

# 从TDWVG2015年会 看生物多样性信息学的新进展

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中国科学院动物研究所 生物多样性信息学研究组，北京  
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# TDWG2015年会基本情况

- 生物多样性信息标准组织（TDWG）2015年会（TDWG 2015 Conference）及执委会会议（Executive Committee Meeting）于2015年9月21日至10月2日在肯尼亚首都内罗毕召开。
- 今年的年会共有4个大会报告、13场专题研讨会（74个口头报告）、8个培训研讨会、墙报展示（46个），TDWG执委会、各个任务小组和兴趣小组召开了工作会议。
- 145人注册参加年会（目前TDWG注册会员231人），来自41个国家（肯尼亚51人）
- 会议主题：Applications, Standards and Capacity Building for Sustaining Global Biodiversity
- 会议协办方：African Conservation Centre

# Symposia

- Biodiversity Informatics Services and Workflows (服务与 workflow)
- Professional and formal biodiversity informatics training as a key for capacity building: state-of-play, challenges (职业化、正规化的能力建设)
- The Role of Data Standards in Real-World Applications using Biodiversity Information (标准的作用)
- BHL Africa: Assessing and Building Capacity for Global Access to Biodiversity Literature (BHL)
- The role of camera trap programs for biodiversity monitoring and conservation: Standards and practices for sharing data (红外相机的作用)
- Semantics for Sustaining Biodiversity (语义学)
- Training and Collaboration for sustained African Engagement in Biodiversity Informatics (培训与合作)
- USING BIODIVERSITY INFORMATICS TOOLS FOR MANAGEMENT (管理工具)
- BIODIVERSITY INFORMATICS TOOLS FOR SYSTEMATICS (生物系统学工具)
- DIGITIZATION AND DATA PUBLISHING (数字化和出版)
- GENETIC RESOURCE PRESERVATION (遗传资源)
- CITIZEN SCIENCE (公民科学)
- BIODIVERSITY INFORMATICS TOOLS FOR PROTECTED AREAS CONSERVATION (保护工具)

# Workshops, Demos and Training

- Biodiversity Data Mobilization Models (数据信息化模型)
- Scratchpads platform (Scratchpads)
- Using iPlant's infrastructure for biodiversity research (iPlant)
- PaleoCore Workshop (PaleoCore)
- Specify 6 (Specify)
- Training on Data cleaning, Data quality and Data publishing through the GBIF using the IPT (IPT)
- GEOLocate (GEOLocate)
- BHL Africa Workshop (BHL)

# Interest Groups and Task Groups

- Interesting Group:
  - Biodiversity Services and Clients
  - Biological Descriptions
  - Geospatial
  - Imaging
  - Invasive Species
  - Literature
  - Natural Collections Descriptions
  - Observation and Specimen Records
  - Phylogenetics
  - Process
  - Taxonomic Names and Concepts
  - TDWG Architecture
  - TDWG Infrastructure
  - TDWG Species Information
  - Genomic Biodiversity Working Group
- Task Group
  - Multimedia Resources
  - Access Biological Collections Data (ABCD)
  - DarwinCore (DwC)
  - Observations
  - Globally Unique Identifiers (GUID)
  - TAPIR

# Keynote Speaker

- **Wilbur Ottichilo:** *Use of biodiversity informatics in the nexus of policy and science for action and impact* (政策与科学的协调)
- **Tanya Abrahamse:** *Biodiversity Informatics in Meeting Sustainable Development Challenges in Africa* (可持续发展)
- **Selwyn Willoughby:** *Biodiversity and protected Areas Management Programme (BIOPAMA)* (保护区管理)
- **David Western, Lucy Waruingi:** *Building Biodiversity Knowledge from Ground up!* (知识传播)

## S02: Professional and formal biodiversity informatics training as a key for capacity building: state-of-play, challenges (能力建设)

- Teaching Biodiversity Data Management to Computer Science and Geography Students – An Experience Report (Friedrich-Schiller-University Jena, Germany)
- Engaging and Training iDiv Researchers in Biodiversity Data Management (German Centre for Integrative Biodiversity Research, Germany)
- The Role of Outreach and Networks in Addressing Capacity Needs in Biodiversity Documentation in East Africa ()
- Introducing data training programmes in large natural history museums to tackle their digital challenges (The Natural History Museum, United Kingdom)
- More data than we know what to do with? Biodiversity informatics skills needs in the research data pipeline (iDigBio, United States)

# W04: BIODIVERSITY DATA MOBILIZATION MODELS (数据信息化模型)

- CROWDSOURCING BIODIVERSITY DATA MOBILIZATION (众包)
- OPEN HERBARIUM: FILLING THE GAPS IN BIODIVERSITY DATA (开放的标本馆)
- DATA CARPENTRY: ONE COMPREHENSIVE MODEL FOR TEACHING BIODIVERSITY INFORMATICS DATA MANAGEMENT, RESEARCH SKILLS, AND TRAINING INSTRUCTORS (技能培训模型)
- A SIMPLE MODEL FOR LARGE-SCALE DATA MOBILIZATION ACROSS A DIVERSE ORGANISATION (大机构内的模型)
- CAPACITY BUILDING FOR BIODIVERSITY INFORMATICS: THE EXPERIENCE OF THE NATIONAL BIODIVERSITY CENTRE, MINISTRY OF AGRICULTURE AND FORESTS, BHUTAN (能力建设)
- OVERCOMING THE MAIN CHALLENGES TO SUSTAINABLE BIODIVERSITY DATA MOBILIZATION IN BENIN (可持续模型)

# 生物多样性信息学新进展的热点

- 各种应用工具软件的开发（研究、管理、规划）：支持实际应用
- 服务和 workflow (Services and Workflows) 的开发和规范：系统集成
- **Data Mobilization Model** 的研究：关于生物多样性数据的模型
- 能力建设的重新认识：最高水平的研究机构内部员工
- 生物多样性科学研究中新技术的追踪（**Barcode**，红外相机）
- 数字化是长期持续的基础性工作
- 与当地保护的需求紧密结合
- 与社会发展的需求紧密结合

# 为什么中国参会者很少？

- TDWG是研究数据标准的
- 我只做标本数字化
- 我是分类学家，不是IT人
- 我是保护区管理者，与信息学没有关系
- 我是高级研究人员/馆员，没有必要参加信息学培训

**以上观点都是错误的！**

谢谢各位的关注

请批评指正