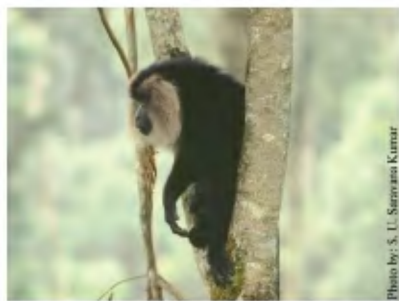


## In this issue

### Infant development in lion-tailed macaques

The lion-tailed macaque, endemic to the rainforests of the Western Ghats, is an endangered species. Never abundant, the populations of this species have been further declining due to habitat fragmentation and hunting. The species has, therefore, attracted a special conservation concern. Whereas considerable information has been gathered about its population trends and ecology, little is known about the details of subtle aspects of its behav-



iour such as infant development and weaning. B. A. Krishna *et al.* (page 347) provide results of a long-term study on the behavioural development in 31 infants from birth to the age of 15 months. An active weaning by the mother begins at the infant's age of about five and a half months and is by and large completed by the age of nine months. Male infants appear to garner more parental investment from their mothers than the female infants. During the past decade, the role of behavioural biology has been specifically emphasized for its contribution to conservation and management of endangered species. Studies of the present kind not only add to our database on an endangered species but also provide depths into subtleties of behaviour.

### Materials for lithium batteries

Lithium-ion batteries have emerged as the most important showpiece of modern theoretical and applied electrochemistry. Albeit their recent origin, lithium-ion batteries have become

incredibly popular as power sources for portable devices such as cellular phones, camcorders and laptops. Continual shift of gears in their technology in tune with the demands of a burgeoning electronics industry requires innovations in both materials and design. Advances in materials science, especially of nanomaterials, and application of the molecular recognition and self-assembling properties of biosystems are expected to revolutionize lithium batteries at the conceptual and technological levels. See page 314.

### Mating success and fluctuating asymmetry

More than a decade has passed since T. A. Markow and A. P. Møller suggested first that fluctuating asymmetry (FA), the morphological expression of developmental instability, might play a role in sexual selection and/or communication. Through the intervening years, there is growing body of literature addressing the relationship between FA and fitness components at both the individual and population levels. Interest in FA stems from the notion that there is a target state of symmetry that all individuals are aiming to achieve, and that individuals fail to develop symmetrically are in some way of poorer quality than those that do achieve symmetry. Rarely in biology there has been such intuitively attractive and broadly applicable proposition as the concept that deviations from symmetry are the consequence of inability to cope with environmental or genetic stress. The appeal of FA also extends to the ease with which this potential measure of phenotypic and genetic quality can be obtained: simply the difference in size of the left and right sides of a bilaterally symmetrical trait. In the context of the sexual selection, FA may be an empirical measure of the quality of individuals competing for reproductive success or a reliable cue for potential mate. In the paper on mating success and fluctuating asymmetry in *Drosophila ananassae*, C. Vishalakshi and B. N. Singh (page 375) have

shown that size of the morphological traits is more reliable indicator of individual quality rather than fluctuating asymmetry in sexual selection and they suggest that FA may not be considered as overall cue of genetic quality.

### Stone anchors along the coast of Chilika Lake

Use of stone anchors came into lime-light ever since people started using lake, sea and rivers for maritime trade and other purposes. Finding of stone anchors are representative of the existence of ancient harbours, anchorage and trade routes. Several types of stone anchors have been discovered both from onshore and offshore explorations along the coast of India. Over the period of time stone anchors developed, i.e. from dead weight to composite and Indo-Arabian type and this is because of increasing carrying capacity and change in shape and size of boats. Stone anchors of India resemble with the anchors found in the Mediterranean Sea, Red Sea and Persian Gulf coast, however they differ in period.



Explorations along the coast of Chilika have yielded stone anchors along with hero stones. These anchors differ from those recovered from other parts of India. The details of the anchors of Chilika lake and hero stones have been discussed (page 386). The discovery of stone anchors from the Chilika Lake region revealed that the stone anchors used in the sea for overseas maritime trade is different from the anchors used in lake. Further, the study shows that anchors used in lake are kept under water permanently, whereas anchors used in sea are lowered and lifted every time.