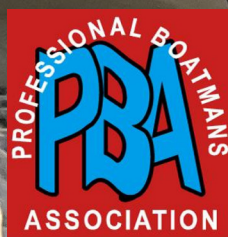


BLUEFIN TUNA TRAINING MODULE

TACKLE: REELS

PRODUCED BY THE UKBFTA
IN ASSOCIATION WITH THE ANGLING TRUST AND THE PBA



REELS

INTRODUCTION

We are extremely fortunate to experience each year an influx of amazing bluefin tuna into our waters. Atlantic bluefin tuna are one of the most powerful pelagic fish in the oceans, and for 4-5 months a year, anglers fishing the UK's western waters have a great chance of hooking up one of these incredible fish, ranging from 100lb to 800lbs or so.

Such fish place huge demands on fishing tackle, and choosing the right gear is essential. Large bluefin will find and exploit any weakness in your gear. The right choice can be the difference between success and failure. It can mean a healthy, releasable fish boatside in reasonable time, or a lost or dead fish, after hours of ineffective effort, plus a fatigued or injured angler. The reel you choose is a crucial component of that set-up. You need not only the very best quality, but also the right design, AND to understand HOW to use that gear to its best effect.

In this article we are going to focus upon the optimal gear to use when trolling lures/baits, and fishing baits on the drift or at anchor, with 'conventional' big game rods and reels. Whilst popping and jigging is permitted in the English CRRF, it is a specialised technique requiring quite different gear. Given that, we will cover that elsewhere in a separate article. So, where to start...?



CHOOSING THE RIGHT REEL

The first question to address is what are we actually likely to catch?

But just how big are 'our bluefin'? The average size of bluefin caught over three years of English CHART was as follows, (note CEFAS used 'Straight Fork length' and a length/weight table of their choice for their reporting in CHART 2021-2023).



The average size fell in 2023 largely due to an influx of smaller fish during the middle third of the season, coupled with the highest levels of effort of the season and the highest catch per unit of effort.

Average bluefin size in UK Waters

2021 71", c255lb

2022 74" c290lb

2023 65" c200lbs

Over that five week period the average size of fish caught was 165lbs. Either side of that five weeks, the average weekly size was around 250lbs. Only 2.5% of the total caught/measured, were at or below c100lbs.

Our UK bluefin are BIG, POWERFUL fish. Tackle appropriate for targeting 100/150lb bluefin is very different from what you would sensibly choose to tackle 300-500lb bluefin. Every season between 2021 and 2023 saw fish caught that were in excess of 700lbs.

BASIC CHARACTERISTICS

BASIC CHARACTERISTICS OF AN IDEAL REEL

There are some 'non-negotiables' when it comes to choosing the right reel for targeting bluefin with troll/bait fishing techniques.

It should be a multiplier, of metal frame construction, with a lever drag, adequate line capacity and a drag capable of applying significant pressure to tire your fish. It needs to be from a quality manufacturer. 'Knock-offs' sourced online will just not stand up to the harsh treatment inflicted by a large bluefin tuna.



Most experienced CHART skippers, (and indeed big game skippers/anglers around the world) favour reels from Accurate, Alutecnos, Avet, Okuma, Penn, Shimano.

Whilst each skipper or angler may have their favourite brand, the reality is that once you are into the appropriate model from each manufacturer, there isn't really that much to choose between those top six manufacturers models.

ALL of them can fulfil the basic roles required of our 'bluefin reels', i.e.

- To act as a store of line
- To retrieve line efficiently
- To apply appropriate, controlled drag under pressure

To fulfil those roles, the 'right reel' must tick the boxes with regards to the four following 'characteristics'.

- **Adequate Line Capacity. (Influenced by line b/s and material).**
- **Appropriate retrieval rates. (Influenced by size, gearing, amount of line)**
- **Appropriate Gear ratio's. One or two speed?**
- **Adequate Drag. Maximum? Range? Usable?**

LINE CAPACITY AND REEL SIZE

Let's look at each of these characteristics and why they are important.

Broadly speaking we now have available '50', '50W', '80', '80W', '130' class' reels from a range of manufacturers. ('W' is for 'Wide' and holds more line than the 'non wide'). '50W' reels generally hold around 850-900 yards of 50lb monofilament,

'80W' reels generally hold around 950/1000 yards of 80lb monofilament,

'130' reels generally hold around 1000 yards of 130lb monofilament.

The majority of experienced bluefin charter skippers use a braided mainline with a monofilament topshot, so the monofilament line capacities listed above are not that helpful. Some do use mono all through. It's a personal choice but does impact line capacity and/or the size of the reel used.

There is an ongoing debate about the appropriate reel size to use for stand-up, 50W, 80 (not common) or 80W. There is general agreement that 130's are just too big and overkill in terms of drag etc for stand-up and better suited to chair/gunwhale use.

50W's are smaller, lighter, with a lower line capacity and generally lower max drag (not always) than 80W's. Some experienced skippers swear by 50W's for all but the rare 600lb+ fish but others prefer the 'comfort' (line capacity and drag) an 80W reel gives, (and the optics for paying clients who may want to see a 'proper big game reel').

It may come down to your preferred brand, what rod you want to fit it to and your preferred fishing techniques.

So what about line capacity?

A typical 50W reel with a small amount of 100lb monofilament backing, 100lb hollow-core braid mainline and say a 100 yard 150lb mono topshot can hold a total of about 750-850 yards of line (depending upon model).

A typical 80W reel with 100lb monofilament backing and say 200lb hollow core braided line plus a 100 yard 150lb-200lb topshot can easily hold 1,200yards+ of line. (many use more backing and 200lb hollow-core rather than 100/150lb hollow-core as we don't wish to spool up with 2000-2500 yards of expensive hollow core, most of which will never see the light of day!).

LINE RETRIEVAL AND GEAR RATIOS

It is fair to say that most 50W users are running about 800-900 yards of line, and 80W users about 1,200-1500 yards. We deepest we tend to fish for our bluefin is around 250-300ft, so why do we have thousands of feet of line on our reels? A long first and second run from a powerful bluefin will typically not go more than 150-250 yards. There are exceptions of course, but under those circumstances you may be starting engines and following the fish pretty sharply.

Personally, the most line I have ever had out on a feisty, late season bluefin was around 400 yards, taken in three epic runs (of shorter length each time).

We fill one reel with 600 yards of line, (say we use 80lb mono on a 50W).

We fill the second reel with 1,000 yards of line, say a 100-130lb hollow core and mono topshot.

When full, both reels will retrieve about 37" of line with one turn of the reel handle.

A big bluefin hits your far back trolled skirted bait and screams off, by the time you have the angler harnessed up, he makes another screaming run. This is a late season, cold water monster and now has taken 350 yards of line from your reel.



The diameter of the spool has now reduced. Your tuna has taken nearly 60% of your line from reel 1. (The spool diameter has not reduced by 60% but is around 50% lower).

You set your stance and start to wind to regain line. You make a turn on the handle, a whole 22" of line returns to the spool. That's a 40% worse rate than when full.

In this hypothetical battle using reel 2, you've lost 350 yards but that only represents 35% of the 1,000 yards you started with.

When you now crank that reel handle one turn, you will get 28" of line back on the reel, just 24% worse than when you started.

That may not seem like much of a difference, BUT, over the course of a fight with a large bluefin you may lose and regain line multiple times, you may have to regain hundreds of yards of line in a fight. If we told you a magic switch on your reel could improve your efficiency in regaining line by 10-15%, you would probably jump at it....

You can do this just by spooling up your reels with a hollow-core/topshot combination rather than monofilament all through, or by choosing a larger capacity reel. It would be crazy not to.... You should aim for around 850 yards of line on your full reel at a minimum.

GEARS AND RATIOS

Big game reels for bluefin should be 'two-speed'. Some bluefin may spend the entire fight mid/top water, fish running at the boat will require that higher gear ratio

So why are we spooling up with so much expensive line? Well, it is mainly to do with LINE RETRIEVAL RATES

LINE RETRIEVAL RATES

Two speed reels as outlined above typically have the following gear ratios.

50W: 3.1 to 3.5, and 1.3 to 1.7 When the spool is full, each turn of the reel handle retrieves 37-40" of line, and in low gear 13-15".

80W: 2.5 to 2.7 and 1.3. (Accurate's ATD 80W is lower at 2.2/1.0 and Penn's 80VISW higher at 3.1/1.5). When the spool is full, each turn of the reel handle retrieves 39-40" of line, and in low gear typically around 19".

But those line retrieval rates change significantly when a big fish decides to empty your nicely filled spool... We'll use the example of a 50W reel here, but the PRINCIPLES and OUTCOMES are the similar if we apply them to an 80W given the lower gearing of a typical 80W.

DRAG AND HOOKHOLDS

(and maybe a bit of gas from the skipper to move away from the fish and maintain a tight line).

However, many will at some stage go deep and in the up and down fight the angler will really benefit from a low gear ratio (and short pumps) to really get that fish's head up and moving in the right direction, or 'corkscrewing' it up through the pinwheel.

There isn't much to choose between most manufacturers in terms of the gear ratios offered. If regaining line faster is your personal preference, the Penn International series in 50W and 80W guise offer the highest gearing of the six manufacturers mentioned above, (at 3.5 and 3.1 high gear ratios respectively.) This translates into about an 8% difference in line retrieval rates. Of course there is no free lunch and that higher gearing is offset by a reduction of torque.

The 130 class reel offerings from the major manufacturers are all around 2.2/2.3 high, and 1.1/1.2 low. Those larger spools generate line retrieval rates of about 39-41" in high, and 19-21" in low. Again there is little difference between them.

There is in reality little to choose between the major manufacturers reels in terms of gearing. But you do want 2 speeds...

HOW MUCH DRAG IS ENOUGH

The introduction of high tech materials into drag plates, and more recently 'twin drag' systems on some offerings, has meant that the maximum quoted drag on many manufacturers reels has skyrocketed in the last 10 years. You can now buy 50W sized reels that boast 75-100lbs of drag capability.



Coupled with the advent of lower maintenance, high quality braided lines this has allowed anglers to shift down to smaller sized reels than historically used for large sportfish such as bluefin and billfish. Lighter materials in cage/spool construction also reduce weight.

Boasting adequate drag and line capacity these smaller, lighter reels make for a more enjoyable experience and with better techniques and improved harnesses see huge fish now manageable in stand-up gear that even twenty years ago would have been almost unthinkable. (Thank you Avet/Accurate, Marsha Bierman, and Dennis Braid!)

However, just how much drag do we need?

There are real world constraints on just how much drag we can apply to a fish from these reels however.

In stand-up gear, less so in a chair, there is a limit to just how much drag the angler can apply to the fish. Bear in mind that the negative mechanical advantage of a rod means that the force the angler applies to the rod will be markedly more than that which he is applying to the fish.

In practical terms, initial drag settings of around 40lb (in correctly chosen and set up harnesses) are about the limit for even fit anglers. Any slippage in the harness in transferring pressure to the lower back will very quickly become extremely painful, wide leg positions for stability will put pressure on knees and ankles that can become painful and dangerous.

From a chair, it is possible to apply greater levels of drag that stand-up but we soon begin to experience another constraint.

HOOKHOLDS

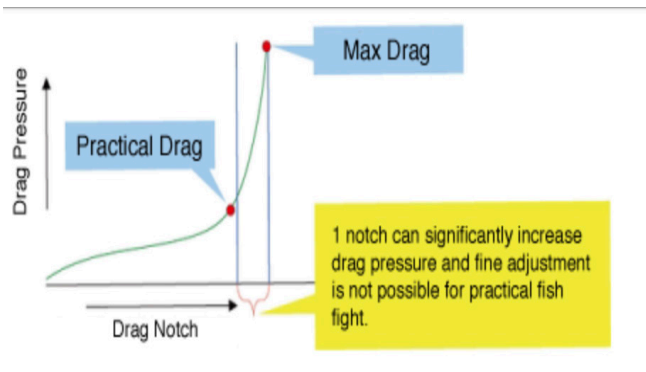
Even if your line connections, swivels, hooks etc are all up to the task, at some stage the force on the hookhold may result in a pulled hook. Bluefin jaws are robust but they are not comparable to the bill of a marlin. Another drawback to these very high drag reels is the finesse of adjustment. If you choose to set max drag at the highest possible level, (but of course don't intend to use it!), you create other potential problems.

1) The 'strike' drag position will be wherever the manufacturer has set it. It precludes you setting 'strike' at where you typically spend most of the fight dragwise. It gives you a reference point as a crewman/skipper if your angler starts to 'mess around with it', and when backing off if you lose a lot of line in a fight.

Losing Line

2) A **drag lever** has a finite physical range. If that range is from free spool to 45 lbs of drag, each notch, detent or cm of movement adjust the drag by 'x' lbs/kg. If the max drag is set at say 65lbs, each notch or cm adjusts the drag by a larger amount. You lose some finesse in setting the drag level you want.

Additionally, drag curves are not linear, as per the Shimano tackle graph (via the Japanese anglers website) below, there is a point where the 'drag curve' steepens dramatically. An inexperienced and/or flustered angler can suddenly increase drag to levels that can result in them smashing into the gunwhales, breaking line/connections or pulling hooks when the fish next makes a run.



LOSING LINE? BACK OFF THE DRAG

The other often misunderstood aspect of drag is that the amount of pressure it takes to turn the spool and give line varies with how full the spool is.

For example, if you set your 'strike'/'fighting' drag at 25lbs at the start of the day with a full spool, and mid morning find yourself with your spool half emptied by a powerful fish, the drag at the same lever position could be DOUBLE the pressure you set it at.

A failure by inexperienced anglers to understand this, to even bring the drag lever back off when the fish has taken a lot of line, is probably responsible for the majority of broken rods, lines, swivels, hooks and hookholds in our fishery in recent years.

By all means buy that fancy reel advertising 75/100lbs of drag, but do not delude yourself that you can use that drag beyond a fraction of its advertised level.

There is a 'goldilocks' range of drag that is 'just right' for the angler and fish when coupled with good technique and skilled helmsman.

'Walking the dog', following a fish around applying mini-

mal pressure, is an often seen error and will result in long fights, more lost and dead fish.

Equally trying to bully 'popeye style', bluefin tuna to the boat with huge amounts of drag will also result in sub-optimal outcomes.

25-40lb of drag, coupled with good technique on the rod and on the helm, will deliver better outcomes in shorter time than either of the aforementioned approaches....

Don't buy your reels based upon the 'max drag' levels claimed by manufacturer, there are many other more important considerations.



CONCLUSION

All 'conventional' reels for use in the bluefin fishery should be metal frame multipliers, with lever drags and able to hold a minimum of 750 yards of your chosen line.

For fighting fish 'stand-up', a quality '50W' or '80W' reel is perfectly adequate, perhaps leaning towards the 80W for less experienced crews/anglers.

As long it can apply a minimum of c30lbs of drag when full, don't get too hung up on maximum drag potential. For chair or gunwhale use, an '80W' or '130' class reel are optimal, and here higher levels of drag may actually be utilised, but still bear in mind that there are limits to what effective settings can and should be used.

Understand how your drag changes in the fight, how to use your drag effectively and dynamically during a fight.

The reels outlined above constitute a significant investment, buy right and look after them and you will buy once. Buy cheap and wrong.