



GBIF, DanBIF og behovet for en samlet dansk biodiversitetsplatform

Aarhus Universitet

29 januar 2015

Hvad er GBIF?

Global Biodiversity Information Facility

- Startet 2001, OECD megascience initiativ
- Mission:
"to make the world's biodiversity data freely and universally available via the Internet"
- Arbejdsprogrammer
 - Mobilisering af primære biodiversitetsdata - DIGIT
 - Udredning af taxonomiske navne - ECAT
 - Standarder og værktøjer til udveksling af biodiversitetsdata
- Sekretariat in København





Global Workshop (Brasilia, March 2012)

Key Elements

Aichi Biodiversity Targets

Technical Rationale (and Quick Guides)

Implementation

Indicators

Quick Guides for Aichi Targets

Aichi Biodiversity Targets Icons

Other useful resources

Meetings and Documents

Briefing Sessions

Notifications

Inputs for revising and updating the Strategic Plan 2002-2010

UN Decade on Biodiversity

> [Convention](#) > [Strategic Plan 2011-2020](#) > Aichi-Targets

Aichi Biodiversity Targets

- **Strategic Goal A:** Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society
- **Strategic Goal B:** Reduce the direct pressures on biodiversity and promote sustainable use
- **Strategic Goal C:** To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity
- **Strategic Goal D:** Enhance the benefits to all from biodiversity and ecosystem services
- **Strategic Goal E:** Enhance implementation through participatory planning, knowledge management and capacity building

Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society



Target 1

By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.



Target 2

By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.



Target 3

By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.



Target 4

By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

National Targets

Click [here](#) to find national targets, including national targets linked to the Aichi Biodiversity Targets by countries.

Biodiversity Champions

- [The Hyderabad call for Biodiversity Champions](#)
- [The Champions & their Pledges](#)

Quick Guides for the Aichi Biodiversity Targets



Aichi Biodiversity Targets Icons

Aichi Targets Newsletters

Aichi Biodiversity Targets - Fliers

- [English](#)
- [Spanish](#)
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You are here: Home ▶ About IPBES

Font size Bigger Reset Smaller



Intergovernmental Platform on Biodiversity & Ecosystem Services



- Home
- About IPBES
- Work Programme
- Plenary Sessions
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- Policies and Procedures
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Select Language ▼

In Focus

IPBES-3 application form available [here](#).

IPBES-2 meeting report available in all UN languages [here](#).

IPBES Membership

IPBES now counts 121 Members. The full list of current IPBES Members is available [here](#).

All Member States are requested to submit the name and contact details of their National Focal Point (NFP) to the IPBES Secretariat. The current list of NFPs of these members is available [here](#).

About IPBES

Biodiversity from terrestrial, marine, coastal, and inland water ecosystems provides the basis for ecosystems and the services they provide that underpin human well-being. However, biodiversity and ecosystem services are declining at an unprecedented rate, and in order to address this challenge, adequate local, national and international policies need to be adopted and implemented. To achieve this, decision makers need scientifically credible and independent information that takes into account the complex relationships between biodiversity, ecosystem services, and people. They also need effective methods to interpret this scientific information in order to make informed decisions. The scientific community also needs to understand the needs of decision makers better in order to provide them with the relevant information. In essence, the dialogue between the scientific community, governments, and other stakeholders on biodiversity and ecosystem services needs to be strengthened.

To this end, a new platform has been established by the international community - the 'Intergovernmental Platform on Biodiversity and Ecosystem Services' (IPBES). IPBES was established in April 2012, as an independent intergovernmental body open to all member countries of the United Nations. The members are committed to building IPBES as the leading intergovernmental body for assessing the state of the planet's biodiversity, its ecosystems and the essential services they provide to society.

IPBES provides a mechanism recognized by both the scientific and policy communities to synthesize, review, assess and critically evaluate relevant information and knowledge generated worldwide by governments, academia, scientific organizations, non-governmental organizations and indigenous communities. This involves a credible group of experts in conducting assessments of such information and

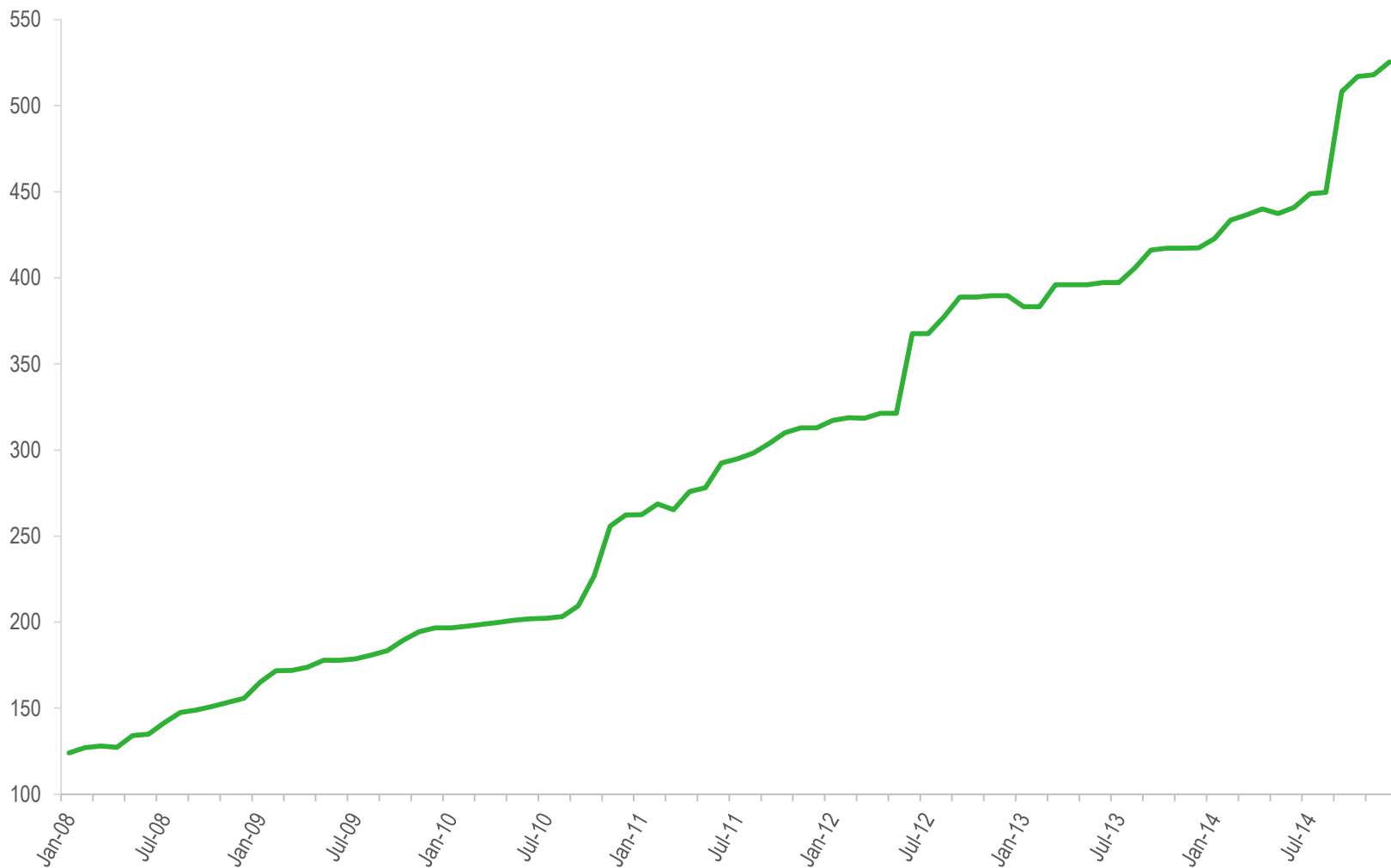
Hvordan er GBIF organiseret?

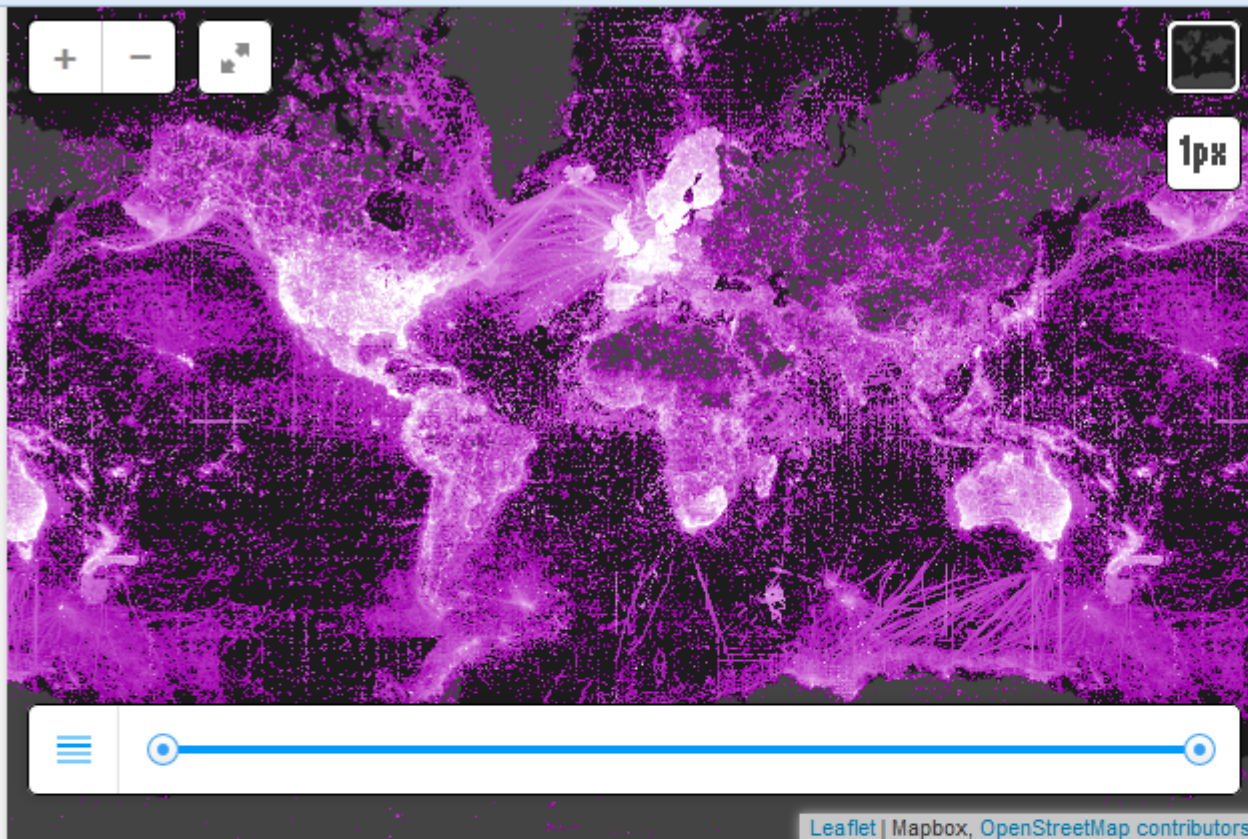
- Decentral datainfrastruktur -hvert land organiserer et node der kanaliserer data fra nationale dataejere til GBIF.
- GBIF besidder ingen data - alle data befinder sig hos og vedligeholdes af dataejere
- Standarder og værktøjer til deling af data
- Samarbejde med alle væsentlige aktører på biodiversitetsområdet



DATA PUBLISHED THROUGH GBIF.ORG

Trend in primary biodiversity records (millions)





Georeferenced data

VIEW RECORDS

[All records](#) | [In viewable area](#)

ABOUT

This map shows the density of all 458,195,646 georeferenced occurrence records published through the GBIF network.

To explore the records, zoom into the map or click on the links above and add further filters to customize search results.

Taxonomic characteristics

The following provides a summary of number of records per kingdom. Further filters, such as a location or temporal filter, may be applied when [exploring the data](#).

364,129,317

(69.2566%)

137,094,122

(26.075%)

9,885,186

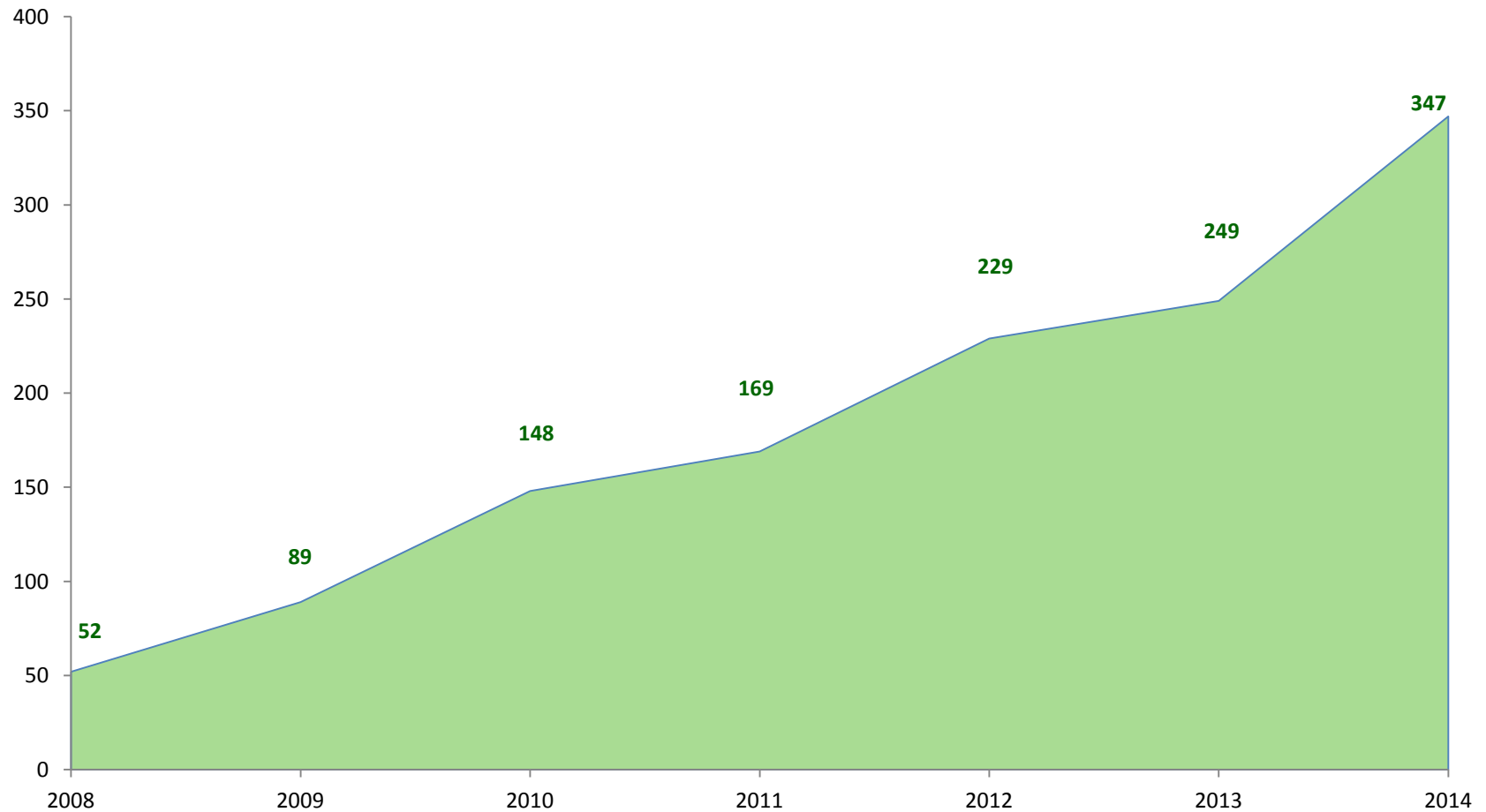
(1.8801%)

4,628,651

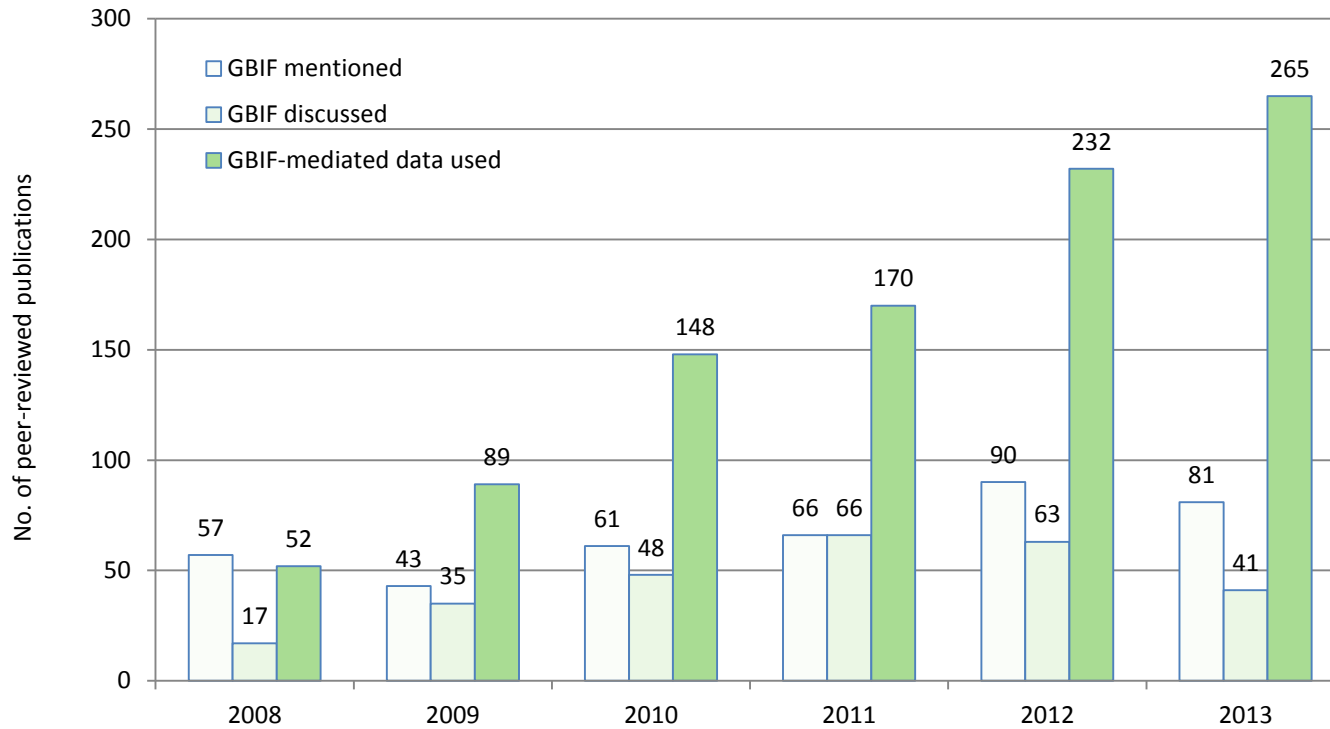
(0.8804%)

CITATIONS IN PEER-REVIEWED RESEARCH

Number of research publications using GBIF-mediated data

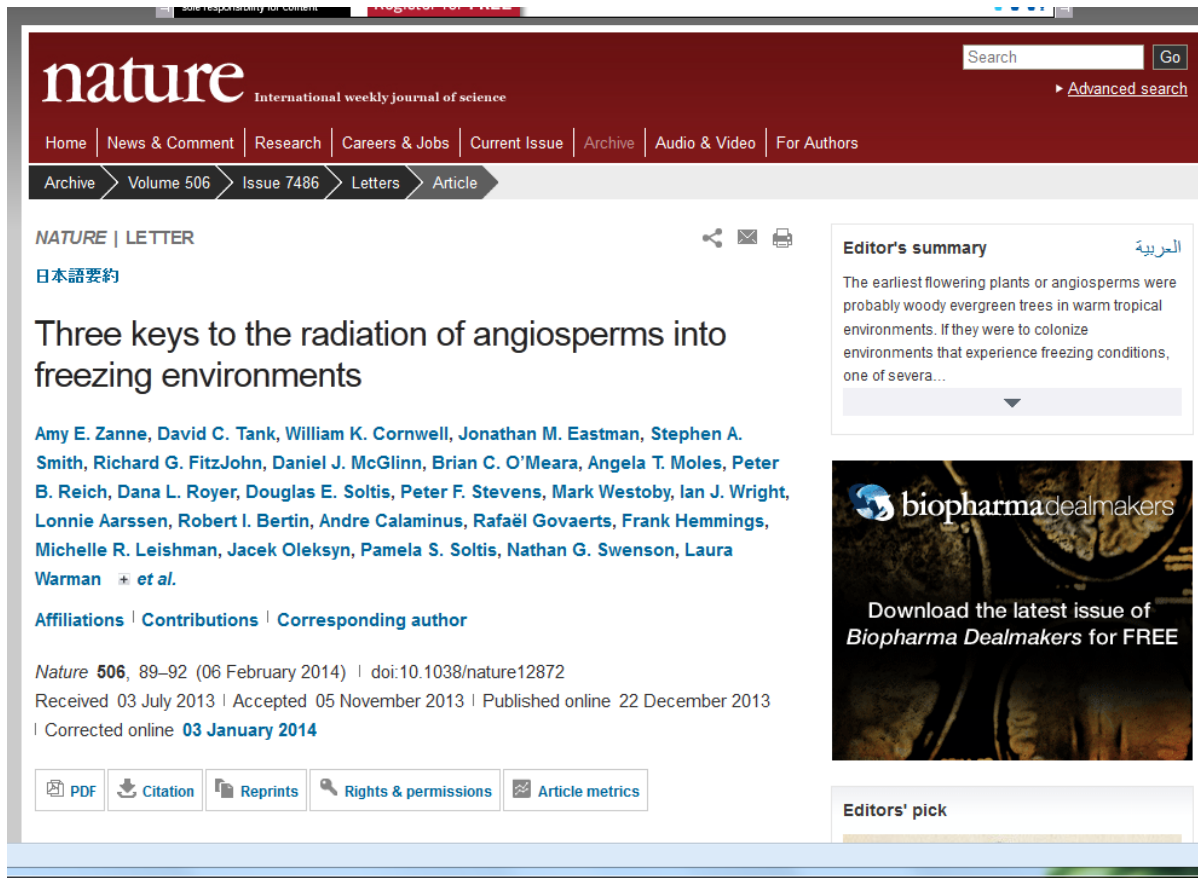


GBIF citation in research



What kind of papers are they?

- *Gbits latest issue - example:*



The screenshot shows the Nature journal website interface. At the top, the 'nature' logo is displayed with the tagline 'International weekly journal of science'. A search bar is located in the top right corner. Below the logo, there are navigation links for 'Home', 'News & Comment', 'Research', 'Careers & Jobs', 'Current Issue', 'Archive', 'Audio & Video', and 'For Authors'. A secondary navigation bar includes 'Archive', 'Volume 506', 'Issue 7486', 'Letters', and 'Article'. The main content area features the article title 'Three keys to the radiation of angiosperms into freezing environments' under the 'LETTER' category. The authors listed are Amy E. Zanne, David C. Tank, William K. Cornwell, Jonathan M. Eastman, Stephen A. Smith, Richard G. FitzJohn, Daniel J. McGlinn, Brian C. O'Meara, Angela T. Moles, Peter B. Reich, Dana L. Royer, Douglas E. Soltis, Peter F. Stevens, Mark Westoby, Ian J. Wright, Lonnie Aarssen, Robert I. Bertin, Andre Calaminus, Rafaël Govaerts, Frank Hemmings, Michelle R. Leishman, Jacek Oleksyn, Pamela S. Soltis, Nathan G. Swenson, and Laura Warman. The article's publication details include 'Nature 506, 89–92 (06 February 2014)', a DOI of 10.1038/nature12872, and dates for receipt (03 July 2013), acceptance (05 November 2013), online publication (22 December 2013), and correction (03 January 2014). At the bottom of the article, there are buttons for 'PDF', 'Citation', 'Reprints', 'Rights & permissions', and 'Article metrics'. On the right side of the page, there is an 'Editor's summary' section with a 'الحريية' (Arabic) link and a 'Download the latest issue of Biopharma Dealmakers for FREE' advertisement.

What kind of papers are they?

- *Gbits Science Supplement 9: PLoS ONE, Global change biology, Biological Invasions, Hydrobiologia, Ecology Letters, Philosophical transactions of the Royal Society of London B, BMC Evolutionary Biology, etc.*



Global Change Biology

Global Change Biology (2013), doi: 10.1111/gcb.12295

Invasion of Old World *Phragmites australis* in the New World: precipitation and temperature patterns combined with human influences redesign the invasive niche

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Abstract

After its introduction into North America, Euro-Asian *Phragmites australis* became an aggressive invasive wetland grass along the Atlantic coast of North America. Its distribution range has since expanded to the middle, south and southwest of North America, where invasive *P. australis* has replaced millions of hectares of native plants in inland and tidal wetlands. Another *P. australis* invasion from the Mediterranean region is simultaneously occurring in the Gulf region of the United States and some countries in South America. Here, we analysed the occurrence records of the two Old World invasive lineages of *P. australis* (Haplotype M and Med) in both their native and introduced ranges using environmental niche models (ENMs) to assess (i) whether a niche shift accompanied the invasions in the New World; (ii) the role of biologically relevant climatic variables and human influence in the process of invasion; and (iii) the current potential distribution of these two lineages. We detected local niche shifts along the East Coast of North America and the Gulf Coast of the United States for Haplotype M and around the Mississippi Delta and Florida of the United States for Med. The new niche of the introduced Haplotype M accounts for temperature fluctuations and increased precipitation. The introduced Med lineage has enlarged its original subtropical niche to the tropics-subtropics, invading regions with a high annual mean temperature (> ca. 10 °C) and high precipitation in the driest period. Human influence is an important factor for both niches. We suggest that an increase in precipitation in the 20th century, global warming and human-made habitats have shaped the invasive niches of the two lineages in the New World. However, as the invasions are ongoing and human and natural disturbances occur concomitantly, the future distribution ranges of the two lineages may diverge from the potential distribution ranges detected in this study.

Keywords: biological invasion, climate, common reed, environmental (ecological) niche models, haplotype M, human influence, mediterranean lineage, niche shift, potential distribution

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PHILOSOPHICAL TRANSACTIONS — OF — THE ROYAL SOCIETY

rstb.royalsocietypublishing.org

Research



Cite this article: Normand S et al. 2013 A greener Greenland? Climatic potential and long-term constraints on future expansions of trees and shrubs. *Phil Trans R Soc B* 368: 20120479.
<http://dx.doi.org/10.1098/rstb.2012.0479>

One contribution of 11 to a Theme Issue 'Long-term changes in Arctic tundra ecosystems'.

Subject Areas:
ecology

Keywords:
Arctic, climatic niche modelling, climate change impact, disequilibrium, postglacial re-colonization, shrub expansion

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A greener Greenland? Climatic potential and long-term constraints on future expansions of trees and shrubs

Signe Normand¹, Christophe Randin^{1,2}, Ralf Ohlemüller³, Christian Bay^{4,5}, Toke T. Høye^{5,7}, Erik D. Kjær⁸, Christian Körner², Heike Lischke¹, Luigi Maiorano⁹, Jens Paulsen², Peter B. Pearman¹, Achilles Psomas¹, Urs A. Treier⁶, Niklaus E. Zimmernann¹ and Jens-Christian Svenning⁶

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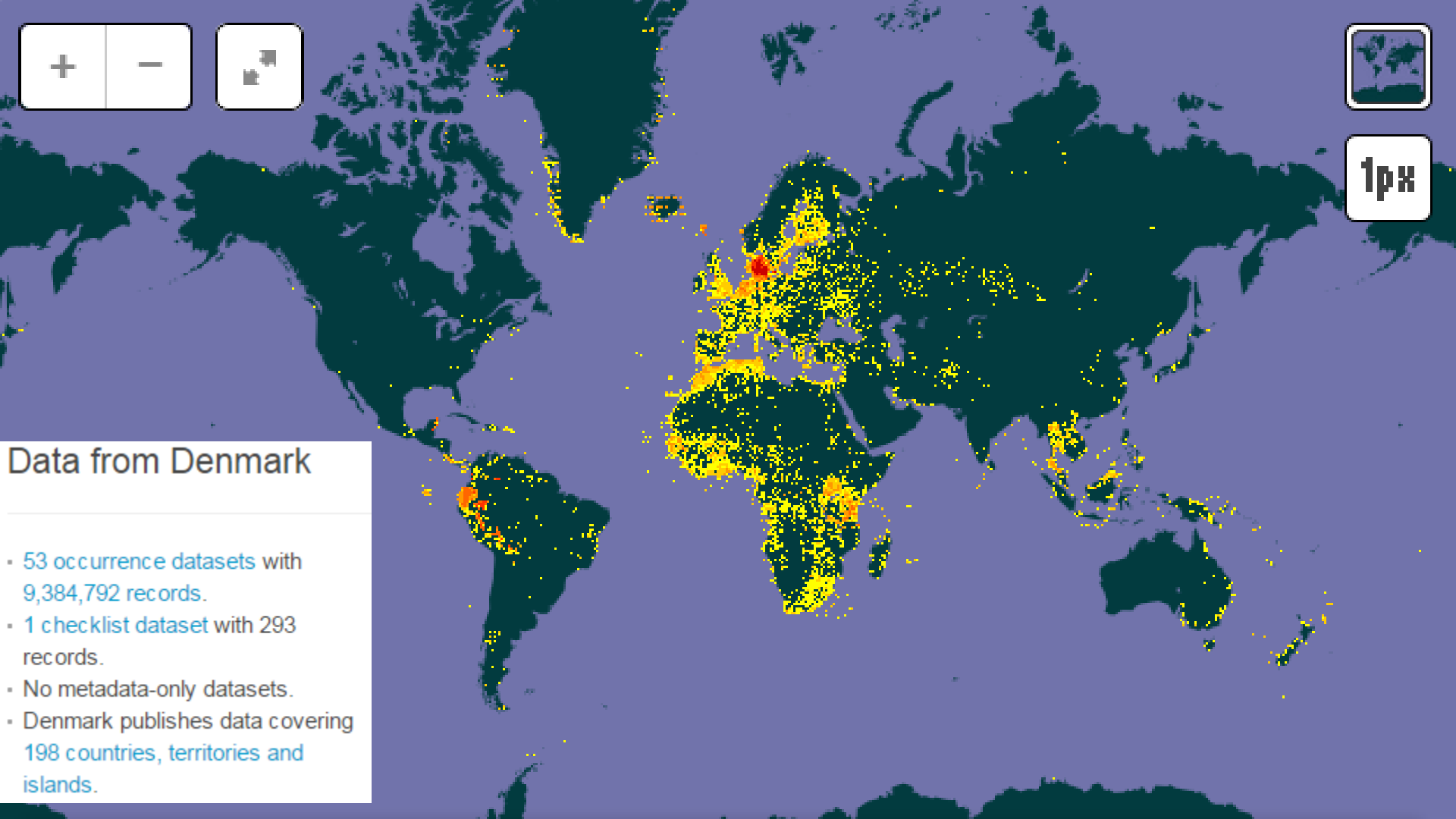
Warming-induced expansion of trees and shrubs into tundra vegetation will strongly impact Arctic ecosystems. Today, a small subset of the boreal woody flora found during certain Plio-Pleistocene warm periods inhabits Greenland. Whether the twenty-first century warming will induce a re-colonization of a rich woody flora depends on the roles of climate and migration limitations in shaping species ranges. Using potential treeline and climatic niche modelling, we project shifts in areas climatically suitable for tree growth and 56 Greenlandic, North American and European tree and shrub species from the Last Glacial Maximum through the present and into the future. In combination with observed tree plantings, our modelling highlights that a majority of the non-native species find climatically suitable conditions in certain parts of Greenland today, even in areas harbouring no native trees. Analyses of analogous climates indicate that these conditions are widespread outside Greenland, thus increasing the likelihood of woody invasions. Nonetheless, we find a substantial migration lag for Greenland's current and future woody flora. In conclusion, the projected climatic scope for future expansions is strongly limited by dispersal, soil development and other disequilibrium dynamics, with plantings and unintentional seed dispersal by humans having potentially large impacts on spread rates.

Hvad har vi lært...

- Det tager tid
 - Bygge organisation
 - Udvikle værktøjer
 - Opnå kritisk masse
- Det koster penge
- Men det giver resultater!



- Dansk node i GBIF
- Organiser Danske primære biodiversitsdata og formidler dem til GBIF i standardiseret form
- Faciliterer udviklingen af en dansk national artskonsensusliste allearter.dk



Data from Denmark

- 53 occurrence datasets with 9,384,792 records.
- 1 checklist dataset with 293 records.
- No metadata-only datasets.
- Denmark publishes data covering 198 countries, territories and islands.

Map navigation controls including a hamburger menu icon on the left, a horizontal zoom slider with circular end caps, and a circular refresh icon on the right.

Hvor mange data har vi Danmark?



- Databaser: mindst 30 mill.
 - Foreninger og Citizen Science: DOF, Atlasundersøgelser, Fugle og Natur, BugBase,
 - Naturovervågning
 - Museer
- Museumssamlinger: 15 mill.
 - Overvejende IKKE digitaliseret
- Ingen samlet adgang til data


Sverige: Artportalen



ARTPORTALEN
Rapportsystem för växter, djur och svampar

Skapa konto Logga in

Hem Rapportera Sök fynd Listor och Statistik Bilder Mina sidor



Observera att artgruppen fåglar ännu inte finns med i nya Artportalen. Fåglar rapporterar man och söker efter i [rapportsystemet för fåglar](#) som ligger i gamla Artportalen tills vidare. [Läs mer »](#)

[Dölj meddelandet X](#)

Startsida

Dagens fynd

Dagens bilder

Vad är nytt?

- ✓ Ett konto för alla arter
- ✓ Bättre kartor
- ✓ Granska fynden före publicering
- ✓ Förbättrad import
- ✓ Sök fynd med ytor
- ✓ Definiera egna parametrar
- ✓ Artportalen blir flerspråkig

[Fler nyheter »](#)

Nyheter

2015-01-19

Ny skyddsklassad art

Den för Sverige nya orkidén bi-ofrys (*Ophrys apifera*) är bara känd med ett fåtal exemplar från en enda plats i landet. P.g.a. risken för besöksställe och insamling har arten därför skyddsklassats, vilket... [Läs mer »](#)

2015-01-19

Uppdatering av arter och namn i ny release

...eringen omfattar bl.a. två nya arter för Sverige, samt att man nu



Nu har de ryggradslösa djuren flyttat in

+ 3 017

FYND IDAG

10 909 774

FYND TOTALT

Logga in

Kom igång

[Miniguide »](#)

1 Skapa användarkonto

Oavsett om du har ett konto i gamla Artportalen eller är ny användare måste du skapa ett nytt användarkonto för att kunna rapportera.

2 Koppla gamla fynd

Du som har konto i gamla Artportalen måste koppla dina gamla fynd till ditt nya konto för att få åtkomst till dem och för att de ska synas i listor.

3 Rapportera fynd

Ange som minst art, plats och datum och bygg på med valfria uppgifter. Rapportera fynd för fynd i formulär eller många fynd åt gången via Excel-mall. Granska sedan uppgifterna innan du publicerar dem.

UK: National Biodiversity Network og Biological Records Center



NBN
National Biodiversity Network

Search news and documents

Home The NBN Share Data Access Data Use Data Submit Wildlife Sightings Tools & Resources Forum News Events Contact us

Good open data

- can be linked to, so that it can be easily shared and talked about
- is available in a standard, structured format, so that it can be easily processed
- has guaranteed availability and consistency over time, so that others can rely on it
- is traceable, through any processing, right back to where it originates, so others can work out whether to trust it

Open data: the future of data sharing

[Share Data](#) with the NBN

[Access Data](#) from the NBN Gateway

[Submit a sighting](#) on iRecord

Live map showing the distribution of *Acanthosoma haemorrhoidale* - Hawthorn Shieldbug. Click the map to explore the data further.

Latest news **Events & training** **Examples of use**

Welcome to the Biological Records Centre

The Biological Records Centre (BRC), established in 1964, is a national focus in the UK for terrestrial and freshwater species recording. BRC works closely with the voluntary recording community, principally through support of national recording schemes and societies.

A booklet reviewing the first 50 years of BRC can be download [here](#).

BRC is supported by the [Joint Nature Conservation Committee](#) and the [Centre for Ecology & Hydrology](#) within the [Natural Environment Research Council](#).

The work of BRC is a major component of the [National Biodiversity Network](#).

50 Celebrating 50 years of the Biological Records Centre

New British and Irish atlas of bryophytes published

New BRC website



more

Use of the NBN Gateway for Journal of Applied Ecology paper

Planning / Development

Ayrshire Biological Records Centre

Environment Agency Easimaps

RECORD data portal

Greenspace Information for Greater London

Using BWARS data from the NBN Gateway at Sussex BRC

Policy Making & Reporting

Natural England

NBN Gateway data helps ClimateXchange Scotland

Public engagement

Harlequin Ladybird Project

Scotland's Squirrels

Research

A metapopulation approach to urban conservation planning

Data use for research in Australia

Data Use for research on climate change

Student research

Use of data for research in Belgium

Web services

CABI Plantwise



Education

The NBN Gateway is in its early days of use in education and this is an area we are seeking to increase in the future

[Read more](#)



Planning / Development

Data from the NBN Gateway is proving invaluable for planning and development schemes

[Read more](#)



Public engagement

The interested public will be an increasingly important part of recording in the future. Here are some examples of websites specifically aimed at the public, using the NBN Gateway.

[Read more](#)

Web services

Integrating NBN Gateway maps



Land management & practical conservation

Data is a vital part of land management and conservation decisions. See how NBN data is helping.

[Read more](#)



Policy Making & Reporting

New policies need good data to back them up and that's where the NBN Gateway is really starting to help in the decision making process

[Read more](#)



Research

The NBN Gateway is in its early days of use for research and this is an area we are seeking to increase in the future

[Read more](#)



Archive

Information on some of the older

Hvad kan en fælles platform give?



- Fælles dataadgang og visning - øget værdi af data
- Erfaringsudveksling og koordinering
- Fælles værktøjer, synergi i fundraising
- Sammenkobling af data
- Platform for andre type Citizen Science projekter, fx rette mod børn og unge