



2022 Report of the IUCN Species Survival Commission and Secretariat



Stand-alone report IUCN SSC Equid Specialist Group 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.

ASSESS ACT PLAN

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.

Animalia

Fungi

Plantae

National Species

Disciplinary

Action Partnership

Task Force

Red List Authority

Committee

Center for Species Survival

Example for the recommended citation:

Moehlman, PD, and King, SRB. 2023. 2022 Report of the Equid 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. 8 pp.



2022 Report

IUCN SSC Equid Specialist Group



SOCIAL MEDIA AND WEBSITE Facebook: IUCN/SSC Equid Specialist Group Website: www.equids.org



co-chair Patricia D. Moehlman EcoHealth Alliance, New York, New York, US; Columbia University, Adjunct Senior Research Scientist, EICES, New York, New York, US; TAWIRI, Arusha, Tanzania



CO-CHAIR Sarah R.B. King NREL, Warner College of Natural Resources, Colorado State University, Fort Collins, Colorado, US RED LIST AUTHORITY COORDINATOR Sarah R.B. King NREL, Warner College of Natural Resources, Colorado State University, Fort Collins, Colorado, US NUMBER OF MEMBERS

Mission statement

The mission of the IUCN SSC Equid Specialist Group (ESG) is to conserve biological diversity by developing and executing programmes to study, save, restore and manage wisely wild equids and their habitats. Our greatest challenge is to improve wild equid conservation status, to sustain their ecosystems and to enhance the livelihoods of local communities.

Projected impact 2021–2025

The ESG assesses extinction risk of equid species by identifying threats and working with scientists, communities, organisations and governments to research, monitor and manage wild equid populations.

Targets 2021-2025

ASSESS

T-001 Complete Ethiopian PhD on African Wild Ass (*Equus africanus*). Status: Achieved

T-002 Conduct taxonomic review of Equidae. Status: On track **T-003** Document all known equid diseases and parasites.

Status: On track

T-006 Khomyn Talyn Takhi/Association TAKH (KTT/TAKH): Implement species monitoring programme that informs the trends and status of the population in Khomyn Tal National Park (KTNP). Status: On track

T-008 KTT/TAKH: Develop and test hybrid Przewalski's Horse (*Equus ferus przewal-skii*)/domestic detection in KTNP. Status: On track

T-009 KTT/TAKH: Collaborate on a study of traditional pasture to rewilding. Status: On track

T-015 Association Goviin Khulan: Research social composition and behaviour and water source use. Status: On track

T-021 Grevy's Zebra (*Equus grevyi*): Complete analysis and publish results of 3rd Great Grevy's Rally.

Status: On track

T-024 Publish data on Serengeti Zebra causes of mortality and survival rates and reproductive rates. Status: On track **T-025** Research on Asiatic Wild Ass (*Equus hemionus*) in Israel: Research association between social and genetic networks, and effect on vegetation. Status: On track

-**028** Collect data on i

T-028 Collect data on interaction between predators (Lions and Hyenas) and Grevy's Zebra to understand impact of predation. Status: On track

T-030 African Wild Ass: Analyse data on population dynamics in relation to rainfall variability and diet.

Status: On track

T-032 Kiang (*Equus kiang*) and nomad livelihoods in Ladakh: Understand patterns and processes of Kiang-pastoralist conflict to come up with specific mitigation measures to manage the negative interactions. Status: On track

T-035 Conduct new Red List assessment of Asiatic Wild Ass based on surveys and rapid assessments 2014–2020, and information from workshop in Vilm (see Plan Component).

Status: Not initiated



Indian Wild Ass (*Equus hemionus khur*) at Little Rann of Kutch, India Photo: Patricia D Moehlman

T-036 Based on experience of Green Status assessment of Iberian Lynx (*Lynx pardinus*), look into the potential for a Green Status assessment of the Asiatic Wild Ass. Status: Not initiated

T-044 Monitor and manage Grevy's Zebra population health. Status: On track

T-045 Produce scientific publications on equid research and conservation. Status: On track

PLAN

T-022 Grevy's zebra: Organise and run the 4^{th} Great Grevy's Rally (then analyse and publish results).

Status: Not initiated

T-026 Minimise the potential negative impacts of infrastructure development on Grevy's Zebra habitat and populations. Status: On track

T-027 Maintain connectivity within northern Kenya for free movement of Grevy's Zebra to enhance genetic diversity. Status: On track

T-031 African Wild Ass: Convene a workshop to develop a conservation action plan for African wild ass in Eritrea. Status: Not initiated **T-033** Kiang and nomad livelihoods in Ladakh: Engage with key stakeholders to develop customised management strategies for selected hotspots. Status: On track

T-037 Conduct conservation planning and development of a Khulan Action Plan for Mongolia – WCS and partners. Status: On track

T-038 Develop action plan for the Asiatic Wild Ass based on experience gained from the Khulan Conservation Strategy for Mongolia; workshop slot reserved within the Convention on Migratory Species Central Asian Mammals Initiative (CMS/CAMI) framework on the Island of Vilm, Germany. Status: On track

ACT

T-005 Designate protected areas for African Wild Ass. Status: On track

T-007 KTT/TAKH: Translocate four individual horses from Hustai National Park to KTNP to maintain genetic diversity of the population in KTNP. Status: Not initiated **T-016** Association Goviin Khulan: Develop curriculum about ecology and conservation for protected area rangers and community citizen scientists. Status: On track

T-019 Association Goviin Khulan: Work with border troops and local community to set camera traps for Khulan (*Equus hemionus* spp. *hemionus*).

Status: Not initiated

T-029 Enhance recruitment rate of Grevy's Zebra (maintain 30% proportion of foals and juveniles).

Status: On track

T-042 Enhance inter-regional Grevy's Zebra conservation.

Status: On track

T-043 Enhance Grevy's Zebra conservation and habitat management. Status: On track

NETWORK

T-010 KTT/TAKH: Explore becoming a member organisation of IUCN. Status: Not initiated

T-012 KTT/TAKH: Improve communication strategy towards local people in KTNP. Status: On track

T-013 KTT/TAKH: Organise a post-Congress visit/workshop at Le Villaret. Status: On track

T-014 KTT/TAKH: Partnerships with other reintroduction sites and twinning of National Parks.

Status: On track

T-018 Association Goviin Khulan: Develop ecotourism in Gobi. Status: On track

Status: On track

T-020 Grevy's Zebra: Train all data managers to use WILDBOOK to complete a National Grevy's Zebra Database. Status: On track

T-023 Grevy's Zebra: Continue support of Kenya Wildlife Service's 'Grevy's Zebra Technical Committee'. Status: On track

T-034 Maintain close cooperation with partners in Central Asia via CMS/CAMI. Status: On track

T-041 Develop new stakeholder partnerships and strengthen existing partnerships. Status: On track

COMMUNICATE

T-004 Organise Third International Wild Equid Conference. Status: On track

T-011 KTT/TAKH: Implement national and international communication strategy for Przewalski's Horses. Status: On track

T-017 Association Goviin Khulan: Publish scientific articles, brochures for children and a documentary. Status: On track

T-039 Contribute to CAMI news. Status: On track

T-040 Produce scientific publications and presentations on equid research and conservation.

Status: On track

Activities and results 2022 ASSESS

Research activities

T-002 Conduct taxonomic review of Equidae. (KSR 5)

Updated taxonomy of Equidae produced: 1

Result description: In 2022, we obtained funds from SSC Internal Grant for a workshop, and the meeting date was set for April 2023.

T-003 Document all known equid diseases and parasites. (KSR 5)

Number of research projects completed or supported by SSC members per taxonomic group and region: 1

Result description: PLS is currently compiling information on this matter.

T-006 Khomyn Talyn Takhi/Association TAKH (KTT/TAKH): Implement species monitoring programme that informs the trends and status of the population in Khomyn Tal National Park (KTNP). (KSR 6)

Monitoring underway: Ongoing.

Result description: The population of Przewalski's Horse (*Equus ferus*) is being observed, and new tools are being developed.

T-008 KTT/TAKH: Develop and test hybrid Przewalski's Horse (*Equus ferus przewal-skii*)/domestic detection in KTNP. (KSR 5)

Number of research projects completed or supported by SSC members per taxonomic group and region: 1

Result description: In 2022, faecal samples are collected to test paternity.

T-009 KTT/TAKH: Collaborate on a study of traditional pasture to rewilding. (KSR 5)

Number of research projects completed or supported by SSC members per taxonomic group and region: 1

Result description: Our PhD student started in October 2021. In 2022 the student commenced sampling and obtaining results on vegetation, Orthoptera, and the effect of big grazers (Przewalski's Horses, domestic horses, and sheep in three sites).

T-015 Association Goviin Khulan: Research social composition and behaviour and water source use. (KSR 5)

Number of research projects completed or supported by SSC members per taxonomic group and region: 1

Result description: By 2022, data collection has started.

T-024 Publish data on Serengeti Zebra causes of mortality and survival rates and reproductive rates. (KSR 5)

Number of scientific publications about species research that acknowledges SSC affiliation: 1

Result description: Data on the Serengeti Zebra (*Equus quagga boehmi*) is being analysed.

T-025 Research on Asiatic Wild Ass (*E. hemionus*) in Israel: Research association between social and genetic networks, and effect on vegetation. (KSR 5)

Number of scientific publications about species research that acknowledges SSC affiliation: 2

Result description: In 2022, genetic research was completed, and a manuscript is in preparation. Vegetation data analyses are being done.

T-028 Collect data on interaction between predators (Lions and Hyenas) and Grevy's Zebra to understand impact of predation. (KSR 5)

Number of research projects completed or supported by SSC members per taxonomic group and region: 1

Result description: A population of 59 Lions (*Panthera leo*) (42 adults, three sub-adults, and 14 cubs) occurring in five prides and three coalitions was monitored. Camera traps showed a population of a minimum of 147 spotted Hyaenas (*Crocuta crocuta*). Jacob's Selectivity Index indicated that buffalo and eland are preferred prey of lions, although Grevy's Zebra are consumed.



Przewalski's Horses at Hortobagy National Park, Hungary Photo: ESG

T-032 Kiang (*E. kiang*) and nomad livelihoods in Ladakh: Understand patterns and processes of kiang-pastoralist conflict to come up with specific mitigation measures to manage the negative interactions. (KSR 5)

Number of research projects completed or supported by SSC members per taxonomic group and region: 1

Result description: SECURE Himalaya program of the UNDP implemented with the Ladakh Wildlife Department. A combination of early warning systems about crop raiding by Kiang of green peas and barley fields at 4,000m elevation in the basin, and communication with pastoralists to temper negative attitudes toward Kiang and explain kiang's role in the ecosystem.

T-044 Monitor and manage Grevy's Zebra population health. (KSR 6)

Grevy's Zebra health monitored: Ongoing.

Result description: Survey was delayed until 2024 as Grevy's Zebra is in no physical state to be stressed. GZT and Marwell have scouts walking patrols daily and setting up camera traps. Camera traps are also in place at feeding stations to see how many animals are coming, movement between feeding sites, and body condition. Will not know how the drought has affected the whole population until the next survey.

T-045 Produce scientific publications on equid research and conservation. (KSR 5)

Number of scientific publications about species research that acknowledges SSC affiliation: 9

Result description: At least nine peer-reviewed articles on wild equids were published by members of the ESG in 2022.

PLAN

Planning

T-022 Grevy's zebra: Organise and run the 4th Great Grevy's Rally (then analyse and publish results). (KSR 9)

Completion of the Great Grevy's Rally: 0 Result description: The Great Grevy's Zebra rally was postponed until 2023 due to severe drought.

T-026 Minimise the potential negative impacts of infrastructure development on Grevy's Zebra habitat and populations. (KSR 8)

Number of Grevy's Zebra in the wild: Ongoing.

Result description: The main tool was to collar 23 animals to determine movement and feed results back to large-scale infrastructure developers. Collars have been purchased, but collaring was delayed due to the drought as animals cannot be stressed. **T-027 Maintain connectivity within northern** Kenya for free movement of Grevy's Zebra to enhance genetic diversity. (KSR 8)

Number of conservation plans/strategies developed: 1

Result description: Collaring of Grevy's Zebra to determine movement and connectivity has been delayed because of the drought, however, camera traps provide evidence of Grevy's Zebras in the Northern Gap designated wildlife migratory route.

T-033 Kiang and nomad livelihoods in Ladakh: Engage with key stakeholders to develop customised management strategies for selected hotspots. (KSR 8)

Number of conservation plans/strategies developed: 1

Result description: ESG member Yash Veer Bhatnagar is advising three organizations: SECURE Himalaya Program of the UNDP implemented with the Ladakh Wildlife Department, WWF-India, and the Nature Conservation Foundation in their work to help improve incomes and attitudes of pastoralists in relation to Kiang. Hotspots have been identified where Kiang-pastoralist tensions are high, and this is where the work is focused.

T-038 Develop action plan for the Asiatic Wild Ass based on experience gained from the Khulan Conservation Strategy for Mongolia; workshop slot reserved within the Convention on Migratory Species Central Asian Mammals Initiative (CMS/CAMI) framework on the Island of Vilm, Germany. (KSR 8)

Number of conservation plans/strategies developed: 1

Result description: This is in planning with CMS/CAMI with a workshop in Vilm, Germany most likely in June; Petra Kaczensky is currently working on details with the CMS secretariat and there will be official dates and information early next year.

ACT

Conservation actions

T-005 Designate protected areas for African Wild Ass. (KSR 10)

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

Result description: In 2022, research and modelling for determining suitable habitat for African Wild Ass, and prioritized areas that should be demarcated for protection were finalized.

T-005 Designate protected areas for African Wild Ass. (KSR 10)

Number of species with increased or prevented decrease in population or range size, as a result of conservation actions: 1

Result description: Finalized research and modelling for determining suitable habitat for African Wild Ass, and prioritised areas that should be demarcated for protection.

T-019 Association Goviin Khulan: Work with border troops and local community to set camera traps for Khulan (*Equus hemionus* spp. *hemionus*). (KSR 10)

Number of camera traps: 0

Result description: To initiate the program funding is needed.

T-029 Enhance recruitment rate of Grevy's Zebra (maintain 30% proportion of foals and juveniles). (KSR 10)

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

Result description: The drought is potentially affecting recruitment. Supplementary feeding is aimed at supporting lactating and pregnant females to mitigate mortality. Grevy's Zebra has not yet achieved a population of 30% subadults and young which would enable them to have a self-sustaining and stable population; their population is considered to have a medium growth potential. Grevy's Zebra population appeared to move following rain showers, although they seemed to prefer lower altitude areas.

T-043 Enhance Grevy's Zebra conservation and habitat management. (KSR 10)

Number of threatened species benefiting from *in situ* conservation action: 2

Result description: Scout training and deployment of a new version of the data collection tool on GPS phones was achieved. Literacy training to improve the use of the tool was done. The GZT works with communities who are preparing the land with seeds for when the rains come, to promote habitat recovery.

NETWORK

Membership

T-013 KTT/TAKH: Organise a post-Congress visit/workshop at Le Villaret. (KSR 1)

Number of members attending: 0 Result description: The workshop was not conducted after the Congress, but one is planned for 2023.

Synergy

T-014 KTT/TAKH: Partnerships with other reintroduction sites and twinning of National Parks. (KSR 1)

Number of 'in kind' partnerships established and maintained: 4 Result description: Contact with other projects in Mongolia is ongoing. Partnership with two projects in Spain is ongoing to create new sites for Przewalski's Horses and collaborative projects with Hortobagy and Rewilding Europe. Creating a network of Przewalski's Horse sites.

T-034 Maintain close cooperation with partners in Central Asia via CMS/CAMI. (KSR 1) $\,$

Number of 'in kind' partnerships established and maintained: 5

Result description: A status update for China was published (Xu, W. et al. (2022). 'Current status and future challenges for Khulan (Equus hemionus) conservation in China'. Global Ecology and Conservation 37). There was a small helicopter transport of four Khulans for reintroduction to the central steppe in Kazakhstan by ACBK and international partners. Furthermore, there was a large ground transport of 60 Khulans to Ily Balkash - funded by UNDP - for recovering prey species for a potential future reintroduction of tigers. The process for a national Khulan Action Plan for Mongolia is ongoing led by WCS Mongolia, and 29 Khulans in the South Gobi Region were collared for the assessment of the impact of linear infrastructure and other anthropogenic impacts in the region.

T-041 Develop new stakeholder partnerships and strengthen existing partnerships. (KSR 1)

Number of 'in kind' partnerships established and maintained: 3

Result description: Existing partnerships have been strengthened. MOU developed with Lewa, and Marwell working closely with Grevy's Zebra Trust to provide hay for Grevy's zebra. Marwell Project Leader has been working closely with KWS (also including Lewa and GZT).

Capacity building

T-012 KTT/TAKH: Improve communication strategy towards local people in KTNP. (KSR 3)

Communication strategy improved: Ongoing.



Indian Wild Ass (*Equus hemionus khur*) at Little Rann of Kutch, India Photo: Patricia D Moehlman

Result description: Social science interviews were conducted in 2022. Further activities are planned for 2023.

Proposal development and funding

T-018 Association Goviin Khulan: Develop ecotourism in Gobi. (KSR 3)

Number of scientific expeditions conducted: 4

Result description: Partnerships were formed with four travel agencies for community-based ecotourism.

COMMUNICATE

Communication

T-004 Organise Third International Wild Equid Conference. (KSR 13)

Number of SSC members' presentations developed in relation to specific taxonomic groups: 1

Result description: Discussions for the organization of the Third International Wild Equid Conference have begun.

T-011 KTT/TAKH: Implement national and international communication strategy for Przewalski's Horses. (KSR 13)

Number of digital communication outputs developed in relation to specific taxonomic groups: 5

Result description: Oral presentation by our PhD student was held in October; we also attended other workshops on biodiversity in 2022. Moreover, educational visits to Le Villaret and ethological training courses were done, and a newspaper and documentary were created.

T-039 Contribute to CAMI news. (KSR 13)

Number of contributions to the CAMI news: 1

Result description: A piece on the impact of the new railways on Khulan for the CAMI news in October 2022; it should be published any time in 2022 or early 2023.

Scientific meetings

T-040 Produce scientific publications and presentations on equid research and conservation. (KSR 12)

Number of presentations delivered at scientific events: 13

Result description: Members of the Equid Specialist Group were authors or co-authors on at least 13 peer-reviewed scientific publications.

Acknowledgements

We thank the following donors that have provided funding for operations, research, training, and conservation action: EcoHealth Alliance, the Basel Zoo, Planete Sauvage Zoo, and the Government of Germany via the Secretariat of the Convention on Migratory Species (CMS). We would particularly like to thank Clara Nobbe and Nora Marie Weyer for their contributions and support. We thank the Hortobágy National Park Directorate, Hungary for funding the 25th Anniversary of the Pentezug Reserve Conference, and we thank the SSC for internal grant funding to organize an Equid Taxonomy Workshop.

Summary of achievements

Total number of targets 2021-2025: 45

Geographic regions: 9 Global, 17 Africa, 21 Asia, 4 Europe

Actions during 2022:

Assess: 12 (KSR 5, 6) Plan: 5 (KSR 8, 9) Act: 5 (KSR 10) Network: 6 (KSR 1, 3) Communicate: 4 (KSR 12, 13)

Overall achievement 2021-2025:

7 (16%)	37 (82%)	1 (2%)
Not initiated	On track	Achieved