

Water

By

Ian Cox – August 2012



One of the most evocative passages I have read in fly fishing literature was written 60 years ago by Frank Sawyer. I refer to the opening chapter of *Keeper of the Stream* in which he describes the relationship of water meadow to the Avon before industrialised agriculture and urbanisation destroyed it all in the 1950's. In the course of this he observed:

In rivers, as elsewhere, everything preys on another, forming a vast cycle of in which one living creature is the food of something else. In rivers usually the smaller animals are the food of those which are larger.

So it was necessary (for the river keeper) to start at the beginning with the first living creatures and putting the first life at the bottom of the ladder, work patiently towards the topmost rung. It is in the tiny things – the young- which need the most assistance, for life in every instance commences in a very humble way.

He went on to say:

Though, neither are welcome, I much prefer floods to drought. I am sure far more harm is done to a fishery through the lack of running water than by having too much.

And that brings me to the nub of this article. You see South Africa suffers from a severe lack of running water. In fact we already use most of what we have.

The 1999 South African National State of the Environment Report on Freshwater Systems and Resources opens with this chilling synopsis:

South Africa's available freshwater resources are already almost fully-utilised and under stress. At the projected population growth and economic development rates, it is unlikely that the projected demand on water resources in South Africa will be sustainable. Water will increasingly becoming the limiting resource in South Africa, and supply will become a major restriction to the future socio-economic development of the country, in terms of both the amount of water available and the quality of what is available. At present many water resources are polluted by industrial effluents, domestic and commercial sewage, acid mine drainage, agricultural runoff and litter.

The report goes on to note that at 8.6% of South Africa's rainfall available as run off (mostly concentrated on the Eastern seaboard), we suffer from one of the lowest rainfall to surface water conversion ratios in the world.

This basic outlook has not changed. The 2010 state of the environment report records:

Evidence provided here shows that a significant proportion of our useable water resources, including our river ecosystems, have been degraded, and that most of our exploitable water resources are being utilized at present. In many cases, current levels of water-use make no allowance for the need to sustain the ecological viability of the resource. Furthermore, climate change is expected to alter hydrological systems and water supplies in southern Africa and reduce the availability of water.

This coupled with unusually poor soils makes South Africa a very poor bet in terms of agricultural potential. South Africa's agricultural potential is, for example, is considerably worse than Ethiopia. Paradoxically this harsh environment has made South Africa a cornucopia of biodiversity. For all our poor soils and arid conditions we rate as one of the four most bio diverse countries on the planet.

This is, by its very nature, a precarious state born of a desperate battle to survive. We as South Africans are no strangers to this battle. Indeed in a sense the battle that is taking place in nature echoes in the human world where disparities between haves and have not's in South Africa manifest more extremely than almost anywhere else on the planet. It is not surprising, therefore, that the effects of the human battle for survival in South Africa impacts on our biodiversity to a greater degree than countries that are not faced with such extremes.

And this is, I think, the sharp edge of the biodiversity question in South Africa. Our treaty undertakings ask us to protect our biodiversity for the greater good. Our constitution requires us to protect the environment, but here is the rub; we must not do so for the sake of protecting our biodiversity but rather for the social economic and cultural advancement and wellbeing of our peoples. Ours is an unashamedly "people first" policy. Ideally one must look for solutions where both people and the environment are winners. However if a choice has to be made we must put the economic and cultural advancement and wellbeing of our peoples ahead of pure environmental issues.

Like it or not that priority will impact negatively on existing Biodiversity. Our people are largely poor and growing in numbers and in their expectations. Ours is not the best of environments in which to preach biodiversity as a priority. In fact it has the potential to be a vicious circle. It is a precarious balancing act where one, to quote a politician with a lifetimes experience in such matters, strives to achieve, not the right thing, for that is seldom possible. Success is achieved if one can deliver the least disastrous thing.

So back to water.

The shortage of water in this country, and our propensity to waste or pollute what we have means that a considerable amount of damage is going to be done to the existing biodiversity of our rivers if we as human beings are going to have a chance of prosperity in the short term. Dams will have to be built and we will have to accept the huge environmental changes that will be caused downstream of these impoundments. Similarly we will abstract increasing amounts of water from our rivers thus further impacting on downstream habitats especially estuarine ones. Pollution will also be widespread. None of these are desirable outcomes. However they are the inevitable

consequence of the collision that is taking place between a growing and largely under resourced population with a fragile environment already beset with the adverse impacts of climate change.

In these circumstances the focus of our efforts at conservation cannot be at preserving what we have. What we have is in any event an illusion. All environments change all the time. It is just that our environment is changing very rapidly and if one is truthful about it there is nothing we can do to alter this. What we can do is take care to identify and where possible mitigate the adverse impacts of human advancement, taking care that where compromises have to be made, that we get bang for buck and that these are not disastrous to our long term future.

In the South African context this means, we must protect the availability and purity of our fresh water supplies wherever this is feasible. This means one must give priority to the protection of our catchments and what is left of our wetlands. As Frank Sawyer said we must start at the beginning. We must also conserve our supply of fresh water and preserve the purity of those supplies. The focus of those efforts should however be on ensuring the availability and purity of freshwater rather than on preserving biodiversity of aquatic habitats for their own sake.

I suggest that it starts with working to limit needlessly wasting or polluting what little water we have. Working for Water and programs such as the Blue Dot program and Adopt a River are all important steps in the right direction. However more needs to be done especially to limit agricultural wastage and pollution. Organised agriculture after all remains the largest of South Africa's water consumers and a significant polluter. The devastating effect of mining on our water security also has to be addressed both as regards the threat that it already poses and how this can be limited in the future. Fracking for example should not be seen purely in regard to its economic benefits but also in terms of the pollution risk it poses to our ground water.



Most importantly we need to make people aware of the importance of preserving water and maintaining its purity. Recreational fishing becomes an important driver in this initiative because as Frank Sawyer pointed out, healthy fish stocks point to a healthy river. Fisherman have a vested interest in ensuring that that state continues as do the communities who serve recreational fishing. Recreational fishing is a significant income generator often in communities that offer little else in terms of income earning potential. Thus fisherman and service provider alike can be encouraged to work towards looking after what is a rapidly degrading water resource.

Frank Sawyer lamented towards the end of his life that his life work had come to naught. He said:

There is much I can think about, but sometimes, in view of what has happened in recent years, I wonder if a lot of what I did in the past was not a waste of time and energy. The Avon is not like it was when I was a boy, nor like it was when I started as a river keeper, for from then until now it has been a constant battle against adversity.

I don't think Frank Sawyer would have written these words if he were alive today. Yes the Avon has changed beyond all recognition. Stocking now maintains the balance that was the role of the river keeper and his careful tending of river and water meadows. However change is the inevitable consequence of the vast cycle where one animal preys on another. What Frank Sawyer achieved through his work and his writing was to educate generations of fisherman who now care, very passionately, if the English fly fishing magazines are anything to go by, about the state of British rivers. Yes legislation has made an enormous difference to the health of British rivers but this is due in no small measure to the fact that those laws enjoy the committed support of the British angler, many of whom contribute significantly to the rehabilitation of those rivers.

South Africa has a similar opportunity and indeed the efforts of organisations such as FOSAF need to be seen in this light. However the current version of the Biodiversity Act (NEMBA) is not helpful. That Act in diverting attention away from real issues in pursuit of an unrealistic ideal of environmental purity has made enemies when it should have made friends. In so doing it has, I believe, done incalculable damage to the cause it was meant to promote and to the welfare of our country and its people.

South Africa does not need idealistic legislation. We need sensible practical legislation that we can afford, that works and which will bring South Africans together in the pursuit of a sustainable environment that is beneficial to our health and wellbeing.
