GBIF in Asia: Membership and Nodes Development

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Key points

Chronological Review of the activity
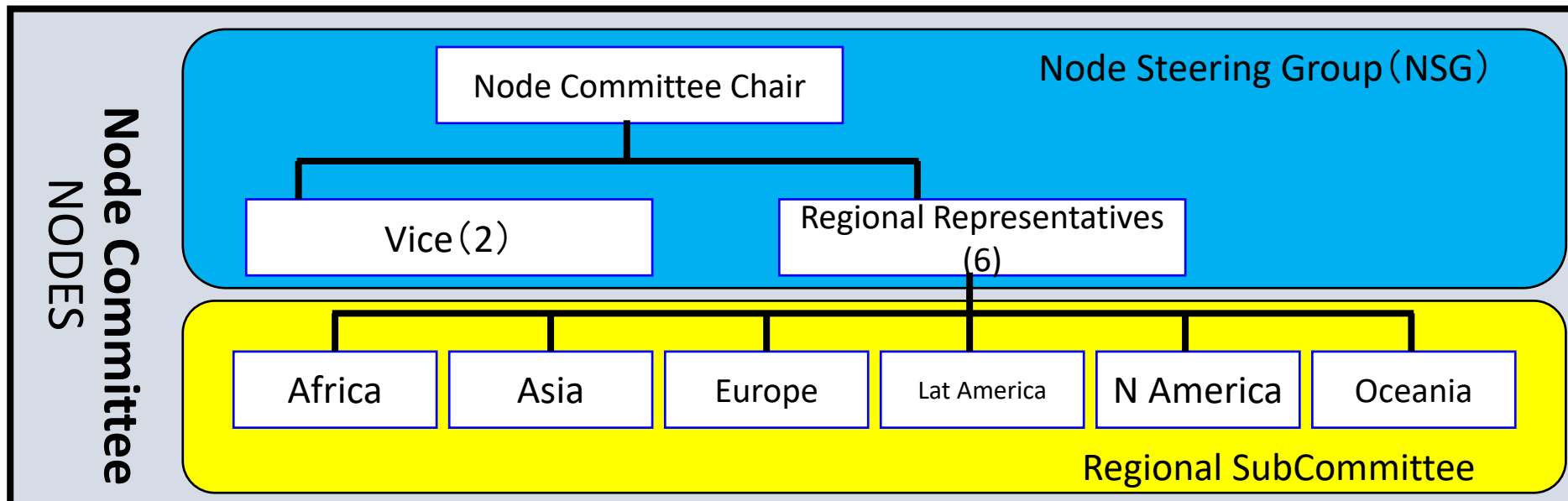 Memberships
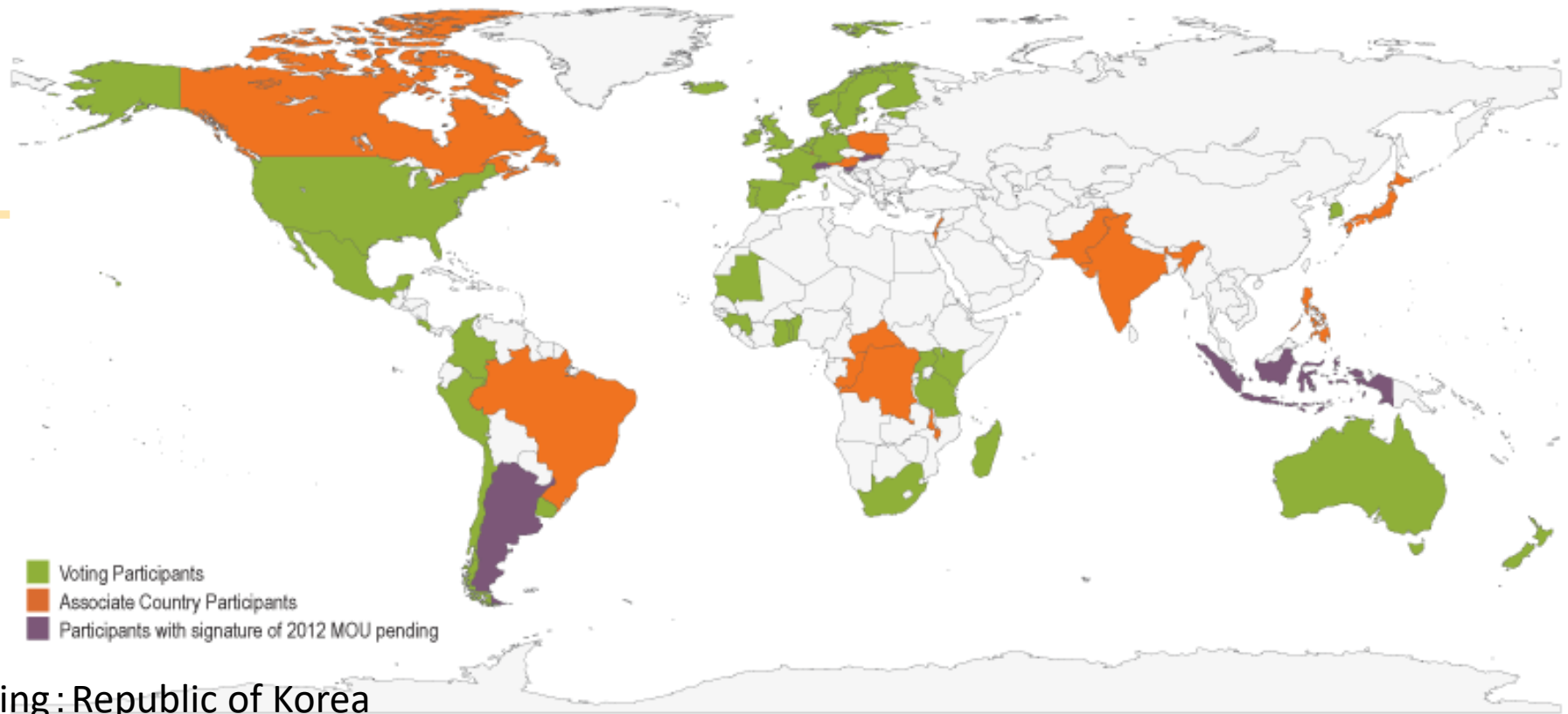 Historical review in development
 Regional strategy
 BIFA

Regionalization

Background

- Rapid increase of participants, still increasing.
- Due to the limited manpower, regionalization became necessary based on collaboration within the region.

Map of GBIF Country Participants

Legend:
- Voting Participants
- Associate Country Participants
- Participants with signature of 2012 MOU pending

Voting : Republic of Korea

Associate Country : Japan, India, Philippines, Indonesia

Associate Organization : ACB, ICIMOD, LIPI, CAS, Chinese Taipei (Taiwan)

List of participants in Asia as of June 2017

Voting
  Korea

Associate
  Chinese Taipei, India, Indonesia, Japan,
    ~~Pakistan,~~ Philippines

Other Associate Participant
  ACB (ASEAN Center of Biodiversity)
  ICIMOD (International Centre for Integrated
    Mountain Development)
  CAS (Chinese Academy of Science)

2ⁿᵈ Asian Nodes Workshop highlights / general remarks (2010, partially cited)

1. The region, the continent Asia is very diverse, also in the context of GBIF. This heterogeneity poses some challenges in terms of collaboration and communication.

2. Despite its potential, the representation of the region in GBIF is **not** very strong. Relevant causes for this is that there are only two voting members of GBIF in Asia, and there is not a single full time GBIF node manager in the continent, lack of a national mandate or budget are also common issues for GBIF nodes.

3. There was a consensus about keeping contacts and starting activities at the regional level. However how to move forward and what level of formalization is needed remain issues open for discussion.

Report on Regional Workshop of the GBIF Participant Nodes in Asia

Asian Regional Meeting (1)

1. 2009.9. Thailand (1st)
2. 2010.11. India (2nd)
3. 2012.3. Japan (3rd)

    Sheila Vergara (ACB) elected as an Asian Representative

    Nakul Chettri (ICIMOD) elected as a deputy Rep.

4. 2012.6. Taiwan (4th)

    Strategy composed; with IPT workshp

Regional Strategy, Asia (2013-2016)

Strategy 1: **Build network** of data holders and providers in the region by sharing information on GBIF and regional nodes informatics infrastructure as well as information on existing thematic databases such as FishBase, IBIN, ILTER, species group networks.

Strategy 2: **Popularize the data paper** incentive through development of metadata catalogues and corresponding datasets.

Strategy 3: Explore (funding) options for **mobilising legacy data** housed in museums and herbaria and (mechanism) for repatriation of biodiversity data from Asia housed in other countries.

Strategy 4: Strengthen help desk facility at regional nodes to **ensure the use of DwC-A standard** for generating new biodiversity data (metadata, occurrences, checklist) and to better mobilise the publishing of data through GBIF IPT platform.

Scientific activities

1. Making species checklist at national level, including <u>invasive, Red List,</u> endemic species and migratory birds.
2. Updating fish databases to assess fish biodiversity loss and risk in Asia.

Workshop on integrated Red List/Invasive Species List / Check List in East Asia
2013.3.12-13. in Tsukuba, Japan

1. Promote understanding of the importance of the Red List (RL), Invasive Species List (IL) and Check List (CL)
2. Survey current status of RL/IL/CL in East Asia
3. Determine strategy for integration of RL/IL/CL in East Asia

Challenges in integration of the list

- Collection of the Red Lists: **Done**.
- Digitization of the data: **Done**.
- Verification of the names with the help of professionals: Stacked.

- A number of scientific names found to be unlisted in "training data" (incl. GBIF Backbone taxonomy).
- The present system is not easily adoptable to update data.

New challenges raised.

Each Red Lists to be published as a checklist through IPT. (7th Regional Mtg., 2016)

Asian Regional Meeting (2)

5. 2014.7. Japan (5th)
   T. Hosoya (JP) : Representative.
   Y.H. Wang (C.T.) : Deputy Rep.
6. 2015.6. Taiwan (6th)
   BIFA discussed.
7. 2016.6. Philippines (7th)
   New regional strategy.
   Reps. elected for another 2 yrs.

BIFA (Since 2015)

Biodiversity Information Fund for Asia

1. Fund provided from Japanese government.
2. Used for the development of Biodiversity informatics of Asia in GBIF context.
3. Steered by the Steering Committee (JP Gov. + Asian Rep.+ GBIFS), with Evaluation Board.

4 selected projects for Phase 1

- 01 Strengthening GBIF Philippines
- 04 Mobilising data from ASEAN Protected areas
- 05 Biodiversity Informatics Curriculum
- 07 Development of Biodiversity data system in Vietnam

GBIF Strategic Plan (2017-2022)

1. Deliver relevant data
2. Improve data quality
3. Fill data gaps
4. Enhance biodiversity informatics infrastructure
5. Empower global network

Regional Strategy, Asia (2017-2022)

I. Empower Global Network
    1. Promote capacity building among relevant participants.
    2. Reduce language barrier.
    3. Increase outreach / education (to non-member countries).
    4. Seek for funding for stable and proactive activity.

II. Enhance Biodiversity Informatics Infrastructure
    5. Promote setting up IPT server.
    6. Promoting fundamental information for biodiversity analysis.

III. Fill Data Gaps
    7. Analyze data gaps.
    8. Promote engagement of common citizens.
    9. Mobilize new data types.
    10. Accelerate digitization and provision of legacy data.

IV. Improve Data Quality
    11. Analyze the data at hand to objectively evaluate the status.

V. Deliver Relevant Data
    12. Increase Engagement with other stakeholders.
    13. Secure commitment of data providers.

Mentoring Program with Indonesia
2012. 11. -2013.7.
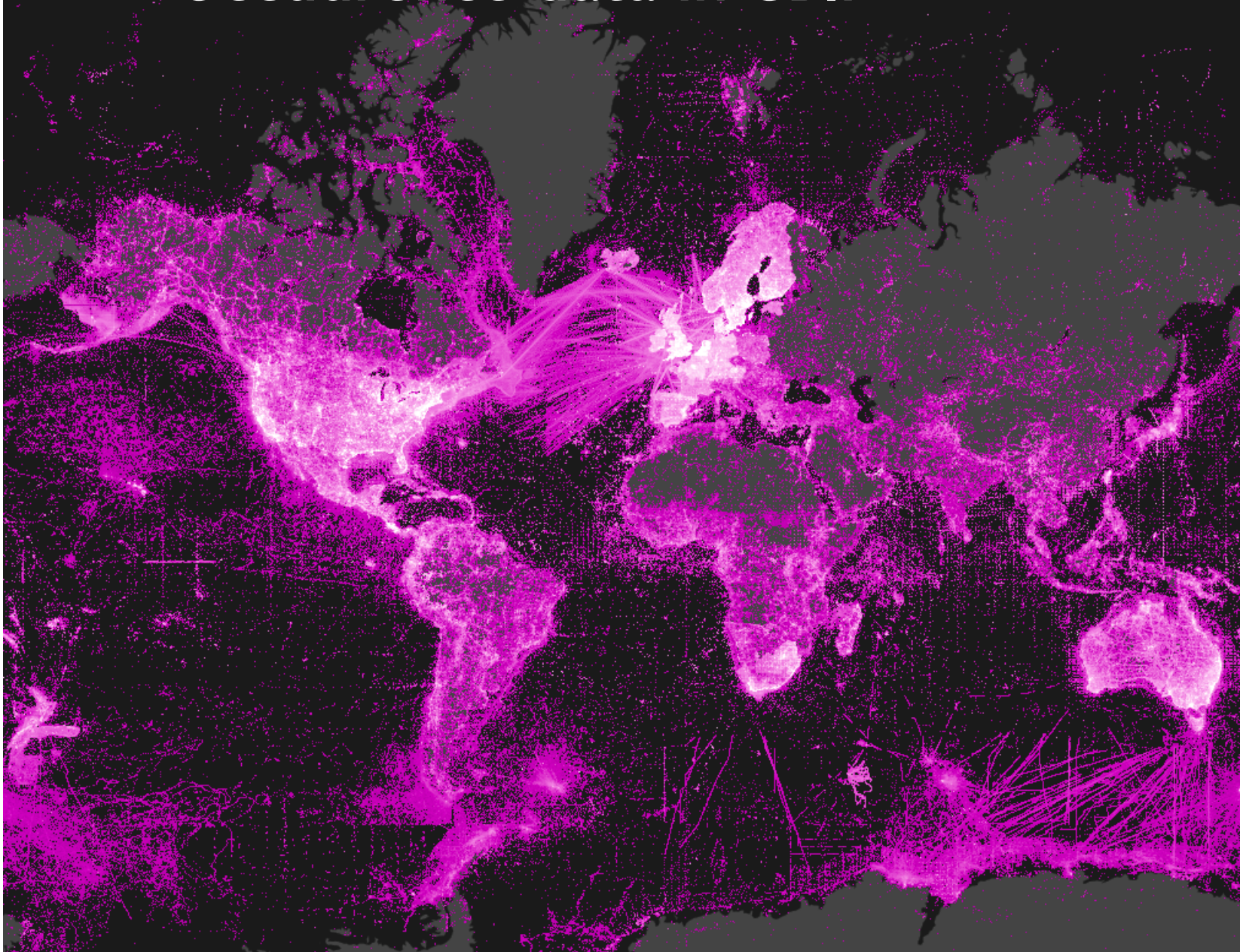

Establishment of "InaBIF"

Workshop on Integrated Management of Biodiversity Data 2013.2.5.

Asia-Pacific workshop on sharing biodiversity Information and the Integrated Publishing Toolkit (IPT2) , Taiwan 2012.6.25-27.
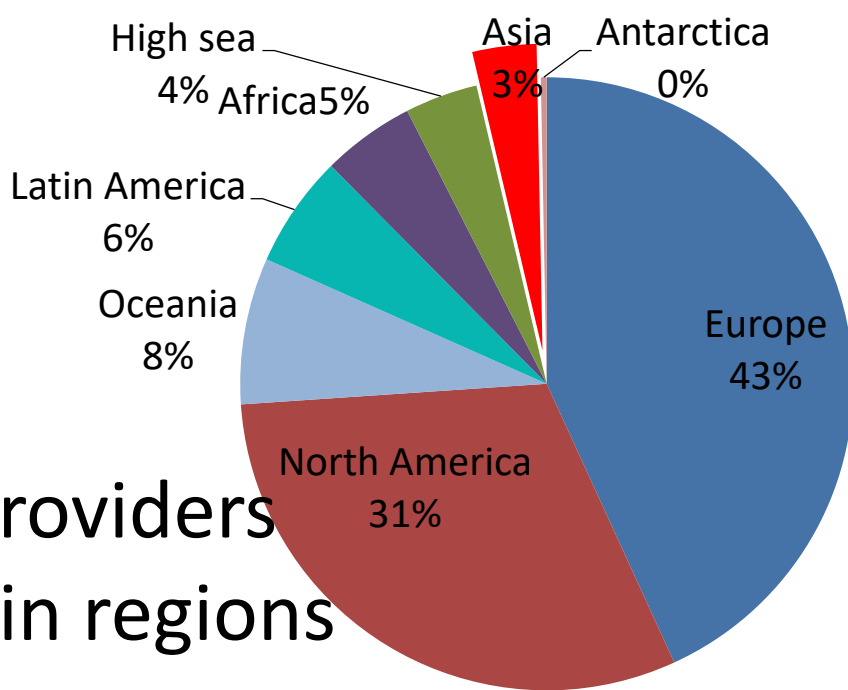
Occuurence data in GBIF

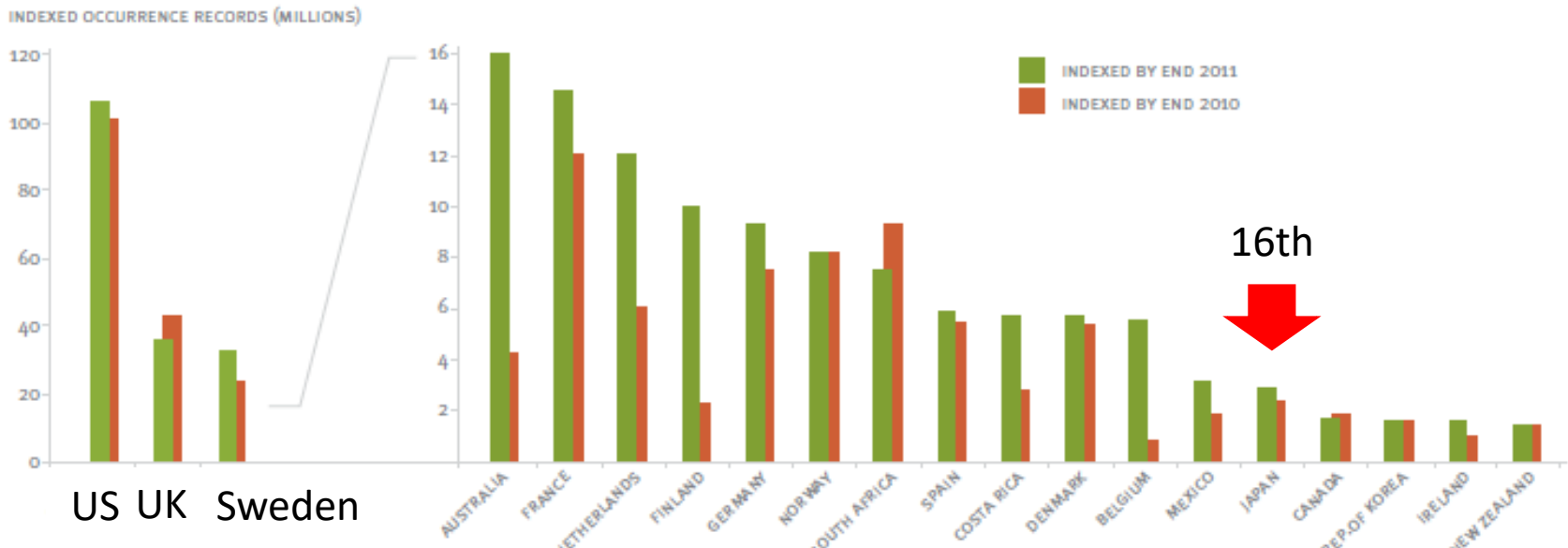**Density of georeferenced species occurrence records published through GBIF**
(see http://www.gbif.org/occurrence**)**

Last updated: 2014-07-09

Data providers based in regions

More data from Asia expected

Pie chart: Europe 43%, North America 31%, Oceania 8%, Latin America 6%, Africa 5%, High sea 4%, Asia 3%, Antarctica 0%

Data Records Breakdown by GBIF Participant

INDEXED OCCURRENCE RECORDS (MILLIONS)

INDEXED BY END 2011
INDEXED BY END 2010

16th

US UK Sweden

AUSTRALIA FRANCE NETHERLANDS FINLAND GERMANY NORWAY SOUTH AFRICA SPAIN COSTA RICA DENMARK BELGIUM MEXICO JAPAN CANADA REP. OF KOREA IRELAND NEW ZEALAND

Challenges: Still few data published

- Identification of data holders
- Incentives
- Use cases to express the importance and usefulness of the integrated data
- Language barrier
- Capacity building
- Funding
- Regional/Global collaboration
- Open data, data recycling