

Professor Ratan Lal Brahmachary



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Ratan Lal Brahmachary (1932 - 2018)

Professor Ratan Lal Brahmachary, distinguished biochemist and a pioneer of tiger pheromone studies in India, died in the wee hours of morning on 13 February 2018 in a nursing home in Kolkata, India. He was 86.

Widely known for his research in pheromones, the biochemical messengers in living organisms, Brahmachary made significant contributions in tiger behavioural studies researching the animal for over 50 years.

Interestingly, he was an astrophysicist by training and a student of eminent Indian theoretical physicist Satyendra Nath Bose. Brahmachary shifted streams to study pheromones at the Indian Statistical Institute under its founder Prasanta Chandra Mahalanobis. He studied many species of wildlife, notably big cats, and undertook research trips to his favourite continent Africa fourteen times.

An ardent admirer of entomologist Gopal Chandra Bhattacharya, Brahmachary studied ethology in the Amazon basin in South America and Borneo, Indonesia. He was among the first scientists to observe the scent-marking behaviour of tigers, where the animals spray urine on tree branches to mark their territories and communicate via biochemical messengers. Synthesising the chemical nature of tiger urine (marking fluid), Brahmachary, alongwith Jyotirmoy Dutta of Bose Institute, Kolkata made the first comprehensive approach towards understanding the nature of big cat pheromones.

Obituary

Brahmachary's research found out that the molecule 2 acetyl-1-pyrroline (2AP) was present in tiger urine (marking fluid) and was the very same molecule that imparts the beautiful aroma to fragrant varieties of rice like basmati.

The biochemist was assisted in his studies on tiger pheromones by former Prime Minister of India, Indira Gandhi, who supported his scientific investigations. When Brahmachary was looking for a tiger cub to study pheromonal communication, Gandhi famously responded, "So you want a tiger cub?", and later facilitated his research on tigers, both in captivity and wild. An inveterate traveler, Brahmachary forged celebrated friendships with conservationists and animal welfare professionals from across the world.

He wrote several books in Bangla to promote the cause of wildlife protection and scientific observation of animal behaviour, including '*Africar Jongoley Barobar*' ('Twelve Visits to the African Jungle') and '*Bagh, Shingha, Haathi*' ('Tiger, Lion and Elephant'), receiving the coveted state prize of Bengal, the Rabindra Puraskar, for his contributions to science popularisation. His book '*My Tryst With Big Cats*' is quite popular among tiger studies scholars. He also wrote '*Animal Behaviour*' a remarkable book on ethology for Indian students.

A founder patron of Zoo Check, now the Born Free Foundation, Brahmachary always emphasised that wildlife belongs in the wild and strongly stood for compassionate treatment of animals in research. "Biology is as fascinating as probing the mysteries of the physical universe. The inner universe of an organism or of an ecosystem is as challenging as the outer Universe of the expanding cosmos," he once said in an interview. His research on tiger pheromones was published in the March, 1988 issue of ZOOS' PRINT magazine.

A life-long bachelor, Professor Ratan Lal Brahmachary had pledged his body to medical research.



Ratan Lal Brahmachary with tiger cub Sabita and Katyayani photograph by Sally Walker

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