TFFC (Middelpunt) Fishery Report for the 2009/2010 Season

Summary

The 2009/10 season with its exceptionally good rains and full dams was again very favourable for trout fishing, but the external parasite anchor worm had a significant impact on the results from January 2010 onwards. It is well known that this parasite becomes active at water temperatures of above 15° C with the result that the main affect is seen during late summer/autumn. Parasitized trout go off the feed, lose condition and either die or become easy prey for predators. At this stage it appears that this parasite is not a problem in larger dams elsewhere in Mpumalanga although it has caused major losses in several intensive production units. It is therefore suggested that our very large grass carp population may be hosting this organism thus causing a very elevated incidence of the parasite in trout which are much more susceptible to this parasite.

We have proposed a three-year plan to drain, disinfect and refill all our dams starting from the top waters with Dams 1 and 2 to be completed before the end of the year. Grass carp numbers will either be reduced or, depending on the results of the initial stage of the programme, may have to be eliminated entirely from our waters. Stocking of trout will be ended in October to reduce the number of fish exposed to anchor worm when it is most active and stockings have already been increased during the 'safe' winter months.

For the next few years anglers will have to accept that the best fishing will be limited to the months of May to October with significantly fewer trout to be caught from December until well after the popular Easter period. However, if one considers the affect of global warming and the fact that we may be entering a drier hotter cycle after several years of above average rainfall this adjustment may be sensible anyway.

1. **Rainbows stocked vs. captured: 1994 - 2010**

Season	No. stocked	No. killed	No. C&R*	% killed	% killed+C&R.
1994/5	3206	1923	454	60,0	74,1
1995/6	2684	1730	373	64,5	78,3
1996/7	2523	1864	518	74,1	94,4
1997/8	2599	1784	454	64,3	93,8
1998/9	2518	1188	708	47,2	75,3
1999/00	3352	1394	715	41,6	62,9
2000/01	3035	1778	1360	58,6	103,4
2001/02	2746	1714	1477	62,4	116,2
2002/3	2455	1454	850	59,2	93,8
2003/4	2349	888	576	37,8	62,3
2004/5	2400	1236	1063	51,5	95,8
2005/6	2480	1019	1142	41,1	87,1
2006/7	1495	715	860	47,8	105,4
2007/8	1861	861	1159	46,3	108,5
2008/9	1498	767	992	51,2	117,4
2009/10	1926	705	1014	36,6	89,3

*C&R = Catch & Release

2. **Relationship between size of Rainbows stocked & recapture rate: 1994 – 2010**

Season	Avg. size stocked - grams	% killed	% killed+C&R.
1994/5	530	60,0	74,1
1995/6	672	64,5	78,3
1996/7	718	74,1	94,4
1997/8	649	64,3	93,8
1998/9	596	47,2	75,3
1999/00	556	41,6	62,9
2000/01	759	58,6	103,4
2001/2	765	62,4	116,2
2002/3	734	59,2	93,8
2003/4	673	37,8	62,3
2004/5	721	51,5	95,8
2005/6	706	41,1	87,1
2006/7	755	47,8	105,4
2007/8	645	46,3	108,5
2008/9	768	51,2	117,4
2009/10	701	36,6	89,3

Although there is a strong correlation between size of fish stocked and recapture rate dry cycles coupled with high temperatures tend to drive recapture rates down while cooler summers result in lower mortality and therefore improved angling. In addition the impact of anchor worm had a marked influence on recapture rates for the 2009/10 period.

3. **All trout (rainbows + browns) stocked vs recapture rates: 1994 – 2010**

Season	No stocked	No. killed	No. returned	No. killed + C&R
1994/5	3206	1923	454	2377
1995/6	2684	1730	373	2103
1996/7	2523	1864	518	2382
1997/8	2599	1784	454	2238
1998/9	2590	1188	708	1896
1999/00	3403	1417	766	2183
2000/01	3235	1807	1454	3261
2001/2	2891	1766	1622	3388
2002/3	2625	1516	940	2456
2003/4	2349	901	594	1495
2004/5	2521	1260	1131	2391
2005/6	2455	1050	1231	2281
2006/7	1645	732	941	1673
2007/8	2064	879	1178	2057
2008/9	1520	789	1070	1859
2009/10	1926	726	1047	1773

C&R= Catch & Release

4. **Avg. length, CF & mass plus total mass killed (Rainbows): 1996 – 2010.**

Season	Avg. length	Avg. CF	Avg. mass killed	Total mass killed
1996/7	41,5 cm	122	852g	1638 kg
1997/8	41,1 cm	117	824g	1426 kg
1998/9	41,5 cm	119	815g	968 kg
1999/00	39,7 cm	118	735g	1024 kg
2000/01	41,1 cm	122	841g	1495 kg
2001/2	41,8 cm	123	901g	1544 kg
2002/3	41,0 cm	120	837g	1216 kg
2003/4	40,2 cm	124	806g	706 kg
2004/5	40,5 cm	129	852g	1053 kg
2005/6	40,9 cm	126	860g	876 kg
2006/7	42,0 cm	126	936g	669 kg
2007/8	41,1 cm	119	818g	704 kg
2008/9	41,1 cm	121	836g	641 kg
2009/10	40,9 cm	123	842g	594 kg

5. Six largest fish in 2009/10.

Mass	Angler	Month	Dam	Species	CF	Length
2450	G.Crossley (visitor)	Dec	3	Brown	103	62
2400	V. Song	Aug	1	Rainbow	171	52
2380	C.Steele	Sept	3	Brown	136	56
2100	S.Andersen	Oct	1	Brown	126	55
2100	J.Oosthuizen	Dec	2	Brown	141	53
2100	D.Thurlow	Feb	5	Rainbow	168	50

It should be noted that 4 of the 6 largest fish killed were browns although browns comprise only 6% to 8 % of the total number of trout stocked annually. In addition of the six largest trout recorded only one was taken after January which may be the result of the anchor worm infestation. Last season the four largest trout were recorded in April and May.

6. Breakdown of 2009/10 results by dam: No. Stocked vs. Killed & C & R* – Rainbows only.

Dam	Stocked	Killed	Killed as % Stocked	C&R	C&R as % Stocked	C&R + Kill as % Stocked.
1	383	106	27,7	266	69,5	97,1
2	182	85	46,7	108	59,3	106,0
3	297	92	31,0	133	44,8	75,8
4	197	94	47,7	133	67,5	115,2
5	267	101	37,8	119	44,6	82,4
6	257	87	33,9	117	45,5	79,4
7	343	140	40,8	138	40,2	81,0
	1926	**705**	**36,6**	**1014**	**52,6**	**89,3**

***C&R= Catch & Release**

7. Breakdown of 2009/10 results by dam: Length, CF & Weight – Rainbows only.

Dam	Mean Length cm	Mean CF	Mean Weight grams
1	41,9	129	950
2	41,4	122	861
3	43,1	130	1039
4	40,1	115	743
5	40,8	125	848
6	39,6	123	767
7	40,0	113	726
Middelpunt	**40,9**	**123**	**842**

8. Number of members compared with number visits

Year	1998/9	1999/00	2000/1	2001/2	2002/3	2003/4	2004/5	2005/6	2006/7	2007/8	2008/9	2009/10
No. Members	90	91	91	95	95	95	100	100	100	110	110	110
No. Visits	500	542	617	623	603	439	479	476	388	453	432	394

In order to keep fees at a reasonable level the membership has been increased over the last 6-7 years but after a peak during 2000 to 2003 fishing pressure has remained level or actually declined during the last 5 - 6 seasons. The number of visits in the 2006/7 season was also well down because the clubhouse was closed for renovations during the winter of 2006.

A 'visit' is based on a form which is completed by each angler recording fish caught and this represents approximately 1,5 days angling effort. In theory nil returns should also be recorded but this is not always done.

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