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Project Description	Relevance	Award €	Product(s)	Taxa	Species	Region
<p><i>Inventory of all Caterpillars and their Food Plants and Parasitoids of Area de Conservacion Guanacaste, Costa Rica</i></p> <p>These data are being used by Costa Rican conservation planning, climate change mitigation, biodiversity prospecting, primary school education, adult ecotourism, biological control, biodegradation of agricultural wastes, water quality control, systematics, taxonomy, conservation awareness, and now, even part of a nation-wide effort to “<i>environmentalize</i>” the entire country.</p> <p>Countries: Costa Rica, USA Institutions: Univ. of Pennsylvania</p>	<p>2010 Indicators Climate Change Invasive Alien Species Conservation</p>	8792	<p>144,348 images 120,000+specimens, 380,000 occurrences.</p>	Lepidoptera	3000+	Costa Rica
<p><i>Digitisation of Bee Specimen Records from University of California Riverside</i></p> <p>The UCR Entomology Research Museum has one of the most significant collections of North American bees . Mobilizing this material will represent a major contribution to global knowledge of bee diversity, biogeography, phenology, and pollination ecology. Many of the species represented are specialist pollinators, whose floral associations are narrowly restricted and of potentially vast significance for ecology and conservation of the associated plant species.</p> <p>Countries: USA Institutions: Univ. of CA - Riverside</p>	<p>Pollinator Associations Pollinator Species</p>	33268	<p>230,000 specimens 150,000 floral associations</p>	Bees	500	SW USA
<p><i>Early Land Plants Today: Uniting Liverwort Taxonomy, Nomenclature and Geography</i></p> <p>Liverworts (Marchantiophyta) are pivotal in our understanding of early land plant evolution. They form a conspicuous and important component in many terrestrial ecosystems throughout the world. The objective is to unify the vastly scattered biological literature on liverwort taxonomy, nomenclature, and geography.</p> <p>Countries: USA, Australia, China Institutions: Field Museum, Univ. Sydney, Univ. Göttingen, East China Normal Univ.</p>	GSPC Target 1	41265	Global catalog of liverworts and 60,000 occurrence records	Liverworts	6000-9000	Global



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<p><i>Tsetse flies and Sandflies of medical and economic importance in East Africa</i></p> <p>The project will collect and database the distribution data of Tsetse flies which are both important vectors of diseases in the eastern African region. In addition, Tsetse flies transmit trypanosomes, which cause huge losses in production and productivity in a wide range of key livestock species. GBIF has virtually no data on these taxa from the region This project will provide accessible distribution data that will be an important baseline for medical and veterinary research in the region, as well as for studying the effect of climate change on the spatial distribution of insect decease vectors. The existing dataset will be continuously supplemented by data from relevant research activities being undertaken by partner institutions.</p> <p>Countries: Kenya Institutions: African Insect Science for Food and Health, Kholodny Institute of Botany, Kenya Agricultural Research Institute , Kenya Medical Research Institute</p>	Climate Change Disease Vectors	25410	5000 digitized, geo-referenced specimens	Tsetse flies and sand flies	20	Kenya
<p><i>A system for increasing the georeferencing quantity and quality of all GBIF-mediated occurrence records</i></p> <p>Although a majority of the 135 million occurrence records that are cached by the GBIF portal are georeferenced, the quality and methodology of georeferencing varies widely, and a much smaller fractions have georeference data produced according to best practices . This proposal will help rectify this problem by providing a system to georeference the occurrences with high quality locality data and then provide these georeferenced data back to GBIF or the original data providers. This will improve the utility of these data, making them more accessible to, for example, niche-modelling and distribution algorithms that seek geo-referenced occurrence data.</p> <p>Countries: USA, Australia Institutions: Univ. Florida, Australian Museum, Univ. Kansas, Univ Colorado</p>	Climate Change Range Changes Invasive Alien Species	46081	A geo-referencing service for the entire GBIF network that allows data providers to geo-referencing localities, and error-check existing geo-referencing based on locality information.	All major groups	-	Global



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<p><i>GBIF data content development from the Consortium of California Herbaria: Advancing the international effort to monitor and control non-native taxa</i></p> <p>When a newly introduced, non-native plant is first noticed in the United States, it usually finds its way to an herbarium for identification. Therefore, herbarium botanists, trained to identify plants from anywhere in the world, are on the front lines of the battle to prevent the establishment and spread of non-native plants. Herbarium specimens provide irrefutable, vouchered, documentation of the earliest reports of the introduction of non-native plants. Because of their verifiability, herbarium specimen data are an essential tool used to monitor the introduction, establishment, and spread of invasive, non-native taxa. The products of the proposed project will be used in the ongoing effort to document non-native California plants and the introduction and spread of alien taxa around the world.</p> <p>Countries: USA</p> <p>Institutions: University of California – Berkeley, Rancho Santa Ana Botanic Garden, California Dept. of Food & Agriculture</p>	Invasive Alien Species	42510	57,800 non-native plant specimens	Flowering plants	unspecified	California, USA
<p><i>Extracting Nomenclatural Data, Species Descriptions and Collecting Events from Legacy Publications: The Zootaxa-TaxonX-ZooBank Project</i></p> <p>This proposal seeks to develop a workflow that enables taxonomic literature, both retrospective, and currently, to be marked up in a taxonomic data schema and stored in a collective data repository for multifaceted access. The proposal will target the retrospective tagging of publications from ZooTaxa, a new online journal specializing in the publication of new species descriptions. Zootaxa has published many species of importance in biodiversity and conservation. This proposal will ensure that the data contained with the source publications is available both in the context of the original but also within other geographic, temporal, and thematic contexts.</p> <p>Countries: Switzerland, New Zealand, UK, USA</p> <p>Institutions: Landcare Research, Universität Karlsruh, Ohio State Univ. Columbia Univ. Bishop Museum, NHM London</p>	Conservation Invasive Alien Species Pollinators	50000	A workflow for processing current and historic taxonomic publications into a searchable, atomized database and web service.	Animalia	-	Global



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<p>Enhancement of GBIF as a resource for mosquito biodiversity and vector-borne disease studies</p> <p>This proposal will make available to GBIF 130,000 geo-referenced mosquito collection records, the majority with associated voucher specimens. Mosquitoes have been overlooked as indicators of biodiversity. However, groups of mosquitoes have highly specialized ecological requirements, and many of these are only found in forest habitats where immatures exploit natural water receptacles such as palm spathes, bamboo, tree holes and bromeliads (the Neotropical Anopheles subgenus Kerteszia is only found in bromeliads). Recently, mosquitoes were included in a project to measure the impact of climate change on biodiversity by the Smithsonian Institution Global Earth Observatories. Mosquitoes have overwhelming public health importance and by becoming a major data resource for mosquitoes (and someday ticks, fleas and other groups) GBIF can extend its mission in novel directions.</p> <p>Countries: USA Institutions: Smithsonian Institution</p>	<p>Invasive Species Climate Change Indicators Disease Vectors</p>	40681	130,000 specimen records	Mosquitoes	3500	Global
<p>Project to Digitize Fungal Occurrence Data from Cyrillic Alphabet Sources</p> <p>Much information about occurrence of fungi exists in the Cyrillic alphabet. Most relates to the former Soviet Union and old Warsaw Pact countries, nearly 20% of the world's land surface. Very little is digitized, less is accessible in the Latin alphabet, and the GBIF dataset currently contains little or no fungal occurrence data from those regions. This project aims to digitize at least 40,000 records of fungi (plus about 20,000 records of associated animals and plants) from Cyrillic alphabet sources (mycological publications and reference collection packet data), and to make this hitherto unavailable information accessible in the Latin alphabet freely through the GBIF portal. This project will contribute to work which the proposed participants are already carrying out on fungi and climate change, conservation of microfungi and the evaluation of 1500 ascomycetes as 2010 indicators. Significant matched funding for closely related work is already approved.</p> <p>Countries: UK, Bugaria, Ukraine Institutions: CABI Bioscience, Bugarian Acad. Sci, Kholodny Institute of Botany</p>	<p>Climate Change 2010 Indicators Conservation of Fungi</p>	34000	40,000 fungi 20,000 associated sp.	Fungi	thousands	Former USSR



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<p><i>Digitalization and release of data and images from the collections of the Instituto de Ciencias Naturales, and elaboration of data cards for the catalogue of organisms' names</i></p> <p>Colombia is one of the most diverse countries in the world and it is estimated to have the 10% of the planet diversity, despite having only 0.1% of its surface. The Instituto de Ciencias Naturales will systematize information from 128,000 specimens of cryptogams species, some pollinator species, exotic invasive species and endangered species. This project will support the country's development and have national-international relevance by providing access to multiple projects and the basis for the generation and validation of knowledge, through the projects' development. Colombia urgently needs information about its diversity. Evidence of this is the frequent use of non-native species for environmental recovery strategies or even as diversity symbols by the public. At an academic level, it is easy to find continental distribution maps that inexplicably show a discontinuity in the distribution of species that is consistent with the country's political boundaries. The social and economic impacts begin with providing an invaluable data set which could help in a decisions' making process. This information will be the basis to propose conservation strategies, environmental management plans, programs of sustainable use of species, production and marketing and, in this way to help the community and the productive sector to improve the knowledge and appropriate the resources of the country.</p> <p>Countries: Colombia Institutions: Instituto de Ciencias Naturales</p>	Conservation strategies and capacity building	40000	128,000 cryptogam specimens, 88,000 images 2,000 taxon records	Cryptogams	4000	Colombia
<p><i>Evaluation and cleaning of data on ground beetles (Insecta Coleoptera Carabidae s.l.) accessible through the GBIF Data Portal (2007)</i></p> <p>Ground beetles are ideal indicator organisms in climate change studies. Many species are invasive in nearctic and tropical regions. Over 300,000 records in the GBIF network will be reviewed for taxonomic accuracy to ensure all records are of very high quality for subsequent scientific use.</p> <p>Countries: Germany</p>	Global Climate Change Invasive Alien Species	3000	Verification/remediation of over 300,000 Carabid records	Ground beetles	35000	Global



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<p><i>Digitization and Analysis of Information Relevant for the Implementation of the Global Strategy for Plant Conservation in Central America</i></p> <p>The main objective of the proposal is to increase the quantity and quality of digital records of plants from Central America and to demonstrate its usefulness by developing an analysis and report on two critical targets of the Global Strategy for Plant Conservation (GSPC). An increase in the quantity of plant records will be achieved by digitizing 112,000 new specimen records from Guatemala, Honduras, and Costa Rica. The improvement in data quality will be achieved by applying data curation techniques on the newly generated digital data and on 160,000 digital records from two herbaria from the Mesoamerican Herbaria Network. By integrating this curated data with data from GBIF's portal and the Portal of Plants of Central America managed by INBio (a regional analysis addressing two of the targets of the Global Strategy for Plant Conservation will be prepared and distributed to regional authorities. The analysis will include target 1 ("A widely accessible working list of known plant species, as a step towards a complete world flora") and target 7 ("60 per cent of the world's threatened species conserved in situ") that are directly related to the information integrated and shared by GBIF's Portal.</p> <p>Countries: Costa Rica</p> <p>Institutions: Universidad de Costa Rica, Herbario USJ, Costa Rica; Universidad Nacional Autónoma de Honduras, Herbario TEFH, Honduras; Universidad de San Carlos de Guatemala, Herbario USCG (CECON), Guatemala; Escuela Agrícola Panamericana, Zamorano, Herbario EAP, Honduras; Proyecto Flora Mesoamericana (MOBOT, MEXU, British Museum); Regional Institute of Biodiversity (IRBIO), Honduras; Centro Zamorano de Biodiversidad, Honduras; Biodiversity Office, Ministries of the Environment of Central America</p>	GSPC Targets 1 and 7	40600	292,000 new and updated specimen records; Reports and workshops	Higher plants	22,000+	Central America (Guatemala, Honduras, Costa Rica)