

Obituary

Peter Hamilton Raven (1936–2026): A Global Architect of Biodiversity Conservation and a Friend to Indian Botany



The international botanical community mourns the passing of Dr Peter H. Raven, President Emeritus of the Missouri Botanical Garden, and one of the most influential biologists of the modern era. To many, he was a trusted and steadfast advocate for the study and conservation of tropical flora. He was equally revered in India as a mentor, collaborator, and visionary who connected tropical botany and biodiversity in general with global conservation policy.

Born in Shanghai in 1936, Raven's scientific journey began in California where his early fascination with plants led him to the California Academy of Sciences. He completed his undergraduate studies at the University of California, Berkeley (1957) and earned his Ph.D. in botany from the University of California, Los Angeles (1960). After a period

on the faculty at Stanford University, in 1971, he began his leadership of the Missouri Botanical Garden as its Director and later President, and was also appointed as George Engelmann Professor of Botany at Washington University in St. Louis. Over nearly four decades, he transformed it from being a regional U.S. institution into an international leader in botanical research. Under his leadership, major international initiatives such as the Flora of China and Flora of North America projects were undertaken, while the Garden too became a vital resource for scientists across South Asia.

Raven's academic contributions were crucial in helping to reshape evolutionary biology. His landmark 1964 paper, "Butterflies and Plants: A Study in Coevolution," co-authored with Paul R. Ehrlich, introduced and formalized the concept of coevolution—demonstrating reciprocal evolutionary change between interacting species. This work remains one of the most cited in evolutionary biology.

He authored more than 700 scientific publications straddling systematics, biogeography, evolution, ethnobotany, and conservation biology, and he had a particular interest and expertise in the family Onagraceae. His widely used textbook, *Biology of Plants*, co-authored with Ray F. Evert and Susan E. Eichhorn, has educated generations of students globally and remains especially influential in India.

Raven maintained deep and enduring ties with India where he was a regular visitor. He frequently connected with institutions such as the Botanical Survey of India (BSI) and laboratories of the Council of Scientific & Industrial Research

(CSIR), advocating strongly for conservation of biodiversity hotspots such as the Western Ghats and the Himalayas. Through collaborations with the Missouri Botanical Garden, he helped train Indian botanists, particularly in modern plant taxonomy and herbarium management.

Raven was a leading advocate for the idea that human survival depends fundamentally on plant diversity. He warned early on about the accelerating biodiversity crisis and the “Sixth Extinction,” yet remained dedicated to finding practical solutions, promoting many approaches to biodiversity conservation, including seed banks, in situ and ex situ conservation, ecological restoration and international cooperation.

His contributions earned global recognition and he received numerous national and international honors in recognition of his contributions, including the National Medal of Science in the U.S.A., a MacArthur Fellowship and numerous international awards. He was a member of the U.S. National Academy of Sciences and served on its Council from 1983 to 1986, and was Home Secretary of the Academy from 1987 to 1999. He was elected as a Fellow of multiple academies worldwide, including the Pontifical Academy of Science. He was widely honored by Indian scientific bodies, such as the Indian National Science Academy (INSA) and the Indian Academy of Sciences (IAS) reflecting his enduring influence on Indian botanical research.

When Raven assumed leadership of the Missouri Botanical Garden at the age of 35, it was modest in scale. By his retirement in 2010, it had become a global hub for research, conservation biology, and education, with major international collaborative programmes in regions and countries including Africa, Madagascar and Latin America. He expanded its herbarium to become one of the

world’s largest, and established key centers for conservation science at the Garden, and expanded the institution’s library (now named in his honour) to become one of the world’s greatest repositories of botanical literature. Beyond his institutional leadership, he co-founded the Donald Danforth Plant Science Center in St. Louis and helped St. Louis to become a major center for plant science.

Following his retirement, he remained a busy, effective and energetic advocate for plants, sustainability and for the protection of the ecosystems on which humanity depends. He lectured widely throughout the world as a great ambassador for biodiversity, sustainability and for the Missouri Botanical Garden.

For me personally he was a formidable supporter and advocate for the efforts that I and many others made in plant conservation, and in the development of botanic gardens and their role in saving plant species. I will never forget the generous support that he gave me when I had the honour of following him as President of the Missouri Botanical Garden on his retirement in 2010.

Peter Raven’s passing marks the end of an important and transformational era in botanical science. He combined intellectual rigor with a powerful ability to communicate—from detailed plant systematics to global environmental policy. For India and the world, his legacy lives on in the scientists he mentored, the institutions he shaped, and the conservation movement he helped to grow.

Peter Wyse Jackson

President Emeritus Missouri Botanical Garden
George Engelmann Professor of Botany (Emeritus)
Washington University in St. Louis
Missouri Botanical Garden
4344 Shaw Blvd., St. Louis, MO 63110, USA