IUCN SSC Viper Specialist Group



2020 Report





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Co-Chairs

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Location/Affiliation

(1) Universidad Autónoma de Aguascalientes, Aguascalientes, Mexico

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(3) Universidade de São Paulo, Brazil

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Number of members

172

Social networks

Facebook: Viper Specialist Group Instagram: @viper_IUCN Twitter: @viper_IUCN

Website: www.viperconservation.org



Mission statement

The Viper Specialist Group (VSG) is a platform from which conservation biologists can work to increase our scientific understanding of viper biology and implement conservation actions to prevent declines and extinctions.

Projected impact for the 2017-2020 quadrennium

By the end of 2020, we will have strengthened the organisation and effectiveness of the Viper Specialist Group in order to have a more meaningful impact on the conservation of vipers globally. We will do this by supporting the individual activities of the members, increasing the membership, repositioning the VSG officers, continuing to publish the VSG newsletter, launching a new website, reactivating the presence of the VSG in social media, continuing to support Red List assessment activities, participating more in academic meetings to network with academic institutions, zoos, NGOs and other actors interested in the conservation of vipers, continuing to explore the possibilities to purchase land for the conservation of vipers, and publishing scientific and produce outreach material for vipers, among other things.

Targets for the 2017-2020 quadrennium

Assess

Red List: (1) complete Red List assessments for as many species of vipers in the world as possible; (2) complete assessments for European and North Asian vipers; (3) consider the assessment of Kuhrang Mountain Viper (Montivipera kuhrangica) for the IUCN Red List. Research activities: (1) identify priority sites for the conservation of vipers; (2) identify Blackheaded Bushmaster (Lachesis melanocephala) distribution in relation to human presence; (3) update the distribution maps for vipers in the Western Hemisphere; (4) obtain missing ecological information for poorly known viper species in Mesoamerica; (5) project the impact of climate change on selected species of vipers in Mesoamerica.

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Planning: (1) define regional priority species for European and North Asian vipers; (2) develop a Viper Action Plan with specific actionable items; (3) complete and publish the VSG Strategic Plan; (4) complete conservation action plans for at least 50% of VSG regions.

Policy: (1) provide guidance on the harvesting of vipers in Iran.

Act

Conservation actions: (1) define regional priority species for European and North Asian vipers; (2) promote the creation of areas for the conservation of vipers in each region.



Network

Documents review: identify knowledge gaps in species assessments.

Membership: increase representativeness in membership.

Synergy: develop effective partnerships between zoos and the VSG.

Communicate

Communication: (1) create a webpage about the VSG with taxonomic updates to make this information more widely available; (2) continue to publish the Viper Specialist Group newsletter; (3) restructure the editorial board of the newsletter; (4) create outreach materials for living with vipers that can be customised by region; (5) increase the efficiency and amount of internal and external communication; (6) implement subpages for each region in the VSG website.

Scientific meetings: (1) determine how to develop and implement focal species initiatives; (2) hold regular virtual meetings among the Regional Coordinators; (3) hold at least one in-person meeting with most of the Regional Coordinators in this quadrennium.

Activities and results 2020

Assess

Documents review

i. Several species are being studied; however, this is done mainly through the research carried out by the individual members of the group, and we have to find a way to consolidate that effort in a coherent and effective programme to identify knowledge gaps in species assessments.

Red List

- i. Completing Red List assessments for as many species of vipers in the world as possible was part of the Global Reptile Assessment (GRA), and the assessments were done to comply with the goals of the GRA. However, we want to continue with the momentum to re-assess many species that were assessed more than 10 years ago. (KSR #1)
- **ii.** An updated analysis on the phylogeny of Eurasian vipers was carried out and is available as open access in *Amphibia-Reptilia* now. The assessments are still pending until the lifting of COVID-19 restrictions. (KSR #2)

Research activities

- i. A map was produced with areas of high viper diversity in Mexico, the country with the largest number of viper species, that could translate into priority sites for conservation. China is also identified as the second most speciose country. (KSR #22)
- ii. A field study to use conservation detection dogs to locate bushmasters was postponed due to COVID-19; however, we continued to collect new observations through landowner networks and plan to submit a manuscript of bushmaster distribution in 2021. (KSR #43)
- **iii.** Distribution maps were updated for vipers in the Western Hemisphere, but the products are not yet published because they are maps. We still must find the best possible repository for them. (KSR #12)

Plan

Policy

i. Advice was given for the Memorandum of Understanding for harvesting of vipers in Iran, but no official document was generated. (KSR #27)



Least Concern Rhinoceros Viper, Bitis rhinoceros, a West African viper in the Viperinae subfamily Photo: Joel Sartore

Act

Conservation actions

i. One area in South Africa was created for the conservation of vipers with support from the Rainforest Fund. (KSR #22, 43)

Network

Membership

i. We are in the process of updating our membership lists, including the removal of inactive members and adding additional viper experts to fill gaps in expertise.

Synergy

- i. COVID-19 created financial hardships for all zoos and conservation support was not a priority in 2020 for most zoos. In 2021 we are launching a committee to meet this objective. (KSR #29)
- **ii.** We decided to reorganise the group to a committee-based structure that would allow for easier implementation of focal species initiatives.

Communicate

Communication

i. We were awarded an SSC Internal Grant to pay for server, domain, software and an internship for the construction of our new website. The website is ready to be launched after the last edits are completed, anticipated by end of July 2021. (KSR #28)

- ii. We are reorganising the structure of the group and did not have time to continue working on the reorganisation of our newsletter. This is currently on hold, but we will reactivate it again once we complete the other organisational priorities within the group. (KSR #28)
- iii. We recently started to plan the creation of outreach material with the leadership of the Middle Eastern regional coordinator. We will consult our base and will develop a format to send to the membership to gather data for all viper species that will translate into outreach material. Independent to this, the support that we obtained to create our new website allowed us to produce some outreach material that will be available on the new website. (KSR #28)
- iv. Increased efficiency and quantity of internal and external communication was accomplished by having two Co-Chairs and distributing the workload among them, something that immediately changed the dynamics of the group in a very positive way. (KSR #28)

Scientific meetings

i. Although we resumed holding two virtual meetings per year with the regional coordinators, the Co-Chairs have held several meetings with the goal of creating committees with specific tasks.



Endangered Greek Meadow Viper, Vipera graeca Photo: Stephen Roussos



Least Concern Tzotzil Montane Pit Viper, Cerrophidion tzotzilorum, a Mesoamerican pit viper with a small distribution area Photo: Jesús Sigala

Acknowledgements

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Summary of activities 2020

Components of Species Conservation Cycle: 5/5

Assess 6 | | | | | |
Plan 1 |
Act 1 |
Network 3 | | |
Communicate 5 | | | |
Main KSRs addressed: 1, 2, 12, 22, 27, 28, 29, 43

KSR: Key Species Result