

LINE CLASS POINT SCORE  
TAG & RELEASE  
2010 SEASON REVIEW  
SUMMARY OF FINDINGS MAY 2010

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INTRODUCTION

During the years leading up to the introduction of Line Class T&R Point score there was a division between most Southern Zone and some Northern Zone Clubs, who believed that the system is not suitable for their members wishes. The new system was voted in at the 2009 NSWGFA AGM by club delegates who represented over 60% of the registered NSWGFA anglers and Clubs which collectively represent 73% of the marlin tagged in NSW waters since 2007, which is a clear mandate.

Post the introduction this season there has been continuing criticism by some club individuals challenging their respective committees for voting for the new system even before it got off the ground.

A comprehensive document has been prepared reviewing the results of the first season of Line Class T&R point score system and making observations for improvement. The full document can be viewed on Broken Bay GFC's website, [www.bbgfc.org](http://www.bbgfc.org). This document is a condensed version and reviews the pros and cons of both sides of the argument and analyses the T&R trends evident from the first year of introduction of Line class T&R.

- The significant swing towards fishing 15kg line class for striped and black marlin
- The drop in the unnecessary use of 37kg line class to target striped and black marlin
- the eradication of the "no skill" juvenile Mahi Mahi tagging on inappropriate line class to create a "tournament tie- break" situation
- A healthy increase in the "marlin only" hook-up to tag ratios with 15kg ratios higher than 24kg. i.e Less fish are being lost during the fight.
- Encouraging evidence that striped and black marlin can be released quicker and in a healthier condition on 15kg line class with improved "angler skill" prevailing over heavier drag factors.

These trends are noteworthy and reflect that the new point score in its first year has restored a greater degree of angling skill to our T&R competition and assisted quicker fight times, less bust offs and the release of marlin in a healthier condition with less stress.

This is a very positive outcome and at a time when our sport is under attack from environmentalists and Governments, provides us with powerful evidence that we are pro-actively focusing on ensuring more humane and sustainable angling culture within our clubs.

The aim of this paper is to put the evidence of the first season on the table and seek to provide solutions to remove the division within ranks on the future of line class T&R. We need to be united as a sport to ensure we can effectively fight the environmental lobby and Government agencies, seeking to shut us down.

Please read the full document and if you have any concerns regarding the integrity of the findings and trends, submit them to NSWGFA Point Score Sub-Committee for review.

## 1 What were the perceived faults of the previous fixed points (non Line Class) point score system?

- it provided a means whereby anglers were encouraged to fish heavier than necessary (24kg & 37kg) to tag striped and black marlin resulting in unnecessary stress and damage to the fish.
- It encouraged anglers to tag significant number of juvenile Mahi Mahi stock (average 2.2kg) from fish traps and FADS on 24kg and 37kg tackle to provide a tie break for tournament fishing.
- The system did not recognise that the key to the survival of a tagged fish is the targeting of the species with a line class which does not apply undue stress. Fishing conditions and fish sizes are not constant as the fixed point system would infer
- Competition is all about angler skill pitted against the fish. The system completely ignored recognizing "angler skill" on a fish which can fight effectively and substituted "drag factor" as the prime source retrieving a fish and earning points. This was an unsuitable system which worked in conflict with GFAA ethical aims.

## 2. What were the main objections to the introduction of Line Class T&R?

This is a confusing question to answer. Despite substantial scientific evidence and research supporting the proposals, no meaningful argument was ever been documented or tabled to argue a case for non-adoption.

Most objections appeared to be based on the contention that Southern Zone was different to the rest of the State because the fish are “bigger”. Hence they need heavier tackle to target their marlin and would be disadvantaged if a point score which encouraged lighter line was introduced. The disadvantage of lower points being received for Blue Marlin tags on heavy tackle was also raised as an issue.

The other argument was that fishing lighter line would result in a substantial increase in busted off fish and severely damaged fish due to longer fighting times.

Immediately post the introduction of line class T&R there was some criticism from a small, but vocal group of individuals taking to task their Club committees for voting for the proposal. Again the dialogue was loud – and predicted disaster with damaged fish and longer fights the main objections.

### 3. How these objections have stacked-up now that Line class T&R is a reality and has a “Benchmark” to measure

- i) Southern Zone is “different”. The fish are bigger and they need to fish heavier to be competitive.

The NSW DPI fisheries report on NSW Game Fish Tournament Monitoring, released in 2007, showed that the black, striped and blue marlin along the NSW coast are basically the same source stock and average weights of species may differ from year to year between Northern, Central & Southern Zones. Using data from tag card estimated weights and long line catches Southern Zone Striped Marlin are slightly larger than Central Zone. There is no trend or difference in Blue Marlin weights between Zones. Black marlin data shows Southern Zone fish are larger 87.0kg vs 50.3kg due to the fact that the massive influx of Juvenile Black marlin (15-30kg), which occurred from time to time in 1997, 1998 and 2005.

These fish do not migrate to Southern Zone waters and overall the incidence of Black marlin in Southern Zone waters is substantially less than Central and Northern Zone. The main marlin species tagged in Southern Zone are striped marlin and the difference in average weights is marginal. Basically the argument of “bigger fish” does not appear to have a credible scientific base.

The question is “Would it make a scrap of difference even if Southern Zone fish were bigger?”. Southern Zone Clubs generally only fish in their own waters. Hence there is no disadvantage because the point score is only relevant to their waters. Consequently, their members can individually decide which line class they wish to target the fish on relevant to what is available in their waters, just the same as anglers in other Zones.

- ii) Larger Blue Marlin are not adequately rewarded under Line Class T&R as heavier tackle is necessary to target them.

The question of needing heavier tackle to target blue marlin is common to all Zones and is a valid issue for consideration. However, blue marlin is not a prolific species in NSW. Blue marlin represent

around 6% of total tagged billfish. So the decision that needs to be made by the individual is “do you want to fish heavier to ensure you are more adequately equipped in the event that you encounter a blue Marlin. If that is the view, the statistical odds demonstrate that you will likely go a full season and not see a blue marlin. The odds of encountering a blue marlin for tagging are around one in twenty. Hence the odds show that you will tag an average of twenty 70 – 100kg black and striped marlin on tackle heavier than necessary, with substantially less angler skill and a huge amount of “drag factor” damage, before you encounter one blue marlin. Also when large blue marlin are around the word quickly spreads and anglers gear up accordingly.

- iii) Heavier tackle on fish will result in quicker releases and is more humane.

This contention was the main plank of the underlying structure of a flat T&R point score system. It seems logical enough but only took one season of line class T&R to demonstrate that it is highly questionable. Basically the contention was dubious to start with but now is highly unlikely.

There is emerging evidence that there is a major flaw in the contention that quicker fights on heavier tackle results is beneficial to the fish. The reality is that heavier tackle than necessary on a lighter fish places a substantially more lethal strain on the fish and the angler is having a “free kick” as the fish is severely restricted in its ability to fight. The reason should have been obvious and, for 20 years or more, our sport supported a point score system which encourages using heavier tackle on light fish for the good of the fish!

The heavier the drag placed on a fish the more difficult it is for the fish to fight effectively. It is subdued quicker because it has been ‘smashed” by the heavier the tackle the greater distress placed on the fish. It’s like matching a light or middle weight boxer with a heavy weight. It’s all over quick – but the damage can be immense. The first real evidence of this was in the 1998 interclub when over 852 juvenile black marlin averaging 20 – 30kg were tagged on mainly on 24kg and 37kg line class. Numerous dead marlin were tagged and released at the boat. Many died because they were unable to fight and were keel-hauled often being lost because the exhausted fish’s abrasive bill was wedged across the leader.

The 1998 Interclub was the “extreme” case of damage inflicted under the flat point score system. However, the line class used should be based on what can be demonstrated as the optimum line class drag which is sufficiently heavy to subdue the targeted fish specie in a reasonable fight time without damaging it.

We know we are mainly targeting on average black or striped marlin with an average weight of 70 – 100kg and, for a point score benchmark we should be focusing on what impact the line class and subsequent drag has on the fight time of such a fish.

From the analysis of data obtained from the 2010 Interclub (see table below) 258 marlin were tagged on 15kg and 24kg line class, it is apparent that the fighting time on 24kg is no different to 15kg. This result is despite the fact that the drag exerted on 24 kg is 60% greater than 15kg (5kg vs 8kg). What does this mean? It means that the 15kg fish is most likely fresher and has had substantially less punishment than the 24kg angled fish.:

## 2010 Interclub Marlin Tagged "All Boats " vs "Top 3 teams" Line Class Fight Time Analysis

	Fish Tagged 15kg	Fight Time mean	Fish Tagged 24kg	Fight Time mean	Fish Tagged total	Fight Time mean
Total All boats 15/24kg line	75	28.6	183	29.1	258	28.93
Total Top 3 teams	32	15.3	55	19.6	87	18
NPSGFC Top team Born free, Billistic, Gunrunner, Diversion, Seaka	19	15.7	23	15.6	42	15.7
BROKEN BAY 2nd place In a Meeting, Black Pete, Aluhra Gorilla, Frosty	13	14.6	10	16.4	23	15.4
LMGFC 3rd Place Running Bear, Weapon, Amokura			22	25.1	22	25.1

The major points of this analysis are:

- From the 191 boats fishing 75 marlin were tagged on 15kg line class and 183 marlin on 24kg line class. The average fight time for 15kg was 28.6 minutes and the average fight time for 24kg was 29.1 minutes
- Thus from the entire angler range from novice to skilled, there was no meaningful difference in average angling time between 15kg and 24kg despite a 60% greater "drag kill" inflicted on 24kg fight
- When this sample is broken down to the 87 marlin tagged by the top three champion teams, where it would be expected that angling skills are superior, the outcome is even more dramatic. The average angling time on 15kg line class was 15.3 minutes vs 19.6 minutes on 24kg line class
- Thus despite almost 40% less drag applied to the twenty three 15kg fish, the average fighting time was 22% less than the 24kg line class sample

Another smaller sample (87 Marlin) from three Broken Bay GFC T&R boats marlin fishing both 24kg and 15kg line class shows a similar trend of an average of 23 minutes fight time on 15kg and 28 minutes on 24kg.

From this data it is evident that for the striped and black marlin source we are targeting in NSW waters, there appears to be a "sweet spot" at 15kg line class where "angler skill" exceeds "drag factor". The fight time taken from this data was less, and from angler observations, the fish were released healthier having been subjected to less drag strain.

iv.) Line class T&R will result in less tags through lost fish and greater damage to the fish from prolonged fights

Data collected over the past three years and the 2010 NSW Interclub tournament show that 15kg angled fish are being released in the same, or better, time span as 24kg, then, if this is the case, the prospect of meaningful damage from a prolonged fight should obviously be less.

This objection appears to be related the experience of capture anglers where the line class fished can be taken to the limit on light tackle to gain the maximum points. This is an intentional strategy and is basically fishing "on the edge". Line class T&R is not designed for "on the edge" angling. It is designed to reduce unnecessary drag on the fish which provides harmony between angling skill and "drag factor".

During the first season of Line class T&R there has been no evidence whatsoever of T&R anglers seeking to fish "on the edge" of line class limits.

The most visible data to judge whether there is a trend to greater "edge" fishing is the Hook-up to release success. This data from a published DPI report (Park 2007) was collected from tournament Skeds since 1997 and can be measured from the "Hook-up" rate vs the "catch" rate.

Hook-up to capture/release data 1997 – 2005  
Measured hook-ups and Capture/release per boat

	Hook-up rate	Catch rate	%
Billfish /Tuna & Sportfish Trolling	1.13	0.74	66%
Black Marlin Charter boats (1990's)	1.89	0.90	48%

Using this data as the benchmark and comparing it with the three most recent tournaments post the introduction of Line Class T&R point score, there are no trends which would indicate that more fish are being lost during fighting.

	Hook-ups	Releases	Catch/hook-up trend
AIBT 2010 (Marlin only)	77	59	77%
Top 3 T&R Teams 2010 Interclub (Marlin only)	115	87	76%
Broken Bay Invitational (marlin only)	217	168	77%
Top 10 T&R Marlin boats Broken Bay Invitational 2010	91	82	90%

This data shows that there is a significant improvement in the "marlin only" data which is more representative of where there would be an impact if line class T&R point score system was creating riskier and more damaging angling practices.

Preliminary data from the I & I NSW Gamefish Tournament Monitoring Program are shown in the table below. These data provide the proportion of fish that were hooked up and successfully caught in the NSW Interclub Tournament from 1998 to 2010. Boats included in these figures were those who

had tagged at least one billfish during each annual event. There are no significant differences in these trends in recent years, including the 2010 post line class T&R point score introduction.

### **Port Stephens Interclub 1998 - 2010 Marlin "Catch to Hook-up" Trends**

	1998 -2003	2004 - 2009	1998 - 2009	2010
	%	%	%	%
Mean Catch / Hook-up Ratios	62	70	67	75

. It can be seen from these data that there is no perceivable trend that would suggest that the introduction of line class T&R has had a negative impact on tag rates as a consequence of a higher rate of "bust-offs". There is likely to be other factors such as bait types used that are influencing these trends. The 2010 catch to hook-up ratio post Line Class T&R was 10% higher than 2009, 5% higher than the average of the previous 6 years and 9% higher than the average of the past 12 years.

There has been no evidence of "fringe line class angling" for striped and black marlin in T&R competitions or increased "bust-offs" reflected in hook-up to catch ratios for billfish tag and release boats. Only a greater swing towards 15kg line class at the expense of 37kg.

## **4. What have been the trends and outcomes of the first season of line class T&R? .**

The main aim of the Line Class T&R was to provide a system which provided a more humane method of tagging Marlin whereby the unnecessary drag kill factor is reduced, or eliminated and the fish is released in quicker time with less stress during the fight and less damage on release. This by definition means that the aim is to encourage fishing lighter where appropriate and focus more on "angler Skill" than "Drag stress factor".

A secondary aim was to remove the unnecessary and undesirable activity of tagging Juvenile Mahi Mahi on 24 kg and 37kg line class to provide a tie break in competitions.

On any measure the first year has been a resounding success. The Interclub, AIBT and Broken Bay invitational Tournaments collectively tagged 621 marlin and provided a substantial data base to provide a meaningful sample of statistical outcomes.

### **1. Line Class Selection**

There has been a very significant reduction in the use of 37kg line class and a major surge in 15kg line

class for targeting striped and black marlin The tables below shows the difference in data collected from Broken Bay GFC records over the past 5 years on a sample of 505 marlin tagged and compares it with the 2010 data from the three major Tournaments (Interclub, AIBT and Broken Bay Invitational) plus Broken Bay Point score data to date

## **LINE CLASS PREFERENCE TRENDS - MARLIN 2005 -2010**

### **2005 2009 PRE T&R POINT SCORE CHANGE**

BBGFC DATA	15KG OR LESS	24KG	37KG OR MORE	TOTAL
MARLIN TAGGED	55	397	53	505
% Tagged by Line class	11%	79%	10%	

### **2010 POST T&R POINT SCORE CHANGE Interclub AIBT & Broken Bay Data**

	15KG OR LESS	24KG	37KG OR MORE	TOTAL
MARLIN TAGGED	201	407	13	621
% Tagged by Line class	32%	66%	2%	

The main highlights are :

An threefold increase in the preference for 15kg line class from 11% to 32%

An 80% reduction in the use of 37kg line class from 10% to 2%

A 16% reduction in 24kg line class from 79% to 66%

## **2. Improved marlin Hook-up to Tag Outcomes**

One of the major objections to the introduction on a line class point score was the claims by opponents that there would less fish tagged due to the increased loss fish during fighting. The data from the 2010 season is emphatic that this has not happened. Indeed, in the first year hook-up to capture rates have increased, in some cases significantly.

The data from all three tournaments show increased hook-up to tag outcomes compared with historical data. This shows that the marlin hook-up /Tag ratio for the season was around 75% – 77%. Data extracted from Broken Bay Invitational Tournament Sked sheets broke this data down further into line class outcomes. This is shown below:

## Line Class Hook-up ratio 2010 Analysis

### BROKEN BAY INVITATIONAL 2010

	Striped	Black	Blue	Total
Tagged Marlin by Species	146	15	7	168
Line Class	37kg	24kg	15kg and Less	
Hooked marlin by Line Class	12	143	62	217
Tagged Marlin by Line Class	5	110	53	168
Hook-up to Tag rate%	42%	77%	85%	77%

This data shows that there was an 85% hook-up to Tag on 15kg compared with 77% for 24kg and 42% on 37kg. These are exceptional figures and although taken from a small sample, certainly is sufficient to question the theory that lighter line angling under this point Score will result in less tags. The data from the top 10 Boats is even more impressive as seen below:

### Broken Bay Invitational 2010 Top 10 T&R Boats "Hook-up to Tag" Data

Marlin Tagged	24kg	15kg	Total	Fish lost	Fish hooked	Tagrate%
Bite Me		11	11	0	11	100%
Born free	2	9	11	0	11	100%
Rivenge	11		11	0	11	100%
Smart Bill	9	1	10	2	12	83%
Black Pete	7	2	9	1	10	90%
Adrenalin	7		7	0	7	100%
In a Meeting	1	5	6	2	8	75%
Murrifin		6	6	0	6	100%
Amokura	6		6	2	8	75%
Aluhra	2	3	5	2	7	71%
<b>Total Fish</b>	<b>45</b>	<b>37</b>	<b>82</b>	<b>9</b>	<b>91</b>	<b>90%</b>

15kg / 24kg Split                      55%              45%

It can be seen from this data that the top boat, "Bite Me", fished exclusively on 15kg line and achieved a 100% hit rate. "Born Free" came second also with a 100% rate with nine on their eleven fish tagged on 15kg. With 55% angled on 24kg and 45% on 15kg, in this sample of 91 hook-ups, there clearly was no impediment by fishing 15kg line. The top three boats all tagged 11 marlin with the line class "skill factor" differentiating the places., rather than a count-back or Juvenile Mahi Mahi tags.

### 3. Quicker Fight times on Lighter tackle

The main arguments against the new system was that lighter tackle would lead to longer battles and greater stress placed on the fish. This subject has been covered earlier. The data is irrefutable that this has not happened. The lighter line enables the fish to fight without the Impediment of unnecessary drag. The data shows that there was no difference in marlin fight times between 15kg and 24kg in the 2010 interclub, but more importantly at the top end of the field, the boats fishing 15kg line class angled on average 22% quicker than 24kg anglers. This trend has been confirmed in Broken Bay Club Boats during the past three years where the 15kg angled fish fight times were 19 % less than those the angled on 24kg,

### 4. Elimination of Juvenile Mahi Mahi Tagging for Tournament Tie-Breaks

Juvenile Mahi Mahi for Tie-Breaks on medium and heavy tackle from FADS or fish traps, is now a thing of the past.

### 5. Angling Skill is becoming a more important part of competition and fishing ethics are enhanced.

The almost disappearance of 37kg line class angling from our tournaments, where Striped and Black marlin were the predominant target species, and focus on 15kg and 24kg as the preferred line class, is important. It restores ethics to T&R angling and provides compliance with GFAA's aims to promote ethical and sportsman-like angling practices within our sport. It provides a uniform ethic code between both T&R and Capture angling and has increased our ability to release more fish in a more healthy state.

## 5. What can you do to help?

To remove the heat from the divisions created by the line class issue, we all need to reflect on what is important for our sport. What do we want out of our fishing experience?

Some members will always have some opposing views on some aspect of fishing and healthy debate and discussion is a good thing and is usually respected if it is well thought out and credible.

As an angler, or skipper, you have the option to choose how you fish. Capture or T&R, Lures or live or dead baits, target marlin, tuna or shark, use light, medium or heavy tackle, Fish close, wide, north, south, on the shelf, off the shelf, drift or troll etc.... , All of these choices are yours and your skill or luck in getting the right formula for the day can rely on numerous factors.

Most boats and anglers have a preferred formula which suits their boat and crew's style of fishing.

Much of the anti debate on line class T&R seems to be based on an individual's "preferred formula" perceived as not being conducive to the new points score system. I.e. it possibly won't necessarily suit the way they have preferred to fish. Most of the early "heat" was pre season before a line was wet. Now the season is coming to the close, compelling evidence is proving that striped and black marlin are being angled as competently on 15kg as they are on 24kg. Not only is the angling skill greater on 15kg, but also it leaves the released fish in better condition with no increase in fight times and less drag inflicted on the fish. And importantly the angler is rewarded with additional points.

If you think that fishing lighter for greater points is wrong give it a try before slamming it. You may be surprised at the buzz in seeing a healthy 100kg marlin actively angled on 15kg and released in superior condition. During the 2010 Interclub seven of the top 13 scoring boats in the top three teams, fished primarily 15kg, or a mix of 15kg and 24kg. 6 only fished exclusively 24kg..

In the Broken Bay Tournament, only three of the top ten boats fished exclusively 24kg. Of the remaining seven boats, five fished primarily 15kg and the winning boat with 11 fish fished 100% 15kg with a 100% hook-up to tag ratio. 37kg did not rate.

45% of the fished tagged by the top ten boats were on 15kg. This compares with “zero” tagged on 15kg in the previous year’s event. So clearly a lot of competent skippers and anglers have successfully embraced the concept of fishing with greater skill to release healthy fish.

More importantly don’t vent your displeasure on your club’s committee for voting for the system. If you have any credible scientific evidence that the positive outcomes of the new T&R point score system do not provide a better outcome for the angled fish, then prepare a submission and send it to the NSWGFA Executive for consideration. The new point score system is all about what is better for the fish, and recognises the skill of the angler.

We need to ensure that we all work together and have a focus on fighting for the survival of our sport, and allow our executive and Club Committees to focus on the broad issues of survival rather than dividing ourselves over a Point score system and weakening our ability to defend our sport.

## 6. Possible Initiatives to Improve Line Class Point Score and Remove Divisions

With the first season almost behind us, and plenty of data on how anglers have responded, it is worthwhile looking at ways of possible improving it further to suit angler preferences.

- Simplify the system to embrace three line class categories rather than five

One of the obvious outcomes of line class T&R is that anglers have significantly reduced the use of 37kg for targeting striped and black marlin, and 60kg is almost non-existent. At the other end of the spectrum, there has been very little marlin T&R angling activity below 15kg. Over 97% of T&R activity in the three major NSW 2010 Tournaments analysed in this paper were 15kg and 24kg. There has been no significant trend to fish lighter than 15kg in the first year of the new system.

Hence a simpler system may be to only have three points of differentiation, rather than five.

Current System:	10kg & Below	15kg	24kg	37kg	60kg
Marlin points	12500	11500	10000	8500	7500
Possible Alternative	15kg and below		24kg	37kg and above	
Marlin Points	11500		10000	8500	

Other species can be similarly adjusted to reflect the concept.

This formula reflects the recommendations of the NSWGFA Committee formed to review the new point score a few years ago.

- NSWGFA establish a Sub-Committee to Monitor Line Class T&R Data and Trends

The establishment of a point score Sub-Committee with scientific representation) to analyse and review T&R point score submissions would be a significant step forward and focus all quality debate into a bipartisan forum free of emotion, division and disharmony. It would also remove “club politics’ from the debate.

- Reclassify base points for the Blue Marlin species to remove the anomaly.

Each billfish species have a points classification. Sailfish and short-billed spearfish are around half the size of striped and black marlin and are allocated half the points (5000 base vs 10000). Blue marlin are around 50% larger than Blacks and Striped but receive the same points.

Under the line class T&R point score a 250kg Blue marlin angled on 37kg line class will earn 8500 points. Whereas a 100kg striped marlin angled on 15kg will score 11500 points. Both are 6.7 times line class releases and would regarded as a pretty good achievement.

By reclassifying the blue marlin species to a higher point level, to reflect the larger size, could remove this anomaly. Under a three line class category point score system the following amendments could be considered

	15kg and below	24kg	37kg and above
Blue Marlin Points	13500	12500	11500

In the example above both the 100kg striped marlin on 15kg, and the 250kg Blue marlin on 37kg are 6.7 times released and receive the same points (11500) thus removing the anomaly

- Provide the ability for dissenting clubs to fish the flat line class System for their Club competitions

Such an initiative, if successful could quickly defuse the situation.. If a dissenting club put such a resolution to the NSWGFA AGM it would most likely get significant support. The pro line class clubs most likely would not be concerned if a minority group of clubs wanted to go down that route and probably would support such resolution as long as it did not impinge on the operation of the principles of existing line class system. Thus the dissenting Clubs who prefer the old system would be allowed to use it exclusively within their club point score if they chose.

A simpler alternative would be for the club to reclassify its T&R trophy list to the most “number of fish” tagged by species (if they are not already doing this).