

PROGLOGUE : WADE DOAK

Trees in the Sea: Exploring Life in Mangroves

After several years exploring coral reefs aboard Dr Walter Starck's underwater research vessel El Torito, an intensive period of my life had been completed. I returned to live beside a mangrove river in Northland, New Zealand. I recalled Walt's words about mangroves: "I've always had a fondness for mangroves", said the scientist-philosopher during cabin talk. "I grew up around them in the Florida Keys. They're one of the places where life has reached its fullest expression; amongst the most productive communities on the planet. The ultimate evergreens.

"All the world over, as water runs off the land it takes silt and nutrients with it. At tidal level it spreads, forming mud banks. Such places are very rich in nutrients and there's no shortage of water - although it's salt. A great niche for any plant that can survive under such extraordinary conditions. And there is no competition. It's too wet and muddy for most land plants and too harsh for marine plants."*

Aroused by coral reef communities and tropical rain forest, my passion for diversity spilled over into the mangroves at my door. Walt's words kept coming to mind. Why did he value them so highly? Why were they so incredibly productive? To my delight I began to find a complexity of life in a world of mud and flooded forest that matched the tropical world I still yearned for.

Gradually I learnt there were myriad secrets to penetrate amidst those low, sly lives. The greater my effort the more I was rewarded with insights. Soon I was developing new angles of approach: I built an observation platform above a winding river glade; a crab hide let me pry at mud level into a busy society of ecofarmers; I suspended myself face down above crab city in a rectangular net; I crawled beneath overhanging mud banks with a torch and high power lens; by day and night I dived with scuba; on a special surfboard with a window-panel I drifted upstream silently with the tide - the more avenues I tested, the further I was allowed to enter a hidden world...