

| FORMAT | | |
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| 1. Name of resource | GBIF Current Best Practices for Generalizing Sensitive Species Occurrence Data | |
| 2. Location | https://docs.gbif.org/sensitive-species-best-practices/master/en/ | |
| 3. Alternative location | https://doi.org/10.15468/doc-5jp4-5g10 | |
| 4. Author[s] | A. D. Chapman | |
| 5. Publisher/producer/host | GBIF | |
| 6. Year | 2020 | |
| 7. Suggested citation | Chapman, A. D. (2020). Current Best Practices for Generalizing Sensitive Species Occurrence Data. GBIF, available at https://docs.gbif.org/sensitive-species-best-practices/master/en/ | |
| 8. Languages in which available | English, French, Spanish (web page translates automatically) | |
| 9. Geographic area resource relates to | Global | |
| 10. Does the resource relate to a specific time frame? | | |
| 11. Type | Report | |
| | Toolkit/Framework/Roadmap | Yes |
| | Sign-post to other resource (database) | |
| | Case studies | Yes |
| | Other | |
| 12. If this is part of an initiative, what is the initiative? | | |
| COLLECTIONS AND COLLECTIONS-BASED INSTITUTIONS | | |
| 13. Explicit links to collections | Yes | |
| 14. Explicit links to museums/libraries/archives | Yes | |
| 15. Types of institutions the resource covers | Museums | X |
| | Archives | |
| | Libraries | |
| | Other | X |
| 16. Types of collections/disciplines the resource covers | Arts, humanities and social sciences: philosophy, psychology, religion, social sciences, law, politics, language, arts and | |

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| | recreation, architecture, literature, history, geography and ethnology, anthropology, archaeology | |
| | Science, natural history, technology, medicine, engineering, manufacturing | X |
| 17. If no explicit links to collections, justification for inclusion | | |

HOW IT CONTRIBUTES TO SUSTAINABLE DEVELOPMENT

18. Collections-related activities the resource relates to (mark all that apply)

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| Develop collections to protect and safeguard wider cultural and natural heritage more effectively , for example by targeting collecting to threatened forms of heritage in strategic ways | X |
| Use collections to promote learning and educational opportunities that contribute to sustainable development more effectively , for example education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development and/or skills development relating to collections | |
| Use collections to promote cultural participation/social inclusion more effectively , for example by reducing barriers to participation, to ensure no-one is 'left behind' | |
| Use collections to promote sustainable tourism more effectively , for example by developing new products based on local cultural heritage, and/or considering the rights of stakeholder groups in relation to collections | |
| Use collections to support research that contributes to sustainable development (including all forms of personal and self-directed research at all levels that make use of stored collections) more effectively, for example by providing effective facilities, collections and information to meet researchers' needs | X |
| Make decisions around collections that contribute to sustainable development more effectively | |
| i. employment (recruiting, staff training, staff safety) | |
| ii. energy consumption, greenhouse gas emissions, reduction, monitoring and reporting | |
| iii. waste management and reduction of waste | |
| iv. transport (forms of transport, energy use) | |
| v. commercial activities including copyright and IP | |
| vi. governance and management | X |
| vii. security, disaster preparedness and risk reduction | |

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| Direct external leadership, partnerships and collaborations towards sustainable development more effectively , for example by developing impactful partnerships | X |
| 19. Does the resource relate clearly to any international conventions (mark all that apply)? | |
| Culture conventions: | |
| 1952, 71 Protection of Copyright and Neighbouring Rights | |
| 1954 Protection of Cultural Property in the Event of Armed Conflict | |
| 1970 Fighting Against the Illicit Trafficking of Cultural Property | |
| 1972 Protection of the World Cultural and Natural Heritage | X |
| 2001 Protection of the Underwater Cultural Heritage | |
| 2003 Safeguarding of the Intangible Cultural Heritage | |
| 2005 Protection and Promotion of the Diversity of Cultural Expressions | |
| Rio Conventions: | |
| Convention on Biological Diversity (CBD), Convention to Combat Desertification (UNCCD), Framework Convention on Climate Change (UNFCCC) | X |
| AIMS AND CONTENT | |
| 20. What issues does the resource aim to address? | <p>“This document aims to provide best practice (or best current practice) for dealing with sensitive primary species occurrence data, and provide guidance on how to make as much data available without at the same time opening up the species to harm because data has been placed in the public domain.</p> <p>It is now more than a decade since the first Guide was published, and this new publication is designed to bring those practices up to date and to incorporate the experiences gained by institutions that have implemented the Guide in whole or in part.” (Objectives)</p> |
| 21. Intended audience of resource | <p>“This work is designed for those who need, or want to know how they can best make as much data available on sensitive taxa as possible without that published data leading to harm to the species. This document is also for individuals or organizations faced with developing a policy on dealing with sensitive primary species occurrence data and writing in-house documentation consistent with current best practice.</p> <p>Above all, this document will help end users of the data to understand the implications of trying to use records that may have been generalized to protect sensitive species, and how to understand the meaning of generalization at different precisions.” (Audience)</p> |
| 22. Process of development | <p>“The unprotected distribution of Sensitive Primary Species Occurrence Data (for example the exact localities of rare,</p> |

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| | <p>endangered or commercially valuable taxa) was a concern of GBIF – the Global Biodiversity Information Facility – from its beginning. The GBIF Secretariat has a vested interest in making data available via its portals, but at the same time respecting the wishes of data providers to restrict information on sensitive taxa. In early 2006, GBIF initiated a process to address this issue, especially in relation to data to be shared through the GBIF network and made visible through GBIF.org and other data aggregating initiatives...” (Introduction)</p> |
| <p>23. Organisation/structure/contents</p> | <ul style="list-style-type: none"> • Introduction • Objectives • Audience • Scope 1. Principles 2. Determining sensitivity 3. Generalizing textual information 4. Generalizing spatial information 5. Documentation and metadata 6. Authentication and authorization 7. Implementations • Afterword • Glossary |
| <p>FRAMEWORKS</p> | |
| <p>24. Framework structure</p> | <p>The resource identifies a set of high-level principles for the sharing of sensitive biodiversity-related data that can be considered as a framework:</p> <ol style="list-style-type: none"> 1. The management of sensitive data is integral to ethical data management. 2. Wherever possible, environmental information should be freely available to all. Generally this benefits the environment by increasing awareness, enabling better decision-making and reducing risk of damage. 3. Public release of information can sometimes result in environmental harm. In such cases availability of information may need to be controlled; although the presumption remains in favour of release and any restrictions should be assessed and reviewed rigorously. |

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| | <ol style="list-style-type: none"> 4. All data regarded as being sensitive should include a date for review of their sensitivity status, along with documented reasons for the sensitivity status. The date for review may be short or long depending on the nature of the sensitivity. 5. Whenever a data provider receives an application for enhanced access to restricted data, they should avoid assuming continued sensitivity and use it as an opportunity to revisit the determination. 6. If the data is to be restricted for distribution, then this should only be done to a copy of the data at the time of their distribution. Data should never be altered, falsified or deleted from the stored record. 7. Documentation is essential for many reasons, and where data have been restricted or generalized, it is important that the reason(s) for the categorization is recorded as metadata that remains with the record. 8. Where data is restricted or generalized for distribution (such as the name of a collector, textual locality information, etc.), this should be documented by replacing with appropriate wording – the field should not be left blank or null. 9. There are extremely strong reasons not to restrict data on related collections (e.g. collector’s numbers in sequence, collector’s name, etc.) because of the restrictions this places on data quality and data validation procedures, etc. 10. Users of sensitive data should comply with any and all restrictions of access that the data provider has placed on the data. If granted enhanced access to restricted information, users must not compromise or otherwise infringe the confidentiality of such information. 11. Data providers should respect the needs of data users to have access to data and documentation in order to determine the ‘fitness for use’ of the data and to ensure that analyses are robust and not misleading. |
| 25. Relevant policy considerations | Yes |

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| 26. Resources for implementation identified | Yes |
| 27. Specific assessment points/indicators/milestones/action plan for monitoring | Yes |
| 28. ASPECTS OF SUSTAINABILITY COVERED BY RESOURCE (mark all that apply) | |
| People (social sustainability) | |
| Planet (environmental sustainability) | X |
| Prosperity (economic sustainability) | |
| Peace | X |
| Partnerships | X |
| 29. CROSS-CUTTING CONSIDERATIONS COVERED BY RESOURCE (mark all that apply) | |
| Gender perspectives | |
| North and South perspectives | |
| HOW THE RESOURCE CONTRIBUTES TO AGENDA 2030 AND THE SDGs | |
| HOW AGENDA 2030 AND THE SDGs FEATURE IN THE RESOURCE | |
| 30. SDGs and Agenda 2030 specifically mentioned? | No |
| 31. SDGs specifically mentioned? | No |
| 32. SDG targets specifically mentioned? | No |
| 33. SDG indicators specifically mentioned? | No |
| SDGs AND SDG TARGETS AND LINKAGES | |
| 34. Comments on SDG linkages | <p>The resource can support SDG targets related to conservation of natural heritage, and effective management of biodiversity information.</p> <p>In terms of conservation of natural heritage, these include 11.4 (protection and safeguarding of cultural and natural heritage), 14.2 (conservation of marine and coastal habitats), 15.1 (sustainable use of nature) and 15.5 (reversing habitat destruction and extinctions), 15.7 (reducing supply and demand for trafficked wildlife) and 15.C (strengthen global efforts to combat poaching and trafficking of protected species).</p> |

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| | <p>In terms of effective management of information, these include 9.5 (support scientific research), 16.6 (effective, accountable and transparent institutions) and 16.10 (protect the right to information and fundamental freedoms), and 17.16 (global partnerships, including sharing of information).</p> |
| <p>35. SDGs and SDG targets the resource helps advance</p> | |
| <p>SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization 9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending</p> | <p>Number and proportion of collections facilities that effectively support research and researchers.</p> <p>Number and proportion of staff who are appropriately skilled to undertake and support collections-based research.</p> <p>Expenditure on initiatives to enhance and upgrade collections facilities.</p> <p>Numbers of staff engaged in supporting and developing research use based on collections.</p> <p>Number of initiatives to encourage innovation drawing on collections.</p> <p>Increase in number of research and development workers per 1 million people.</p> <p>Increase in public and private research and development spending being used to develop and make use of collections.</p> |
| <p>SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable 11.4 Strengthen efforts to protect and safeguard the world’s cultural and natural heritage</p> | <p><i>11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage</i></p> <p>Plans, policies and procedures in place for the safe use of collections for a variety of purposes, protecting and safeguarding both collections and those who use them.</p> <p>Plans, policies and procedures in place for the identification, safeguarding and protection of cultural and natural heritage at risk.</p> <p>Collecting programmes in place to protect, safeguard and make use of cultural and natural heritage, addressing the needs of communities and stakeholders, and ensuring that</p> |

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| | <p>collections can be an effective resource for sustainable development.</p> <p>Number and diversity of educational, awareness-raising, research programmes, and partnerships that aim to strengthen protection of cultural and natural heritage.</p> |
| <p>SDG 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development 14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans</p> | <p>Proportion of marine and coastal areas in a good ecological condition</p> <p>Numbers of educational and awareness-raising programmes, research activities, and partnerships drawing on collections aiming to support protection of marine and coastal areas.</p> |
| <p>SDG 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</p> | <p>Proportion of terrestrial and inland freshwater systems in a good ecological condition.</p> <p>Information on, programmes relating to, collections development, and partnerships relating to terrestrial and freshwater systems drawing on collections in place, to support their protection and effective functioning.</p> |
| <p>SDG 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt</p> | <p>Number and proportion of habitats, notably endangered habitats, and species with favourable conservation status, with special reference to locally, nationally and globally endangered species.</p> |

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| <p>and reverse land degradation and halt biodiversity loss 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</p> | <p>Information on, programmes relating to, collections development, and partnerships relating to habitats and species drawing on collections in place, to support their protection and continued existence.</p> <p>Measures taken to enhance biodiversity value of green space associated with collections institutions.</p> |
| <p>SDG 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss 15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products</p> | <p>Policies and plans in place to ensure objects and specimens of protected species (for example ivory, rhino horn) in collections are protected against theft and do not enter supply chains.</p> <p>Policies and plans in place to ensure that objects and specimens are only acquired in line with national and international legislation, or with legal dispensation.</p> <p>Information on, programmes relating to, collections development, and partnerships relating to poached and trafficked species, notably protected and endangered species, to end poaching and trafficking.</p> |
| <p>SDG 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss 15.C Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities</p> | <p>Policies and plans in place to ensure objects and specimens of protected species (for example ivory, rhino horn) in collections are protected against theft and do not enter supply chains.</p> <p>Policies and plans in place to ensure that objects and specimens are only acquired in line with national and international legislation, or with legal dispensation.</p> <p>Revenue generated to combat poaching and trafficking of protected species, and to support local communities to pursue sustainable livelihoods.</p> <p>Direct financial support given to projects and organisations to combat poaching and trafficking of protected species, and to support local communities to pursue sustainable livelihoods.</p> |

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| <p>SDG 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p> <p>16.6 Develop effective, accountable and transparent institutions at all levels</p> | <p>16.6.2 Proportion of the population [audience/users/non-users] satisfied with their last experience of public services</p> <p>Access to information, and accountability policies and mechanisms, in place.</p> <p>Effective institutional arrangements, both for own working and for working in partnership with other sectors, in place.</p> <p>Plans and arrangements in place for extraordinary circumstances such as natural and human-caused disasters.</p> <p>Effective arrangements in place to fulfil legal and social obligations and responsibilities.</p> <p>Effective arrangements in place for transparent communication and reporting of institutional performance.</p> <p>Effective arrangements in place for transparent decision-making and accountability.</p> |
| <p>SDG 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p> <p>16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements</p> | <p>Adopt and implement constitutional, statutory and/or policy guarantees for public access to information.</p> <p>Plans in place, and plans implemented to enhance public access to information relating to collections.</p> <p>Plans in place, and plans implemented to support fundamental freedoms, in line with human rights, national and international agreements and legislation.</p> <p>Plans and procedures in place for public access to information relating to the operation and management of collections-based institutions.</p> <p>Complaint mechanism in place for public to use where public access to information and fundamental freedoms not supported or fulfilled.</p> |
| <p>SDG 17. Partnerships for the goals</p> <p>17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share</p> | <p>Number and/or increase in number, and diversity of global and international multi-stakeholder partnerships that share collection-related knowledge, expertise, technology and financial resources to address the SDGs, or that otherwise involve collections-based organisations and institutions.</p> |

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| knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries | | Number and/or increase in number, and diversity of global and international multi-stakeholder partnerships involving developing countries that share collection-related knowledge, expertise, technology and financial resources to address the SDGs. | | | |
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| 13 | 14 | 15 | 16 | 17 | |