF BIODIVERSITY

Chair: TBC

- 9.00 **LiDAR as a tool to monitor biodiversity**
Thomas Nauss, Philipps-Universität Marburg, Germany
- 9.30 **Predicting vertebrate movement from space to better inform landscape management planning**
Kamran Safi, Max Plank Institute, Germany
- 10.00 **Unveiling wild animal populations' secrets using satellite data**
Peter Fretwell, British Antarctic Survey
- 10.30 POSTER SESSION (TEA/COFFEE)**
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SESSION III: SATELLITES TO INFORM RESPONSES TO THE CURRENT BIODIVERSITY CRISIS

Chair: TBC

- 11.00 **Using remote sensing to inform conservation priorities**
Graeme Buchanan, RSPB, UK
- 11.30 **Effectiveness of African protected areas for the conservation of large mammals**
Carlo Rondinini, University of Rome, Italy
- 12.00 **Remote Sensing for Sustainable Landscapes**
Andrew Skidmore, University of Twente, Netherlands
- 12.30 LUNCH**
- 13.30 **Satellites and the development of blue carbon initiatives**
Emily Pidgeon, Conservation International, USA
- 14.00 **Satellites and the implementation of REDD+: a study case from Indonesia**
Edward Mitchard, University of Edinburgh, UK
- 14.30 **DOPA, a Digital Observatory for Protected Areas using earth Observations**
Gregoire Dubois, EC-JRC, Italy
- 15.00 POSTER SESSION (TEA/COFFEE)**
- 15.30 **Identifying the top 10 conservation questions that can be informed by remote sensing**
Robert Rose, WCS, USA
- 16.00 **Earth Observations from a user's perspective and to support the implementation of EBVs and the Aichi targets**
Robert Hoft, CBD & Mike Gill, Environment Canada
- 16.30 **Integration as the key to success: bridging gaps between ecological research and remote sensing**
Ned Horning, American Museum of Natural History, USA
- 17.00 **Conclusions and summing up**
Martin Wegmann, CEOS Biodiversity, DLR, Department of Remote Sensing, Wuerzburg, Germany
- End of Symposium**

REGISTRATION

REMOTE SENSING FOR CONSERVATION: USES, PROSPECTS AND CHALLENGES

22 and 23 May 2014. The Meeting Rooms, Zoological Society of London, Regent's Park (Outer Circle), London NW1 4RY, UK.

Symposium Attendance	Full rate	Discounted rate	(applicable for ZSL Friends & Fellows ¹ , and students ²)
For two days or part days	£140	£70	
For one day or part day	£85	£45	

Deadline for Registration 15 May 2014 (an additional **£10 fee** is applicable for all late registrations).

ONLINE BOOKING AVAILABLE NOW <http://www.zsl.org/science/events/remote-sensing-symposium,788,EV.html>

To pay by cheque or card, please complete and return this form to: Megan Orpwood-Russell, Scientific Meetings Coordinator, ZSL London Zoo, Regent's Park, London NW1 4RY, UK; e-mail: megan.orpwood-russell@zsl.org; fax: +44 (0)20 7449 6411. Please complete one form per delegate.

REGISTRATION

Please register me for: TWO DAYS / THURSDAY / FRIDAY (please delete as applicable)

I AM / AM NOT a Fellow or Friend of the Zoological Society of London¹
I AM / AM NOT a registered graduate/undergraduate student²

¹Please provide your ZSL Membership number

²Please provide a supporting statement from your course supervisor or a copy of your student card.

3-COURSE DINNER (THURSDAY EVENING)

I would like to book for dinner on Thursday 22 May: please reservedinner place(s) (£40 each).

Closing date for dinner bookings: 15 May 2014. Please list any special dietary requirements below (including vegetarian).

We regret that cancellations received after 15 May 2014 cannot be refunded.

Your details

Title: **First name:** **Surname:**

Name (as you would like it to appear on your badge):

Position: **Organisation:**

E-mail: **Tel:**

Special dietary requirements (please specify, including vegetarian):

Mailing address (billing address should be provided for card payments):

Delegate list: We would like to make a list of delegates available to all attendees. Please indicate here if you **do not** want your information (name, position, organisation, e-mail address) to be included []

PAYMENT DETAILS

Cheque I enclose a cheque for £..... payable to: The Zoological Society of London.
Please note that cheques can only be accepted in Sterling drawn against a UK bank.
Direct payment by Euros or US\$ may also be possible; please contact Megan Orpwood-Russell for information.

Card Please complete all details below and return by fax or by post:

Please debit my Visa / MasterCard (delete as appropriate)

Amount £.....
Card Number / / /
Expiry Date / Card security code
Name on Card (capital letters please)
Signature of Card Holder Date

If you would prefer to give card details over the telephone please call Megan on +44 (0)20 7449 6227.

Cancellations must be received in writing by 15 May 2014 and will be refunded less a £15.00 processing charge. Substitutions may be made at any time without charge; please notify Megan Orpwood-Russell of any change in attendee details.

LOCATION



The Zoological Society of London's Meeting Rooms are next to the ZSL Main Office, on the Outer Circle, Regent's Park. Cars may be parked in the ZSL London Zoo visitors' car park – please contact Megan Orpwood-Russell (details below) to arrange a special parking rate. The nearest public transport is by the 274 bus (to ZSL London Zoo), or by Underground (to Camden Town).

NOTES

Attendance All places must be booked in advance. **Full rate:** two days £140; one day £85.

Discounted rate: (for students and ZSL Friends and Fellows) two days £70; one day £45.

Registration deadline: 15 May 2014 (a fee of £10 will be charged on all late registrations).

Meals and refreshments Coffee, tea and a buffet sandwich lunch will be served during breaks and are included in the ticket price. A dinner with the speakers will be held on Thursday 22 May; tickets cost £40 each and must be purchased no later than 15 May 2014. Please state if you have any special dietary requirements, including vegetarian.

Posters The organisers invite delegates to submit proposals for posters related to the symposium topic. Abstracts of no more than 250 words can be emailed or posted (using enclosed form) to Megan Orpwood-Russell (details below) by 10 May 2014 for consideration by the organisers. Accepted poster presenters will be notified by 12 May 2014.

Booking and enquiries

please contact: Megan Orpwood-Russell, Scientific Meetings Coordinator
Zoological Society of London,
Regent's Park (Outer Circle)
London NW1 4RY, UK.

E: megan.orpwood-russell@zsl.org ; T: +44 (0)20 7449 6227; F: +44 (0)20 7449 6411
www.zsl.org/science/scientific-meetings/



The Zoological Society of London (ZSL) is a charity devoted to the worldwide conservation of animals and their habitats.