





## Global Biodiversity Information Facility (GBIF)






### General information





<b>Institution</b>	Global Biodiversity Information Facility (GBIF)
<b>Legal name</b>	Global Biodiversity Information Facility (GBIF)
<b>Foundation year</b>	2001
<b>Name of the Director General or Head of the institution</b>	Donald Hobern, Executive Secretary
<b>Brief description of the Scientific Mission of your institution</b>	<p>The Global Biodiversity Information Facility (GBIF) is an international open data infrastructure, funded by governments.</p> <p>It allows anyone, anywhere to access data about all types of life on Earth, shared via the global platform <a href="http://www.gbif.org">www.gbif.org</a> and through national and thematic portals.</p> <p>By encouraging and helping institutions to publish data according to common standards, GBIF enables research not possible before, and informs better decisions to conserve and sustainably use the biological resources of the planet.</p> <p>GBIF operates through a network of nodes, coordinating the biodiversity information facilities of Participant countries and organizations, collaborating with each other and the Secretariat to share skills, experiences and technical capacity.</p>
<b>Brief description of the vision of your institution</b>	A world in which biodiversity information is freely and universally available for science, society and a sustainable future.
<b>Main objectives or lines of action</b>	<p>The GBIF community will address the following priorities under the GBIF Strategic Plan 2017-2021:</p> <p><b>Empower Global Network</b></p> <p><i>“Ensure that governments, researchers and users are equipped and supported to share, improve and use data through the GBIF network, regardless of geography, language or institutional affiliation.”</i></p> <p><b>Enhance Biodiversity Information Infrastructure</b></p> <p><i>“Provide leadership, expertise and tools to support the integration of all biodiversity information as an interconnected digital knowledgebase.”</i></p> <p><b>Fill Data Gaps</b></p> <p><i>“Prioritize and promote mobilization of new data resources which combine with existing resources to maximize the coverage, completeness and resolution of GBIF data, particularly with respect to</i></p>





	<i>taxonomy, geography and time.”</i>
	<b>Improve Data Quality</b>
	<i>“Ensure that all data within the GBIF network are of the highest-possible quality and associated with clear indicators enabling users to assess their origin, relevance and usefulness for any application.”</i>
	<b>Deliver Relevant Data</b>
	<i>“Ensure that GBIF delivers data in the form and completeness required to meet the highest-priority needs of science and, through science, society.”</i>
<b>Biodiversity related objectives</b>	Providing the data foundations for informing policy on biodiversity including support for Essential Biodiversity Variables, extinction risk assessments, strategies for targeting invasive alien species, protected area siting and management, conserving plant genetic resources for agriculture, among others.




## GBIF's contribution to the Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets

Objective / Aichi Target			Yes	Partially	No	NA	Main actions performed (for 2011-2016):
A	1	 Public awareness	Does your institution develop actions aimed to strengthen awareness, concern and knowledge about biodiversity?				Through facilitating global sharing and access of citizen science data, GBIF's national nodes and contributing networks provide a direct link between citizens' observations of nature and the scientific evidence to support biodiversity-related policy. See for example provision of >1m 'research grade' observation records from the iNaturalist platform accessible via GBIF <a href="http://www.gbif.org/dataset/50c9509d-22c7-4a22-a47d-8c48425ef4a7">http://www.gbif.org/dataset/50c9509d-22c7-4a22-a47d-8c48425ef4a7</a>
	2	 Valorization	Do some of the activities that your institution carries out contribute to the valuation of biodiversity and ecosystem services, contributing to achieve poverty reduction and sustainable development?				Encouragement of the open publication of data generated from environmental impact assessment, and the use of the GBIF.org platform to inform development planning processes, helps to bring biodiversity values into public and private decision making. See for example <a href="http://www.gbif.org/event/82148">www.gbif.org/event/82148</a> for details of workshop bringing stakeholders together in West Asia to encourage sharing of biodiversity data from EIAs.
	3	 Incentives	Does your institution develop actions aimed at countering the effects of harmful incentives for biodiversity or promote the application of incentives with positive effects on biodiversity?				X
	4	 Sustainable Production	Has your institution developed and/or promoted scientific knowledge and/or technology innovation that promote sustainable production and/or consumption (including within your institution)?				X

Objective / Aichi Target			Yes	Partially	No	NA	Main actions performed (for 2011-2016):
B	5	 Habitat loss	Has your institution carried out actions that contribute to a decrease in the rate of loss of natural habitats?				
				X			Data accessed through GBIF contributes to research on the impacts of habitat loss.
	6	 Sustainable management of fishes and invertebrates	Has your institution developed or implemented scientific knowledge and/or technology and innovation to promote the sustainable extraction and recovery of species of fish, invertebrates and aquatic plants, or that have contributed to reduce illegal fishing or incidental catch?				
			X				Data accessed through GBIF has contributed to research into sustainable fisheries e.g. through modelling species distribution using the AquaMaps application <a href="http://www.aquamaps.org">www.aquamaps.org</a>
	7	 Sustainable primary sector	Does your institution promote and contribute to the sustainable management of agricultural land, and/or farming of aquatic organisms, and/or forests?				
				X			Species occurrence data published via GBIF.org provides a means of monitoring long-term biodiversity trends in areas targeted for sustainable agriculture and/or forestry, especially with the introduction of the sampling event data standard to enable sharing of species abundance data from standardized protocols covering vegetation plots, transects etc. (see <a href="http://www.gbif.org/newsroom/news/sample-based-data">www.gbif.org/newsroom/news/sample-based-data</a> )
	8	 Pollution reduction	Does your institution carry out actions to control, monitor and/or improve water pollution, and/or ocean and coast pollution, and/or soil pollution, and/or solid waste pollution, and/or air pollution?				
					X		
	9	 Invasive species	Does your institution develop actions aimed at the identification, prevention, control and eradication of exotic invasive species?				
			X				Data accessed via GBIF has informed nearly 300 peer-reviewed studies into invasive alien species (see <a href="http://www.gbif.org/mendeley/invasives">http://www.gbif.org/mendeley/invasives</a> ); in addition, GBIF has coordinated the Global Invasive Alien Species Information Partnership through the CBD, enabling the development of the Global Register of Invasive and Introduced Species ( <a href="http://www.griis.org">www.griis.org</a> ); as well as convening experts

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							in invasive alien species research to propose improvements in the organization of data to better inform action in the field (see <a href="http://www.gbif.org/newsroom/news/invasive-alien-species-task-group-launched">http://www.gbif.org/newsroom/news/invasive-alien-species-task-group-launched</a> )
	10	 Pressures on vulnerable ecosystems	Does your institution develop scientific knowledge and/or technology and innovation to reduce the anthropogenic pressure factors and maintain integrity and functioning of coral reefs and/or other ecosystems vulnerable to climate change?				GBIF provides the means to integrate and share data relating to coral reefs and other climate-vulnerable ecosystems, for example with the recent publication of the Reef Life Survey at <a href="http://www.gbif.org/dataset/38f06820-08c5-42b2-94f6-47cc3e83a54a">http://www.gbif.org/dataset/38f06820-08c5-42b2-94f6-47cc3e83a54a</a>
			X				
C	11	 Protected Areas	Does your institution develop scientific knowledge and/or technology and innovation that promote or contribute the efficient management, representativeness, connectivity and integration landscape of protected areas (terrestrial, and/or marine and coastal) or the creation/incorporation of new public, private or community conservation areas?				GBIF is a source of data for a large body of research informing priorities for the siting and management of protected areas (see <a href="http://www.gbif.org/mendeley/conservation">http://www.gbif.org/mendeley/conservation</a> ) Accessing data shared through GBIF is an important means of filling gaps to supplement field surveys informing PA management plans (see Pino-del-Carpio, A., Ariño, A.H. & Miranda, R. Biodivers Conserv (2014) 23: 2239. doi:10.1007/s10531-014-0718-2)
			X				
	12	 Threatened Species	Does your institution develop scientific knowledge and/or technology and innovation to promote and contribute to the effective protection of threatened species?				GBIF is an important source of data informing research into species conservation ( <a href="http://www.gbif.org/mendeley/conservation">http://www.gbif.org/mendeley/conservation</a> ) In addition, species occurrence data brought together through GBIF.org help to inform Red List Assessments both at national and global scales.
			X				
	13	 Genetic diversity	Does your organization develop scientific knowledge and/or technology and innovation aimed to maintain native genetic diversity and the wild relatives of cultivated plant species and/or livestock and domesticated animals?				Data accessed through GBIF has been used in a significant number of studies addressing genetic diversity especially in relation to distribution of Crop Wild Relatives (see
			X				

Objective / Aichi Target			Yes	Partially	No	NA	Main actions performed (for 2011-2016):
							<a href="http://www.gbif.org/mendeley/agriculture">http://www.gbif.org/mendeley/agriculture</a> ). GBIF is also working with experts in agricultural biodiversity to optimize the mobilization and discovery of data relating to plant genetic resources (see <a href="http://www.gbif.org/newsroom/news/agrobiodiversity_report">www.gbif.org/newsroom/news/agrobiodiversity_report</a> )
D	14	 Restoration	Has your institution developed scientific knowledge and/or technology and innovation for the restoration and recovery of ecosystem services taking into consideration the needs of women, indigenous and local communities and the poor and vulnerable?				
				X			GBIF has been used as a data source in research relating to provision of ecosystem services.
	15	 Resilience	Has your institution developed scientific, technical and/or technological actions of ecological restoration and rehabilitation? How many actions since 2011 and is the approximate restored area of degraded ecosystems within the framework of these actions?				
				X			Although not directly contributing to restoration actions, data shared and accessed through GBIF is helping to inform policies on restoration, see e.g. <i>Butterfield, B. J., Copeland, S. M., Munson, S. M., Roybal, C. M. and Wood, T. E. (2016), Restoration: using species in restoration that will persist now and into the future. Restor Ecol. doi:10.1111/rec.12381</i>
	16	 Nagoya Protocol	Have you heard of the Nagoya Protocol, and has your institution developed scientific, technical and/or technological actions linked to it?				
					X		Heard of it yes! Although no specific actions relating to the Protocol have been developed, GBIF plans to research implications of the Protocol on mobilization of open-access data, and develop guidelines to inform future data gathering efforts especially in relation to community-based monitoring that makes use of indigenous and local knowledge.
E	17	 NBSAP update	Has your institution collaborated in the elaboration and/or implementation of the National Biodiversity Strategy of its country, or any other biodiversity strategy at a sub-national level or equivalent?				
				X			Not directly, but mobilization and use of data through GBIF has helped to inform a number of NBSAPs, including through consultation with GBIF national node institutions.
	18		Does your institution integrate traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity?				

Objective / Aichi Target			Yes	Partially	No	NA	Main actions performed (for 2011-2016):
		 Traditional Knowledge			X		Not directly, but future plans include exploration of community based monitoring, incorporating ILK, as a means of data mobilization.
19	 Knowledge, science and technology	Does your institution generate scientific, technical and/or technological information on biodiversity? How does your institution consider that the availability of useful information on biodiversity (assessment, monitoring, inventories, studies, etc.) is in your country?					
		X				NA	Examples of information generated in conservation, values, functioning, status, trends, impacts of loss, sustainable use or others. More than 600m species occurrence records covering some 1.6m species, shared through over 800 institutions worldwide – and used in more than 1,800 peer reviewed studies.
		Sufficient	Limited	Scarce	Indicate relevant gaps of information and information available and its sources. Many gaps and biases remain in data integrated through GBIF – identifying these gaps at spatial, temporal and taxonomic scales is a major priority to help inform future data mobilization priorities.		
		X					
20	 Funding	What is the approximate percentage of your institution's annual budget destined for the implementation of scientific, technical and/or technological actions aimed for the conservation and sustainable use of biodiversity and ecosystem services and does your institution have fundraising strategies for this purpose?					
		X					100% of funding ultimately supports STT actions; as well as continuing to engage governments in the need to maintain the data-sharing infrastructure (human and technical) through GBIF's core budget, recent programmes have leveraged supplementary funds from the European Union and Government of Japan to support capacity building and data mobilization projects in Africa, the Caribbean, Pacific and Asia (see <a href="http://www.gbif.org/bid">www.gbif.org/bid</a> and <a href="http://www.gbif.org/bifa">www.gbif.org/bifa</a> )