



Shark Park KwaZulu-Natal: Whale shark, tiger shark, blacktip. *Photograph: Blue Wilderness. www.bluewilderness.co.za*

can tell you there's a critical factor of eye contact in clean water that defines the proximity of approach of a shark and I don't know how we are ever going to help the surfer community who are unsighted atop their boards. This is the challenge we need to focus on with this user group which will go a long way to solving the issues with some of the more charismatic mega fauna such as white sharks and bulls.

► **Do you believe there is any truth in suggestions that sharks, being adaptable, could start to see humans as easy prey with a high number of fatal attacks?**

No. If we look at the rogue shark theory then none of the Port St. Johns bites fit the profile. Sharks feed on approximately 10% of their body weight per week. Even if they go for longer periods and can eat much more at a single sitting then an 80kg-120kg bull shark would need to feed on approximately 8kgs of food per week – that is just over 400kg per year.

We are not even close to this and if you consider the narrow annual time frame for the bites since 2007 and the vast time elapsed annually it is a seasonal abundance rather than a rogue shark issue. Effectively as the sharks move into and out of that area annually you would expect a trail of bite victims along this path a la' the Tanzania Lions – this is not the case.

► **Do you believe that the river is a Zambezi breeding ground because so many other estuaries have been destroyed?**

Less than 5% of KZN's rivers and estuaries are available to bull sharks for critical times of their life cycle (assessment delivered by, at the time, Ronel Nel at bull shark workshop hosted by Sharks Board nearly a decade ago).

The uMzimvubu has been a productive bull shark habitat (pupping as evidenced by the presence of neonates) for as long as fishing records exist for the area and probably for eons prior to that.

There is not a significant enough thermic difference between the uMzimvubu and the uMzimkulu for example – at least not in the summer. So they have always used the river for pupping, that's not new. For me, the question is – are there more sharks there now as a result of the destroyed KZN river and estuarine environments? I'm unsure that there is an increased predator density. I see so much of the ball action with the sharks here at Shark Park. Coalition and conflict groupings, grumpy solitary individuals and the list goes on.

It is not as simple as there are two parking bays and the one on the left is taken so we have a fifty car pile-up in the right hand bay – people wait, park down the road etc. In the case of the mullet in the St. Lucia estuary the females absorb their eggs in periods when conditions are adverse. What do sharks do? I don't think we know. Your question leads to more questions than answers but points to the obvious that we know so little about sharks that we are clutching at straws in this case.