

1. Arrow spine must match the Bow/Archer.
 2. Nocking point must be correctly set to the Bow/Archer.
 3. Pile weight.
 4. Arrow weight.
1. The spine of an arrow is determined by supporting the arrow at either end 28” apart, hanging a 2lb weight at the centre and measuring the amount of deflection. There is a gadget for this. Arrows of the correct spine perform the Archers Paradox with the least effort therefore increasing both accuracy and distance.

Spine is very important and spine charts can only be regarded as a starting point (see chart)

I have always assumed that these are made up assuming that the arrow will have a 125g pile. Using a lighter pile will have the effect of stiffening the spine of the arrow.

Spine must be looked at in two ways:-

Static Spine - the spine rating you buy the arrow at.

Dynamic Spine – the effect on the arrow when it leaves the bow, which takes into account the static spine, size of fletch, tightness of nock on the string, smoothness of loose and speed of the bow.

2. Nocking Point – an incorrect nocking point causes the arrow to porpoise as it heads toward the target and depending what distance is required for the arrow to straighten out.

To have a constant nocking point your bow hand position must be consistent arrow to arrow. There is no point having a mark on the string if your arrow rest (Hand) moves up and down between shots causing a vertical variation on the target. (I haven’t worked out what difference this makes at clout).

3. As stated earlier the pile weight affects the spine of the arrow. The lighter the pile the stiffer the arrow acts and vice versa. This is not bad news as varying the pile weight allows you to fine tune your set up. Obviously the pile weight adds to the overall weight of the arrow changing sight marks.
4. Arrow weight or more precisely variation between arrows will have a serious effect on accuracy, therefore, always buy shafts advertised as weight and spine matched. As we shoot 3 arrow ends having one “duff” arrow be it spine or weight will have a disastrous effect on score at the end of the day.

ENGLISH LONGBOW								
Bow Weight	Arrow Draw Length/ Spine							
	25”	26”	27”	28”	29”	30”	31”	
20-25 lbs	<10	<10	10/15	15/20	20/25	25/30	30/35	5/16”
25-30 lbs	<10	10/15	15/20	20/25	25/30	30/35	35/40	
30-35 lbs	10/15	15/20	20/25	25/30	30/35	35/40	40/45	
35-40 lbs	15/20	20/25	25/30	30/35	35/40	40/45	45/50	11/32”
40-45 lbs	20/25	25/30	30/35	35/40	40/45	45/50	50/55	
45-50 lbs	25/30	30/35	35/40	40/45	45/50	50/55	55/60	
50-55 lbs	30/35	35/40	40/45	45/50	50/55	55/60	60/65	
55-60 lbs	35/40	40/45	45/50	50/55	55/60	60/65	65/70	
60-65 lbs	40/45	45/50	50/55	55/60	60/65	65/70	70/75	
65-70 lbs	45/50	50/55	55/60	60/65	65/70	70/75	75/80	
70-75 lbs	50/55	55/60	60/65	65/70	70/75	75/80	80/85	
75-80 lbs	55/60	60/65	65/70	70/75	75/80	80/85	85/90	

Authors disclaimer – Please note that Longbow Archery is not affected by the Law of Logic therefore it is not unusual for some adjustments to produce the opposite effect than that which was expected. DO NOT LET THIS MINOR PROBLEM DISCOURAGE YOU - THINGS CAN ONLY IMPROVE.