Conservation news

South Korea advances engagement with international conservation breeding for the Critically Endangered Amur leopard

Ex situ conservation breeding can play an important role in the conservation of rare and threatened species. To achieve this, coordinated conservation breeding programmes, organized regionally or globally, provide essential coordination and management functions, and help to provide verification that captive breeding is managed to support the long-term conservation of wild populations.

The Amur leopard *Panthera pardus orientalis* is a Critically Endangered felid native to north-east Asia. The species was extirpated from the Republic of Korea (South Korea) in 1970 (Elves-Powell et al., 2024, *PLOS One*, 19, e0299783) and, although it is believed to have persisted in the Democratic People's Republic of Korea (North Korea) until at least 1999 (Elves-Powell et al., 2025, *Biological Conservation*, 308, 111102), the only confirmed extant population is in Russia and north-east China. Although monitoring suggests some population recovery and range expansion, overall the Amur leopard remains in a perilous state (Li et al., 2023, *Animals*, 14, 59).

To maintain a viable insurance population, support wild populations through conservation translocations from captive-bred individuals, and raise funds for in situ conservation, the international zoo community has been involved in two large-scale coordinated captive breeding programmes for the Amur leopard, the European Association of Zoos and Aquaria-led ex situ programme, and the Species Survival Plan in North America. Despite South Korea being a historical range country, there has previously been little involvement from member organizations of the Korean Association of Zoos and Aquariums in either programme.

Several member organizations of the Korean Association of Zoos and Aquariums have signalled their intention to transition from being primarily tourist attractions to playing an active role in ex situ conservation. Recently, Seoul Zoo became the first Korean institution to join the Amur leopard ex situ programme, and in late 2025, engagement between the ex situ programme and the Korean zoo community was strengthened when Cheongju Zoo joined the programme. The transfer of the first pair of leopards from the Amur leopard ex situ programme's population to Cheongju Zoo is currently under evaluation and will take place on a timeline in accordance with quarantine clearance.

Integration of Korean zoos into the ex situ programme network presents opportunities for increased international collaboration and sharing of best practices. Initial priorities are likely to focus on management of the captive population. For example, improved studbook management will help to maintain genetic diversity and better align captive breeding with the goal of maintaining a viable insurance population. Furthermore, as c. 20 million people visit member institutions of the Korean Association of Zoos and Aquariums every year, this provides an opportunity for greater contributions to public awareness raising and conservation education, with the aim of achieving sustained public attention to, and support for, the conservation of the last remaining wild Amur leopard population.

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