

The MCAA T&F League individual award based on World Athletics (WA) scoring tables. A review of the 2022 awards.

Now the 2022 MCAA T&F League has finished for 2022, we take a look at the individual award based on WA scoring tables. In particular we are trying to see if we have a fair competition across event and gender. The first table below is the top 30 scores across all divisions.

ALL DIVISIONS. Individual Competition. World Athletics scoring - best performance from each match and then highest three of these match scores to count.																			
Name	Club	Gender	Match	Event	Perf	Score	Match	Event	Perf	Score	Match	Event	Perf	Score	Match	Event	Perf	Score	Total
Lucy Jones	Tipton	F	1	200	24.1	1049	2	200	24.5	1016	3	200	25.2	960					3025
Katie Holt	Stoke	F	1	1500	4:23.96	1021	2	5k/3k	9:04.82	1090	3	1500	4:41.30	896					3007
Samantha Griffiths	Bir	F	1	100	12.09	997	2	100	12.22	974	3	100	12.37	948					2919
Elliott Powell	Leic	M	1	100	10.3	1104	2	400	48.6	954	4	100	11.1	856					2914
Jessica Waters	SinA	F	1	100	12.3	960	2	100	12.4	943	3	100	12.42	940					2843
Nicholas Pryce	RSC	M	1	100	10.9	915	3	200	21.7	969	4	100	10.8	945					2829
Cleo Martin-Evans Y	Dav	F	1	LJ	5.91	968	2	LJ	5.61	905	3	LJ	5.67	917	4	LJ	5.77	939	2824
Marvric Ne-Sean Pamphile	R&N	M	1	200	21.91	940	2	200	22.03	923	3	400	48.53	958					2821
Jake Minshull Y	Cov G	M	1	400	48.82	941	2	400H	52.69	999	4	LJ	6.79	873					2813
Katie Robbins	Yate	F	1	400	57.8	939	2	400	58.3	923	4	400	57.6	945					2807
Natalie Griffiths	C&S	F	1	400H	62.22	957	2	400	58	932	3	400H	63.7	916	4	400H	64.8	886	2805
Princess Atanda y	Leic	F	1	100	12.3	960	3	100	12.6	910	4	100	12.5	926					2796
David Seidu y	Charn	M	1	100	10.8	945	3	200	22	927	4	100	10.9	915					2787
Joseph Gilkes	Cov G	M	1	TJ	15.08	950	2	LJ	6.79	873	3	LJ	6.86	887	4	TJ	14.9	930	2767
Caleb Downes	R&N	M	1	100	10.81	942	2	100	10.87	924	3	100	11.05	870					2736
Tiffany Cox	Abing	F	1	100	12.47	931	2	200	26.2	882	3	100	12.6	910					2723
Rebecca Hoadley	Chelt	F	1	400	59.3	892	2	400	59	901	3	400	58.21	926	4	200	26.7	845	2719
Isabelle Neville	Tamw	F	1	400	58.57	914	2	400	59.34	891	3	400	58.88	905	4	200	26.59	853	2710
Eva Tyler x	Here	F	1	200	25.2	960	2	200	25.9	905	3	200	26.7	845					2710
Ella Burrows X	B&R	F	1	200	25.6	928	2	200	26	897	3	200	26.48	861					2686
Mohammed Aminu	Telf	M	1	100	10.86	927	3	100	11.1	856	4	100	11	885					2668
Leah Butterfill y	W&SV	F	1	100	12.6	910	2	100	12.9	860	3	100	12.7	893					2663
Jack Forrest Y	Bir	M	1	200	22.12	911	2	100	10.99	888	4	200	22.58	849					2648
Millie Clemson Y	Worc	F	1	100	12.7	893	2	100	12.9	860	3	100	12.72	890					2643
Christina Griffith Y	Newp	F	1	100H	15.3	882	2	100H	15.3	882	3	100H	15.4	871					2635
Efua Boateng	R&N	F	2	100	12.78	880	3	100	12.93	855	4	100	12.69	895					2630
Joel Townley	Glouc	M	1	TJ	13.91	826	2	TJ	14.46	884	3	TJ	14.37	874	4	TJ	14.34	871	2629
Olivia Harwood y	Here	F	1	200	26.2	882	2	400	60.8	846	3	400	59.5	886					2614
Sydney Davies	C&S	F	1	100	12.81	875	3	100	12.9	860	4	100	12.8	876					2611
Nicholas Kanonik	Yate	M	1	200	22.3	886	2	200	22.3	886	3	400	50.65	837					2609

The observations from the previous table are that 1) it is reasonably balanced across genders; 2) there is a bias towards flat track events and sprints in particular. An analysis of the WA scoring tables in the context of UK ranking statistics (detailed discussion below in Appendix 1) indicates this is always going to be the case. It is possible though to modify the WA scoring to remove this bias (again detail in Appendix 1). The two tables below show what effect this would have – using division 1 results as an example case. **Would we want to adopt these new scoring tables for 2023 is of course the key question.**

Division 1. Individual Competition. World Athletics scoring - best performance from each match and then highest three of these match scores to count.																			
Name	Club	Gender	Match	Event	Perf	Score	Match	Event	Perf	Score	Match	Event	Perf	Score	Match	Event	Perf	Score	Total
Samantha Griffiths	Bir	F	1	100	12.09	997	2	100	12.22	974	3	100	12.37	948					2919
Marvric Ne-Sean Pamphile	R&N	M	1	200	21.91	940	2	200	22.03	923	3	400	48.53	958					2821
Caleb Downes	R&N	M	1	100	10.81	942	2	100	10.87	924	3	100	11.05	870					2736
Isabelle Neville	Tamw	F	1	400	58.57	914	2	400	59.34	891	3	400	58.88	905	4	200	26.59	853	2710
Jack Forrest Y	Bir	M	1	200	22.12	911	2	100	10.99	888	4	200	22.58	849					2648
Efua Boateng	R&N	F	2	100	12.78	880	3	100	12.93	855	4	100	12.69	895					2630
Joel Townley	Glouc	M	1	TJ	13.91	826	2	TJ	14.46	884	3	TJ	14.37	874	4	TJ	14.34	871	2629
Annabelle Crossdale	Notts	F	1	HT	55.77	864	2	HT	56.82	881	3	HT	55.35	858	4	HT	50.77	784	2603
Andrea Jesudason	BriW	F	1	LJ	5.34	848	2	LJ	5.26	831	3	LJ	5.32	843	4	LJ	5.38	856	2547
Katherine Snowden	Tamw	F	1	800	2:21.95	796	3	800	2:19.02	840	4	800	2:17.39	865					2501
Sarah Long	BriW	F	1	100	13.3	796	2	SP	6.2	342	3	100	13.1	828	4	200	26.36	870	2494
Leshawn Clifford X	Bir	F	2	LJ	5.02	780	3	LJ	5.42	865	4	LJ	5.28	835					2480
Tim Williams	Glouc	M	1	HT	56.01	819	2	HT	56.85	831	3	HT	56.41	825	4	HT	55.49	811	2475
Psalm Roberts-Nash	Bir	M	2	400	50.42	850	3	800	1:59.87	772	4	400	50.45	848					2470
A'Janai Bowen Y	Notts	F	2	200	27.77	767	3	200	26.61	851	4	200	26.61	851					2469
Lamin Dampha	Bir	M	1	400	50.97	819	2	400	50.64	837	3	400	51.76	777	4	400	51.13	811	2467
Abby Halcarz	Tamw	F	2	3000	10:22.73	846	3	3000	10:37.77	802	4	5000	18:17.10	812					2460
Lottie McLaren X	Tamw	F	1	800	2:20.13	823	2	800	2:19.52	833	3	800	2:21.40	804					2460
Ella Julin Y	Glouc	F	1	100	13.12	825	2	100	13	844	3	100	13.39	782					2451
Maria Jones	BriW	F	1	400	61.13	836	2	400	63.08	779	4	400	61.78	817					2432
Merhawi Tkue	Notts	M	1	2kSC	6:22.22	789	2	3kSC	9:58.81	765	3	800	2:04.50	664	4	3kSC	9:28.70	878	2432
Milan Champion	Notts	M	2	3000	8:39.65	836	3	2kSC	6:16.76	820	4	5000	15:13.96	768					2424
Megan Stenhouse Y	R&N	F	1	5000	18:10.96	822	2	3000	10:22.73	846	3	3000	10:59.31	742					2410
Matthew Madden	Notts	M	2	LJ	6.32	777	3	LJ	6.47	807	4	LJ	6.46	805					2389
Richard De-Camps	Glouc	M	1	1500	4:07.90	764	2	1500	4:06.19	783	3	1500	4:02.55	825	4	1500	4:15.97	677	2372
Ethan Hood Y	Glouc	M	1	400	51.34	799	3	400	51.98	765	4	400	51.44	794					2358
Kate Davies	Glouc	F	1	HJ	1.6	804	2	HJ	1.55	755	3	HJ	1.55	755	4	LJ	5	776	2335
Robert Palmer	Notts	M	1	JT	58.05	781	2	JT	56.25	756	3	JT	58.7	790					2327
Ellen Thrall	Glouc	F	1	HT	49.88	770	2	HT	49.62	766	3	HT	49.18	759	4	HT	50.33	777	2313
Samantha Barrett	BriW	F	1	TJ	10.53	739	3	TJ	10.99	786	4	TJ	10.93	780					2305

Division 1. Individual Competition. World Athletics scoring scaled (UK AT100=1100) - best performance from each match and then highest three of these match scores to count.																			
Name	Club	Gender	Match	Event	Perf	Score	Match	Event	Perf	Score	Match	Event	Perf	Score	Match	Event	Perf	Score	Total
Annabelle Crossdale	Notts	F	1	HT	55.77	1056	2	HT	56.82	1076	3	HT	55.35	1048	4	HT	50.77	958	3181
Samantha Griffiths	Bir	F	1	100	12.09	1015	2	100	12.22	991	3	100	12.37	965				0	2970
Tim Williams	Glouc	M	1	HT	56.01	971	2	HT	56.85	986	3	HT	56.41	978	4	HT	55.49	962	2935
Marvric Ne-Sean Pamphile	R&N	M	1	200	21.91	941	2	200	22.03	924	3	400	48.53	963				0	2828
Ellen Thrall	Glouc	F	1	HT	49.88	941	2	HT	49.62	936	3	HT	49.18	927	4	HT	50.33	949	2826
Joel Townley	Glouc	M	1	TJ	13.91	885	2	TJ	14.46	947	3	TJ	14.37	937	4	TJ	14.34	934	2818
Robert Palmer	Notts	M	1	JT	58.05	927	2	JT	56.25	898	3	JT	58.7	938				0	2763
Kerry Murch	R&N	F	2	JT	37.44	900	3	JT	39.76	958	4	JT	36.81	884				0	2742
Caleb Downes	R&N	M	1	100	10.81	943	2	100	10.87	925	3	100	11.05	871				0	2739
Isabelle Neville	Tamw	F	1	400	58.57	923	2	400	59.34	900	3	400	58.88	914	4	200	26.59	862	2737
Efua Boateng	R&N	F	2	100	12.78	895	3	100	12.93	870	4	100	12.69	911				0	2676
Andrea Jesudason	BriW	F	1	LJ	5.34	887	2	LJ	5.26	870	3	LJ	5.32	882	4	LJ	5.38	896	2665
Jack Forrest Y	Bir	M	1	200	22.12	912	2	100	10.99	889	4	200	22.58	850				0	2651
Samantha Barrett	BriW	F	1	TJ	10.53	845	3	TJ	10.99	899	4	TJ	10.93	892				0	2636
Leshawn Clifford X	Bir	F	2	LJ	5.02	816	3	LJ	5.42	905	4	LJ	5.28	874				0	2595
Sarah Long	BriW	F	1	100	13.3	810	2	SP	6.2	446	3	100	13.1	843	4	200	26.36	879	2531
Kofi Afirifah-Mensah Y	Notts	M	1	PV	4.25	851	2	PV	4	776	3	PV	4.1	806	4	PV	4.28	860	2516
Abby Halcarz	Tamw	F	2	3000	10:22.73	854	3	3000	10:37.77	810	4	5000	18:17.10	835				0	2499
Ella Julin Y	Glouc	F	1	100	13.12	840	2	100	13	859	3	100	13.39	796				0	2494
A'Janai Bowen Y	Notts	F	2	200	27.77	775	3	200	26.61	860	4	200	26.61	860				0	2494
Matthew Madden	Notts	M	2	LJ	6.32	810	3	LJ	6.47	841	4	LJ	6.46	839				0	2490
Merhawi Tkue	Notts	M	1	2kSC	6:22.22	807	2	3kSC	9:58.81	782	3	800	2:04.50	653	4	3kSC	9:28.70	898	2487
Kate Davies	Glouc	F	1	HJ	1.6	862	2	HJ	1.55	809	3	HJ	1.55	809	4	LJ	5	812	2483
Lamin Dampha	Bir	M	1	400	50.97	823	2	400	50.64	841	3	400	51.76	781	4	400	51.13	815	2480
Katherine Snowden	Tamw	F	1	800	2:21.95	786	3	800	2:19.02	830	4	800	2:17.39	855				0	2471
Gareth Winter	Glouc	M	1	SP	14.58	948	3	SP	15.07	982	4	DT	27.01	541				0	2470
Psalm Roberts-Nash	Bir	M	2	400	50.42	854	3	800	1:59.87	760	4	400	50.45	852				0	2467
Maria Jones	BriW	F	1	400	61.13	844	2	400	63.08	787	4	400	61.78	825				0	2457
Megan Stenhouse Y	R&N	F	1	5000	18:10.96	845	2	3000	10:22.73	854	3	3000	10:59.31	749				0	2449
Milan Campion	Notts	M	2	3000	8:39.65	831	3	2kSC	6:16.76	839	4	5000	15:13.96	775				0	2445

Appendix 1. Some discussion points on World Athletic scoring tables

These notes have been written just in case the MCAA T&F League AGM (4 December 2022) wishes to consider different scoring options for the league's best individual performance (as set by the best performance of an athlete in each of three different matches over the season).

The league started this individual award in 2022 and based the scoring directly on the World Athletic (WA) scoring tables.

In order to define a set of scoring tables that provides a comparison across different events there are two basic solutions. Either you can just align scoring directly to (world) ranking (i.e. 1000th annual rank in any event gets the same score type thing) or you can try and award points based on some form of definition of athletic prowess. The issue with simple ranking alignment is that we know some events have higher participation levels than others – true in both the UK and at world level. To build tables that attempt to align to athletic prowess you need to look at the physics (and physiology) of each event. When you look at the physics the forms of the WA tables (that is their equations) look reasonable. The WA tables then appear to make reasonable decisions about how to align one event to another – the world record comes out at around 1300 points¹ and zero points aligns to what looks like minimal athletic input² for that event.

You can look at WA point scores for the world record, the UK's top 100 all-time lists performance (more on this later), the 100th ranked performance in 2022 and an AAA standard (we pick grade 2). These can be shown as charts – see the first chart in Annex A (men) and the first chart in Annex B (women). It is useful to consider the scores against the UK all-time top 100 performance across events. Throws, for example, score lower at the All-Time 100 rank than flat track events – essentially reflecting the fact that throws have relatively fewer athletes competing than the flat track events. The same trend is seen at World level at this level of performance, where the in-year World top500 rank follows the UK All-time 100 line reasonably well and shows the same drop for the throws. Below this performance level however, for example at the UK in-year top 100 level, we see a larger fall-off in the UK system than at world level. The UK in-year top 100 rank aligns reasonably well with World in-year top1500 for flat track events, but the world in-year 1500 level holds up better for other events than the UK in-year 100 line.

What this means is that the use of pure WA tables will generally lead to winners of the individual awards coming from the flat track events – firstly because worldwide there are more competitors in these events and secondly because this trend is greater in the UK. Of course this may well be a reasonable solution and we should simply accept that popular events are more likely to produce the individual award winner. However, it is worth exploring if there are options to even out across events – and base this in the UK context.

The question is how to modify the scoring so that we take some account of UK participation statistics yet still retain a strong element of the “equal athletic prowess” concept. We need some measure from the UK system that we believe identifies “equal” performance but is not too biased by participation statistics. We could use the UK record in each event – that is certainly a reasonable estimate of “equal” performance. We would also expect the UK record to be mostly immune from participation effects as athletes at this level are likely to be identified within the general population (usually whilst at school) and will also be motivated to continue in the sport. Using single points in statistics does though generally lead to estimation errors. Instead we select the UK all-time 100th rank as the comparison mark. Again at this level the athletes are likely to be identified within the general population and do generally continue in the sport.

¹ The tables are not exactly set so 1300=world record. Rather they are such that the top of the rankings looks even across events – exceptional world records (e.g. men's 400mH) can then score differently.

² For example, if we think about a middle distance (running) race then we'd say that the aim of the event is for an athlete to train to be able to run that distance. A time that any individual from the general public could achieve by walking round (but not race walking) looks like a good candidate for no points. Similarly just stepping into the long jump pit, or dropping the shot out the front of the circle look like no points from an athletic prowess viewpoint.

We therefore simply scale the WA scores so that the UK all-time top 100 performance gains 1100 points in all events. These are the second charts in Annex A (men) and Annex B (women). This would mean that the chance of any given event yielding a best performance is more balanced across events – yet it retains an “athletic prowess” element as we have used the top end of the all-time lists.

The UK’s actual (annual now) 100th rank performance across the events in 2022 still shows that more athletes on average will gain the higher scores in the flat track events. However, the differences across the events are less marked³. We can get a feel for how this might affect the individual best performance awards by re-calculating this year’s results. We have done this above for division 1 – the tables on page 2 and 3. There is indeed a better balance across event types.

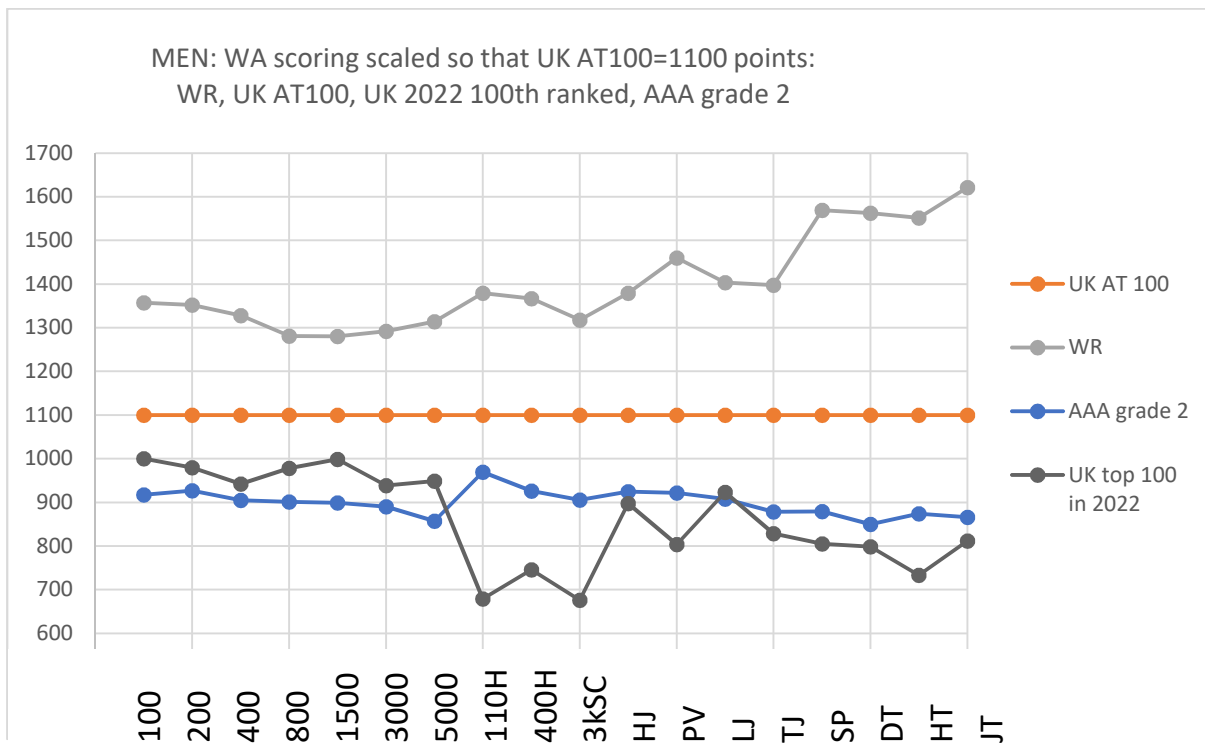
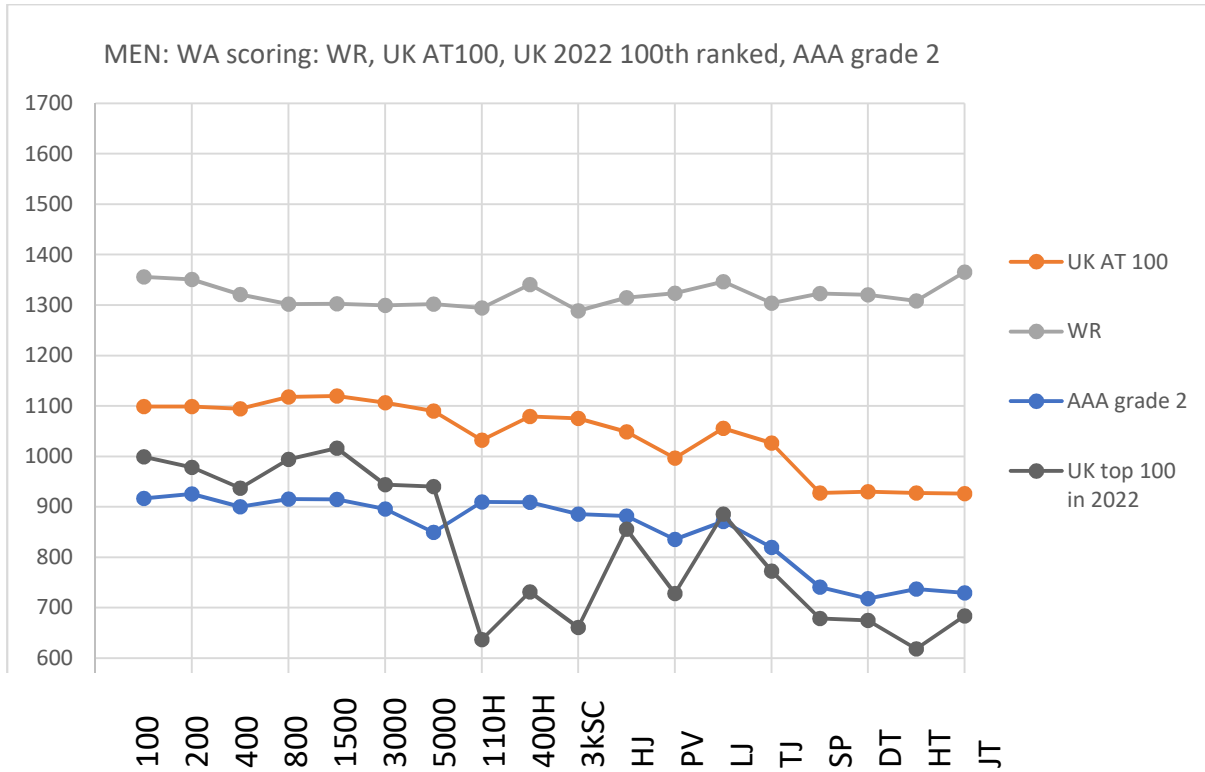
The question that might arise at the AGM is whether we wish to adopt this scaling so that we have a more even chance of the best performance winner deriving from any given event.

³ The fact that there are still differences across events at the in-year top 100 rank almost certainly indicates that within the UK much larger numbers of athletes are attracted to, and remain in, the flat track events than the technical events.

Annex A: Points across events for the world record (WR), UK all-time top 100 performance (UK AT 100), UK 100th rank in UK in 2022 and AAA grade 2 standard. **MENS EVENTS.**

FIRST CHART: directly from World Athletic scoring tables

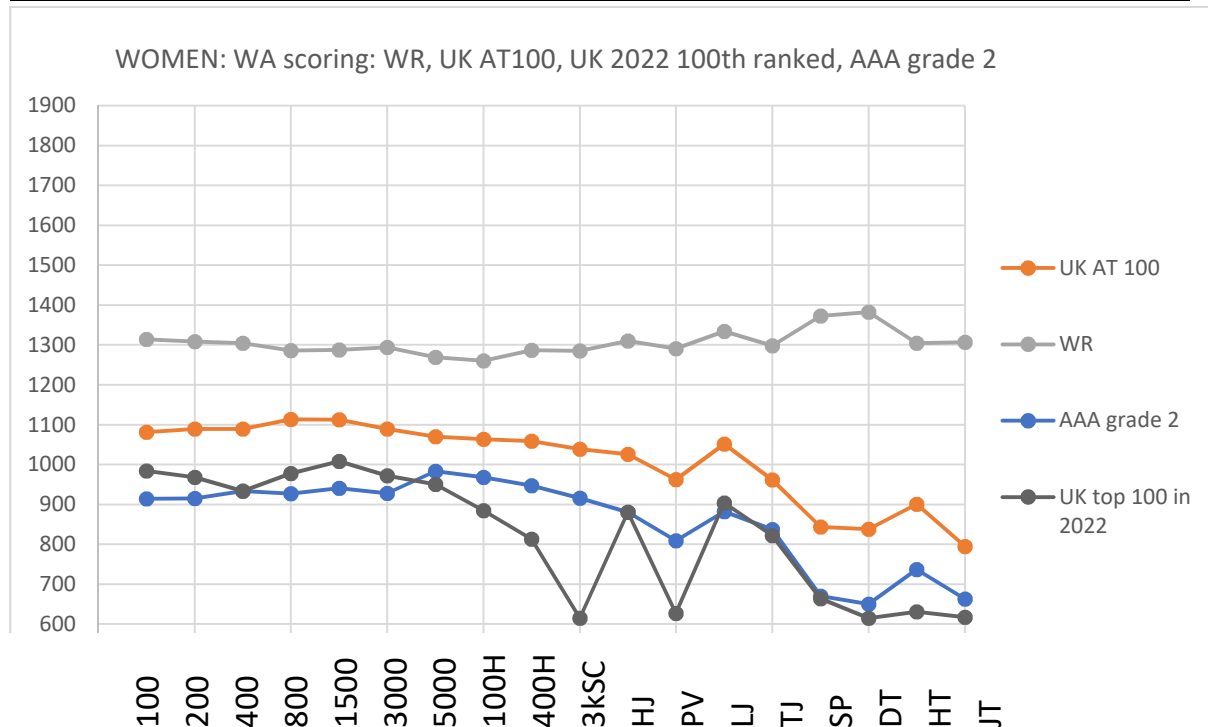
SECOND CHART: World Athletic scoring tables scaled so that UK Top 100 All Time gains 1100 points



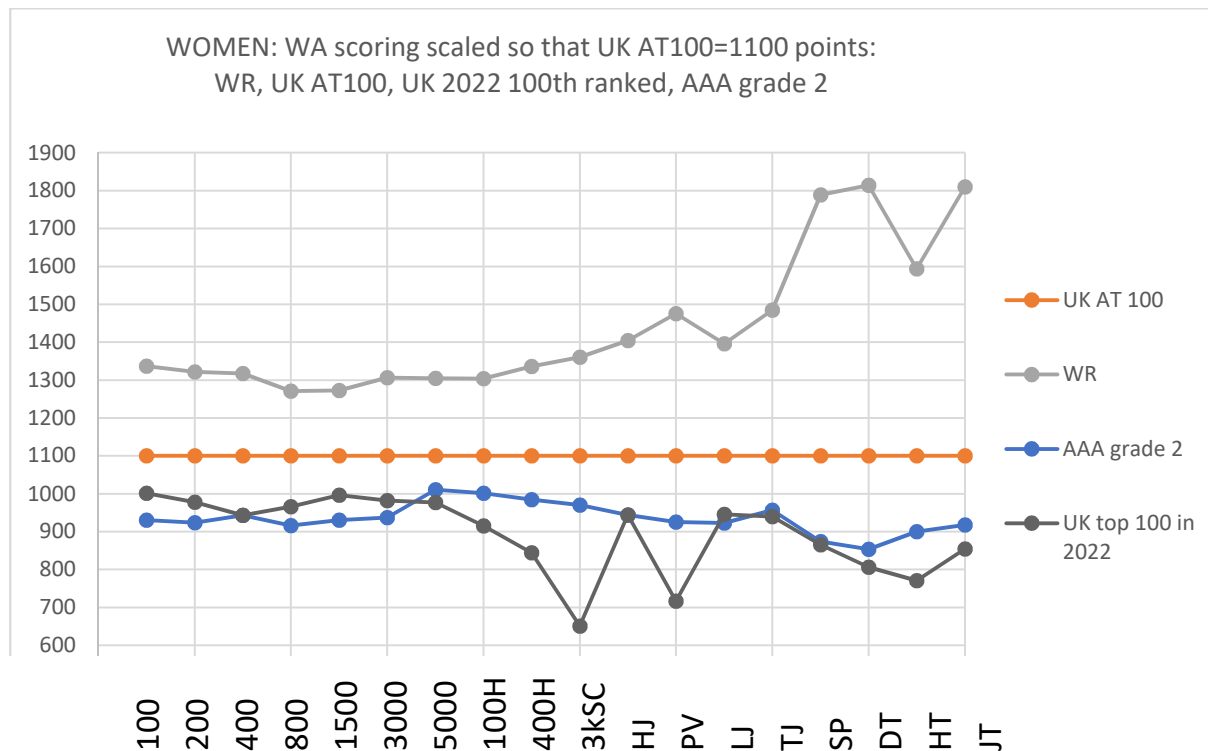
Annex B: Points across events for the world record (WR), UK all-time top 100 performance (UK AT 100), UK 100th rank in UK in 2022 and AAA grade 2 standard. **WOMENS EVENTS.**

FIRST CHART: directly from World Athletic scoring tables

SECOND CHART: World Athletic scoring tables scaled so that UK Top 100 All Time gains 1100 points



Note: 3kSC 2022 rank used is 42 (not 100) as rank=42 is as far as women's 3kSC goes in 2022.



Note: 3kSC 2022 rank used is 42 (not 100) as rank=42 is as far as women's 3kSC goes in 2022.