Abstract

A quest for life must be heard: striving towards hangul survival.

Mukesh Thakur¹, Lalit Kumar Sharma¹ and Sathyakumar, S.²
¹Zoological Survey of India, New Alipore, Kolkata-700053, WB, India
²Wildlife Institute of India, Post Box # 18, Chandrabani, Dehradun 248 001, Uttarakhand, India
§Corresponding author(s): Mukesh E. mail: thamukesh@gmail.com

Species endangerment ranks, as declared by the national and international authorities, are often crucial in conservation decisions at the local and regional scale. While species are regarded as units of priority, widespread species with several subspecies are often neglected in conservation plannings and scientific research, irrespective of their genetic status and value for biodiversity conservation. Discriminating conservation status at the subspecies level becomes challenging in situations where many subspecies are often incorrectly lumped into a single species complex. The hangul (Cervus elaphus hanglu), the only hope of Asiatic survivor of red deer species in India is a true example of a subspecies experiencing ignorance of the conservation union. However, it has been listed under Schedule I of the Wildlife (Protection) Act of India (1972) and categorized among the top 15 species of highest conservation priority by the Government of India. The IUCN Red List had considered hangul a subspecies of red deer, and hence categorised as 'Least Concern' in the red deer complex. Despite the rigorous conservation efforts of the forest department in Jammu & Kashmir, hangul has experienced a severe decline in numbers and range contraction in the past few decades. The most recent census (2015) indicated hangul population in Dachigam is lowest ever recorded i.e. 110 to 130 individuals only, reflecting hangul facing the worst time for its survival.

We investigated genetic variability, sex ratio and demographic history of hangul population for the first time and found this population to exhibit a relatively low diversity estimates when compared to other red deer populations of the world. We established the facts through our scientific publications that hangul is a precarious subspecies of red deer, significantly diverged from the other subspecies of red deer which deserve to be upgraded to a species level in the red deer species complex. Considering the current level of varying threats and population decline (number and area of occurrence), we raised the fact that hangul to be worthy to provide a discrete status within the red deer complex, different from the 'Least Concern' as recognized earlier.

With our proven scientific inputs IUCN/SSC- DSG authority has upgraded the hangul to a species level with merging 3 subspecies of red deer inhibited in Tarim mountains C.e.hanglu, C.e.bacterianus and C.e.yarkandensis. Hangul, not only has been now recognized as a species of red deer but also the conservation status has been upgraded to Critically Endangered from the Least Concern, which is the highest level of priority status among the conservation community one species can get. We hope the inclusion of hangul on the Red List will "help to gain international attention for the conservation of this subspecies."