

that goes also for several members of the scientific leadership as well. So, the primary purpose of the above exercise would be to establish and convey a sense of connectivity between the present and the efforts, both modest and titanic, of the principal actors of the immediate and more distant past. Without an established and transmitted connection with the artefacts and the actors of the past, many

of the present generation, and an alarming number of the next, will view the Indian scientific enterprise as an imported consumable, merely locally import-substituted in hard times, and not even that when money has been more comfortably provided. One of the many adverse consequences of such a happening will be that, although we will be able to identify – in parts even with justifiable pride – science

in India, we will be hard-put to identify, map and transmit to the generations to come the continuing story of Indian science.

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## Extinct species

Khoshoo (*Curr. Sci.*, 1996, 71, 506–513) has rightly suggested that India needs a National Biodiversity Conservation Board and it is one of the most welcome suggestions which would help to save our rare species otherwise, they would undoubtedly become extinct if no tangible efforts are made to protect them. However, he has given a sizable list of plants which are alleged to have become extinct in India. Included in this list are two species of the genus *Isoetes* L. (Isoetaceae: Pteridophyta), e.g. *I. dixitei* Shende and *I. sampathkumaranii* Rao, a plant to which we have devoted three decades of pointed attention.

*I. sampathkumaranii* was initially described by Rao (*Curr. Sci.*, 1944, 13, 286–287) along water margins in shallow depression in granite rocks from Government Botanical Gardens, Bangalore. This species might have become extinct as its type locality was subsequently destroyed to beautify the garden in question. Moreover, to the best of our knowledge and belief a search for this species at the above type locality and also elsewhere, has yielded nothing positive. There is no later report of its occurrence during the last 25 years or more from any other region.

*I. dixitei* was for the first time described by Shende (*J. Univ. Bombay*, 1945, B14, 50–52) from Panchgani, Maharashtra as

occurring in the shallow rock pools on the Tableland. It is specifically mentioned in the above paper that this species became extinct in 1868; but strangely enough this species was described only in 1945. It is therefore, indeed curious, that the species, which was actually described and brought on record as late as 1945 is said to have disappeared in 1868. Even otherwise this species today continues to occur not only in its type locality, Panchgani Tableland but other Tablelands of Panchgani as well as Mahabaleshwar, Maharashtra. However, its protection is essential to save it from the ravages of extinction.

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### T. N. Khoshoo replies:

The paper was written with the primary purpose of highlighting an urgent need for a National Biodiversity Conservation Board. The national and international response to such a need was indeed overwhelming. To that extent the paper has achieved its objective.

Among other things, the data about extinction of our biota during the last 100 to 200 years was available only with the World Conservation Monitoring Centre. However, before recording the information from WCMC I wrote the following in the aforementioned paper: 'Though no professional studies have been made on the extinction of biota in India, the following species appear to have become extinct'.

Based on Srivastava's information, the WCMC may consider deletion of this particular species from the list of extinct species in India. I also wrote the following in the same paper: 'Although the loss of foregoing (24) species has come to light, there may be many more species which have become extinct. A systematic study has to be initiated by BSI and ZSI involving university system.' Let me hope that credible data on endangerment and/or extinction on Indian biota would be generated in India so that one does not have to depend on outside sources.

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