## **Ecological character**

As the monsoon recedes, the water gradually dries up and by the end of January most of the water in the forest and low lying areas becomes saline. The water dries up completely by the end of January, leaving behind hardpacked mud, which gradually turns into soft powdery dust as summer advances. The other habitat types include stretches of open grazing lands ( $ca\ 7\ km^2$ ), especially at the southern and western portions, some mangrove vegetation bordering the Muniappan lake and near the lighthouse, and dune vegetation on the coast.

The habitat varies seasonally in the eastern two-third part of the GVS. It is a continuous sheet of shallow, fresh/brackish/saline water (depending on the season) during the monsoon and during the period of the southwesterly winds (May and June). At other times, the waterspread area dries up gradually north to south up to a few kilometres, creating mudflats and shallow pools.

Due to the diversity of habitats, the vegetation of the Point Calimere Wildlife Sanctuary is equally diverse, ranging from dry evergreen forests, mangrove vegetation, salt marsh to grasslands. The flora of the Point Calimere forest and the Great Vedaranyam Swamp were studied by different workers (Blasco & Legris 1973; Sebastine & Ellis 1967; Meher-Homji 1974, 1984; Balasubramanian 1982 and Rao & Balasubramanian 1994; whereas the vegetation of the Talaignayar has only been investigated by Sebastine and Ellis (1967).

- Forest Vegetation (Point Calimere): The forest at Point Calimere is classified as Tropical Dry Evergreen Forest (Champion & Seth 1968), but Meher-Homji (1973) considered it a misnomer as the climatic regime is not typically tropical (but dissymetric), the region is not particularly dry, and nor is the formation entirely evergreen as almost 50% of the species are deciduous. This forest is a peculiar type that is confined to northern Sri Lanka and the coastal region of the Coromandel.
- **Grassland Vegetation**: A total of 27 species including 11 species of grasses, 4 sedges, 7 forbs and 3 succulents have been reported from the grassland area frequented by Blackbuck (Rao and Balasubramian 1994). These species constitute the major food of the Blackbuck and cattle in the Sanctuary.

In low lying areas of the grasslands subjected to seasonal flooding, most of the species are salt-tolerant. *Sporobolus tremulus* is dominant, followed by *Aeluropus lagopoides* and *Sacciolepis indica*. *Cressa cretica* is mainly recorded in areas with salt encrustation. *S. tremulus* and *A. lagopoides* are amphibious species with high degree of salt tolerance.

- **Shore Vegetation**: The vegetation is scrub jungle.
- **Mangrove Vegetation:** Characteristic mangrove forest is seen at Muthupet, where the River Korayar meets the sea. *Avicennia marina* is the dominant mangrove species in the area.

Fourteen species of mammals have been reported from the Sanctuary. The larger mammals are the Blackbuck *Antilope cervicapra*, Spotted Deer *Axis axis*, Wild Boar *Sus scrofa* and Jackal

Canis aureus. The Flying Fox *Pteropus giganteus*roosts in large flocks on trees in the Point Calimere forest and the mangrove forest at Muthupet. The Common Dolphin *Delphinus delphis* is seen near the shore during the monsoon.

Some of the major waterbird species are the Greater Flamingo *Phoenicopterus roseus* and the Lesser Flamingo *P.minor*, Spot-billed Pelican *Pelecanus philippensis*, Spoonbilled Sandpiper *Calidris pygmeus*, Asian Dowitcher *Limnodromus semipalmatus*, White-bellied Sea-Eagle *Haliaeetus leucogaster*, Brahminy Kite *Haliastur indus* and Osprey *Pandion haliaetus*. Landbirds include Paradise Flycatcher *Terpsiphone paradisi*, Indian Pitta *Pitta brachyura*, Rosy Starling *Sturnus roseus*, Blyth's Reed Warbler *Acrocephalus dumetorum*, Crested Serpent Eagle *Spilornis cheela* and Brown Shrike *Lanius cristatus*.