



South African
NATIONAL PARKS

THE GROOT RIVER ESTUARY

Nature's Valley

Tsitsikamma National Park

The Nature's Valley Estuary is fed by the Bobbejaan and Groot Rivers. These perennial rivers arise from near pristine catchments in protected areas of the Witberg mountains. This, together with the protection of the estuary system under management of the Tsitsikamma National Park, provides one of the most naturally functioning estuaries in South Africa. The tidal reach of the Groot River system is some 2 km up to the bridge of the R102 but under exceptional conditions may reach to above the bridge. The Nature's Valley village draws fresh water from a point a little above the bridge.

NATURAL FUNCTIONING

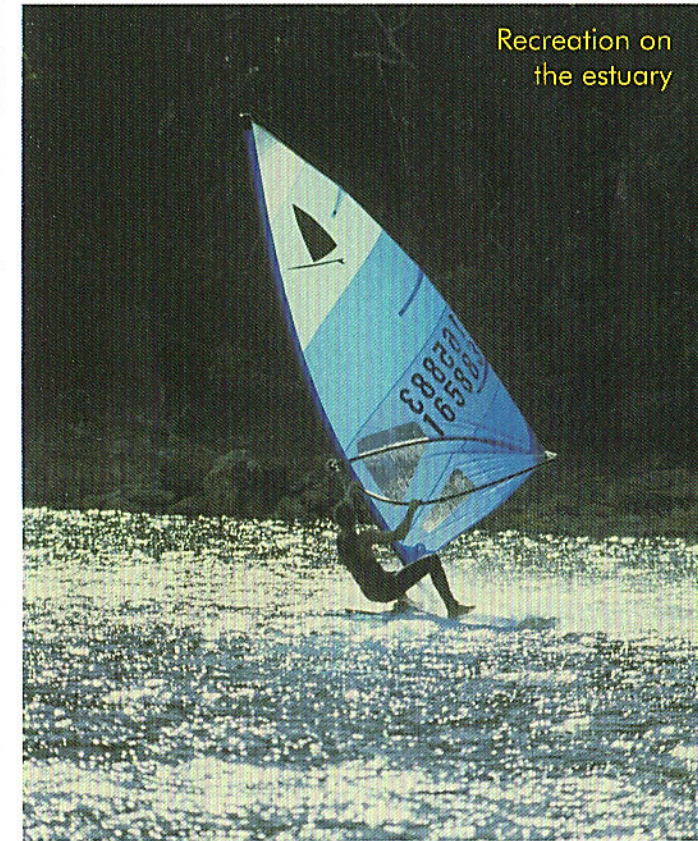
The Groot River estuary functions as a partially open system - periods of tidal interchange alternate with periods of no interchange and the salinity of the water varies widely. From time to time river flow or sea conditions breach the closed estuary naturally to re-establish tidal conditions. It is natural for the position of the mouth to change from time to time. Under conditions of natural breaching the level of the estuary reaches a maximum and scouring of sediments is optimal

when breaching takes place especially if breaching coincides with flooding. Human intervention to open the estuary before it reaches its natural maximum level results in less effective scouring and slow silting up of the estuary. The health of the system is best served by avoiding unnatural breaching. This has not always been possible because some of the roads and houses at Nature's Valley are low lying and flooding has caused problems. In the middle and lower reaches of the estuary, sediments accumulate and the rich nutrient influx from river and sea, together with warm shallow waters, create productive conditions for estuarine life. While there is not a large diversity of species which have adapted to the stressful



Sand Prawn
near mouth
of estuary

conditions of varying water levels and salinity, a wide variety of plants and algae are well adapted to the estuary. They range from those almost permanently submerged to sedges and reeds found along the banks. Many of the basic organisms in the food chain are microscopic phytoplankton. These are fed upon by many larger creatures like worms, prawns, clams, crabs and shrimps which in turn support fish and wading birds.



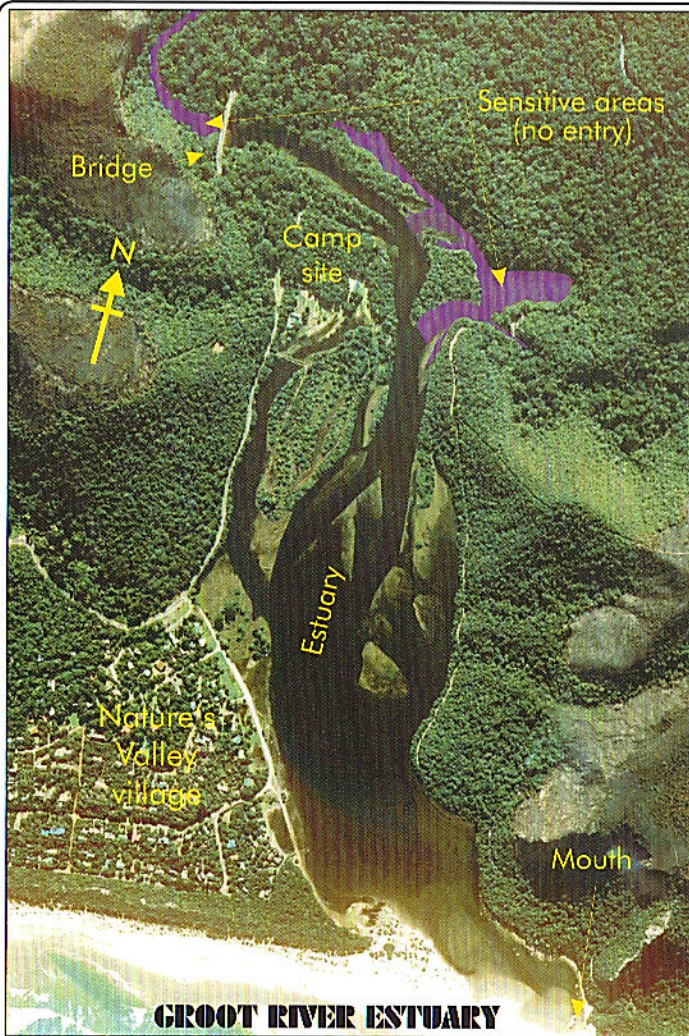
Recreation on
the estuary

Fishing and bait collection require permits which are obtainable from your local Post Office

No motorised craft

Boats and canoes keep clear of sensitive areas

No dogs are allowed in the estuary

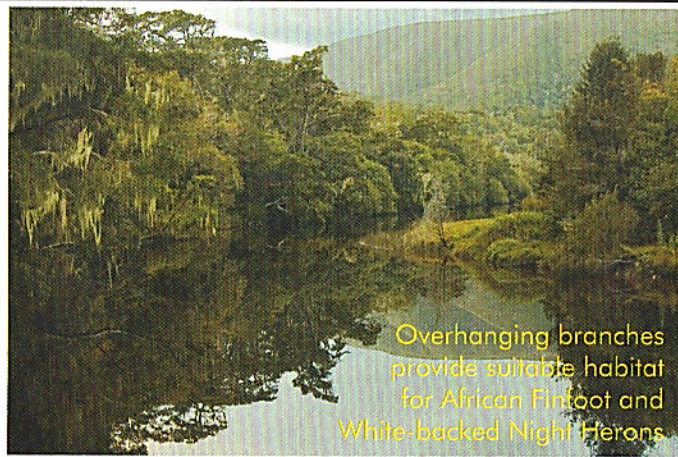


GROOT RIVER ESTUARY

Tsitsikamma National Park

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 email: tsitsinp@mweb.co.za

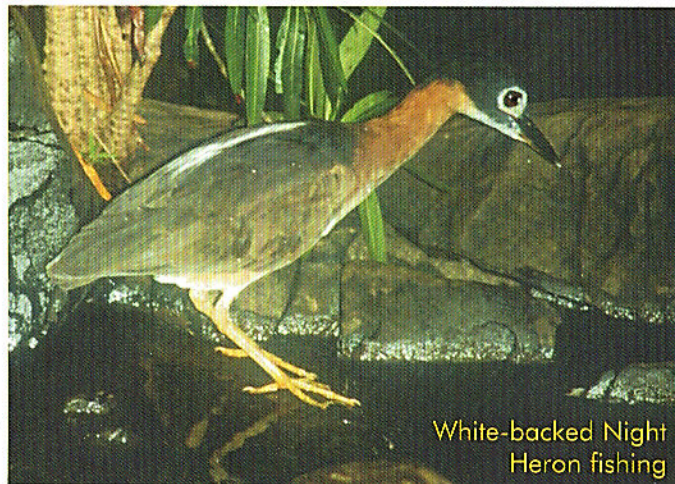
Central Reservations: 012 428 9111
 reservations@sanparks.org
 web site: www.sanparks.org



Overhanging branches provide suitable habitat for African Finfoot and White-backed Night Herons

ESTUARIES VITAL FOR SEA FISH

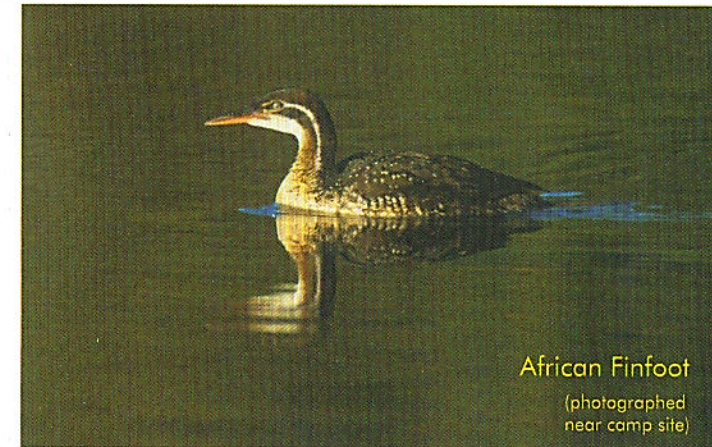
Estuaries are vitally important to the survival of many marine fishes and other sea creatures along our coastline. In the eastern and southern Cape, 47 species of fish are estuarine dependent. Fish such as the Spotted Grunter, Cape Stumpnose and some mullet spawn at sea close to estuary mouths. Their larvae or fingerlings enter estuaries which serve as nurseries for the young fish. The large Knysna Crab, *Scylla serrata*, with pincers that can reach the size of a man's fist, is occasionally seen in the estuary. This formidable predator has an alternate strategy - it lives in estuaries but after mating the females venture out to inshore coastal waters where they lay their eggs (up to 2 million at a time). After surviving several planktonic stages at sea, some hatchlings find their way back to estuaries. Estuaries breathe life into the ocean and the ocean does the same to estuaries.



White-backed Night Heron fishing

UNCOMMON BIRDS

The lower river and upper reaches of the Groot River estuary are lined by indigenous forest. These portions of the system are exploited by two highly specialised species of bird - they both require rivers with overhanging vegetation for their life styles. The White-backed Night Heron feeds on fish and frogs at the water's edge, often from the cover of overhanging branches. The African Finfoot feeds by swimming along the banks taking small creatures (insects, spiders etc.) off the overhanging vegetation. Both species nest on branches at the water's edge, usually overhanging the water. Many birders travel far to see these uncommon and special birds. The increasing use of canoes and boats is creating more and more disturbance in those parts of the estuary vital to the survival of these birds. In order to afford them quiet areas for



African Finfoot
 (photographed near camp site)

nesting, resting and hunting, portions of the estuary are set aside as sensitive areas (see map). Hopefully this will allow these birds to continue to inhabit this beautiful river and estuary. Most of the estuary remains open for responsible boating and recreation. Canoes offer a quiet and unobtrusive way in which to observe the water associated birds of which over 40 species have been recorded. Also watch for forest birds from the water. You may observe species such as African Black Duck, Giant Kingfisher, dazzling blue Half-collared Kingfisher, Knysna Turacos, Grey Cuckooshrikes and many more. Occasionally African Fish Eagles, Osprey and Cape Clawless Otters may be seen.