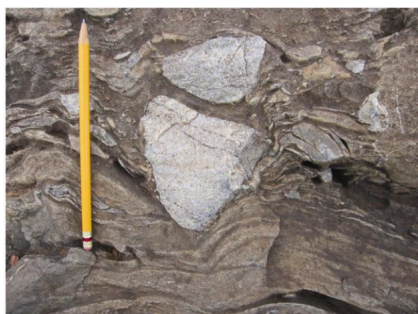


## In this issue

### ~2.7 billion-year-old Archean glaciomarine deposits, southern India

Nearly the oldest glacial deposits in the world, exceeded in age only by the ~2.9 billion-year-old Pongola deposits in South Africa, are described from the 2.7 billion-year-old Talya and Kaldurga Conglomerates (Vanivilas Formation, Chitradurga Group, Dharwar Supergroup) in the Chitradurga schist belt of the Western



Dharwar Craton of southern India. There are 15 'diamictite' units within a measured section > 500 m thick, comprised of boulders, cobbles, and pebbles in a fine-grained laminated matrix of mud, silt, and fine sand. They were deposited in a marine environment, with the coarse component dropped from floating icebergs (i.e. ice-rafted detritus) into fine-grained sediment on the ocean floor. The main evidence for this mechanism is the presence of 'dropstones',

stones that have penetrated and/or bowed down the underlying fine-grained laminae. Rare stones are faceted and glacially striated, and a few pebble nests from overturned icebergs are also present. The source of the coarse material is from the Bababudan Group (quartzite, quartz-pebble conglomerate and iron formation) and from older granitic basement; the source area was located to the west and southwest. An axiom of geology is 'the present is the key to the past'. An excellent analogue for these deposits is present in the Pacific Ocean just west of Alaska, where glaciomarine deposits have accumulated for several million years, until recently, from mountain glaciers of Alaska that reached the ocean and calved icebergs. Modern and late Cenozoic depositional rates in that region allow for crude calculations of the Archean depositional rates. See **page 387**.

### Reproductive performance of Indian mouse deer (*Moschiola indica*)

The mouse deer or the Indian chevrotain (*Moschiola indica*) is a primitive deer, belongs to a distinct family Tragulidae. It shares pig like characters such as the presence of four toes, large hooves, absence of facial scent glands and mating behaviour. Mouse

deer plays a major role in forest ecosystem as seed disperser and form prey for many carnivores. It has been included as an endangered species in the Indian Wildlife Protection Act (1972) due to frequent hunting. Information on reproduction and behaviour of this endangered species is limited. The Nehru Zoological Park, Hyderabad initiated a conservation



breeding programme on mouse deer with six deer, supported by the Central Zoo Authority, Government of India. A total of 31 births were recorded between March 2010 and February 2013. Female mouse deer came to oestrus at an age of 145 days and gestation length ranged from 150 to 163 days. Age at first fawning was 304 days. The inter-birth interval ranged from 150 to 170 days. All the females showed post-partum oestrus within 4–6 h of fawning until successful copulation occurred. The present observations on reproduction of mouse deer can help in future breeding programmes. See **page 439**.