

1. PROJECT TITLE: Strengthening the Conservation Evidence Base for Great Apes

PROJECT SUMMARY

State of the World's Great Apes (SOWA) is a program that combines science, education and outreach, to guide policy and action to reverse the decline of the world's great apes. Central to the program is the International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) A.P.E.S. (Ape Populations, Environments and Surveys) database, the most comprehensive information source on the global status of great apes. SOWA relies on the A.P.E.S. database for the long-term monitoring of great ape populations and assessing conservation effectiveness. Through the maintenance, expansion, and analyses of data in the A.P.E.S. database, the ultimate goal of SOWA is to present compelling evidence for necessary policy changes, shifts in focus of conservation action on the ground, and increased funding to targeted areas.

PROJECT NARRATIVE

2. Statement of Need

The A.P.E.S. project was initiated in 2005 to address the need for a central platform that provides key status information on, for example, spatial distribution, population trends and threats, to monitor great ape populations at various scales, and to make this an accessible resource to the great ape conservation community. In response, the Arcus and World We Want Foundations supported a collaborative effort by the Max Planck Institute for Evolutionary Anthropology, United Nations Great Ape Survival Partnership (GRASP), United Nations Environment Programme World Conservation Monitoring Centre (UNEP/WCMC), IUCN SSC Primate Specialist Group and the Jane Goodall Institute to develop the IUCN SSC A.P.E.S. database.

By the end of 2022, the database contained geo-referenced survey data from 457 sites for all 14 great ape taxa, covering 22 of the 23 range countries, and housed 730 standardized and quality-checked datasets consisting of more than 1.5 million data points on great apes and other sympatric species. Data archived in the A.P.E.S. database are primarily raw field survey data (e.g. nests, footprints, signs of illegal activities) received from conservation organizations, governmental organizations, universities, individuals and local communities. These data are requested by the A.P.E.S. Database Team, processed, formatted and archived in the database using a standard data template (see appendix I). The database also stores information on abundance, population density, population trends, and spatial distributions (see 2022 report here). Data received from contributors are free of charge. However, stored data remains the property of the data owners and their permission is decisive to share their data with any interested third parties.

The A.P.E.S. database is an initiative of the Section on Great Apes (SGA) of the IUCN SSC Primate Specialist Group. Composed of the world's leading great ape specialists, the SGA's mission is to advance great ape conservation efforts based on the best-available science and technical information. The SGA facilitates the exchange of critical information, provides guidelines for research and conservation, produces regional and taxon-specific action plans, and advises on effective strategies for the protection of great ape populations. The IUCN SSC A.P.E.S. database has fostered collaborations among individuals, conservation projects, universities and research institutions worldwide, who have contributed data and facilitated the implementation of various large-scale studies on the status of great apes. Over the last 18 years, the A.P.E.S. database has grown immensely in value by amassing a wealth of data used to produce indispensable materials. For example, maps and analyses for the *Regional action plan for the conservation of western chimpanzees (Pan troglodytes verus) 2020–2030* (IUCN

SSC Primate Specialist Group 2020). New knowledge on the density, distribution and population connectivity of the subspecies has helped guide field initiatives (e.g., identification of survey gaps and priority areas for great apes), define conservation priorities (e.g., Junker et al. 2015), and evaluate the potential impacts of development projects (e.g., Andradi et al. 2021). Thanks to the A.P.E.S. database, more than 20 spatial layers on the distribution, density and abundance of African and Asian great apes have been developed. These layers are fundamental for a variety of analyses, from estimating population trends and identifying key population drivers, to the evaluation of future land-use and climate change scenarios. For example, using 300 survey datasets archived in the A.P.E.S. database, Carvalho et al. (2021) predicted that under future climate change scenarios, the range of African great apes may face up to a 90% reduction. The A.P.E.S. database has been critical in underpinning policy decisions, such as the uplisting of the western chimpanzee to Critically Endangered status in the IUCN Red List of Threatened Species. Such large-scale analyses incorporating multiple datasets across the range of a taxonomic group make it possible to provide more accurate status and trend estimates and conservation recommendations.

The [A.P.E.S. wiki](#) is part of the A.P.E.S. database and provides complementary information on ape surveys, threats, and conservation activities. The A.P.E.S. wiki compiles information on all sites (e.g., protected areas, survey sites, mining and logging concessions, and conservation landscapes) where apes are present, or have been present in the recent past. The A.P.E.S. wiki is an open-access platform and the first of its kind, amalgamating information on ape status from published and unpublished sources. It may serve as a model for other taxon groups. The wiki aims to provide access to up-to-date information and data, and to act as a collaboration tool for conservation practitioners, scientists and other stakeholders. The A.P.E.S. wiki also aims to support evidence-based conservation by centralizing the information and data needed for evidence-based decision-making. Using a web scraping approach, the standardized information can be easily extracted and used to conduct important assessments (e.g., effectiveness of conservation measures, distribution and magnitude of threats) at national, regional and taxon-wide levels (Heinicke et al. 2020).

Another initiative of the SGA, the ARRC (Avoid, Reduce, Restore, Conserve) Task Force, was created in 2016 to address the growing footprint of energy, extractive, and associated infrastructure projects in great ape habitat. In 2019, the World Bank's International Finance Corporation changed its lending guidance to require all projects seeking loans that have the potential to impact great apes to consult with the SGA for guidance on avoiding and/or mitigating their impacts. Since that time, the Task Force has engaged with 16 companies and increased awareness and technical knowledge on key threats to apes from energy and extractive projects. Through the ARRC Task Force, an enormous amount of data on the extent and scope of energy and extractive projects has been obtained, and this will be integrated into State of the World's Apes. Furthermore, SOWA will provide critical information for key audiences that the ARRC Task Force engages with, including lending banks, private industry, and government agencies to better understand the impacts of their activities on great ape populations not only locally but also the cumulative impacts, nationally and even globally.

Since 2018, the A.P.E.S. project has been supported by the Arcus Foundation, but this funding comes to an end in 2023 and the database will need new funding resources to continue functioning. The A.P.E.S. database is hosted on the website of the IUCN SSC PSG Section on Great Apes as part of the SOWA initiative. What is needed now is to update and expand the scope of the baseline of great ape data, conduct new and cutting-edge analyses of these data, and articulate results in visually captivating ways. These results will then feed back to conservationists working on the ground, as well as policy makers, governments of great ape range states, the private sector, the banks that fund private sector and development projects operating in ape habitat, potential donors, and the public. The ultimate goal of the SOWA initiative is to harness the power of these global analyses to create a multi-faceted approach, synthesis, improved flow of information and tailored campaigns to convey messages to influential

decision makers, and as a result, build a robust framework for the protection of our closest living relatives on earth, the great apes.

Anticipated benefits and outcomes

The anticipated benefits and outcomes of this project are:

- Increased awareness of remote responsibility by governments, private sector companies and the public for the impacts on great apes caused by consumption patterns and global supply chains.
- Governments, conservation organizations, and development institutions are adopting better practices to reduce habitat loss, and improve conservation activities to ensure the survival of great ape populations worldwide.
- Availability of multi-scale information on great ape conservation status, threats and conservation activities providing better information to inform policy and management decisions.
- Increased knowledge and capacity of all stakeholders to effectively conserve great ape populations.
- Increased avoidance of great ape habitat by lending banks, governments, extractive industries, and other private sector companies for selecting the location of future projects.
- Reduced impact and increased sustainability of human activities in great ape habitat.
- More effective use of conservation funding by donors to conserve apes due to the availability of better information to base decisions upon.
- Increased success of new conservation projects and initiatives as a result of better understanding on what activities and scenarios are most effective in conserving great apes and their habitat.

3. Project Goals, Objectives, Activities and Methods

The overarching goal of this project is to improve the survival prospects of great apes by developing products based on large-scale or global analyses that effectively communicate evidence-based great ape conservation approaches to government decision makers, conservation practitioners, donors and the private sector.

The objectives of this project are to:

- 1) Maintain a comprehensive, centralized, and regularly updated database on relevant metrics of great ape populations that is available to a broad range of key stakeholders and the public.
- 2) Increase capacity to inform effectiveness of great ape conservation interventions through accessible and evidence-driven approaches.
- 3) Produce a bi-annual publication called State of the World's Great Apes to communicate the distribution, status, and trends impacting great apes coupled with an issue-oriented policy brief to provide targeted recommendations for improved evidence-based conservation aimed at relevant audiences.

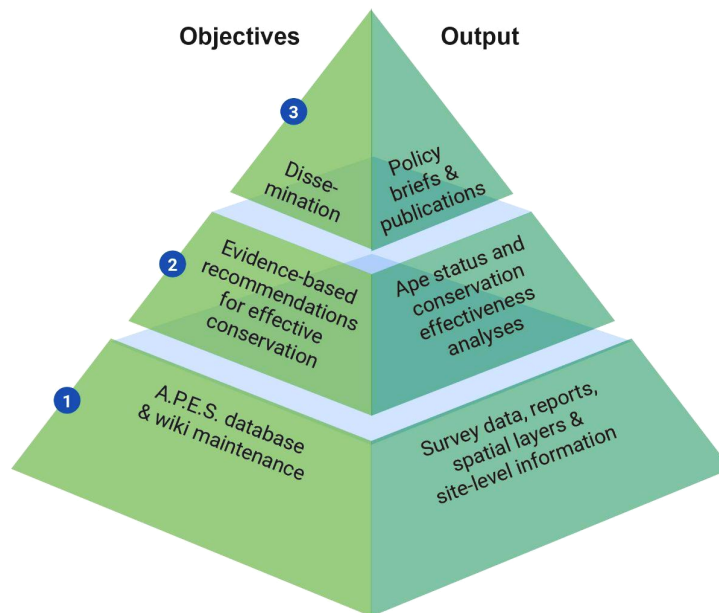


Figure 1. Objectives of the SOWA and their corresponding outputs. The maintenance and expansion of the A.P.E.S. database are the foundation for large-scale analyses, which in turn lead to the publication of scientific articles, policy briefs and SOWA reports.

The following activities will be implemented to achieve each of the objectives:

Objective 1. Maintain a comprehensive, centralized, and regularly updated database on relevant metrics of great ape populations, which is available to a broad range of key stakeholders.

Activity 1.1; Database maintenance & growth: Secure the continued growth and operation of the IUCN SSC A.P.E.S. database with identification, acquisition, processing, standardization, quality-checking, and archiving of field survey data provided by the great ape community. Activities include identifying and requesting field survey data and associated reports from owning institutions, individuals, industries and private sectors, and archiving them in the database. This includes traveling to meetings and congresses to promote the A.P.E.S. database, engaging with data owners, and mobilizing new data collection.

Activity 1.2; Acquisition of novel datasets: Incorporate new data types, such as camera trap and aerial survey data, which are increasingly used to monitor great apes. Recent advances in monitoring wildlife have led to the development of new survey techniques using various types of recording devices. These approaches result in large amounts of data that need to be stored and adequately processed. We will make use of existing AI approaches for processing and transcription of visual data into tabular format (e.g., ZambaCloud www.zambacloud.com). We will also compile all currently available information on ape diseases in a GIS point vector layer (if spatial information cannot always be assigned to point localities, it will be complemented by a polygon layer). This layer will provide all available data on great ape diseases in a spatially explicit format, which can be integrated into models of great ape status, such as density distribution or occurrence models. It will be made available through the A.P.E.S. database.

Activity 1.3: Incorporation of gibbon data: Continue and speed up the incorporation of survey data on gibbons (20 taxa) into the A.P.E.S. database and develop, in collaboration with the PSG Section on Small Apes (SSA), a standardized and comprehensive template, similar to that for great apes, for incorporating and archiving these data into the A.P.E.S. database.

Activity 1.4: Services to the great ape community and public: Provide services to the great ape community and to the public. These services include sharing raw survey data from the archives, spatial layers, abundance maps, and reports with interested users; creating secondary products such as great ape density, great-ape-populations-at-risk and suitable habitat layers; stimulating networks and collaborations; answering queries from the press and general public, and responding to data and information requests from the great ape community and other stakeholders.

Activity 1.5: Trend analyses: Support updates to the IUCN Red List by conducting population trend analyses based on systematic time series survey data from the A.P.E.S. database. These analyses involve identifying and selecting for each taxon all sites that have been surveyed repetitively and systematically across their range. Using the approach developed by Kühl et al. (2017), we will aim to determine the rate of population change for each taxon.

Activity 1.6: Expansion of A.P.E.S. wiki: Expand the A.P.E.S. wiki to include the majority of great ape sites (a minimum of 600 sites will be reached; the current total in April 2023 is 250 sites), and regularly update information for the available sites to maintain an up-to-date and comprehensive platform. Existing pages will be updated by including new information on threats, conservation activities and ape surveys, thereby storing time-series information on the platform. This includes updating and extending information on diseases as part of the standardized table in the threats subsection (example here). In case additional information on diseases makes the content of the threats table too difficult to access, we will create a separate section with a specific table on diseases. Information on new sites will be collected using an online form and online meetings, such as an “A.P.E.S. Wiki Day”, during which the SGA network will jointly work on updates, as well as in-person meetings, conferences and workshops.

Objective 2. Increase effectiveness of great ape conservation interventions through accessible and evidence-driven tools. This objective builds upon Objective 1 by using data in the A.P.E.S. database and A.P.E.S. wiki to analyze the effectiveness of various conservation strategies. For activities 2.1 and 2.2 we will centralize information already compiled in the A.P.E.S. wiki (e.g. information on threats and conservation interventions) with additional information that is currently unavailable, such as information on funding and funding gaps, attitudes of the local population towards great apes, and the general socio-economic context of the local population. Data gaps will be identified during the co-development process with USFWS and may involve additional experts (SGA members and social scientists as needed) to ensure completeness and quality. The A.P.E.S. database will also pilot a Decision Support Tool to help inform conservation funding decisions. This tool, informed by the [Return on Investment](#) tool for elephants and similar resources, will aim to assist conservation implementing groups, government authorities, and funding organizations to target and prioritize sites for conservation effort, and to evaluate the impact of decreasing or increasing investments on great ape populations.

Activity 2.1: Assessment of evidence: Assess the evidence of effectiveness for conservation interventions and projects for a selected set of sites. The number of sites selected will depend upon the number of sites available in the A.P.E.S. wiki (currently 214 African great ape sites). By the time we carry out this activity the expected sample size for this analysis will be a minimum of 250 sites. These analyses will take into account differences in socioeconomic, political and geographical contexts, and combine qualitative (expert-based inputs) and quantitative (statistical models) approaches.

Activity 2.2: Assess socio-political conditions: Assess funding, management, political will and capacity to achieve effective great ape conservation for a selected set of sites both inside and outside protected

areas. As in Activity 2.1, we will centralize information, seeking to fill in gaps as needed, to estimate the levels of funding needed to protect great apes and close funding gaps, and to improve the effectiveness of conservation interventions.

Activity 2.3; Conservation scenario modeling: Define three alternative scenarios for future great ape conservation based on activities 2.1 and 2.2. The three scenarios are 1) business as usual, 2) improved conservation (including, e.g., disease control, adequate resourcing), and 3) improved conservation with more sustainable production and consumption of resources to reduce the pressure on ape habitat. More sustainable consumption of natural resources means, for example, reduced use of timber products, and reduced food waste and consumption of meat. More sustainable production includes, reduction of soil erosion and soil protection, reduced use of water, reduced pollution (e.g. from pesticides, fertilizer), integrated farming practices (agroforestry) or wood production in natural forests. This scenario-based modeling will help identify the actions that need to be taken to bend the curve, that is, to reverse the decline of great apes. With this approach we can predict, for example, the increase in great ape populations occurring within gradients of hunting along roads and in mining concessions, if improved conservation takes place.

Activity 2.4; Development of decision-support tool: Develop a pilot *Decision Support Tool* to improve conservation effectiveness. First, we will use the available sites in the A.P.E.S. Wiki as well as available population estimates from the A.P.E.S. database, and compile management, socioeconomic and investment data for those sites; second, we will develop a model to predict rates of population change according to the influence of important socioeconomic and environmental factors; and third, develop the pilot tool using R, with which we will be able to identify the impacts of investments on great ape populations. The Decision Support Tool will aggregate all the socioeconomic, ecological and population status information and the user will be able to filter sites according to predefined conditions; e.g. low risk of mining, low risk of climate change impact or population size larger than 1000 individuals. Based on this aggregated information and filtered set of sites, the tool will aim to inform funding decisions or conservation strategies by government wildlife authorities, and implementing and funding organizations.

Activity 2.5; IUCN Green Status Assessment: Complete IUCN Green Status of Species assessments for all great ape taxa. Specifically, Green Status assessments comprise: 1) determining the taxon's range and delineating its spatial subdivisions, 2) quantifying the ecological functionality of each subpopulation, 3) assessing subpopulation viability, and 4) evaluating the impacts of past conservation efforts on current population status, and estimating future population changes for different conservation activity scenarios.

Objective 3. Produce a bi-annual (every 2 years) publication called State of the World's Great Apes to communicate the distribution, status and trends impacting great apes, coupled with an issue-oriented policy brief to provide targeted recommendations aimed at relevant audiences to address a key threat to great apes. This publication will be produced bi-annually and feature three main sections (see activities 3.1 to 3.3) and a policy brief (activity 3.4) for each issue.

Activity 3.1; Population status synthesis: Produce a summary of conservation status covering population, taxon and country-level information on great ape conservation status.

Activity 3.2; Conservation evidence synthesis: Produce a summary on what works in great ape conservation (based on activity 2.1); present qualitative and quantitative evidence for the effectiveness of interventions, projects and policies.

Activity 3.3; Bending the curve: Produce a summary of three conservation scenarios for great apes and corresponding gap analyses based on activities 2.2 and 2.3. This key summary will lay out solutions that together can bend the curve of great ape population declines.

Activity 3.4: Policy brief on a key threat to great apes: Produce a policy brief on a key threat faced by great apes and disseminate to key audiences. The policy brief will take an in-depth look at a particular sector or resource having an impact on great ape populations and provide recommendations on how to reduce or eliminate this threat. Examples of potential sectors or resources include cobalt mining, bauxite mining and hydroelectric projects, which would be developed in partnership with the ARRC Task Force.

4. Project Timetable

The project timeline is attached.

5. Stakeholder Involvement

The products of this cooperative agreement will be reviewed, developed, and used by members of the Sections on Great Apes and Small Apes and US Fish and Wildlife Service’s international conservation specialists. Furthermore, we will disseminate the products and information developed to all relevant stakeholders and decision makers to promote the widespread adoption of new information and practices to improve ape conservation globally.

6. Project monitoring and evaluation

Monitoring and evaluation of the SOWA initiative will be conducted by a SOWA steering committee.

| Objective | Indicator <i>(i.e., what you will measure to track your progress toward achieving the objective)</i> | Monitoring Method <i>(i.e., how you will measure the indicator)</i> | Current Status <i>(if known)</i> | Desired Status |
|---|--|---|--|---|
| <i>Objective 1. Maintain a comprehensive, centralized, and regularly updated database on relevant metrics of great ape populations, which is available to a broad range of key stakeholders.</i> | | | | |
| 1.1 | Number of datasets and sites in A.P.E.S. database and wiki | Mobilization and storage of at least 80 datasets per year | 730 datasets | Reach a total of > 1,200 ape survey datasets in the next five years |

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| 1.2 | Number of camera trap datasets | Identify, request, process and store at least 60 camera trap survey datasets | Camera trap (CT) datasets currently in the A.P.E.S. database are archived as presence/absence data | Create a CT data repository and a formal data template and pipeline to extract all pertinent variables from CT datasets |
| 1.3 | A comprehensive data template for formatting gibbon survey data is available and operational | Gibbon datasets are effectively archived and explicitly visible on the A.P.E.S. Portal | A few datasets received in the past years are stored on the server, but they are not yet formatted | All gibbon datasets received from data owners are immediately formatted using the newly created template |
| 1.4 | We expect that the A.P.E.S. Portal mirroring/reflecting the data and products of the A.P.E.S. database will increase public attention on the A.P.E.S. database and its data/products | Number of data/service requests received | The mean number of requests for data/information received per year totals 40 | 50 to 60 requests for data/services/products per year within the funding period |
| 1.5 | Conduct trend analyses to determine the rate of population change for at least 50% of great ape taxa for which suitable datasets are available | Number of taxa for which trend analyses are applicable | The A.P.E.S. database supported the 2016-2017 Red Listing by providing statistical studies for two taxa: the western chimpanzee and the bonobo | Based on available future data expected during the funding period, we anticipate that the A.P.E.S. database will conduct trend analyses for at least 50% of great ape taxa |

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| 1.6 | Total number of datasets and sites in A.P.E.S. database and wiki | The number of new and updated sites published on the A.P.E.S. wiki platform | As of April 2023, the A.P.E.S. wiki platform currently hosts 250 ape sites | The desired situation is that the A.P.E.S. wiki platform provides information for the majority of sites where great apes are, or have been, present |
| Objective | Indicator <i>(i.e., what you will measure to track your progress toward achieving the objective)</i> | Monitoring Method <i>(i.e., how you will measure the indicator)</i> | Current Status <i>(if known)</i> | Desired Status |
| Objective 2. Increase effectiveness of great ape conservation interventions through accessible and evidence-driven tools | | | | |
| 2.1 | Knowledge of the effectiveness of interventions in ape habitat | Improved knowledge of effectiveness of conservation interventions in ape habitats | Limited knowledge; less than 1% of primate studies have investigated conservation effectiveness (Junker et al. 2020) | Sound information is available on which interventions are effective for ape conservation |
| 2.2 | Areas/landscapes/sites in ape habitats lacking/needing funding to achieve conservation goals are identified | A set of areas/landscapes/sites in ape habitats lacking/needing funding to achieve key/priority ape populations are listed | These areas are currently unknown | Estimates of the levels of funding needed to effectively ensure the protection of key ape populations are available to donors and decision-makers |
| 2.3 | Various scenarios for future ape conservation are described in a policy brief | Publication of a Policy brief to increase attention of donors around the scenarios identified | Currently nonexistent | Increase attention of donors on impact of funding/gaps on key ape populations |

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|--|--|---|--|---|
| 2.4 | Development of a Decision Support Tool (DST) to assess conservation effectiveness in ape habitats | Effective functioning of the DST for assessment of effectiveness of conservation interventions | Nonexistence of a DST | Availability of an open access online tool that enables the assessment of impact of funding and other socioeconomic factors on ape conservation |
| 2.5 | IUCN Green Status of Species for all great ape taxa is known | IUCN Green Status assessments for all great ape taxa are published | The IUCN Green Status Assessment has not been conducted yet | IUCN Green Status for all great ape taxa is assessed and published |
| Objective | Indicator <i>(i.e., what you will measure to track your progress toward achieving the objective)</i> | Monitoring Method <i>(i.e., how you will measure the indicator)</i> | Current Status <i>(if known)</i> | Desired Status |
| Objective 3. Produce a bi-annual (every 2 years) publication called State of the World's Great Apes | | | | |
| 3.1 | Compilation of information on conservation status of great apes at taxon and country levels | SOWA report is published at 2 year intervals, including conservation status of great ape taxa and their population abundances at site level | Arcus Foundation has been publishing the State of the Apes, focusing on the threats facing great apes and gibbons | An online publication on the threats facing great apes and gibbons and updated at 2 year intervals |
| 3.2 | A study is prepared analyzing the effectiveness of various activities implemented for ape conservation | A chapter is published in the SOWA report promoting interventions that work in ape conservation | Junker et al. (2020) pointed out that lack of evidence on the effectiveness of implemented activities jeopardizes effective conservation | The effectiveness of all interventions for ape conservation, is scientifically proven or evidence-based |

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| 3.3 | Development of various possible scenarios for ape conservation | Publication of the various scenarios identified in the SOWA | Currently nonexistent | Step out of the 'Business as Usual' scenario and move towards a scenario of bending the curve of ape declines |
| 3.4 | Development of policy brief on key issues affecting ape conservation | Number of policy briefs published to provide targets for improved evidence-based conservation | Unknown | Publication of policy brief on urgent issues affecting ape conservation to provide recommendations to targeted audiences |

7. Description of Entities Undertaking the Project

The International Union for Conservation of Nature (IUCN) is an international organization working in the field of nature conservation and sustainable use of natural resources. The Species Survival Commission (SSC) is an IUCN science-based network of more than 10,500 volunteer experts from almost every country of the world, all working together towards achieving the vision of, "A just world that values and conserves nature through positive action to reduce the loss of diversity of life on earth". The SSC Primate Specialist Group (PSG) is a network of scientists and conservationists who stand against the tide of extinction which threatens humanity's closest kin. In 2004, the PSG created its [Section on Great Apes \(SGA\)](#) to help researchers and conservationists understand the issues affecting great apes. Comprising the world's leading great ape specialists, the SGA facilitates the exchange of critical information, provides guidelines for research and conservation, produces regional and species action plans, and advises on effective conservation strategies.

The Ape Populations, Environments and Surveys (A.P.E.S.) project was initiated in 2005 as a joint effort between the SGA and the Max Planck Institute for Evolutionary Anthropology. The first two years of the project were focused on the compilation of great ape population data and the development of a data access and release policy. In 2007, the A.P.E.S. project was combined with an initiative by the United Nations Environment Programme World Conservation Monitoring Centre (UNEP WCMC, Cambridge, UK), the Arcus Foundation and the Jane Goodall Institute, and has evolved into the current platform. Previously hosted by the Max Planck Institute for Evolutionary Anthropology, the website and database are to be transitioned to being hosted by the financial sponsor of the SGA, Re:wild.

One of the main goals of the A.P.E.S. project is to overcome a lack of resources and difficulties in accessing both published and unpublished data from great ape studies by creating a comprehensive and open database of knowledge about great ape distribution throughout their range in order to guide management and funding decisions needed for their conservation. This project is a collaborative effort

to which many organizations, governments, and individuals have contributed in terms of data, funding, scientific and technical expertise, consultation and time and effort.

Re:wild is a non-profit organization that protects endangered species and habitats through science-based field action by partnering with and bringing together non-governmental organizations, governments, companies, indigenous peoples, local communities, influential leaders and the public to restore and rewild at scale to address the interconnected climate, biodiversity, and human health crises. Re:wild launched in 2021, combining more than three decades of conservation impact by Leonardo DiCaprio and Global Wildlife Conservation, whose vital work has protected and conserved over 12 million acres, benefitting more than 16,000 species in the world's most irreplaceable places for biodiversity. Re:wild hosts the PSG and is the fiscal sponsor of the SGA. All grants and financial contributions for the SGA are thus managed by Re:wild.

8. Sustainability

SOWA is a long-term project and we expect all activities related to the A.P.E.S. database and the A.P.E.S. wiki to continue beyond the funding period, such as the maintenance of the database, which is fundamental and ongoing since 2005. The A.P.E.S. database and A.P.E.S. wiki will continue to be essential resources for conservation research and ape population status assessments. The Service funding period will contribute to the long-term sustainability of these platforms, as their value and usefulness continue to grow with the compilation of new data over time.

The role of the Section on Great Apes (SGA) of the IUCN SSC Primate Specialist Group has been essential in the establishment and maintenance of the A.P.E.S. project. Activities of the SGA are long term and rely on the A.P.E.S. database and wiki to a great extent. Inclusion of gibbon datasets in the IUCN A.P.E.S. database will continue and strengthen the collaboration between the SGA and the Section on Small Apes (SSA).

The sustainability of the project will also be secured through the implementation of AI approaches for processing and integrating new data into the A.P.E.S. database, thereby reducing the workload required. Furthermore, new data will be requested as part of the funding agreements with future funders of the SOWA.

9. Budget

10. Literature Cited

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Junker, J., Petrovan, S. O., Arroyo-Rodríguez, V., Boonratana, R., Byler, D., Chapman, C. A., ... & Kuehl, H. S. (2020). A severe lack of evidence limits effective conservation of the world's primates. *BioScience* 70: 794–803.

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11. Governmental Endorsement

Please see the letter of endorsement following the narrative proposal.

12. Indirect Costs Information and Statement

We are an organization that does not have a current negotiated (including provisional) rate. In the event an award is made, we elect to charge the de minimis rate of 10% of Modified Total Direct Costs as defined in 2 CFR §200.1. We understand we must use this methodology consistently for all Federal awards until such time as we negotiate a different rate with our cognizant agency. We understand that we must notify the Service in writing if during the award period we establish a rate that changes the methodology used to charge indirect costs to the award. We understand that additional Federal funds may not be available to support an unexpected increase in indirect costs and that such changes are subject to review, negotiation, and prior approval by the Service.

13. Uniform Audit Reporting Statement – Not applicable.

14. Conflict of Interest Disclosure – Not applicable

15. Disclosure of Lobbying Activities – Not applicable.

16. Overlap or Duplication of Effort Statement

Applicants must provide a statement indicating if there is any overlap between this Federal application and any other Federal application, or funded project, in regard to activities, costs, or time commitment of key personnel.

There are no overlaps or duplications between this application and any of our other Federal applications or funded projects, including in regard to activities, costs, or time commitment of key personnel.