

tematic surveys and monitoring of several colonies in various Indian states, the exact situation will not be known. Furthermore, the Indian Wildlife Protection Act considers all fruit bats as 'vermin'¹³, so these mega bats are 'legally vulnerable' for hunting pressure in unprotected areas. The flying foxes are in fact excellent seed dispersers, pollinators and indicators of habitat diversity.

Among the 25-biodiversity hot spots, the Western Ghats and Sri Lanka Hot spot has been listed as the most densely populated¹⁴, with 341 people/km². Thus the threat to biodiversity is real and surveys have got to be intensified to document the vast biological resources of India. How hard or easy is it to accomplish such a task? Even students with a postgraduate degree in zoology apparently have difficulty in identifying 5–10 species of birds, lizards, fish or butterflies put together². This is because students have hardly been encouraged to look at live creatures around them. In this murky situation, training becomes crucial to biology students and teachers to contribute significantly towards the biodiversity inventory. On the occasion of Salim Ali's birth centenary, the Indian Academy of Sciences launched 'Life-

scape' a project headed by Madhav Gadgil, a renowned conservationist, to enhance the quality of science education and to collect reliable data on the diversity of life using high school, college and postgraduate students as well as teachers². This project certainly deserves support from all students and teachers of biology across India, and indeed this model could be used in other biological hot spots around the world to compile biodiversity data effectively.

1. Myers, N., Mittermeier, R. A., Mittermeier, C. G., da Fonseca, G. A. B. and Kent, J., *Nature*, 2000, **403**, 853–858.
2. Gadgil, M., *Curr. Sci.*, 1996, **71**, 688–697.
3. Kurup, G. U., in *Current Primate Researches* (eds Roonwal, M. L., Mohnot, S. M. and Rathore, N. S.), University of Jodhpur Press, Jodhpur, 1984, pp. 57–65.
4. Southwick, C. H. and Lindburg, D. G., in *The Road of Self-sustaining Populations* (ed. Benirschke, K.), Springer-Verlag, New York, 1986, pp. 171–187.
5. Mistry, S., *Bats*, 1995, **13**, 11–15.
6. Bates, P. J. J. and Harrison, D. L., *Bats of the Indian Sub-continent*, Harrison Zoological Museum, Kent, 1997.
7. Saberwal, V., *Conserv. Biol.*, 1996, **10**, 741–749.

8. Hsu, M. J. and Agoramoorthy, G., *Bio-divers. Conserv.*, **7**, 1383–1384.
9. Thomas, D. W. and La Val, R. K., in *Ecological and Behavioral Methods for the Study of Bats* (ed. Kunz, T. H.), Smithsonian Institution Press, Washington, D.C., 1988, pp. 77–90.
10. Fujita, M. S. and Tuttle, M. D., *Conserv. Biol.*, **5**, 455–463.
11. Rainey, W. E., in *Bat Biology and Conservation* (eds Kunz, T. H. and Racey, P. A.), Smithsonian Institution Press, Washington, D.C., 1998, pp. 326–341.
12. Hsu, M. J. and Agoramoorthy, G., *Conserv. Biol.*, **11**, 834–836.
13. GOI, The Wildlife (Protection) Act No. 53 of 9 September 1972, Ministry of Law, Justice and Company Affairs, Government of India, 1972.
14. Cincotta, R. P., Wisnewski, J. and Engelman, R., *Nature*, 2000, **404**, 990–992.

GOVINDASAMY AGORAMOORTHY*
MINNA J. HSU

*Department of Biological Sciences,
National Sun Yat-sen University,
P.O. Box 59-157,*

Kaohsiung 80424, Taiwan

**For correspondence*

e-mail:agoram@mail.nsysu.edu.tw

Attesting wastage

I like to draw the attention of all persons in this country who still remain sane and faithful to rational practices. I have chosen *Current Science* for submitting this letter for publication because, in my opinion, this journal is the largest and most influential platform for exchange of ideas and actions of scientists (and technologists, scientific amateurs and interested laymen) in India. I also believe that scientists and scientific workers as a lot in this country have a more rational and open outlook than others; they cannot afford to waste time foolishly and the policy makers still pay heed to their voices.

I am now a reader in a university department. Earlier I was for more than a decade a Group 'A' Officer in the State Government of West Bengal. For the last 23 years or so, I have probably spent one-fifteenth (may be more) of this

23 × 365 × 24 hours on attesting copies of certificates, writing character certificates and doing such other utterly meaningless unproductive activities. Usually a student applying for admission to an institution or sitting for a public examination, or a person applying for training, scholarship, fellowship or a job is required to submit copies of mark sheets, certificates, testimonials, etc. (on an average by my estimate 10 sheets of papers) along with the application.

Each of these needs to be (compulsorily) attested by a Gazetted Officer, a Group 'A' Officer of some designation or status, a principal, a lecturer, MP, MLA, councillor or a person with suitable employment. Each of these persons is highly pressed for working time. Attestation means a signature with a date and sometimes (if one attests a photograph or a thumb impression) with other suitable

statements and an impression of a (rubber) seal. If one considers that a signature requires five seconds and stamping requires ten seconds and comparing original with the copy requires 30 seconds, and if in the whole of India at least 5 million such attestations are needed every day, then $(6 \times 10^6 \times 45) / 3600 = 75,000$ man-hours are lost every day!

There is a tendency (quite natural though) of increasing the number of testimonials to be enclosed with an application. These are xerox-copied nowadays. Consider then the huge mass of papers being used and wasted! Moreover each copy would cost 40 to 60 paise, usually.

Most of the applicants are not even called for an interview. Often the interview is cancelled or readvertised. Ultimately only 0.1% or less on the whole is selected. All other papers (applications) are

thrown away or dumped for a while to be sold as paper waste.

In case of those selected, they have to produce the original documents, which are checked and verified at different points. If this is the case, why should everybody enclose a huge mass of supporting papers duly attested, more than 99% of which is never even sifted through! Why cannot the application (whether on plain paper or in an issued proforma) be submitted along with a CV duly signed and declared to be true by the candidate? If a copy of any really essentially important document needs to be enclosed, why cannot this be self-attested? At best, a summary of qualifications and testimonials may be asked for from the candidate. All this infor-

mation can easily be verified at the time of joining. The authorities may well seek confidential reports from three or four different corners, as is usually done by many government and non-government agencies through police verification or references to educational institutions attended by the candidate. We must realize that no system is absolutely fool-proof. But we can minimize wastage of time, money and manpower in our poor country and ensure selection of the most competent candidate by acting rationally.

My specific proposals are: (i) Let every person eligible to attest, stop attesting documents to be enclosed with an application; (ii) Let every applicant send in applications and accompanying documents, if necessary with self attestation;

(iii) Let every government or non-government agency take steps to discontinue the practice of attestation by proper notifications; (iv) Let our Hon'ble High Courts and/or the Hon'ble Supreme Court take up this matter *suo moto* and issue directives to stop the practice of attestation.

SUBIR K. SEN

*Department of Library and Information Science,
University of Calcutta,
Asutosh Building,
College Street,
Kolkata 700 073, India
e-mail: subir-s@hotmail.com*

SciDev.net – Inputs from reputed journals are but crumbs

The Third World Academy of Sciences (TWAS) Newsletter, said to be available on-line at <http://www.ictp.trieste.it/~twas/Nlonline.html>, is not quite current in that as on 7 January 2002 it did not contain the July–September issue (2000, 13) which was lying on my desk already. Be that as it may, this latest issue contains a news item regarding the web portal SciDev.net. This article stated that it is 'a new free-access web portal sponsored by *Nature* and *Science*, in cooperation with the Third World Academy of Sciences, set to take off this (2001) December. The focus: *Science and Technology in the Developing World* (emphasis mine)'. Naturally, I was curious to see the contents of SciDev.net. It is available on-line at the website <http://www.SciDev.net/>.

The site contains the following information: News, Features, Opinion and Editorial, Book Review, Comments and Feedback.

Detailing the objectives of this new portal the homepage states, 'SciDev.net seeks to provide concise, accurate and topical news coverage of the principal issues and events relevant to the areas covered by the website. . . . Feature items will focus in greater depth on the background to the topics covered on the website. . . . The centre column of the

homepage contains a summary of the most recent opinion items to appear on the website. This item is either commissioned by SciDev.net or reproduced from another publication, in which case a summary will appear with a link to the original site. The Book Review section provides links to book reviews appearing on other sites, particularly in *Nature* and *Science*, that are relevant to the themes addressed by the website. . . . Regional gateways provide a collection of news, features and opinion items relevant to different parts of the world.'

From this description, it is obvious that the only inputs from *Nature* and *Science* are to be found in the Book Review section. Further exploration showed that as on 7 January 2002, in the archives of SciDev.net, nine books were listed. When the book reviews were examined, the status was that links or references to *Nature* and *Science* had been given to six books, one to *British Medical Journal* and no reviews were available for the remaining two.

Recently *Current Science* had published a News item entitled 'Medical journals for free' (2002, 81, 635–636). On 9 July 2001, the WHO and six medical journal publishers announced an initiative which will enable close to 100 developing countries to gain access to

vital scientific information that they otherwise could not afford. 'The arrangement agreed to by the six publishers would allow almost 1000 of the world's leading medical and scientific journals to become available through the Internet to medical schools and research institutions in developing countries for free or at deeply-reduced rates'. In addition, it is also noted that some non-medical periodicals also seem to be available for free on the web, for example, *Proceedings of the National Academy of Sciences, USA*.

In the light of these global changes that are taking place, in my opinion the inputs from *Nature* or *Science* to SciDev.net do not touch any hard-core science information, access to which the developing countries cannot afford. The inputs on news and book reviews can be conveniently missed without much loss, but the crucial opening of windows to scientific literature, per se, is sadly still wanting to be available to the developing world.

K. R. RAO

*'Gokula', 29/2, 11th Cross,
Third Main (Margosa) Road,
Malleswaram,
Bangalore 560 003, India
e-mail: krarrao@ias.ernet.in*