

# Analyzing The Triple Crown

The Raise A Native Sire Line Rules

**By Stanley Caris** 

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#### Introduction

When Mine That Bird won the Derby by 6 lengths in 2009 at odds of 50-1 handicappers scratched their heads in disbelief. How could such an extreme longshot who had never achieved a Beyer figure higher than an 81 win the roses? After seeing results like the one above some racing fans believed that it makes no sense to invest on a race that is so unpredictable. However, despite the occasional extreme longshot like Mine That Bird, most Kentucky Derbies are won by true contenders. Recent winners I'll Have Another, Super Saver, Big Brown, Street Sense, Barbaro, Smarty Jones, Funny Cide, War Emblem and Monarchos all figured to be among the top prospects in their Derbies. Of particular interest to handicappers are the prices paid by many of the above logical contenders. I'll Have Another went off

at 15-1, Super Saver 8-1, Funny Cide 12-1, War Emblem 20-1 and Monarchos 10-1.

Because of the large field (usually around 20 runners) the Derby offers
handicappers a realistic chance to make a significant score.

At odds of 15-1 I'll Have Another was a definite overlay in the 2012 Kentucky Derby. He was a logical contender because he raced the final 3/8 of the Santa Anita Derby in 36 2/5 seconds and traveled the last furlong in 12 2/5. This author's research has discovered that a final 3 furlong time of 37 4/5 or less or a final furlong in 12 4/5 or less in a big 5 prep race over a dirt track is a strong angle for the Derby. In addition, I'll Have Another was a member of the very powerful Raise A Native sire line and runners that carry that line have won 18 Derbies Kentucky Derbies.

There were only two runners in last year's Derby that carried the Raise A Native sire line and also achieved a final furlong time of 12 4/5 seconds or less in a big 5 prep race over a dirt track. These two were I'll Have Another and the Derby favorite, Bodemeister. In addition Bodemeister led my 8 indicator checklist with 20 points whereas I'll Have Another was second best on my checklist with 12 points. These two horses comprised a hefty exacta combination of \$306. This Derby was a perfect example of how research on past Derbies can lead a handicapper to a very respectable score in the run for the roses. "Knowledge is Power."

It is the purpose of this book to provide handicappers with indicators that will

lead them to making the best wagers on the Kentucky Derby, Preakness and Belmont Stakes. These wagers will be based on **impact values** which are statistics that compare the percentage of winners who qualify on certain critieria with the percentage of starters who also qualify on that same critieria. For example if Kentucky breds make up 80% of the starters in the Derby and comprise 80% of the winners the impact value is **1.00** (80% winners divided by 80% of the starters equals 1.00). The 1.00 impact value means that horses that were bred in Kentucky are only winning their expected share of Derbies because the percentage of winners equals the percentage of starters. An impact value over 1.00 means that horses with that indicator are winning more than their expected amount because the percentage of winners qualifying on the indicator will be higher than the percentage of starters that qualify on the indicator. An impact value under 1.00 means that winners qualifying on the indicator are winning less then their expected amount.

Another example follows: Since 90% of the Derby winners in the last 40 years started in a **big 5 Prep race** (**Florida Derby, Wood Memorial, Blue Grass, Santa Anita Derby**, or **Arkansas Derby**) handicappers might think that this would provide them with a big edge but in reality by itself this indicator is only slightly better than average. Since approximately 75% of the starters in the Derby have raced in one of the big 5 preps mentioned above, the impact value for starting in a big 5 prep race is only **1.20** (90% winners divided by 75% of the starters). This means that horses who qualify on this angle are winning the roses only 20% more

often than statistical expectation.

However, when this author focused on horses that raced the last 3 furlongs of a big 5 prep race in 37 4/5 or less along with a few other handicapping angles, the impact value goes up significantly to **2.32** because in the last 40 years there have been 27 Derby winners that qualified on this indicator and the percentage of starters that qualified is only 29.1% (67.5% winners divided by 29.1% of the starters equals 2.32). In the last 40 years horses who raced the last 3 furlongs of a big 5 prep race in 37 4/5 or less and also qualified on a few other fundamental factors are winning the roses more than twice as often as statistical expectation.

It takes a great deal of time and effort to come up with strong impact values like the one above that can serve as valuable indicators for handicappers. Very often the research turns out to be fruitless but now and again this author has discovered some very positive angles. Impact values of **2.00** and higher are strong indicators and when we find an impact value of **3.00** and higher we have what is known as a golden nugget for the handicapper. For example runners with the Raise A Native sire line that also qualified on my final fraction indicator have won 12 of the last 27

Derbies and have an extraordinary impact value of **3.93**. Qualifiers on this indicator are winning the roses almost 4 times more often than statistical expectation. All well and good but what about the return on the investment for the above qualifiers? Indicators that have the most value are those with strong impact values that also produce a positive return on one's investment (ROI). The Raise A Native sire line indicator mentioned above has a very strong ROI of **146%** (See the section entitled Derby Indicator #2-The Raise A Native Sire Line Plus A Fast Finish in a Big 5 Prep Race).

The Raise A Native sire line plus a fast finish in a major prep race is the kind of statistic that carries clout and the main thrust of this book is to provide racing fans with indicators that will give them an edge in wagering on the Triple Crown events. These indicators will be used in a checklist where each entry is assigned points and then the points are totaled for every horse in the race. There will be 8 different indicators used in the Derby checklist, 5 in the Preakness checklist and 6 for the Belmont.

Statisticians may say that the above statistic comes from too small a sample size but since similar impact values for the above indicator occur in the Preakness and Belmont stakes, one can conclude that carrying the Raise A Native sire line and achieving a fast final fraction in a big five prep race is a solid indicator that is not just due to chance.

Interestingly, the last Triple Crown Winner, Affirmed and the great colt he beat in all three legs of the crown, Alydar, carried the Raise A Native sire line. Alydar was a son of Raise A Native and Affirmed was a paternal grandson of Raise A Native.

#### The Elusive Triple Crown

Three extraordinary thoroughbreds won the Triple Crown in the 1970s: Secretariat (1973), Seattle Slew (1977) and Affirmed (1978). Since that win in 1978 eleven runners have come into the Belmont after capturing the first two jewels of the crown and all 11 failed to achieve immortality.

Why is it so difficult to win the Triple Crown? One reason could be that modern racehorses are no longer bred for stamina and durability as were their ancestors of 30 years ago. The last three runners that captured the Triple Crown (Affirmed, Seattle Slew and Secretariat) and the three horses that came closest to winning all three races (Silver Charm, Real Quiet and Smarty Jones) all carried the Phalaris/Nonphalaris pedigree pattern (where the sire line traces to Phalaris and the broodmare sire line does not go back to Phalaris). This pattern may have provided thoroughbreds with the necessary durability to run well in all three legs of the crown.

It is unrealistic to expect a thoroughbred to win 3 major route races at three

different distances at three different tracks within a period of only 5 weeks.

In addition, in recent times the competition has become more intense as many fresh horses contest the Belmont after having skipped the Preakness or the first two legs of the Triple Crown. These runners have an advantage over steeds that are worn out after running in both the Derby and Preakness. In fact 8 horses that spoiled Triple Crown bids of the last 11 runners who captured the first two jewels were horses that did not run in all three Triple Crown events (See Table 1).

Table 1- The Last 11 Thoroughbreds Who Won the First Two Jewels of the Triple Crown Were Usually Upset By Fresh Horses

Year	Horse That Won The First Two Legs	Belmont Winner	Belmont Winner's Past Races
2008	Big Brown	Da' Tara	Did not run in the Derby or Preakness
2004	Smarty Jones	Birdstone	Did not run in the Preakness
2003	Funny Cide	Empire Maker	Did not run in the Preakness
2002	War Emblem	Sarava	Did not run in the Derby or
			Preakness
1999	Charismatic	Lemon Drop Kid	Did not run in the Preakness
1998	Real Quiet	Victory Gallop	Raced in all 3 Triple Crown events
1997	Silver Charm	Touch Gold	Did not run in the Derby
1989	Sunday Silence	Easy Goer	Raced in all 3 Triple Crown events
1987	Alysheba	Bet Twice	Raced in all 3 Triple Crown events
1981	Pleasant Colony	Summing	Did not run in the Derby or
			Preakness
1979	Spectacular Bid	Coastal	Did not run in the Derby or
			Preakness

Note: 8 of the 11 horses that spoiled a Triple Crown bid above were runners who did not compete in all three legs of the crown.

#### **Handicapping The Kentucky Derby**

#### **Beyer Speed Figures**

In the decade of the 1990s almost every Derby winner achieved a Beyer speed figure of 105 or higher in a major 9 furlong prep race. In the last 4 years however, each Derby winner failed to achieve a triple digit Beyer figure in any of its 9 furlong prep races. It could be that the modern thoroughbred is no longer capable of doing what its ancestors did and future Derby winners may continue putting up less than triple digit Beyer figures in the prep races leading up to the run for the roses. In analyzing the last 10 Derby fields with regard to Beyer figure rankings achieved in 6 major prep races (Santa Anita Derby, Blue Grass, Arkansas Derby, Florida Derby, Wood Memorial and Illinois Derby) it is clear that Beyer speed figures have trended lower (See Table 2).

Table -2 The Top 5 Beyer Speed Figures In A Major 9 Furlong Prep By Derby Runners From 2003-2012 (Winners in Bold Face)

Year	Horse	Best 5 Speed Figures	Race
2012	Bodemeister	108	Arkansas Derby
	Alpha	98	<b>Wood Memorial</b>
	Gemologist	98	<b>Wood Memorial</b>
	Take Charge Indy	95	Florida Derby
	I'll Have Another	94 (5 <sup>th</sup> best)	Santa Anita Derby
2011	Archarcharch	98	Arkansas Derby
	Nehro	98	Arkansas Derby

	Comma to the Top	97	Santa Anita Derby
	Midnight Interlude	97	Santa Anita Derby
	Shackleford	93	Florida Derby
	<b>Animal Kingdom</b>	(raced on polytrack)	<b>Spiral Stakes</b>
2010	Ice Box Super Saver Line of David American Lion Dublin	99 <b>98 (2<sup>nd</sup> best)</b> 98 98 97	Florida Derby Arkansas Derby Arkansas Derby Illinois Derby Arkansas Derby
2009	Dunkirk	108	Florida Derby
	West Side Bernie	101	Wood Memorial
	Papa Clem	101	Arkansas Derby
	Summer Bird	99	Arkansas Derby
	Musket Man	98	Illinois Derby
	<b>Mine That Bird</b>	<b>80 (8<sup>th</sup> best)</b>	Sunland Derby
2008	<b>Big Brown</b> Gayego Z Fortune Recapturetheglory Smooth Air	106 (best) 103 102 102 98	Florida Derby Arkansas Derby Arkansas Derby Illinois Derby Florida Derby
2007	Curlin Tiago Cowtown Cat Scat Daddy Nobiz Like Shobiz Street Sense	103 100 98 98 98 ( raced on polytrack)	Arkansas Derby Santa Anita Derby Illinois Derby Florida Derby Wood Memorial <b>Blue Grass</b>
2006	Sinister Minister	116	Blue Grass
	Sweetnorthernsaint	109	Illinois Derby
	Brother Derek	108	Santa Anita Derby
	<b>Barbaro</b>	<b>103 (4<sup>th</sup> best</b> )	Florida Derby
	Point Determined	103	Santa Anita Derby
	Sharp Humor	102	Florida Derby

2005	Bellamy Road Afleet Alex Greeley's Galaxy Bandini	120 108 106 103	Wood Memorial Arkansas Derby Illinois Derby Blue Grass
	Noble Causeway	100	Florida Derby
	Giacomo	95 (8 <sup>th</sup> best)	Santa Anita Derby
2004	The Cliff's Edge Lion Heart <b>Smarty Jones</b> Pollard's Vision Borrego	111 110 <b>107 (3<sup>rd</sup> best)</b> 107 105	Blue Grass Blue Grass Arkansas Derby Illinois Derby Arkansas Derby
2003	Empire Maker Funny Cide Ten Most Wanted Peace Rules Buddy Gil	111 <b>110 (2<sup>nd</sup> best)</b> 110 104 104	Wood Memorial Wood Memorial Illinois Derby Blue Grass Santa Anita Derby

Note: In the last three years Beyer speed figures for the top 5 ranked horses at 9 furlongs have trended significantly lower. Polytrack speed figures were not used in the above analysis.

The data in Table 2 also shows us that of the top 15 Beyer figures obtained by horses in 2010, 2011 and 2012 at 9 furlongs only 1 was a triple digit Beyer (Bodemeister 108).

Since only one Derby winner in the last 10 years came into the race with the highest last out Beyer figure at 9 furlongs (Big Brown) this author recommends that handicappers should confine their win wagers to runners that do **not** post the highest Beyer figure in the Derby field in a 9 furlong prep race.

#### **Derby Favorites**

In the decade of the 1970s there were 6 winning favorites in the run for the roses: Riva Ridge, Secretariat, Cannonade, Foolish Pleasure, Seattle Slew and Spectacular Bid. Since then only 4 Derby favorites managed to wear the roses which translates into a very low percentage of 12.1. This author recommends wagering against the Derby favorite in the win pool (See Table 3)

Table 3- How The Derby Post Time Favorite Has Faired From 1980-2012 (Winners in Bold Face)

			<b>Odds At Post Time</b>
Year	Derby Favorite F	inish Position	(To One Dollar)
2012	Bodemeister	2	4.20
2011	Dialed In	8	5.20
2010	Lookin At Lucky	6	6.30
2009	Friesan Fire	18	3.80
2008	Big Brown	1	2.40
2007	Street Sense	1	4.90
2006	Sweetnorthernsaint	7	5.50
2005	Bellamy Road	7	2.50
2004	<b>Smarty Jones</b>	1	4.10
2003	Empire Maker	2	2.50
2002	Harlan's Holiday	7	6.00
2001	Point Given	5	1.80
2000	Fusaichi Pegasus	1	2.30
1999	General Challenge and Excellent Mee	eting 11 and 5	4.80
1998	Indian Charlie	3	2.70
1997	Captain Bodgit	2	3.10
1996	Unbridled's Song	5	3.50
1995	Timber Country, Serena's Song entry	3 and 16	3.40
1994	Holy Bull	12	2.20
1993	Prairie Bayou	2	4.40
1992	Arazi	8	.90
1991	Hansel	10	2.50
1990	Mister Frisky	8	1.90
1989	Easy Goer, Awe Inspiring entry	2 and 3	.80
1988	Private Terms	9	3.40
1987	Demons Begone	DNF	2.20

1986	Snow Chief	11	2.10
1985	Chief's Crown	3	1.20
1984	Life's Magic and Althea entry	8 and 19	2.80
1983	Marfa entry	5	2.40
1982	Air Forbes Won	7	2.70
1981	Proud Appeal, Golden Derby entry	21 and 18	2.30
1980	Plugged Nickel	7	2.60

Note: Since 1980 only 4 Derby favorites (12.1%) managed to win the roses.

#### 2 Year Old Form

From 1972-1987 the dual qualifier system was an excellent way to select the Derby winner. In that 16 year period every Derby winner was a dual qualifier which means being weighted within 10 pounds of the Experimental Highweight or was a champion in another country and having a dosage index of 4.00 or less. Since that time however there has been a steady decline in dual qualifier success rate. In fact, in the last 15 years only two dual qualifiers won the roses: Street Sense in 2007 and Super Saver in 2010.

In the last 15 years 8 Derby winners did not even win a stake race at age 2 and five of these did not even run in a stake at age 2. Since trainers are bringing their charges up to the Derby after very light campaigns, it no longer makes sense to toss a Derby contender simply because it is lightly raced or hasn't run in a stake race at age 2 (See Table 4).

Table 4- The 2 Year Old Form Of Derby Winners (1998-2012)

Year	Derby Winner	2 Year Old Stakes Form Plus Total Career Starts Until Derby Day
2012	I'll Have Another	Raced second in the Best Pal Stakes (5 starts)
2011	Animal Kingdom	Did not run in a stake at age 2 (4 starts)
2010	Super Saver	Won the Champagne (6 starts)
2009	Mine That Bird	Won the Grey Stakes in Canada (8 starts)
2008	Big Brown	Did not run in a stake at age 2 (3 starts)
2007	Street Sense	Won the BC Juvenile at age 2 (7 starts)
2006	Barbaro	Won the Laurel Futurity (5 starts)
2005	Giacomo	Second in the Hollywood Futurity (7starts)
2004	Smarty Jones	Won the Pennsylvania Nursery (6 starts)
2003	Funny Cide	Won the Sleepy Hollow (6 starts)
2002	War Emblem	Was 7 <sup>th</sup> in one stake try (7 starts)
2001	Monarchos	Did not run in a stake race at age 2 (6 starts)
2000	Fusaichi Pegasus	Did not run in a stake race at age 2 (5 starts)
1999	Charismatic	Did not run in a stake race at age 2 (14 starts)
1998	Real Quiet	Won the Hollywood Futurity (12 starts)

Note: 8 of the last 15 Derby winners did not win a stake race at age 2 and five of these winners did not even run in a stake race at age 2.

Since 2-year old form is no longer an important critieria for handicapping the Derby we must look for other clues in order to evaluate 3 year olds competing in the Derby. One of the best indicators to predict Derby success is how fast a colt runs his final furlong or last 3 furlongs of a big 5 prep race. These races are all run at 9 furlongs and are therefore the longest races a horse is asked to run before Derby day.

Although most handicappers dismissed Giacomo from consideration in the 2005

Derby, he did race the final 3 furlongs of the Santa Anita Derby in 37 2/5 seconds which is a very respectable finish and one that qualifies Giacomo on Derby Indicator # 1.

#### DERBY INDICATOR #1- Fast Final Fractions in a Big 5 Prep Race

In order for a horse to qualify on this indicator it must fit the following rules 1) It must achieve a final 3/8 in 37.8 (37 4/5) seconds or less or a final eighth in 12.8 (12 4/5) seconds or less in a big 5 Prep race (Florida Derby, Santa Anita Derby, Wood Memorial, Arkansas Derby or Blue Grass ) 2) it must not have run worse than fourth in its last start 3) it must not have run worse than fourth in the race that qualifies it on final fraction times 4) it must not have lost 2 lengths or more from the six furlong call to the finish of a big 5 prep race unless it shows No loss of ground in another big 5 prep race and 5) races over polytracks were omitted from this study.

Horses qualifying on Derby Indicator #1 have won the roses in 27 of the last 40 years (See Table 5).

Table 5- Derby Winners Who Qualified On Indicator #1 (Winners in Bold Face)

Derby Winner	Race	Final 3/8	Final 1/8
I'll Have Another	Santa Anita Derby	37.4	12.4
Animal Kingdom			
Super Saver	Arkansas Derby		12.8
Mine That Bird			
Big Brown			
Street Sense			
Barbaro	Florida Derby	37.6	
Giacomo	Santa Anita Derby	37.4	12.6
Smarty Jones	Arkansas Derby	37.8	12.6
Funny Cide	<b>Wood Memorial</b>	37.6	
War Emblem			
Monarchos	<b>Wood Memorial</b>	37.4	12.4
Fusaichi Pegasus	<b>Wood Memorial</b>	37.0	12.4
Charismatic			
Real Quiet	Santa Anita Derby	36.6	12.4
Silver Charm			
	Super Saver Mine That Bird Big Brown Street Sense Barbaro Giacomo Smarty Jones Funny Cide War Emblem Monarchos Fusaichi Pegasus Charismatic Real Quiet	I'll Have Another Animal Kingdom Super Saver Mine That Bird Big Brown Street Sense Barbaro Giacomo Smarty Jones Funny Cide War Emblem Monarchos Fusaichi Pegasus Charismatic Real Quiet Santa Anita Derby Santa Anita Derby Wood Memorial Wood Memorial Wood Memorial Santa Anita Derby Santa Anita Derby Santa Anita Derby Santa Memorial Wood Memorial Santa Anita Derby	I'll Have Another Animal Kingdom Super Saver Arkansas Derby Mine That Bird Big Brown Street Sense Barbaro Giacomo Santa Anita Derby

Grindstone	Arkansas Derby		12.8
Thunder Gulch	Blue Grass	36.8	12.4
Go For Gin	<b>Wood Memorial</b>	37.8	12.6
Sea Hero	Blue Grass	37.6	
Lil E Tee	Arkansas Derby	37.8	
Strike the Gold	Blue Grass	35.4	
Unbridled	Blue Grass	36.8	
Sunday Silence	Santa Anita Derby	37.8	
Winning Colors			
Alysheba	Blue Grass	37.4	
Ferdinand			
Spend A Buck			
Swale	Florida Derby	37.4	
Sunny's Halo	Arkansas Derby	37.8	
Gato Del Sol	Blue Grass	36.8	
Pleasant Colony	<b>Wood Memorial</b>	37.8	
Genuine Risk			
Spectacular Bid	Florida Derby	36.8	
Affirmed			
Seattle Slew	<b>Wood Memorial</b>	37.4	
<b>Bold Forbes</b>	<b>Wood Memorial</b>	37.6	
<b>Foolish Pleasure</b>	<b>Wood Memorial</b>	37.8	
Cannonade			
Secretariat	<b>Wood Memorial</b>	37.2	
	Thunder Gulch Go For Gin Sea Hero Lil E Tee Strike the Gold Unbridled Sunday Silence Winning Colors Alysheba Ferdinand Spend A Buck Swale Sunny's Halo Gato Del Sol Pleasant Colony Genuine Risk Spectacular Bid Affirmed Seattle Slew Bold Forbes Foolish Pleasure Cannonade	Thunder Gulch Go For Gin Sea Hero Lil E Tee Strike the Gold Unbridled Sunday Silence Winning Colors Alysheba Ferdinand Spend A Buck Swale Sunny's Halo Gato Del Sol Pleasant Colony Genuine Risk Spectacular Bid Affirmed Seattle Slew Blue Grass Santa Anita Derby Sunday Seattle Grass Florida Derby Wood Memorial Florida Derby Seattle Slew Wood Memorial Wood Memorial Wood Memorial Wood Memorial Wood Memorial Seattle Slew Wood Memorial Wood Memorial Seatnonade	Thunder Gulch Go For Gin Wood Memorial 37.8 Sea Hero Blue Grass 37.6 Lil E Tee Arkansas Derby 37.8 Strike the Gold Blue Grass 35.4 Unbridled Blue Grass 36.8 Sunday Silence Santa Anita Derby 37.8 Winning Colors Alysheba Blue Grass 37.4 Ferdinand Spend A Buck Swale Florida Derby Sunny's Halo Gato Del Sol Blue Grass Blue Grass 37.4 Sunny's Halo Gato Del Sol Blue Grass 36.8 Pleasant Colony Wood Memorial 37.8 Genuine Risk Spectacular Bid Affirmed Spectacular Bid Affirmed Seattle Slew Wood Memorial 37.4 Bold Forbes Wood Memorial 37.6 Foolish Pleasure Wood Memorial 37.8 Cannonade

Note: This indicator has pointed out the Derby winner in 27 of the last 40 years. Since mile times were not published in the Daily Racing Form prior to 1994 the final eighth of a mile time could not be calculated from 1973-1993.

Looking at table 5 one can see that Strike the Gold was the only horse in the last 40 years to race the last 3 furlongs of a big 5 prep race in less than 36 seconds.

Since the percent of starters qualifying on this indicator is 29.1% (198 of 680) and the percent of winners is 67.5% the impact value for this method is a strong **2.32** (67.5% winners divided by 29.1% of the starters).

This indicator has also selected 12 exacts since 1985 which was the first year when exacts wagering was conducted on the run for the roses (See Table 6).

Table 6-Derby Starters That Qualified On Our Final Fraction Indicator (Horses in the Money Are In Bold Face)

Year	Total	Horses That Qualified On Our Final Fraction Indicator
2012	(7)	I'll Have Another WON, Bodemeister (2 <sup>nd</sup> ), Union Rags,
0011	(1)	Creative Cause, Take Charge Indy, El Padrino, and Alpha
2011	(4)	<b>Nehro (2<sup>nd</sup>)</b> , Archarcharch, Comma to the Top,
0040	(0)	and Midnight Interlude
2010	(3)	Super Saver WON, Ice Box (2 <sup>nd</sup> ), and Dublin
2009	(4)	Summer Bird, West Side Bernie, Dunkirk, and Papa Clem
2008	(2)	Z Fortune and Gayego
2007	(2)	Curlin (3 <sup>rd</sup> ) and Tiago
2006	(4)	Barbaro WON, Jazil (4th dead heat), Brother Derek (4th)
		and Point Determined
2005	(5)	Giacomo WON, Afleet Alex (3 <sup>rd</sup> ), Bellamy Road, Wilko,
		and Buzzard's Bay
2004	(8)	Smarty Jones WON and Imperialism (3 <sup>rd</sup> ),
		Pro Prado, Tapit, Castledale, The Cliff's Edge, Borrego, and
		Master David
2003	(2)	Funny Cide WON and Empire Maker (2 <sup>nd</sup> )
2002	(2)	Private Emblem and Lusty Latin
2001	(7)	Monarchos WON, Congaree (3 <sup>rd</sup> ), Point Given,
		Millennium Wind ,Dollar Bill, Jamaican Rum and Balto Star
2000	(10)	Fusaichi Pegasus WON, Aptitude (2nd), Impeachment 3rd
		Wheelaway, Captain Steve, War Chant, Anees, The Deputy,
		Graeme Hall and Deputy Warlock
1999	(6)	Menifee (2 <sup>nd</sup> ), Cat Thief 3 <sup>rd</sup> , Prime Timber (4 <sup>th</sup> ), General
		Challenge, Adonis and Vicar
1998	(7)	Real Quiet WON, Victory Gallop 2 <sup>nd</sup> , Indian Charlie (3 <sup>rd</sup> ),
		Hallory Hunter 4th, Hanuman Highway, Favorite Trick and
		Cape Town
1997	(6)	Captain Bodgit (2 <sup>nd</sup> ), Pulpit (4 <sup>th</sup> ), Crypto Star, Celtic Warrior,
		Jack Flash and Phantom on Tour
1996	(7)	<b>Grindstone WON, Cavonnier (2nd)</b> , Editor's Note, Skip Away,
		In Contention, Alyrob and Halo Sunshine

1995	(9)	<b>Thunder Gulch WON, Tejano Run (2<sup>nd</sup>), Timber Country 3<sup>rd</sup>, Jumron (4<sup>th</sup>)</b> , Mecke, Afternoon Deelites, Suave Prospect, Talkn Man, and Wild Syn
1994	(8)	Go For Gin WON, Strodes Creek (2 <sup>nd</sup> ), Blumin Affair (3 <sup>rd</sup> ), Brocco (4 <sup>th</sup> ), Tabasco Cat, Mahogany Hall, Holy Bull,
1993	(9)	And Valiant Nature <b>Sea Hero WON, Prairie Bayou (2<sup>nd</sup>),</b> Kissin Kris, Dixieland  Heat, Wallenda, Mi Cielo, Storm Tower, Rockamundo and
1992	(6)	Tossofthecoin <b>Lil E Tee WON,</b> Conte Di Savoya, Pine Bluff, West by West, Ecstatic Ride and Pistols and Roses
1991	(5)	<b>Strike the Gold WON, Best Pal (2<sup>nd</sup>)</b> , Fly So Free, Quintana and Lost Mountain
1990	(5)	<b>Unbridled WON, Summer Squall (2<sup>nd</sup>),</b> Video Ranger, Silver Ending and Land Rush
1989	(4)	<b>Sunday Silence WON, Easy Goer (2<sup>nd</sup>),</b> Triple Buck and Western Playboy
1988	(5)	Proper Reality, Seeking the Gold, Private Terms, Sea Trek and Granacus
1987	(6)	<b>Alysheba WON,</b> Cryptoclearance, Gulch, Leo Castelli, No More Flowers and Demons Begone
1986	(3)	<b>Bold Arrangement (2nd),</b> Rampage and Snow Chief
1985		<b>Chief's Crown (3<sup>rd</sup>),</b> Fast Account, Proud Truth, Skywalker,
1903	(8)	Tanks Prospect, Floating Reserve, Rhoman Rule and Eternal Prince
1984	(4)	<b>Swale WON,</b> Pine Circle, Althea, and Silent King
1983	(4)	Sunny's Halo WON, Caveat (3 <sup>rd</sup> ), Marfa and Play Fellow
1982	(2)	Gato Del Sol WON and Casselaria
1981	(1)	Pleasant Colony WON
1980	(2)	Rumbo (2 <sup>nd</sup> ) and Super Moment
1979	(5)	Spectacular Bid WON, Golden Act (3 <sup>rd</sup> ), Flying Paster,
17/7	(0)	Screen King and Shamgo
1978	(2)	Alydar (2 <sup>nd</sup> ) and Believe It (3 <sup>rd</sup> )
1977	(3)	<b>Seattle Slew WON, Sanhedrin (3</b> <sup>rd</sup> <b>),</b> and Get the Axe
1976	(6)	Bold Forbes WON, Honest Pleasure (2 <sup>nd</sup> ), Elocutionist (3 <sup>rd</sup> )
27.0		On the Sly, Inca Roca and Play the Red
1975	(7)	Foolish Pleasure WON, Avatar (2 <sup>nd</sup> ), Diablo (3 <sup>rd</sup> ),
	C- <i>J</i>	Master Derby, Media, Prince Thou Art and Honey Mark
1974	(3)	<b>Agitate (3<sup>rd</sup>),</b> Judger and Rube the Great
1973	(5)	Secretariat WON, Sham (2 <sup>nd</sup> ), Our Native(3 <sup>rd</sup> ),
	Ç- <b>J</b>	Angle Light and Restless Jet
		,

198 of 680 total starters

# Note: This indicator has pointed out 27 of the last 40 Derby winners and has a strong impact value of 2.32.

Further evidence supporting the value of the above indicator is found in its winning ROI. If handicappers were to wager \$2 on each of our 198 qualifiers the total cost would be \$396. Since the total return on our 27 winners comes to \$558 the profit realized is \$162 . A profit of \$162 divided by an investment of \$396 produces an ROI of **41%** (See Table 7).

Table 7- The Parimutuel Prices and ROI of Our 27 Derby Winners That Qualified on Derby Indicator #1

Year	Derby Winner	Parimutuel Price (per \$2 wager)
2012	I'll Have Another	32.60
2010	Super Saver	18.00
2006	Barbaro	14.20
2005	Giacomo	102.60
2004	Smarty Jones	10.20
2003	Funny Cide	27.60
2001	Monarchos	23.00
2000	Fusaichi Pegasus	6.60
1998	Real Quiet	18.80
1996	Grindstone	13.80
1995	Thunder Gulch	51.00
1994	Go For Gin	20.20
1993	Sea Hero	27.80
1992	Lil E Tee	35.60
1991	Strike the Gold	11.60
1990	Unbridled	23.60
1989	Sunday Silence	8.20
1987	Alysheba	18.80
1984	Swale	8.80
1983	Sunny's Halo	7.00
1982	Gato Del Sol	44.40
1981	Pleasant Colony	9.00
1979	Spectacular Bid	3.20

1977	Seattle Slew	3.00
1976	<b>Bold Forbes</b>	8.00
1975	Foolish Pleasure	5.80
1973	Secretariat	5.00

total \$558.00

total investment \$396 (198 qualifiers times \$2 each)

total profit \$162

**ROI** 41% (profit divided by investment)

Note: This indicator has a strong winning **ROI of 41%.** Even if the huge longshot, Giacomo (\$102.60) were omitted from the above study, the ROI would still be positive.

In addition to this indicator's strength in pointing out Derby winners it has also nailed 12 exactas which have a positive ROI. If racing fans were to make \$2 exacta boxes of all our qualifiers each year the total cost would be \$1,676. Since the total return on our 12 winning exactas was \$1,985.40 the profit comes to \$309.40. This yields an **ROI** of **18.5%** (See Table 8a and 8b).

Table 8a- The Cost of Combining All Qualifiers in \$2 Exacta Boxes

	om 1110 0000 01 00	
Year	No. Of Qualifiers	Cost (per \$2 exacta box)
2012	7	84
2011	4	24
2010	3	12
2009	4	24
2008	2	4
2007	2	4
2006	4	24
2005	5	40
2004	8	112
2003	2	4
2002	2	4
2001	7	84
2000	10	180
1999	6	60
1998	7	84
1997	6	60

1996	7	84
1995	9	144
1994	8	112
1993	9	144
1992	6	60
1991	5	40
1990	5	40
1989	4	24
1988	5	40
1987	6	60
1986	3	12
1985	8	112

\$1,676.00 (total investment)

Table 8b- The Parimutuel Prices and ROI of 8 Winning Exacta Combinations

Year	Winning Exacta Combination	Exacta Return (per \$2 wager)
2012	I'll Have Another and Bodemeister	306.60
2010	Super Saver and Ice Box	152.40
2003	Funny Cide and Empire Maker	97.00
2000	Fusaichi Pegasus and Aptitude	66.00
1998	Real Quiet and Victory Gallop	291.80
1996	Grindstone and Cavonnier	61.80
1995	Thunder Gulch and Tejano Run	480.00
1994	Go For Gin and Strodes Creek	184.80
1993	Sea Hero and Prairie Bayou	190.60
1991	Strike the Gold and Best Pal	73.40
1990	Unbridled and Summer Squall	65.80
1989	Sunday Silence and Easy Goer	15.20
	Total Return	\$1,985.40
	Total Investment	\$1,676.00
	Profit	\$309.40
	ROI	18.5% (profit over investment)

Note: Qualifiers on the above indicator have combined for 12 exactas in the last 28 years. Since exacta wagering was not offered on the Derby prior to 1985 the only years used in the above study were 1985-2012.

Additional support for Indicator #1 is found in the Fisher Test For Statistical Signficance. The purpose of this test is to determine if statistics discovered by a handicapping angle could be due to chance alone or if the indicator really carries clout and it is very unlikely that the results of the study are due to coincidence.

In order to perform this test one must go on the internet and type in **Graph Pad Quick Calcs 2 by 2 Contingency Table**. This table with 4 rectangles works as follows: Place the **observed** number of Derby winners that qualified on Indicator #1 in the first rectangle. That number is 27. In the rectangle to the right of the first rectangle we place the **expected** number of Derby winners which is obtained by multiplying .291 (29.1% converted to a decimal), the frequency of Derby starters that qualify on indicator #1 by 40 years. That number comes out to 11.64 and we round it up to 12 and place 12 in the second rectangle. In the rectangle directly below the rectangle that contains 27 we place the number 13 which is obtained by subtracting 27 from 40 and tells us the number of Derby winners observed that did not qualify on this indicator. In the next rectangle we place 28 because .709 times 40 years equals 28.3. That number is rounded down to 28 and tells us the number of horses expected to win the Derby that should not qualify on Indicator #1 based on the percentage of starters that did not qualify. The four rectangles look like this: Observed Winners Qualifying on Indicator #1 27 12 Expected

Observed Winners Not Qualifying on Indicator #1 13 28 Expected

Then all you need to do is click on the word calculate and the Quick Calcs site will compute the p value for this statistic. The p value is a number anywhere from zero to one that indicates the probability that the statistic is due to chance alone. The smaller the p value the more likely the statistic is signficant, the larger the p value the more likely the statistic is just due to pure chance. P values of .05 or lower are generally considered significant. The p value for this statistic is .001 which means that the big differences in the groups above is not likely to be due to chance and therefore one can conclude that horses that qualify on Indicator #1 have a better chance of winning the roses than those that do not qualify.

#### The Raise A Native Sire Line

Native Dancer compiled a phenomenal record of 21 wins in 22 starts and his only loss came in the 1953 Kentucky Derby where he was bumped at the start and lost by a head to longshot winner, Dark Star. Although Native Dancer will be remembered for his extraordinary race record, he will also be etched in our memory for fathering an undefeated son by the name of Raise A Native.

Raise A Native won all 4 of his starts at age 2 and in 1963 he set the 5 ½ furlong track record at Aqueduct in the Great American Stakes while racing the distance in 1:02 3/5 (a record that still stands today). Following that race a bowed tendon forced Raise A Native into retirement.

At stud Raise A Native became one of only three sires in history to father three sons that led the North American sire list: These three were 1)Exclusive Native who led the list in 1978 and 1979, 2)Alydar who was the leader in 1990 and 3)Mr. Prospector who led the list in 1987 and 1988. The Mr. Prospector sire line has become one of the most dominant sire lines in modern times.

Of particular interest to handicappers is the strength of the Raise A Native sire line in the Kentucky Derby where it has generated **18 winners** since Majestic Prince in 1969. Although the Raise A Native sire line is represented by 11 Derby winners that go through Mr. Prospector, there were 7 Derby winners carrying the Raise A Native sire line that had no trace of Mr. Prospector in tail-male (See Table 9).

Table 9- Derby Winners That Carried the Raise A Native Sire Line (Asterisks Indicate By Way Of Mr. Prospector In Tail-Male)

#### Year Derby Winners That Carried the Raise A Native Sire Line

- 2012 I'll Have Another \*
- 2010 Super Saver
- 2009 Mine That Bird \*
- 2007 Street Sense \*
- 2004 Smarty Jones \*
- 2003 Funny Cide \*
- 2002 War Emblem \*
- 2001 Monarchos
- 2000 Fusaichi Pegasus \*
- 1998 Real Quiet \*
- 1996 Grindstone \*
- 1995 Thunder Gulch\*
- 1991 Strike the Gold
- 1990 Unbridled \*
- 1987 Alysheba
- 1980 Genuine Risk
- 1978 Affirmed
- 1969 Majestic Prince

Note: Since 1969 there have been 18 Kentucky Derby winners that carried the Raise A Native Sire Line. Interestingly 11 of the above went through Mr. Prospector in tail-male and 7 of the above did not carry Mr. Prospector on their sire line.

From 1969-2012 there were 36 years in which at least one horse with the Raise A Native sire line raced in the Derby. In those 36 years the total number of Raise A Native sire line runners in the Derby was 155 and the total number of starters was 612. Since the Raise A Native sire line was represented by 18 winners in the above Derbies, the impact value is a strong **1.98** (50% winners divided by 25.3% of the starters). Horses with the Raise A Native sire line are winning the roses 98% more often than statistical expectation or almost twice as often as one would expect.

#### The \$96,092.80 Raise A Native Superfecta Polytrack Curveballs of 2012

Last year the \$2 Derby superfecta of \$96,092.80 was comprised of four horses that carried the Raise A Native sire line: I'll Have Another, Bodemeister, Dullahan and Went the Day Well. Interestingly, this author recommended an exacta box of I'll Have Another and Bodemeister because they were the first and second choices on my checklist and both qualified on my final fraction indicator. Although the exacta came back a healthy \$306.60, the superfecta curve ball of \$96,092.80 was comprised of two Raise A Native sire line runners that did not qualify on my final fraction indicator. The two horses that never competed in a big 5 prep race over a dirt surface were: Dullahan who ran third and Went the Day Well who ran fourth. Both of these runners raced over polytracks in their last start and since they could not qualify on my final fraction indicator I did not include them in my exotic wagers.

There is no way of comparing a polytrack performance to a dirt track because thoroughbreds running on a polytrack are usually held back early and allowed to finish fast (similar to the strategy used in turf races).

If there were no polytracks in existence it is likely that Dullahan and Went the Day Well would have run in a big 5 prep race over a dirt surface and it is possible that both of them might have qualified on my final fraction indicators.

There were 6 Derby runners last year (I'll Have Another, Bodemeister, Dullahan, Went the Day Well, Done Talking and Optimizer) who carried the Raise A Native sire line and 4 of them comprised the huge superfecta. How much does it cost to combine all 6 runners in a \$1 superfecta box? The cost is \$360 and for most people that is way too much hard earned cash to invest on a horse race but for those who did there was a \$48,046.40 prize at the end of that rainbow. Churchill Downs did not offer a 10 cent superfecta on last years Derby. If they did a 10 cent superfecta six horse Raise A Native sire line box would have cost \$36 and would have materialized into \$4,804. Horseplayers need not burn the midnight oil to win big; all they had to do was make a 6 horse superfecta box comprised of the only Raise A Native sire line horses in last year's Derby. For \$360 you get back \$48,046.40. "Woulda, coulda, shoulda but didn't. Oh Well, We can still say, "Hail Raise A Native!"

DERBY INDICATOR #2-The Raise A Native Sire Line Plus A Fast Finish In A Big 5 Prep Race The Raise A Native sire line can stand alone as a handicapping angle for the Derby. However, combining the Raise A Native sire line with all the rules found in Derby indicator #1 turns out to be a phenomenal indicator.

Through history, runners carrying the Raise A Native sire line that also fit all the rules from Derby Indicator #1 have accounted for 12 of the last 27 Derbies in which at least one qualifier started. The impact value for this method is an extraordinary 3.93 (44.4% winners divided by 11.3% of the starters). This means that our qualifiers are winning the Derby almost 4 times more often than statistical expectation.

Further support for the above indicator is seen in a comparison between the impact values for Indicator #1 by itself and the impact value of the Raise A Native sire line plus all the rules in indicator #1. Since Indicator #1 by itself has an impact value of **2.32** and Indicator #2 which combines all the rules of indicator #1 with the presence of the Raise A Native sire line has an impact value of **3.93** one can conclude that it is the Raise A Native sire line that has caused the significant improvement in the impact value which is now approximately 70% stronger than the first indicator.

Indicator #2 is one of my strongest indicators for pointing out Derby
winners. Table 10 below lists all the runners through history that carried the Raise

A Native sire line that also qualified on all the rules found in Derby Indicator #1.

Note that Majestic Prince, who won the Derby in 1969, was the very first runner in the Derby to carry the Raise A Native sire line but he did not qualify on all the rules found in Derby Indicator #1 and therefore does not appear in Table 10.

Table 10- Kentucky Derby Runners Who Carried the Raise A Native Sire Line And Qualified On All The Rules in Derby Indicator #1 (Horses in the Money are in Bold Face)

Year	Qualifiers	No.	Starters
2012	I'll Have Another WON , Bodemeister (2 <sup>nd</sup> )	2	20
2011		0	0
2010	Super Saver WON, Dublin	2	20
2009	Summer Bird, Dunkirk and Papa Clem	3	19
2008		0	0
	Curlin (3 <sup>rd</sup> )	1	20
	Point Determined and Brother Derek and Jazil	3	20
	Afleet Alex (3 <sup>rd</sup> )	1	20
2004	Smarty Jones WON, The Cliff's Edge,		
	and Master David	3	18
	Funny Cide WON and Empire Maker (2 <sup>nd</sup>	2	16
	Private Emblem	1	18
2001	Monarchos WON, Point Given and	_	
	Millennium Wind	3	17
	Fusaichi Pegasus WON ,Anees and Wheelaway	3	19
	D. LO CAMON W. C. H. (2nd)	0	0
1998	Real Quiet WON, Victory Gallop (2 <sup>nd</sup> ),		4.5
	Cape Town and Halory Hunter	4	15
1997	Crypto Star	1	13
	Grindstone WON, Alyrob and Editor's Note	3	19
1995	Thunder Gulch WON, Timber Country (3 <sup>rd</sup> )		
	and Suave Prospect	3	19
	Mahogany Hall	1	14
	Wallenda and Mi Cielo	2	19
	West by West	1	18
	Strike the Gold WON and Quintana	2	16
1990	Unbridled WON	1	15
1989	Easy Goer 2 <sup>nd</sup>	1	15

1969-1972		0	0
1973 Our Native	3rd	1	13
1974-1977		0	0
1978 <b>Alydar 2</b> nd		1	11
1979-1983		0	0
1984 Althea	_	1	20
1985 Eternal Prin	ce and Tanks Prospect	2	13
1986		0	0
1987 Alysheba W	ON, Gulch and Cryptoclearance	3	17
1988 Seeking the	Gold	1	17

Note: This indicator has a very impressive impact value of **3.93**. Since there were no qualifiers on the above indicator in 1969-1972, 1974-1977, 1979-1983, 1986, 1999, 2008, and 2011, those years were not used in the above study.

Runners not qualifying on this indicator have a very poor impact value of .63 (55.6% winners divided by 88.7% of the starters equals an impact value of .63. There is a very large swing from our qualifiers with an impact value of 3.93 to the nonqualifiers who have an impact value of .63.

Added support for this indicator is found in the Fisher test of statistical significance which was utilized for Derby Indicator #1. If a 2 by 2 contingency test is performed the table of data will look like the following:

Observed Winners With The Raise A Native 12 3 Expected Winners
Observed Winners Without Raise A Native 15 24 Expected Winners

When we click on the word calculate the p value comes to .0135 which means the statistic is significant. It is very unlikely that the above indicator was due to just a chance happening. One can conclude that runners with the Raise A Native sire line

that finish fast in a big 5 prep race have a significant edge in the run for the roses.

Further support for the above method is found in its strong ROI. If handicappers were to wager \$2 on each of our 52 qualifiers the total investment would be \$104. Since the return on our 12 winners was \$255.60, the profit is \$151.60 and the ROI is **146%** (See Table 11).

Table 11- The Parimutuel Prices Of Our 12 Winning Qualifiers
And How The ROI Is Calculated

Year	<b>Derby Winner</b>	Parimutuel Price (Per \$2 Wager)
2012	I'll Have Another	32.60
2010	Super Saver	18.00
2004	Smarty Jones	10.20
2003	Funny Cide	27.60
2001	Monarchos	23.00
2000	Fusaichi Pegasus	6.60
1998	Real Quiet	18.80
1996	Grindstone	13.80
1995	Thunder Gulch	51.00
1991	Strike the Gold	11.60
1990	Unbridled	23.60
1987	Alysheba	18.80

<b>Total Return</b>	\$255.60
Investment	<b>\$104.00</b> (52 qualifiers times <b>\$2</b> each)
Profit	<b>\$151.60</b>
ROI	146% (profit divided by investment)

Note: Wagering on horses that carry the Raise A Native sire line that also achieved a final eighth of a mile in 12.8 seconds or less or a final 3/8 in 37.8 or less in a big 5 prep race has proven to be a very successful indicator that generates a very large return on one's investment (ROI=146%). Even if we omitted the longshot winner, Thunder Gulch (\$51) from the above study our ROI would still be positive.

# DERBY INDICATOR # 3-A Fast Finish in a Big 5 Prep Plus A Beyer Figure of 98 or Higher In That Prep

Although my indicator above which combines the Raise A Native sire line with a fast finish in a major prep race is extraordinary for selecting Derby winners the following indicator is superior in selecting Derby winners and exactas.

In order for a runner to qualify on Indicator #3 it must achieve a Beyer figure of 98 or higher in a 9 furlong stake race at age 3 and also fit all the rules listed under Derby Indicator #1.

This indicator has generated 12 Derby winners, 7 exacts and 4 trifects in the last 21 years and has a strong impact value of **2.16** (57.1% winners divided by 26.4% of the starters). See Table 12 for a listing of all runners who qualified on this indicator.

Table 12- Derby Runners Who Achieved a Beyer Figure of 98 or Higher In A 9 Furlong Graded Stake Race and Qualified on All The Rules in Derby Indicator #1 (Horses in the Money are in Bold Face)

Year	Qualifiers	No of Qualifiers
2012	Bodemeister (2 <sup>nd</sup> ) and Alpha	2
2011	Nehro (2 <sup>nd</sup> ) and Archarcharch	2
2010	Super Saver WON, Ice Box (2 <sup>nd</sup> )	2
2009	Summer Bird, Dunkirk, Papa Clem and West Side Bernie	4
2008	Z Fortune and Gayego,	2
2007	Curlin (3 <sup>rd</sup> ) and Tiago	2
2006	<b>Barbaro WON,</b> Point Determined and Brother Derek	3
2005	Giacomo WON, Afleet Alex (3 <sup>rd</sup> ), Bellamy Road and	
	Buzzard's Bay	4
2004	Smarty Jones WON, Imperialism 3 <sup>rd</sup> , Tapit, Borrego,	
	The Cliff's Edge, Castledale, Pro Prado, and Master David	d 8

	Total	101 of 382 Total Starters
	and Pistols and Roses	5
1992	<b>Lil E Tee WON</b> , Conte Di Savoya, Ecstatic Ride, Pine Bluff,	r
	and Rockomundo	5
1993	Prairie Bayou 2 <sup>nd</sup> , Mi Cielo, Kissin Kris, Storm Tower,	
	and Brocco	8
1777	Tabasco Cat, Holy Bull, Mahogany Hall, Valiant Nature	
1994		9
	Afternoon Deelites and Mecke	9
1995	Thunder Gulch WON, Tejano Run (2 <sup>nd</sup> ) Timber Country 3 <sup>rd</sup> , Suave Prospect, Wild Syn, Jumron, Talkin Man,	
1005	Editor's Note, Skip Away, and In Contention Thunder Culch WON, Toigne Bur (2nd) Timber Country	6
1996	, , , , , , , , , , , , , , , , , , , ,	
4006	Celtic Warrior and Jack Flash	6
1997		_
	and Favorite Trick	7
	Halory Hunter, Cape Town, Hanuman Highway,	
1998	Real Quiet WON, Victory Gallop (2 <sup>nd</sup> ), Indian Charlie (3 <sup>rd</sup> )	,
	General Challenge, Prime Timber and Vicar	6
1999	Menifee (2 <sup>nd</sup> ), Cat Thief (3 <sup>rd</sup> ), Adonis,	
	Anees, Wheelaway and Deputy Warlock	10
	The Deputy, War Chant, Graeme Hall, Captain Steve	•
2000		)
	and Dollar Bill	7
2001	Jamaican Rum, Balto Star, Millennium Wind	
2002		1
	Private Emblem	1
2003	Funny Cide WON, Empire Maker (2 <sup>nd</sup> )	2

Note: This indicator has a solid impact value of 2.16

Further support for the above indicator can be found in its ROI. If one were to wager \$2 on each of the 101 qualifiers the total investment would come to \$202. Since the total return on our 12 winners is \$341.60 the profit realized is \$139.60. This translates into an **ROI of 69** %. See Table 13 for a listing of the parimutual

prices of our winners and how the ROI is calculated.

Table 13- Parimutuel Prices Of Our 10 Winning Qualifiers and How The ROI Is Determined

Year	Derby Winner	Parimutuel Price (Per \$2 Wager)
2010	Super Saver	18.00
2006	Barbaro	14.20
2005	Giacomo	102.60
2004	Smarty Jones	10.20
2003	Funny Cide	27.60
2001	Monarchos	23.00
2000	Fusaichi Pegasus	6.60
1998	Real Quiet	18.80
1996	Grindstone	13.80
1995	Thunder Gulch	51.00
1994	Go For Gin	20.20
1992	Lil E Tee	35.60
	Total Return	\$341.60
	Total Investment	\$202.00 (102 qualifiers times \$2 each)
	Profit	\$139.60

Profit \$139.60

ROI 69 % (profit divided by investment)

Note: An ROI of 69% is a strong return on our 12 winning qualifiers. Even if our huge longshot Giacomo (102.60) were omitted from the above study, the ROI would still be positive.

Additional strength of this indicator is found in its positive ROI for exacta combinations. If racing fans were to combine all of our qualifiers in exacta boxes each year the total cost would come to \$1,084 and the total return generated from our 7 winning exactas would be \$1,333.80. The 7 exactas yield a profit of \$249.80 and translates into an **ROI of 23%** (See Table 14a and 14b).

Table 14a- The Total Cost of Exacta Boxes On Our Qualifiers From 1994-2012

Year	No. Of Qualifiers	Total Cost (\$2 Exacta Boxes)
2012	2	4
2011	2	4
2010	2	4
2009	4	24
2008	2	4
2007	2	4
2006	3	12
2005	4	24
2004	8	112
2003	2	4
2002	1	0
2001	7	84
2000	10	180
1999	6	60
1998	7	84
1997	6	60
1996	7	84
1995	9	144
1994	8	112
1993	5	40
1992	5	40
		\$ 1,084

Table 14b-The Parimutuel Prices of Our 7 Winning Exacta Combinations And How the ROI Is Calculated

Year	Exacta Combination	Exacta Price (Per \$2 Exacta Box)
2010	Super Saver and Ice Box	152.40
2003	Funny Cide and Empire Maker	97.00
2000	Fusaichi Pegasus and Aptitude	66.00
1998	Real Quiet and Victory Gallop	291.80
1996	Grindstone and Cavonnier	61.80
1995	Thunder Gulch and Tejano Run	480.00
1994	Go For Gin and Strodes Creek	184.80
	Total Return	\$1,333.80
	Total Investment	\$ 1,084.00
	Profit	\$ 249.80
	ROI	23% (profit divided by investment)

#### **DERBY INDICATOR #4-Female Families**

The first horse to inhabit the earth was Eohippus, a creature that roamed the grasslands 60 million years ago. Within the egg cells of a female Eohippus are molecules called mitochondrial DNA (mt-DNA) which are responsible for producing energy systems in all horses. Mitochondria provide horses with the stamina needed to outlast predators in a long grueling chase when their life is in danger. Therefore, the mt-DNA codes that manufactured the best mitochondria provided horses with an abundance of energy that gave them a better chance to survive. As time passed horses that survived were primarily those that had extraordinary mt-DNA. Since man has been selecting the best female families for breeding stock for hundreds of years, he has unknowingly perpetuated a breed that carries very high functioning mt-DNA.

Mt-DNA can only be transmitted by a female and since it is located in the cytoplasm of her egg cells it does not undergo changes from its original form (excluding mutations which are very rare). Mt-DNA is transmitted unchanged for hundreds of years along the tail-female line. For example, the mt-DNA found in Belmont winner, Easy Goer, is identical to the mt-DNA carried by his fifth dam, La Troienne, who is the taproot mare of family 1x and who probably was the most

15 one can see the tail-female line of Easy Goer and can trace mt-DNA through 5 dams as follows: La Troienne passes her mt-DNA on to her daughter, Big Hurry who in turn passes on this mt-DNA to her daughter, Allemande, who in turn transmits this genetic gem on to her daughter, Marking Time who then gives that mt-DNA to her daughter, Relaxing. Relaxing transmits that mt-DNA to her son, Easy Goer.

Table 15- The Transmission of Mt-DNA Along The Tail-Female Line From La Troienne to Easy Goer By Way Of 5 Mares

	1st gen	2nd gen	3rd gen	4th gen	5th Gen
				Polynesian	Unbreakable
			Mathe Barrer	Polyfiesiafi	Black Polly
			Native Dancer	Catalan	Discovery
		Raise A Native		Geisha	Miyako
		Raise A Native		C A	Teddy
			Balas Vall	Case Ace	Sweetheart
			Raise You	Lada Class	American Flag
	Alydar			Lady Glory	Beloved
	Alydar			Nasrullah	Nearco
			On-and On	INASTUIIAII	Mumtaz Begum
			On-and On	Tuelee	Bull Lea
		Sweet Tooth		Two Lea	Two Bob
		Sweet rootii	Plum Cake	Ponder	Pensive
					Miss Rushin
				Real Delight	Bull Lea
Easy Goer 1986 mt-DNA					Blue Delight
Easy Goer 1986 mt-DNA		Buckpasser	Tom Fool	Menow	Pharamond
					Alcibiades
				Gaga	Bull Dog
					Alpoise
				War Admiral	Man O' War
				War Aumirai	Brushup
			Busanda	Businesslike	Blue Larkspur
	Relevies 1076 ask DNA				La Troienne (1926
	Relaxing 1976 mt-DNA			Market Wise	Brokers Tip
			To Market		On Hand
			TO IVIAI KEL		Johnstown
		Marking Time 1963 mt-DNA		Pretty Does	Creese
		iviai king Time 1905 mt-DNA		Countermoint	Count Fleet
			Allemande 1955 mt-DNA	Counterpoint	Jabot
					Black Toney
				Big Hurry 1936 mt-DNA	La Troienne 1926 mt-Df

Note: The pedigree chart above traces the path of mt-DNA from La Troienne To Easy Goer. Since mt-DNA rarely undergos changes, the mt-DNA in Easy Goer is identical to the mt-DNA in all his dams along his tail female line.

Since the transmission of mt-DNA can only occur by way of the tail-female line, all horses must receive their mt-DNA from their dams. Although Easy Goer carried the same mt-DNA that was found in La Troienne, he could not pass on that mt-DNA to his descendents because mt-DNA is not found in sperm cells. It seems very likely that the mt-DNA that Easy Goer received from his dam, Relaxing was influential in manufacturing mitochondria which gave Easy Goer the energy needed to win one of America's most demanding races, the 1½ mile Belmont stakes of 1989.

Intrigued by the above idea, this author analyzed the female families of Kentucky Derby winners from 1974 to the present in order to determine which families were best at generating winners of this great race. It turns out that several branches of family **1** have accounted for 10 Derby winners since 1974 and in that time frame family **23b** has generated 5 Derby winners. Collectively these two families have generated 15 Derby winners in the last 37 years where at least one qualifier started in the run for the roses. Of great interest to handicappers is the recent power of these two families which have generated the last 4 Derby winners: I'll Have Another (23b), Animal Kingdom (1h), Super Saver (1x) and Mine That Bird (23b).

In 2012 the trifecta combination which paid \$3,065.60 was comprised of I'll

Have Another (family 23b), Bodemeister (family 1n) and Dullahan (family 23b). In fact, collectively these two families comprise 18.4% of the starters (118 of 640) and 40.5% of the Derby winners in the last 37 years in which at least one qualifier started. This translates into a strong impact value of **2.20** (40.5% winners divided by 18.4% of the starters).

# The only critieria for qualifying on this indicator is to be a member of either family 1 or family 23b.

Interestingly, racing fans who would have wagered only on family 1 or family 23b runners could have selected the Derby winner **40.5%** of the time since 1974 without any other handicapping angles (See Table 16).

Table 16-Derby Runners That Belong To Either Family 1 or 23b (Winners Are In Bold Face and Family Numbers in Parenthesis)

Year	Qualifiers	No.
2012	I'll Have Another WON(23b), Bodemeister (2nd) (1n)	
	<b>Dullahan (3<sup>rd</sup>)(23b)</b> , Creative Cause (Fam.1), Sabercat (Fam.1)	
	Prospective (Fam.1)	6
2011	Animal Kingdom WON (1h), Master of Hounds (Fam. 1), and	
	Comma to the Top (Fam. 1)	3
2010	Super Saver WON (1x), Ice Box 2 <sup>nd</sup> (1s), Deans Kitten (fam. 1),	
	Sidney's Candy (Fam.1)	4
2009	Mine That Bird WON (23b), Chocolate Candy (23b), Join In The	
	Dance (fam. 1) and Atomic Rain(fam. 1)	4
2008	Eight Belles 2 <sup>nd</sup> (1x), Z Fortune, Cowboy Cal, Anak Nakal,	
	Recapturetheglory and Tale of Ekati are all in family 1	6
2007	Scat Daddy, Storm in May, Bwana Bull, Great Hunter, Zanjero,	
	Circular Quay and Sedgefield are from family 1 whereas Dominican	
	And Stormello are from family 23b	9
2006	Bluegrass Cat 2 <sup>nd</sup> (1x), Sharp Humor and Brother Derek are	
	both from family 1	3
2005	High Fly and Sort It Out are from family 1	2
2004	Smarty Jones WON(1x), Action this Day (Family 1) and	
	Pollard's Vision 23b	3

2003	Supan Blitz, Ten Cents A Snine, Buddy Gil and	
	Ten Most Wanted are from family 1	4
2002		0
2001	Express Tour and Fifty Stars are both members of family 1	2
2000	Impeachment 3 <sup>rd</sup> (1g), Hals Hope and More than Ready are	
	members of family 1	3
1999	Family 1 members include Valhol, Adonis, Stephen Got Even and	
	Ecton Park, Vicar is 23b	5
1998	Hanuman Highway is from family 1	1
1997	Hello and Shammy Davis are in family 1	2
1996	Grindstone WON(1c), Cavonnier 2nd (1r), Semoran and	
	Matty G were in family 1	4
1995	Knockadoon and Dazzling Falls are both in family 23b	2
1994	Go For Gin WON (1x)	1
1993	Sea Hero WON(1x), Prairie Bayou 2 <sup>nd</sup> (1x), Silver of Silver	
	and Ragtime Rebel are both in family 1	4
1992	Lil E Tee WON (23b)	1
1991	Quintana and Forty Something are in family 1, Alydavid 23b	3
1990	Unbridled WON(1r), Pleasant Tap 3rd (1x), and Video Ranger	
	is a member of family 1	3
1989	Easy Goer 2 <sup>nd</sup> (1x)	1
1988	Winning Colors WON (23b), Forty Niner 2nd (1n), Granacus,	
	Cefis and Intensive Command are in family 1 and Regal Classic is	
	in family 23b	6
1987	Candi's Gold, Masterful Advocate, and War are in family 1	3
1986	Rampage is in family 1	1
1985	Spend A Buck WON (1s), Chief's Crown 3rd (23b) and	
	Fast Account is in family 1	3
1984	<b>Swale WON(1n),</b> Silent King and Bedouin are in family 1 and	
	Secret Prince is in 23b	4
1983	Highland Park, Chumming and Marfa are in family 1	3
1982	Royal Roberto and El Baba are in family 1 and Rockwall is 23b	3
1981	Noble Nashua, Splendid Spruce, Pass the Tab, and Proud Appeal	
	are all members of family 1	4
1980	Genuine Risk WON(1n), Rumbo 2nd (1n), Jacklin Klugman 3rd	
	(1j), Bold N Ruling and Rockhill Native are members of family 1	5
1979	Sir Ivor Again is in family 1	1
1978	Affirmed WON(23b), Believe It 3rd (1n), and Raymond Earl	
	is a member of 23b.	3
1977	Get the Axe and Nostalgia are both in family 1	2
1976		

	Total	118 of 640
	family 1	3
1974	Agitate 3rd (23b), Flip Sal and Confederate Yankee are in	
1975	Master Derby is in family 1	1

Note: This indicator has generated 15 Derby winners in the last 37 years and has a solid impact value of 2.20. Since there were no qualifiers in 1976 and 2002 those years were not included in this study.

The value of the above indicator can also be found in its winning ROI. If one were to wager \$2 on each of the above 118 qualifiers the cost would have been \$236 and since the return on our 15 winners would have been \$390.80 the profit comes to \$154.80 and the ROI is a strong 65.6% (See Table 17).

Table 17- The Parimutuel Prices And ROI of Derby Winners
That Were Members Of Family 1 or 23b

	That were members of raining 1 of 23b			
Year	Derby Winner	Parimutuel Price (per \$2 wager)		
2012	I'LL Have Another	32.60		
2011	Animal Kingdom	43.80		
2010	Super Saver	18.00		
2009	Mine That Bird	103.20		
2004	Smarty Jones	10.20		
1996	Grindstone	13.80		
1994	Go For Gin	20.20		
1993	Sea Hero	27.80		
1992	Lil E Tee	35.60		
1990	Unbridled	23.60		
1988	Winning Colors	8.80		
1985	Spend A Buck	10.20		
1984	Swale	8.80		
1980	Genuine Risk	28.60		
1978	Affirmed	5.60		
	Total R	eturn \$390.80		
	Investn	nent \$236 (118 qualifiers times \$2 each)		
	Profit	\$154.80		
	ROI	65.6% (profit over investment)		

Note: An ROI of 65.6% is a strong return on our 15 winners. Even if longshot winner Mine That Bird were omitted from the above study the ROI would still be positive.

Recent research on mt-DNA has pointed out some errors in certain families which indicate that certain thoroughbreds originally thought to belong to a given family were actually members of another family. One of these errors was found in family 23b. However, since the Derby winners I'll Have Another and Mine That Bird trace to the strong conduit mare, **Broom Flower** one can conclude that both these Derby winners belong to a strong female family (even if its not family 23b). Since Derby winners Lil E Tee and Affirmed both carry the strong conduit mare, **Nature**, one can say that both these Derby winners belong to a strong female family even it its not family 23b.

Some errors were also found in family 1n and since only two Derby winners since 1974 were members of family 1n (Swale and Genuine Risk) an analysis of these two is appropriate. Since Swale, the 1984 Derby winner, traces to the strong conduit mare, **Popinjay**, one can say that Swale belongs to a strong female family even if its not family 1n. The only other Derby winner that was a member of family 1n was Genuine Risk whose conduit mare is Samphire, a thoroughbred that is not considered to be a major conduit mare.

DERBY INDICATOR 5- Daily Racing Form Speed Rating Plus Track Variant Equals 103 Or Higher In A Big 5 Prep in Last Start In order for a runner to fit this indicator it must qualify on the following rules: 1) the entry must have raced **first or second** in a big 5 prep in its last race. 2)the runner must have achieved a **103** or higher figure in that big 5 prep when the Daily Racing Form speed rating is added to the track variant 3) the runner must not have lost 2 lengths or more from the 6 furlong call to the finish of that prep unless it shows no loss of ground in another big 5 prep. 4)Races over polytracks were not used in this study.

Runners that fit this indicator have won 10 of the last 20 Derbies in which there was at least one qualifier. These types make up 19.2% of the starters (70 qualifiers of 364 starters) and 50% of the winners for an impact value of **2.60** (See Table 18).

Table 18-Derby Runners Who Raced First or Second In A Big 5 Prep Race When Their Speed Rating Plus Track Variant In the Racing Form Add Up to 103 Or Higher (Horses in the Money Are In Bold Face)

Year	Derby Qualifiers	No.
2012	<b>Bodemeister (2<sup>nd</sup>)</b> , Alpha and Gemologist	3
2011	Nehro (2 <sup>nd</sup> ) and Archarcharch	2
2010	Super Saver (WON), Ice Box (2 <sup>nd</sup> ), Line of David	3
2009	Papa Clem, Dunkirk and West Side Bernie	3
2008	Big Brown (WON), Gayego, and Z Fortune	3
2007	Curlin (3 <sup>rd</sup> ), Tiago and Scat Daddy	3
2006	Barbaro (WON), Brother Derek, Point Determined, Lawyer Ron	4
2005	Afleet Alex (3 <sup>rd</sup> ) and Bellamy Road	2
2004	Smarty Jones (WON), Lion Heart (2 <sup>nd</sup> ), Tapit, The Cliff's Edge	
	and Borrego	5
2003	Funny Cide (WON), Empire Maker (2 <sup>nd</sup> ), Peace Rules (3 <sup>rd</sup> )	3
2002		0

2001	<b>Monarchos (WON), Congaree (3rd),</b> Point Given, Millennium Wind	
	Jamaican Rum, and Balto Star	
2000	Fusaichi Pegasus (WON), The Deputy, War Chant, More Than	
	Ready, Graeme Hall and High Yield	6
1999	Menifee (2 <sup>nd</sup> ), Cat Thief (3 <sup>rd</sup> ), Valhol, Adonis and General Challeng	ge 5
1998	Indian Charlie 3rd	1
1997	Silver Charm (WON), Free House (3 <sup>rd</sup> ), Crypto Star,	
	Phantom On Tour, and Pulpit	5
1996	Cavonnier (2 <sup>nd</sup> ), Alyrob and Skip Away	3
1995	Talkin Man and Dazzling Falls	2
1994	<b>Go For Gin (WON), Blumin Affair (3</b> rd <b>),</b> Valiant Nature,	
	Tabasco Cat, Holy Bull and Brocco	6
1993	Prairie Bayou (2 <sup>nd</sup> ), Rockamundo and Kissin Kris	3
1992	Lil E Tee (WON) and Pine Bluff	2
	$\overline{70}$	of 364

Note: This indicator has a strong impact value of **2.60** and has pointed out the Derby winner in 10 of the last 20 years in which at least one qualifier started in the run for the roses.

Evidence supporting the value of the above indicator can be found in its positive ROI. If racing fans would have wagered \$2 to win on all our qualifiers the total cost of the investment would be \$140. Since the return on the 10 winning qualifiers is \$172.20 the profit realized would be \$32.20. A profit of \$32.20 divided by an investment of \$140 equals an **ROI of 23%**.

## DERBY INDICATOR #6--Winning a Race At A Mile Or Longer At Age 2 Plus a 92 Or Higher Beyer Figure At Age 2

In order to qualify on this indicator a runner must win a race at a mile or more at age 2 and also achieve a Beyer figure of 92 or higher at age 2.

In the last 21 years 10 Derby winners qualified on this indicator which has a

strong impact value of **1.96** (47.6% winners divided by 24.3% of the starters).

Table 19 lists all the horses that qualified on this indicator since 1992.

Table 19- Derby Runners Who Achieved a 92 or Higher Beyer Figure at Age 2 And Also Won A Race At A Mile Or Longer At That Age (In the Money Finishers Are In Bold Face)

Year	Qualifiers	No.
2012	Hansen, Union Rags and Creative Cause	3
2011	Mucho Macho Man and Comma To The Top	2
2010	Super Saver (WON) and Jackson Bend	2
2009	West Side Bernie	1
2008	Colonel John, Z Humor, Z Fortune, and Cowboy Cal	4
2007	Street Sense (WON), Scat Daddy, Imawildandcrazyguy, Stormello	),
	Any Given Saturday, and Nobiz Like Shobiz	6
2006	Barbaro (WON), Bluegrass Cat (2nd), Lawyer Ron, Bob and John	ı
	Flashy Bull, Private Vow, Sharp Humor, and Brother Derek	8
2005	Giacomo (WON), Wilko, Sun King and Spanish Chestnut	4
2004	Lion Heart (2 <sup>nd</sup> ), Tapit, The Cliff's Edge, Borrego, Birdstone,	
	Read the Footnotes, Friend's Lake and Action This Day	8
2003	Funny Cide (WON), Empire Maker (2nd), Peace Rules (3rd),	
	Lone Star Sky , Buddy Gil and Outta Here	6
2002	Harlan's Holiday, Essence of Dubai and Johannesburg	3
2001	Point Given, AP Valentine, Dollar Bill, and Express Tour	4
2000	Anees and Captain Steve	2
1999	Cat Thief (3 <sup>rd</sup> ), Vicar, Three Ring, Excellent Meeting, Lemon Drop	
	Kid, and Answer Lively	6
1998	Real Quiet (WON), Artax, Old Trieste, Halory Hunter,	
	Favorite Trick and Cape Town	6
1997	Captain Bodgit (2 <sup>nd</sup> ), Free House (3 <sup>rd</sup> ), Phantom On Tour,	
	and Concerto	4
1996	Editor's Note, Matty G, Unbridled's Song, Skip Away, In Contention	l,
	and Honour and Glory	6
1995	Thunder Gulch (WON), Timber Country (3 <sup>rd</sup> ), Serena's Song,	
	Eltish, Jumron and Afternoon Deelites	6
1994	Go For Gin (WON), Brocco, Holy Bull, and Valiant Nature	4
1993	Sea Hero (WON), Silver of Silver and Corby	3
1992	Lil E Tee (WON), Dance Floor (3 <sup>rd</sup> ), Pistols and Roses, Arazi,	
	and Pine Bluff	5
	93	of 382

Evidence supporting the above indicator is found in its positive ROI. If

handicappers were to wager \$2 to win on all the qualifiers above the total investment would be \$186. Since the return on our 10 winning qualifiers is \$327.60 the profit realized comes to \$141.60. A profit of \$141.60 divided by an investment of \$186 yields an ROI of **76%**. Even if longshot winner Giacomo were omitted from the above study our ROI would still be positive.

### **Buckpasser In The X Passing Position**

Although Buckpasser was a phenomenal distance runner who won 25 of his 31 lifetime starts and was named Horse of the Year in 1966, he will also be remembered as a fabulous sire of fillies. The progeny of Buckpasser's daughters consistently won huge purses which allowed Buckpasser to become the leading broodmare sire in North America in 1983,1984, 1988 and 1989. Buckpasser fathered 148 dams who generated 142 stakes winners from 1,367 foals (10.4% stakes winners from his daughters foals). These stakes winners gave Buckpasser an extraordinary average earnings index of **3.23** as a broodmare sire.

When a stallion becomes a leading broodmare sire for four years, the evidence is strong that he is transmitting a superlative X chromosome to all his daughters.

According to Marianna Haun who wrote two important books regarding the X chromosome and large heart trait in thoroughbreds Buckpasser carried War

Admiral's large heart. Haun proposed the theory that the large heart trait in racehorses is carried on the X chromosome and that Buckpasser got his large heart X chromosome from his dam, Busanda who received that large hearted X from her father, Triple Crown winner, War Admiral.

Since a stallion always transmits his X chromosome to all his daughters and none of his sons it is probably this X that marks Buckpasser's spot among the all-time great broodmare sires.

Intrigued by the above theory I researched the last 40 Kentucky Derby fields to see if the presence of Buckpasser in the X passing position could be used as a critierion for selecting Derby winners.

The indicator that follows consists of all the runners who ever raced in the Derby that carried Buckpasser in the X passing position and also qualified on all the rules found in Derby Indicator #1. The first runner who qualified on this indicator was Believe It who ran third in the 1978 Kentucky Derby.

DERBY INDICATOR #7—In order to qualify on this indicator a runner must carry Buckpasser in the X passing position and fit all the rules found in Derby Indicator #1.

Since 1978 there have been 4 winners of the Derby that fit the above critieria and although that is a small number, one must look at the extraordinary impact value generated by this indicator. Since qualifiers comprised only 8% of the starters over a 17 year period where at least one qualifier started in the Derby and 4 Derby

2.94 (23.5% winners divided by 8% of the starters). Horses who qualify on our Buckpasser indicator are winning the roses almost 3 times more often than statistical expectation. Furthermore since 1978 there have been 8 Derby place finishers that qualified on this indicator which has a fantastic place impact value of 5.88 (47% place finishers divided by 8% of the starters). Qualifiers on this indicator are running second in the Derby almost 6 times more often than expected. That's an extraordinary statistic that should not be overlooked. Table 20 which follows contains a listing of all the horses who ever started in the Kentucky Derby that carried Buckpasser in the X passing position and also qualified on all the rules found in Derby Indicator #1.

Table 20- Derby Runners Who Carried Buckpasser In The X Passing Position And Also Qualified On All The Rules Found In Derby Indicator #1 (Horses in the Money Are In Bold Face)

Year	Qualifiers	Number	<b>Total Starters</b>
2012	Bodemeister (2 <sup>nd</sup> )	1	20
2011	Archarcharch and Comma To The Top	2	19
2010	Super Saver (WON)	1	20
2009	Summer Bird, West Side Bernie, Dunkirk	3	19
2008			
2007			
2006			
2005	Bellamy Road	1	20
2004	Tapit	1	18
2003	Funny Cide (WON), Empire Maker (2nd)	2	16
2002			
2001			
2000	Aptitude (2 <sup>nd</sup> )	1	19

	24	300
Believe It 3 <sup>rd</sup>	1	11
Seeking the Gold	1	17
Easy Goer (2 <sup>nd</sup> ) and Triple Buck	2	15
Unbridled (WON), Summer Squall (2nd)	2	15
Prairie Bayou (2 <sup>nd</sup> )	1	19
Tejano Run (2 <sup>nd</sup> ) and Talkin Man	2	19
Cavonnier (2 <sup>nd</sup> )	1	19
Real Quiet (WON)	1	15
Vicar	1	19
	Real Quiet (WON) Cavonnier (2 <sup>nd</sup> ) Tejano Run (2 <sup>nd</sup> ) and Talkin Man Prairie Bayou (2 <sup>nd</sup> ) Unbridled (WON), Summer Squall (2 <sup>nd</sup> ) Easy Goer (2 <sup>nd</sup> ) and Triple Buck Seeking the Gold	Real Quiet (WON)       1

Note: There were 4 Derby winners and 8 place finishers that fit this indicator that has an extraordinary winning impact value of **2.94** and a fantastic place impact value of **5.88**. Since there were no qualifiers in the years 1979-1987, 1991, 1992, 1994, 1997, 2001, 2002, and from 2006-2008 those years were not part of the above study.

Added support for the power of the above method is found in the finish positions of our 24 qualifiers. Its not often that one can find an indicator that gets 12 of 24 or 50% of its qualifiers finishing first or second. Although the above method can only be used in certain years when at least one qualifier is running in the Derby, it has proven to be a golden nugget for handicapping the run for the roses.

The value of our Buckpasser indicator is also seen in its positive ROI. If one were to wager \$2 on each of our 24 qualifiers the total cost comes to \$48. Since the 4 winners returned \$88 the ROI is a strong **83%** (See Table 21).

Table 21- The Parimutuel Prices and ROI of Our 4 Derby Qualifiers
That Carried Buckpasser In The X Passing Position and
And Also Fit All The Rules Found In Derby Indicator #1

Year	<b>Derby Winners That Qualifie</b>	d Parin	nutuel Price (Per \$2 Wager)
2010	Super Saver		18.00
2003	Funny Cide		27.60
1998	Real Quiet		18.80
1990	Unbridled		23.60
	Tot	al Return	88.00
	Total Inve	estment	48.00 (24 qualifiers at \$2 each)
	Total F	Profit	40.00
	RC	I	83% (Profit divided by investment)

Note: An ROI of 83% is a strong return for the above indicator that had only 24 qualifiers in 17 years.

Why has the presence of Buckpasser in the X passing position been successful in pointing out Derby winners? The most common answer to this question is found in the X factor theory proposed by Haun. She claims that the gene for the large heart is passed along by way of the X chromosome line which she refers to as the heartline. Horses that carry a large heart have an advantage (particularly in long distance races like those in the Triple Crown) over those that do not. A large heart pumps more blood to the muscles which certainly gives a runner the stamina needed to prevail in a long grueling stretch run of a major Triple Crown event.

Another explanation for the success of Buckpasser in the X passing position might be the presence of other extraordinary genes (other than the large heart trait) that may be carried on Buckpasser's X chromosome. Buckpasser has been identified as a Classic chef-de-race which means he bestows stamina to his foals. It is possible that the stamina being passed along to his foals may be an outcome of genetic traits that reside on Buckpasser's extraordinary X chromosome.

Even if Haun's X factor theory is eventually proven wrong my Buckpasser

indicator will still be valuable. Other traits on the all important X chromosome could certainly be contributing to Buckpasser's success. It doesn't matter if it is the heart gene or genes for some other organ or some other characteristics that are found on the X chromosome that are responsible for the clear-cut advantage of having Buckpasser in the X passing position. The bottom line is the same: Having Buckpasser in the X passing position is an advantage for a runner competing in the Derby.

Statisticians might say that the above indicator represents a sample size that is too small. However, since similar Buckpasser indicators come up with very high impact values and strong ROIs in the Preakness and Belmont Stakes it is not likely to be due to chance alone or a mere coincidence.

**Table 22- How Can Racing Fans Determine If A Horse Carries Buckpasser In The X Passing Position?** 

	1st gen	2nd gen	3rd gen	4th gen	5th Gen
			Majestic Light -		Raise A Native
				Majestic Prince	Gay Hostess
				Irradiate	Ribot
				irradiate	High Voltage
		Wavering Monarch		Bushassas	Tom Fool
			Uncommitted	Buckpasser	Busanda
			Uncommitted	Lady Do Cood	Better Self
	Marias Mon			Lady Be Good	Past Eight
	Marias Mon				Grey Sovereign
			6	Fortino	Ranavalo
			Caro	Chambord	Chamossaire
		Carlotta Maria		Chambord	Life Hill
		Cariotta Maria		Maralina	Nasram
			Water Malone	Naskra -	Iskra
				Gray Matter	Stratmat
					Songcraft
uper Saver XY		AP Indy XY	Seattle Slew	Bold Reasoning	Boldnesian
					Reason To Earn
				My Charmer	Poker
					Fair Charmer
					Bold Ruler XY
			M l d C	Secretariat XY	Somethingroyal XX
			Weekend Surprise XX	Lassie Dear XX	Buckpasser XY
	C			Lassie Dear XX	Gay Missile XX
	Supercharger XX			Daire A Nation	Native Dancer
			Mr. Draspastor	Raise A Native	Raise You
			Mr. Prospector	Cold Diagos	Nashua
		Cat I walnu WY		Gold Digger	Sequence
		Get Lucky XX Dand		Na sthass Danas	Nearctic
			Daniel Number	Northern Dancer	Natalma
			Dance Number	Numbered Account	Buckpasser
					Intriguing

How can racing fans determine if a thoroughbred carries Buckpasser in the X passing position? The following analysis will trace this process in the 2010 Derby winner, Super Saver. **Table 22** illustrates the 5 generation pedigree of Super Saver.

Buckpasser appears on the dam side of Super Saver's pedigree in the 5<sup>th</sup> generation as the sire of Lassie Dear. Buckpasser transmits his X chromosome to his daughter, Lassie Dear because a sire always transmits his X chromosome to all his daughters and none of his sons. Lassie Dear carries the same X chromosome that was present in Buckpasser. However, because of recombination (crossing over of genes from one X to the other in females) there is no way of knowing the combination of genes that Lassie Dear's daughter, Weekend Surprise receives. Suffice it to say that Weekend Surprise receives an X chromosome from Lassie Dear that is a mix of genes that were present in Lassie Dear's two X chromosomes, one of which she received from her sire, Buckpasser and the other from her dam, Gay Missile. Similarly, Weekend Surprise sends an X chromosome to her son, A.P. Indy. That X is a mixture of genes from her sire's X and her dam's X (Secretariat and Lassie Dear). AP Indy transmits his X chromosome to his daughter, Supercharger. Supercharger transmits one of her X chromosomes to her son, Super Saver. That X is a mix of genes from the X chromosomes of her sire, AP Indy, and her dam, Get Lucky.

The percentage of genes that Buckpasser transmits along his X chromosome to Super Saver can be calculated as follows: Buckpasser transmits his X chromosome to Lassie Dear (100%). From Lassie Dear to Weekend Surprise the percentage is theoretically around 50% of Buckpasser's X. From Weekend Surprise to A.P. Indy the percentage is around 25% of Buckpasser's X. From A.P.Indy to Supercharger the percentage is still 25% because a sire's X does not undergo recombination. From Supercharger to Super Saver the percentage of Buckpasser's X is once again reduced

approximately in half to 12.5%. One can say that Super Saver on the average will carry an X chromosome that has around 12.5% of the genes that were present on Buckpasser's X chromosome.

If one looks at the top part of Super Saver's pedigree you can see Buckpasser appears in the fourth generation as the sire of Uncommitted. Interestingly, in this position he cannot transmit his X chromosome to Super Saver. In fact, the top portion of the pedigree which terminates in Super Saver's sire, Marias Mon can never transmit an X chromosome to a son (Super Saver). That part of the pedigree can only transmit one member of the 32<sup>nd</sup> pair of chromosomes to the horse in question and that is the Y chromosome. The reason for this is as follows:

Buckpasser gives his X chromosome to his daughter, Uncommitted. Uncommitted transmits one of her Xs to her son, Wavering Monarch. Wavering Monarch transmits his Y chromosome to his son Marias Mon and Marias Mon transmits a Y chromosome to Super Saver. (A sire always transmits his Y chromosome to all his sons) (See Table 22).

#### **Conduit Mares In Tail Female**

William Lathrop (In his book, Modern Conduit Mares) defines a conduit mare as a horse's mare in tail- female that was born closest to 1900 but not before that time.

Many of the conduit mares identified by Lathrop are among the most influential matriarchs in America.

Since mt-DNA, the genes that manufacture energy units called mitochondria are transmitted along the tail-female line, this author researched the conduit mares listed in Lathrop's book to see which mares tail-female line generated at least one winner of a Triple Crown race and at least one more thoroughbred that was particularly noteworthy (See Table 23)

Table 23- Conduit Mares Whose Tail-Female Line Are Represented By At Least One Winner of a Triple Crown race and at Least One Other Noteworthy Thoroughbred (D=Derby Winner) (B= Belmont Winner) and (P=Preakness Winner)

Conduit Mare	Noteworthy Thoroughbreds That Carry These Strong Conduit Mares In Tail-Female
Affection	Coastal (B) and Crème Fraiche (B), Levee, Shuvee
Altoviscar	Shackleford (P), Round Table, and Go For Wand
Americus Girl	Risen Star (B), Mahmoud, and Nasrullah
Artless	Monarchos (D) and the great Zenyatta and Dynaformer
Audience	Venetian Way (D), Timber Country (P) and Fall Aspen
Ballancoire	Determine (D), Equipoise, Intentionally and Seabiscuit
Bill and Coo	Secretariat (D, P, and B), Elocutionist (P), Somethingroyal
Broom Flower	Mine That Bird (D) and I'll Have Another (D and P)
Cherokee Rose	Fusaichi Pegasus (D), Pine Bluff (P) and Jaipur (B) and Ruffian
Chit Chat	Grindstone (D), Arts and Letters (B), Pass Catcher (B)
Countess Wanda	Swaps (D), Iron Liege (D) and Althea
Court Dress	Charismatic (D and P) and Go and Go (B), Deputy Minister
Dazzling	Northern Dancer (D and P), Spectacular Bid (D and P),
	Cannonade (D), Halo, Tosmah, and Danehill
Doxa	Super Saver (D), Smarty Jones (D and P), Go For Gin (D)
	Sea Hero (D), Spend A Buck (D), Prairie Bayou (P),
	Personality (P) and Easy Goer (B)
Epitaph	Colonial Affair (B) and Union Rags (B)
Fine Feathers	Barbaro (D), Chateaugay (D), Little Current (P and B)
Fricassee	Unbridled (D) and Dr. Fager
Frizette	Seattle Slew (D, P, and B), Ferdinand (D), Mr. Prospector
Glacier	Citation (D, P, and B) and Davona Dale

Grace Commoner Forward Pass (D), Codex (P), Alydar and Grand Slam

Herself Tom Rolfe (P), Bee Bee Bee (P) and Ack Ack La Venganza Bold Forbes (D and B), Bet Twice (B) and Forego

Lygie Danzig Connection (B), Decidedly (D) and Omaha (D,P, B)

Macaroon Alysheba (D and P) and Kelso

Marchetta Celtic Ash (B), My Babu and Turn-To

Nature Affirmed (D,P and B), Lil E Tee (D) and Ghostzapper Ophirdale Conquistador Cielo (B) and Whirlaway (D, P, B) Funny Cide (D and P), Empire Maker (B) and Alibhai

Plucky Liege Commendable (B), Fappiano, Quiet American, Sir Gallahad III

Popinjay Swale (D and B) and Alphabet Soup

Query Hail To All (B) and Sword Dancer (P and B)

Rambling Rose Lemon Drop Kid (B), AP Indy (B) and Summer Squall (P) Remembrance Avatar (B), Afleet Alex (P and B) and Run the Gauntlet

Renaissance Touch Gold (B) and With Approval

Sanctuary Tim Tam (D and P), Winning Colors (D), Chris Evert Simons Shoes Big Brown (D and P), Nuryey, and Sadler's Wells

Solirena Deputed Testimony (P), Tanks Prospect (P) and In Reality Tribonyx Majestic Prince (D and P), Real Quiet (D and P), Graustark

Torpenhow Jazil (B), Rags to Riches (B) and Nijinsky II

Note: Doxa is the best of the conduit mares since her tail-female line is represented by 8 different winners of at least one Triple Crown race.

Since mt-DNA supplies a horse with the energy units that are so vital for a runner competing in Triple Crown races which are 1 and 3/16 miles or longer, it seems logical to conclude that the winners of these events who carried the above strong conduit mares in tail female had an advantage over their competition. Interestingly, 27 Derby winners since 1973 carried one of the above 39 conduit mares in tail-female (See Table 24).

Table 24- Conduit Mares Carried In Tail-Female By the Last 40 Derby Winners (Asterisks Mean the Derby Winner's Conduit Mare Is Not On Our List Of Special Conduits in Table 23)

Vear	Derby Winner	Conduit Mare In Tail-Female
	I'll Have Another	Broom Flower
	Animal Kingdom	Ardentrive*
	Super Saver	Doxa
	Mine That Bird	Broom Flower
	Big Brown	Simons Shoes
	Street Sense	Face A Main*
	Barbaro	Fine Feathers
	Giacomo	Dons Birthday*
	Smarty Jones	Doxa
2003		Petit Bleu
	War Emblem	High Flyer *
	Monarchos	Artless
	Fusaichi Pegasus	Cherokee Rose
	Charismatic	Court Dress
	Real Quiet	Tribonyx
	Silver Charm	Investigation*
	Grindstone	Chit Chat
1995	Thunder Gulch	Lady Daisy Cutter*
	Go For Gin	Doxa
1993	Sea Hero	Doxa
	Lil E Tee	Nature
1991	Strike the Gold	Noreen Agnes*
1990	Unbridled	Fricassee
1989	Sunday Silence	La Baroness Fleche*
	Winning Colors	Sanctuary
1987	Alysheba	Macaroon
1986	Ferdinand	Frizette
1985	Spend A Buck	Doxa
1984	Swale	Popinjay
1983	Sunny's Halo	Bonnie Star*
1982	Gato Del Sol	Petticoat*
1981	Pleasant Colony	Gitanella*
1980	Genuine Risk	Samphire*
1979	Spectacular Bid	Dazzling
1978	Affirmed	Nature
1977	Seattle Slew	Frizette
	Bold Forbes	La Venganza
1975		Miranda*
	Cannonade	Dazzling
1973	Secretariat	Bill And Coo

Note: 27 of the last 40 Derby winners trace in tail-female to one of the conduit mares found in Table 23.

Added support for the value of our 39 conduit mares is also found in the Preakness and Belmont Stakes. 25 of the last 40 winners of the Preakness and the Belmont carried one of these special conduit mares in tail-female.

When a runner carries one of our special conduit mares in tail-female and also qualifies on all the rules in Derby Indicator #1 it has a significant edge over its competitors.

#### DERBY INDICATOR #8- Conduit Mares In Tail Female Plus A Fast Final Fraction

In order for a runner to qualify on this indicator it must carry one of our special conduit mares in tail-female (found in table 23) and also fit all the rules stated in Derby Indicator #1.

Steeds who qualified on this indicator have accounted for 19 Derby winners in the last 34 years when at least one qualifier started in the run for the roses. These runners comprised 55.9% of the winners from only 13% of the starters and have a fantastic winning impact value of **4.30**. Furthermore this indicator has generated 7 Derby exactas in the 23 years where 2 or more runners qualified (See Table 25).

Table 25-Derby Runners That Carried One of Our Special Conduit Mares In Tail-Female And Also Qualified on All The Rules in Derby Indicator #1 (Horses in the Money Are In Bold Face)

Year	Qualifiers	No.	<b>Total Starter</b>
2012	I'll Have Another WON and Bodemeister 2nd		
	Union Rags	3	20
2011	<b>Nehro 2<sup>nd</sup>, Comma to the Top and Midnight Interlude</b>	3	19
2010	Super Saver WON, Ice Box 2 <sup>nd</sup> and Line of David	3	20
2009		0	0
2008	Gayego	1	20

2007		0	0
	Barbaro WON and Jazil	2	20
2005	Afleet Alex 3 <sup>rd</sup> and Bellamy Road	2	20
2004	Smarty Jones WON and Borrego	2	18
2003	Funny Cide WON and Empire Maker 2nd	2	16
2002		0	0
2001	Monarchos WON and Congaree 3rd		
	and Millennium Wind	3	17
2000	Fusaichi Pegasus WON, Aptitude 2nd and Anees	3	19
1999	Menifee 2 <sup>nd</sup>	1	19
1998	Real Quiet WON and Indian Charlie 2nd	2	15
1997	Pulpit and Phantom on Tour	2	13
	<b>Grindstone WON, Cavonnier 2<sup>nd</sup>,</b> and Alyrob	3	19
1995	Timber Country 3 <sup>rd</sup>	1	19
1994	Go For Gin WON, Strodes Creek 3rd and		
	Mahogany Hall	3	14
1993	Sea Hero WON, Prairie Bayou 2nd, Dixieland Heat,		
	Mi Cielo, Tossofthecoin, and Kissin Kris	6	19
1992	Lil E Tee WON, Conte Di Savoya and Pine Bluff	3	18
1991	Quintana	1	16
1990	Unbridled WON, Summer Squall 2 <sup>nd</sup> ,		
	Silver Endng and Video Ranger	4	15
1989	Easy Goer 2 <sup>nd</sup>	1	15
1988	Private Terms and Brian's Time	2	17
1987	Alysheba WON and Demons Begone	2	17
1986		0	0
1985	Chief's Crown 3 <sup>rd</sup> , Skywalker, Rhoman Rule and		
	Tanks Prospect	4	13
1984	Swale WON, Pine Circle and Althea	3	20
1983		0	0
1982		0	0
1981		0	0
		0	0
	Spectacular Bid WON	1	10
	Alydar (2 <sup>nd</sup> )	1	11
	Seattle Slew WON	1	15
	Bold Forbes WON and Elocutionist (3 <sup>rd</sup> )	2	9
	<b>Avatar (2<sup>nd</sup>)</b> and Prince Thou Art	2	15
	Agitate (3 <sup>rd</sup> ) and Judger	2	23
1973	Secretariat WON	1	13
1972		0	0
	Twist the Axe	1	20
1970	Personality	1	17

Note: This indicator has a very powerful impact value of 4.30. Since there were no qualifiers in 1972, 1980-1983, 1986, 2002, 2007 and 2009 those years were not used in this study.

The value of the above indicator is also found in its strong ROI. If handicappers were to wager \$2 to win on each of our 74 qualifiers the total return would have been \$318.80 from an investment of \$148. Since the profit comes to \$170.80 the ROI is a strong 115% (See Table 26).

Table 26- The Parimutuel Prices Of Our 14 Derby Winners And How The ROI Is Calculated

Year	Derby Winner	Parimutuel Price (per \$2 wager)
2012	I'll Have Another	32.60
2010	Super Saver	18.00
2006	Barbaro	14.20
2004	Smarty Jones	10.20
2003	Funny Cide	27.60
2001	Monarchos	23.00
2000	Fusaichi Pegasus	6.60
1998	Real Quiet	18.80
1996	Grindstone	13.80
1994	Go For Gin	20.20
1993	Sea Hero	27.80
1992	Lil E Tee	35.60
1990	Unbridled	23.60
1987	Alysheba	18.80
1984	Swale	8.80
1979	Spectacular Bid	3.20
1977	Seattle Slew	3.00
1976	Bold Forbes	8.00
1973	Secretariat	5.00
	Total Return	\$318.80
	Total Investment	\$148.00 (74 qualifiers times \$2 each)
	Profit	\$170.80
	ROI	<b>115%</b> (profit divided by investment)

Note: An **ROI of 115%** is a very impressive return on our 19 winners.

Added support for the above indicator is found in its ability to hit 8 exactas in the last 19 years where there were two or more qualifiers. If our qualifiers were combined in \$2 exacta boxes the total cost comes to \$260 and the return on our 8 winning exactas is \$1,125. Since the profit is \$865 the ROI is an astounding 333% (See Table 27).

Table 27-The Prices Paid By Our 8 Winning Exacta
Combinations And How the ROL is Calculated

	Combinations And now the ROLIS Calculated					
Year	Exacta Combination	Parimutuel Price (Per \$2)				
2012	I'll Have Another and Bodemeister	306.60				
2010	Super Saver and Ice Box	152.40				
2003	Funny Cide and Empire Maker	97.00				
2000	Fusaichi Pegasus and Aptitude	66.00				
1996	Grindstone and Cavonnier	61.80				
1994	Go For Gin and Strodes Creek	184.80				
1993	Sea Hero and Prairie Bayou	190.60				
1990	Unbridled and Summer Squall	65.80				
	<u> </u>					
	Total Return	\$1,125.00				
	Total Investment	\$ 260.00				
	Profit	\$ 865.00				
	ROI	333%				

Note: An ROI of **333%** is an extraordinary return on our 8 winning exactas. Even if the large exacta of \$306.60 in 2012 were omitted from the above study the ROI would still be positive.

Additional evidence to back up the value of the above indicator is found in the Fisher Test of Statistical Significance. When the Fisher 2 by 2 contigency table is used we get a very small p value of **.0002** which means the above statistics obtained

in our conduit mare indicator are extremely statistically significant. Runners who carry one of our special conduit mares in tail-female who also qualify on our fast final fraction indicator have a definite edge in the run for the roses. To find out how to calculate the p value see the Fisher test of statistical significance which appears in the discussion of Derby Indicator #1.

### **Derby Checklists**

The above 8 indicators will be used in a Derby checklist in which each runner will be given points based on the **impact values** that the indicators generated. For example, my Raise A Native plus final fraction indicator has an impact value of 3.93 and therefore this indicator gets 4 points (3.93 rounded off to the nearest whole number is 4). The following describes the 8 indicators and the rules that apply to them:

#### **Codes For the 8 Indicators in My Derby Checklist**

**(DERBY INDICATOR #1)** 37.8= Give 2 points to a horse that fits the following rules: 1) It must achieve a final 3/8 of a mile in 37 4/5 seconds or less or a final 1/8 in 12 4/5 or less in a big 5 prep race 2) it must not run worse than 4<sup>th</sup> in its last start. 3) The runner must not have been worse than 4<sup>th</sup> in the race that qualifies it on final fraction time. 4) The horse must not have lost 2 lengths or more from the 6 furlong call to the finish of a big 5 prep race unless it shows no loss of ground in another big 5 prep. 5) Races over polytracks were omitted from this study.

**(DERBY INDICATOR #2) RF=** Give 4 points to all horses that carry the **Raise A Native sire line** and also qualify on the rules stated in Derby Indicator #1 above.

**(DERBY INDICATOR #3) 98=** Give 2 points to all horses that achieved a **98** or higher Beyer figure in a 9 furlong stake at age 3 and also fit all the rules found in Derby Indicator #1.

**(DERBY INDICATOR #4) 23b=** Give 2 points to all horses who are members of family **1 or 23 b**.

**(DERBY INDICATOR #5) SR=** Give 3 points to all runners who fit the following: 1) The runner must be **first or second** in a big 5 prep race and achieve a Daily Racing Form speed rating plus track variant of **103 or higher** in that big 5 prep. 2) The runner must show no loss of ground from the 6 furlong call to the finish of a big 5 prep race unless it shows no loss of ground in another big 5 prep race. 3) Races over polytracks were not considered part of this study.

**(DERBY INDICATOR #6) 92=** Give 2 points to all runners that **won at a mile** or **more** at **age 2** and also achieved a Beyer figure of **92 or higher** at that age.

**(DERBY INDICATOR #7) BK=** Give 3 points to all runners that carry **Buckpasser in the X passing position** and also qualify on all the rules found in Derby Indicator #1.

**(DERBY INDICATOR #8) CM=** Give 4 points to all runners that carry one of our **special conduit mares** in tail-female and also qualify on all the rules found in Derby Indicator #1

## Tables 28, 29 and 30 Checklists For The Kentucky Derbies of 2010, 2011 and 2012

The following three checklists illustrate how my 8 indicators worked in the last 3 runnings of the Kentucky Derby (2010, 2011 and 2012).

Derby Checklsit 2010	37.8	RF	98	23b	SR	92	BK	CM	Total
Super Saver	2	4	2	2	3	2	3	4	22
Ice Box	2	0	2	2	3	0	0	4	13
Dublin	2	4	0	0	0	0	0	0	6
Line of David	0	0	0	0	3	0	0	0	3
Jackson Bend	0	0	0	0	0	2	0	0	2
Sidney's Candy	0	0	0	2	0	0	0	0	2
Dean's Kitten	0	0	0	2	0	0	0	0	2
Paddy O'Prado	0	0	0	0	0	0	0	0	0
Awesome Act	0	0	0	0	0	0	0	0	0
Homeboykris	0	0	0	0	0	0	0	0	0
Backtalk	0	0	0	0	0	0	0	0	0
Make Music For Me	0	0	0	0	0	0	0	0	0
Devil May Care	0	0	0	0	0	0	0	0	0
Mission Impazible	0	0	0	0	0	0	0	0	0
Stately Victor	0	0	0	0	0	0	0	0	0
Conveyance	0	0	0	0	0	0	0	0	0
American Lion	0	0	0	0	0	0	0	0	0
Lookin At Lucky	0	0	0	0	0	0	0	0	0
Noble's Promise	0	0	0	0	0	0	0	0	0
Discreetly Mine	0	0	0	0	0	0	0	0	0

Derby Checklist 2011	37.8	RF	98	23b	SR	92	ВК	CM	Total
Comma To The Top	2	0	0	2	0	2	3	4	13
Nehro	2	0	2	0	3	0	0	4	11
Archarcharch	2	0	2	0	3	0	3	0	10
Midnight Interlude	2	0	0	0	0	0	0	4	6
Animal Kingdom	0	0	0	2	0	0	0	0	2
Master of Hounds	0	0	0	2	0	0	0	0	2
Mucho Macho Man	0	0	0	0	0	2	0	0	2
Dialed In	0	0	0	0	0	0	0	0	0
Watch Me Go	0	0	0	0	0	0	0	0	0
Shackleford	0	0	0	0	0	0	0	0	0
Twinspired	0	0	0	0	0	0	0	0	0
Derby Kitten	0	0	0	0	0	0	0	0	0
Decisive Moment	0	0	0	0	0	0	0	0	0
Santiva	0	0	0	0	0	0	0	0	0
Pants on Fire	0	0	0	0	0	0	0	0	0
Soldat	0	0	0	0	0	0	0	0	0
Brilliant Speed	0	0	0	0	0	0	0	0	0
Twice the Appeal	0	0	0	0	0	0	0	0	0
Stay Thirsty	0	0	0	0	0	0	0	0	0

Derby Checklist 2012	37.8	RF	98	23b	SR	92	ВК	CM	Total
Bodemeister	2	4	2	2	3	0	3	4	20
I'll Have Another	2	4	0	2	0	0	0	4	12
Union Rags	2	0	0	0	0	2	0	4	8
Alpha	2	0	2	0	3	0	0	0	7
Creative Cause	2	0	0	2	0	2	0	0	6
Geomologist	0	0	0	0	3	0	0	0	3
Dullahan	0	0	0	2	0	0	0	0	2
Sabercat	0	0	0	2	0	0	0	0	2
Prospective	0	0	0	2	0	0	0	0	2
El Padrino	2	0	0	0	0	0	0	0	2
Hansen	0	0	0	0	0	2	0	0	2
Take Charge Indy	2	0	0	0	0	0	0	0	2
Daddy Long Legs	0	0	0	0	0	0	0	0	0
Rousing Sermon	0	0	0	0	0	0	0	0	0
Trinniberg	0	0	0	0	0	0	0	0	0
Done Talking	0	0	0	0	0	0	0	0	0
Went The Day Well	0	0	0	0	0	0	0	0	0
Liaison	0	0	0	0	0	0	0	0	0
Daddy Nose Best	0	0	0	0	0	0	0	0	0
Optimizer	0	0	0	0	0	0	0	0	0

Last year (2012), **Bodemeister** led my checklist with **20** points and **I'll Have Another** was second choice on my checklist with **12** points. The average person looking at the checklist might conclude that Bodemeister was a standout, however, since Bodemeister was going off as the favorite at 4-1 and I'll Have Another went off at odds of **15-1**, it made much more sense to take advantage of the overlaid odds on I'll Have Another. Furthermore, only 4 Derby favorites have won the roses since 1980 so wagering on Bodemeister to win was not a favorable scenario. On the other hand an exacta box of Bodemeister and I'll Have Another is a good idea because Bodemeister and I'll Have Another were the only runners in this Derby who qualified on my all powerful **Raise A Native sire line plus final fraction indicator.** 

This author recommended an exacta box including those two colts plus a few others.

The Derby exacta of I'll Have Another and Bodemeister returned a hefty \$306.60 for a \$2 wager.

In 2011 Derby winner Animal Kingdom was an unknown factor since it was his first effort on a dirt surface. Races on turf and polytracks are not reliable indicators of how a horse is likely to run on a dirt surface. It makes more sense to wager on a horse that already has shown ability on a dirt surface. My checklist leader was Archarcharch with 13 points who drew the dreaded #1 post position. Basically that post is the kiss of death in the Derby and Archarcharch pulled up lame and was vanned off. Second choice on my checklist was Nehro with 10 points who closed ground to come in second. Comma To The Top was my checklist  $3^{rd}$  choice who prompted the pace for a mile and then tired abruptly to finish last. The next best point getter was fourth choice on my checklist, Midnight Interlude, who was never in contention and finished  $16^{th}$ . 2011 was not a good year for my checklist.

In 2010 my checklist leader with **22 points** was **Super Saver** and he qualified on one of my most powerful indicators-**The Raise A Native sire line plus a fast final fraction.** Second choice with 13 points was **Ice Box** who was one of only three horses in the whole field who qualified on my **final fraction** indicator. I recommended an exacta box of Super Saver, Ice Box, Dublin and Noble's Promise.

Super Saver and Ice Box rounded out a \$2 exacta of \$152.40.

The number of points given to each indicator is based on the impact value for that indicator. For example, since the impact value for our Raise A Native plus final fraction indicator is **3.96** I round that off to the nearest whole number which is 4 and therefore runners qualifying on this indicator get 4 points.

The checklist is designed to be used as a guide to picking the most likely Derby contenders. Just because a runner is the leader on my checklist does not necessarily make him an outstanding wager. Many times the checklist leader offers no value in the win pool because his odds are too low. I suggest looking for value among the other true contenders. For example, I'll Have Another at 15-1 was a true overlay last year because he was second choice on my checklist. "WHEN HANDICAPPING THE DERBY ALWAYS LOOK FOR VALUE IN OVERLAYS AMONG THE TRUE CONTENDERS".

#### **Handicapping The Preakness**

Unlike the Derby the Preakness is the most formful race of the Triple Crown. Since 1986 there have been 11 winning post time favorites and 8 winning second choices which grouped together comprises 19 of the last 27 winners or 70%. When handicapping the Preakness give close scrutiny to the horses getting the most money in the win pool.

Historically, runners that try to win the Preakness in wire to wire style are very unsuccessful. Only 2 Preakness winners since 1986 managed to win on the front end: Louis Quatorze and Rachel Alexandra.

How a runner finishes a 9 furlong prep or the Derby itself is a major clue to its chances of success in the Preakness.

## PREAKNESS INDICATOR #1- A Fast Finish in a Major Stake Race And A 95 Or Higher Beyer Fig In One Of Its Last Two Starts

This author has discovered that 13 of the last 21 Preakness winners qualified on the following rules: 1)the runner must have achieved a final eighth of a mile in 12.6 seconds or less or raced the last 3 furlongs in 37.8 or less in a big 5 prep race or raced the last quarter of the Derby in 25 2/5 or less 2) the runner must obtain a 95 or higher Beyer figure in one of its last 2 starts at 9 furlongs or longer 3) the runner must have finished no worse than fourth in its last start. 4) In addition a qualifier must not have lost 2 lengths or more from the 6 furlong call to the finish of a big 5 prep race if that race was used to qualify it on final fraction times 5) Races over polytracks were not considered part of this study.

Runners qualifying on this indicator have won 13 of the last 21 Preaknesses and have a strong impact value of **3.08** (61.9% winners divided by 20.1% of the starters (See Table 31).

Table 31-- Preakness Runners That Qualify on The 5 Rules
Listed Above in Preakness Indicator #1 (In the Money
Horses are in Bold Face)

		No. Of	
	•	Qualifiers	Starters
2012	I'll Have Another WON, Bodemeister 2 <sup>nd</sup>		
	and Went the Day Well	3	11
2011	,		
	and Mucho Macho Man	3	14
	Pleasant Prince	1	12
2009	Mine That Bird 2 <sup>nd</sup> and Papa Clem	2	11
2008	Big Brown WON	1	12
2007	Curlin WON, Street Sense 2 <sup>nd</sup> , Hard Spun 3 <sup>rd</sup> ,		
	and King of the Roxy	4	9
2006	Barbaro and Brother Derek	2	9
2005	Afleet Alex WON and Giacomo 3rd	2	14
2004	Smarty Jones WON and Imperialism 3 <sup>rd</sup>	2	10
2003	Funny Cide WON and Kissin Saint	2	10
2002	War Emblem WON and Proud Citizen 3rd		
	and Medaglia D'Oro	3	13
2001	Congaree 3 <sup>rd</sup> and Monarchos	2	11
2000	Fusaichi Pegasus 2 <sup>nd</sup> , Impeachment 3 <sup>rd</sup> , Snuck In		8
1999	Charismatic WON and Menifee 2nd	2	12
1998	Real Quiet WON, Victory Gallop 2 <sup>nd</sup> , Hot Wells	3	9
1997	Silver Charm WON and Captain Bodgit 2nd	2	10
1996	Cavonnier	1	12
1995	Timber Country WON and Tejano Run	2	11
1994	Go For Gin 2 <sup>nd</sup> , Concern 3 <sup>rd</sup> , and Blumin Affair	3	10
1993	Prairie Bayou WON and Sea Hero	2	12
1992	Conte Di Savoya and Lil E Tee	2	14
	Total Total	47 of	234 starters

Note: This indicator generated 13 winners and 6 exacts since 1992 and has an extraordinary impact value of **3.08.** 

The value of the above indicator can be found in its positive ROI. If racing fans were to wager \$2 on each of the 47 qualifiers the investment would be \$94 and the return on our 13 winning qualifiers comes to \$118.40. Since the profit realized is \$24.40 the ROI is **26%** (See Table 32).

Table 32- The Parimutuel Prices and ROI On Our 12 Winning Qualifiers

Year	Winning Preakness Qualifier		Parimutuel Price (Per \$2 Wager)
2013	I'll Have Anoth	er	8.40
2012	Shackleford		27.20
2008	Big Brown		2.40
2007	Curlin		8.80
2005	Afleet Alex		8.60
2004	Smarty Jones		3.40
2003	Funny Cide		5.80
2002	War Emblem		7.60
1999	Charismatic		18.80
1998	Real Quiet		7.00
1997	Silver Charm		8.20
1995	Timber Country	у	5.80
1993	Prairie Bayou		6.40
		Total Return	\$118.40
		Total Investment	\$94 (47 qualifiers times \$2 each)
		Profit	\$24.40
		ROI	26% (profit divided by investment)

Note: Although the ROI for the above indicator is not as high as that found in some of our other indicators it is still a good one.

The Fisher Test of statistical significance adds more support to the above indicator. To do this test I used the **Quick Calcs: 2 by 2 Contingency** Table site on the internet. (the same test as performed on Derby Indicator #1). In the first rectangle we put in 13 which represents the number of Preakness winners that qualified on Indicator #1. In the rectangle to the right of that we put in 4 which represents the number of Preakness winners expected to qualify on this indicator based on the percentage of starters that qualified. We multiply .201 (20.1%) times

21 years and come up with 4.22 and then round that off to the closest whole number which is 4. In the third rectangle we enter an 8 which represents the number of Preakness winners that did Not qualify on Indicator #1. In the fourth rectangle we enter a 17 which represents the expected number of Preakness winners that would Not qualify on Indicator #1. That number is obtained by multiplying .799 times 21 years. The result is 16.78 which is rounded up to 17. The table will look like the following:

# Observed Winners That Qualified 13 4 Expected Winners that Qualified Observed Winners Not Qualified 8 17 Expected Winners Not Qualified

Then one must click on the word calculate which appears below the rectangles on the internet site and the Fisher P value equals .0109 which Quick Calcs states is statistically significant.

One can conclude from the above test that runners that finish fast in major stake races at 9 furlongs or longer are not just winning the Preakness as a random event due to chance alone. Runners that qualify on this indicator actually have an edge over their competitors in the Preakness stakes.

Added support for the above indicator is in its ability to nail 6 exactas in the 18 years where two or more qualifiers started. The total cost of combining our qualifiers in \$2 exacta boxes comes to \$140. Since the total return on our 6 winning exactas was \$241.40 the ROI is a strong **72%** (a profit of \$101.40 divided by an investment of \$140. See Table 33 for a summary of how the ROI is calculated.

Table 33- The Prices On Our 6 Winning Exacta Combinations and Their ROI

Year	Exacta Combination		Exacta Price (per \$2 wager)
2012	I'll Have Another and Boden	18.60	
2011	Shackleford and Animal Kir	114.80	
2007	Curlin and Street Sense		23.20
1999	Charismatic and Menifee		47.60
1998	Real Quiet and Victory Gallo	14.80	
1997	Silver Charm and Captain Bodgit		22.40
		Total Return	\$241.40
		Investment	\$140.00
		Profit	\$101.40
		ROI	72%

Note: An ROI of 72% is a solid return on our 6 winning exacta combinations.

### PREAKNESS INDICATOR #2- A Strong Conduit Mare In Tail-Female

This indicator refers to the list of strong conduit mares that are used in Derby Indicator #8. In order to qualify on this indicator a runner must carry one of our special conduit mares in tail-female and also fit all the rules stated in Preakness Indicator #1

Runners that fit this indicator have won 10 of the last 20 Preaknesses when at least one qualifier started and comprise only 12.1% of the starters. This translates into a powerful impact value of **4.13** (50% of the winners divided by 12.1% of the starters). See Table 34 for a list of all the runners that qualified on this indicator.

Table 34-Preakness Runners That Carry a Strong Conduit Mare in Tail-Female And Qualify On All The Rules Found In Preakness Indicator #1

**Year Runners That Qualified** 

No. of Qualifiers Starters

2012	I'll Have Another WON, Bodemeister 2nd		
	and Went the Day Well	3	11
2011	Shackleford WON and Mucho Macho Man	2	14
2010	Pleasant Prince	1	12
2009	Mine That Bird 2 <sup>nd</sup>	1	12
2008	Big Brown WON	1	12
2007	Hard Spun 3 <sup>rd</sup>	1	9
2006	Barbaro	1	9
2005	Afleet Alex WON	1	14
2004	Smarty Jones WON	1	10
2003	Funny Cide WON	1	10
2002	Proud Citizen 3 <sup>rd</sup>	1	13
2001	Congaree 3rd and Monarchos	2	11
2000	Fusaichi Pegasus 2 <sup>nd</sup>	1	8
1999	Charismatic WON, Menifee 2 <sup>nd</sup> ,	2	10
1998	Real Quiet WON	1	10
1997		0	0
1996	Cavonnier	1	12
1995	Timber Country WON	1	11
1994	Go For Gin 2 <sup>nd</sup>	1	10
1993	Prairie Bayou WON, Sea Hero	2	12
1992	Lil E Tee and Conte Di Savoya	2	14
		27	of <b>224</b>

Note: This indicator has a strong impact value of **4.13**. Since there were no qualifiers in 1997 that year was not used in this study.

Added support for the above indicator is found in its positive ROI. If handicappers wagered \$2 on each of the 27 qualifiers the total return on the 10 Preakness winners would be \$93.80. Since the total investment is \$54 the profit comes to \$39.80. A profit of \$39.80 divided by an investment of \$54 yields an **ROI of 73.7%**.

# PREAKNESS INDICATOR #3- The Raise A Native Sire Line Plus A Fast Finish In a Major Prep Race or the Kentucky Derby

The Raise A Native sire line is a very strong heritage for generating winners in all three Triple Crown events. In order to qualify on this indicator a runner must carry the Raise A Native sire line and also fit all the rules found in Preakness Indicator #1.

This indicator has generated 8 of the last 12 Preakness winners since 1994 in which at least one qualifier started. Since this indicator comprises 66.7 % winners from only 14.3% of the starters the impact value is an extraordinary **4.66** (66.7% winners divided by 14.3% of the starters).

From only 18 qualifiers this indicator produced 8 Preakness winners, 5 second place finishers, and 1 show horse. Remarkably 14 of the 19 qualifiers were in the money (See Table 35).

Table 35- Preakness Runners That Carried the Raise A Native Sire Line And Fit All The Rules Stated In Preakness Indicator #1 (1994-2012)

Year	Qualifiers	No. of Qualifiers
2012	I'll Have Another WON, Bodemeister 2 <sup>nd</sup> ,	
	and Went the Day Well	3
2011		0
2010		0
2009	Mine That Bird 2 <sup>nd</sup> and Papa Clem	2
2008		0
2007	Curlin WON and Street Sense 2nd	2
2006	Brother Derek	1

2005	Afleet Alex WON	1
2004	Smarty Jones WON	1
2003	Funny Cide WON	1
2002	War Emblem WON and Proud Citizen 3rd	2
2001	Monarchos	1
2000	Fusaichi Pegasus 2 <sup>nd</sup>	1
1999		0
1998	Real Quiet WON and Victory Gallop 2nd	2
1997		0
1996		0
1995	Timber Country WON	1
1994		0
1993		0
1992		0

18 of 126 starters

Note: This indicator generated 8 winners, 5 second place finishers and 1 third place finishers from only 18 qualifiers and has a fantastic winning impact value of 4.66. Since there were no qualifiers in 9 of the above years, those years were not included in the above study.

Further support for this indicator is found in its positive ROI. If one were to wager \$2 on each of our 18 qualifiers the total cost would be \$36 and the return on our 8 winners comes to \$55.60. The profit is 19.60 and the ROI comes to **54%.** (profit divided by investment).

Added value for the above indicator is found in its ability to nail 3 exactas in the only 5 years where exactas were possible ( when 2 or more qualifiers started). The total cost of using our qualifiers in \$2 exacta boxes for those 5 years is \$28 and the return on the three winning exactas was 56.60. Since the profit comes to 28.60 the ROI is a strong **102%** (a profit of 28.60 divided by an investment of \$28).

PREAKNESS INDICATOR #4- Runners Carrying Buckpasser in the X Passing
Position Who Also Qualified On All The Rules
Found In Preakness Indicator #1 With The
Exception of the 95 Beyer Figure Rule

This indicator is one of the most intriguing because having Buckpasser in the X passing position plus a fast final finish in major prep races is an extraordinary indicator in all three legs of the Triple Crown and generates high impact values and ROIs in all three races. Interestingly, Buckpasser is now found in many modern champions. In fact, 40% of the top 10 stallions regarding gross earnings in North America in 2011 carried Buckpasser in the X passing position.

In order to qualify on this indicator a runner must 1) Carry Buckpasser in the X passing position 2) fit all the rules found in Preakness Indicator #1 with the exception of the 95 Beyer figure rule (Beyer figures were not published in the Daily Racing Form until 1992)

Qualifiers on this indicator have won 5 of the last 11 Preaknesses when at least one qualifier started. Since these types comprise 9.9% of the starters this indicator has an extraordinary impact value of **4.60** (45.5% winners divided by 9.9% of the starters). Qualifiers have won the Preakness approximately 4 ½ times more often than expected. Since 1985 there were 12 runners who qualified on this indicator and 5 of the 12 won the Preakness while another 3 ran second and one raced third (See Table 36).

Table 36- Runners Carrying Buckpasser In the X Passing Position Who Also Qualified On All The Rules Found In Preakness Indicator #1

Year	Qualifiers	No. of Qualifiers	Starters
2012	Bodemeister 2 <sup>nd</sup>	1	11
2011	Shackleford WON	1	14
2010	Pleasant Prince	1	12
2003	Funny Cide WON	1	10
2002	Proud Citizen 3 <sup>rd</sup>	1	13
1998	Real Quiet WON	1	9
1996	Cavonnier	1	12
1995	Tejano Run	1	11
1993	Prairie Bayou WON	1	12
1990	Summer Squall WON and Unbridled 2 <sup>n</sup>	d 2	9
1989	Easy Goer 2 <sup>nd</sup>	1	8
1988		0	0
1986		0	0
1985		0	0
		12	of 121 starters

Note: This indicator has an extremely high impact value of **4.60**.

Runners qualifying on this indicator consisted of 5 winners, 3 place finishers and one third place finisher in the last 11 years where at least one qualifier started in the Preakness. Since 9 of our 12 qualifiers above were in the money one can say that our qualifiers have a fantastic in the money rate of 75%.

The value of the above indicator can be seen in its positive ROI. If racing fans were to wager \$2 on each of the 12 qualifiers the total cost would have been \$24 and since the return on our 5 winning qualifiers is \$53.20, the profit realized is \$29.20. A profit of 29.20 divided by an investment of \$24 yields an ROI of **122%** (See Table 37).

Table 37-The Parimutuel Prices of Our 5 Winning Qualifiers
And How The ROI Is Calculated

<b>Preakness Winner</b>	That Qualified	Parimutuel Price (per \$2)
Shackleford		27.20
Funny Cide		5.80
Real Quiet		7.00
Prairie Bayou		6.40
Summer Squall		6.80
		53.20
	Total Investment	24.00 (12 qualifiers times \$2)
	Profit	29.20
	ROI	122%
	Shackleford Funny Cide Real Quiet Prairie Bayou	Funny Cide Real Quiet Prairie Bayou Summer Squall  Total Investment Profit

Note: A profit of **122%** is a solid return on our 5 winning qualifiers. Even if our longshot winner, Shackleford was omitted from the above study our ROI would still be positive.

## PREAKNESS INDICATOR#5- An Average Beyer Speed Figure of 94 in Last Two Starts

In order to qualify on this indicator a runner must fit the following rules: 1) Have an average Beyer speed figure of **94** or higher in their last two starts on a dirt track at a mile or more 2) be no worse than fourth in its last start 3) must not have lost 2 lengths or more from the six furlong call to the finish in either of its last two races on a dirt track at a mile or a mile and a sixteenth or a mile and an eighth 4)races on polytracks were omitted from this study

Qualifiers on this indicator won 15 of the last 21 Preaknesses and have a strong impact value of **2.74** (71.4% of the winners divided by 26.1% of the starters). See Table 38 for a summary of runners who qualified on this indicator.

Table 38- Runners Who Achieved An Average Beyer Figure Of 94 In Their Last Two Starts

Year	Qualifiers	No.
2012	I'll Have Another WON and Bodemeister 2nd	2
2011	Shackleford WON, and Mucho Macho Man	2
2010	Super Saver	1
2009	Rachel Alexandra WON, Musket Man 3rd, and	
	Papa Clem	3
2008	Big Brown WON	1
2007	Curlin WON, Street Sense 2 <sup>nd</sup> , Hard Spun 3rd	3
2006	Bernardini WON, Barbaro, Brother Derek and	
	Like Now	4
2005	Afleet Alex WON and Giacomo 3rd	2
2004	Smarty Jones WON, Rock Hard Ten 2 <sup>nd</sup>	
	and Imperialism	3
2003	Funny Cide WON, Peace Rules and Kissin Saint	3
2002	War Emblem WON, Magic Weisner 2 <sup>nd</sup> , Proud	
	Citizen 3 <sup>rd</sup> , Equality and Medaglia D'Oro	5
2001	Congaree 3 <sup>rd</sup> , Monarchos, and Marciano	3
2000	Fusaichi Pegasus 2 <sup>nd</sup> , Impeachment 3 <sup>rd</sup> , and	
	Snuck In	3
1999	Charismatic WON, Menifee 2 <sup>nd</sup>	
	Cat Thief and Silverbulletday	4
1998	<b>Real Quiet WON, Victory Gallop 2<sup>nd</sup></b> and Hot Wells	3
1997	Silver Charm WON, Captain Bodgit 2 <sup>nd</sup> ,	
	Free House 3 <sup>rd</sup> , and Frisk Me Now	4
1996	Cavonnier and Prince of Thieves	2
1995	<b>Timber Country WON, </b> Tejano Run and Our Gatsby	3
1994	<b>Go For Gin 2<sup>nd</sup>, Concern 3<sup>rd</sup>, Blumin Affair</b>	3
1993	<b>Prairie Bayou WON,</b> Sea Hero, Koluctoo Jimmy Al,	
	and Personal Hope	4
1992	Conte Di Savoya, Casual Lies and Lil E Tee	3

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Note: The above indicator has generated 15 Preakness winners since 1992 and has a strong impact value of  $\bf 2.74$ .

Although this indicator has a small ROI of 15% at least it still is in the positive range.

#### Codes For the 5 Indicators Used In the Preakness Checklist

**PREAKNESS INDICATOR #1- (F95)** Give 3 points to a horse that qualifies on the following: 1) it must achieve a final 1/8 of a mile in **12 3/5** or less or a final 3 furlongs in **37 4/5** or less in a **big 5 prep race** or a **25 2/5** or less final quarter of the Kentucky Derby. 2)It must achieve a **95** or higher Beyer figure in one of its last two starts at 9 furlongs or longer 3)it must be no worse than 4<sup>th</sup> in its last start 4) It must not have lost 2 lengths or more from the 6 furlong call to the finish of a big 5 prep race if that race is used to qualify the runner on final fraction times 5) races on polytracks were omitted from this study.

**PREAKNESS INDICATOR #2- (CM)** Give 4 points to all horses that carry one of the special conduit mares that appear in the Derby section and qualify on all the rules found in Preakness Indicator #1.

**PREAKNESS INDICATOR #3- (RF)** Give 5 points to all horses that carry the Raise A Native sire line provided that they also qualify on all rules found in Preakness Indicator #1.

**PREAKNESS INDICATOR #4- (BU)** Give 5 points to all horses that carry **Buckpasser** in the **X passing position** provided that they qualify on all the rules stated in Preakness Indicator #1 with the exception of the 95 Beyer figure rule.

**PREAKNESS INDICATOR #5- (94)** Give 3 points to all runners that fit the following rules: 1) it must have an average Beyer figure of 94 in their last two starts on a dirt track at a mile or more 2) it must have finished fourth or better in its last start. 3) it must not have lost 2 lengths or more from the 6 furlong call to the finish of either of its last two dirt races at a mile or a mile and an eighth. 4) races over polytracks were omitted from this study.

## How My Preakness Checklists Did In 2010, 2011 and 2012 Tables 39, 40, and 41

Preakness Checklist 2010	F:	95	CM	RF	BU	94	Total
Pleasant Prince		3	4	0	5	0	12
Super Saver		0	0	0	0	3	3
Paddo O'Prado		0	0	0	0	0	0
Dublin		0	0	0	0	0	0
Lookin At Lucky		0	0	0	0	0	0
Northern Giant		0	0	0	0	0	0
Schoolyard Dreams		0	0	0	0	0	0
Aikenite		0	0	0	0	0	0
Caracortado		0	0	0	0	0	0
Jackson Bend		0	0	0	0	0	0
Yawanna Twist		0	0	0	0	0	0
First Dude		0	0	0	0	0	0
Preakness Checklsit 2011 Shackleford Mucho Macho Man Animal Kingdom	F95 3 3 3	CM 4 4 0	RF 0 0 0	BU 5 0 0	94 3 3 0	Total 15 10 3	
Midnight Interlude	0	0	0	0	0	0	
Dialed In	0	0	0	0	0	0	
Isn't He Perfect	0	0	0	0	0	0	
King Congie	0	0	0	0	0	0	
Mr. Commons	0	0	0	0	0	0	
Dance City	0	0	0	0	0	0	
Concealed Identity	0	0	0	0	0	0	
Sway Away	0	0	0	0	0	0	
Flashpoint	0	0	0	0	0	0	
Astrology	0	0	0	0	0	0	
Norman Asbjornson	0	0	0	0	0	0	

Preakness Checklist 2012	F95	CM	RF	BU	94	Total
Bodemeister	3	4	5	5	3	20
I'll Have Another	3	4	5	0	3	15
Went The Day Well	3	4	5	0	0	12
Optimizer	0	0	0	0	0	0
Creative Cause	0	0	0	0	0	0
Tiger Walk	0	0	0	0	0	0
Cozetti	0	0	0	0	0	0
Pretension	0	0	0	0	0	0
Optimizer	0	0	0	0	0	0
Zetterholm	0	0	0	0	0	0
Teeth of the Dog	0	0	0	0	0	0
Daddy Nose Best	0	0	0	0	0	0

In 2012 my Preakness checklist leader was **Bodemeister** with 20 points and **I'll Have Another** was second choice with 15 points. These two runners comprised the exacta which returned \$18.60.

In 2011 our checklist leader, **Shackleford** (15 points) won the Preakness and returned \$27.20. Shackleford was the only runner in the Preakness that carried Buckpasser in the X passing position since his broodmare sire was Unbridled. In addition, Shackleford qualified on my final quarter mile indicator in the Kentucky Derby having raced the last quarter in 25 2/5 seconds. At 12-1 he was certainly a bargain. Our third choice, **Animal Kingdom** (the Derby winner) raced second and the exacta combination of these two returned returned a very generous \$114.80.

In 2010 my checklist leader was Pleasant Prince with 12 points and he raced out

of the money. No one ever said this was an easy game and since thoroughbreds are flesh and blood animals (not machines) they do not always race as well as their past performances might indicate.

## **Handicapping The Belmont Stakes**

Since only 6 favorites (22%) have won the Belmont since 1986, one can say that the Belmont for the most part has been unkind to favorites. In the above time frame 14 of the last 27 Belmonts were won by horses that went postward at 5-1 or higher. Perhaps it's the unique distance of 1 ½ miles that causes many upsets (See Tabel 42).

Table 42- Belmont Winners From 1986-2012 (Asterisks Indicate Post Time Favorites)

Year	Belmont Winner	<b>Odds At Post Time</b>	<b>Price (\$2)</b>
2012	Union Rags	5-2	7.50
2011	Ruler on Ice	24-1	51.50
2010	Drosselmeyer	13-1	28.00
2009	Summer Bird	11-1	25.80
2008	Da' Tara	38-1	79.00
2007	Rags to Riches	4-1	10.60
2006	Jazil	6-1	14.40
2005	Afleet Alex	1-1	4.30 *
2004	Birdstone	36-1	74.00
2003	Empire Maker	2-1	6.00
2002	Sarava	70-1	142.50
2001	Point Given	6-5	4.40 *
2000	Commendable	18-1	39.60
1999	Lemon Drop Kid	29-1	61.50
1998	Victory Gallop	9-2	11.00
1997	Touch Gold	5-2	7.30
1996	Editor's Note	5-1	13.60
1995	Thunder Gulch	3-2	5.00 *
1994	Tabasco Cat	3-1	8.80

1993	Colonial Affair	13-1	29.80
1992	A.P. Indy	1-1	4.20 *
1991	Hansel	4-1	10.20
1990	Go and Go	7-1	17.00
1989	Easy Goer	3-2	5.20 *
1988	Risen Star	2-1	6.20 *
1987	Bet Twice	8-1	18.00
1986	Danzig Connection	8-1	18.00

Note: Since 1986 only 6 (22%) favorites have won the Belmont Stakes

This author recommends wagering against the Belmont favorite.

#### BELMONT INDICATOR #1- A Fast Finish In A Major Stake Race And A 92 Or Higher Beyer Figure at 9 Furlongs

How a horse finishes certain graded stake races at 9 furlongs or longer can serve as a solid clue to its likelihood of winning the Belmont stakes. The rules for Belmont Indicator #1 which follow focuses on finishing times in major races:

1) The runner must have achieved a final 1/8 of a mile in 12 3/5 seconds or less or a final 3/8 of a mile in 37 4/5 or less in a graded 9 furlong stake race at age three or a final 3/16 in the Preakness in 19 1/5 or less or a final quarter in the Kentucky Derby in **25 2/5** or less. 2) The steed must achieve a Beyer figure of **92** or higher in a graded stake at 9 furlongs or longer in at least one of its last two starts at that distance. 3) The runner must not show a loss of ground of 2 lengths or more from the six furlong call to the finish of a graded 9 furlong race or from the mile call to the finish of the Preakness if either of the above races are used to qualify it on final fraction times. Any loss of ground from the mile call to the finish of the Kentucky Derby is acceptable. 4) The runner must not have been worse than fourth in its last start unless it was the Kentucky Derby 5) If the runner was worse than fourth in the Kentucky Derby it must have been no worse than third in its first start after the Derby or in its last start before the Derby. 6) the runner must not have been worse than fourth in the race that qualifies it on final fraction time unless it was the Kentucky Derby 7)the runner must not have been a frontrunner in the race that qualifies it on final fraction time 8) races on polytracks were omitted from this study.

Runners qualifying on this indicator have won 15 of the last 21 Belmonts and have a strong winning impact value of **1.94** ( 71.4% winners divided by 36.8% of the starters). In addition, this indicator has nailed 11 exactas and 5 trifectas since 1992 (See Table 43)

Table 43- Belmont Runners That Finished Fast In a Major Stake Race and Achieved a 92 Beyer Figure in a Graded Stake at 9 Furlongs or More (Horses in the Money are in Bold Face)

Year	Qualifiers	No. of Qualifiers	Starters
2012	Union Rags WON and Street Life 4th	2	10
2011	Animal Kingdom 2 <sup>nd</sup> , Brilliant Speed 3 <sup>rd</sup> ,		
	Shackleford, Nehro and Master of Hounds	5	12
2010	<b>Drosselmeyer WON, Fly Down 2nd,</b> and Ice Box	3	12
2009	Summer Bird WON, Dunkirk 2 <sup>nd</sup> , Mine that Bir		
	Charitable Man 4 <sup>th</sup> and Flying Private	5	10
2008	<b>Denis of Cork 2<sup>nd</sup>, Big Brown and Macho Again</b>	3	9
2007	Rags to Riches WON, Curlin 2 <sup>nd</sup> , and Tiago		
	and I'mawildandcrazyguy	4	7
2006	Jazil WON, Bluegrass Cat 2 <sup>nd</sup> , Sunriver 3 <sup>rd</sup> ,		
	Steppenwolfer 4th, Bob and John, Hemingway's Ko	-	12
	Afleet Alex WON and Giacomo	2	11
	Smarty Jones 2 <sup>nd</sup> and Purge	2	9
2003	Empire Maker WON, Ten Most Wanted 2 <sup>nd</sup> ,		
	Funny Cide 3 <sup>rd</sup> , and Dynever	4	5
2002	Sunday Break 3 <sup>rd</sup> , Perfect Drift		
	Proud Citizen, and Invisilbe Ink	4	10
2001	Point Given WON, A.P. Valentine 2 <sup>nd</sup> ,		
	and Thunder Blitz and Dollar Bill	4	9
2000	Aptitude 2 <sup>nd</sup> , Unshaded 3 <sup>rd</sup> , Wheelaway,		
	Impeachment, Globalize and Postponed	6	11
1999			
	Charismatic 3rd, Best of Luck, Pineaff and	_	
	Silverbulletday and Prime Directive	7	11
	Victory Gallop WON, Real Quiet 2 <sup>nd</sup> , Classic Cat	3	11
1997	Touch Gold WON, Silver Charm 2 <sup>nd</sup> ,		_
	and Crypto Star	3	7
1996	Editor's Note WON, Skip Away 2 <sup>nd</sup> , Cavonnier and		4.0
1005	Jamies First Punch	4	12
1995	Thunder Gulch WON and Knockadoon	2	11

1994	Tabasco Cat WON, Go For Gin 2 <sup>nd</sup> ,			
	Strodes Creek 3 <sup>rd</sup> ,	3		6
1993	Kissin Kris 2 <sup>nd</sup> , Prairie Bayou and Virginia Rapids	3		13
1992	AP Indy WON and Pine Bluff	2		11
	_			
		77	of	209

Note: This indicator has selected 15 Belmont winners, 11 exactas and 5 trifectas since 1992 and has a strong winning impact value of **1.94**.

Although a positive ROI is obtained if one were to wager on all our qualifiers to win the Belmont, the strongest value of the above indicator is in the exacta pools.

If one were to combine all our qualifiers in \$2 exacta boxes the total cost would have been \$508 and the total return on our 11 winning exactas would be \$2,142.20. This translates into a profit of \$1,634.20. The ROI comes to a very strong **322%** ( a profit of \$1,634.20 divided by an investment of \$508). Even if we omitted the huge exacta combination of Lemon Drop Kid and Vision and Verse of \$1,537 in 1999 our ROI would still be positive (See Table 44).

Table 44- The Prices of Our 11 Winning Exacta Combinations and the ROI

Year	Exacta Combination	Exacta Price (per \$2)
2010	Drosselmeyer and Fly Down	144.50
2009	Summer Bird and Dunkirk	121.00
2007	Rags to Riches and Curlin	25.20
2006	Jazil and Bluegrass Cat	92.00
2003	Empire Maker and Ten Most Wanted	44.00
2001	Point Given and A.P. Valentine	20.60
1999	Lemon Drop Kid and Vision and Verse	1,537.00
1998	Victory Gallop and Real Quiet	17.60
1997	Touch Gold and Silver Charm	13.60

	Profit ROI	\$1,634.20	it over investment)
	Total Investment	·	
	Total Return	\$2,142.20	<del></del>
1994	Tabasco Cat and Go For Gin	19.20	
1996	Editor's Note and Skip Away	107.50	

Note: An ROI of 332% is a very impressive return on our 11 winning exacta combinations. Even if we omitted the huge exacta of \$1,537 in the Belmont stakes of 1999 our ROI would still be positive.

#### BELMONT INDICATOR #2- Buckpasser In The X Passing Position Plus A Fast Finish In A Major Stake Race

When an indicator can point out a large percentage of winners and place finishers from only a small percentage of the starters handcappers should take notice of its clear cut value. This author discovered such an indicator with regard to the presence of Buckpasser in the pedigree. Runners that carried Buckpasser in the X passing position and fit the following rules have performed very well in the Belmont stakes: 1) The runner must carry Buckpasser in the X passing position 2)the runner must qualify on all the rules found in Belmont Indicator #1.

Runners that qualified on the above rules have won 7 of the last 15 Belmonts in which at least one qualifier started. The winning impact value for this indicator is an extraordinary **3.41** (46.7% winners divided by 13.7% of the starters).

Amazingly, our 21 qualifiers comprised 7 winners and 6 second place finishers and 2 third place finishers which means 71% of our qualifiers hit the board in the

Belmont stakes since 1992 (See Table 45).

Table 45- Belmont Runners That Carried Buckpasser in the X Passing Position Who Also Qualified On All The Rules Of Belmont Indicator #1 (Winners and In the Money Finishers Are In Bold Face)

Year	Qualifiers	No. of Qualifiers	Starters
2012		0	0
	Brilliant Speed 3rd and Shackleford	2	12
	Drosselmeyer WON	1	12
	Summer Bird WON, Dunkirk 2 <sup>nd</sup> , Charitable Man and	_	
	Flying Private	4	10
2008	Denis of Cork 2 <sup>nd</sup>	1	9
2007	Rags to Riches WON	1	7
	Bluegrass Cat 2 <sup>nd</sup>	1	12
2005		0	0
2004		0	0
2003	Empire Maker WON, Funny Cide 3 <sup>rd</sup>	2	5
2002	Proud Citizen	1	10
2001		0	0
2000	Aptitude 2 <sup>nd</sup>	1	11
1999	Lemon Drop Kid WON and Vision and Verse 2nd	2	11
1998	Real Quiet 2 <sup>nd</sup>	1	11
1997	Touch Gold WON	1	7
1996	Cavonnier	1	12
1995		0	0
1994		0	0
1993	Prairie Bayou	1	13
1992	A. P. Indy WON	1	11
		21	of 153

Note: This indicator has a very high impact value of **3.41** and has generated 7 Belmont winners, 5 place finishers and 2 third place finishers in the last 15 years when at least one qualifier started. Since 14 of our 21 qualifiers were in the money one can conclude that this indicator is a valuable tool for handicapping the Belmont.

Further support for the above indicator is found in its strong ROI. If one were to wager \$2 on each of our 21 qualifiers the total investment would be \$42 and the total return on our 7 winners is \$143.40. Since the profit is \$101.40 the ROI is a very powerful **241%** (a profit of \$101.40 divided by an investment of \$42). An ROI of 241% is a very strong return on ones investment and supports the value of Belmont indicator # 2 (See Table 46)

Table 46 -How the ROI on Our Belmont Winning Qualifiers is Calculated

Year	<b>Belmont Winner</b>	Parimutu	el Price (Per \$2 Wager)	
2010	Drosselmeyer	28.0	00	
2009	Summer Bird	25.8	30	
2007	Rags to Riches	10.6	50	
2003	Empire Maker	6.0	00	
1999	Lemon Drop Kid	61.	50	
1997	Touch Gold	7.3	30	
1992	A. P. Indy	4.2	20	
	Total return \$143.40			
	Total	Investment \$42	2 (21 qualifiers times \$2 each)	
		Profit \$10	1.40	

Note: An ROI of 241% is a very strong return for our Buckpasser indicator. Even if the longshot winner, Lemon Drop Kid were omitted from this study our ROI would still be positive.

**241%** (profit divided by investment)

### BELMONT INDICATOR #3 The Raise A Native Sire Line Plus a Fast **Final Fraction In A Major Stake Race**

ROI

The Raise A Native sire line is a strong indicator in all three jewels of the Triple Crown. Runners qualifying on the following indicator have performed exceedingly well in the Belmont stakes: The runner must carry the Raise A Native sire line and qualify on all the rules found in Belmont Indicator #1.

Runners who fit the above critieria have won 10 of the last 17 Belmonts and comprise only 16.5% of the starters which translates into an impact value of **3.56** (58.8% of the winners divided by 16.5% of the starters). Belmont starters who qualify on this indicator are winning the Belmont 3 ½ times more often than expected and the prices paid by Lemon Drop Kid (30-1), Summer Bird (12-1) and Drosselmeyer (13-1) make this indicator that much more enticing (See Table 47).

Table 47- Belmont Runners Who Carried The Raise A Native Sire Line And Qualified On All The Rules in Belmont Indicator #1

(Winners and In the Money Horses are in Bold Face)

		No. of	
Year	Qualifiers	Qualifiers	Starters
2012	Street Life (4th)	1	10
2011	Master of Hounds	1	12
2010	Drosselmeyer WON	1	12
2009	Summer Bird WON, Dunkirk 2nd, Mine That Bird 3rd,		
	Charitable Man (4th) and Flying Private	5	10
2008		0	0
2007	Curlin 2 <sup>nd</sup>	1	7
2006	Jazil WON and Bob and John	2	12
2005	Afleet Alex WON	1	11
2004	Smarty Jones 2 <sup>nd</sup>	1	9
2003	Empire Maker WON and Funny Cide 3rd	2	5
2002	Proud Citiizen and Sunday Break	2	10
2001	Point Given WON and Invisible Ink	2	9
2000	Unshaded 3 <sup>rd</sup> , Wheelaway	2	11
1999	<b>Lemon Drop Kid WON</b> and Prime Directive	2	11
1998	Victory Gallop WON, Real Quiet 2nd	2	11
1997	Crypto Star	1	7
1996	Editor's Note WON	1	12
1995	Thunder Gulch WON	1	11
1992-	1994	0	0
		28 o	f 170

Note: This indicator has a strong impact value of 3.56. Since there were no qualifiers in 1992-1994, and 2008 those years were not used in this study.

The above indicator pointed out 10 winners, 4 second place finishers and 3 show horses from only 28 qualifiers. Our qualifiers are hitting the board 60.7% of the time.

Added support for the value of this indicator is found in its strong ROI. If one were to wager \$2 to win on all 28 qualifiers above the total investment would be \$56 and the return would come to \$174.30. Since the profit realized is \$118.30, the ROI is a very impressive **211%** (See Table 48)

Table 48 -The Parimutuel Prices and ROI For Belmont Indicator #3

Year	<b>Qualifying Belmon</b>	t Winner	Price (Per \$2 Wager)
2010	Drosselmeyer		28.00
2009	Summer Bird		25.80
2006	Jazil		14.40
2005	Afleet Alex		4.30
2003	Empire Maker		6.00
2001	Point Given		4.70
1999	Lemon Drop Kid		61.50
1998	Victory Gallop		11.00
1996	Editor's Note		13.60
1995	Thunder Gulch		5.00
		Total Return	\$174.30
		Total Investment	56.00 (30 qualifiers times \$2)
		Profit	\$118.30

Note: An ROI of 211% is a very impressive return on a \$56 investment. Even if longshot winner, Lemon Drop Kid were omitted from this study the ROI would still be positive.

**211%** (profit over investment)

ROI

Added support for the above indicator can be found in the Fisher test of statistical significance which uses a 2 by 2 contingency table that is explained in detail in the discussion of Derby Indicator #1. If this table is used the p value comes to .0324 and the association between the groups is considered to be statistically significant. The table looks like the following:

## Observed Winners With The Raise A Native Sire Line 10 3 Expected Winners Observed Winners Lacking The Raise A Native Line 7 14 Expected Winners

After completing the rectangles on the Quick Calcs internet site with the data above all one needs to do is click on the word calculate that appears below the rectangles and the Quick Calcs site will compute the p value as .0324.

A p value of .0324 indicates that the differences between the above two groups is not likely to be due to chance alone or just a coincidence. One can conclude from the above p value that horses carrying the Raise A Native sire line that also qualify on Belmont Indicator #1 actually have an edge in the Belmont stakes.

#### BELMONT INDICATOR #4- The Raise A Native Sire Line/Northern Dancer Broodmare Sire Line Nick

I have found that the Raise A Native sire line/Northern Dancer broodmare sire line pattern has been very successful in the Belmont stakes in recent years. Such a

pattern is called a **Sire Line-Broodmare Sire Line Nick**. In order for a runner to qualify on this type of nick his sire line must trace back to Raise A Native and the male line of his broodmare sire must trace back to Northern Dancer (See Table 49).

Table 49 - The Four Generation Pedigree of Drosselmeyer Which Illustrates The Raise A Native Sire Line/Northern Dancer Broodmare Sire Line Nick

	1st gen	2nd gen	3rd gen	4th gen	
			Raise A Nati	Raise A Native	
		Forty Niner	wii. Frospector	Gold Digger	
		Forty Niner	File	Tom Rolfe	
	Distorted Humor		File	Continue	
	Distorted Humor		Donnie	Norther Dancer  Pas De Nom  Mr. Leader  Gay Sonnet  Northern Dancer	
		Danzige Requity	Danzig		
Drosselmeyer		Danzigs Beauty	Sweetest Chant		
			Sweetest Chant	Gay Sonnet	
			NIII I		
			Nijinsky	Flaming Page	
		Moscow Ballet	A AUDI	Cornish Prince	
	Caldan Ballat		Millicent	Milan Mill	
	Golden Ballet		Clave O Cald	Seattle Slew	
		Calden Jawal D	Slew O Gold	Alluvial	
		Golden Jewel Box	A4: 6: B: I	Storm Bird	
			Miss Storm Bird	Sunlover	

Notice that Drosselmeyer's sire line traces back to Raise A Native in the fourth generation. Drosselmeyer's sire is Distorted Humor who is a son of Forty Niner who

is a son of Mr. Prospector who in turn is a son of Raise A Native. The sire line of any horse is the male line that goes from the sire's father to his father etc. Since, Raise A Native appears on the tail –male line of Drosselmeyer, one can say that Drosselemeyer carries the Raise A Native sire line.

Also notice that Drosselmeyer's dam is Golden Ballet whose sire is Moscow Ballet, a son of Nijinsky who in turn was a son of Northern Dancer who appears in Drosselmeyer's fourth generation on the dam side. The broodmare sire of any horse is the sire of the dam of that horse. Therefore the broodmare sire line is the sire line of the broodmare sire. One can say that Drosselmeyer carries the Northern Dancer broodmare sire line which appears in bold face in table 49.

Therefore, in analyzing Drosselmeyer's pedigree we can conclude that he carries the Raise A Native Sire Line/Northern Dancer Broodmare Sire Line nick.

In order to fit this indicator a horse must carry the Raise A Native /Northern Dancer nick and fit all the rules found in Belmont Indicator #1.

Runners qualifying on the above indicator's rules have won 6 Belmonts in the last 12 years where at least one qualifier started and has a strong impact value of **4.59** (50% of the winners divided by 10.9% of the starters). This indicator has generated 6 winners, one second place finisher and 2 third place finishers from only 13 qualifiers since 1992 (See Table 50).

Table 50- Belmont Runners Who Qualified On The Rules In Indicator # 4 (In the Money Runners are in Bold Face)

Year	Qualifiers	No. Of Qualfiiers	Starters
2012		0	0
2011	Master of Hounds	1	12
2010	Drosselmeyer WON	1	12
2009	Summer Bird WON	1	10
2008		0	0
2007	Curlin 2 <sup>nd</sup>	1	7
2006	Jazil WON and Bob and John	2	12
2005		0	0
2004		0	0
2003	Empire Maker WON	1	5
2002	Sunday Break 3 <sup>rd</sup>	1	10
2001		0	0
2000	Unshaded 3 <sup>rd</sup>	1	11
1999	Prime Directive	1	11
1998	Victory Gallop WON	1	11
1997	Crypto Star	1	7
1996		0	0
1995	Thunder Gulch WON	1	11
1992-	1994	0	0
		13	of 119

Note: This indicator has a very strong impact value of **4.59**. Since there were no qualifiers in 9 years above, those years were omitted from this study.

Evidence to support the above indicator is found in its very strong ROI. If one were to wager \$2 on each qualifier to win the cost would be \$26. Since the total return on our 6 winners is \$90.20 the profit realized is \$64.20. The ROI comes to **247%** (64.20 divided by an investment of \$26).

Although the above indicator has a very high impact value one must note that the sample size from which it is derived is small. However, when one looks at the last six years from 2003 to the present we see only 7 qualifiers that started in the

Belmont and from these 7 we get 4 winners and a second place finisher. Such results seem to indicate that The Raise A Native Sire Line/Northern Dancer Broodmare sire line nick may actually be a recent trend in the Belmont stakes and handicappers might be able to predict future Belmont winners by using this indicator.

#### **BELMONT INDICATOR #5 -Early Speed**

Although closers occasionally win the Belmont we want our contenders to show a reasonable amount of early speed. This author has found that a very high percentage of winners were fairly close up in a graded stake at 9 furlongs or longer.

To qualify on this indicator the runner must be within 3  $\frac{1}{2}$  lengths of the leader at the 6 furlong call or 1 mile call of a graded stake race at 9 furlongs or be within 3  $\frac{1}{2}$  lengths of the leader at the 8 furlong call of the Derby or Preakness. In addition the runner must fit all the rules listed in Belmont Indicator #1.

Horses qualifying on this indicator have won 13 of the last 21 Belmonts and have a high impact value of **2.08** (61.9% winners divided by 29.7% of the starters). In addition, this indicator nailed the exacta 8 times since 1992 (See Table 51).

Table 51-Belmont Runners Who Qualfied On Our Early Speed Indicator (Runners In The Money Are In Bold Face)

Year	Qualifiers	No. of Qualifiers
2012	Union Rags WON	1
2011	Nehro, Shackleford and Animal Kingdom	3
2010	Drosselmeyer WON, Fly Down 2nd, and Ice Box	3
2009	Summer Bird WON, Dunkirk 2 <sup>nd</sup> ,	
	and Charitable Man 4 <sup>th</sup>	3
2008	Denis of Cork 2 <sup>nd</sup> Big Brown	2
2007	Rags to Riches WON, Curlin 2nd, and Tiago	3

2006	Bluegrass Cat 2 <sup>nd</sup> , Sunriver 3 <sup>rd</sup> , and Bob and John	3
2005	Afleet Alex WON and Giacomo	2
2004	Smarty Jones 2 <sup>nd</sup> , and Purge	2
2003	Empire Maker WON, Ten Most Wanted 2nd,	
	Funny Cide 3 <sup>rd</sup> and Dynever	4
2002	Sunday Break 3rd, Perfect Drift, Proud Citizen	3
2001	<b>Point Given WON,</b> Invisible Ink, and Thunder Blitz	3
2000	Aptitude 2 <sup>nd</sup> , Unshaded 3 <sup>rd</sup> , Wheelaway	
	Postponed, and Globalize	5
1999	Lemon Drop Kid WON, Vision and Verse 2 <sup>nd</sup> ,	
	Charismatic 3 <sup>rd</sup> , Silverbulletday, Best of Luck	
	Pineaff, and Prime Directive	7
1998	Victory Gallop WON, Real Quiet 2nd and Classic Ca	t 3
1997	Touch Gold WON, Silver Charm 2nd	2
1996	<b>Skip Away 2<sup>nd</sup>, </b> Jamies First Punch and Cavonnier	3
1995	Thunder Gulch WON and Knockadoon	2
1994	Tabasco Cat WON, Go For Gin 2 <sup>nd</sup> ,	
	and Strodes Creek 3rd	3
1993	Kissin Kris $ 2^{nd}$ , Prairie Bayou and Virginia Rapids	3
1992	AP Indy WON and Pine Bluff	2
		62 of 209 starters

Note: This indicator has a strong impact value of **2.08**.

Although this indicator has a positive winning ROI, it has been an excellent tool for selecting 8 exactas since 1992. If handicappers were to combine all qualifiers each year in \$2 exacta boxes the total cost would be \$304 and since the total return on our 8 winning exactas was \$1,922.10 the profit comes to \$1,618.10. A profit of \$1618.10 divided by an investment of \$288 yields an ROI of **532%**. Even if we omitted the huge exacta of \$1,537 in the 1999 Belmont stakes our ROI would still be positive.

### **BELMONT INDICATOR #6- Strong Conduit Mares In Tail-Female**

In the Derby section (Table 23) I listed 39 special conduit mares that were consistently found in the tail female line of Derby, Preakness and Belmont winners. Table 52 lists the last 40 Belmont winners and shows us that 25 of these winners trace to one of our special conduit mares in tail-female.

Table 52- Conduit Mares Found In Tail-Female of the Last 40 Belmont Winners (Asterisks Indicate Winners That Did Not Carry One of Our Special Conduit Mares In Tail-Female)

	Conduit Mares in Tan-Female)			
Year	Belmont Winner	Conduit Mare		
2012	Union Rags	Epitaph		
2011	Ruler on Ice	Chaffaway *		
2010	Drosselmeyer	Consuelo *		
2009	Summer Bird	Black Velvet *		
2008	Da' Tara	Princess Mary *		
2007	Rags to Riches	Torpenhow		
2006	Jazil	Torpenhow		
2005	Afleet Alex	Remembrance		
2004	Birdstone	Padilla *		
2003	Empire Maker	Petit Bleu		
2002	Sarava	Bellamia *		
2001	Point Given	Rondeau *		
2000	Commendable	Plucky Liege		
1999	Lemon Drop Kid	Rambling Rose		
1998	Victory Gallop	Offensive *		
1997	Touch Gold	Renaissance		
1996	Editor's Note	Curiosity *		
1995	Thunder Gulch	Lady Daisy Cutter *		
1994	Tabasco Cat	Albilla *		
1993	Colonial Affair	Epitaph		
1992	A.P. Indy	Rambling Rose		
1991	Hansel	Madree *		
1990	Go and Go	Court Dress		
1989	Easy Goer	Doxa		
1988	Risen Star	Americus Girl		
1987	Bet Twice	La Venganza		
1986	Danzig Connection	Lygie		
1985	Crème Fraiche	Affection		

1984	Swale	Popinjay
1983	Caveat	Purity *
1982	Conquistador Cielo	Ophirdale
1981	Summing	Springtime *
1980	Temperence Hill	Soligena *
1979	Coastal	Affection
1978	Affirmed	Nature
1977	Seattle Slew	Frizette
1976	Bold Forbes	La Venganza
1975	Avatar	Remembrance
1974	Little Current	Fine Feathers
1973	Secretariat	Bill and Coo

Note: 25 of the last 40 Belmont winners traced to one of our special conduit mares in tail-female.

To qualify on this indicator a runner must carry one of our special conduit mares in tail female and also qualify on all the rules found in Belmont Indicator #1.

Runners that fit this indicator have won 8 of the last 19 Belmonts in which at least one qualifier started. Since qualifiers comprise 42.1% of the winners and 18% of the starters, the impact value for this indicator is a strong **2.34**. From 34 qualifiers we get 8 winners, 7 place finishers and 6 show horses which means 62% of our qualifiers raced in the money (See Table 53).

Table 53- Belmont Runners That Carry One Of Our Strong Conduit Mares In Tail-Female And Also Qualify On All The Rules Found In Belmont Indicator #1 (In The Money Horses Are In Bold Face)

Year	Qualifiers	No. Of Qualifiers
2012	Union Rags WON and Street Life 4th	2
2011	Brilliant Speed 3 <sup>rd</sup> , Shackleford and Nehro	3
2010	Ice Box	1
2009	Mine That Bird 3rd	1

2008	Big Brown	1
2007	Rags to Riches WON	1
2006	Jazil WON and Bluegrass Cat 2 <sup>nd</sup> and Hemingway's Key	3
2005	Afleet Alex WON	1
2004	Smarty Jones 2 <sup>nd</sup>	1
2003	Empire Maker WON, Ten Most Wanted 2nd,	
	Funny Cide 3 <sup>rd</sup> and Dynever	4
2002	Proud Citizen	1
2001		0
2000	Aptitude 2 <sup>nd</sup> and Postponed	2
1999	Lemon Drop Kid WON, Charismatic 3 <sup>rd</sup> , Best of Luck	
	and Silverbulletday	4
1998	Real Quiet 2 <sup>nd</sup>	1
1997	Touch Gold WON	1
1996	Cavonnier	1
1995		0
1994	Go For Gin 2 <sup>nd</sup> and Strodes Creek 3 <sup>rd</sup>	2
1993	Kissin Kris 2 <sup>nd</sup> and Prairie Bayou	2
1992	A.P. Indy WON and Pine Bluff 3 <sup>rd</sup>	2
	_	34 of 189

Note: This indicator has a strong impact value of **2.34.** Since there were no qualifiers in 1995 and 2001 those years were not used in this study.

Added support for the above indicator is found in its positive ROI. If handicappers were to wager \$2 on each of the above 34 qualifiers the return on our 8 winners would be \$115.80. Since the investment was \$68 the profit comes to \$47.80 and the ROI is **70%** (profit divided by investment).

An ROI of 70% is a solid return on ones investment. Handicappers should note that this indicator generated 8 winners, 7 place finishers and 6 show horses from

only 34 qualifiers since 1992 and has a strong impact value for each finishing position: the winning impact value is **2.34**, the place impact value is **2.04** and the impact value for third place finishers is **1.75**.

#### Codes For the 6 Belmont Indicators

**BELMONT INDICATOR** #1 - F92= Give 2 points to all runners that achieve the following: 1) a final 1/8 of a mile in 12 3/5 or less or a final 3 furlongs in 37 4/5 or less in a graded stake at 9 furlongs at age three or a final quarter in the Kentucky Derby in 25 2/5 or less or a final 3/16 in the Preakness in 19 1/5 or less. 2) the runner must have a 92 or higher Beyer figure in one of its last two starts in a graded stake at 9 furlongs or more. 3) The runner must not show a loss of 2 lengths or more from the 6 furlong call to the finish of its 9 furlong stake race or from the mile call to the finish of the Preakness if either of these above races are used to qualify it on final fraction times. Any loss of ground in the Kentucky Derby is acceptable. 4) the runner must be no worse than fourth in its last start unless it was the Kentucky Derby 5) If the runner was worse than fourth in the Kentucky Derby it must be no worse than third in its first start after the Derby or in its last start before the Derby. 6) the runner must not be worse than fourth in the race that qualifies it on final fraction time 7)The runner must not be a frontrunner in its qualifying race for final fraction times. 8)races over polytracks are not used in this study

**BELMONT INDICATOR #2- BU= Give 3 points** to all horses that carry Buckpasser in the X passing position provided that they qualify on all the rules stated in indicator #1 above.

**BELMONT INDICATOR #3- RF= Give 4 points** to all horses that carry the Raise A Native sire line provided that they qualify on all the rules stated in indicator # 1 above.

**BELMONT INDICATOR #4-RN/ND= Give 5 points** to all horses that carry the Raise A Native/ Northern Dancer nick provided that it qualifies on all the rules stated in indicator #1 above.

**BELMONT INDICATOR #5-ES= 1) Give 2 points** to all horses that were within 3 ½ lengths of the leader at the 6 furlong call of a 9 furlong graded stake race or were within 3 ½ lengths of the leader of the Preakness at the mile call provided that they qualify on all the rules stated in Belmont Indicator #1 above.

**BELMONT INDICATOR #6-CM= Give 2 points** to all runners who carry one of our special conduit mares in tail-female provided that they qualify on all the rules found in Belmont Indicator #1.

Tables 54, 55, 56 and 57, -Checklists for the Belmont Stakes of 2009-2012  $\,$ 

Belmont Checklist 2009							
Summer Bird	2	3	4	5	2	0	16
Dunkirk	2	3	4	0	2	0	11
Charitable Man	2	3	4	0	2	0	11
Mine That Bird	2	0	4	0	2	2	10
Flying Private	2	3	4	0	0	0	9
Luv Gov	0	0	0	0	0	0	0
Brave Victory	0	0	0	0	0	0	0
Mr. Hot Stuff	0	0	0	0	0	0	0
Chocolate Candy	0	0	0	0	0	0	0
Miner's Escape	0	0	0	0	0	0	0
Belmont Checklist 2010	F92	BU	RF	RN/ND	ES	CM	Total
Drosslemeyer	2	3	4	5	2	0	16
Ice Box	2	0	0	0	2	2	6
Fly Down	2	0	0	0	2	0	4
First Dude	0	0	0	0	0	0	0
Game on Dude	0	0	0	0	0	0	0
Uptowncharliebrown	0	0	0	0	0	0	0
Stay Put	0	0	0	0	0	0	0
Interactif	0	0	0	0	0	0	0
Stately Victor	0	0	0	0	0	0	0
Make Music For Me	0	0	0	0	0	0	0
Dave in Dixie	_	_	_	^	^	^	0
	0	0	0	0	0	0	0

Belmont Checklist 2011							
Master of Hounds	2	0	4	5	0	0	11
Shackleford	2	3	0	0	2	2	9
Brilliant Speed	2	3	0	0	2	2	9
Nehro	2	0	0	0	2	2	6
Mucho Macho Man	2	0	0	0	2	2	6
Animal Kingdom	2	0	0	0	2	0	4
Stay Thirsty	0	0	0	0	0	0	0
Santiva	0	0	0	0	0	0	0
Monzon	0	0	0	0	0	0	0
Prime Cut	0	0	0	0	0	0	0
Isn't He Perfect	0	0	0	0	0	0	0
Ruler On Ice	0	0	0	0	0	0	0
Rulei Office	U	U	U	U	U	U	U
Belmont Checklist 2012	F92	BU		RAN/ND			Tota
Belmont Checklist 2012	F92	BU	RF	RAN/ND	ES	CM	Tota
Belmont Checklist 2012 Street Life	F92 2	BU 0	RF I	RAN/ND 0	ES 0	CM 2	Tota 8
Belmont Checklist 2012 Street Life Union Rags	F92 2 2	BU 0 0	RF 1 4 0	RAN/ND 0 0	ES 0 2	CM 2 2	Tota 8 6
Belmont Checklist 2012 Street Life Union Rags Paynter	F92 2 2 0	BU 0 0 0	RF   4	RAN/ND 0 0 0	ES 0 2 0	CM 2 2 0	Tota 8 6 0
Belmont Checklist 2012 Street Life Union Rags Paynter Dullahan	F92 2 2 0	BU 0 0 0 0	RF   4	RAN/ND 0 0 0 0	ES 0 2 0 0	CM 2 2 0	Tota 8 6 0
Belmont Checklist 2012 Street Life Union Rags Paynter Dullahan Atigun	F92 2 2 0 0	BU 0 0 0 0 0	RF I 4 0 0 0 0	RAN/ND 0 0 0 0 0	ES 0 2 0 0	CM 2 2 0 0	Tota 8 6 0 0
Belmont Checklist 2012 Street Life Union Rags Paynter Dullahan Atigun Five Sixteen	F92 2 2 0 0 0	BU 0 0 0 0 0 0	RF 1 4 0 0 0 0 0	RAN/ND 0 0 0 0 0 0	ES 0 2 0 0 0 0 0	CM 2 2 0 0 0	Tota 8 6 0 0 0
Belmont Checklist 2012 Street Life Union Rags Paynter Dullahan Atigun Five Sixteen Guyana Star Dweej	F92 2 2 0 0 0 0	BU 0 0 0 0 0 0	RF I 4 0 0 0 0 0 0	RAN/ND 0 0 0 0 0 0 0	ES 0 2 0 0 0 0 0 0	CM 2 2 0 0 0 0	Tota 8 6 0 0 0 0

One can see that only two horses in the 2012 Belmont received points on my checklist. One of these, **Union Rags** (6 points) won the Belmont and the other, **Street Life** (8 points) raced fourth. In looking for other runners for the trifecta and superfecta it was clear to me that Paynter who almost qualified on my final 1/8 of a mile indicator was definitely one to include in the trifecta and superfecta because he had a 106 Beyer figure in his last race. Although Dullahan did not qualify for any points he did win the Blue Grass Stakes and was a closing third in the Derby and also carried the strong conduit mare, Broom Flower in tail female. Although Atigun

received no points he did carry the strong conduit mare, Bill and Coo in tail female and was coming off a winning effort and also carried the powerful Raise A Native sire line. Optimizer was the only runner in this Belmont who had Buckpasser in the X passing position so I through him in my trifectas and superfectas as well. I recommended a trifecta key of Union Rags in the win position with Atigun, Dullahan, Paynter, Street Life and Optimizer in the place and show positions. The \$1 trifecta came back a strong \$248 and the 10 cent superfecta which I also recommended came back \$95.30 dollars.

In the 2011 Belmont stakes Master of Hounds, my checklist leader, raced out of the money. Brilliant Speed who was second choice on my checklist and the only runner with the great Buckpasser in the X passing position made a strong rally in the stretch but hung in the last furlong while finishing third. It was a bad year for my checklist.

In 2010 my checklist leader was a whopping overlay named Drosselmeyer who went off at 13-1 and won the Belmont in the clear. Drosselmeyer qualified on two very powerful indicators: The Raise A Native sire line plus a fast final fraction and Buckpasser in the X passing position. This type of runner is what I mainly look for in all three legs of the Triple Crown--- a horse who leads my checklist while qualifying on very important indicators and goes postward at

lucrative odds. I also recommended an exacta box of Drosselmeyer my checklist leader and Fly Down who was third choice on my checklist. These two runners comprised a \$141 exacta combination.

In 2009 my checklist leader **Summer Bird**, **a huge overlay**, won the Belmont at odss of **12-1** and my second checklist choice, Dunkirk, raced second and my 4<sup>th</sup> choice on my checklist, Mine That Bird ran 3<sup>rd</sup> while my 3<sup>rd</sup> checklist point getter, Charitable Man raced fourth. Interestingly, all 4 of the above runners carried the **Raise A Native** sire line and also qualified on my final 1/8 of a mile indicator. In addition, three of the first four finishers carried **Buckpasser in the X passing position** (Summer Bird, Dunkirk and Charitable Man). The \$2 exacta of Summer Bird and Dunkirk paid **\$121**, the \$2 trifecta of Summer Bird, Dunkirk and Mine That Bird returned **\$295** and the \$2 superfecta of the above 4 runners returned **\$852**. Hail Raise A Native!

#### **Summary and Conclusions**

The indicators in this book provide handicappers with an edge in all three Triple Crown events. When incorporated into a checklist the points accumulated by each entry can serve as clues in selecting the likely contenders.

Some indicators like the Raise A Native sire line and Buckpasser in the X passing position are so strong that they should be emphasized. These two

indicators came up strong in all three legs of the Triple Crown and have very high impact values and solid ROIs in each race. Statisticians may criticize these indicators because the sample sizes of each is rather small but since they work well to predict winners in all three jewels of the crown they are solid handicapping tools.

I remember back in 2004 someone criticized my Raise A Native indicator by saying that all dominant sire lines will fade in time and that my Raise A Native sire line angle would get weaker. He looked like he was right in the next few years as Derby winners Giacomo and Barbaro carried different sire lines. However, in 2010 Derby winner Super Saver (\$18), a member of the Raise A Native sire line, qualified on my final fraction indicator and in 2012 Derby winner I'll Have Another (\$32.80), also a member of the Raise A Native sire line qualified on my final fraction indicator. Furthermore, in 2010 there were only two runners in the Derby that carried the Raise A Native sire line and qualified on my final fraction indicator: Super Saver, the winner, and Dublin who ran out of the money. In 2012 there were only 2 runners in the Derby that carried the Raise A Native sire line and also qualified on my final fraction indicator (Bodemeister and I'll Have Another) and they comprised a \$306 exacta combination.

Similarly in the Belmont stakes since 2004 there have been 4 winners that carried the Raise A Native sire line and qualified on my final fraction indicator: Afleet Alex (2005), Jazil (2006), Summer Bird (2009), and Drosselmeyer (2010). Of particular interest are the prices paid by the last two winners: Summer Bird returned \$25.80 and Drosselmeyer returned \$28.

When a method can be used to predict the future and the prices paid by winning qualifiers are large like the ones above handicappers should wager on its qualifiers.

Although my checklists generally do well in the Triple Crown races there are years when the winners are so unpredictable that the checklist fails. A thoroughbred is a flesh and blood animal and does not always run back to his statistics. Animal Kingdom's Derby of 2011 and Ruler on Ice's Belmont that same year are examples of when the checklist fails to do well since Animal Kingdom only had 2 points on my checklist and Ruler on Ice had zero points. Handicappers must realize that it is impossible to pick the Derby, Preakness and Belmont winner every year but by using the information provided in my checklists one should be able to select a fairly high percentage of good priced winners over the years. The next three sections illustrate how my checklist performed in the Kentucky Derby, Preakness and Belmont stakes over the last 19 years.

**Table 58--Conclusions About My Kentucky Derby Checklist (1994-2012)** 

Checklist Last 19 Derby Winners	37.8	RF	98	23b	SR	92	BK	CM	Total	Checklist Placing
2012 I'll Have Another	2	4	0	2	0	0	0	4	12	Second Choice
2011 Animal Kingdom	0	0	0	2	0	0	0	0	2	
2010 Super Saver	2	4	2	2	3	2	3	4	22	Leader
2009 Mine That Bird	0	0	0	2	0	0	0	0	2	
2008 Big Brown	0	0	0	0	3	0	0	0	3	
2007 Street Sense	0	0	0	0	0	2	0	0	2	
2006 Barbaro	2	0	2	0	3	2	0	4	13	Second Choice
2005 Giacomo	2	0	2	0	0	2	0	0	6	
2004 Smarty Jones	2	4	2	2	3	0	0	4	17	Leader
2003 Funny Cide	2	4	2	0	3	2	3	4	20	Leader
2002 War Emblem	0	0	0	0	0	0	0	0	0	
2001 Monarchos	2	4	2	0	3	0	0	4	15	Leader
2000 Fusaichi Pegasus	2	4	2	0	3	0	0	4	15	Leader
1999 Charismatic	0	0	0	0	0	0	0	0	0	
1998 Real Quiet	2	4	2	0	0	2	3	4	17	Leader
1997 Silver Charm	0	0	0	0	3	0	0	0	3	
1996 Grindstone	2	4	2	2	0	0	0	4	14	Second Choice
1995 Thunder Gulch	2	4	2	0	0	2	0	0	10	Second Choice
1994 Go For Gin	2	0	2	2	3	2	0	4	15	Leader

In the last 19 years my Derby **checklist leader** or **the second best point getter** on my checklist won the roses 11 times (58%). Interestingly, many of these winners paid very lucrative prices as follows: I'll Have Another \$32.80, Super Saver \$18, Funny Cide \$27.60, Monarchos \$23, Thunder Gulch \$51 and Go For Gin \$20.20. If one were to wager \$2 on each Derby checklist leader and checklist second choice over the last 19 years the investment would be \$78 and the total return on the 11 winners comes to \$236.20 Since the profit derived is \$158.20 the **ROI** is an extraordinary **203%** (See Table 59)

Table 59- Parimutuel Prices of the 11 Derby Winners That Were Either the Checklist Leader or Second Choice on My Checklist and The ROI That They Generated

Year	Derby Winner	<b>Parimutuel Price</b>	<b>Checklist Position</b>
2012	I'll Have Another	32.80	Second Choice
2010	Super Saver	18.00	Checklist Leader
2006	Barbaro	14.20	Second Choice
2004	Smarty Jones	10.20	Checklist Leader
2003	Funny Cide (tied with Empi	re	
	Maker)	27.60	Checklist Leader
2001	Monarchos	23.00	Checklist Leader
2000	Fusaichi Pegasus	6.60	Checklist Leader
1998	Real Quiet	18.80	Checklist Leader
1996	Grindstone	13.80	Second Choice
1995	Thunder Gulch	51.00	Second Choice
1994	Go For Gin	20.20	Checklist Leader
	Total Return	\$ 236.20	
	Total Investm	nent \$78 (\$4 per	year times 19 years
		plus c	one tie)
	Profit	\$158.20	
	ROI	<b>203%</b> (pro	fit over investment)

Note: An ROI of **203%** is extraordinary and shows the value of wagering on our checklist leader and second choice over the last 19 Derbies.

Checklist leaders do not always offer value. For example, Bodemeister was the Derby checklist leader last year with 20 points but offered no value in the win pool at 4-1. However, I'll Have Another who was second choice on my Derby checklist with 12 points was a huge overlay at odds of 15-1 and therefore was one of the value plays in last years Derby. When playing the Derby and Belmont Stakes always look for value among the checklist leaders and second choices because history tells us that these two legs of the Triple Crown (unlike the Preakness) generate the largest returns.

I have always maintained that combining **pedigree factors** with **racing factors** is **very important**. There were many runners in the history of the Kentucky Derby that carried the Raise A Native sire line and finished out of the money. However, when the Raise A Native sire line is combined with a fast finish in a big 5 prep race I found data that is quite remarkable. Derby Indicator #2 (The Raise A Native Sire Line Plus A Fast Finish In A Big 5 Prep) gets 44.4% winners from only 11.3% of the starters and has a very strong impact value of **3.93**. Runners that qualify on this indicator are winning the roses almost 4 times more often than statistical expectation.

Through history there have been 18 Derby winners that carried the Raise A Native sire line. Since 12 of the 18 qualified on Derby Indicator #2 (Raise A Native Plus A Fast Final Fraction) lets do an analysis of the other 6 Raise A Native sire line

winners to see why they did not qualify on my fast final fraction indicator.

**Mine That Bird**, the 2009 Derby winner, was not even close to qualifying on my final fraction indicator and never even achieved a Beyer figure higher than an 81.

**Street Sense**, the 2007 Derby winner, never raced in a big 5 prep race over a dirt surface but did run in the Blue Grass which was run on a polytrack that year. If he had run over a dirt track at 9 furlongs he probably would have qualified on my final fraction indicator.

**War Emblem**, the 2002 Derby winner, ran in the Illinois Derby which is not a big 5 prep race and therefore could not qualify on my final fraction indicator. He did run a fast final fraction in the Illinois Derby ( the last 3 furlongs in 36.8).

**Genuine Risk,** the 1980 Derby winner, was not even close to qualifying on my final fraction indicator.

**Affirmed**, the 1978 Derby winner did not qualify on my final fraction indicator but did run exceedingly fast early fractions in the Santa Anita Derby going the first four furlongs in a blazing 45 4/5 and racing by the six furlong point in a scintillating 1:09 4/5 on his way to a handy 8 length victory. He raced the last 3 furlongs in a

respectable 38 1/5 seconds and just missed qualifying on my final 3 furlong indicator by only 2/5 of a second. Considering those brilliant early fractions one would have expected him to tire in the final furlongs but instead he won the Santa Anita Derby by 8 lengths as his rider pleased and could have gone considerably faster if asked for more speed.

**Majestic Prince**, the Derby winner in 1969 also missed qualifying on my final fraction indicator by 2/5 of a second (running the last 3/8 of the Santa Anita Derby in 38 1/5). However, he won the race handily by 8 lengths under jockey Bill Hartack and therefore probably could have gone a few ticks faster if Hartack would have urged him for more speed.

In summary, 12 Raise A Native sire line Derby winners qualified on my final fraction indicator and 6 did not. Of the six that did not Mine That Bird and Genuine Risk just ran too slow. Of the other 4 that did not qualify one (War Emblem) did not run in a big 5 prep race. Another, Street Sense, never raced over a dirt track in a big 5 prep. Another, Affirmed raced blazingly fast early fractions in the Santa Anita Derby and just missed qualifying on my final fraction indicator. Another, Majestic Prince just missed qualifying on my final fraction indicator.

If a thoroughbred carries the Raise A Native sireline and runs the last 3 furlongs of a big 5 prep race in 37 4/5 or less, handicappers should consider wagering on that runner because those types have done exceedingly well in

### the run for the roses.

## A Play On Words (RAN is an Abbreviation for Raise A Native)

The RUNNERS with RAN on top have more RUN in them than those that RAN without RAN in tail-male. By the way the first four finishers in last year's Derby all carried the RAN sire line and RAN into the superfecta: (I'll Have Another, Bodemeister, Dullahan and Went the Day Well). I guess they just could RUN faster because they had more RAN in them than those that lacked RAN on top and were destined to become ALSO RANs.

Table 60--Conclusions About the Preakness

Checklists Last 19 Preaknesses	F95	CM	RF	BU	94	Total	<b>Checklist Position</b>
2012 I'll Have Another	3	4	5	0	3	15	Second Choice
2011 Shackleford	3	4	0	5	3	15	Leader
2010 Lookin At Lucky	0	0	0	0	0	0	
2009 Rachel Alexandra	0	0	0	0	3	3	
2008 Big Brown	3	4	0	0	3	10	Leader
2007 Curlin	3	0	5	0	3	11	Second Choice
2006 Bernardini	0	0	0	0	3	3	
2005 Afleet Alex	3	4	5	0	3	15	Leader
2004 Smarty Jones	3	4	5	0	3	15	Leader
2003 Funny Cide	3	4	5	5	3	20	Leader
2002 War Emblem	0	0	0	0	3	3	
2001 Point Given	0	0	0	0	0	0	
2000 Red Bullet	0	0	0	0	0	0	
1999 Charismatic	3	4	0	0	3	10	Leader (tied )
1998 Real Quiet	3	4	5	5	3	20	Leader
1997 Silver Charm	3	0	0	0	3	6	
1996 Louis Quatorze	0	0	0	0	0	0	
1995 Timber Country	3	4	5	0	3	15	Leader
1994 Tabasco Cat	0	0	0	0	0	0	

Looking at Table 60 one can see that 10 of the last 19 Preakness winners (53%) were either the **checklist leader or second choice**. If one were to wager \$2 to win on our checklist leader and second best point getter each year for 19 years the total investment would be 78 dollars and the total profit would be 18.20 dollars. The ROI would be 23% (See Table 61).

Table 61- The Parimutuel Prices Of Preakness Winners That Were Either Checklist Leaders Or Second Choices On Our Checklist And How The ROI Is Determined

Year	Preakness W	Vinner Par	imutue	l Price (Per \$2 Wager)
2012	I'll Have Anot	ther	8.40	
2011	Shackleford		27.20	
2008	Big Brown		2.40	
2007	Curlin		8.80	
2005	Afleet Alex		8.60	
2004	<b>Smarty Jones</b>		3.40	
2003	Funny Cide		5.80	
1999	Charismatic		18.80	(Tied With Menifee For Leader)
1998	Real Quiet		7.00	
1995	Timber Coun	try	5.80	
		Total Return	\$96.20	
		Total Investment	\$78.00	(\$4 per year times 19 years
				plus one tie)
		Profit	\$18.20	-
		ROI	23% (	(profit divided by investment)

Note: Although the above ROI for the Preakness (23%) is not as strong as the ROI derived from our Derby checklist leaders and second choices (203%), it does show us that the above indicator is a good one.

Table 62--Conclusions About the Belmont Stakes

Belmont CKLST Winners 94-2012	F92	BU	RF	RN/ND	ES	CM	Total	<b>Checklist Position</b>
2012 Union Rags	2	0	0	0	2	2	6	Second Choice
2011 Ruler On Ice	0	0	0	0	0	0	0	
2010 Drosselmeyer	2	3	4	5	2	0	16	Leader
2009 Summer Bird	2	3	4	5	2	0	16	Leader
2008 Da' Tara	0	0	0	0	0	0	0	
2007 Rags to Riches	2	3	0	0	2	2	9	Second Choice
2006 Jazil	2	0	4	5	0	2	13	Leader
2005 Afleet Alex	2	0	4	0	2	2	10	Leader
2004 Birdstone	0	0	0	0	0	0	0	
2003 Empire Maker	2	3	4	5	2	2	18	Leader
2002 Sarava	0	0	0	0	0	0	0	
2001 Point Given	2	0	4	0	2	0	8	Leader
2000 Commendable	0	0	0	0	0	0	0	
1999 Lemon Drop Kid	2	3	4	0	2	2	13	Leader
1998 Victory Gallop	2	0	4	5	2	0	13	Leader
1997 Touch Gold	2	3	0	0	2	2	9	Second Choice
1996 Editor's Note	2	0	4	0	0	0	6	Second Choice
1995 Thunder Gulch	2	0	4	5	2	0	13	Leader
1994 Tabasco Cat	2	0	0	0	2	0	4	

Looking at the Checklist for the last 19 Belmont Winners one can see that our checklist leader won the Belmont 9 times and our second choice won it 4 times. Collectively, the leader and second choice won 13 of the last 19 Belmonts (68%). If handicappers were to wager \$2 on each of our checklist leaders and second choices the total investment would come to \$82 and our ROI comes to a very powerful **143%** (See Table 63).

Table 63- The Parimutuel Prices of the 13 Belmont Winners That Were Either The Checklist Leader or Second Choice And How The ROI Is Determined

Year Belmont Winner Parimutuel Price (Per \$2 Wager)

2012	Union Rags	7.50		
2010	Drosselmeyer	28.00		
2009	Summer Bird	25.80		
2007	Rags To Riches	10.60		
2006	Jazil	14.40	(Tied With Bob and John For Leader)	
2005	Afleet Alex	4.30		
2003	Empire Maker	6.00		
2001	Point Given	4.40		
1999	Lemon Drop Kid	61.50	(Tied with Prime Directive For Leader)	
1998	Victory Gallop	11.00	(Tied with Real Quiet For Checklist Leader)	
1997	Touch Gold	7.30		
1996	Editor's Note	13.60		
1995	Thunder Gulch	5.00		
	Total Return	\$199.40		
	Total Investment	\$82.00 (\$4 per year plus 3 ties)		
	Profit	\$117.40		
	ROI	143%		

Note: An ROI of **143%** is an extraordinary return on our 13 Belmont winners that were either our checklist leader or second choice on our checklist.

Interestingly, if punters were to wager \$2 on my checklist leader and second best point getter in the Derby, Preakness and Belmont Stakes each year for the last 19 years, they would have turned a profit in all three legs of the Triple Crown.

I would like to thank William Lathrop for the information provided in his book-Modern Conduit Mares and also Marianna Haun for the information about the X chromosome which is found in her book –The X Factor. **Stan Caris** 

#### Miscellaneous

## How To Calculate The Final 1/8 of a Mile Time For a 9 Furlong Race

In order to calculate the time it takes a horse to run his final eighth of a mile in a 9 furlong race one needs to subtract the horse's mile time from his final time. See **Table 64** which illustrates the fractional times for the Santa Anita Derby of 2012. I'll Have Another took 1:35 2/5 seconds to run a mile in this race because he was ½ length behind the leader who ran the mile in 1:35 1/5. Since the formula used to transfer lengths to seconds is 1 length equals 1/5 of a second we add 1/5 of a second to the leaders time of 1:35 1/5 to get I'll Have Another's mile time as 1:35 2/5. Since he won the race in 1:47 4/5 he ran his final eighth in **12 2/5** (subtract 1:35 2/5 from 1:47 4/5). One should note that this author drops anything less than ½ of a length. Therefore ¼ of a length or a neck or a head or a nose is dropped whereas ½ a length or ¾ of a length is rounded up to one length.

Racing fans should also note that the Daily Racing Form lists the number of lengths behind for a runner at 5 points in a 9 furlong race. These points are the  $\frac{1}{4}$ , the  $\frac{1}{4}$ , the  $\frac{3}{4}$ , the 1 mile point and the finish line. To determine final  $\frac{1}{8}$  time all one needs to know is the 1 mile time which can be determined by using the  $4^{th}$  call and the fifth call which is at the finish of the 9 furlong race. Adjustments are then made for lengths behind in order to determine fractional times.

Table 64- The Fractional Times of The Santa Anita Derby of 2012 Showing The Number of Lengths I'll Have Another Was Behind The Leader At the 6 Furlong Call (3/4 of a mile), the Mile Call And Where He Was At The Finish.

Santa Anita Derby	Third Call ¾ mile	Fourth Call 1 mile	Fifth Call (9 Furlongs) 1 mile and an eighth		
Leader's Time	1:11	1:35 1/5	_		
I'll Have Another	2 lengths	½ a length	Won by a Nose		
<b>Lengths Behind Leader</b>	behind	behind	1:47 4/5		
I'll Have Another's Time	1:11 2/5	1:35 2/5	1:47 4/5		

Note: I'll Have Another's Final 1/8 is 12 2/5 seconds (1:47 4/5 minus 1:35 2/5). His final 3/8 time is 36 2/5 ( 1:47 4/5 minus 1:11 2/5)

## How to Calculate The Final 3/8 Time In A 9 Furlong Race

In order to compute I'll Have Another's final 3/8 time one needs to subtract his 6 furlong time (3/4 of a mile) from his 9 furlong finishing time. Since he was 2 lengths behind the leader at the 6 furlong call which was run in 1:11 flat by the leader, I'll Have Another's 6 furlong time is 1:11 2/5. Since he raced the 9 furlong distance in 1:47 4/5 he ran his final 3 furlongs in 36 2/5 seconds (1:11 2/5 subtracted from 1:47 4/5 equals 36 2/5).

Note: Only two calls are necessary to find the final 3/8 time for a horse that has run a 9 furlong race: the 6 furlong call which is the third call in a 9 furlong race and the final time.

### **How To Calculate Final Quarter Times in The Derby**

In order to calculate the final quarter time of the Kentucky Derby one needs to subtract the runner's one mile time from its final time at 10 furlongs. Looking at **Table 65** we can see that Animal Kingdom raced to the mile call in 1:38 flat. This figure of 1:38 flat is obtained by looking at the leaders time at one mile which was 1:37 2/5 and then adding 3/5 of a second to that time because Animal Kingdom was 2 <sup>3</sup>/<sub>4</sub> lengths behind the frontrunner at the mile call. Since Animal Kingdom won the roses in 2:02 flat his final quarter time was **24 flat** (1:38 subtracted from 2:02).

Table 65- The Fractional Times of the 2011 Kentucky Derby Showing
The Number of Lengths Animal Kingdom was Behind the Leader
At the Mile Call and Where He Was At The Finish

**Kentucky Derby Mile Call Finish** 

Time of the Leader 1:37 2/5

Animal Kingdom 2 3/4 behind

Animal Kingdom's Time 1:38 Won The Derby in 2:02

Final Quarter :24 flat

Note: Subtracting his mile time of 1:38 from his final time of 2:02 we get Animal Kingdom racing his final quarter of the Derby in 24 seconds flat.

Note: The Daily Racing Form past performances includes 5 points of call for the Derby: the ½ mile, the ¾ mile, the mile, and the mile and an eighth call and the finish. However, the only two calls needed to calculate final quarter time are the mile call which is the third call and the finish. Adjusments are then made for lengths behind.

#### **How To Calculate Final Three Sixteenths of the Preakness**

In order to find final 3/16 of the Preakness one must subtract the time it took the runner to complete one mile from the time it took him to run 1 3/16 miles. Looking at **Table 66** below we see that Afleet Alex reached the mile call of the Preakness in

1:36 4/5 seconds. The leader did the mile in 1:36 but Afleet Alex was 4 lengths behind him. Therefore we tack on 4/5 of a second to the leaders time and get Afleet Alex going to the mile in 1:36 4/5. Since Afleet Alex won the Preakness in 1:55 flat we can calculate his time for the last 3/16 of a mile simply by subtracting his mile time from his final time (1:36 4/5 subtracted from 1:55 produces a final 3/16 of a mile in **18 1/5.** As a help to handicappers the mile call in the Daily Racing Form for the Preakness is the third call that designates lengths behind the leader.

Table 66- The Fractional Times of the 2005 Preakness Showing The Number of Lengths Afleet Alex was Behind the Leader at the the Mile Call and Where He Was At The Finish

Preakness 1 Mile Call Finish

Leader 1:36

Afleet Alex 4 lengths behind

Afleet Alex's Time 1:36 4/5 He Won in 1:55

Final 3/16 time 18 1/5

Note: Subtracting Afleet Alex's mile time of 1:36 4/5 from his final time of 1:55 we get him racing the last 3/16 of the Preakness in 18 1/5 seconds.

#### Stallions Carrying Buckpasser In The X Passing Position

The following table is a list of major stallions that carry Buckpasser in the X passing position on their dam side. Handicappers should note that a male thoroughbred must have these stallions on their dam side in the X passing position in order to receive any genes that were present on Buckpasser's X chromosome. However, a female horse can have Buckpasser either on the dam's side or the sire's

side in the X passing position to receive genes that reside on his X.

In either of the above cases the transmission of Buckpasser's genes that are found on his X chromosome can only occur in a line that transmits these genes to the dam of the horse you are investigating (See Table 22 a Pedigree Chart of Super Saver found under Derby Indicator #7). See Table 67 for a list of stallions that carry Buckpasser in the X passing position.

Table 67- Prominent Stallions Carrying Buckpasser In The X Passing Position

Albert the Great Private Account
Any Given Saturday Proud Citizen
A.P. Indy Pure Prize
Aptitude Real Quiet
Behrens Redattore
Believe It Rhythm

Bluegrass Cat Seeking The Gold

Cahill Road Sir Cat
Chester House Slew O'Gold
Danehill Speightstown
D'Wildcat Stephanotis
Easy Goer Stormy Atlantic
Entepreneur Summer Squall

El Gran Senor Tapit

Empire Maker Touch Gold
Exchange Rate Unbridled

Fast Play Vision and Verse

Grand Slam Wando

Irish Open Wavering Monarch

Jump StartWildcat HeirKing CugatWild RushLemon Drop KidWoodman

Lion Hearted Majestic Warrior Miner's Mark

Mining

Miswaki 119

More Than Ready Not For Love Out of Place Petionville Plugged Nickle Polish Numbers

**Note:** Some of the above stallions are no longer alive or may no longer be fathering offspring, however they still can appear as the first, second, third, fourth, fifth etc. damsire and therefore be capable of transmitting genes on their X chromosome to many of today's thoroughbreds.

## **Table 68 - Prominent Stallions Carrying The Raise A Native Sire Line**

The following table lists most of the major Raise A Native sire line stallions that appear in modern pedigrees in tail-male. Some of these stallions are no longer alive or are no longer fathering offspring but they represent the Raise A Native sire line heritage and are found in tail-male of many modern day thoroughbreds (See Table 68).

# Table 68- Prominent Stallions That Are Members of the Raise A Native Sire Line

Affirmed Grindstone Kingmambo Afleet Alex Afleet Lemon Drop Kid Alvdar Majestic Light Maiestic Prince Alvsheba Birdstone Marias Mon Broken Vow Mr. Prospector Candy Ride Northern Afleet Carson City Our Emblem Petionville City Zip Point Given Conquistador Cielo Cryptoclearance Proud Citizen Curlin **Quiet American Distorted Humor** Seeking the Gold E Dubai Speightstown El Corredor Street Crv Smart Strike **Elusive Quality Empire Maker** Thunder Gulch

English Channel
Exclusive Native
Fappiano
Forty Niner
Flower Alley
Fusaichi Pegasus
Gone West
Grand Slam
Gulch

Unbridled's Song Victory Gallop Wavering Monarch Woodman

## Glossary

**Affirmed-** The last thoroughbred to win the Triple Crown. He beat Alydar by a nose in the 1978 Belmont.

**Ancestor-** An individual found in the pedigree of a thoroughbred. For example-Raise A Native is an ancestor of I'll Have Another and appears in I'll Have Another's fifth generation.

**Belmont Stakes-** The third leg of the Triple Crown which is the longest of the three races at 1 ½ miles and is run at Belmont Park in Long Island.

**Beyer Figure-**A speed figure that appears in bold face type in the Daily Racing Form that describes the total speed of a horse in a particular race.

**Big 5 Prep Race-** One of the following 9 furlong preps designated by this author to be of major importance for horses on the Kentucky Derby trail: Florida Derby, Santa Anita Derby, Wood Memorial, Arkansas Derby, and the Blue Grass (when it was run on a dirt track).

**Broodmare Sire-** The sire of a thoroughbred's dam. Sometimes referred to as the maternal grandsire. For example, Arch is the broodmare sire of last year's Derby winner, I'll Have Another.

**Buckpasser-** One of the greatest broodmare sires of all time who is a maternal grandson of Triple Crown Winner, War Admiral. Runners who carry Buckpasser in the X passing position have done very well in all three Triple Crown races. Although War Admiral was the most sought after stallion for inbreeding in recent years, Buckpasser may just take over that role in the future.

**Closer-** A horse that usually makes one big move in the last 2 or 3 furlongs of a race. Often referred to as a plotter.

**Conduit Mare-** Defined by William Lathrop ( author of Modern Conduit Mares) as the mare in tail-female that was born closest to 1900 but not before that time. For example Bill and Coo is the conduit mare of the great Secretariat.

**Dam-** The mother of a thoroughbred. For example, Won't Tell You is the dam of Affirmed.

**Descendent-** Progeny generated by a sire or dam. For example, male line descendents of Raise A Native have won 18 Kentucky Derbies.

**Doxa-** a conduit mare whose tail-female line has generated 8 different winners of Triple Crown events. For example- Doxa is the conduit mare of Smarty Jones.

**Exacta-** A type of wager that requires a handicapper to select the winner and second place finisher in exact order. For example- an exacta of 4 with 7 requires the 4 horse to win the race and the 7 horse to run second.

**Family 1 and 23b-** The best two families for generating Kentucky Derby winners. For example- Super Saver is a member of family 1 and I'll Have Another is a member of family 23b.

**Female Family-**The family of the dam of any thoroughbred which is traced along the tail-female line at the absolute bottom of the pedigree. For example, if one traces the female family of Animal Kingdom along his tail female line one will eventually arrive at the foundation mare of family number 1, Tregonwells Natural Barb Mare, who was born over 300 years ago.

**Final Eighth Time-** The time it takes a runner to race the final furlong of a race. In order to determine final eighth time handicappers must subtract the time it takes the horse to reach the last furlong point from the finishing time. For example- if a horse runs 8 furlongs of a 9 furlong race in 1:35 flat and finishes the race in 1:47 flat, his final eighth time is 12 seconds flat.

**Final Three Eighths Time-** The time it takes a horse to run the last 3 furlongs of a race. To determine this in a 9 furlong race one must subtract the time it took the horse to reach the 6 furlong point of the race from the time it took the horse to complete 9 furlongs.

**Final Quarter-** The time it takes a horse to run the final 2 furlongs of a race. For example- Mine That Bird ran the last quarter of the Kentucky Derby in 23 4/5 seconds. He reached the mile point in 1:38 4/5 and finished the mile and a quarter race in 2:02 3/5 (Subtract the mile time of 1:38 4/5 from his final time of 2:02 3/5 to get his final quarter time of 23 4/5).

**Fisher Test of Statistical Significance** – A test to find out the probability (p value) that a group of statistics are not due to chance alone. For example, since the p value for my Raise A Native sire line indicator in the Kentucky Derby comes out to **.0135** one can conclude that the 12 Derby winners that fit this indicator did not just find the winner's circle by chance or a random happening. That small p value supports the idea that horses qualifying on my Raise A Native indicator have a definite edge in the run for the roses.

**Furlong-** an eighth of a mile. For example- there are 8 furlongs in a mile (8/8 = one mile).

**Graded Stake Race-** A race that offers large purses and has a rating of Grade 1 (usually the best races of all), Grade 2 (usually the second best races of all), Grade 3 (third best races of all). For example- The Kentucky Derby is a grade 1 race.

**Impact Value-** A statistic that compares the percent of starters that qualify on a certain critierion with the percent of winners that qualify on that same critierion. For example- If the winning impact value for the Raise A Native sire line in the Kentucky Derby is approximately **2.00** (50% winners divided by 25% of the starters) one can conclude that horses who have the Raise A Native sire line are winning the roses twice as often as statistical expectation.

**Impact Value of 1.00-** an impact value that means the horses qualifying on this critierion are just winning their expected share of races. For example, if 75% of all Derby winners were bred in Kentucky and 75% of all starters in the Derby were also bred in Kentucky the impact value for this critierion would be 1.00 (75% winners divided by 75% of the starters). An impact value of 1.00 is of no value to a handicapper.

**In The Money-** Horses that finish first, second or third in a race.

**Kentucky Derby-** Americas most famous race. The first leg of the Triple Crown at 1 ¼ miles which is run on the first Saturday in May at Churchill Downs.

**Large Heart Gene-** According to Marianna Haun (author of the X Factor) it's a gene carried on the X chromosome that is responsible for the large heart in thoroughbreds.

**La Troienne** – One of the best mares of all time whose tail-female line has generated a long list of outstanding runners. La Troienne is a member of family 1x.

**Length-** refers to the length of a thoroughbred. For example, if a horse loses a race by one length we add 1/5 of a second to the winners time to get that horse's final time.

**Maternal Grandsire-** The sire of the dam of a thoroughbred which is often called the Broodmare sire. For example- Princequillo is the maternal grandsire of Secretariat.

**Nick- (Sire Line/Broodmare Sire Line)** A breeding pattern consisting of a certain sire line that is crossed with a certain broodmare sire line. For example-The Raise A Native Sire Line/Northern Dancer Broodmare sire line nick has been very successful in generating Belmont winners in recent years. Drosselmeyer, the 2010 Belmont winner, carries the Raise A Native sire line/Northern Dancer broodmare sire line nick (his sire traces in tail male to Raise A Native and his broodmare sire is a male line descendent of Northern Dancer.

Mitochondria- units found in the cytoplasm of the cell that supply energy.

**Mt-DNA-** (mitochondrial DNA)- genetic codes that dictate the production of mitochondria in the cell. These codes can only be transmitted by a female.

**Native Dancer-** A great thoroughbred runner whose male line descendents have won 19 Kentucky Derbies. He sired Raise A Native who in turn fathered Mr. Prospector whose sire line has become the most dominant line for generating winners of the Triple Crown events.

**Nonphalaris Line-** A line that does NOT trace to Phalaris a major stallion born in 1926. For example: Dr. Fager has all Nonphalaris lines since Phalaris never appears in his pedigree.

**One Mile Call-** The call that describes the position of a horse at the one mile point of a race. For example- At the mile call in last year's Derby Bodemeister was 3 lengths in front of the the field and he raced the mile in 1:35 flat.

**Overlay-** A horse that is going postward at odds that are considerably higher than expected. For example- In last years Derby I'll Have Another was a considerable overlay at odds of 15-1. This author felt his true odds should have been around 5-1.

**Pedigree Chart-** A chart that names the ancestors in a horse's past generations. For example- a 5 generation pedigree shows all the ancestors of a horse in his first, second, third, fourth and fifth generations. The total number of ancestors in a 5 generation pedigree is 62 (2 in the first generation, 4 in the second, 8 in the third, 16 in the fourth and 32 in the fifth generation).

**Phalaris-** A major stallion born in 1926 whose male line descendents consist of stallions frequently found in modern pedigrees. Male line descendents of Phalaris include the dominant sire lines of Native Dancer and his son Raise A Native and his grandson, Mr. Prospector, the male line of Nasrullah, the male line of Northern Dancer and the male line of Turn –To. Around 80% of all sire lines today are Phalaris lines.

**Polytrack-** A synthetic track made up of rubber, plastic etc. For example-Woodbine, Keenland, Arlington Park, Del Mar, Hollywood, and Turfway Park are among the major racetracks today that have a polytrack surface.

**Preakness**- The second leg of the Triple Crown at 1 3/16 miles which is run at Pimlico Racetrack in Maryland two weeks after the Kentucky Derby.

**P Value-** indicates the probability that a given statistic or set of statistics is likely to be due to chance. For example a p value of .05 or lower indicates that the statistic is significant and probably not due to a chance happening.

**Raise A Native-** A son of Native Dancer whose sire line has generated 18 Derby winners. Raise A Native's son, Mr. Prospector, is one of the most influential stallions found in modern day pedigrees.

**Raise A Native Sire Line/Northern Dancer Broodmare Sire Line-** refers to a nick that occurs when a horse carries the Raise A Native sire line and the Northern Dancer broodmare sire line.

**ROI-** An abbreviation for return on investment. For example if handicappers wagered \$2 on each of the 21 qualifiers found in my Buckpasser indicator for the Belmont stakes the cost would have been \$42 and the return would have been \$143.40. Since the profit is \$101.40 the ROI comes to 241% (a profit of \$101.40 divided by an investment of \$42 equals an ROI of 2.41 which is then multiplied by 100 to get an ROI of 241%.

**Sire Line-**The male line of a thoroughbred going from his father to the sire of that father to the great-grandsire etc. For example- Union Rags carries the Northern Dancer sire line.

**Speed Rating- (Daily Racing Form)-** A rating given in the Daily Racing Form which indicates how fast a horse runs in a particular race compared to a recent track record at that distance. For example – in last years Derby I'll Have Another was given a Daily Racing Form speed rating of 101.

**Statistical Expectation-** An indicator that describes whether or not a particular statistic is strong, weak, or neutral. For example, since the impact value for the Raise A Native sire line in the Derby is around 2.00 one can conclude that horses with this lineage are winning the Derby twice as often as statistical expectation.

**Superfecta-** a wager requiring racing fans to select the first four finishers of a race in exact order.

**Trifecta-** a wager requiring racing fans to select the first three finishers of a race in exact order.

**Tail-Female Line-** the dam line of any thoroughbred. For example- The tail-female line of Smarty Jones traces back to the great taproot mare, La Troienne. To locate this line in a pedigree chart simply look at the absolute bottom portion of the pedigree which shows a line of all females beginning with the horse's dam.

**Tail-Male Line-** The sire line of a thoroughbred. For example- the tail-male line of Secretariat traces back to Phalaris. To locate this line in a pedigree simply look at the absolute top of the pedigree chart which shows a line of all male stallions beginning with the horse's sire.

**Track Variant-** a Daily Racing Form number that describes the speed of the track on a given day. The higher the number, the slower the track. The lower the number the faster the track. For example Fly Down had a speed rating of 80 in the Dwyer Stakes of 2010 and that was achieved over a track variant of 29. He had an 80 speed rating over a very slow track that had a **high variant of 29**.

**Triple Crown-** America's most popular race series consisting of the Kentucky Derby on the first Saturday in May, the Preakness two weeks later and the Belmont Stakes three weeks after the Preakness.

**War Admiral**- The Triple Crown winner of 1937 who is frequently found in the X passing position of major stake winners. The maternal grandsire of Buckpasser.

**Wire to Wire-** a horse that wins his race from start to finish on the front end.

**X Passing Position-** the position of a stallion or dam in a pedigree that allows for the transmission of genes on his or her X chromosome. For example- Drosselmeyer has Buckpasser in the X passing position and therefore will inherit a certain percentage of Buckpasser's genes that were present on his X chromosome.

**X Chromosome-** An important chromosome that carries vital genes and is probably a major contributing factor in developing outstanding broodmare sires. The X chromosome of a sire is transmitted to all of his daughters and none of his sons. It is logical to assume that the great broodmare sires passed on a superlative X chromosome to all their daughters.

I would like to thank William Lathrop for the information provided in his book, Modern Conduit Mares and Marianna Haun for information about the X chromosome in her book The X Factor. **Stan Caris** 

## **Bibliography**

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#### **Internet Sources**

<u>www.pedigreequery.com</u>- This site can be used to analyze the 5 generation pedigree of any thoroughbred. Such critieria as sire lines, broodmare sire lines, Buckpasser in the X passing position, conduit mares etc. can be ascertained from the information given in the pedigrees. It is a site that can be used for free.

<u>www.tbheritage.com</u>- This site offers information on female families and articles on the recent research that has been done on mt-DNA from certain family branches.

**GraphPad QuickCalcs: Analyze a 2X2 contingency table.** This site can be used to determine if a statistic is significant. If you fill in the 4 rectangles as I illustrated in Derby Indictor #1 the Quick Calcs site will compute the p value for you.

## **Newspapers and Magazines**

<u>www.drf.com</u>- This site provides handicappers with entries, past performances, race results and news articles about thoroughbreds.

<u>www.bloodhorse.com/horse-</u> This site offers news about breeding thoroughbred racehorses. It provides the leading sire lists and broodmare sire lists for stallions and if you subscribe to the magazine you get 52 weekly magazines covering racing around the globe, a stallion register, a monthly stakes calendar and articles about major stakes races run throughout the year.