

# **THE LEVELS OF THE RATINGS IN THE INTERNATIONAL CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012**

A RE-ASSESSMENT CARRIED OUT BY THE WORLD RANKINGS SUPERVISORY COMMITTEE

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# **ANALYSIS OF THE LEVELS OF EUROPEAN 3 YEAR OLDS AND UPWARDS IN INTERNATIONAL FLAT CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012**

## **PURPOSE**

There has been much debate over many years about the variance in the levels of the ratings in the World Thoroughbred Rankings and its predecessor, the International Classifications. The WRSC has been aware of this problem and statistical work has been proceeding for some time which has shown a decline in the number of horses included in the rankings.

This paper is the culmination of that process. Over the last few years there has been a huge increase in interest in the Rankings because of Sea The Stars and Frankel and a desire for racing enthusiasts to understand where they stood in the list of greats, at least since 1977. They have brought renewed interest in our work but inevitably some criticism of the inconsistency of the various International Handicappers over the period.

The purpose of this paper is absolutely NOT to say that the current Handicappers are right and those who compiled the ratings between 1977 and 1991 were wrong. It is merely to acknowledge that handicapping methods and practices have evolved during the past 35 years. This is an attempt to show how the ratings would look if they were being assessed on current levels.

## **METHODOLOGY**

The chosen method of making sensible comparisons year on year was to look at the means of various groupings of horses each year. It was decided to use the top 19, 38 and 57. This was because in 1982 only 57 horses were rated at 120+ and the ratings initially only went down to 120. Also using three different sets gave an opportunity to compare not just the best horses but also those good animals that provide the body of horses in the rankings. It would highlight good years, less good years and years when there were some outstanding horses but little depth. Only British, French and Irish trained horses were counted as they are the only ones that have been included since 1977 and it led to a like for like comparison.

The objective was to decide on three tolerated ranges within which the mean rating of the top 19, top 38 and top 57 horses in each year should fall and then to decide on minimal adjustments to the level of the ratings for each year which would bring the means within these tolerated ranges. A secondary desire was to ensure that the changes were monotonic over time. That is that the decrease applied in one year should never be bigger than the decrease applied in the previous year.

## **RESULTS**

Table 1 indicates the vast number of horses included initially and the rapid decline over the first ten years followed by a levelling off. There is then another slight fall particularly in the early years of this century and a return to previous levels over the last few years. In 1977

there was a total of 145 British, French and Irish 3 year olds and upwards rated at 120 and above. By 1992 this figure had reduced to 36 and in 2004 it reached a low of 18.

The means of the top 19, top 38 and top 57 ratings all took their highest values in the first year (1977), their second highest values in the second year (1978) their third highest values in the third year (1979), their eleven highest values in the first eleven years (1977 to 1987) and their fourteen highest values in the first fourteen years (1977-1990). There is thus clear evidence that the level of the ratings was unjustifiably higher in the period before 1991 in comparison with the period after 1991. All three means took their lowest value in 2004 and their second lowest value in 2006, but the trends are less dramatic after 1991.

Between 1977 and 1998 a period of 21 years each of the means dropped by around 8lbs. and there was subsequently minor changes so that between 1977 and 2004 each of the means dropped by 10lbs. This outcome was caused by the nature of elite racing altering as did the composition of the committee and handicapping methodology.

Table 2 suggests changes to the ratings of each year to enable sensible comparisons to be made. A reasonable tolerated range is included based on the means from 1992 to 2012 excluding 2004 when the level of the ratings was probably slightly lower than justified.

There has to be room for variations in the quality of each crop. This is the key to the research as if you vary the tolerances you get significantly different results. A variety of other tolerated ranges were experimented with as was the use of medians. However the selected method was the most appropriate in this task and gave the greatest degree of consistency across the range of abilities of the horses.

The suggested adjustment is the minimum change that needs to be made to the levels to get each year close to conforming to the three tolerated ranges taking account of rounding up and down. Thus in 1977 a reduction of 7lbs. takes the top 19 mean from 132.0 to 125.0, the top 38 mean from 129.9 to 122.9 and the top 57 mean from 128.5 to 121.5, all within the tolerated ranges.

1990 is the only year that it is not possible to marry the changes to each of the means because of the desire to ensure that the changes were monotonic over time. Clearly there were a number of excellent horses in that year but less strength in depth.

From 1992 to 2003 no change needs to be made to the ratings as that is a period when the International Handicappers were relatively consistent year on year. In 2004, because of increased slippage, an increase is needed to make the ratings conform to the tolerances.

Table 3 shows the effects of the changes on each year and it shows that much greater consistency occurs year on year both in the means and in the number of horses at 130+ and 120+ once the suggested changes have been applied. The range of the means has been more than halved, while the range of horses included at 120+ has reduced from 127 to 19.

The overall objective of the revision of past ratings was to reduce the variation at each ranking and this has been achieved.

Table 4 shows how the suggested changes affects the top horses in each year group with the biggest changes being made in the early years of the Classifications. Table 5 indicates the overall leading horses over time and how that would alter when the adjustment is made.

### **CAUSES OF THE CHANGES**

1 In the early years, the use of a norm of 100 (140) for the top horse in an average year was beginning with a false premise as it led to top down handicapping and a vastly greater number of horses at 120+ than would be the case nowadays as they were artificially drawn up to this “norm”.

2 With so few countries involved in the early years, horses leapfrogged each other and the normal problems when dealing with a small horse population occurred.

3 Between 1977 and 1982 the median of the British domestic file fell from 68 to 53 which had a significant knock on effect on the top horses.

4 From 1985 the new participant European countries Germany and Italy had different weight for age scales.

5 The extension of the Classification to 115 and above in 1985, to 112 and above in 1989 and to 110 in 1990 had a depressant effect as there was now a safety net in which to include the type of horse that had been overly promoted in the past.

6 Much easier travel coupled with an increase in valuable International races enabled connections of the better horses to avoid each other.

7 The ownership of so many of the top horses in just a few hands meant competition and higher ratings suffered.

8 The International Handicappers became increasingly reluctant to accept the reliability of exceptional one off performances.

9 There has been a huge increase in Pattern Races across the world leading to a dilution of competition.

10 In 1977 there were 3 Handicappers assessing the best horses from Western Europe. There are now fifteen Handicappers representing all of the major racing authorities rating the best horses in the world. It is much more likely that horses will be downgraded with a larger Committee.

## **STATISTICAL CHANGES**

### **RANGE OF HORSES INCLUDED AT 130+ PRE AND POST CHANGES**

#### **PRE**

18 in 1977 to 0 in 2002, 2004 and 2006

#### **POST**

4 in 1982, 1985, 1987, 1997 and 2003 to 0 in 1980, 2002, 2004 and 2006

### **RANGE OF HORSES INCLUDED AT 120+ PRE AND POST CHANGES**

#### **PRE**

145 in 1977 to 18 in 2004

#### **POST**

39 in 1977, 1980, 1994 and 1996 to 20 in 2003 and 2006

### **MEAN RATING OF HORSES PRE AND POST CHANGES**

#### **PRE**

TOP 19 horses range from 132.0 in 1977 to 122.1 in 2004 = 9.9lbs.

TOP 38 horses range from 129.9 in 1977 to 119.9 in 2004 = 10.0lbs.

TOP 57 horses range from 128.5 in 1977 to 118.7 in 2004 = 9.8lbs.

#### **POST**

TOP 19 horses range from 127.0 in 1990 to 122.6 in 2006 = 4.4lbs.

TOP 38 horses range from 124.1 in 1990 to 120.5 in 2006 = 3.6lbs.

TOP 57 horses range from 122.1 in 1990 to 119.1 in 2006 = 3.0lbs.

### **STANDARD DEVIATIONS FOR 19<sup>th</sup>, 38<sup>th</sup> and 57<sup>th</sup> BEST HORSES**

19<sup>th</sup> BEST pre changes = 2.51, post changes = 0.99

38<sup>th</sup> BEST pre changes = 2.49, post changes = 0.93

57<sup>th</sup> BEST pre changes = 2.33, post changes = 0.8

**TABLE 1- MEAN LEVEL OF BRITISH, FRENCH AND IRISH HORSES IN INTERNATIONAL FLAT CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012 (GRAPHS 1 AND 2 IN APPENDIX)**

<b>YEAR</b>	<b>RATED 130+</b>	<b>RATED 120+</b>	<b>TOP 19 MEAN</b>	<b>TOP 38 MEAN</b>	<b>TOP 57 MEAN</b>
1977	18	145	132.0	129.9	128.5
1978	11	119	130.6	128.7	127.1
1979	9	96	130.5	128.3	126.3
1980	3	93	128.1	126.6	125.2
1981	9	66	129.6	127.1	125.2
1982	5	57	128.4	125.6	123.8
1983	4	77	128.3	125.6	124.3
1984	6	83	129.3	126.3	124.7
1985	11	60	129.4	126.3	124.6
1986	6	63	128.6	125.6	124.0
1987	5	53	128.1	125.5	123.8
1988	3	47	126.8	124.1	122.5
1989	3	48	126.6	124.3	122.7
1990	5	43	128.0	125.1	123.1
1991	2	38	126.5	123.9	122.1
1992	1	36	125.6	123.2	121.7
1993	1	29	124.4	121.9	120.6
1994	1	39	125.5	123.2	121.6
1995	1	38	124.9	122.7	121.4
1996	3	39	126.4	123.7	121.9
1997	4	36	126.5	123.6	121.8
1998	1	32	124.2	122.1	120.7
1999	3	33	125.2	122.6	120.9

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<b>YEAR</b>	<b>RATED 130+</b>	<b>RATED 120+</b>	<b>TOP 19 MEAN</b>	<b>TOP 38 MEAN</b>	<b>TOP 57 MEAN</b>
2000	3	29	125.4	122.5	120.8
2001	1	23	123.4	121.4	119.9
2002	0	22	123.7	121.2	119.7
2003	4	20	124.7	121.5	120.0
2004	0	18	122.1	119.9	118.7
2005	1	26	123.6	121.2	119.4
2006	0	20	122.6	120.5	119.1
2007	1	24	123.3	121.1	119.6
2008	1	22	124.6	121.8	120.4
2009	2	31	124.4	122.0	120.5
2010	1	36	124.6	122.4	120.9
2011	1	37	125.1	122.9	121.2
2012	3	22	124.5	121.3	119.7

**TABLE 2 – MINIMUM REVISION REQUIRED TO BRING THE MEANS WITHIN THE INDICATED TOLERATED RANGES**

<b>YEAR</b>	<b>TOP 19 MEAN</b>	<b>TOP 38 MEAN</b>	<b>TOP 57 MEAN</b>	<b>REVISION</b>
	<b>TOLERATED RANGE</b>	<b>TOLERATED RANGE</b>	<b>TOLERATED RANGE</b>	
	<b>(123-126)</b>	<b>(120-123)</b>	<b>(119-122)</b>	
1977	132.0	129.9	128.5	-7
1978	130.6	128.7	127.1	-6
1979	130.5	128.3	126.3	-5
1980	128.1	126.6	125.2	-4
1981	129.6	127.1	125.2	-4
1982	128.4	125.6	123.8	-3
1983	128.3	125.6	124.3	-3
1984	129.3	126.3	124.7	-3
1985	129.4	126.3	124.6	-3
1986	128.6	125.6	124.0	-3
1987	128.1	125.5	123.8	-2
1988	126.8	124.1	122.5	-1
1989	126.6	124.3	122.7	-1
1990	128.0	125.1	123.1	-1*
1991	126.5	123.9	122.1	-1
1992	125.6	123.2	121.7	0
1993	124.4	121.9	120.6	0
1994	125.5	123.2	121.6	0
1995	124.9	122.7	121.4	0
1996	126.4	123.7	121.9	0
1997	126.5	123.6	121.8	0



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<b>YEAR</b>	<b>TOP 19 MEAN</b>	<b>TOP 38 MEAN</b>	<b>TOP 57 MEAN</b>	<b>REVISION</b>
	<b>TOLERATED RANGE</b>	<b>TOLERATED RANGE</b>	<b>TOLERATED RANGE</b>	
	<b>(123-126)</b>	<b>(120-123)</b>	<b>(119-122)</b>	
1998	124.2	122.1	120.7	0
1999	125.2	122.6	120.9	0
2000	125.4	122.5	120.8	0
2001	123.4	121.4	119.9	0
2002	123.7	121.2	119.7	0
2003	124.7	121.5	120.0	0
2004	122.1	119.9	118.7	+1
2005	123.6	121.2	119.4	0
2006	122.6	120.5	119.1	0
2007	123.3	121.1	119.6	0
2008	124.6	121.8	120.4	0
2009	124.4	122.0	120.5	0
2010	124.6	122.4	120.9	0
2011	125.1	122.9	121.2	0
2012	124.5	121.3	119.7	0

**TABLE 3 – EFFECTS OF REVISION TO MEANS ON NUMBERS OF BRITISH, IRISH AND FRENCH HORSES AT 130+ AND 120+ IN CLASSIFICATIONS AND RANKINGS 1977-2012 (GRAPHS 3 AND 4 IN APPENDIX)**

YEAR	REVISION	TOP 19 MEAN RANGE (123-126)	TOP 38 MEAN RANGE (120-123)	TOP 57 MEAN RANGE (119-122)	RATED 130+	RATED 120+
1977	-7	125.0	122.9	121.5	1	39
1978	-6	124.6	122.7	121.1	1	36
1979	-5	125.5	123.3	121.3	3	35
1980	-4	124.1	122.6	121.2	0	39
1981	-4	125.6	123.1	121.2	1	35
1982	-3	125.4	122.6	120.8	4	31
1983	-3	125.3	122.6	121.3	1	38
1984	-3	126.3	123.3	121.7	3	37
1985	-3	126.4	123.3	121.6	4	30
1986	-3	125.6	122.6	121.0	3	28
1987	-2	126.1	123.5	121.8	4	38
1988	-1	125.8	123.1	121.5	3	35
1989	-1	125.6	123.3	121.7	3	38
1990	-1*	127.0	124.1	122.1	3	36
1991	-1	125.5	122.9	121.1	2	31
1992	0	125.6	123.2	121.7	1	36
1993	0	124.4	121.9	120.6	1	29
1994	0	125.5	123.2	121.6	1	39
1995	0	124.9	122.7	121.4	1	38
1996	0	126.4	123.7	121.9	3	39
1997	0	126.5	123.6	121.8	4	36

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YEAR	CHANGE	TOP 19 MEAN RANGE (123-126)	TOP 38 MEAN RANGE (120-123)	TOP 57 MEAN RANGE (119-122)	RATED 130+	RATED 120+
1998	0	124.2	122.1	120.7	1	32
1999	0	125.2	122.6	120.9	3	33
2000	0	125.4	122.5	120.8	3	29
2001	0	123.4	121.4	119.9	1	23
2002	0	123.7	121.2	119.7	0	22
2003	0	124.7	121.5	120.0	4	20
2004	+1	123.1	120.9	119.7	0	21
2005	0	123.6	121.2	119.4	1	26
2006	0	122.6	120.5	119.1	0	20
2007	0	123.3	121.1	119.6	1	24
2008	0	124.6	121.8	120.4	1	22
2009	0	124.4	122.0	120.5	2	31
2010	0	124.6	122.4	120.9	1	36
2011	0	125.1	122.9	121.2	1	37
2012	0	124.5	121.3	119.7	3	22

**TABLE 4 - EFFECT OF REVISION TO THE RATINGS OF THE TOP HORSES IN INTERNATIONAL CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012**

<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>	<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>		
<b>1977 (-7)</b>			<b>1978 (-6)</b>				
131	Alleged	3c	Ire	134	Alleged	4c	Ire
128	Blushing Groom	3c	Fr	129	Ile De Bourbon	3c	GB
128	The Minstrel	3c	Ire	126	Acamas	3c	Fr
127	Balmerino	5h	GB	126	Shirley Heights	3c	GB
127	Orange Bay	5h	GB	125	Swiss Maid	3f	GB
126	Buckskin	4c	Fr	125	Exdirectory	3c	Ire
126	Gentilhombre	4c	GB	125	Hawaiian Sound	3c	GB
126	Sagaro	6h	Fr	125	Sanedtki	4f	Fr
124	Crystal Palace	3c	Fr	125	Buckskin	5h	GB
124	Exceller	4c	Fr	125	Trillion	4f	Fr
124	Flying Water	4f	Fr	124	Homing	3c	GB
124	Relkino	4c	GB				
123	Artaius	3c	Ire				
123	Dunfermline	3f	GB				
123	Madelia	3f	Fr				
123	Arctic Tern	4c	Fr				
123	Crow	4c	Fr				
123	Riboboy	4c	Fr				

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<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>	<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>
<b>1979 (-5)</b>			<b>1980 (-4)</b>		
132	Three Troikas	3f Fr	127	Moorestyle	3c GB
131	Troy	3c GB	126	Argument	3c Fr
130	Ile De Bourbon	4c GB	126	ElaManaMou	4c GB
128	Le Marmot	3c Fr	125	Known Fact	3c GB
127	Top Ville	3c Fr	125	Nureyev	3c Fr
127	Thatching	4c Ire	125	Kris	4c GB
126	Irish River	3c Fr	125	Le Marmot	4c Fr
126	Kris	3c GB	125	Le Moss	5h GB
126	Gay Mecene	4c Fr			
<b>1981 (-4)</b>			<b>1982 (-3)</b>		
136	Shergar	3c GB	131	Golden Fleece	3c Ire
128	Northjet	4c Fr	130	Green Forest	3c Fr
127	Bikala	3c Fr	130	Assert	3c Ire
127	Moorestyle	4c GB	130	Kalaglow	4c GB
126	Marwell	3f GB	128	Ardross	6h GB
126	Cut Above	3c GB	126	Akiyda	3f Fr
126	Sharpo	4c GB	125	Sharpo	5h GB
126	Ardross	5h GB	125	April Run	4f Fr
126	Gold River	4f Fr	125	Bikala	4c Fr
125	Light Cavalry	4c GB			

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<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>	<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>
<b>1983 (-3)</b>			<b>1984 (-3)</b>		
130	Shareef Dancer	3c GB	135	El Gran Senor	3c Ire
129	All Along	4f Fr	132	Teenoso	4c GB
128	Habibti	3f GB	130	Sagace	4c Fr
127	Caerleon	3c Ire	129	Chief Singer	3c GB
126	L'Emigrant	3c Fr	128	Darshaan	3c Fr
126	LuthEnchantee	3f Fr	127	Sadler's Wells	3c Ire
126	Sun Princess	3f GB	125	Cormorant Wood	4f GB
126	Diamond Shoal	4c GB	125	Lear Fan	3c GB
125	Teenoso	3c GB	125	Morcon	4c GB
125	Time Charter	4f GB	125	Seattle Song	3c Fr
<b>1985 (-3)</b>			<b>1986 (-3)</b>		
132	Slip Anchor	3c GB	138	Dancing Brave	3c GB
131	Petoski	3c GB	131	Bering	3c Fr
130	Rainbow Quest	4c GB	131	Shahrastani	3c GB
130	Sagace	5h Fr	129	Shardari	4c GB
129	Pebbles	4f GB	127	Acatenango	4c Ger
128	Shadeed	3c GB	127	Last Tycoon	3c Fr
127	Commanche Run	4c GB	127	Triptych	4f Fr
127	Law Society	3c Ire	126	Celestial Storm	3c GB
127	Mouktar	3c Fr	126	Thrill Show	3c Fr
127	Never So Bold	5h GB	125	Altayan	3c Fr
127	Oh So Sharp	3f GB			

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<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>	<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>
<b>1987 (-2)</b>			<b>1988 (-1)</b>		
133	Reference Point	3c GB	132	Warning	3c GB
132	Mtoto	4c GB	131	Miesque	4f Fr
132	Trempolino	3c Fr	130	Mtoto	5h GB
130	Miesque	3f Fr	130	Tony Bin	5h Ity
129	Celestial Storm	4c GB	128	Persian Heights	3c GB
128	Tony Bin	4c Ity	127	Diminuendo	3f GB
127	Indian Skimmer	3f GB	127	Indian Skimmer	4f GB
126	Milligram	3f GB			
126	Triptych	5m Fr			
<b>1989 (-1)</b>			<b>1990 (-1)</b>		
133	Old Vic	3c GB	132	Dayjur	3c GB
133	Zilzal	3c GB	131	Saumarez	3c Fr
130	Nashwan	3c GB	130	Belmez	3c GB
128	Polish Precedent	3c Fr	129	Epervier Bleu	3c Fr
127	Cacoethes	3c GB	129	Old Vic	4c GB
127	Carroll House	4c GB	128	Ron's Victory	3c Fr
126	Unfuwain	4c GB	128	Royal Academy	3c Ire
126	Warning	4c GB	128	Snurge	3c GB
			127	Markofdistinction	4c GB
			127	Priolo	3c Fr

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YR/RT. HORSE	A/S	TR.	YR/RT. HORSE	A/S	TR.
<b>1991 (-1)</b>			<b>1992 (0)</b>		
136	Generous	3c GB	135	St Jovite	3c Ire
135	Suave Dancer	3c Fr	129	Pistolet Bleu	4c Fr
130	Lomitas	3c Ger	128	Selkirk	4c GB
127	Pistolet Bleu	3c Fr	128	Subotica	4c Fr
127	Selkirk	3c GB	127	Rodrigo de Triano	3c GB
126	Magic Night	3f Fr	127	Sheikh Albadou	4c GB
126	Second Set	3c GB	126	Lahib	4c GB
125	Polish Patriot	3c GB	126	Marling	3f GB
125	Epervier Bleu	4c Fr	126	Second Set	4c GB
125	Priolo	4c Fr			
<b>1993 (0)</b>			<b>1994 (0)</b>		
130	Zafonic	3c Fr	130	Balanchine	3f GB
129	Opera House	5h GB	128	Distant View	3c GB
128	Arcangues	5h Fr	128	Maroof	4c GB
127	Commander In Chief	3c GB	127	Barathea	4c GB
127	White Muzzle	3c GB	127	Tikkanen	3c Fr
126	Bigstone	3c Fr	126	Carnegie	3c Fr
125	Urban Sea	4f Fr	126	Erhaab	3c GB
125	Wolfhound	4c GB	126	King's Theatre	3c GB
124	Luazur	4c Fr	126	Lochsong	6m GB
124	Platini	4c Ger	125	Grand Lodge	3c GB
			125	Hernando	4c Fr
			125	White Muzzle	4c GB



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<b>1995 (0)</b>			<b>1996 (0)</b>		
132	Cigar	5h USA	135	Cigar	6h USA
130	Lammtarra	3c GB	134	Helissio	3c Fr
129	Bahri	3c GB	133	Mark Of Esteem	3c GB
129	Inside Information	4f USA	131	Bosra Sham	3f GB
129	Northern Spur	4c USA	130	Skip Away	3c USA
128	Freedom Cry	4c Fr	129	Halling	5h GB
128	Halling	4c GB	129	Pentire	4c GB
128	Heavenly Prize	4f USA	127	Anabaa	4c Fr
127	Holy Bull	4c USA	127	Bijou d'Inde	3c GB
127	Lake Coniston	4c GB	127	Soul Of The Matter	5h USA
<b>1997 (0)</b>			<b>1998 (0)</b>		
137	Peintre Celebre	3c Fr	131	Skip Away	5h USA
134	Pilsudski	5h GB	130	Awesome Again	4c USA
132	Singspiel	5h GB	130	Intikhab	4c GB
131	Bosra Sham	4f GB	129	Swain	6h GB
131	Gentlemen	5h USA	128	Desert Prince	3c GB
129	Swain	5h GB	128	Silver Charm	4c USA
128	Desert King	3c Ire	127	Dr Fong	3c GB
127	Formal Gold	4c USA	127	High-Rise	3c GB
127	Skip Away	4c USA	127	Real Quiet	3c USA
			127	Victory Gallop	3c USA

**TABLE 4 - EFFECT OF REVISION TO THE RATINGS OF THE TOP HORSES IN INTERNATIONAL CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012**

<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>	<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>
<b>1999 (0)</b>			<b>2000 (0)</b>		
135	Daylami	5h GB	134	Dubai Millennium	4c Gb
135	Montjeu	3c Fr	132	Sinndar	3c Ire
134	El Condor Pasa	4c Jpn	130	Montjeu	4c Fr
132	Royal Anthem	4c GB	127	Fusaichi Pegasus	3c USA
130	Artax	4c USA	127	Giant's Causeway	3c Ire
127	Dubai Millennium	3c GB	127	Kona Gold	6g USA
127	Sendawar	3c Fr	127	Namid	4c Ire
127	Stravinsky	3c Ire	127	Tiznow	3c USA
127	Victory Gallop	4c USA	126	Egyptband	3f Fr
126	Behrens	5h USA	126	Kalanisi	4c GB
126	Croco Rouge	4c Fr	126	Observatory	3c GB
<b>2001 (0)</b>			<b>2002 (0)</b>		
133	Sakhee	4c GB	128	Rock Of Gibraltar	3c Ire
130	Point Given	3c USA	127	Marienbard	5h GB
129	Fantastic Light	5h GB	126	Golan	4c GB
129	Galileo	3c Ire	126	Grandera	4c GB
128	Tiznow	4c USA	126	High Chaparral	3c Ire
127	Delaware Township	5h USA	126	Keltos	4c Fr
127	Kona Gold	7g USA	126	Sulamani	3c Fr
126	Squirtle Squirt	3c USA	125	Azeri	4f USA
			125	Nayef	4c GB
			125	Volponi	4c USA

**TABLE 4 - EFFECT OF REVISION TO THE RATINGS OF THE TOP HORSES IN INTERNATIONAL CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012**

<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>	<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>
<b>2003 (0)</b>			<b>2004 (+1)</b>		
133	Hawk Wing	4c Ire	131	Ghostzapper	4c USA
132	Dalakhani	3c Fr	129	Smarty Jones	3c USA
131	Alamshar	3c Ire	128	Doyen	4c GB
130	Mubtaker	6h GB	127	Bago	3c Fr
127	Candy Ride	4c USA	127	Pleasantly Perfect	6h USA
127	Falbrav	5h GB	126	Cherry Mix	3c Fr
127	High Chaparral	4c Ire	125	Haafhd	3c GB
127	Johar	4c USA	125	MedagliaD'Oro	5h USA
127	Mineshaft	4c USA			
126	Moon Ballad	4c GB			
<b>2005 (0)</b>			<b>2006 (0)</b>		
130	Hurricane Run	3c Fr	129	Invasor	4c USA
128	Ghostzapper	5h USA	128	Bernadini	3c USA
126	Azamour	4c Ire	128	Discreet Cat	3c USA
126	Westerner	6h Fr	127	Deep Impact	4c Jpn
125	Motivator	3c GB	127	George Washington	3c Ire
125	Shamardal	3c GB	127	Lava Man	5g USA
125	Saint Liam	5h USA	127	Rail Link	3c Fr
125	Shirocco	4c Fr	126	Barbaro	3c USA
			126	Dylan Thomas	3c Ire
			126	Hurricane Run	4c Fr

**TABLE 4 - EFFECT OF REVISION TO THE RATINGS OF THE TOP HORSES IN INTERNATIONAL CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012**

<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>	<b>YR/RT. HORSE</b>	<b>A/S</b>	<b>TR.</b>
<b>2007 (0)</b>			<b>2008 (0)</b>		
131	Manduro	5h Fr	130	Curlin	4c USA
129	Authorized	3c GB	130	New Approach	3c Ire
129	Curlin	3c USA	129	Raven's Pass	3c GB
129	Dylan Thomas	4c Ire	128	Zarkava	3f Fr
129	Invasor	5h USA	127	Duke Of Marmalade	4c Ire
128	Street Sense	3c USA	125	Big Brown	3c USA
127	Admire Moon	4c Jpn	125	Conduit	3c GB
125	English Channel	5h USA	125	Goldikova	3f Fr
125	Soldier Of Fortune	3c Ire	125	Henrythenavigator	3c Ire
124	Any Given Saturday	3c USA	125	Montmartre	3c Fr
124	Lawyer Ron	4c USA	125	Youmzain	5h GB
124	Youmzain	4c GB	125	Zenyatta	4f USA
<b>2009 (0)</b>			<b>2010 (0)</b>		
136	Sea The Stars	3c Ire	135	Harbinger	4c GB
130	Goldikova	4f Fr	129	Blame	4c USA
129	Rip Van Winkle	3c Ire	128	Makfi	3c Fr
128	Fame And Glory	3c Ire	128	Quality Road	4c USA
128	Zenyatta	5m USA	128	Workforce	3c GB
127	Rachel Alexandra	3f USA	127	Canford Cliffs	3c GB
125	Cavalryman	3c Fr	127	Nakayama Festa	4c Jpn
125	Conduit	4c GB	126	Cape Blanco	3c Ire
125	GioPonti	4c USA	126	Rip Van Winkle	4c Ire
125	Gladiatorus	4c UAE	126	So You Think	4c Aus
125	Youmzain	6h GB			

**TABLE 4 - EFFECT OF REVISION TO THE RATINGS OF THE TOP HORSES IN INTERNATIONAL CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012**

YR/RT. HORSE			A/S	TR.	YR/RT. HORSE			A/S	TR.
<b>2011 (0)</b>				<b>2012 (0)</b>					
136	Frankel	3c	GB	140	Frankel	4c	GB		
132	Black Caviar	5m	Aus	131	Cirrus Des Aigles	6g	Fr		
128	Cirrus des Aigles	5g	Fr	130	Black Caviar	6m	Aus		
128	Danedream	3f	Ger	130	Excelebration	4c	Ire		
127	Canford Cliffs	4c	GB	129	Wise Dan	5g	USA		
127	Rewilding	4c	GB	127	Orfevre	4c	Jpn		
126	Dream Ahead	3c	GB	126	Monterosso	5h	UAE		
126	Excelebration	3c	GB	126	Nathaniel	4c	GB		
126	Nathaniel	3c	GB	126	So You Think	6h	Ire		
126	So You Think	5h	Ire	125	Fort Larned	4c	USA		
125	Rocket Man	6g	Sin	125	Hay List	7g	Aus		
125	Twice Over	6h	GB	125	I'll Have Another	3c	USA		
125	Workforce	4c	GB						

**TABLE 5 -COMPARISON OF THE TOP HORSES BEFORE AND AFTER REVISED RATINGS IN INTERNATIONAL CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012**

**BEFORE SUGGESTED CHANGES**

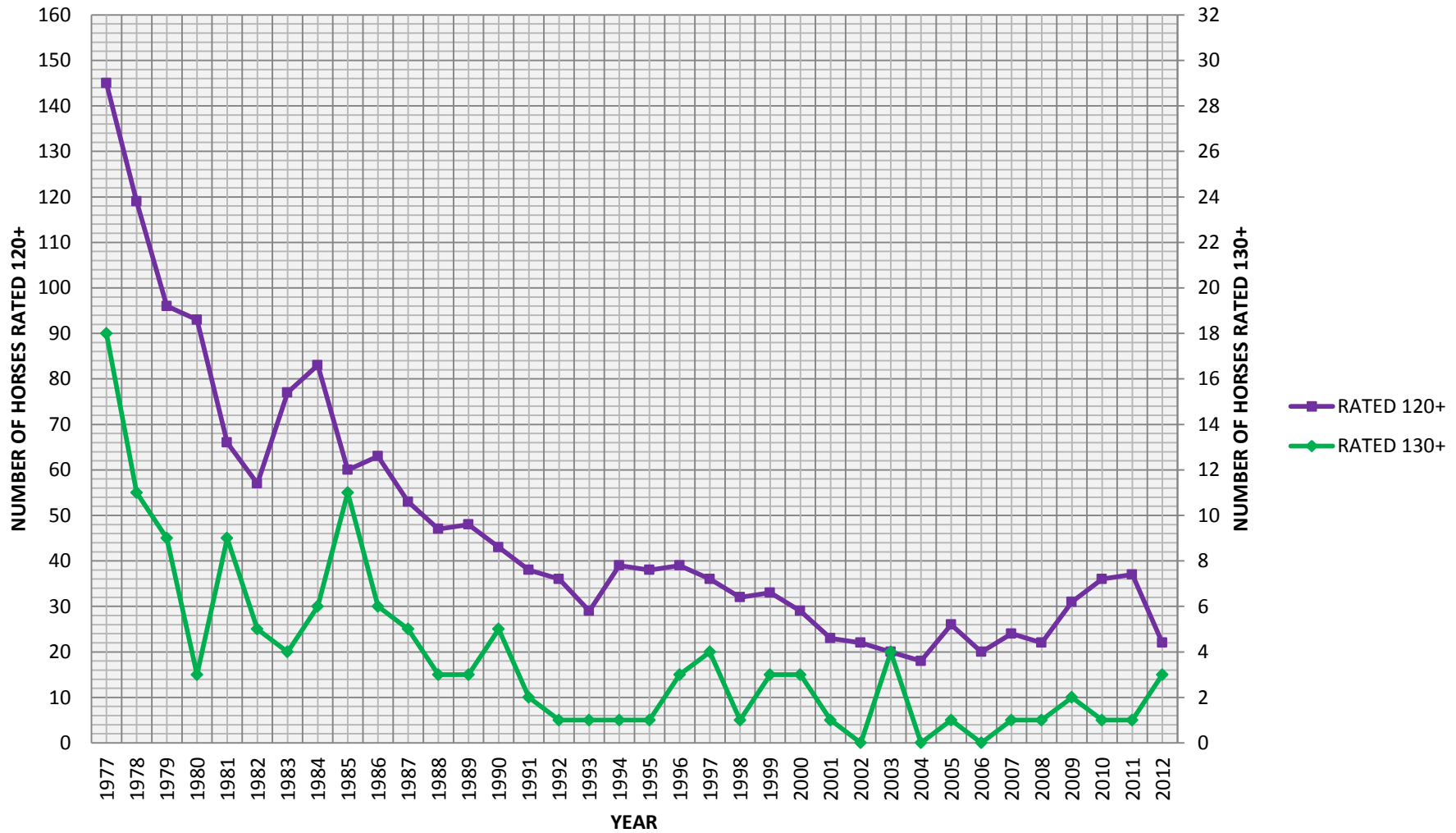
**AFTER SUGGESTED CHANGES**

<b>RAT.</b>	<b>HORSE</b>	<b>A/S</b>	<b>TR.</b>	<b>RAT.</b>	<b>HORSE</b>	<b>A/S</b>	<b>TR.</b>
141	Dancing Brave	3c	GB	140	Frankel	4c	GB
140	Alleged	4c	Ire	138	Dancing Brave	3c	GB
140	Frankel	4c	GB	137	Peintre Celebre	3c	Fr
140	Shergar	3c	GB	136	Generous	3c	GB
138	El Gran Senor	3c	Ire	136	Sea The Stars	3c	Ire
137	Generous	3c	GB	136	Shergar	3c	GB
137	Peintre Celebre	3c	Fr	135	Cigar	6h	USA
137	Three Troikas	3f	Fr	135	Daylami	5h	Gb
136	Sea The Stars	3c	Ire	135	El Gran Senor	3c	Ire
136	Suave Dancer	3c	Fr	135	Harbinger	4c	GB
136	Troy	3c	GB	135	Montjeu	3c	Fr
135	Blushing Groom	3c	Fr	135	St Jovite	3c	Ire
135	Cigar	6h	USA	135	Suave Dancer	3c	Fr
135	Daylami	5h	GB	134	Alleged	4c	Ire
135	Harbinger	4c	GB	134	Dubai Millennium	4c	UAE
135	Ile De Bourbon	3c	GB	134	El Condor Pasa	4c	Jpn
135	Montjeu	3c	Fr	134	Helissio	3c	Fr
135	Reference Point	3c	GB	134	Pilsudski	5h	GB
135	Slip Anchor	3c	GB	133	Hawk Wing	4c	Ire
135	St Jovite	3c	Ire	133	Mark Of Esteem	3c	GB
135	Teenos	4c	GB	133	Old Vic	3c	GB
135	The Minstrel	3c	Ire	133	Reference Point	3c	GB
				133	Sakhee	4c	GB
				133	Zilzal	3c	GB

**APPENDIX**

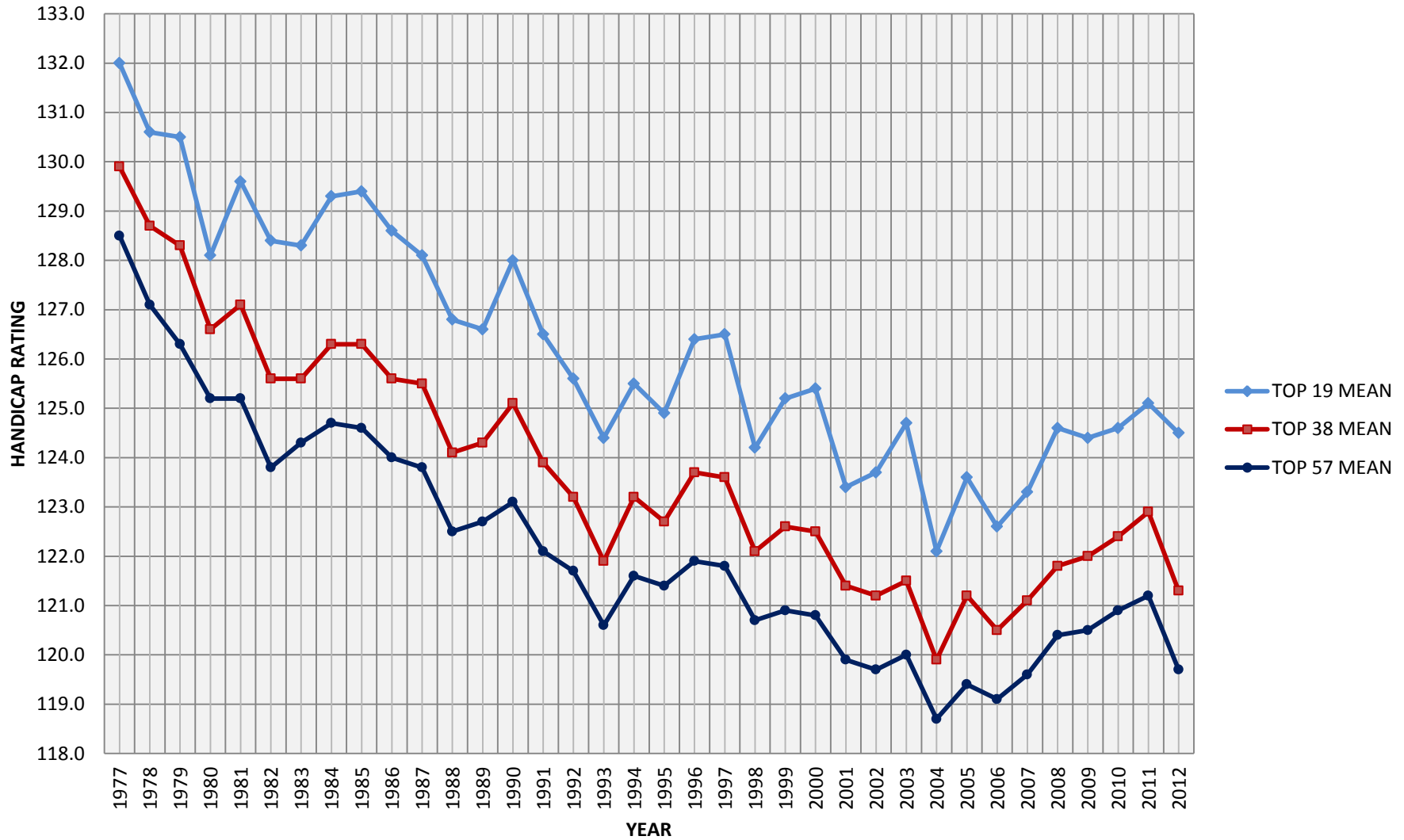
**GRAPH 1**

**GRAPH SHOWING THE DECLINE IN THE NUMBER OF 130+ AND 120+ EUROPEAN HORSES IN THE INTERNATIONAL FLAT CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012 (TABLE 1)**



GRAPH 2

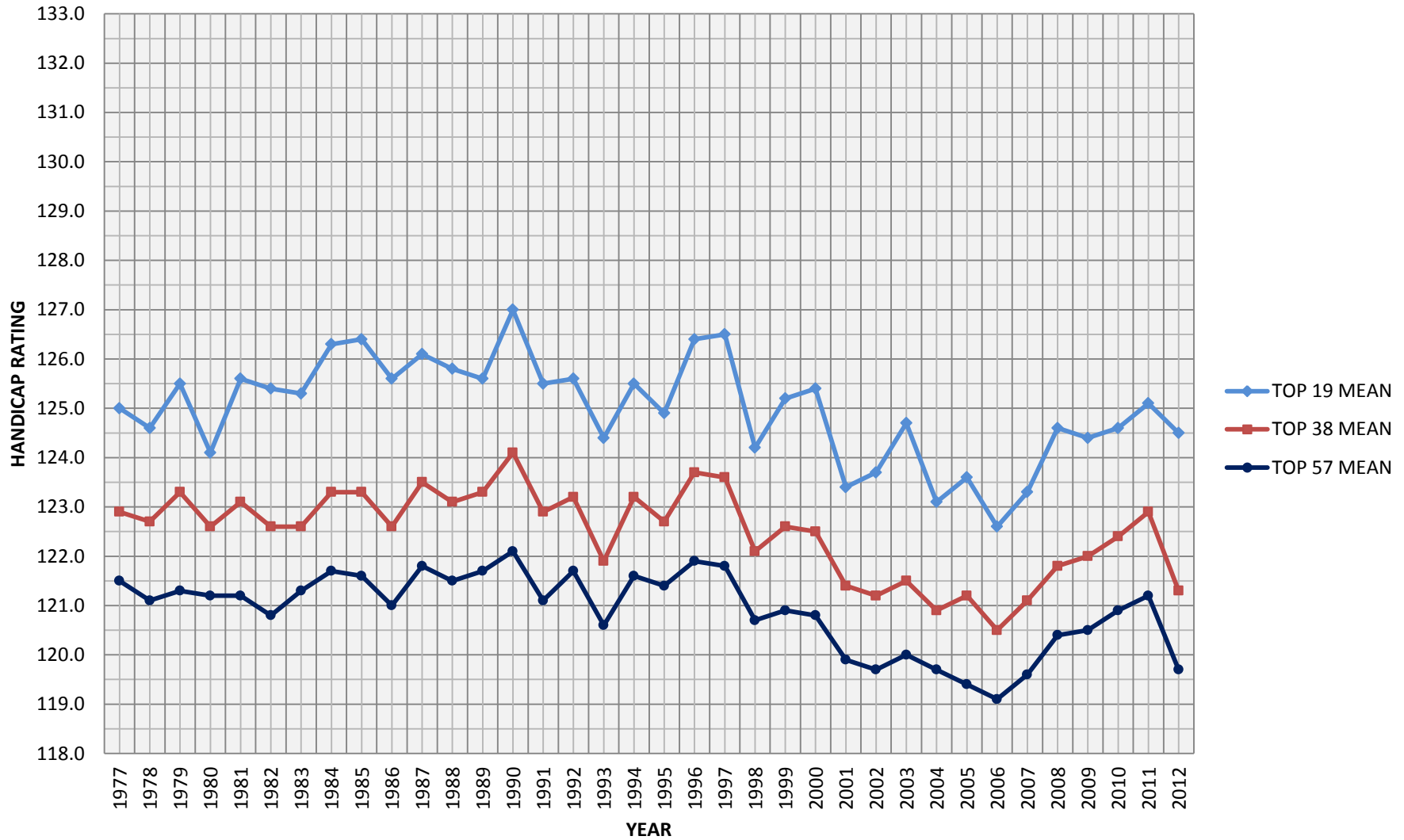
GRAPH SHOWING THE DECLINE IN THE MEANS OF HORSES IN THE INTERNATIONAL CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012 (TABLE 1)





**GRAPH 3**

**GRAPH SHOWING THE REVISED MEANS OF HORSES IN THE INTERNATIONAL CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012 (TABLE 3)**



GRAPH 4

GRAPH SHOWING THE REVISED NUMBER OF 130+ AND 120+ HORSES IN THE INTERNATIONAL CLASSIFICATIONS AND WORLD THOROUGHBRED RANKINGS 1977-2012 (TABLE 3)

