

## Bamboo: reading

Robert Butler is known as 'Bamboo Bob' by his friends: he's a botanist, an agriculturalist and a leading expert on the bamboo plant. I went to ask him why he thinks bamboo is the most important plant in the world.

I found him at home in his garden but before I could ask any questions Bob had one for me.

'Is there any bamboo in your home?'

I replied instantly that of course there wasn't, but he made me think again. Then I remembered that I had some lampshades made of bamboo in the bedroom, some bamboo canes in the garden to support my plants against the wind, and a bamboo tray. 'Bamboo,' said Bob 'can be used for almost anything.'



Before I could ask for some more examples he had another question for me – 'What do you know about bamboo?' I replied that I thought it was a beautiful tree, very tall and graceful with delicate leaves. I knew that it was one of the fastest growing plants in the world and that pandas liked eating it. Then Bob surprised me by saying that bamboo was not a tree at all but a grass, and that it could vary in height from dwarf, 30cm plants to giant timber bamboos that grow to well over 30m. 'And just how fast can they grow?' he asked. I really had no idea – 10 or perhaps 20cm a day? Well, apparently a Japanese scientist had measured the growth of one variety of bamboo and claimed it had grown 60cm over a 24-hour period! That would have been in ideal conditions of heat, humidity and fertile soil explained Bob, but even in his garden he'd seen bamboo grow half that in a day. What was more remarkable, he added, was that some 20m tall bamboos reach that height in one growing season, which might be as short as two months! Now that is fast!

'And where does bamboo grow?' asked Bob. I felt more confident with my answer this time: It grew in Asia. Yes, agreed Bob, it grew in most Asian countries including India (with the largest bamboo forests), China and Vietnam. It grew in both tropical and subtropical climates, in jungles and high on mountains. It could also be found growing naturally in Africa, the Caribbean and Latin America. In fact it could be found on all the continents except Antarctica.

Bob told me that he had become fascinated by bamboo when, as a student, he went on an agricultural study trip to Asia. While in Vietnam he had stayed in a stilt house and after climbing the stairs to the first (and only) floor he was surprised, and a little alarmed, to discover the floor was made with strips of bamboo. 'I could see through the floor very





easily,' recalls Bob 'and the strips were quite narrow, not whole poles of bamboo, I just knew I was going to fall through it!' Instead the bamboo held his weight quite easily. 'I then discovered that there are hundreds of millions of people who live in houses made from bamboo,' said Bob. 'In Bangladesh, most people live in bamboo houses. It provides not only walls and floors but also window frames, ceilings and roofs. It's amazing!'

Then in Hong Kong he witnessed another scene that confirmed how strong bamboo was. 'I was watching some men building one of those skyscrapers and I realised that the scaffolding was swaying in the wind. Then getting nearer I saw that the men weren't using steel scaffolding, but bamboo!' Astonished by this he spoke to the foreman who explained that bamboo was much better to use than steel, iron or aluminium. There were three reasons: it was almost as strong as steel, but it was lightweight so easy to transport and set up, and very flexible too so that it bent in strong winds without breaking - ideal scaffolding material then for a country prone to typhoons. 'With the added benefit of not getting too hot to touch in the scorching sun either!' grinned Bob.

Finally it was in Japan that Bob found out how durable the plant was too. 'There I discovered that some bamboo plants which had been growing near ground zero at Hiroshima in 1945 had survived the atomic blast and sent up new shoots within days.' Bob also saw bamboo used for building bridges, for musical instruments and furniture. Inspired he returned home and has been an ardent fan of bamboo ever since, growing it, writing books about it and studying it. 'There are about 1,500 documented traditional uses for bamboo, from fishing baskets to flowerpots, from flagpoles to fences, from firewood to fodder,' said Bob. "Which reminds me – come and have lunch with me.'

We went inside and sat down to eat. I wasn't surprised that the food was presented in beautiful bamboo bowls. What I hadn't expected was that to the vegetables he had added some bamboo - bamboo shoots! 'They're low in fat and calories, and a good source of fibre and potassium,' said Bob. As I ate the crisp, tasty shoots I thought perhaps Bob was right – bamboo *is* the most important plant in the world after all!'

