

SOME RESULTS OF THE 2003/2004 PLETTENBERG BAY ROCK AND SURF LINE FISHERY SURVEY

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In the last issue of the Natures Valley Trust newsletter I mentioned that SANParks were re-assessing the recreational shore fishery within Natures Valley and that the results would be compared to a previous assessment of the Plettenberg Bay linefisheries completed 5 years ago. A few people have since asked me what results were obtained during the previous study and how we would compare them to the present study. Within this article I have tried to highlight some of the most important information that came out of the previous study and how we would use this for comparative purposes.

At the time of the earlier survey the linefisheries in Plettenberg Bay could be divided up into commercial hake, charter operators, recreational ski-boat, recreational and subsistence shore (rock and surf) and estuarine (shore and boat) anglers. Each sector was monitored for a period of one year from mid 2003 to mid 2004 using a combination of methods which included direct contact questionnaires and catch records. Key questions we wanted to answer included: How many people were fishing (how much effort), where were they fishing and how many fish were being caught (species, numbers and sizes).

Over the project period a total of 1691 rock and surf anglers, 597 estuarine anglers and 245 recreational ski-boat and charter trips were interviewed whilst two years of commercial catch records were analyzed and the by-catch from a further 167 trips were inspected. In other words the different fisheries were comprehensively surveyed providing a complete picture of what was occurring within the study area. However, for the purposes of this article I am only going to give some results from rock and surf sector.

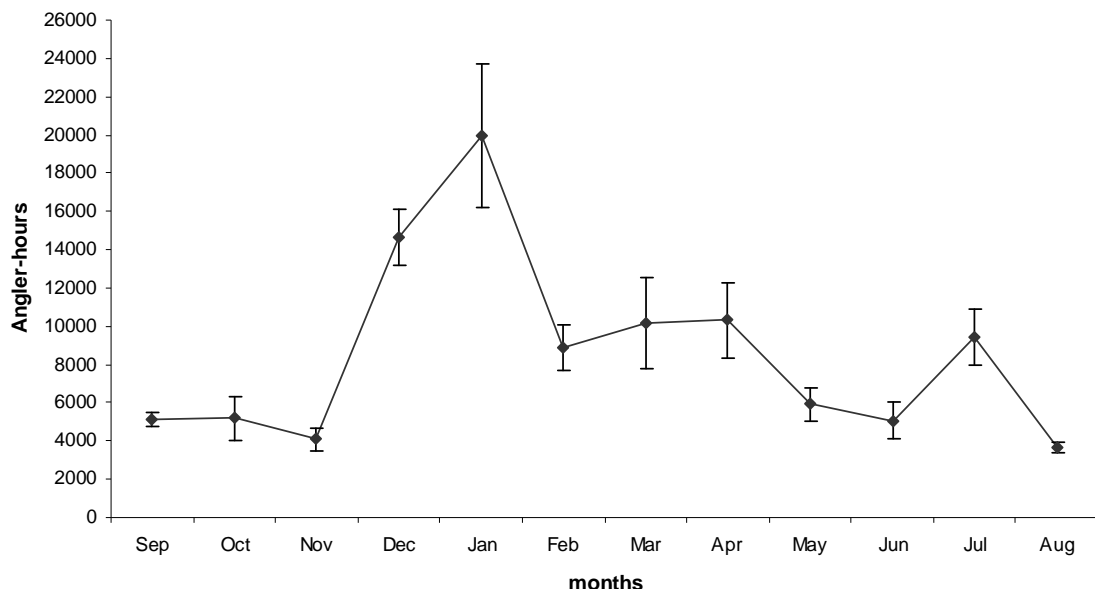


Figure 1. Estimated mean monthly effort expressed in angler-hours (mean \pm SD) for the shore-based fishery in Plettenberg Bay from September 2003 to August 2004.

Although the majority of anglers encountered during the project were living within Plettenberg Bay and its environs, overall fishing effort was highly seasonal with major influxes of fishermen during the summer and Easter holiday periods (Figure 1). During the survey period the total annual daily effort for the rock and surf fishery was estimated to be 102 566 (SD \pm 4862) angler-hours! Of which some 16 000 occurred within Natures Valley. It's worth noting that this is only the day time effort and does not include any night angling.

In total thirty-six fish species (26 fish species and 10 shark species) representing 18 families were identified during the survey period, but only a few species made up the majority of catches. Within Natures Valley, catch by number was dominated by lesser sand sharks, strepie, black tail, shad and cape stumpnose whilst other fish species caught included galjoen, white musselcracker, kob and white steenbras. Unfortunately throughout Plettenberg Bay the retained (caught and kept) catch of many anglers contravened the minimal legal size limit with white steenbras being the most commonly kept undersized fish (61%) followed by zebra (56%) and galjoen (44%).



An example of an undersized white steenbras caught and kept.

Obviously this was not a good result and needed to be addressed. But to address it we needed to know why anglers were keeping the undersized fish. Part of the answer was provided when we tested anglers as to their knowledge regarding the relevant fishery regulations. When asked if they knew the size and bag limits for the species they were targeting or catching, only 25% gave the correct size limits whilst 38% knew the bag limits! It's common sense that if you do not know the regulations by default you cannot obey them. The second reason for keeping undersized fish related to the number of fish being caught. The catch per unit effort (or number of fish caught per angler hour) was low with an overall catch rate estimated at 0.374 (\pm 0.325) fish.angler-hour⁻¹ or 170 (\pm 162.1) grams.angler-hour⁻¹. Due to the low catch rate anglers exhibited a propensity to rather keep any fish caught than wait for a non-guaranteed legally sized fish. We also interviewed those anglers who stated that due to them having paid a license they now deserved, and in some instances believed they had a right, to keep any fish! Obviously, the problem

would not be solved with one solution but rather a number of initiatives were needed. One such initiative was the development and placement of the fishery signboard that you can see opposite the restaurant and shop (these were actually placed at a number of access points throughout Plettenberg Bay).

EINZAMPE ULAALULO RECREATIONAL FISHING REGULATIONS VISVANG WET

Species	Bag Limit
1 BLACK MUSSELCRACKER	1
1 RED STEENBRAS	1
1 WHITE STEENBRAS	1
2 WHITE MUSSELCRACKER	2
4 SILVER	4
1 KOB - DUSKY	1
5 KOB - SILVER	5
2 GEELBEK	2
2 GARRICK / LEERVIS	2
5 BLACKTAIL	5
5 SANTER / SOLDIER	5
4 ELF / SHAD	4
1 MISS LUDY / RED STUMPNOSE	1
2 RED ROMAN	2
2 GALJEN	2
1 DAGERAAD	1

ILLUSTRATIONS SHOWN HERE REPRESENT 50% OF THE ACTUAL MINIMUM SIZE LIMITS

= BAG LIMIT PER SPECIES

Species	Minimum Size Limit
POENSKOP / BLACK STEENBRAS SILVER KOB	50CM
DUSKY KOB WHITE STEENBRAS RED STEENBRAS WHITE MUSSELCRACKER GEELBEK / CAPE SALMON	60CM
LEERVIS	70CM
GALJEN SILVERS / CARPENTER	35CM
DAGERAAD	40CM
BLACKTAIL	20CM
RED ROMAN ELF / SHAD SANTER MISS LUDY	30CM

FAILURE TO COMPLY WITH THE ABOVE REGULATIONS CAN RESULT IN A SPOT FINE OF R10 000 OR IMPRISONMENT

An example of the fishing regulation board erected at strategic points along the Plettenberg Bay coastline.

But back to the present. By re-surveying the shore fishery and using the same methods as employed previously we will not only get an idea of how the amount of fishing effort has changed (both temporally and spatially) but also how total catch and catch rates have changed. This is important as we can use catch per unit effort as an indirect indicator of fish abundance. In other words have catch rates changed and what does this indicate about our resident reef fish stocks. Lastly we will also be monitoring changes in anglers' knowledge of, and attitude towards, the current fishery regulations.

In ending I would like to re-iterate that individual catch cards are available from the Natures Valley Trust offices and that the more people who buy into the monitoring programme the more successful it will be. Remember it is your fishery and we need to work together to ensure its sustainability. Lastly, I would like to say that in buying a recreational fishing permit you obtain the right to partake in an activity (fishing) within designated areas but it does not give you the right to go keep any or every fish caught!