I was recently asked how I choose and refine my compound stabiliser set-up and it got me thinking… is there a definitive set-up that will suit everyone and every bow? As you can imagine, the answer to this is: Unfortunately, no. But in my research and own shooting experience I’ve found a few interesting approaches that could make balancing your bow a bit easier.

Firstly, it should be noted that the reason each person needs their own individual stabiliser set-up is quite simply that we are all different — in terms of both size and shape, strength and technique. It’s all unique, so it means each archer will affect a unique set of forces onto a bow when it’s shot; this is just basic physics. So in order to get the most out of a bow, we need to balance it to suit our own individual style… and I’ll try and explain the easiest and quickest way to get started with this.

The best way to begin is find a long rod you like and decide on roughly how much tip weight you’d like — that’s the weight on the end of your long rod. It’s very much down to personal preference, and a bit of trial and error will be required. Just remember: The more tip weight you use, the heavier your final set-up will be — and as a general rule, you need just enough tip weight to make your bow sit fairly still and make any movement slow and predictable.

Once you’ve settled on a tip weight, decide on the length and style of your rear bar, or bars. Whether it’s one or two you’d like to include, some sort of rear stabilisation vastly improves any compound bow’s reaction after the shot.

As well as counterbalancing your sight, the rear bars should help give the bow a more neutral feeling balance — and in turn make it sit steadier, and shoot more forgiving. There’s an easy bit of maths to do to find a starting point for your rear tip weight, too:

Multiply the weight in ounces of your longrod’s tip weight by the length of the rod, then divide the total by the length of your rear rods. This will give you the most neutral balance, as the moments acting on the fore and rear of the bow, enforced by gravity, will equal out.

So, if you’ve got a 33-inch longrod with 5 ounces of weight and 10-inch rear rods, the maths would look like this:

\[
\text{33 inches} \times \text{5 ounces} = 165 \\
165 / \text{10 inches} = 16.5 \text{ ounces}
\]

Shorter stabilisers will need more weight to achieve the same effect as longer ones, so the length of stabiliser you want to use will depend on how heavy you want your finished set-up to be. As you can imagine, 16.5 ounces is quite a hefty mass — so try to keep your rear bar close into the side of your riser, if you’re only going to use one.

With two shortrods, the mass can be evenly distributed between the pair — and it’s worth experimenting with position and balance to find the most comfortable splitting of the weights. You’ll find theoretical balance is interfered with by the amount of torque you exert on the rod, then divide the total by the length of your rear rods. This will give you the most neutral balance, as the moments acting on the fore and rear of the bow, enforced by gravity, will equal out.

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\]
handle, so you must experiment with your bow drawn.

Pull the string back and aim at a target, centre your bubble and then close your eyes (it's best to do this fairly close-up, in case you accidentally release) — and after around five seconds, open your eyes and see where your bubble's sitting and which way your bow's leading. The twist in your bubble will show whether your bow wants to lean left or right during the shot.

By adjusting the positions of the short rods and the distribution of weight you should be able to experiment until you find a neutral balance point at full draw — and a bow that sits perfectly upright while aiming. It's only at this point you should start fine-tuning your stabilisation.

Add weight to the longrod, or remove it from the rear rods, if you want a bow that drops forward after the shot — which tends to be particularly useful outdoors, that drops forward after the shot — which way your bow's leading. The twist in your bubble will show whether your bow wants to lean left or right during the shot.

BEITER CENTRALIZER
Used by international archers all over the world, Beiter's famous Centralizer system has won a great number of medals over the years.

The tuning modules can be adjusted to allow you to absorb the actual harmonics of your bow — and though you can try and find the optimum position for your set-up, the factory setting works extremely well for most archers.

Since it's a multi-rod system, air travels easily in and around the stabiliser, minimising the wind's effect on your kit.

That's more, the tuning modules are available in a few rainbow's worth of colours, so you can truly match your Centralizer system to your bow!

Available in lengths ranging from 26 to 45in for the longrods, and 8, 10 or 12 for the short.

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FUSE CARBON BLADE
The 'squashed' tube Fuse Carbon Blade's are possibly the most exciting looking new stabilisers on the shooting line today. The thinking is: With a knife-like aerodynamic blueprint, the lightweight tubes cut through wind, rather than being buffeted by it (hence the name, Blade!).

Each set comes with a rubber doinker and end weights to ensure vibration is kept to a minimum, and plenty of international shooters are moving towards this new phenomenon.

The Blades come in longrod lengths of 24, 27, 30 and 33in, and in shortrod lengths of 8, 10, 12 and 15in. And we'll be fully testing a set very soon!

Price: £139.95, short — £89.95
Quicks Archery T: 02392 254114
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DOINKER PLATINUM
Since Braden Gellenthien, the American compound archer who's been taking the World Cup competition by storm, has been shooting the new Doinker Platinum's, they've been flooding in and then quickly out of archery shops across the world. Our very own Duncan Busby's shot them to a Commonwealth Games gold medal, too.

When coupled with Doinker's new adjustable tension dampers — which allow you to set the vibration absorbing capabilities of the stabilisers — the Platinum is a premier system.

Available in sizes ranging from 24in to 34in for longrods, and 10, 12 and 15in for shortrods. Expect to pay upwards of £170.

Doinker
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The key to your stabiliser set-up is to get your bow sitting as steady as possible, while remembering that your sight will move during the aiming process — and you shouldn't get hung up on trying to make your bow sit perfectly still. Instead, try to get your sight to gently and slowly float around the centre of the target. If your sight still moves quickly, then adding more weight to your set-up can help settle it down — and vice versa, if your pin sinks low, lighten everything up. And if you get a bobbing motion, playing with your longrod's tip weight is the easiest way to calm it.

Always keeping in mind the basic formula we highlighted before, of course. And do remember, whenever you change anything re-check how your bow sits on aim — and make notes!

One you hit on the right set-up, your bow should sit well, and not feel like it wants to fight you when aiming — and it should also react consistently and comfortably on your follow through. Balancing your bow can be tricky but if you put some time into trying this method you should find simple steps easier to optimising your bow's reaction. Get your equipment working with you, not against you! Good luck.