

# IUCN SSC Horseshoe Crab Specialist Group



## 2018 Report



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### Co-Chairs

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### Number of members

79

### Social networks

Facebook:

Horseshoe Crabs Group

Asian Horseshoe Crabs Group



### Mission statement

The four extant species of horseshoe crabs are imperilled, because of overfishing for use as food, bait, production of biomedical products derived from their blood, and because of habitat loss or alteration due to shoreline development and armouring against coastal erosion. The group aims to protect horseshoe crabs in the world through collaborative effort in conservation of their populations and habitats, and in raising public awareness of their importance in evolutionary history, marine coastal ecology and biomedical uses.

### Projected impact for the 2017-2020 quadrennium

The three species of horseshoe crabs in Asia, *Tachypleus tridentatus*, *T. gigas* and *Carcinoscopus rotundicauda*, are currently listed as Data Deficient, and we expect that our current activities will lead to a change in this status in the current quadrennium. While it is premature to assign a status without a formal review of the data, most studies indicate a moderate to severe threat to local populations and a lack of genetic connectivity among populations. We expect to submit a Red List assessment for each of the three Asian horseshoe crabs as an important first step in leading to greater conservation measures for these animals, including greater protection for essential spawning and juvenile nursery habitats. Our group will continue being an active advocate for these unique animals through the support of various outreach and educational programmes that our members have developed.

### Targets for the 2017-2020 quadrennium

#### Assess

Green List: complete Green List assessment of American Horseshoe Crab (*Limulus polyphemus*) and Tri-spine Horseshoe Crab (*Tachypleus tridentatus*) through assessing the recovery of species' populations and measuring their conservation success.

Red List: update Red List assessments of all three Asian species of horseshoe crab.

#### Network

Capacity building: develop best practices for adult and juvenile horseshoe crab population assessments.

#### Communicate

Research activities: publish a book based on papers presented at the 3rd and 4th International Workshops on the Science and Conservation of Horseshoe Crabs in 2015 and 2019.

Scientific meetings: (1) coordinate the 4th International Workshop on the Science and Conservation of Horseshoe Crabs in summer 2019; (2) organise a Special Session at the 148th Annual Meeting of the American Fisheries Society, Atlantic City, NJ, August 2018.



A mating pair of tri-spine horseshoe crabs (*Tachypleus tridentatus*)  
Photo: Takuya Morihisa

Release of juvenile tri-spine horseshoe crabs cultured from laboratory to enhance local population  
Photo: China Dialogue



A mating pair of mangrove horseshoe crabs (*Carcinoscorpius rotundicauda*)  
Photo: Billy Kwan



## Activities and results 2018

### Assess

#### Green List

i. A working group has been assembled to develop the American Horseshoe Crab and Tri-spine Horseshoe Crab Green List assessments. The group will lead a workshop at the 2019 meeting in China. (KSR #11)

#### Red List

i. We have completed Red List assessment on *Tachypleus tridentatus*, which has been updated from Data Deficient to Endangered in August 2018. This update was officially announced by IUCN in March 2019. (KSR #2)

### Communicate

#### Research activities

i. Publication of book based on papers presented the 3rd and 4th International Workshops on the Science and Conservation of Horseshoe Crabs in 2015 and 2019. (KSR #28)

#### Scientific meetings

i. The 4th International Workshop on the Science and Conservation of Horseshoe Crabs will be held from 15-20 June 2019 in Qinzhou, Guangxi, China. There will be around 130 participants attending. We have successfully secured travel funding for some participants, especially those from emerging economies, to attend the workshop. Such funds include an IUCN SSC Internal Grant and Ocean Park Conservation Foundation Hong Kong grant. (KSR #28)

ii. 'Spirit in the night: throwing light on our many connections to the American horseshoe crab', Special Session at 148th Annual Meeting of the American Fisheries Society, Atlantic City, NJ, August 2018. 18 papers presented. (KSR #28)

### Acknowledgements

We thank the Species Survival Commission and Ocean Park Conservation Foundation Hong Kong for providing travel funding support for participants from emerging economies to attend the June 2019 International Workshop, and Beibu Gulf University, Guangxi Biodiversity Research and Conservation Association, Guangxi Key Laboratory of Beibu Gulf Marine Biodiversity Conservation, and Guangxi First-Class Aquaculture Platform (Incubation) at Beibu Gulf University for organising the event.

### Summary of activities 2018

Species Conservation Cycle ratio: 2/5

Assess **2** ||

Communicate **3** |||

Main KSRs addressed: 2, 11, 28

KSR: Key Species Result