











pests, especially rodents, then such a strategy will help reduce human persecution of the owls. We believe that interactive educational programs based on scientific data, like this study, can be used to remove superstitions and further owl conservation.

## REFERENCES

- Ali, S. & S.D. Ripley (1969).** *Handbook of the Birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka—Vol. 3.* New Oxford University Press, Delhi, 327pp.
- Bibby, C., M. Jones & S. Marsden (1998).** *Expedition Field Techniques: Bird Surveys.* Expedition Advisory Center, London, 137pp.
- Daniels, J.C. (2002).** *The Book of Indian Reptiles and Amphibians.* Bombay Natural History Society and Oxford University Press, Mumbai, 238pp.
- Devkar, R.V. (2009).** Episodes of unnatural injury and death of Barn Owls (*Tyto alba*); a warning call. *Current Science* 96: 209–210.
- Donázar, J.A. (1987).** Geographic variations in the diet of the eagle owls in western Mediterranean Europe, pp. 220–224. In: *Biology and Conservation of Northern Forest Owl.* General Technical Report RM-142.
- Frank, R.A. & R.S. Lutz (1997).** Great Horned Owl (*Bubo virginianus*) productivity and home range characteristics in a shortgrass prairie, pp. 185–189. In: Duncan, J.R., D.H. Johnson & T.H. Nicholls (eds.). *Biology and Conservation of Owls of the Northern Hemisphere.*
- Frey, H. (1973).** Zur Ökologie niederösterreichischer Uhupopulationen. *Egretta* 16: 1–68.
- Gillies, C.A. & R.J. Pierce (1999).** Secondary poisoning of mammalian predators during possum and rodent control operations at Trounson Kauri Park, Northland, New Zealand. *New Zealand Journal of Ecology* 23(2): 183–192.
- Hearn, C.E.D. (1973).** A review of agricultural pesticide incidents in man in England and Wales, 1952–71. *British Journal of Industrial Medicine* 30: 253–258.
- Howard, W.E. (1976).** A philosophy of vertebrate pest control, pp. 116–120. In: Proceedings of the 7<sup>th</sup> Vertebrate Pest Conference.
- Jain, A.P., R.S. Tripathi & B.D. Rana (1993).** *Rodent Management: The State of Art.* Technical Bulletin No. 1. Indian Council of Agricultural Research, New Delhi, 38pp.
- Johnson, R.J., J.R. Brandle, N. Sunderman, R. Fitzmaurice, N.A. Beecher, R.M. Case, M. Dix, L. Young, M.O. Harrell, R.J. Wright & L. Hodges (1996).** Wildlife as natural enemies of crop pests, pp. 112–116. In: 8<sup>th</sup> Triennial National Extension Wildlife and Fisheries Specialists Conferences.
- Kanakasabai, R., P. Neelanarayanan & R. Nagarajan (1998).** Quantifying Barn Owl *Tyto alba stertens* prey frequency and biomass, pp. 153–157. In: Dhindsa, M.S., P.S. Rao & B.M. Parasharya (eds.). *Birds in Agricultural Ecosystem.* AICRP on Economic Ornithology, Rajendranagar, New Delhi, 196pp.
- Kasambe, R., S. Pande, A. Pawashe & J. Vadatkar (2004).** Additional records of Forest Spotted Owlet *Athene blewitti* in Melghat. *Newsletter for Ornithologists* 1: 12–14.
- Kaukeinen, D. (1982).** A review of the secondary poisoning hazard potential to wildlife from the use of anticoagulant rodenticides, pp. 151–158. In: Marsh, R.E. (ed.). Proceedings of the Tenth Vertebrate Pest Conference. University of California, Davis, 245pp.
- Khajuria, H. (1968).** The young of the Indian Long-tailed Tree Mouse *Vandeleuria o. oleracea* (Bennet) (Rodentia: Muridae). *Cheetal* 2: 52.
- Leditznig, C. (1992).** Telemetric study in the Eagle Owl (*Bubo bubo*) in the foreland of the Alps in Lower Austria - methods and first results. *Egretta* 35: 69–72.
- Legendre, P. & L. Legendre (1998).** *Numerical Ecology.* Second Edition. Elsevier Sciences, Amsterdam, 853pp.
- Littrell, E.E. (1990).** Effects of field vertebrate pest control on nontarget wildlife (with emphasis on bird and rodent control), pp. 59–61. In: Davis, L.R., R.E. Marsh & D.E. Beadle (eds.). Proceedings of the Fourteenth Vertebrate Pest Conference. University of California, Davis, 372pp.
- Murthy, G.V.S. & M. Sanjappa (2001).** Grasslands, pp. 149–163. In: Alfred, J.R.B., A.K. Das & A.K. Sanyal (eds.). *Ecosystems of India,* Envis - Zoological Survey of India, 410pp.
- Neelanarayanan, P. (2007).** Diet of Barn Owl *Tyto alba stertens* Hartert, 1929 in a portion of Cauvery Delta, Tamil Nadu, India. *Zoos' Print Journal* 22(8): 2777–2781.
- Neelanarayanan, P., R. Nagarajan & R. Kanakasabi (1999).** The common Barn Owl *Tyto alba stertens* Hartert, 1929: an effective bio-control agent of rodent pests, pp. 153–163. In: Kaul, B.L. & Y.R. Malhotra (eds.). *Advances in Fish and Wildlife Ecology and Biology—Volume 2.* Daya Publishing House, Delhi, 281pp.
- Newton, I. & I. Wyllie (2002).** Rodenticides in British Barn Owls (*Tyto alba*), pp. 280–289. In: Newton, I., R. Kavanagh, J. Olsen & I. Taylor (eds.). *Ecology and Conservation of Owls.* Csiro Publishing, Australia, 598pp.
- Olsson, V. (1979).** Studies on a population of eagle owls *Bubo bubo* (L.), in south Sweden. *Viltrevy* 11: 1–99.
- Pande, S., A. Pawashe, D.B. Bastawade & P.P. Kulkarni (2004).** Scorpions and molluscs: some new dietary records for Spotted Owlet *Athene brama* in India. *Newsletter for Ornithologists* 1: 68–70.
- Pande, S., A. Pawashe, U. Karambelkar & S. Shrotri (2005).** Salvage, relocation and in-nest behaviour of Barn Owl *Tyto alba stertens* Hartert, chicks. *Indian Birds* 1: 5–6.
- Pande, S., A. Pawashe, M.N. Mahajan, C. Joglekar & A. Mahabal (2007).** Effect of food and habitat on breeding success in Spotted Owlets (*Athene brama*) nesting in villages and rural landscapes in India. *Journal of Raptor Research* 41: 26–34.

- Parshad, V.R. (1999).** Rodent control in India. *International Pest Management Reviews* 4: 97–126.
- Penteriani, V. (1997).** Long-term study of goshawk breeding population on a Mediterranean mountain (Abruzzi Apennines, Central Italy): density, breeding performances and diet. *Journal of Raptor Research* 31: 308–312.
- Penteriani, V., M. Gallardo & P. Roche (2002).** Landscape structure and food supply affect Eagle Owl (*Bubo bubo*) density and breeding performance: a case of intra-population heterogeneity. *Journal of Zoology, London* 257: 365–372.
- Penteriani, V., M. Gallardo, P. Roche & H. Cazassus (2001).** Effects of landscape spatial structure and composition on the settlement of the Eagle Owl *Bubo bubo* in a Mediterranean habitat. *Ardea* 89: 331–340.
- Ramanujam, M.E. (2004).** Methods of analyzing rodent prey of the Indian Eagle Owl *Bubo bengalensis* (Franklin) in and around Pondicherry. *Zoos' Print Journal* 19: 1492–1494.
- Ramanujam, M.E. (2006).** On the prey of the Indian Eagle Owl *Bubo bengalensis* (Franklin, 1831) in and around Pondicherry, southern India. *Zoos' Print Journal* 21: 2231–2240.
- Ramanujam, M.E. & T. Murugavel (2009).** A preliminary report on the development of young Indian Eagle Owl *Bubo bengalensis* (Franklin, 1831) in and around Puducherry, southern India. *Journal of Threatened Taxa* 1(10): 519–524.
- Ranade, R.V. (1989).** The Pygmy Shrew *Suncus etruscus*. *Journal of the Bombay Natural History Society* 86: 238–239.
- Roychoudhary, S.P. (1966).** *Land and Soil*. National Book Trust, New Delhi, 171pp.
- Singleton, G.R. (1994).** The prospects and associated challenges for the biological control of rodents, pp. 301–307. In: Proceedings of the 16<sup>th</sup> Vertebrate Pest Conference, 353pp.
- Smith, E.P. & I.A. Lipkovich (2002).** *Biplot 1.1: Excel Addin freeware*. Statistics Department of Virginia Tech, <http://www.stat.vt.edu/facstaff/epsmith.html>
- Spillet, J.J. (1966).** Growth of three species of Calcutta Rats, *Bandicota bengalensis*, *B. indica* and *Rattus rattus* (Linn.), pp. 177–196. In: Proceedings of Indian Rodent Symposium, Johns Hopkins University Center for Medical Research and Training and United States Agency for International Development, Calcutta, India, 314pp.
- Tikader, B.K. & D.B. Bastawade (1983).** *Fauna of India: Scorpions. Scorpionida: Arachnida Vol. III*. Zoological Survey of India, Calcutta, 668pp.
- Tikader, B.K. & R.C. Sharma (1992).** *Handbook of Indian Lizards*. Published by Director, Zoological Survey of India, Calcutta, 249pp.
- Wodzicki, K. (1973).** Prospects for biological control of rodent populations. *Bulletin of World Health Organization* 48: 461–467.



**Author Detail:** SATISH PANDE is a Fellow of Maharashtra Academy of Sciences. He is an Interventional Vascular Radiologist and Assoc. Professor of Radiology at B.J. Medical College, Pune. He works in ecology and field ornithology and has made several video films on raptor ecology, marine ecosystem and conservation. He has published more than 40 papers and has authored several field guides and popular books on ornithology, nature education, orchids and other subjects for popularization of science and to promote conservation.

NEELES DAHANUKAR works in ecology and evolutionary biology with an emphasis on mathematical and statistical analysis.