Can Indian geneticists revive the majestic Asiatic cheetah?

Atul Sethi | TNN

A few days ago, when scientists inched closer to reviving an Australian frog species that has been extinct for the last 30 years, they also revived the world’s fascination for de-extinction — a concept that walks the thin line between science fiction and reality. Bringing to life species that have been wiped off the face of earth is a dream many geneticists have pursued for years.

“If India were to aggressively pursue it, there are at least three extinct species that can get a shot at coming back from the dead,” says Sandeep Sharma of the Washington-based Smithsonian Conservation Biology Institute. “High on the list is the Asiatic cheetah that went extinct in India soon after Independence. The others are the pink-headed duck and the mountain quail.”

Indian geneticists have been attempting to clone the Asiatic cheetah — a favourite animal of the Mughal emperor Akbar who reportedly had an army of 1,000 cheetahs accompany him on his hunting expeditions. But efforts to recreate the majestic predator have encountered several roadblocks. “The biggest hurdle is procuring the cell-line of the cheetah and defining protocols for somatic cell transfer,” says S Shivaji of the Centre for Cellular and Molecular Biology, Hyderabad. Somatic cell transfer involves creating a clone embryo with a donor nucleus in a laboratory. After that, it would be a case of attempting again and again — success rates in reproductive cloning are just about 5% — till an Asiatic cheetah cub is born.

“We are still not sure what factors combine to create the 5% success rate,” says Shivaji.

If man does succeed in playing god, it might just be Jurassic Park all over again, hopefully minus the horror.