

Wildlife (Protection) Act, 1972. The Act defines wild animal as one 'specified in the Schedules I to IV and found wild in nature'⁵. Ironically, however, the Schedules I to IV of the Act do not include even a single species of freshwater fish underlining the fact that in India, freshwater fishes are not considered as 'wild animals'. That there is no legal instrument that protects our freshwater fishes and that all freshwater fishes are potentially food, at least for subsistence, renders conservation of freshwater fishes as the biggest challenge in the years to come.

The Western Ghats has a great diversity in its fish, with more than half the known number of species being endemic. It is not just Miss Kerala, but there are also many others that are faced with the threat of extinction due to loss of habitat and unsustainable harvest. Nevertheless, while research is necessary, postponing conservation action due to data deficiency is a folly. The Convention on Biological Diversity⁶ in its preamble has specifically stated, 'noting that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat'. It is in

this context that intrusive scientific tools as that adopted by the authors¹ and recommendations² like 'there is an urgent need to undertake a thorough taxonomic review of several genera and species of freshwater fishes', can be perceived as other serious forms of threats faced by already endangered species.

Taxonomy is a means and not the end. Biological concepts are rapidly evolving resulting in the taxonomic unit, traditionally called species, becoming more and more hypothetical. In pursuits to resolve disputes as to which species an individual might belong, several hundreds of fishes (and other rare animals, especially amphibians) are being collected everyday by researchers throughout the Western Ghats (not sparing the Protected Areas too). Lack of training in field identification has further driven researchers to collect everything available. It is in this context that the Miss Kerala experience^{1,2} is an 'early warning' and must be taken seriously by all those concerned with freshwater fish conservation in the Western Ghats. It should also invoke and sustain a sense of 'responsible collecting' in every field biologist.

1. Solomon, S., Ramprasanth, M. R., Baby, F., Pereira, B., Thariam, J., Ali, A. and

Raghavan, R., *J. Threat. Taxa*, 2011, **3**(9), 2071–2077.

2. Molur, S., Smith, K. G., Daniel, B. A. and Darwall, W. R. T. (Compilers), *The Status and Distribution of Freshwater Biodiversity in the Western Ghats, India*, Cambridge, UK and IUCN Gland, Switzerland, and Coimbatore, India, Zoo Outreach Organization, 2011, pp. 1–116.
3. Menon, A. G. K., Occasional Paper No 175, Zoological Survey of India, Calcutta, 1999, pp. 1–366.
4. Anon., Guidelines on the implementation of the 'IUCN Policy Statement on Research Involving Species at Risk of Extinction', with special reference to Scientific Collecting of Threatened Species, Gland, IUCN, Switzerland, 2011, pp. 1–3.
5. Wildlife Protection Society of India, *The Wildlife (Protection) Act, 1972*, Professional Book Publishers, New Delhi, 2003, pp. 1–10.
6. Anon., *Handbook of the Convention on Biological Diversity*, Secretariat of the Convention on Biological Diversity, Montreal, Canada, 2003, 2nd edn, pp. 1–936.

R. J. RANJIT DANIELS

Care Earth, No. 5, 21st Street,
Thillaianganagar,
Chennai 600 061, India
e-mail: ranjit.daniels@gmail.com

Will development spare the spiny-tailed lizards in Kachchh?

The Indian spiny-tailed lizard is a unique reptile that belongs to the family Agamidae. According to Wilms *et al.*¹, its generic name has been recently resurrected from *Uromastyx hardwickii* to *Sara hardwickii*. It occurs in large numbers in isolated patches in the drylands of Uttar Pradesh, Rajasthan, Gujarat (Kachchh) and Pakistan². These solitary lizards excavate twisting burrows (6–8 cm wide; 2 m long) for safe living. They are mostly herbivores, but occasionally feed on insects and hibernate in winter^{2,3}.

The spiny-tailed lizard has been listed in the CITES (Appendix II) and Indian Wildlife (Protection) Act (Schedule II). Although the 1998 IUCN Red List had listed the lizard as vulnerable, it has gone missing in the recent list⁴. It is known locally as 'Sandho' in Gujarat, and is hunted due to its aphrodisiac value². The ongoing land developments are already

displacing these lizards due to the construction of a large number of housing and industrial units across rural Kachchh.

Following the 2001 earthquake, the Kachchh District (area 45,652 sq. km) gained prominence for growth in the



Figure 1. An immature spiny-tailed lizard ventures out of its den in Khadir village, Kachchh.

CORRESPONDENCE

industrial and land development sectors. Although various government agencies and NGOs have done environmental impact assessments, details on the survival threats facing local fauna and flora are not available. In spite of this, local NGOs and security forces have locked into a debate recently, when the state asked for clearance from the Centre (Ministry of Environment and Forests) to build a road through the Kachchh Desert Wildlife Sanctuary⁵. Although the road may run over some patchy territories displacing the spiny-tails (Figure 1) along the Harappan site of Dholavira, the flamingos that breed in the Great Rann managed to get some conservation attention. Conservationists argue that

the proposed road will destabilize the breeding grounds of thousands of flamingos and chase them away. But proponents from the Government maintain that the road is critical for the Border Security Force to better access to its last outpost – the hotspot of the 1965 war between India and Pakistan. The Indian wildlife conservation efforts have a history of promoting only ‘glamorous’ wildlife^{6,7}, and so the threats facing the often ignored spiny-tailed lizards in the Kachchh frontier may sadly go unnoticed.

1. Wilms, T. M., Bohme, W., Wagner, P., Lutzmann, N. and Schmitz, A., *Bonn. Zool. Beitr.*, 2009, **56**, 55–99.

2. Daniel, J. C., *The Book of Indian Reptiles*, Oxford University Press, Delhi, 1992.
3. Dutta, S. and Jhala, Y., *J. Bombay Nat. Hist. Soc.*, 2007, **104**, 255–265.
4. *The IUCN Red List of Threatened Species*, IUCN, Cambridge, 2011.
5. Chauhan, C., *Hindustan Times*, 14 October 2011.
6. Saberwal, V., *Conserv. Biol.*, 1996, **10**, 741–749.
7. Agoramorthy, G. and Kumar, V., *Curr. Sci.*, 2011, **101**, 261–262.

PRATIKSHA PATEL

*Himadri Enviro Protection Consultants,
A 506, Wall Street 2,
Ahmedabad 380 006, India
e-mail: drpratikshapatel@gmail.com*

NET: in-built conflict

The University Grants Commission (UGC) and the Council of Scientific and Industrial Research (CSIR), New Delhi biannually conduct a combined National Eligibility Test (NET) for postgraduate (PG) students in order to award the Junior Research Fellowship (JRF), and eligibility for lectureship (LS) or assistant professorship in universities and colleges. It has been observed that the first preference of meritorious and desiring PG students is to clear the examination so that their academic liaison remains uninterrupted and they become independent with a sizeable fellowship available for a maximum of five years. A limited number of candidates succeed in NET, which entitles them for LS. The CSIR test clubs several distinct but interdisciplinary subjects in one packet and overall five packets cover the entire science domain. The case is vastly different from UGC that conducts the test in 94 subjects related to humanities, commerce and languages, and allied subjects. The GATE exam also awards fellowship in 22 engineering and engineering-related science subjects.

NET has had a chequered history since its inception; on and off NET qualification is made compulsory or optional for academic positions. It is observed that there is a general paucity of NET-qualified

candidates. To overcome the shortage of NET candidates, the higher education regulating authority, the UGC, allowed states to conduct their own tests, popularly known as the State Level Eligibility Test (SLET) or State Eligibility Test (SET). UGC also frequently considered, in a time window, higher degree holders (MPhil/PhD) for academic jobs without NET qualification; and at present with a rider that in-job NET clearance.

Time and again relaxation in basic eligibility condition of NET raises doubts about its importance. This is a multidimensional problem. Frequent relaxation in induction qualification implies that policy makers are unable to grasp the ground situation created by the voluminous syllabus which is exceedingly heavy in comparison to top competitive exams. It is also beyond the capacity of an above-average PG student. One fails to understand what purpose does this syllabus serve. Neither teaching nor research standards have increased after introduction of NET. Allowing SLET/PhD/MPhil in itself is a confession that NET is difficult to crack and softer options are needed for vacant positions. No reasonable answers are available for the following questions: Why are examinations not conducted subject-wise? What purpose does an option-less examination

serve? Why does a candidate have to appear only in one paper? Why are superficially related subjects clubbed together? Is the purpose of NET to promote interdisciplinary research? Are our universities allowing a student of mathematics to register in botany? Why are the states allowed to conduct their own examination? Why is an equivalent job of scientist position available in national laboratories on the PhD qualification? Why do NET papers include research-related questions whose answers are not available in standard textbooks?

The science NET exam has to be candidate supportive. The first step towards this would be to have two papers (subject-wise exam). The best way to attract talent in higher academics is by offering opportunities within a few months after the PG examinations. There is no doubt that we need talented and research-oriented candidates in the higher education set-up. Talent is not always reflected by marks; it is the sum of knowledge, intelligence, hard work, commitment and passion for academic work.

A. K. BIYANI

*Department of Geology,
DBS College,
Dehradun 248 001, India
e-mail: biyani_ajay@yahoo.com*