Conservation News

New record of the Endangered *Nymphaea candida* discovered in Xinjiang, China

Nymphaea candida J. Presl & C. Presl is a perennial aquatic plant of the Nymphaeaceae family. It is predominantly found in still or slow-flowing freshwater across Eurasia, including Central and Eastern Europe, north-west Asia, and Central Asia. Although it is widely distributed and categorized as Least Concern in Europe on the IUCN Red List, it faces significant threats in China, where it is classified as a wild plant under second-class state protection and is categorized as Endangered on the China Biodiversity Red List–Higher Plants. In China it is currently only recorded in the wild in Bosten Lake, Ili Valley Wetland and Irtysh River. The species is threatened by climate change, intensified eutrophication and habitat fragmentation. The wild population of *N. candida* in Gongliu County has decreased by 50% in the past 5 years.

With the support of the third Xinjiang comprehensive scientific expedition project, we surveyed for *N. candida* in August 2023 and August 2024, and identified a new population in Yining County, Xinjiang. We recorded the new population in the reeds of Kashgar Town in August 2024. It consists of c. 150 plants, distributed sparsely across the area. The main accompanying species include *Phragmites australis* and *Typha orientalis*. *Phragmites australis* is the dominant species in this community, with a coverage of $>75\%$, negatively affecting the growth and reproduction of *N. candida*. Additionally, human activities have caused significant damage to native plants in the area. The seed-set rate of this *N. candida* population is extremely low, and there is a risk of local extinction.

Given the conservation status of this species in China, we collected DNA samples to protect its genetic diversity. We collected tubers from 20 plants for ex situ conservation at the Yili Botanical Garden, and fruits for breeding experiments in the laboratory. Local authorities also need to develop in situ conservation strategies for the species. We will continue to investigate the wild distribution of *N. candida*, explore its conservation status and propose appropriate protection strategies.

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