

## An article submitted by Al Spaeth.

I joined PEDSAC in 1972 and fish competitively for the club and for EP in the years that followed.

Just in case you thought us old guys were lying about the “good old days” we not only had amazing fishing but our area was also the best and most diverse fishing in the country. Through competitive fishing from Natal to the Western Cape we soon realised that we enjoyed the best all around fishing throughout the year for bottom species and game-fish. And, yes, we often caught boat loads of cob, yellowtail, reef fish and tuna when the weather permitted on a Saturday or Sunday as most of us had to work the rest of the week. We had tiny boats, large testicles, (or might have been just foolish), used land-marks to try and find fishing spots we knew of, and I had the best years of my life!

Fishing has been my passion in life for over sixty years. I enjoy many types of angling including rock and surf, deep sea, rivers, and fly-fishing in fresh and salt water. I have been lucky enough to fish most places I dreamed of including Alaska, USA (where I was born), Mauritius, Seychelles, and Mozambique before and after the war. Etc,etc. I have caught and released a lot of fish but also killed, sold, and ate many more.

I have observed fish management (recreational and commercial) across the world. My interest in conservation is only based on the fact that I want my children, grandchildren and generations to come to enjoy the fishing that I have had.

I have witnessed the deterioration of our local fishing and penguins, (as you pointed out in the newsletter), first hand, for more than forty years and the resulting series of restrictions the authorities have placed on recreational anglers over the years. The Penguins are just an indicator species of a much deeper and larger problem. We didn't kill them – although I must admit to eating a couple of their eggs on the odd occasion when we took the research scientists out to islands in our boats many years ago.

I do not believe that we few “weekend warriors” in small boats, dependent on weather, are in any way responsible for the massive decline in our fish populations.

I also spent a few years as a commercial fisherman with a 100 ton hake long line boat operating between PE and Mossel Bay so I have first-hand knowledge of the commercial industry as well.

Now, many years later, like apartheid, I am tired of being blamed for the situation we are now faced with. I am not a marine biologist but like many problems in our country, we don't need rocket science – just some common sense.

The problem is **Fisheries Management**. This is a complex subject but lets go back to some common sense on two of the issues you mentioned. Squid and pilchards.

### **Squid**

Back in the old days squid was just bait. We rarely ate it and when we tried we over cooked it as tough as rubber.

Once a year a few small boats would leave the harbour at dusk, ride to the Bell Buoy and within a few hours after dark return to the harbour with our boats full of squid to be packed in the bait deepfreeze for the rest of the year. Our bay was full of squid and we would often see large ships from the east anchored far out in the bay and the crew catching squid with handlines during all day.

I was involved with the studies done by Dr Graham Ross from the PE Oceanarium when the Chokka industry was started. The estimated biomass of squid in our was unknown and the justification for the commercial fishery was that they died when they spawned - so why not harvest. The theory was good but the new industry was based on a few small ski boats fishing inshore and catching by hand. Few had Fishfinders , and GPS Chart Plotters were science fiction!

They couldn't do much harm.

Boats were limited to day fishing - only when the weather permitted and most launched from the beach. No quotas were established as there had never been a commercial squid industry and they were hoping to get a better estimate of the actual squid biomass to determine a sustainable level of harvest.

We quickly found we had one of the most desirable squid species in the world so the industry quickly boomed in the PE and Jeffreys Bay area which is the only place on our coast where the squid were concentrated and remain the centre of the industry today.

Greed quickly set in, and people flocked here from all over the country for the "white gold" to get rich quick. The supply seemed inexhaustible! Some made fortunes but most lost fortunes.

For those that survived, the boats got larger and permits for small boat crews were consolidated. They added generators and huge lights to attract the squid at night. They added freezers so they could fish for weeks at a time and newer electronics gave them the ability find the squid and plot all of the spawning grounds along the coast. They also had commercial line-fishing licenses so when the squid were scarce they hammered our reef and bottom fish species. Squid spawning grounds are quite small areas so bigger boats needed bigger anchors and long heavy chain to stay on the spot. All boats converge on a single spot and fish day and night until there are no more squid. Unfortunately as the boats swings in the wind the chains drag the bottom ripping the squid egg sacs loose. I have seen them pull anchor with the chain covered in thick masses of eggs – so they are destroying the next generation of squid as well.

Common sense tells us that we should protect spawning fish so that than can reproduce freely. Now we are fishing on their spawning grounds 24/7 and destroying their eggs!

No quotas exist - even today – so they exhausted the supply. And it may have reached that critical mass where it can never recover. Closing the season for three months won't help after thirty years of uncontrolled destruction. No fish species in the world is managed without quotas – except our squid. The industry could have chosen to manage themselves – but greed set in.

For those who may not know, the reason for establishing a quota for each species is simply that no commercial fishing vessel is allowed to offload their catch without a Sea Fisheries Officer present to check the amount and type of fish caught. Each offload is deducted from the boat's quota and the amount caught goes to the Dept of Sea Fisheries for their stats.

Each year they know the amount of fish caught by a controlled number of boats and this is used over a period of years to determine sustainable fishing levels for each species. No quota means there is no control and no management.

The Chokka boats have only themselves to blame for the collapse of their industry.

## **Pilchards**

For decades, the west coast was blessed with the richest pilchard fishery known in the world. Like the Squid industry, they overfished it and destroyed it. For some unknown reason the government has allowed the industry to our south coast as far as PE. I have witnessed many pilchard boats catching up to 50 tons in a single night just a few miles outside the harbour. The demise of our penguins and the lack of a sardine run in Natal are two good indicators of the consequences. All pilchard fishing should be stopped east of Cape Agulhas.

## **Why should we care about Pilchards and Squid?**

Here is where common sense should wake up scientists and government. We must look at the big picture, not a single species.

## **The Food Chain**

The main reason our coast has always been such a productive fishery, by world standards, is our ocean currents. The cold current from the southwest mixes with our warm current coming down from Mozambique. This mixture of cold plankton-rich water is the beginning of the food chain. The tiny plankton (plants and animals) provide the food for a myriad of other species including pilchards and anchovy. Without the smaller fish there is no food for the larger species. Here begins a complex and delicately balanced system called the food chain.

That huge biomass of squid which we had here was never commercially harvested until the Chokka industry started in recent years (nor were the pilchards).

If the squid die when they spawn why not catch and sell them? Lets assume for a moment that prior to commercial fishing, that thousands of tons of squid spawned and died along our coast (maybe hundreds of thousands of tons).

Every angler knows that everything eats squid and pilchard. Every fish survives if the amount of energy used to catch the food they eat is less than the energy they get from it. The more abundant the food, the less the energy required to catch and eat it. If pilchards are abundant it still takes effort for other fish to catch and eat them. As the food source is depleted it more difficult to find and consume, until it requires more

Not so with squid. As they spawn and die they are consumed with almost no energy needed. Our squid formed a large part of the food chain for the fish in our area.

Nothing was wasted. fish, crustaceans and microorganisms consumed all of the squid as they spawned and died.

The more abundant the food is, the faster the fish grow and breed.

Dr Smale also suggested to me last year that a possible reason for the decline in our penguins was that they may have to travel farther for their food. Another good indication the their food source has declined to a critical level – which is the same food source our cob, geelbek, yellowtail etc all depend on.

***I believe the most important reason our fishing had deteriorated in recent is that the food chain has been severely damaged.***

The same years that I have seen our fish become scarcer in our area corresponds exactly to the period since the commercial fishing started for squid and pilchards. Scientists may disagree but they tend to focus on each species in isolation. This is simply due to a lack of management by those responsible for our fisheries. Prior to that we had amazing fishing and even sustained a large fleet of commercial boats.

Penalising the recreational angler who harvests a tiny portion of the fish at the upper levels of the food chain does not help.

When we harvest from the lower food chain we upset the balance of nature and the consequences can be catastrophic for other species.

The poor Geelbek seasons mentioned in your newsletter are another indicator. We have never had a commercial fleet targeting them so there is probably another more obvious reason for their decline – the food chain.

The Squid industry may be responsible for it's own demise and may deserve its fate. The sad part is that they may have permanently damaged the sustainability of many other fish species which depended on the squid as a food source.

I believe the abundance of squid was the main reason we enjoyed the best fishing in the country until the industry started. It was unique to our area as was the amazing fishing.

## **Conservation**

Conservation is based on the sustainable utilisation of our renewable resources. We cannot take more than nature can easily replace. If we manage our resources as we should, they will continue to produce at optimal levels. If a farmer damages his veldt by over-grazing he reduces the lands ability to sustain the livestock he sells for meat. Long-term overgrazing leads to erosion and even if he takes all of his livestock off the farm it may never recover as he has lost the soil that sustained the plants that fed his livestock.

The ocean is a far more complex and delicate ecosystem than a farm but the basic principles remain the same.

If we have fewer cob, geelbek, yellowtail and tuna than we had before it does not mean that it is due to overfishing of those species. Like the penguins, which we never harvested, it is probably an indication of much deeper problems which have impacted the ability of those species to grow and breed at a sustainable level of harvest.

## **Other problems**

### **Tuna History**

In the mid 1970's we eventually built bigger boats (17-18ft) and we thought we could venture further out to sea. In those days bottom fish were so plentiful we got bored (and

seasick) catching them. Yellowtail were plentiful from Cape Recife to Sardinia Bay and we often saw shoals of yellowtail on the Ry Banks in the early morning on the surface for “as far as you could see”. We took this all for granted. It was just the way it was and we had no reason to think it might change.

In earlier years we occasionally caught tuna in the bay (up to 50kgs) in midsummer and a couple of my pals had caught small marlin off even smaller boats in the bay. We wanted to go “big game fishing”!

We soon found that we could catch tuna throughout the year if we ran far enough south off Cape Recife. We noticed the water got warmer and more blue and Cedric Riley soon supplied all of our boats with cold room thermometers screwed onto our transoms. Once we found water around 20C we caught yellowfin. Rarely did we come home without fish and usually we returned with a boat full accompanied arms aching arms and backs punished by severe weather. Our boats and tackle were hopelessly inadequate and weather forecasts unreliable at best so we just tapped the barometer at home in early morning and left the harbour at the mercy of the gods, knowing we would catch fish if we went far enough south. We only had a few Japanese buck tail jigs and eventually. We had no communications except 27meg walkie talkies – which meant you could only speak to another boat if you could see them. Navigation was simple – go South – come home North with a compass that would swing 20 degrees in rough seas. But the fishing was fantastic. It’s amazing that no boats were ever lost and no one drowned.

I became pals with Dr Graham Ross (mentioned earlier) from the PE Oceanarium. He showed me a study of the worlds fisheries produced by Japanese scientists. Tuna was a cheap food source then, and the Japs were then catching worldwide. The study showed that the coast off Africa between PE and Cape Town was the richest tuna fishery in the world! We were fishing in the best spot in the whole world!!

### **Longliners**

We rarely ran more than 30 miles but had no way to measure our speed or distance. In those days we saw lots of Spanish trawlers, Jap Longliners, and almost always ran into miles of longline which we which we tried to pull up by hand but never succeeded. Remember, this is one little boat, close to home, and we saw many foreign fishing boats every trip. The Japs caught tuna over 200km offshore so we can only guess how many boats and factory ships were out there – out of public sight from land.

Years later, during sanctions in the 80’s, the government explained that the Japs were given “fishing rights” in exchange for buying our iron ore. In recent years, after sanctions, we were told that they were being controlled by permits for a limited number of boats – but I saw a photo taken in Cape Town Harbour of two longliners tied up next to each other with the same registration number on both boats! At least two boats operating on the same permit – and the most efficient fishing fleet in the world which has always been government sponsored.

In recent times the government has announced that all Japanese permits were withdrawn – but I counted six Jap longliners lying in the bay last month and we constantly see Jap AND Taiwanese longliners in the harbour. South Africa has never had a tuna fleet even though we had the worlds richest tuna fishing. I was told the other day that a few of the “elite” (Toyko was mentioned) have been granted Tuna fishing permits – and the Japs are fishing for them! If true, then it is just more corruption, as they do not employ local fishermen, and do not offload the fish here or export from South Africa.

They have raped and plundered our coast for more than forty years. Without science, we can see the results – the annual Tuna Classic results are a indicator of the level of damage. Untold numbers of Marlin and Broadbill are caught with the tuna.

We have also lost untold billions in revenue from the fish caught by foreign vessels and not offloaded or shipped from here.

### **Other species**

You also mentioned Dusky Cob. They were also plentiful in the good old days. We caught mostly on the surf from Woody Cape to Cape St Francis. We have been punished by the closing of our beaches to vehicles. We now have many miles of virtually inaccessible beaches with little fishing pressure closed now for many years. If the recreational angler contributed to their decline why have they not recovered? Again, I believe we are not to blame. It's damage to the food chain.

A second reason, I believe, is a smaller sector of the commercial trawling industry called "inshore trawl" which has been going for more than fifty years. Sea Harvest have always had most of the total quota with the Chettys and a few other small boats with very small quotas in PE. The quotas are for Hake and Sole with a smaller percentage of "by-catch" allowed for other species. To target hake they should be fishing deep water but this has never been the case. I know the industry well and for many years I saw the "by-catch" was usually more than the species on quota. By trawling very close inshore the often get soles, never get hake, and come in bins full of Dusky Cob – and get this – Baardman - which is a good indication of how close they fish. Because it is by-catch, the amount of cob caught is not recorded so there is no record. The inshore trawl industry has made more money out of by-catch than their hake quotas and can catch and sell hundreds of tons of fish and stretch their quotas. Deep water trawlers only catch silver cob as by-catch so can't be blamed.

I know of no scientific evidence to prove the Dusky Cob spawn in our rivers but the rivers do seem to form an important part of their life cycle for juvenile fish. These fish are protected by the minimum size limits.

Large Dusky Cob are frequently found in the Gamtoos, and Breede rivers of over 50kgs. Unfortunately, many are legally killed.

Here is where scientists like Dr Paul Cowley should step in, given the amount of research he has done on this species.

Another concept in fishing management was introduced in the USA over thirty years ago and has made a major contribution to the recovery of many fish species including the famous coastal Red Fish found along the Gulf coast. They were popular with anglers but also commercially fished. They were virtually wiped out. A group of Texas anglers (who I met) formed the "Gulf Coast Conservation Association" in 1977, raised money, and took on the authorities who until then were heavily influenced by the commercial fishing industry.

(see history on page 168 of the "Book of Texas Bays")

[http://books.google.co.za/books?id=vv5p1Vr1EZMC&pg=PA168&lpg=PA168&dq=GCCA+red fish&source=bl&ots=0D23M7kfTH&sig=HIL2dQh2avBx2GOW605h4CouUEI&hl=en&sa=X&ei=nEDyU8GGOtKh7Ab-nYGgCg&ved=0CDgQ6AEwAw#v=onepage&q=GCCA%20redfish&f=false](http://books.google.co.za/books?id=vv5p1Vr1EZMC&pg=PA168&lpg=PA168&dq=GCCA+red+fish&source=bl&ots=0D23M7kfTH&sig=HIL2dQh2avBx2GOW605h4CouUEI&hl=en&sa=X&ei=nEDyU8GGOtKh7Ab-nYGgCg&ved=0CDgQ6AEwAw#v=onepage&q=GCCA%20redfish&f=false)

It was soon joined by other states and became the CCA – Coastal Conservation Association.

**"The objective of CCA is to conserve, promote, and enhance the present and future availability of those coastal resources for the benefit and enjoyment of the general public."**

<http://www.joincca.org/about>

The CCA has been responsible for the recovery of many fish species starting with The Redfish and even forced the authorities to shut down commercial fishing. Please read the link above.

One of the most important contributions was to change the fish size limits from a minimum size (like we have here) to a “slot limit”. This means a fish may only be kept if it is in over a minimum size – ***and under a maximum size!***

In the case of Redfish, anglers are only allowed to keep fish between 22 and 28 inches. Anything smaller, or larger, must be released.

It is based on the fact that only a very small percentage of inshore marine fish become large trophy fish and these are the most important breeding stock. As a result of these restrictions scientists found that a larger percentage of the fish were large sexually mature Redfish of up to fifty pounds – and the fish population recovered dramatically. In spite of the recovery, the restrictions remain today. Anglers have been allowed to keep more fish but only within the size range.

In the case of our Dusky Cob, I have no idea how old a fish over 50 kg must be but these “trophy fish” have survived for many years and must carry millions of eggs. They are scarce, not good to eat, and should, by law, be photographed and released. Large fines should be imposed on anyone who does not release them.

The “slot limit” is now used to successfully manage many other species – salt and fresh water.

### **What can we do?**

#### **Pelagic Fish**

Our goal should be to follow the example set by the CCA above, and take action to protect our fish and our sport.

The recreational angler has suffered a series of restrictions based on “scientific research” making it almost impossible to enjoy our sport. The public accepts these restrictions on us as “conservation measures” because we are visible and they see us and the fish we catch. They do not see or hear about the damage that has been done by commercial fishing and foreign vessels because the scientists don’t get the funding for this type of research and our Dept of Sea Fisheries has been heavily influenced by our large fishing monopolies since the “Old South Africa” so their scientists are not independent or objective.

To give you an example of this from my days of commercial fishing, I will use hake which was once a cheap abundant fish.

The total overall quota for any fish species is referred to as the TAC (Total Allowable Catch per year).

The TAC for hake has been 150,000 tons for as long as I can remember. The vast majority of the TAC has always been held by a few large fishing companies like I&J and Sea Harvest. Sea Harvest alone had 60,000 tons of the TAC last time I checked. The purpose of quotas is to manage the resource in a sustainable manner and prevent over fishing by carefully monitoring the actual amount of fish caught. Once a company has caught its annual quota it

must, by law stop fishing until the next year. It is a double edge sword because if you catch less than your quota, the government has the right to reduce it or even take it away the next year.

I was always amazed that in thirty years I never saw a a Sea Harvest or I&J Trawler tied up because they had caught their quota for the year. Somehow their fleets manage to fish throughout the year and catch exactly the allocated quota. Actually it's impossible which means that the figures must be somehow manipulated. I asked a scientist at the Dept of Sea Fisheries many years ago how this could be possible every year? He admitted to me "off the record" that they knew the actual figures were inaccurate and some of his colleagues estimated the actual amount of hake caught was closer to 250,000 tons per year! The trawlers kill everything in their path. Some estimate they dump and unwanted by-catch of dead fish equal to or, greater than the fish they keep. they fill their holds with the most valuable species and dump the rest. I have seen the huge stern trawlers off our coast leaving a solid mass of dead fish on the surface behind them stretching as far as you can see. Sea Fisheries say they limit the amount of small fish the kill by insisting on a minimum net mesh size allowing the small fish to pass through but we have all seen the small juvenile hake, not much larger than a pilchard, in our supermarkets sold as "Yankee Clippers".

I'll give you another small example.

Many years ago at the PEDSAC pub, we heard that a UPE (now NMMU) "penguin hugger" had proposed legislation be passed to make the islands around St Croix a "no fishing" reserve to protect the penguins. We all agreed that we often caught elf around the islands but only the scientists ever went onto the islands and disturbed the Penguins. Surely, common sense says that the elf we were catching were actually competing with the penguins for the same food and were thus a far greater threat to the Penguins than we fishermen! We were actually helping the penguins!

But we fishermen never questioned or challenged this seemingly ridiculous proposal and, as a result, it went through unopposed!

We are just as responsible for the end result as the "penguin hugging" professors.

### **Reef Fish**

Reef fish require a different strategy as they remain resident to one area and can be fished out.

Dr Malcolm Smale of PE spent many years of his career gutting our fish at our club as the boats offloaded the days catch. His invaluable research showed how little we really understand about our fish species. Thanks to him we now know more about our reef fish, how they can change sex and, when they breed successfully, how slowly they grow. Populations can recover by creating coastal reserves where they can breed and re-populate adjoining areas where fishing is allowed - but they cannot recover if they have an inadequate food supply.

### **Tagging**

One other suggestion. Stop tagging fish.

This program make create jobs at ORI but it has only resulted in in more restrictions on us based on poor science. The more fish that are tagged and re-captured the more science uses the data to show that fish populations are declining.

Commercial fishing does not participate in this study so it is all based on our efforts and we alone suffer the consequences.

We do not sterilise the equipment we use and the scientists always caution us about how we handle our fish prior to release and to make sure we do not touch touch them with dry hands. To do might damage the delicate slime coating on the fish which protects it from disease and infection and drastically affect it's chances of survival. I accept that is true but fail to see how the same scientists encourage us to jab a dirty tool in the fishes back and stick in a barbed plastic tube leaving an open wound which may not heal due the foreign object sticking out????

I have caught several fish in the rivers with the tubes covered in algae and marine growth which the slime protects the fish from. The wound from the tag has not healed and looks infected. Some are in poor condition as well. We have no idea how may of the thousands of tagged fish survive? We may be doing more harm than good.

After many years, the tagging program has not resulted in any positive measures to better manage our fisheries.

It has gone on long enough.

The results are inconclusive and the time has come to stop.

### **Summary**

We have been continuously punished for the sins of others.

If we do not become pro-active and challenge the scientists and the authorities we will ultimately be responsible for our own demise.

Common sense tells us that that those responsible for managing our resource and their scientists have failed.

I do not believe that even my great-great grandchildren will ever see the the fishing we enjoyed in the "good old days".

We are blessed with an amazing coastline and and equally amazing variety of fish. Everyone, rich or poor, should have the opportunity to enjoy our sport of recreational angling.

Our objective should not be to catch less fish, but rather to fight to restore our fish populations back to sustainable levels so that we and the commercials can all come home with fish without affecting the long term sustainability of our fish resources.

Best Regards To All  
Al Spaeth