

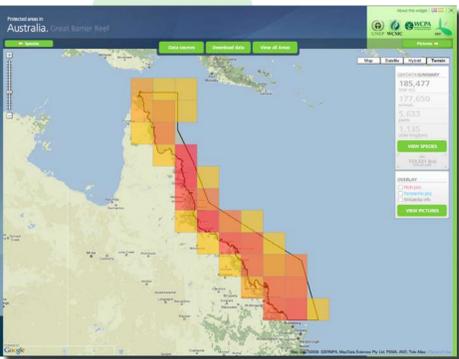


**GBIF**

[www.gbif.org](http://www.gbif.org)

...free and open access  
to biodiversity data

## Global Biodiversity Information Facility Strategic Applications



The Global Biodiversity Information Facility (GBIF) Work Programme includes investment in 'Strategic Applications', areas of strategic importance to the GBIF community.

Two activities under the Strategic Applications initiative are 1) investment in web-based visualisation informatics tools that integrate GBIF-enabled data records with other online biodiversity information resources in order to support large-scale spatial analyses, and 2) mobilising biodiversity data for and from Environmental Impact Assessments (EIAs).

### Integration of GBIF-Enabled Data and IUCN World Database on Protected Areas

GBIF has developed a software which integrates GBIF-enabled point occurrence data with the IUCN and UNEP World Conservation Monitoring Centre (UNEP-WCMC) World Database on Protected Areas ([www.wdpa.org](http://www.wdpa.org)) (Fig. 1).

### Integration of GBIF-Enabled Data and CMS Global Registry of Migratory Species (GROMS)

GBIF has developed a software which integrates GBIF-enabled data with the Convention on Migratory Species (CMS) Global Register of Migratory Species (GROMS) (<http://www.groms.de/>) species' distributions (Fig. 2).

### Modelling Projected Changes in Plant Species' Distributions and Diversity in Response to Climate Change

GBIF is partnering with the International Centre for Tropical Agriculture (<http://www.ciat.cgiar.org>) to study climate change effects on global plant diversity and assess whether protected areas stand up to predicted 2050 distributions. Predictive models use GBIF-enabled data to estimate changes in global plant species' distributions in response to climate change. Results will identify potential refugia for plant species conservation (Fig. 3).

### Publishing Biodiversity Data from Impact Assessments

GBIF and the International Association for Impact Assessment (IAIA) (<http://www.iaia.org/>) are collaborating under a Memorandum of Cooperation to improve the use and application of biodiversity data in sustainable development, decision-making, based on EIAs (Fig. 4).

Fig. 1. GBIF tool integrates GBIF-enabled data, protected area boundaries from the IUCN World Database on Protected Areas, Panoramio and Flickr pictures, and Wikipedia articles. Screen shot shows example of Great Barrier Reef.

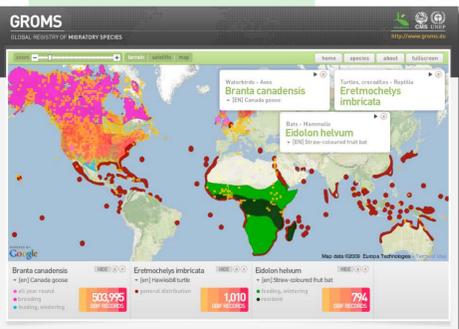


Fig. 2. GBIF tool integrates: 1) GBIF-enabled data, 2) Convention on Migratory Species' Global Register of Migratory Species distributions, & (iii) Google Map layers. Screen shot shows example for the Canada goose, hawksbill sea turtle, and straw-coloured fruit bat.

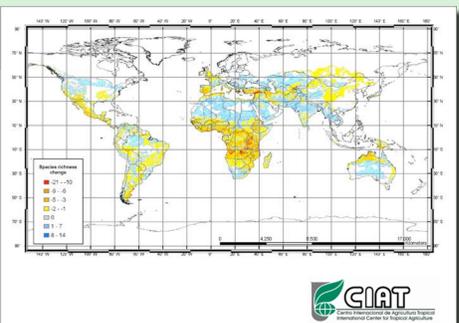


Fig. 3. Climate impact modelling.



Fig. 4. Improving decision-making using EIAs.

### About GBIF

GBIF makes digital biodiversity data openly and freely available on the Internet for everyone, and endorses both open source software and open data access. [www.gbif.org](http://www.gbif.org)

GBIF provides scientific biodiversity data for decision-making, research endeavours and public use. [data.gbif.org](http://data.gbif.org)

GBIF is a network of data publishers who retain ownership and control of the data they share. Linked datasets provide a more robust representation of biodiversity than any single dataset.

GBIF provides access to primary biodiversity data held in institutions in developed and developing countries. Data shared through GBIF are repatriated data.

GBIF is a dynamic, growing partnership of countries, organisations, institutions and individuals working together to mobilise scientific biodiversity data.

GBIF invites you to download species occurrence data freely and openly from <http://data.gbif.org>

GBIF invites you to join the GBIF network and share your biodiversity data, as well as participate in developing new tools and services.



2010 International Year of Biodiversity

