

ABSTRACT BOOK

**27TH INTERNATIONAL
CONGRESS FOR
CONSERVATION BIOLOGY**

**4TH EUROPEAN CONGRESS
FOR CONSERVATION
BIOLOGY**



**ICCB
ECCB
2015**

**MISSION
BIODIVERSITY:
CHOOSING
NEW PATHS FOR
CONSERVATION**

**MONTPELLIER,
FRANCE
2-6 AUGUST 2015**



Society for Conservation Biology



The Society for Conservation Biology (SCB), a global society of conservation students and professionals, held in August 2015 in Montpellier, France its 27th International Congress for Conservation Biology, jointly hosted with the 4th European Congress for Conservation Biology. SCB celebrated its 30th birthday with its largest conference ever, comprised of 2063 attendees, 782 poster presentations and 943 oral presentations organized in 74 contributed sessions and 73 symposia sessions.

The theme of the conference “Mission Biodiversity: Choosing new paths for conservation” represented a response to the fact that the traditional methods for conserving biodiversity need to adapt and change to match the ever-changing nature and needs of today’s world. It emphasized that the same rapid and ongoing biophysical and societal changes our world is facing also affect

conservation science and practice.

We are asking very different questions than what we asked years ago, and using different methods to get the data we need to answer these questions. Increasingly, we work with people from different disciplines such as political science, computer science, economics, and social science, among others. We investigate different challenges that range from new pathogens and invasive species to new drivers of habitat loss such as oil palm production in West Africa to tangled socio-political issues such as the growing illegal trade of species and their parts on the internet. We are developing new methods and tools to address these challenges with on-the-ground conservation, such as using drones and new remote-sensing technology for monitoring and conservation enforcement or citizen science projects for collecting data and engaging the public. Unsurprisingly, one of the most common words in abstracts presented at ICCB-ECCB abstracts was “change.” The ICCB-ECCB 2015 theme and its scientific content, summarized in this Abstract Book, document these changes and our need to keep up with, and even anticipate them for better conservation science and practice.

ICCB-ECCB 2015 featured several presentations, workshops and training courses that provided solutions to prevent or mitigate anthropogenic threats, and celebrated several exemplary success stories through the mini-plenaries from the Society’s Distinguished Service and Early Career Conservationist awardees. ICCB-ECCB 2015 also featured an open debate starring Peter Kareiva and Clive Spash on Conservation Biology today; and how its fundamental principles and values are changing over time.

We would like to thank all participants, organizers and sponsors of ICCB-ECCB 2015 for their excellent work at the conference, and we look forward to many more conservation success stories in the coming years.

—Piero Visconti, Marit Wilkerson,
Edward Game and Raphael Mathevet



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For any queries on regards to this book of abstracts please contact Nathan Spillman nspillman@conbio.org



Society for Conservation Biology

ABOUT THE SOCIETY FOR CONSERVATION BIOLOGY

SCB is a global community of conservation professionals with members working in more than 100 countries who are dedicated to advancing the science and practice of conserving Earth's biological diversity. The Society's membership comprises a wide range of people interested in the conservation and study of biological diversity: resource managers, educators, government and private conservation workers, and students.

SCB publishes the flagship peer-reviewed journal of the field, *Conservation Biology*, and the cutting-edge online journal, *Conservation Letters*. The Society provides many benefits to its community, including local, regional, and global networking, an active conservation-policy program, and free online access to publications for members in developing countries. SCB also administers a postdoctoral program, the David H. Smith Conservation Research Fellowship Program, sponsored by the Cedar Tree Foundation.

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La présente étude est déroulée aux abords du marais de Réghaïa (3° 19' à 3° 20' E. ; 36° 46' à 36° 47' N). L'inventaire des arthropodes a été réalisé par la méthode des pots Barber. Nous avons installé 10 pots-pièges pendant la période du mois de septembre jusqu'au mars de l'année 2013-2014, avec 1 série par mois. 916 individus sont recensés. Ils appartiennent à 6 classes, 21 ordres et 77 espèces. Les Insecta est la plus fréquente (A.R.% = 50,76 %), suivi par les Arachnida (A.R.% = 41,16 %). L'ordre des hyménoptères est le mieux représenté en espèce (A.R.% = 83,23 %), il est suivi par les diptères avec (A.R.% = 5,38).

IDENTIFYING CLASSES OF DEGRADED FORESTS IN AN AMAZONIAN LANDSCAPE FROM REMOTE-SENSING

Clément Bourgoïn
CIRAD

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In the Brazilian Amazon, deforestation and forest degradation have resulted in a complex mosaic of forest types. Nearly 20% of the Brazilian Amazonian forests have been cleared. In this area, abandonment of fields led to regrowth of secondary forests of varying ages. A fraction of the remaining forested land has also suffered from anthropic degradation (mainly over-logging and fire). Human-modified Amazonian landscapes are therefore an assemblage of these various forests associated with pastures and agricultural lands. These landscapes are now at the centre of political concerns. Coercive measures taken by the Brazilian government to curb deforestation, associated with private initiatives (soy and beef moratoria) drastically reduced deforestation rates. The colonization of the Amazonian territory through agricultural expansion over forest areas is now severely restricted. Consequently, conciliation between agricultural production and environmental conservation should be pursued in all human-impacted forests. However these secondary and degraded forests have not received the necessary attention. While identification and characterization of degraded forests became a critical task, there is an overall limitation in the remote sensing analyses developed so far. To define management plans for these areas and to understand their role in the maintenance of ecological services, the first challenge is to identify and characterize the forests that result from different disturbance trajectories. We carried out a study aiming at classifying the large spectrum of degraded

forests into forest classes based on degradation levels using satellite data. The study area took place in the municipality of Paragominas (eastern Amazonia). A large range of captors (optical, radar and lidar) have been tested combining with ground-truth validation. This classification has important applications in ecological studies as well as in supporting decisions for land-use planning.

USING REAL-TIME FOREST LOSS ALERTS AND GLOBAL DEFORESTATION MAPS TO ASSESS THE EFFECTIVENESS OF AFRICA'S TROPICAL PROTECTED AREAS.

Jenna Bowker

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Tropical forests are the most biologically diverse and vulnerable ecosystem, undergoing rapid changes over the last two decades and resulting in the loss of irreplaceable biodiversity. Parks have been established in an attempt to slow biodiversity loss, but the effectiveness of this tool has been questioned, particularly in areas such as tropical Africa suffering from widespread conditions of poverty, rapid population growth and political instability where little or no formal management exists on the ground. As few countries within Africa have stable monitoring systems to generate time-series data of forest cover change, remotely-sensed satellite imagery offers a practical way to examine trends in forest cover change within and outside parks. Recent advances in remote sensing technology have allowed conservationists to investigate forest cover trends at increasingly large scales at high resolutions across whole biomes, offering an efficient, practical and affordable way to explore park effectiveness. I used the remotely sensed global forest change data of Hansen et al. (2013) and near-real-time tree cover loss alert system (FORMA) released by the World Resource Institute in early 2014 to analyze forest loss within parks and immediate surroundings in Africa at 50m and 500m resolution respectively. A total of 224 parks within the tropical and subtropical moist broadleaf forest biome were chosen. Results indicated that the majority of African tropical parks in this study are effective in deterring forest loss inside park boundaries. Smaller parks were less effective at preventing forest loss than larger parks and parks of differing IUCN categories showed no difference in effectiveness. West African parks exhibited the largest amount of forest loss, while Central Africa exhibited the least. This study highlights the potential of remote satellite imagery for estimating the relative impact of park establishment for Africa and identifying effective and failing parks.

