



Species

ISSUE 63

2022 Report of the IUCN Species Survival Commission and Secretariat



The IUCN Species Survival Commission (SSC)

The IUCN Species Survival Commission (SSC) is a science-based network of thousands of volunteer experts from almost every country of the world, all working together toward achieving the vision of “a just world that values and conserves nature through positive action to both prevent the loss and aid recovery of the diversity of life on earth.”

Members of SSC belong to one or more of near 200 Specialist Groups, Red List Authorities, Action Partnerships, Task Forces, and Conservation Committees that make up the Network, each focusing on a taxonomic group (plants, fungi, mammals, birds, reptiles, amphibians, fishes, and invertebrates), national species, or a disciplinary issue, such as sustainable use and livelihoods, translocation of species, wildlife health, climate change, and conservation planning.

Framed by the Species Conservation Cycle, SSC’s major role is to provide information to IUCN on biodiversity conservation, the inherent value of species, their role in ecosystem health and functioning, the provision of ecosystem services, and their support to human livelihoods. This information is fed into the IUCN Red List of Threatened Species.

2021-2025 Species Strategic Plan

The IUCN Species Strategic Plan encompasses the joint work of the IUCN Species Survival Commission and a number of partnerships to achieve more than 2,700 targets proposed by the Network during the 2021-2025 quadrennium.

To accomplish those targets, the Species Conservation Cycle was established, which is the conceptual framework for the Network activities. The Species Conservation Cycle’s main purpose is to guide efforts for valuing and conserving biodiversity through three essential components that are linked to each other:

ASSESS: Understand and inform the world about the status and trends of biodiversity.

PLAN: Develop collaborative, inclusive and science-based conservation strategies, plans and policies.

ACT: Convene and mobilise conservation actions to improve the status of biodiversity.



Their implementation requires two transversal components:

NETWORK: Enhance and support our immediate network and alliances to achieve our biodiversity targets.

COMMUNICATE: Drive strategic and targeted communications to enhance our conservation impact.

SSC Species Report

Annual progress in the implementation of the 2021-2025 Species Strategic Plan is documented in the SSC *Species Report*, which consists of a comprehensive description and analysis of the activities and results generated by the members of the SSC Network each year. Each SSC Group contributes to this document by providing a yearly summarised description of their achievements, which is presented in stand-alone reports.

Structure of the IUCN SSC Stand-alone Report

Stand-alone reports summarize the activities conducted and results generated by each group member of the SSC. Following, is the structure of the stand-alone report and the contents under each session.

Title of the SSC Group

Photograph(s) of the Chair / Co-Chairs

Group information

Includes names of Chair / Co-Chairs, Vice-Chairs, Deputy Chairs, Red List Authority Coordinators and Program Officers, their institutional affiliations, number of members and social networks currently active.

Logo of the SSC Group

Mission statement

Includes the mission of the group.

Projected impact for the 2021-2025 quadrennium

Includes the description of the impact on species conservation resulting from the implementation of the targets formulated by the group for the 2021-2025 quadrennium.

Targets for the 2021-2025 quadrennium

Includes the targets planned by the SSC Group for the 2021-2025 quadrennium ordered alphabetically by component of the Species Conservation Cycle. Each target is labeled with a numerical code (e.g., T-001, T-012) that identifies it in the SSC DATA database and its status for the reported year is indicated (Not initiated, On track or Achieved).

Activities and results

Includes the targets for which activities were conducted and results were generated during the reported year, ordered alphabetically, first by component of the Species Conservation Cycle, and second by Activity Category. Description of activities and results includes the indicator that best describes progress, its associated quantitative or qualitative result, and the narrative description of the activity conducted or result obtained. Each activity or result reported is linked to the Key Species Result to which it is mainly associated (e.g., KSR#1, KSR#5).

Acknowledgements

Includes the acknowledgements to funding agencies, partners, and persons who contributed to the progress of the targets of the group.

Summary of achievements

Summarises information of the group's strategic plan for the quadrennium and progress achieved implementing targets for all the components of the Species Conservation Cycle during the reported year.

Example for the recommended citation:

González, S, and Werner, N. 2023. 2022 Report of the Deer Specialist Group. In: Nassar, JM, García, L, Mendoza, L, Andrade, ND, Bezeng, S, Birkhoff, J, Bohm, M, Canteiro, C, Geschke, J, Henriques, S, Ivande, S, Mileham, K, Ramos, M, Rodríguez, A, Rodríguez, JP, Street, B, and Yerena, E (Eds.). 2022 Report of the IUCN Species Survival Commission and Secretariat. International Union for Conservation of Nature. 4 pp.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

IUCN SSC Deer Specialist Group



CO-CHAIR

Susana González

Departamento de Biodiversidad y Genética, Instituto de Investigaciones Biológicas Clemente Estable, Ministerio de Educación y Cultura, Montevideo, Uruguay

CO-CHAIR

Noam Werner

Haifa Educational Zoo, 124 HaTishbi Street, Haifa 3445519, Israel

RED LIST AUTHORITY COORDINATOR

Mariano Gimenez Dixon (New World species)

Departamento de Biodiversidad y Genética, Instituto de Investigaciones Biológicas Clemente Estable, Ministerio de Educación y Cultura, Montevideo, Uruguay

NUMBER OF MEMBERS

93

SOCIAL MEDIA AND WEBSITE

Instagram: @deerspecialistgroup
Websites: <https://icneotropical.org>
<https://www.deerspecialistgroup.org>

Mission statement

The mission of the Deer Specialist Group (DSG) is to contribute to biodiversity conservation through improvement of the welfare and sustainability of deer populations around the world. Our challenge is to find conservation alternatives to mitigate conflict, thus enabling rare and threatened species to survive.

Projected impact 2021–2025

The DSG has a qualified membership specialising in and researching several of these target species. To achieve our targets, it will be crucial to establish collaboration and partnerships with funding agencies to support research studies and data collection.

Targets 2021–2025

ASSESS

T-001 Collect data on the existing effects and estimate possible effects of global warming on cold-climate DSG species.
Status: Not initiated

T-006 Complete taxonomic studies, using molecular methods, of priority species (Indochinese Hog Deer, *Axis porcinus*; Annamite Muntjac, *Muntiacus truongsonensis*; *Mazama* spp.).

Status: On track

PLAN

T-004 Create protocols to mitigate human-deer conflict in various South American habitats and regions, such as the Pampas, the Cerrado, open grasslands, as well as several forested regions.

Status: Not initiated

T-007 Develop and publish deer conservation translocation guidelines by the end of 2022.

Status: On track

ACT

T-010 Capture Pampas Deer males to inseminate females of the captive centre.

Status: Achieved

NETWORK

T-002 Establish a Climate Change Working Group.

Status: Not initiated

T-009 Continue to grow the membership of the group.

Status: On track

COMMUNICATE

T-003 Develop a new Deer Specialist Group website by the end of 2021.

Status: Achieved

T-008 Establish DSG's visibility in social media platforms by mid-2021.

Status: Achieved

Activities and results 2022

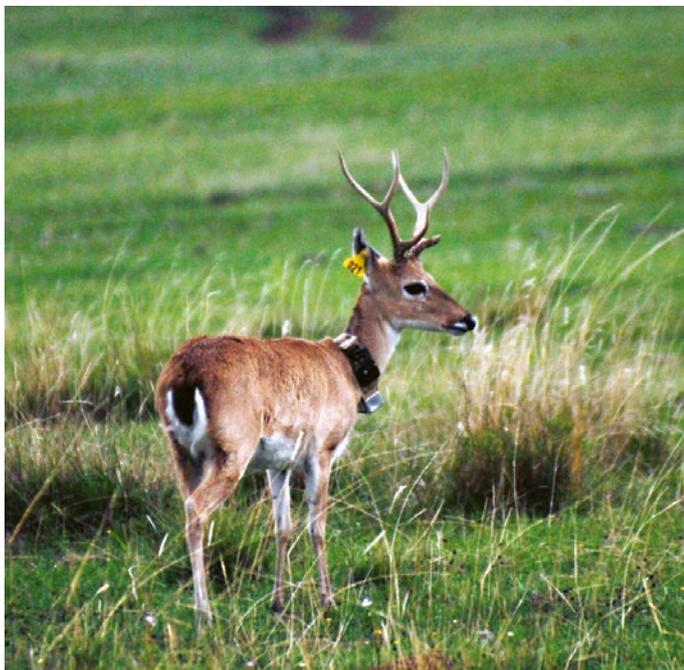
ASSESS

Research activities

T-006 Complete taxonomic studies, using molecular methods, of priority species (Indochinese Hog Deer, *A. porcinus*; Annamite Muntjac, *M. truongsonensis*; *Mazama* spp.). (KSR 5)

Number of research projects completed or supported by SSC members per taxonomic group and region: 2

Result description: Since a decade ago we have been involved in research on morphological and molecular genetic results. The first phylogeny obtained with molecular



Pampas Deer (*Ozotoceros bezoarticus*) male last day with radio GPS collar
Photo: Susana González

Pampas Deer (*Ozotoceros bezoarticus*) male immobilized for taking biological samples
Photo: Marcelo Casacuberta



markers (Duarte, 2008) was the initial step to guide our research to compile information from museum collections and form the current geographic range in South America and the Neotropical region.

ACT

Conservation actions

T-010 Capture Pampas Deer males to inseminate females of the captive centre. (KSR 10)

Number of threatened species benefiting from *in situ* conservation action: 1

Result description: The Pampas Deer is categorized as Least Concern on the IUCN Red List. However, in the southern ranges (Argentina and Uruguay), the populations on wildlife are small and isolated due to habitat loss by agricultural activities and poaching. In Uruguay, in 2020 we obtained support from the Uruguayan Ministry of Environment Environmental DINABISE, with the aim of updating populations' numbers and recovering genetic variability in the Captive Breeding Centre Estación de Cría de Fauna Autóctona de Piriapolis (ECFA). This centre was funded in 1980 with 10 individuals from Arerunguá wildlife population and currently harbours 140. Population fluctuations and other genetic data suggest the stock is suffering from inbreeding depression. Our aim was to capture five males from wildlife to perform semen collection to introduce genetic variability to this captive population. Additionally, we will be monitoring these animals with satellite GPS radio collars for a year. The pandemic delayed our activities, so the capture was finally performed during the first week of March 2022. The team (coordinated by Dr José Mauricio Barbanti Duarte and the Chair) captured five males in two

livestock ranches from Arerunguá. Each male was measured for weight, collected faeces, blood, ectoparasites and semen, and tagged with an alflex and GPS radio collar (Telonics™). Simultaneously, at the ECFA, nine females were submitted to an oestrous cycle synchronization protocol. In the second week, the transcervical artificial insemination procedures took place and, nowadays, the females are in good condition. All the collected biological materials were assessed for genetics, parasites, and serology. The general procedure developed well with the males and females. Since the females did not get pregnant, we are planning to repeat the procedure making changes to the protocol of female hormone synchronization. This is an important example for linking *ex situ* and *in situ* conservation actions to recover the genetic variability of the captive stock and for future reintroduction plans.

NETWORK

Membership

T-009 Continue to grow the membership of the group. (KSR 2)

Number of SSC members recruited: 7

Result description: The Specialist Group member numbers increased during 2022. Hopefully, will continue to grow in 2023 as well.

COMMUNICATE

Communication

T-008 Establish DSG's visibility in social media platforms by mid-2021. (KSR 13)

Number of digital communication outputs developed in relation to specific taxonomic groups: 4

Result description: We published the DSG Annual Newsletter and collaborated with Jon Paul Rodriguez and other SSC members

to perform a manuscript for an opinion article. We advanced to reveal the complex *Mazama* taxonomy and produced a scientific article to correct the genus name of *Mazama gouazoubira* recognizing the first name provided, which was *Subulo*. We published a scientific manuscript regarding the Pampas Deer home range.

Social media platforms and website established and updated: Achieved

Result description: An Instagram account was created, and the website was updated and renewed.

Acknowledgements

We thank the funding support for the survey and capture activities of the Uruguayan Ministry of Environment DINABISE and Whitley Fund for Nature and Kilverstone Charitable Fund, Instituto de Investigaciones Biológicas Clemente Estable, for the dissemination activities. We acknowledge Castro and Coelho families for authorized access to the ranches.

Summary of achievements

Total number of targets 2021–2025: 9

Geographic regions: 7 Global, 2 America

Actions during 2022:

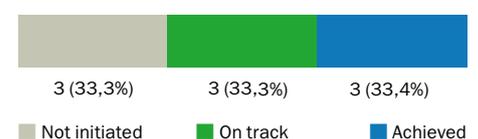
Assess: 1 (KSR 5)

Act: 1 (KSR 10)

Network: 1 (KSR 2)

Communicate: 2 (KSR 13)

Overall achievement 2021–2025:



Legend: Not initiated (grey), On track (green), Achieved (blue)