IUCN SSC Mollusc Specialist Group

2019 Report

Mary Seddon

Chair

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Number of members

104

Social networks

Twitter: @SSC_Mollusc_sg

IUCN SSC MOLLUSC SPECIALIST GROUP

Mission statement

To provide information to IUCN on mollusc 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.

Projected impact for the 2017-2020 quadrennium

We aim to have over 8,700 species listed on the Red List by 2020. In terms of strategic importance, the Mollusc Specialist Group (MSG) expects to accomplish the following targets with direct or indirect impacts on the conservation of mollusc biodiversity: (1) completing the European Union (EU) combined report and presenting to ministers, to inform on the state of biodiversity and the possibility that without actions the EU would not achieve their Aichi Targets; (2) developing and testing on Key Biodiversity Area (KBA) monitoring protocols for freshwater systems (molluscs (gastropods and bivalves), fish, dragonflies, crustaceans and plants) in Morocco, that could be used in any freshwater system worldwide; (3) sharing knowledge on the conservation actions for land snails on islands: *ex situ* breeding, management of invasive species and reintroduction and translocation protocols; (4) sharing knowledge on the conservation actions for freshwater bivalves at the global level: survey, systematics, threat analysis, habitat management, *ex situ* breeding, management of invasive species, reintroduction and translocation protocols, including papers from Australia, US, South America, Asia, Russia, Japan, Europe, and Morocco; (5) recognition of an overlooked threatened habitat with endemic marine species in deep ocean hydrothermal vents; and (6) various small Mohamed bin Zayed Species Conservation Fund grants on local projects.

Targets for the 2017-2020 quadrennium

Assess

Red List: (1) conduct Red List assessment of assorted groups of land snails; (2) conduct Red List assessment of freshwater molluscs (snails and bivalves); (3) fundraise for Red List assessment of freshwater molluscs; (4) conduct Red List assessment of marine molluscs.

Research activities: (1) study freshwater bivalves in Morocco; (2) publish review paper on freshwater bivalves; (3) publish paper on threats to hydrothermal vents molluscs.

Plan

Planning: (1) develop protocols managed by MSG for the IUCN Centre for Mediterranean Cooperation on how to monitor freshwater KBAs, fish, dragonflies and plants; (2) test protocols scoping workshop managed by MSG for the IUCN Centre for Mediterranean Cooperation on how to monitor freshwater KBAs, fish, dragonflies and plants; (3) develop guidelines for management of molluscs in freshwater systems.

Act

Conservation actions: (1) implement Partula Project in French Polynesia; (2) reintroduction of Greater Bermuda Land Snails, *Poecilozonites bermudensis*.

Communicate

Communication: publish the Mollusc Specialist Group newsletter, *Tentacle*.

Scientific meetings: contribute to a conference on Pacific land snails, especially on management of alien invasive species.

Activities and results 2019

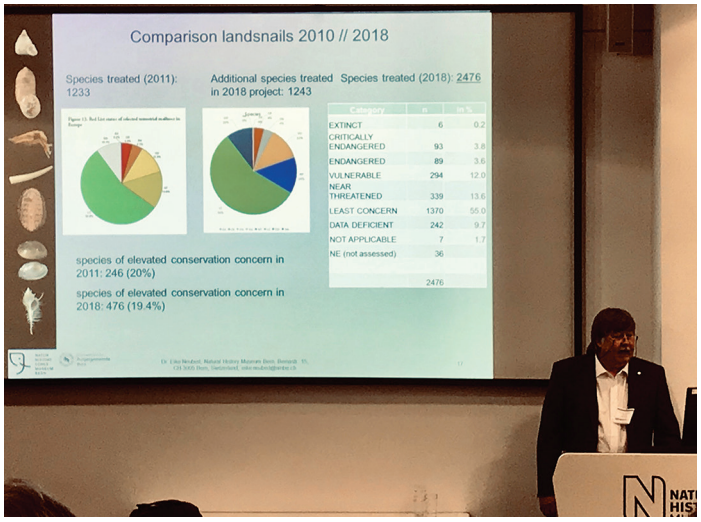
Assess

Red List

i. Land snails: An EU-funded European project to assess 1,200 species was completed with

Paul Pearce-Kelly talking about the work of ZSL over the last two decades in terms of their work on conservation breeding and reintroductions in French Polynesia. This highlights the amazing work that Trevor Coote has done on the ground, working with the authorities, NGO's and various Zoos around the world to keep the species going and then attempt to reestablish them in the wild, in spite of the continued presence of various invasive predators
Photo: Mary Seddon

Eike Neubert making presentation on landsnail status
Photo: Mary Seddon



formal presentation by Zoltán Fehér, and a PDF report submitted to EU Ministers led by David Allen, Eike Neubert and Mary Seddon. A tranche of 100 Australian and 20 Asian species was submitted by Frank Kohler and Mary Seddon but are still to be published; they were resubmitted for 2020. (KSR #1)

ii. Freshwater projects: Several regional projects were completed (Malili Lakes: first global assessment of 40 species; 13 freshwater bivalves from Asia submitted, eight published). Ongoing projects are continuing (in Africa, Asia, North America) by Dirk Van Damme, Manuel Lopes-Lima and Art Bogan. A workshop was held on South American freshwater molluscs, with planning for their assessment work by Cristhian Clavejo. (KSR #1, 2)

iii. Grant application for 2020 reassessment of freshwater molluscs of Europe is in review. (KSR #1, 2)

iv. Hydrothermal vents molluscs: First tranche of 16 species assessed, after long discussions on the application of the Red List categories and criteria to properly assess these species, including work by Resit Akçakaya to confirm we had used the guidelines appropriately. Abalone: 55 species are in review; we expect the process to be completed by the end of 2020, with a scientific paper to follow. (KSR #1)

Research activities

i. One monitoring site was established to study freshwater bivalves in Morocco, as well as survey visits to other sites that had the species at various points in the recent past. (KSR #12)

ii. The Sampled Red List Index paper was presented at a conference in 2018 and was due for publication in a Freshwater Mollusc Conservation Special Issue of *Hydrobiologica* in 2019; however, revisions were required, so it was resubmitted and accepted for publication in 2020. (KSR #43)

iii. A paper was published: Sigwart, J.D., et al. (2019). Red Listing can protect deep-sea biodiversity. *Nature Ecology and Evolution* (3):1134. Available at https://www.nature.com/articles/s41559-019-0930-2. (KSR #43)

Plan

Planning

i. A scoping workshop to develop the protocols managed by MSG for the IUCN Centre for Mediterranean Cooperation on how to monitor freshwater KBAs, molluscs, fish, dragonflies and plants. (KSR #15)

ii. Testing protocols scoping workshop managed by MSG for the IUCN Centre for Mediterranean Cooperation on how to monitor freshwater KBAs, molluscs, fish, dragonflies and plants. (KSR #15)

iii. A new European Cooperation in Science and Technology (EU COST) project was funded for three years on guidelines for management of molluscs in freshwater systems. (KSR #15)

Act

Conservation actions

i. Nearly 6,700 individuals of nine species of genus *Partula* were returned to reserve areas on three different islands, bringing a total of 15,585 individuals released on four different islands in the last five years. On one island, a second invasive predator, the New Guinea flatworm, *Platydemus manokwari*, was identified in 2017, meaning that plans to reintroduce Partula were placed on hold, pending identification of a suitable site. (KSR #24)

ii. Chester Zoo, in conjunction with Zoological Society of London, have been propagating the Greater Bermuda Land Snail (*Poecilozonites bermudensis*) since 2014, when it was rediscovered on the edge of a town. There are now over 30,000 individuals at Chester Zoo, and some have reached the point where they can be released. Each snail has been tagged to enable future monitoring of the species, to see how effective translocation has been. (KSR #24)

Communicate

Communication

i. Tentacle newsletter 27 was published in March 2019. (KSR #28)

Acknowledgements

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Summary of activities 2019

Components of Species Conservation Cycle: 4/5	
Assess	7
Plan	3
Act	2
Communicate	1

Main KSRs addressed: 1, 2, 12, 15, 24, 28, 43

KSR: Key Species Result