

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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