SMARTsig Confidential 9.03, March 2002

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NEXT ISSUE

April 2002, issue 9.04, is scheduled for posting on 3rd April 2002

SMART UP FRONT

The intelligent choice

GOLD MEDAL TUTUS

It's winter Olympics time again. Accompanied, as per usual with the now almost inevitable controversy raging around the standard of judging - this time however also followed by a governing body enquiry. And the questions are raised again - can all of these gold medal events be really called a sport?

"Well it takes a great deal of strength, dexterity, skill, practice, etc., etc." So what? So do countless other professions and/or hobbies, it doesn't give them Olympic status. One defining pronouncement comes from the wife of a friend of mine, who can frequently be heard muttering *"Sport, sport, - bloody sport!",* especially when he's hogging the TV watching either live action, a replay or scanning Teletext for the results.

It certainly wouldn't be understatement to say she is not a big sports fan (brought about primarily as an antidote to her partner's over indulgence it must be said). But ice dancing? Oh yes, I like that. Your Honour! I rest my case, ice dancing is not a sport, proven beyond all reasonable doubt (ask Iris)

Having caught the tail end of one of the tutus-on-ice-with-a-big-false-smile events the other evening, it occurs to me - as a self confessed layman - that bias is so inbuilt into the system that those within cannot see it. It seems to me that one of the biggest obstacles for a run-of-the-mill competitor to overcome is reputation. Anyone wanting to beat any of the elite group of pre-tournament favourites has to perform twice as well as they do to be even noticed.

A French couple won gold in the event I watched, and they did look very good - at least by my uneducated standards. But both the silver & bronze medal winners fell over during their routines. Are we to believe that the inflated pre-event reputations of these two couples make them so superior to the also-rans, that they can afford to trip over - and in a competition where apparently presentation is paramount?

Surely the Olympic ethic is to decorate the world's best, the world's strongest, fastest, fittest. Or who can go furthest, longest, highest, etc. Ballroom dancing on ice doesn't seem to fit the bill in my view. But then again neither does so many of the 'sports' now featured. What's this skiing somersaults all about? . . and now even baggy-trousered kids, wearing their baseball caps with the peak facing backwards have knocked the wheels off their skateboards and are getting gold medals for snow boarding antics on an ice-covered ramp. Great fun it might be, considerable skill and long practice needed no doubt, but an Olympic sport?

Much as many modern-day university degree courses have devalued what could once be claimed as a real achievement, the addition of far too many categories and minority events have - in my view - devalued the Olympic medals & ethic.

I'm merely waiting for ear-waggling to get the international recognition it deserves, then I can do my best for Britain and maybe get a gold medal for myself. My wife will be competing too, she's going for the spinning-plates-on-sticks title, mind you that's a winter Olympic event, she wears ice skates whilst doing it. *- Stef*

SMARTsig

NEW YEAR SYSTEM-BUILDING COMPETITION

Thanks for the many excellent entries in our new year competition with some impressive profit margins gained from the testing data set. Judging is still underway, winners will be notified as soon as possible and a the full list will be published in our April issue (9.04)

In the meantime you can check your own performance by downloading the definitive results from the SMARTsig website www.smartsig.com

One of our original members and a contributor in the past has remained quiet over recent years. But a critical reference to Phil Bull in our February issue fired him into a response.

FIRST CLASS BULL - ABSOLUTELY

Erasmus

The February issue to hand and as usual an interesting read. I was 82 last month and am finding it increasingly difficult to put pen to paper, but the article by John Jackson has spurred me into unapologetic action.

It was an interesting, if overlong article with a good epilogue – he should have remembered his Epilogue (i) . . . *should learn the meaning of concise.*

However what upset me was his disparaging remarks about Phil Bull, when he has not even read his *Mathematics of Betting*. In my opinion Phil Bull's dissertation was absolutely first-class, and so you can make up your own mind about this I am enclosing a photocopy of the relevant article.

It is clear, well written and only misses out on the Kelly staking – which is not that surprising since my copy of the book says first published in 1945. Phil did recognise the advantages of proportional staking, saying that if a backer wins on level-stakes, proportional staking will increase his winnings.

If the article is out of copyright or permission can be obtained from the publishers Morrison & Gibb Ltd. It might be worth re-publishing in SMARTsig.

The article preceding *Staking Systems Exposed* was a very good one on each-way betting, but unfortunately all the

mathematics are to ¼ the odds, which of course was the rule when the article was written.

To change tack slightly, I cannot understand why people get so obsessed with the "Rate of Return on Stakes". If you are working from a bank the system which finishes the period with the largest bank is the best – not necessarily the one which has the best rate of return on stakes.

The basis of winning is to bet on horses whose price is higher than its probability of winning. ONLY PRICE MATTERS! There have been many methods of assessing the probabilities, e.g. Pricewise, those who produce a tissue, etc., etc. Why in this computer age has no-one compared all the various sources to find out which is the most accurate? So much time is spent trying to assess which horse is most likely to win – when it is obviously the favourite – but that does not mean that the favourite is the best horse to back!

Keep up the good work and please excuse my handwriting – it never was any good in the first place - but gets even worse with age.

SMARTsig

I managed to decipher it okay Erasmus, many thanks for taking the trouble to air your views. Whilst on the very same subject, JJe voiced his thoughts via our email group . . .

POWER TO THE PEOPLE

In this months magazine (902 February 2002) *Senator* John Jackson mentions Phil Bull's *Mathematics of Betting*.

This book was written (very small book, not a paper or learned tome) around 1940 when racing and betting was a mystery to the man in the street. No runners - riders - form etc.

Is it worth a read? Well not really this many years later as much of it is out of date in regard to each-way betting with quarter odds etc.

But the book showed virtually for the first time how to work out simple odds, starting prices versus Tote, ante post betting, hedging, etc. All in a very few words. A couple of pages on staking systems and the betting bank.

The level stakes bit basically said, and I quote
"If anyone reading this hopes to find details of the perfect system which will put him on the way to a fortune BY THE MERE EXPEDIENT OF MANIPULATING STAKES he is doomed to disappointment."
"There is no perfect staking system and their can be no perfect staking system. Furthermore their is not and cannot be, any staking system of any kind perfect or imperfect which possesses even the most infinitesimal intrinsic advantage over pure ordinary un-adulterated level stakes."

Bull then goes on to deal with the law of averages and a few other points.

Remember this is in the dark days for the punter who was treated like a mushroom and to put it bluntly punters were both clueless - and would pay good money to system purveyors to be made even more clueless!

Insofar as proportionate staking goes, in whatever form you choose, he had no disagreement, It was not a staking system as such - just level stake betting in which one calculates the stake based upon the size of ones bank at the time.

He summed up with;
Is the staking plan an attempt to apply the law of averages or other mathematical trickery?

If the answer is yes, then bin it.

If no, then ask what is the assumption on which the staking is based?

Is this assumption a mathematically sound one?

Judge staking plans with common sense and by cross-checking on fresh data. NEVER base your judgement on the profits it shows over a series of bets selected by the plan promoter.

This latter question - mathematically sound assumption - can only be decided by applying your general knowledge of racing or a very long practical test.

What you do not do is to judge a staking plan on the profit which it shows over a series of bets selected by the man who sells you the plan.

May I suggest that Timeform today, in their wording, are aware that a lot of their customers do not understand odds and - shall we say the mathematics of betting - and are steering the foolhardy clear of expecting . . .

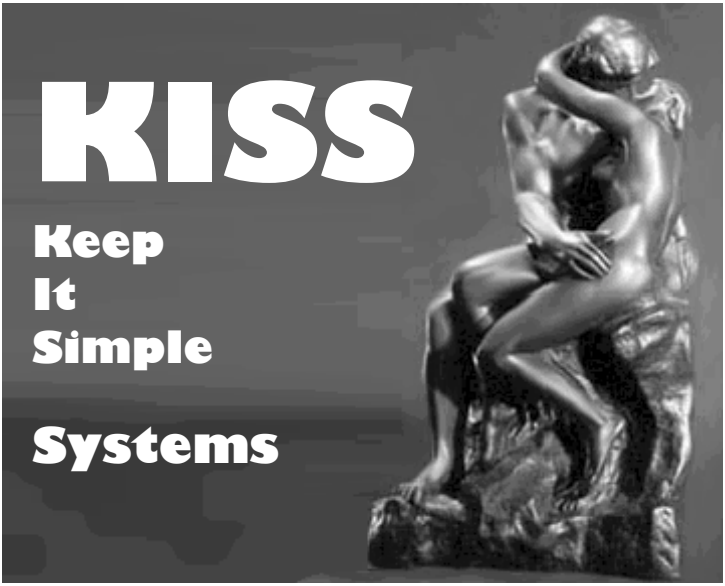
"This time next year Rodney, backing all Top-rated selections . . . ." (you know the rest).

This subject reminds me of the first system I ever bought - The Dawson System - based on retrieve staking. Looking back it's funny just how long it took for the futility of it to finally sink in.

Timeform are providing a service across a wide range of punter abilities and mentalities. And, despite having a set of results that show a profit at the year end, know most of their clients will show a loss on these bets.

My own method would be to crack away at level stakes or proportionate odds stakes raising the level every year or two much as Alan Potts said in the play what he wrote.

As I am only too aware, that in the real world *Sods Law* inevitably overrides everything.



Ever thought of taking advantage of those situations which lack a competitive edge? Maybe neither team is too fussed about winning the game - not losing is more important and to the punters advantage.

INTERNATIONAL SOCCER FRIENDLIES

KISS # 1 ***Brian McCullough***

There have recently been some exchanges on the email group suggesting that there is value in the draw, which is often overlooked by the majority of punters in their quest for a winner. I have always felt that International Soccer 'Friendly' matches were a case in point.

After all they start as a draw and are, in most cases, relatively meaningless, so why should they not end up as a draw?

Witness the recent Holland v England game – numerous substitutions breaking up the rhythm of the game; few fouls; few scoring opportunities and, usually a sign of a lack of competitiveness, no bookings.

Look at the matches held on 13th February 2002, as an example and, ignoring the matches taking place in South America, there were 13 such friendlies listed in the Racing Post. A level stake of one point on the draw, at the best price, in each game produced a return of 20.65 points, when 6 of the matches ended as draws.

A simple filter of eliminating matches where the best price of the home team is 2/5 or less eliminated 3 of the matches, improving the profit to 10.65 points

On this particular occasion, any 3 draws from the 10 matches would have yielded anything between a loss of 0.3 points to a profit of 1.2 points. Of course the maximum downside has to be considered but my experience is that this is a risk well worth taking.

Although I have quoted level stakes here, I often also take the five most likely draws in trebles, four-folds and an accumulator. At 1/10th of a point a line any 3 produces a small profit – all five would yield a 124.77 points profit at typical odds of 9/4.

In summary:

(1) International Soccer Friendlies only
(2) Eliminate matches where the home team is a strong favourite at, say, 2/5 or less
(3) Back in level stakes at best prices available
(4) Consider also a small multiple bet, trebles and upwards for, say, the five tightest matches. These could be filtered out by further eliminating matches based on the strength of home team favouritism

Every set of circumstances have their day. Short-term observations may not be the way to go, but they can turn up other interesting information

SIMPLEST KISS EVER?

KISS #2 ***Tony Hazzard***

Does anyone have any statistics on the Racing Post's Postmark performance in non-handicaps? I've been monitoring the top adusted rating in these races, excluding sellers and claimers.

There is a large turnover, but it's made 30 points profit in the last two weeks (written 18 Jan 2002).

Would surely be the simplest KISS ever if it continued as it has.

SMARTsig

Response from Peter May

Here's Postmark's figures for December National Hunt racing

RaceGroup	Bets	Return	Retrn per 1pt. bet
ClmHdl	5	+7.88	+1.58
CondChs	5	+4.69	+0.94
CondHdl	7	+2.58	+0.37
HcpChs	69	-23.13	-0.34
HcpHdl	56	-6.59	-0.12
MdnChs	3	-0.25	-0.08
MdnHdl	5	+1.25	+0.25
NovChs	32	+1.17	+0.04
NovHcpChs	15	-10.60	-0.71
NovHcpHdl	13	-5.00	-0.38
NovHdl	57	-21.06	-0.37
SellHdl	7	-1.88	-0.27
All Races	274	-50.94	-0.19

The loss for Novice Hurdles is a little off-putting.

SMARTsig

A simple & elegant KISS we published in January created a flurry of follow-ups on our email group.

QUICK RETURNS - BRILLIANT!

Email Group

I thought the method proposed in the January issue (multiplying the last form figure by the number of days since the last run) was brilliant. All to often we come up with methods that are extremely complex relying on many variables, but this approach is simple, and effective.

Unfortunately my copy is not to hand and I cannot remember who devised the approach but they should be applauded.

Having checked the method it appears that a few minor adjustments need to be made to return an acceptable profit.

I would suggest betting only in handicap hurdles and following the lowest rated horse (based on the form figure multiplied by the days figure) if the score is less than 10.

Peter May

My concern here, Peter, is the true "value" of those horses placed 4, 5, 6, 7, 8, 9. We could argue that the first 3 finish in their true order of merit with all 3 jockeys attempting to win or at least get place money.

But do all the other beaten horses finish in strict order of merit? Would it not be true to say that some jockeys give up once beaten and so their horses come in e.g. 8th instead of 5th?

Why not just number of days times 1st ,2nd or 3rd last time out and take the lowest figure? Does this find any takers? Me, I'm sticking with the 4/5 day system -))

Beachcomber

. . . and from the member who proposed the original idea . .

Peter, it gave me great pleasure to learn that you considered my Quick Returns idea to be brilliant. Especially as I have purchased and read all your books with great interest.

Praise from 'The Master' is praise indeed !

I agree with your thoughts on Handicap Hurdles. In a manual study of over 2,600 NH races the Strike Rates were as follows-

Novice Hurdles	27%
Novice Chases	26%
Handicap Hurdles	25%
Rating of 10 and under	27%

Sat Feb 2nd; Uttoxeter 2.20 Handicap Hurdle; Native Emperor; Rating 10; Won at 10/3

Following Stef's article suggesting only betting on Horses with a rating of 5 and under on the Flat, since 1st January following this principle has given;

11 winners from 46 Selections -

Strike Rate 24% and LSP + £42.83

As it is the Trainers who are instrumental in placing their charges for Quick Returns I am sure that the key lies with ascertaining those Trainers who adept at such methods.

This would sort the wheat from the chaff and lead to even greater returns. I do not have RSB but Stef if you are reading this and have the time and inclination, it would be fascinating to find out.

Terry Butcher

Regarding these KISS ideas based on 4, 5 or 6 days or any quick returns to the racecourse. It may pay for those interested to do a bit of research into distance.

When I used to rate sprint handicaps a fair number of runners came out again quite quickly compared to horses running over longer distances.

JJ Egan

Following on to the discussions about KISSes based on recent runners I've been pondering what other angles could be used to improve such a system.

It occurs to me that not all horses are capable of withstanding a demanding race schedule whereas others seem to thrive on it. Looking for the filter that may be a little less obvious to Joe Punter I wondered if genetics may play a part in this and looked over a few sire stats.

These are the results for a few sires who have had a reasonable number of runners on the track in recent seasons who are reappearing within 7 days. Bear in mind these stats are based on all runners coming out in 7 days or less, not just favourites and not within the narrower 4 day time frame

Sire Lugana Beach - 7 from 105 runners have won between 1994 and 2000.
Strike rate = 6.7% and return was a 64.7% **level stakes loss.**

Sire Habitat - 8 from 98 runners won between 86/97.
SR = 8.2%. **Loss of** 46.6% to level stakes.

Sire Unfuwain - 18 winners from 86 runs between 93/2000 = 21% SR. Returned a 69% **level stakes profit.**

Sire Inchinor - 22 winners from 93 runners between 1997 and 2000
= 23.7% SR returning a 42.7% **level stakes profit.**

I've only done a little digging so far to see what came up but it seems further research may prove useful. I know a lot of people shy away from breeding as a selection factor but feel this may be as much to do with the heavy analysis involved rather than the principle.

Anyone interested in taking this thread further themselves, via the mag or in this group?

Graham Warburton

◇

Here's yet another variation on the Quickform idea; this one is really quick as no multiplying is required!

Rules are;

1. All-Weather races, not Maidens, Sellers, Amateurs

2. Consider only those horses whose forecast odds are within 70% of the field (e.g. 9 runners, 70% is 6/1)

3. Add days since last ran (lto) to the best of the last two outings

4. Selection is the lowest total; if more than one, take the first runner from the top of the card.

Here are the results this week (written February 7, 2002)

Monday, Wolverhampton.

1.20 Hcap	2nd	11/10	(8 points)
1.50 Stakes	**Won**	**8/1**	(9)
2.50 Hcap	**Won**	**2/1**	(8)
3.20 Hcap	3rd	7/2	(4)
4.20 Hcap	Lost		(18)

Tuesday, Southwell

2.45 Hcap	2nd	10/3	(13)
3.15 Stakes	2nd	9/2	(10)

4.15 Hcap	3rd	7/2	(8)

Wednesday, Lingfield

1.00 Hcap	Lost		(6)
1.30 Claimer	**Won**	**9/2**	(6)
2.30 Claimer	2nd	6/1	(6)
3.00 Hcap	**Won**	**4/1**	(12)
3.30 Hcap	**Won**	**9/2**	(5)
4.30 Hcap	Lost		(5)

I like the much maligned All-Weather in the winter if I'm going to risk my money. There are no obstacles to fall over and no bottomless going.

It's zilch for the spectator compared with the Jumps I know; the fluid grace of the top hurdlers (I share with my son Mike our favourite horse, Sea Pigeon) and the guts and drama of the chases. Who can forget Dessie against Yahoo in that awful going?

Enough of this nostalgia!

Brian Cattermole

Thank you JJe

Together we are making progress With Stef's variation of Quick Returns- Flat Racing with a rating of 5 and under and your idea of Distance has given since Jan 1st;

Winners	8
Losers	9
SR	47%
LSP	+34.28

Interesting to see Brian Cattermole's idea. I look forward to hearing Mike use it provided he doesn't tell the World how he does it!

Terry Butcher

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Robert Ford 020 8300 4646 (Sidcup, Kent)
email: <kernow.fords@virgin.net>

Having a clear-out or looking for something which is proving to be difficult to find by other means?

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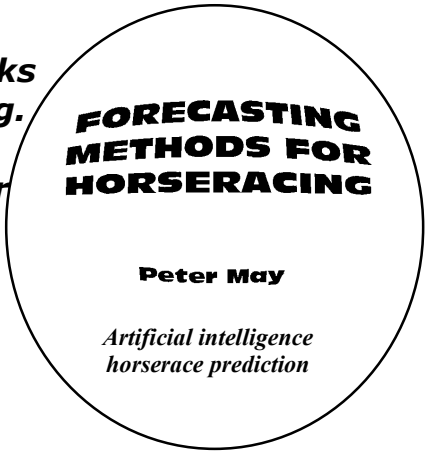
AI and Neural Networks applied to horseracing.

Onward with chapter five, examining systematic, rule-based approaches.



AI FORECASTING METHODS (X)

Peter May

Chapter 5 - The Rule-Based Approach

The earlier chapters of this book have summarised the necessary background information relating to the horseracing problem, in this chapter the first forecasting methods are proposed.

Rule-based methods, discussed in the following sections, are very easy to implement and can prove to be very effective at returning a profit and, consequently, are worthy of serious consideration when forming a comprehensive betting strategy.

Maximising Returns

Unlike many forecasting models which attempt to predict the results of races, the aim of the following rule-based approaches is to maximise the return (i.e. the profit) and hence a detailed examination of the starting prices and probabilities of success is not necessary since any horse which satisfies the rules of the system is, by definition, a value bet.

Rule-Based Systems

Humans use rules to govern many aspects of life. At national level rules, or laws, are created to provide the population with specific bounds and to maintain acceptable living conditions.

At individual level, we apply rules all the time, whether it is in regard to our weekly shopping requirement or the time we need to leave home each day to reach work by an agreed time.

Although when considering the laws of a country we would no doubt refer to them as rules, at the individual level we may not think of many of our decisions as being rule-based.

This is simply because we have become *experts* in everyday life. Experts can intuitively see what the consequences of an action will be and what needs to be done in order for a particular outcome to be achieved. Consequently, we see an empty coffee jar and note the fact that more coffee should be purchased.

As an example of the effect of expertise, consider a receptionist on his/her first day at work. The senior member of staff detailed to instruct the new recruit may inform him/her that when the telephone rings it should be answered within a set time (i.e. three rings) and the enquirer greeted in a specific way.

The novice receptionist, therefore, is thinking: ***if*** the telephone rings ***then*** I must pick it up within three rings and say . . . . This is rule following.

However, a few days later answering the telephone in this specific manner has become *natural* to the receptionist who would no longer be conscious of following a set of ***if . . then . .*** style rules.

In horserace prediction rule-based methods (or systems)

are very popular. Most bettors have their own systems to follow in addition to form study.

For example, some bettors will look for specific jockey/ trainer combinations or bet horses which have travelled over a certain distance to the track. In rule form these methods would be:

if . . . . . *Jockey A is riding*
and . . . *horse is trained by Trainer B*
then . . . *bet*

if . . . . . *distance travelled from stable to racecourse exceeds n miles*
then . . . *bet*

There are two main advantages with these methods: they are precisely structured and are easy to apply. Their rigid style allows for easy testing against known race results and the bettor can soon deduce whether a rule is worth following.

Simplicity is important for many bettors who have little time to study form and in this regard rules can often be applied in a few minutes. However, there are disadvantages with these approaches.

For instance, the rigidity of the rule does not always sanction for changing circumstances, nor exceptional conditions.

As an example, rules involving trainers do not allow for periods of poor stable form which may be the result of a virus affecting the health of the stable's runners.

Notwithstanding the problems associated with rules, in this chapter three rule-based methods are discussed following a brief summary of guidelines for developing rule-based methods.

Developing Rule-Based Systems for Horseracing

There are an infinite number of racing systems. However, only a small percentage will return the bettor a profit, and an even smaller number will be both profitable and reliable.

The following guidelines, which were first published in a slightly modified form in *Jump Racing For Profit* (Raceform, 1996), will hopefully provide a basis for system development.

Simplicity

When designing a selection method it is important not to make it too complex. As the number of variables increases (i.e. distance beaten last time, going last time, going today, race distance last time, race distance today, days since last run etc.) the amount of data needed to give meaningful test results increases.

Complex systems are also difficult to implement, requiring a great deal of searching through previous form to determine the selection.

Uniqueness

Try to find *new* relationships between the data. Using the normal data items in conventional fashion will, in all probability, produce losing systems. The odds on offer account for the established trends, and consequently there is no value for the punter.

Logic

When searching for unique approaches it is imperative to ensure that the variables used are sensible. For instance, whilst backing all horses ridden by bearded jockeys may have returned a profit in the past, facial hair can hardly be considered a reliable discriminating factor with regard to the chances of racing success.

Correlation

Be wary of ill-founded relationships and hidden correlations. As an example, horses running in August tend to produce faster race times than those running in March, therefore they must be better animals.

Whilst this conclusion seems a logical deduction from the available evidence, it is an unconsidered variable which produces this result, namely the going.

Faster going produces faster race times and the ground is likely to ride firmer in August than March, hence the faster times.

Measurement

Base the selection methods on quantifiable variables, for example data items such as the historical wins to runs success rate of the horse.

Try to avoid qualitative items such as suitability of going, distance etc., unless these terms can be defined precisely. Opinion is difficult to analyse, and it is far from constant.

Data Collection

There are three issues concerned with data collection: quality, quantity and spread. Clearly, the data collected needs to be accurate and unbiased.

This seems obvious, but it is not necessarily a straightforward task to undertake, especially when extracting data manually from a formbook. It is very easy to omit particular races during the extraction process reasoning: 'Well, I wouldn't have bet in that race anyway'.

Naturally, sufficient data needs to be collected to support the complexity of the system, however, too many seasons' data can introduce bias due to the ongoing changing nature of racing. Paradoxically, it is not advisable to extract data from just one season.

Certain conditions of the year, weather, quality of horse etc., will bias any analysis. The data needs to be spread evenly over a few recent seasons.

Strike rate

Aim for an approach with a reasonable winner to bets strike rate. A strike rate of just 10% is not really high enough, the losing runs will occur too frequently and could be extremely long (see *Running The System*). Aim for a strike rate of at least 20%.

Testing

There are two different ways of testing a new selection method.

The first involves partitioning the data set *before* the development process. One part can be used for development and the other for testing.

For instance, if the data have been collected from four seasons, the first three seasons could be used to develop and refine the system with the fourth season used for testing.

The second method is to test the system live. In other words, develop the approach on all available and relevant data, and conduct the testing phase during the following year by either keeping a record of the system's performance or by actually backing the selections to small stakes.

In addition to providing a real test environment, this approach is also one of education for the bettor. By closely monitoring the system through the placement of bets, the bettor will get a better *feel* for the method and perhaps identify other highly correlated variables.

For instance the likelihood of long losing runs, the way he/ she reacts after several losing bets etc. Once satisfied with the validity of the system the punter can then increase the stakes.

Running The System

It is very easy to break the rules of the system, especially during long losing runs. This behaviour should be avoided. Providing the system has been based on well-founded ideas, and has been adequately tested, there is no need to doubt its ability to return a profit. Consequently, the devised staking plan should be adhered to. There is nothing worse than finding, at the end of the year, that you have lost money, and that if you had kept to the system's rules you would have made a profit.

In the following section the guidelines listed above will be used to develop three rule-based approaches which will hopefully return a profit.

Selected Rule-Based Methods

Whilst *profitable systems*, of various degrees of merit, are advertised for sale in every horseracing publication, very little research of an academic nature has been published on the subject.

Dayan and McCartney[1] have published the results of six models they developed which were applicable to American horseracing. They concluded that, whilst it is possible to develop predictive models for horseracing, 'it is hard to believe that there is a way to beat the system significantly'.

In contrast to these findings, Roger Vergin tested six previously published rule-based methods and reported his results in *An Investigation of Decision Rules for Thoroughbred Race Horse Wagering*[2]. These systems had been developed by several other researchers, and included such information as the winning percentage of each runner, speed ratings, weight carried and days since last outing. All of which have been analysed in Chapter 3.

After extensive testing, Vergin concluded that 'the systematic evaluation of horseracing data might lead to the development of a profitable betting system'.

The following methods are based on similar approaches to the systems evaluated by Vergin and use the conclusions derived in Chapter 3.

The first system is applicable to juvenile horses (i.e. horses aged two years old) whilst the other two methods are relevant to non-juvenile races. The data used to develop these methods covered the seasons 1994 to 1997, and they are evaluated using 1998 data.

For convenience, the return is expressed as a proportion of a £1 stake, excluding tax. Therefore, an average return of 0.25 for a number of bets equates to a profit of 25p for each £1 staked per bet. A negative figure naturally indicates a loss. When expressing return as an average for a number of bets, the lower limit is bounded at -1.00 which implies no winners from the sample of bets. In other words a loss of £1 for every £1 staked.

The upper limit is unbounded, although an average return of more than 0.09 indicates an profit after tax, and it is very unlikely that this figure will exceed 0.50 for a reasonably sized sample of bets.

Method 1: Juvenile Favourites

A great deal of information can be learned from a two-year-old's first career run. The race distance, time of year, choice of racecourse and starting price all provide valuable information about the horse.

For example, a two-year-old horse making its debut in the early Spring will need to be a sharp, precocious animal with plenty of speed. These horses are likely to be run over sprint distances throughout their careers and will probably fall short of Group 1 class.

A juvenile starting its career over, say, 7 furlongs is likely to become a middle distance horse the following season. The more backward two-year-old horses will not make their

debuts until late in the season, possibly September or October, and are likely to make much better three-year-olds than juveniles, normally making significant physical development over the winter months.

However, of all the factors surrounding a two-year-old's debut probably the most important is its starting price. The better two-year-old runners are known well in advance of racing by bookmakers and the racing public alike, and as a result start at quite short prices.

Figure 5.1 presents the distribution of horses making their juvenile debuts by starting price, it also shows the average return per £1 staked on each to win.

Starting Price	Winners	Runners	Success Rate	Average Retrun/£1
Odds On	84	138	60.9%	0.00
Evens - 2/1	119	322	37.0%	-0.05
85/40 - 5/1	244	1190	20.5%	-0.08
11/2 - 10/1	150	1808	8.3%	-0.31
11/1 - 20/1	71	2637	2.7%	-0.56
21/1 - 40/1	27	2066	1.3%	-0.59
41/1+	3	853	0.4%	-0.82
All	**698**	**9014**	**7.7%**	**-0.45**

Figure 5.1: Analysis of juvenile debuts by starting price

From these figures it can be seen that very few high priced horses win on their debuts. In fact, only 30 horses priced at higher than 20/1 won from almost 3,000 runners, a success rate of just over 1%. This is also reflected in the huge level stake loss of over 65p per £1 staked on these horses.

Clearly, the prices of these runners are not reflecting the low probabilities of success. However, for odds on chances the success rate exceeds 60% and the loss per bet is negligible (before tax).

It should be remembered that these horses have never previously raced and therefore can only be judged on breeding, appearance in the parade ring and *inside information*. This lack of prior evidence also accounts for the higher than average loss returned for all two-year-old debutants, 45p per £1 staked compared to about 30p for all runners, illustrating bookmakers' higher degree of caution when offering prices about these horses.

The question remains, though, whether this information can be combined into a profitable rule-based approach.

From figure 5.1 it can be seen that by simply betting on these well regarded horses, for instance those starting at less than 2/1, on their first racecourse appearance will not return a profit.

However, by following these horses on their next few runs does return a profit, especially if they lose on their debuts. Although this seems paradoxical, following horses which under-perform on their debuts, it exploits the over-pricing associated with these horses in their subsequent runs, thus producing a betting opportunity.

It is equivalent to a casino changing the odds on each number on the roulette wheel simply due to the weight of money staked and the recent frequency distribution of winning numbers.

Providing the wheel is not biased, the underlying probability of success for each number has not changed, therefore some would be under-priced and some over-priced as a result of the changes. Consequently, some numbers would offer a viable betting proposition.

Converting these findings into a rule is a simple task requiring only the definition of a well regarded horse. In this example, the definition becomes all two-year-old horses which start at evens or less for their debuts in fields of 7 or more runners. In rule form:

if . . . . . *the two-year-old is making its debut*
and . . . *the number of runners is 7 or more*
and . . . *its starting price is evens or less*
then . . . *two-year-old is well regarded*

An analysis of the subsequent performance of *well regarded* juveniles resulted in the following rule-based method:

if . . . . . *the two-year-old is well regarded*
and . . . *was beaten on its first run*
then . . . *back it to win on its next two runs*

Over the four seasons 1994-97 using this rule would have resulted in a total of 61 bets of which 27 were successful, just over 44%.

The profit per £1 staked was a little over 38p. SMARTsig

Chapter Five of Peter May's book continues next month . . . .

IRISH COURSE CHARACTERISTICS

Steve Lines

With the National Hunt festival season soon upon us I have compiled a table of the Irish National Hunt courses and their characteristics. It is mostly self-explanatory and may help those who use horse's patterns among their selection process. i.e. *Sheltering* (sure to be among the favourites for the Foxhunters) has won 12 from 12 Hunter chases right-handed, but been beaten on 3 out of 4 attempts left-handed!

The table is compiled from the Internet, not from personal experience (apart from Punchestown) so any missing information is deliberate (number of hurdles/fences per circuit and may help to gauge the characteristic of the track where certain information is missing).

		Characteristics	Size	Finish	Hurdles	Fences
Ballinrobe	RH	sharp	9f	2.5f	4	6
Bellewstown	LH	sharp	9f	3f uphill	5	
Clonmel	RH	undulating	10f	2.5f uphill	6	7
Cork	RH	flat	10f			
Downpatrick	RH	sharp, undulating	11f	1f uphill	5	7
Down Royal	RH	flat, galloping	10f		8	10
Dundalk	LH	easy	10f	2.5f uphill	6	7
Fairyhouse	RH	galloping	14.5f	3f uphill	6	7
Galway	RH	undulating	10f	2f uphill	6	7
Gowran Park	RH	galloping, undulating	12f	3f uphill	6	7
Kilbeggan	RH	undulating	9f	300yds uphill	5	6
Killarney	LH	easy	9f	3f	5	6
Leopardstown	LH	galloping	14f	2.75f uphill	7	10
Limerick	RH	galloping, undulating	11f	2.5f		8
Listowel	LH	flat, easy	8f	2f	5	6
Naas	LH	galloping	12f	4f uphill	6	8
Navan	LH	galloping		3.5f uphill	7	8
Punchestown	RH	galloping, undulating	16f	3.5f	8	11
Roscommon	RH		10f	3.5f	6	6
Sligo	RH		8f	2f uphill	4	5
Tipperary	LH		10f	2.5f	6	6
Thurles	RH		10f	uphill	6	7
Tralee	RH		10f	2f	5	7
Tramore	RH	undulating	8f	1f uphill	4	5
Wexford	RH	sharp, undulating		1f	4	5

Over half of all races run are won by either the race's first or second favourite. Andrew Campbell sets out to build a strategy to indicate which of the two to bet in any particular circumstances.

FAVOURITE & 2nd FAVOURITE IMPACT VALUES

Andrew Campbell

It seems so long since I've felt the urge 'put pen to paper', but the truth is there have been countless blind alleys and false dawns over the last two or three years. However, some fresh ideas and a change in the tax regime have given my research some much needed impetus and led to some really interesting results that I feel are worth reporting on.

Obviously, the abolition of off-course betting tax is a significant change in the market place and brings into focus the 'sharp' end of the betting market, where most of the money is wagered and from where most of the winners are to be found. This is also the area of the market where the overround is at its most favourable. Let me quote some figures. Running through the six seasons flat form I have in my database, courtesy of SMARTsig results-on-disk, the following comparisons can be made of average ROIs at various price points:-

2/1 or less	-	91.53p in every pound wagered would have been recovered
5/1	-	87.56p recovered
10/1	-	74.69p recovered
25/1	-	42.24p recovered
100/1	-	13.73p recovered

These returns all disregard betting tax as this is the market we are now looking at. Having said that, I'd be interested to

know if anyone has done any research to establish if overrounds have increased since October. All the figures quoted hereafter disregard betting tax.

As a confirmed 'valueite', I've long been aware of the conflict that exists between the need to get a price longer than x, say y, and the historical data which shows that the shorter priced x always returns a greater percentage of the player's stake than the longer priced y over a period of time. So during the course of this research, I've made little or no attempt to quantify the winning chance of any runner.

What I have done is turn to an idea that has been lurking in the back of my thoughts for several years but has never seemed sufficiently enticing to warrant further investigation. The aforementioned change in market conditions has encouraged me to take a little look.

It's fairly well documented that the leading pair in the market win around half of all races between them, and at returns that are less unfavourable than amongst their longer priced rivals.

Of the 28,000 races investigated, 32.53% were won by the favourite, 19.88% by its main market rival. They returned 91.61p and 91.50p in the pound respectively. So any random selection process applied to the problem of differentiating between the two could be expected to deliver a 26% strike rate and return 91.50p in the pound. The question that begged asking was, if a random selection process could produce these returns, it must be possible to create a model that could improve upon these results, hopefully overturning the 8.5% 'expected' deficit to reach profitability.

To this end, I set about trying to build a model that could achieve these ends. The object of the exercise was to treat each race as a two-runner contest, the 'winner' of which would become the nominated selection in the wider contest. It wasn't expected that every race would throw up a clear-

cut choice, but it was hoped that clearly defined boundaries could be identified beyond which consistent and sustainable profits would be returned.

I also wanted to avoid the more obvious means of evaluating the respective abilities of the contestants. So instead of building a model based on evaluation criteria such as, how often did ***A*** beat ***B***?, I chose to evaluate by asking, how did the ROI compare in any given circumstance? This had the distinct advantage of clearly identifying areas where the second favourite had been outperforming the favourite.

Overall, the results from this were very good, returning four winning seasons out of six when the aforementioned clearly defined boundaries were applied. However, I wasn't wholly satisfied with the two losing seasons and didn't wish to impose artificial rules to try to turn the figures around.

So I decided to move along and investigate an alternative means of evaluation. Given the nature of what I was doing, attempting to resolve a head-to-head contest, it seemed reasonable to ask, how fast did ***A*** run against ***B***.

Of course, there is a small problem with this approach in that horse racing continues to live in the dark ages and generally only supplies us with the time of the winner. All other times have to be computed using the archaic lengths beaten to reach a conclusion. This is inevitably going to lead fairly large margins of error. However, I decided to give it a whirl to see which way the dice fell.

At this stage, I think it's worth mentioning that I chose to simplify the classification methods I normally use.

For example, when generating an impact value for the number of days since last ran, I invariably attempt to cover all eventualities. That is, generate an impact value for all the variations in the data, regardless of whether the most recent run was 7 or 207 days ago.

There are inherent dangers to this approach, the most obvious being that the 207-day value will be culled from a much smaller data sample, leading to a volatile and unreliable impact value.

Of course, it's possible to set rules to filter out data samples that are too small. However, this can also lead to problems in that, now, the 207-day example may become, in effect, neutral. It is treated as neither positive nor negative and introduces a different type of error to the model.

So, as all the variables I intended using could be represented numerically, I decided to simplify each one to the most basic of comparisons, i.e. the favourite was either equal to, greater than or less than the second favourite. As an example, in a race where the favourite's most recent run was 7 days ago and the second favourite's 14 days ago, the favourite is deemed to be less than the its opponent.

This gave me three classifications. But I also wanted to deal with situations where incomplete data may exist, mostly in the case of first time runners, so I added three further classifications – where data existed for neither runner, where data existed only for the favourite and where data existed only for the second favourite.

The following is an actual example of the type of tables that were produced and hopefully will serve to illustrate some of the points made. This particular case analyses the number of days since the most recent run and produces an impact value for each of the six classifications.

On this particular occasion the historical data is from seasons 1993 to 1997 and was applied to 1992. This is the methodology I have applied in all cases; analyse one season at a time using impact values generated from the other five seasons' data. From left to right, the table lists the classification, the impact value and the size of the data sample.

Classification	IV	Sample
No data for either runner	1.0032	418
No data for favourite	1.0031	715
No data for second favourite	1.0054	963
Favourite has run more recently	1.0030	10140
Second favourite has run more recently	1.0019	8925
Number of days since last run is equal	1.0012	1532

The impact values are expressed in terms of the favourite.

That is, the IV of 1.0030 in "has run more recently" classification tells us that, on average, the favourite ran 1.0030 times faster than the second favourite in races where it had previously run more recently than its opponent during the flat seasons of 1993 to 1997.

At least I could have said that had accurate electronic times for all finishers been made available to the public during this period. A rider to the statement would have to be, 'based on my own calculations'.

The final column was included simply to show that the sample sizes were, in the main, very satisfactory and would hopefully lead to consistent results when applied to the model.

In all, twenty-one variables were included in the model which are detailed in the appendix at the end of this article - I leave it entirely to the editor's judgement whether they warrant inclusion.

The point of the exercise was to try to build a model that could assist in resolving the head-to-head contest between favourite and second favourite to determine which, if any, should be backed in any given encounter.

The model produced a single rating for each race calculated from the impact values of the twenty-one variables.

Finally, then, these are the results: -

	Favourite			Second Favourite		
Rating	**Return**	**Outlay**	**ROI**	**Return**	**Outlay**	**ROI**
1.0015	3.50	11	0.3182	14.00	11	1.2727
1.0016	29.87	34	0.8784	37.00	34	1.0882
1.0017	75.71	127	0.5961	195.46	127	1.5390
1.0018	642.52	782	0.8216	841.21	782	1.0757
1.0019	1183.91	1318	0.8983	1359.55	1318	1.0315
1.0020	2263.89	2552	0.8871	2448.42	2552	0.9594
1.0021	2634.44	2900	0.9084	2845.12	2900	0.9811
1.0022	2866.02	3250	0.8819	3162.76	3250	0.9732
1.0023	3286.66	3509	0.9366	2913.33	3509	0.8302
1.0024	2352.35	2629	0.8948	2330.69	2629	0.8865
1.0025	2031.92	2250	0.9031	2036.20	2250	0.9050
1.0026	1531.10	1658	0.9235	1451.33	1658	0.8753
1.0027	1001.18	1033	0.9692	933.45	1033	0.9036
1.0028	898.19	960	0.9356	718.77	960	0.7487
1.0029	923.03	941	0.9809	793.61	941	0.8434
1.0030	777.32	824	0.9433	754.41	824	0.9155
1.0031	685.90	676	1.0146	492.64	676	0.7288
1.0032	528.49	558	0.9471	484.85	558	0.8689
1.0033	303.21	318	0.9535	287.29	318	0.9034
1.0034	273.45	258	1.0599	270.08	258	1.0468
1.0035	11.61	22	0.5277	19.83	22	0.9015
1.0037	0.00	1	0.0000	0.00	1	0.0000
1.0038	112.61	104	1.0828	97.92	104	0.9415
1.0039	224.80	226	0.9947	184.08	226	0.8145
1.0040	143.95	139	1.0356	95.13	139	0.6844
1.0041	221.11	247	0.8952	239.67	247	0.9703
1.0042	331.55	316	1.0492	279.62	316	0.8849
1.0043	69.11	76	0.9094	86.00	76	1.1316
1.0044	208.82	238	0.8774	189.67	238	0.7969
1.0045	2.10	1	2.1000	0.00	1	0.0000
1.0046	12.94	20	0.6470	37.63	20	1.8813

All of the above are to one point stakes.

Given the original brief of attempting to identify which of the runners to back, it made sense to split the results into two parts, the upper half of the ratings favouring support for the market leader, etc.

So in 13,495 races where the rating for the race was greater than 1.0023, the favourite returned 93.70p for every pound wagered, the second favourite 87.31p.

Further down the scale, in the 14,483 races rated at less than or equal to 1.0023, the favourite returned 89.67p and the second favourite 95.4p.

Combining the favourites from the top half with the second favourites from the bottom gives a strike rate of 27.97% and a return on each pound of 94.58p. This is an improvement on the random expectations of 2% and 3% in strike rate and ROI respectively. These are interesting - but little more.

However, as we move up and down the scale, things start to improve. Never enough to suggest backing the favourite blindly could be recommended mind you. The second favourite is a different matter though.

Moving down the scale just one place to back only in races with a rating below 1.0023 produces a return of 99.36p in every pound over 10,974 selections. Not quite profit, but a starting point to launch numerous ideas that are bound to return a profit, having only to overturn a 1p deficit as they do. I've already found several without having to dig too deeply.

Profitability from over seven thousand races is finally achieved by moving more step down the scale. However, as can clearly be seen from the above table, the real profits were to be had in races where the rating fell below 1.002. Overall, backing only the second favourite in these races would have returned 107.71p per every pound wagered over a total of 2,272 selections. The strike rate had also increased by almost 3%, to 22.84%.

Most pleasing, though was the level of consistency, as the table here demonstrates:-

Year	Return	Outlay	ROI	S Rate
1992	39.75	36	1.1042	0.2222
1993	373.92	356	1.0503	0.2247
1994	414.54	368	1.1265	0.2255
1995	381.46	362	1.0538	0.2293
1996	499.92	462	1.0821	0.2294
1997	737.63	688	1.0721	0.2311

This inspires a lot of confidence that there may be some real opportunities in this area as the figures just keep on repeating year after year.

The only slight anomaly in the table is 1992 where the total number of qualifiers is very small. However, this can easily be explained. If you take a quick look at the sample table of impact values produce values of 1.0031, 1.0032 and 1.0054 for the three classifications of missing data. Because 1992 was the first year for which I have data, every runner starts without any previous data so these impact values have a much greater bearing than they do in subsequent years. The average race rating for 1993 to 1997 was just 1.0024 as opposed to 1.0028 for 1992, hence the relatively small number of qualifiers satisfying the selection criteria.

One thing also stands out in the table of sample impact values. Between 1993 and 1997, in contests where a previously raced favourite is faced with an un-raced second favourite, it runs 1.0054 times faster than its opponent, on average. This is way above the norm and worthy of investigation.

Sure enough, disregarding 1992 for the reasons stated above, backing the favourite in these circumstances yielded 101.74p to the pound over a five-year and 995 race period.

Like all ideas, though, the crunch really comes now. How will it perform when I start testing it in the 'real world'? How has the abolition of betting tax impacted the market place in terms of overround? The edge gained looks solid but still relatively small. It wouldn't require a massive increase in bookmaker takeout to become unprofitable I suspect.

I'll also be interested to see if it translates to the jumps as all the research has been done on the flat. I deliberately used only variables that are common to both codes but there have to serious doubts about how well the model can perform over the winter months.

Finally, of course, there's the age-old problem that always surrounds favourite-based methods – the potential qualifiers are never known in advance. The best that is available are the betting forecasts, so how will they perform? I have a small database that analyses four hundred races using the Daily Express forecast. Overall, the two front-runners in that forecast managed a 48.5% strike rate between them and 91.80p and 95.20p return in the pound respectively, so there's no call for despondency just yet.

Appendix

These are the lists of variables and tables referred to in the main narrative.

These are the variables used:-

From each of the three most recent runs:-

Days - Days since run
Val - Race value
SP – SP (relative to number of runners)
FP - Finishing position (calculated to take account of no. of runners)
NOR - Number of runners
OR – Official Jockey Club rating awarded

Additionally, a suffix of 1, 2 or 3 is added to denote when run, i.e. 1 for most recent, etc.

The three other variables are:-

Jockey – Allowance claimed by jockey
Weight – Weight to be carried
Progress – A figure calculated from the FPs in three most recent races

Most of these are self-explanatory, with the possible exception of SP, FP and Progress.

The SP figures I have using have been derived by dividing the number of runners by the returned SP in each of the last

three runs. For example, a runner returned at 3/1 in a ten runner race would have an SP value of 2.5, 10 divided by 4 (1 chance in 4).

The FP figures are a little more complex and consist of two elements.

Another example is probably the best way of explaining. To allocate an FP value for a runner finishing fourth in a ten runner contest, start by dividing the number of opponents it has beaten by the total number of runners in the race. In this case that would be 6 divided by 10, giving an initial value of 0.6.

Thereafter a component is added to take account of the number of runners in the contest. This is calculated by dividing 0.5 by the number of runners. So in this example that would be 0.5 divided by 10, giving 0.05. Finally this is added to the 0.6 to give a final value of 0.65. Any runner failing to complete the course is automatically awarded 0.

I suspect this second step may seem a little pointless and baffling so I'll try to explain the rationale behind it.

It is my belief that it is a greater achievement to win a twenty runner contest than it is a two runner affair, all other things being equal. After all, in one the winner has defeated nineteen of his peers, in the other only one. The FP values I generate would reflect this philosophy by awarding respective values of 0.975 (19.5/20) and 0.75 (1.5/2).

Conversely, the runners finishing last in these contests would be awarded values of 0.025 (0.5/20) and 0.25 (0.5/2), again reflecting the number of their peers that had beaten them.

Finally, there is the value calculated for Progress.

As the name might suggest, it's a method that attempts to evaluate numerically whether a runner is improving or

deteriorating, based on its last three finishing positions as calculated above.

Quite simply the FP values for a runner's second and third most recent runs are averaged out and subtracted from its FP value from its most recent race.

For example, a runner with an FP1 value of 0.55, FP2 of 0.45 and FP3 of 0.75 would be calculated by averaging 0.45 and 0.75, giving 0.6. This would then be subtracted from the FP1 value of 0.55 to give a Progress value of –0.05.

To find the value for any runner that has only run twice, simply subtract FP2 from FP1.

Any runner that has run less than twice previously has no Progress value and will be classified in one of the three no data classifications.

Which brings us nicely to these classification tables and their impact values. In the model I prefer to represent all the classifications numerically. Using a variation of the example from the main narrative should help explain:-

-5	No data for favourite
-1	Favourite's numeric value for variable is less
0	Numeric values for variable are equal
1	Favourite's numeric value for variable is greater
5	No data for second favourite
10	No data for either runner

So, for example, if the favourite had an FP1 value of 0.85 against the second favourite's 0.75, variable FP1 would be classified as 1 and the appropriate impact value taken from the FP1 classification table as can be seen below.

On the next page then are the tables, compiled from all six seasons worth of data:-

Days1	IV
-5	1.0029
-1	1.0029
0	1.0014
1	1.0019
5	1.0048
10	1.0028

Days2	IV
-5	1.0023
-1	1.0027
0	1.0018
1	1.0016
5	1.0043
10	1.0038

Days3	IV
-5	1.0018
-1	1.0026
0	1.0031
1	1.0014
5	1.0043
10	1.0036

Val1	IV
-5	1.0028
-1	1.0020
0	1.0018
1	1.0027
5	1.0047
10	1.0028

Val2	IV
-5	1.0023
-1	1.0019
0	1.0016
1	1.0024
5	1.0043
10	1.0038

Val3	IV
-5	1.0018
-1	1.0021
0	1.0026
1	1.0019
5	1.0042
10	1.0036

SP1	IV
-5	1.0028
-1	1.0016
0	1.0033
1	1.0028
5	1.0049
10	1.0028

SP2	IV
-5	1.0023
-1	1.0019
0	1.0019
1	1.0024
5	1.0043
10	1.0038

SP3	IV
-5	1.0019
-1	1.0019
0	1.0030
1	1.0021
5	1.0042
10	1.0036

FP1	IV
-5	1.0028
-1	1.0018
0	1.0022
1	1.0027
5	1.0048
10	1.0030

FP2	IV
-5	1.0023
-1	1.0017
0	1.0028
1	1.0025
5	1.0043
10	1.0038

FP3	IV
-5	1.0018
-1	1.0016
0	1.0011
1	1.0024
5	1.0043
10	1.0036

NOR1	IV
-5	1.0029
-1	1.0018
0	1.0020
1	1.0029
5	1.0048
10	1.0028

NOR2	IV
-5	1.0023
-1	1.0022
0	1.0019
1	1.0022
5	1.0043
10	1.0038

NOR3	IV
-5	1.0018
-1	1.0019
0	1.0022
1	1.0021
5	1.0043
10	1.0036

OR1	IV
-5	1.0029
-1	1.0019
0	1.0030
1	1.0024
5	1.0048
10	1.0028

OR2	IV
-5	1.0023
-1	1.0019
0	1.0026
1	1.0022
5	1.0043
10	1.0038

OR3	IV
-5	1.0018
-1	1.0019
0	1.0014
1	1.0023
5	1.0043
10	1.0036

Jockey	IV
-1	1.0020
0	1.0026
1	1.0025

Weight	IV
-1	1.0021
0	1.0033
1	1.0023

Progress	IV
-5	1.0023
-1	1.0022
0	1.0015
1	1.0021
5	1.0043
10	1.0038

Days1	0.1411
Days2	0.0173
Days3	0.1344
Val1	0.0217
Val2	0.0040
Val3	0.0085
SP1	0.1459
SP2	0.0021
SP3	0.0394
FP1	0.0147
FP2	0.0156
FP3	0.0351
NOR1	0.1604
NOR2	0.0010
NOR3	0.0099
OR1	0.0261
OR2	0.0021
OR3	0.0289
Jockey	0.0617
Weight	0.1265
Progress	0.0037

The last piece of the jigsaw is the weightings assigned to each variable.

This has always been a problem area with a need to take into account relative importance of each variable and deal with the issue of correlation between them.

The table to the left is a composite of the six individual seasonal values.

The final rating is arrived at by multiplying the impact value by the weighting for each variable, and adding all the resulting figures together.

Last year Peter May published his Trainer Pointers and favourite percentage tables in SMARTsig. Here's the first of the updated tables for this new year.

TRAINERS & FAVOURITES BY COURSE (I)

Peter May

Two tables I constantly keep updated and find invaluable are my 'Trainer Pointers by Course' and 'Favourite strikes rates by Course & Race Type'.

As last year, the two will be printed over two issues of SMARTsig, this month we present the trainer strikes, next month the favourites.

Trainer Pointer Table Key

Under the race type heading;

2yo refers to juvenile races,
3yo to non-juvenile races
(not those restricted to just three-year-old horses, but all non-juvenile races);
Fto stands for *First Time Out*,
Hcp denotes handicap races,
Stk refers to general conditions and stakes races including sellers.
Clm is shorthand for claimers
Mdn refers to maiden races.
Ret column shows the average return for a level 1 point stake at Starting Price.

Only those trainers showing positive returns for the period 1997-2001 are included in the tables. If the course is not featured, no trainer showed a race-specific profit to SP's over that period.

ASCOT

Trainer	RaceType	Wins	Runs	%	Ret
APOBRIEN	2yoGroup	7	24	29.2	2.01
APOBRIEN	2yoFto	9	32	28.1	1.47
JHMGOSDEN	3yoStk	5	13	38.5	0.90
WJMUSSON	3yoHcp	4	13	30.8	2.92

AYR

BWHILLS	2yoMdn	9	17	52.9	0.97
BWHILLS	3yoMdn	7	16	43.8	0.34
PCALVER	3yoHcp	6	21	28.6	1.32
WJHAGGAS	3yoHcp	6	10	60.0	1.80
WSTOREY	3yoHcp	5	14	35.7	1.34

BATH

GABUTLER	3yoHcp	4	11	36.4	0.64
LMCUMANI	3yoMdn	6	14	42.9	0.99
MRCHANNON	3yoStk	8	18	44.4	0.82
MRSAJPERRETT	3yoMdn	6	17	35.3	1.33
PJMAKIN	3yoHcp	4	16	25.0	1.31
RCHARLTON	3yoMdn	8	25	32.0	0.55

BEVERLEY

EALDUNLOP	3yoHcp	4	13	30.8	0.81
JLDUNLOP	3yoHcp	12	31	38.7	0.50
LMCUMANI	3yoMdn	6	10	60.0	0.89
MJOHNSTON	2yoMdn	7	27	25.9	0.37
PCHASLAM	3yoHcp	5	18	27.8	0.93

BRIGHTON

CEBRITTAIN	2yoMdn	4	10	40.0	1.30
IAWOOD	3yoHcp	5	13	38.5	2.35
LGCOTTRELL	3yoHcp	4	12	33.3	3.33
MJHEATONELLIS	3yoHcp	4	12	33.3	1.44
MRCHANNON	3yoStk	4	15	26.7	1.02
MWIGHAM	3yoHcp	5	10	50.0	2.57
RHANNON	2yoMdn	18	54	33.3	0.23
SIRMARKPRESCOTT	3yoHcp	5	14	35.7	0.68
WRMUIR	3yoClm	4	10	40.0	0.46

CATTERICK

Trainer	RaceType	Wins	Runs	%	Ret
BWHILLS	3yoMdn	5	10	50.0	0.29
DNICHOLLS	3yoClm	7	26	26.9	0.63
DWBARKER	2yoHcp	4	10	40.0	1.99
JPEARCE	3yoHcp	4	15	26.7	0.63
MRSMREVELEY	3yoStk	6	16	37.5	0.25
PFICOLE	2yoMdn	7	11	63.6	1.19
TDEASTERBY	3yoStk	5	15	33.3	0.21

CHEPSTOW

LMCUMANI	3yoMdn	5	13	38.5	0.51

CHESTER

MRSJRRAMSDEN	3yoHcp	4	13	30.8	0.62
MWEASTERBY	3yoHcp	11	42	26.2	0.59

DONCASTER

BAMCMAHON	2yoStk	4	12	33.3	2.04
BAMCMAHON	2yoFto	5	9	55.6	3.42
BWHILLS	2yoStk	7	21	33.3	2.45
BWHILLS	3yoStk	6	22	27.3	0.93
HRACECIL	3yoMdn	7	21	33.3	0.99
JLDUNLOP	3yoList	4	13	30.8	0.77
JRFANSHAWE	3yoHcp	6	23	26.1	0.28
SBINSUROOR	3yoStk	7	13	53.8	0.39

EPSOM

EALDUNLOP	3yoHcp	6	18	33.3	1.24
GBBALDING	3yoHcp	4	15	26.7	1.67
NACALLAGHAN	3yoHcp	4	14	28.6	0.41
RHANNON	3yoMdn	4	10	40.0	0.38

FOLKESTONE

DWPARBUTHNOT	3yoHcp	4	14	28.6	0.61
JMBRADLEY	3yoClm	6	19	31.6	1.73
PFICOLE	2yoMdn	5	15	33.3	0.49
PFICOLE	3yoHcp	4	16	25.0	0.64

GOODWOOD

Trainer	RaceType	Wins	Runs	%	Ret
ABAILEY	3yoHcp	4	15	26.7	2.17
GWRAGG	3yoList	6	16	37.5	1.29
HRACECIL	3yoList	7	14	50.0	1.14
JHMGOSDEN	3yoMdn	14	41	34.1	0.77
MJOHNSTON	3yoGroup	4	11	36.4	2.68
SBINSUROOR	3yoGroup	6	19	31.6	0.33

HAMILTON

GASWINBANK	3yoHcp	4	12	33.3	1.35
MJRYAN	3yoHcp	4	12	33.3	0.83
MRCHANNON	2yoMdn	5	12	41.7	1.76
MRSMREVELEY	3yoClm	4	13	30.8	0.92

HAYDOCK

HRACECIL	3yoMdn	8	17	47.1	0.38
JHMGOSDEN	3yoHcp	7	24	29.2	0.89
JLDUNLOP	2yoMdn	9	26	34.6	0.38
JLDUNLOP	2yoFto	3	12	25.0	0.21
MAJARVIS	3yoHcp	7	19	36.8	1.48
MJRYAN	3yoHcp	7	19	36.8	0.72
MRCHANNON	2yoMdn	4	16	25.0	1.16
SIRMARKPRESCOTT	3yoHcp	5	11	45.5	0.99
SIRMICHAELSTOUT	3yoMdn	7	22	31.8	0.46

KEMPTON

JLDUNLOP	3yoList	6	17	35.3	0.29
MCPIPE	3yoHcp	4	10	40.0	1.13

LEICESTER

BWHILLS	3yoStk	5	10	50.0	0.57
JHMGOSDEN	3yoMdn	5	13	38.5	0.70
JRFANSHAWE	3yoStk	4	10	40.0	1.97
MRSAJPERRETT	2yoMdn	4	12	33.3	0.96
SIRMICHAELSTOUT	3yoMdn	6	10	60.0	0.23
SIRMICHAELSTOUT	2yoFto	7	28	25.0	0.35

LINGFIELD

Trainer	RaceType	Wins	Runs	%	Ret
BHANBURY	3yoMdn	4	11	36.4	1.03
BWHILLS	3yoMdn	5	18	27.8	0.54
CFWALL	3yoHcp	7	23	30.4	0.99
DNICHOLLS	3yoHcp	6	15	40.0	1.03
EALDUNLOP	3yoHcp	5	18	27.8	0.73
JNOSEDA	2yoMdn	4	11	36.4	0.50
JPEARCE	3yoHcp	5	17	29.4	1.26
MPTREGONING	3yoMdn	5	12	41.7	0.59
RHANNON	2yoStk	7	19	36.8	0.76
SIRMICHAELSTOUT	3yoMdn	7	20	35.0	0.53

MUSSELBURGH

ABERRY	2yoMdn	8	29	27.6	0.41
ABERRY	2yoFto	4	12	33.3	0.46
ISEMPLE	3yoStk	4	14	28.6	1.89
JOHNBERRY	3yoHcp	6	16	37.5	0.30
MJOHNSTON	2yoMdn	7	26	26.9	0.20
MJOHNSTON	3yoMdn	5	11	45.5	0.98
SIRMARKPRESCOTT	3yoHcp	7	12	58.3	1.21
TDEASTERBY	3yoHcp	9	35	25.7	0.79

NEWBURY

BWHILLS	3yoStk	4	14	28.6	0.56
DWPARBUTHNOT	3yoHcp	9	32	28.1	1.95
HRACECIL	3yoGroup	4	10	40.0	0.48
HRACECIL	2yoFto	5	16	31.3	2.42
IABALDING	2yoStk	4	13	30.8	0.67
JHMGOSDEN	3yoList	4	12	33.3	1.88
JHMGOSDEN	3yoStk	6	17	35.3	0.42
JLDUNLOP	3yoGroup	4	13	30.8	0.62
JLDUNLOP	3yoList	4	11	36.4	0.61
JLDUNLOP	3yoStk	5	11	45.5	1.40
MPTREGONING	2yoFto	3	8	37.5	3.09
SBINSUROOR	3yoGroup	4	10	40.0	2.45
SIRMICHAELSTOUT	3yoGroup	4	14	28.6	2.0

NEWCASTLE

JHMGOSDEN	3yoMdn	4	11	36.4	0.61
JLDUNLOP	2yoMdn	6	11	54.5	1.20
MJOHNSTON	2yoFto	4	10	40.0	0.95
PCHASLAM	3yoHcp	4	16	25.0	1.34
WJHAGGAS	3yoHcp	6	15	40.0	0.87

NEWMARKET

Trainer	RaceType	Wins	Runs	%	Ret
BHANBURY	3yoList	4	14	28.6	0.76
DRCELSWORTH	3yoMdn	6	21	28.6	0.76
EAWHEELER	3yoHcp	4	14	28.6	2.86
JHMGOSDEN	3yoStk	11	26	42.3	0.57
JLDUNLOP	2yoStk	6	11	54.5	1.92
JRFANSHAWE	3yoStk	4	14	28.6	0.53
MRSALMKING	3yoHcp	4	12	33.3	1.29
PFICOLE	2yoFto	9	28	32.1	0.46

NOTTINGHAM

ACSTEWART	3yoMdn	4	11	36.4	0.83
BRMILLMAN	2yoMdn	4	12	33.3	3.50
BRMILLMAN	2yoFto	4	9	44.4	2.83
DRLODER	2yoFto	3	11	27.3	1.14
HRACECIL	2yoFto	6	15	40.0	0.23
JLDUNLOP	3yoStk	6	21	28.6	0.29
JRFANSHAWE	3yoHcp	6	24	25.0	0.39
MRCHANNON	3yoStk	4	15	26.7	0.42
SPCWOODS	3yoStk	4	11	36.4	0.50

PONTEFRACT

HRACECIL	3yoMdn	6	16	37.5	1.05
WJHAGGAS	2yoMdn	4	14	28.6	1.00
WJHAGGAS	2yoFto	3	9	33.3	1.67

REDCAR

CADWYER	3yoHcp	6	19	31.6	0.70
JHMGOSDEN	2yoMdn	6	15	40.0	1.17
JHMGOSDEN	3yoHcp	4	12	33.3	0.85
JLDUNLOP	2yoMdn	7	18	38.9	0.20
JNOSEDA	3yoMdn	5	10	50.0	0.36
MRSMREVELEY	3yoClm	6	20	30.0	0.38

RIPON

BWHILLS	3yoMdn	11	26	42.3	0.52
JGFITZGERALD	3yoHcp	5	18	27.8	1.86
SPCWOODS	3yoHcp	4	16	25.0	0.31

SALISBURY

Trainer	RaceType	Wins	Runs	%	Ret
BWHILLS	2yoMdn	4	15	26.7	0.86
JLDUNLOP	3yoHcp	11	34	32.4	0.51
RFJOHNSONHOUGH	3yoHcp	5	19	26.3	2.92
RHANNON	3yoStk	5	18	27.8	0.57

SANDOWN

ACSTEWART	3yoHcp	5	14	35.7	0.96
IABALDING	3yoStk	6	11	54.5	1.82
JHMGOSDEN	2yoFto	5	12	41.7	1.38
JRPOULTON	3yoHcp	7	19	36.8	3.91
PFICOLE	3yoHcp	8	29	27.6	1.68
SCWILLIAMS	3yoHcp	7	24	29.2	2.35
SIRMICHAELSTOUT	3yoMdn	9	32	28.1	0.77
SIRMICHAELSTOUT	2yoFto	4	11	36.4	0.78
SIRMICHAELSTOUT	3yoFto	4	11	36.4	2.86

THIRSK

HRACECIL	3yoMdn	8	16	50.0	0.23
JLDUNLOP	3yoHcp	6	14	42.9	0.58
JRFANSHAWE	3yoHcp	4	13	30.8	1.47
SIRMICHAELSTOUT	3yoMdn	7	25	28.0	0.34

WARWICK

BWHILLS	3yoHcp	4	15	26.7	1.40
GMMCCOURT	3yoHcp	4	15	26.7	1.57
JRFANSHAWE	2yoMdn	4	12	33.3	1.04
MCPIPE	3yoHcp	8	20	40.0	0.61

WINDSOR

BWHILLS	2yoFto	4	14	28.6	0.85
HRACECIL	3yoMdn	6	21	28.6	0.50
HRACECIL	2yoFto	3	11	27.3	0.55
MISSDAMCHALE	3yoHcp	4	11	36.4	2.68
MRSAJPERRETT	3yoMdn	4	13	30.8	0.36
PJMAKIN	2yoFto	3	11	27.3	2.36
PWHARRIS	2yoFto	3	11	27.3	0.32
SIRMICHAELSTOUT	3yoMdn	14	47	29.8	0.24

YARMOUTH

Trainer	RaceType	Wins	Runs	%	Ret
BHANBURY	3yoStk	4	12	33.3	0.57
CFWALL	3yoHcp	9	33	27.3	0.92
DRLODER	2yoMdn	7	12	58.3	1.18
DRLODER	2yoFto	5	9	55.6	1.15
EALDUNLOP	3yoHcp	6	21	28.6	0.60
HRACECIL	3yoStk	6	14	42.9	0.31
JRFANSHAWE	2yoFto	3	11	27.3	0.82
LMCUMANI	3yoMdn	5	11	45.5	1.20
MAJARVIS	3yoMdn	4	10	40.0	0.68
SIRMARKPRESCOTT	3yoHcp	4	12	33.3	0.36

YORK

APOBRIEN	2yoFto	3	10	30.0	0.34
JLDUNLOP	2yoMdn	4	11	36.4	0.53
JLDUNLOP	2yoFto	3	8	37.5	0.72
MRSAJPERRETT	3yoHcp	4	13	30.8	1.64
PFICOLE	2yoFto	6	16	37.5	0.45

LINGFIELD (AW)

BSMART	3yoMdn	5	20	25.0	0.25
BWHILLS	3yoMdn	7	13	53.8	0.19
CNALLEN	3yoClm	4	14	28.6	0.27
DHAYDNJONES	3yoClm	4	10	40.0	0.39
DJSCOSGROVE	3yoStk	4	14	28.6	1.29
GABUTLER	3yoHcp	6	23	26.1	0.23
JHMGOSDEN	3yoMdn	5	10	50.0	1.97
JMPEUSTACE	3yoHcp	7	19	36.8	1.91
MISSGAYKELLEWA	3yoMdn	9	36	25.0	0.63
MJOHNSTON	3yoStk	8	17	47.1	0.36
MJOHNSTON	3yoMdn	8	32	25.0	0.82
MLWBELL	3yoHcp	4	15	26.7	0.40
RHANNON	2yoStk	7	11	63.6	1.67
RHANNON	3yoClm	6	21	28.6	0.18
RINGRAM	3yoStk	5	19	26.3	0.80
SPCWOODS	3yoMdn	6	15	40.0	0.24
SPCWOODS	3yoHcp	8	29	27.6	1.20
TGMILLS	3yoClm	6	12	50.0	0.99
TGMILLS	3yoMdn	6	21	28.6	0.91

SOUTHWELL (AW)

Trainer	RaceType	Wins	Runs	%	Ret
BJMEEHAN	2yoMdn	8	14	57.1	0.74
CREGERTON	3yoHcp	5	19	26.3	0.74
GCBRAVERY	3yoHcp	6	24	25.0	1.29
HMORRISON	3yoHcp	4	15	26.7	2.63
MJCAMACHO	3yoClm	4	10	40.0	1.88
MJOHNSTON	3yoMdn	7	13	53.8	3.34
PDEVANS	3yoStk	7	28	25.0	1.00
SIRMARKPRESCOTT	3yoHcp	30	60	50.0	0.38
SPCWOODS	3yoMdn	5	13	38.5	0.34
TDBARRON	2yoMdn	4	16	25.0	0.56

WOLVERHAMPTON (AW)

ANDREWREID	3yoClm	5	14	35.7	0.25
CWTHORNTON	3yoStk	4	12	33.3	0.78
DJSCOSGROVE	3yoStk	4	14	28.6	1.71
JEBANKS	3yoHcp	5	15	33.3	0.73
JNOSEDA	3yoMdn	6	13	46.2	1.15
JRFANSHAWE	3yoMdn	5	13	38.5	0.25
MAJARVIS	3yoHcp	8	23	34.8	0.78
MISSGAYKELLEWA	3yoMdn	4	16	25.0	2.05
NPLITTMODEN	2yoClm	4	11	36.4	2.14
NTINKLER	3yoClm	4	16	25.0	0.19
PCHASLAM	3yoClm	6	22	27.3	0.19
PJMAKIN	3yoHcp	10	34	29.4	1.15
RGUEST	3yoHcp	6	21	28.6	0.35
RMHCOWELL	3yoHcp	7	26	26.9	0.70
SIRMARKPRESCOTT	2yoFto	6	15	40.0	0.39
TDBARRON	3yoStk	4	11	36.4	0.58
TDBARRON	3yoClm	8	18	44.4	0.76
TGMILLS	3yoHcp	10	34	29.4	1.52
WJARVIS	3yoMdn	5	12	41.7	0.48
WJHAGGAS	3yoMdn	11	24	45.8	0.57

NORTHERN TRACKS

BHANBURY	3yoStk	4	10	40.0	1.00
BJMEEHAN	2yoStk	6	18	33.3	0.70
BWHILLS	2yoStk	5	14	35.7	0.42
DENYSSMITH	2yoFto	5	14	35.7	3.86
DRLODER	3yoMdn	12	25	48.0	0.28
EALDUNLOP	3yoStk	8	23	34.8	0.22
GWRAGG	3yoStk	6	13	46.2	1.01

NORTHERN TRACKS (continued)

Trainer	RaceType	Wins	Runs	%	Ret
HRACECIL	3yoMdn	39	91	42.9	0.22
ISEMPLE	3yoStk	11	43	25.6	2.28
JAOSBORNE	2yoFto	3	12	25.0	2.46
JGGIVEN	2yoFto	4	16	25.0	1.72
JNOSEDA	3yoHcp	10	32	31.3	1.00
LMCUMANI	2yoFto	5	19	26.3	0.94
MJOHNSTON	3yoStk	22	81	27.2	0.26
MLWBELL	2yoStk	5	11	45.5	0.64
MLWBELL	3yoStk	10	35	28.6	0.31
MLWBELL	2yoFto	4	14	28.6	0.71
PFICOLE	3yoStk	8	28	28.6	0.71
PFICOLE	2yoFto	5	14	35.7	0.35
SIRMARKPRESCOTT	2yoStk	13	29	44.8	0.30
WGMTURNER	2yoClm	5	18	27.8	0.20
WJHAGGAS	3yoClm	5	15	33.3	0.66
WJHAGGAS	3yoMdn	10	36	27.8	0.36

Our season of superiority spread betting continues.

SOCCER SUPERIORITY SPREADS

SMARTsig

Manchester United continue to dominate our superiority spreads, featuring in no fewer than three of this latest reporting periods six games. Their adverse influence on the shape of our bank continues too, these three games cost us no less than 5.1 points!

A reminder of how we rate each game;
Assessing league games only, from an up-to-date league table, calculate a rating for each team based upon 3 points win, 1.2 points for a draw.
The ***game rating*** is found by deducting the rating of the away side from the home side's rating. Once calculated apply the following formula;
Goal superiority = 0.44 + (game rating x 0.8)
(More details can be found in issue 8.11, November 2001)
We only bet if our rating gives a minimum of 0.4 goal edge.

Balance Sheet, B/Fwd from last month: +4.25

Date	Hteam	Ateam	Supr rating	Best Quote	Edge	Action	res	Supr	Win	Lose	Bank
23-Jan	Leicest	Arsenal	(-0.43)	(-1.1)-(-1.4)	0.67	Sell_A	1-3	-2		0.90	3.35
29-Jan	Bolton	Man U	(-0.14)	(-1.0)-(-1.3)	0.86	Sell_A	0-4	-4		3.00	0.35
02-Feb	Arsenal	So'ton	1.08	1.5 - 1.8	0.42	Sell_H	1-1	0	1.50		1.85
02-Feb	Leicest	Chelse	(-0.34)	(-0.8)-(-1.1)	0.46	Sell_A	2-3	-1		0.20	1.65
02-Feb	Man U	Sund	1.02	1.8 - 2.1	0.78	Sell_H	4-1	3		1.20	0.45
10-Feb	Charltn	Man U	(-0.03)	(-1.1)-(-1.4)	1.07	Sell_A	0-2	-2		0.90	-0.45

C/Fwd to next accounting period: -0.45

SMARTsig

Despite all that has been discussed, demonstrated, proven & disproved before, we are all entitled to an opinion. One long-term member from Holland makes his case.

THE BABY PROGRESSION

Henk Eilerts

I think it is now one-and-a-half years since I last contributed, so now here is what I believe is a staking method that can turn level losing stakes into a profit. *(I thought we'd dismissed this idea as fruitless Henk, many have tried before you – without much success – Ed)*

Here my method of play, for a long-term operation in an effort to win a certain sum in the course of a year. For the bettor to have a chance he must back selections which will bring in a fairly static percentage of winners. Unless he is prepared to devote his time to the intelligent study of form, his best plan is to follow a tipster and/or a rating system in which he has confidence.

A level stake investment on the selection of a newspaper would probably bring about a yearly loss. Let me show you how even these selections can be made to produce an annual profit.

The newspaper selector on the 25% basis does pick about 25 winners in every 100 races. The question is, can a plan of betting be devised to enable a profit to be obtained from a less than exciting 25 from 100 regime? Well, it can be done, and this is how you do it.

Let's say that the average price of the winners is 5/2. On level stakes of £1 on each selection, you would invest £100 and the return, including stakes, would be £87.50, for an overall loss of £12.50. To overcome this loss it is necessary to vary the stake so that the winners will balance the losers

and produce the profit we seek. If this is done correctly, you must win.

We can expect to back 25 winners in every 100 races at odds of 5/2. The combined odds total 62.5 (i.e. 25 @ 2.5/1), plus the £25 staked on the winners is £87.50. This is not good, so I created a method of staking to overcome this loss.

There are 7 rules, which may on first reading appear a little complicated, but actually once into the swing of using them you'll find them quite easy to operate.

1. Treat every 100 bets as a single transaction.
2. Budget to win a set amount over the 100 events.
3. Although, as explained above, your average leads you to expect winners with the total odds of 62.5, cut this expectation down to 40.
4. This means that if, on the 100 races, you back winners whose odds total that amount, you will win whatever amount you have set as your quota.
5. If at any time you have a profit of one point or more for every race operated on, start again. That is, if at the end of 10 races you are £10 in front, start again.
6. To determine your stake divide the total amount of odds needed to complete your cycle into the amount of money to be won.
7. If, for example, you wanted to win £100 at the end of 100 races your first bet would be £2.50 (40 divided into £100)

There it is. The clue to its success is rule (3) which in theory reduces the expected return from 62.5 to 40. This allows for odds below the anticipated average.

Rule (5) is also a sound one. After all, the exercise is to make a profit, so if you are winning the unit sought for each of 10 races run you start afresh.

Some bettors would not be prepared to seek the same

objectives all of the time. This aim can be increased when capital increases, which is the wise approach with all staking plans – put aside all or part of your profits to build your "bank".

You will note the system of staking, you have a divisor (40) and an objective (100).

On a £1 basis the opening bet is 100 ÷ 40
If the bet goes down the loss is added to the objective. Should our bet win, the profit from that bet is deducted from the objective and the odds of the winner deducted from the divisor.

So, if the opening bet won at say 4/1 you would win £10 and gain 4 points. The divisor would go down to 36 (i.e. 40 – 4) and the objective to £90 (i.e. 100 – 10). The subsequent bet is therefore objective ÷ divisor, which is now 90 ÷ 36, the next stake therefore remains at £2.50.

You will find that the required wager on many occasions will be in odd amounts which cannot easily be staked, in such circumstances bring the stake up to the nearest unit of investment.

This is a good staking plan for the person who can pick winners or has the confidence to bet on a public selector and aims at a definite target.

The proper approach is what I call "The baby progression". A baby learns to crawl before it walks, and to walk before it runs. Do likewise for those desirous of trying to make money.

From betting there is only one sensible way – start small. Don't become disheartened if the early progress seems to be slow. If successful you will find that the capital will grow, the crawl will become a walk . . . . and you'll be running before you know it!

SMARTsig

Getting to grips with race-ratings following the lead of Raceform's well known Dutch correspondent of a few years back.

PUTTING IT ALL TOGETHER

Hedgehog

After my last article on Race Rating (January issue, 901) I thought it out for a while and then realised the next logical step was to put the work from my previous articles together.

The VDW methodology, to my understanding, has 3 steps.

The first of these is to get a subset of horses from a race based on the 3 Form horses from the first 5 named in the betting forecast and the 4 highest Ability.

The second step is to get a subset of horses from a race based on the 3 highest Class.

The third step is to apply form evaluation to horses common to both subset. This article is based on this method.

Firstly some definition

- LTO is Last Time Out.
- Betting forecast is the Racing Post betting forecast.
- A Form rating is determined by adding the last 3 form figures together with any result above 9 taken as 10. So a horse with form figures 321 would have a form rating of 3+2+1=6.
- The 3 Form horses have the 3 lowest Form ratings from the first 5 named in the betting forecast.
- Ability rating is total winning prize money divided by

number of wins with the resulting value divided by 100 and with the decimal part ignored. For example instance if a horse has won 2 races one for £12,550.00 and the other for £13,530.00, has an Ability rating of 130.

- The 4 highest Ability horses have the four highest ability ratings from the first 5 named in the betting forecast. This is slightly at odds with VDW, as he would have the 4 highest ability from the race as a whole. This is a limitation of my data.

- Class rating is the penalty value of the race divided by 100 with the decimal part ignored. For instance a race with penalty value of £12,550.00 has Class rating 125.

- The 3 highest Class horses have the 3 highest Class ratings from the race as a whole.

- The Race Rating is based on the following table of form comments from the latter part of a horses LTO race. This is not part of the VDW methodology but I will use it as a means of standardising the form evaluation.

Rating	Comment
5	Quickened, easily, very easily, impressive, very impressive, canter, comfortably, eased (in winning), idled (in winning)
4	All out (to win), ridden out (to win), driven out (to win), pushed out (to win), pushed clear (to win), rallied, just held, just held on, sustained challenge, strong challenge, sustained run, readily, cleverly, strong run, just failed, drew clear, cheekily, rapid headway Ran on strongly
3	Any comment with ran on except ran on strongly, Stayed on strongly
2	Any comment with stayed on except stayed on strongly, Kept on strongly

Table continued . .

Rating	Comment
1	Any comment with kept on except kept on strongly, Headway at any point in the latter part of the race
0	Any other comment

To use this table if the comment for the latter part of a race had the components "headway", "quickened" and "ran on well", I would give this race a 5 for quickening.

The sample is of 175 races for Flat races of £10,000 or more and NH of £7,500 or more. The sample was for the period 29th May to 16th September 2000 during which I kept form comments on the last race ran for each of the first 5 named in the Racing Post betting forecast.

This gives a sample in which the winner was found in the first 5 named 74.9% of the time and the forecast favourite won 25.00% of the time.

Now a quick explanation of table heading:

W - Winners for subset.
R - Runners for subset.
SR% - Percentage strike rate for subset (given as W/R).
Av. Odds - Average winning odds.
ROI - Return on investment after 9% tax where 0 is break even.

So lets apply the first 2 step of the VDW methodology.

Subset	W	R	SR%	Av. Odds	ROI
First 5 named in the betting forecast	131	856	15.30	4.775	-0.189
3 Form horses from the first 5 named	101	604	16.72	4.302	-0.187

Table continued . .

Subset	W	R	SR%	Av. Odds	ROI
3 Form horses + 4 highest Ability in first 5 named	85	489	17.38	4.026	-0.198
3 Form horses + 4 highest Ability + 3 Class horses in first 5 named	48	201	23.88	3.557	-0.002

Starting with the first 5 named in the betting forecast, the first reduction is to consider only those horses that are also one of the 3 Form horses.

The second reduction is to consider only those horses that are one for the 3 Form horses and also one of the 4 Ability horses.

The final reduction is to consider only those horses that are one of the 3 Form horse and one of the 4 Ability horses and one of the 3 Class horses.

After each reduction the strike rate improves. Unfortunately the average odds decreases leaving the ROI negative.

It is not until the final reduction that the ROI gets to a value that would almost break even after betting tax.

It is at this point that VDW would apply form analysis.

To mimic this, I broke the final subset down by LTO race rating. For any rating of 2 or above there is a positive ROI.

Even the blunt instrument of a simple race rating has provided enough information on form to sort the wheat from the chaff.

LTO Rating	W	R	SR%	Av. Odds	ROI
5	6	12	50.00	1.652	+0.216
4	13	38	34.21	3.718	+0.481
3	9	30	30.00	3.365	+0.201
2	8	20	40.00	2.922	+0.439
1	2	23	8.70	4.167	-0.588
0	10	78	12.82	5.050	-0.288
All	48	201	23.88	3.557	-0.002

In fact betting any of the final subset with a race rating of 2 or above would produce 36 winners from 100 selections with a strike rate of 36.00% and an ROI of +0.357. That's 35p in the pound profit for every pound wagered.

I think that this shows how effective the VDW methodology is even with crude form evaluation.

Finally VDW suggested that for those starting out it would be safest to bet only when the selection was also the first or second favourite.

To evaluate this advice I have further reduced the final subset to include only horses that are first or second forecast favourites.

For a forecast of 6/1, 6/1, 8/1, 8/1, 10/1 I would consider there to be 2 forecast favourites and 2 second favourites.

LTO Rating	W	R	SR%	Av. Odds	ROI
5	6	10	60.00	1.652	+0.460
4	10	25	40.00	2.900	+0.431
3	8	23	34.78	3.473	+0.427
2	7	15	46.67	2.768	+0.613
1	1	12	8.33	0.333	-0.898
0	3	33	9.09	3.667	-0.611
All	35	118	29.66	2.783	+0.029

I think that the advice is sound. For those horses with a rating of 2 or above the reduction would produce 31 winners from 73 selection with a strike rate of 42.47% and a ROI of +0.471. That's 47p profit for every pound wagered. That's not bad at all!

Conclusion

I believe I have shown the effectiveness of the VDW method of horse selection and of advice for the beginner. Though I have had to do this by essentially making a system of the method, which is something I believe VDW would have disagreed with.

But I think that the method would yield much better results with a more skillful method of form evaluation taking into account such obvious factors as class drops and distance winners.

SMARTsig

A horse's starting price is an accurate guide to its strike rate. But when betting on a day-to-day basis will we ever treat a 5/1 3rd favourite in a 4-runner race the same as a 5/1 favourite in a 20-runner event? After all, statistically they've both the same chance.

THE PICK OF THE MARKET

Bob, Edinburgh

Virtually all race fans are intrigued by the possibility that there is an area of the betting market where it is best to bet.

Recent articles in SMARTsig raise the subject once more and it seems to me that if we are ever to wrest the golden fleece from the bookies then the issues raised are worthy of our study.

The key articles

The articles mentioned are as follows:

- 'Best Odds at Which to Bet' by Steve Tilley in issues 8.11 and 9.01. (One still to come!)
- 'Stop-at-a-Winner' by SMARTsig with a table of Strikes rates of SP's for Flat races, 1995-2000, compiled by Bill Willoughby in issue 8.12.
- 'Playing Markets, Not Horses' by Brian Oldham in issue 9.01.

Taking them in order.

'Best Odds at Which to Bet'

A Steve Tilley article always stimulates the brain cells. But I am not sure that I have followed his intention in writing these particular articles.

Steve says that he provides a method for doing better in tipping competitions and his is a system for mug punters. His theory seems to show that bettors making higher priced bets have a greater probability of profit than those operating at lower prices.

I am not sure why this argument applies only to tipster competitions and to mug punters. Why is this not of wider application to all betting? Or is he arguing that an argument may hold true for mug punters but does not hold true for us all?

Another problem I had with his argument was that his theory rests on numbers with random probabilities. But the notion that horse races are resolved according to random number theory is not one that the great body of punters, by their betting actions, would agree with. And we can be fairly confident that this isn't because they are all students of Chaos Theory!

I feel intuitively that it is wrong to argue that it is easier to achieve a target by betting 35/1 shots than it is by betting those at evens. But perhaps I have not followed Steve's thread in its entirety and maybe he would explain further.

Please note that I do not dispute Steve's maths. Perish the thought! And as he has a third article which we have yet to see, perhaps my comments are premature.

Unsurprisingly, a look at the statistics involved in real betting seem to lend support to the idea that Steve's mug punter system has wider applicability.

Strikes rates of SP's for Flat races, 1995-2000

The fascination of Bill Willoughby's table, which covered some 270,000 races, is that it clearly illustrates the edge in value that the average SP punter has from betting horses at longer odds.

If you look at the table you can readily see that all the large positive differences occur at the lowest prices. What this must surely mean is that it is in the lowest price brackets where the bookies squeeze their hardest. In other words this is where the punter gets bitten by over-round to the greatest degree.

From a study of the table, it would seem that the only conclusion for value punters would be to avoid horses starting at 9/4 or under!

'Playing Markets, Not Horses'

Brian Oldham also submitted a table showing similar results for 200,000 or so runs. (No details as to which runs were given.) Brian's purpose was rather different in that he had no particular interest in what was the best odds area for betting.

Brian's point was that he believed that the distribution of performances and prices was so closely matched that SP was an almost perfect predictor of a horse's chance in a race. So why bother with form?

From this entirely reasonable standpoint Brian then went on to develop the basis of his approach to trading in odds availability.

With a different aim in mind from Brian, I took a slightly different view of his data. Whereas Brian drew his graph with a straight line my impression was that it was curved! You can see that the points above the line considerably outnumber those below.

This has quite important consequences for bettors.

'Milking the Market'

In an earlier submission in SMARTsig issue 6.11 on the same topic, I plotted some 200,000 racing performances

taken from 'Flat Racing for Profit' (Raceform) by Peter May.

So for example, the graph shows that you would expect 60% winners from horses starting at odds on but only about 2% from those at 50/1 or over.

I should be very surprised if the data provided by Bill and Brian did not also follow a roughly similar trend.

The shape of the line is important. Value bets exist above the line, bets favouring the bookie are made below the line. If all bets were a fair reflection of their odds as Brian suggested then the chart would indeed have an upward diagonal straight line from left to right. But I am sure that Brian knows as well as the rest of us that most bets at SP ain't fair!

So as the money piles on a strongly fancied horse the bookies bend the line in an upward direction and thus make sure that they get their cut. In effect this process need only take place with shorties. The market arithmetic takes care of the long shots which are hardly bet at all.

For punters this means that you shouldn't be too keen on backing horses at prices beneath 5/1. But if you do observe this advice please note that you won't be betting on about 60% of the races that take place because this is the proportion of races won by the shorties!

And incidentally, I suggested in my comment on the market that since only about 2.5% of winners comes from horses priced 20/1 or over then you could safely forget such animals too. Your chance of picking a winner greater than 20/1 comes once in a blue moon.

So the ideal range would seem to be that between 5/1 and 20/1. In this area you will be aiming at about just under 40% of winners. And if you are good enough then there are fair prospects of profit.

There are of course many criticisms that we can make of a betting approach based on areas of SP. I mean to say what professional bets at SP?

Another problem is that when looking at prices we have no notion of the volume of betting. There is an enormous difference in a horse at 1/2 on which no one is betting and another that the weight of good money has forced down. The price may be the same but the bets are not.

We only need to reflect on a horse that may be priced at 5/1, say, in a race where it is outsider of three and compare it with another at the same price that is favourite for a big race of 20 runners. We know that these horses are mathematically rated with the same chance. But how many would bet accordingly?

For example, at Cheltenham recently a punter wagered £100,000 on a favourite to win £175,000. Now raise hands those who think the money would have gone down if the horse had been second favourite, even if offered at the same price of 7/4.

The point is that one has to be very wary when looking at price as a means of estimating the chance of horses and as any punter knows SP's do not tell the whole story. Far from it!

Reporting the progress of several commercial horses-to-follow lists - plus a compilation of some free lists.

HORSES TO FOLLOW PUBLICATIONS

Terry Collins

A good cross section of horses-to-follow lists have been collected for monitoring this National Hunt season, some are commercially available (you pay for 'em) - and we even managed to find some free Lists!

We'll track the fortunes (or otherwise!) of each of them and report the monthly progress. The Lists are;

- Jumping Prospects
- Marten Julien's Bulletin Book
- One Jump Ahead
- Raceform 100-to-Follow
- Timeform 50-to-Follow
- A compilation of 8 'free' Lists found on the Sporting Life web site (a total of 90 horses in all)

Monitoring is from 1st Nov. 2001 until after the Whitbread - which we're taking to be the end of the jumping season.

FREEBIES

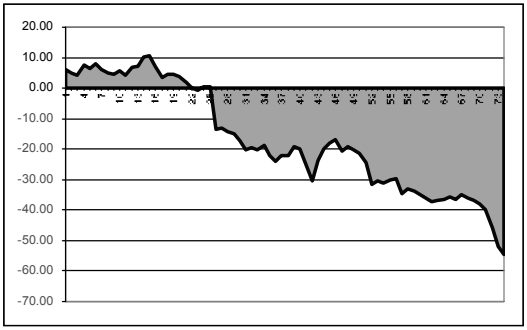
Balance sheet update;

	Selections	winners	BALANCE	win prices
B/Fwd			***-£32.99***	
20-Jan	1	0	-£33.99	
22-Jan	1	0	-£34.99	
24-Jan	1	0	-£35.99	
25-Jan	3	1	-£37.26	8/11
26-Jan	5	1	-£36.76	9/2
27-Jan	2	1	-£36.39	11/8
28-Jan	1	1	-£35.59	4/5
31-Jan	4	2	-£35.02	2/1, 4/7
2-Feb	5	1	-£36.02	3/1
4-Feb	1	0	-£37.02	
5-Feb	1	0	-£38.02	
8-Feb	2	0	-£40.02	
9-Feb	7	1	-£45.95	1/14
10-Feb	6	0	-£51.95	
16-Feb	6	1	-£54.70	9/4

Performance statistics;

	selections	winners	strike%
This period:	46	9	20%
To Date:	195	52	27%

Progress graph;



A 20 point loss for this latest accounting period leaves the Freebies still in the doldrums.
This category however is our own amalgamation, for a breakdown of individual performances see page ##.

JUMPING PROSPECTS

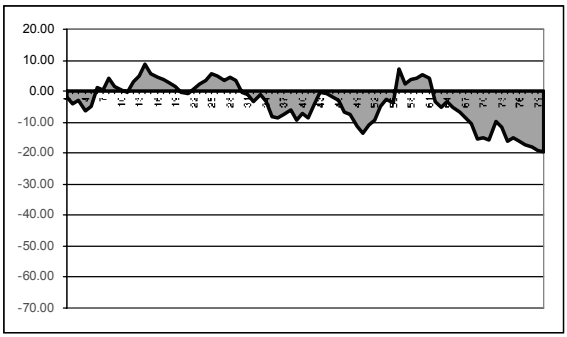
Balance sheet update;

	Selections	winners	BALANCE	win SP's
B/Fwd			***-£3.20***	
25-Jan	4	2	-£3.37	11/10, 8/11
26-Jan	2	0	-£5.37	
28-Jan	3	1	-£6.57	4/5
30-Jan	2	0	-£10.57	
31-Jan	5	1	-£10.57	2/1
2-Feb	5	0	-£15.57	
5-Feb	1	1	-£15.00	4/7
7-Feb	3	2	-£9.75	5/4, 5/1
8-Feb	2	0	-£11.75	
9-Feb	8	2	-£15.18	5/2, 1/14
10-Feb	1	0	-£16.18	
11-Feb	1	0	-£17.18	
13-Feb	1	0	-£18.18	
15-Feb	1	0	-£19.18	
16-Feb	6	1	-£19.68	9/2

Performance statistics;

	selections	winners	strike%
This period:	45	10	22%
To Date:	179	51	28%

Progress graph;



A 16 point recorded loss for the current period doesn't improve JP's performance

Due in the main to the winners being at such cramped odds.

MARTEN JULIENS BULLETIN

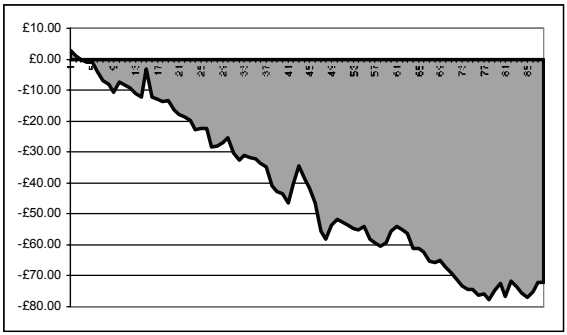
Balance sheet update;

	Selections	winners	BALANCE	win SP's
B/Fwd			***-£61.18***	
20-Jan	1	0	-£62.18	
21-Jan	3	0	-£65.18	
22-Jan	2	1	-£65.57	8/13
23-Jan	1	1	-£64.84	8/11
25-Jan	4	1	-£67.11	8/11
26-Jan	2	0	-£69.11	
27-Jan	2	0	-£71.11	
28-Jan	4	1	-£73.31	4/5
30-Jan	1	0	-£74.31	
31-Jan	3	1	-£74.31	2/1
2-Feb	4	1	-£76.40	10/11
5-Feb	1	1	-£75.83	4/7
6-Feb	2	0	-£77.83	
7-Feb	3	2	-£72.58	5/1, 5/4
8-Feb	4	0	-£76.58	
9-Feb	4	1	-£71.58	8/1
10-Feb	2	0	-£73.58	
13-Feb	2	0	-£75.58	
14-Feb	3	2	-£74.95	8/11, 10/11
15-Feb	1	1	-£72.20	11/4
16-Feb	3	1	-£71.95	9/4

Performance statistics;

	selections	winners	strike%
This period:	52	14	27%
To Date:	218	46	21%

Progress graph;



A busy period at the payout window for MJ, but once again cramped odds result in another loss. We've even had to extend our graph downwards to accommodate!

ONE JUMP AHEAD

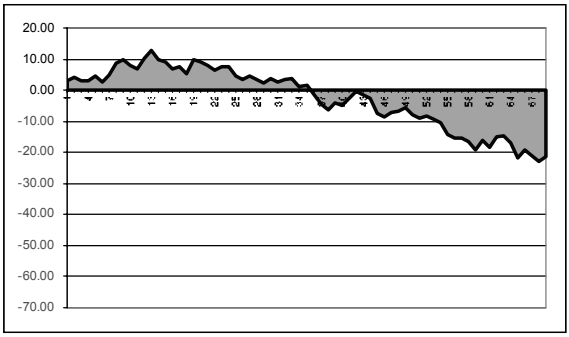
Balance sheet update;

	Selections	winners	BALANCE	win SP's
B/Fwd			***-£7.97***	
21-Jan	1	0	-£8.97	
22-Jan	1	1	-£8.36	8/13
23-Jan	1	0	-£9.36	
24-Jan	1	0	-£10.36	
25-Jan	4	0	-£14.36	
26-Jan	1	0	-£15.36	
28-Jan	2	1	-£15.56	4/5
30-Jan	1	0	-£16.56	
31-Jan	4	2	-£16.22	1/3, 2/1
2-Feb	4	2	-£15.06	10/11, 9/4
7-Feb	2	1	-£14.81	5/4
8-Feb	2	0	-£16.81	
9-Feb	6	2	-£18.99	1/14, 7/4
10-Feb	2	0	-£20.99	
15-Feb	2	0	-£22.99	
16-Feb	4	1	-£21.49	9/2

Performance statistics;

	selections	winners	strike%
This period:	38	10	26%
To Date:	135	40	30%

Progress graph;



An eight point loss over the latest accounting period for One Jump Ahead continues the bad times experienced by all the lists to date.

RACEFORM

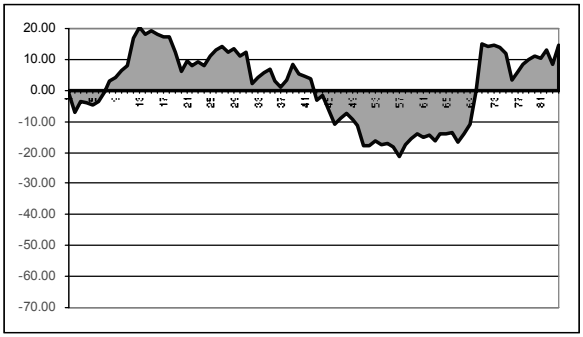
Balance sheet update;

	Selections	winners	BALANCE	win SP's
B/Fwd			***-£13.97***	
21-Jan	1	0	-£14.97	
22-Jan	1	1	-£14.35	8/13
25-Jan	2	0	-£16.35	
26-Jan	5	1	-£13.85	13/2
28-Jan	2	1	-£14.05	4/5
31-Jan	1	1	-£13.72	1/3
2-Feb	5	5	£15.07	10/11,13/8, 9/4,10/1,14/1
4-Feb	1	0	£14.07	
5-Feb	1	1	£14.64	4/7
7-Feb	3	1	£13.89	5/4
8-Feb	2	0	£11.89	
9-Feb	12	5	£11.19	5/2,7/4,5/4,8/11,1/14
13-Feb	1	0	£10.19	
15-Feb	1	1	£12.94	11/4
16-Feb	6	2	£14.55	8/13, 5/1

Performance statistics;

	selections	winners	strike%
This period:	44	19	43%
To Date:	207	66	32%

Progress graph;



To quote from last months article "*expect Raceform to bounce back*" . . And bounce back it certainly did with a 28 pt recorded profit which sends it to the head of affairs.

TIMEFORM

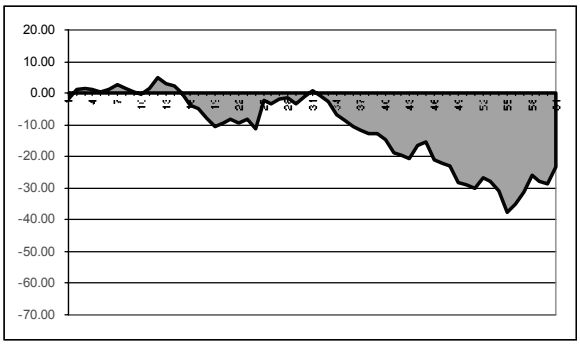
Balance sheet update;

	Selections	winners	BALANCE	win SP's
B/Fwd			-£21.05	
24-Jan	1	0	-£22.05	
25-Jan	1	0	-£23.05	
26-Jan	5	0	-£28.05	
31-Jan	1	0	-£29.05	
4-Feb	1	0	-£30.05	
6-Feb	1	1	-£26.72	10/3
7-Feb	1	0	-£27.72	
8-Feb	3	0	-£30.72	
9-Feb	8	4	-£25.89	1/14,7/4, 5/2, 9/2
10-Feb	2	0	-£27.89	
16-Feb	4	2	-£23.14	9/4, 9/2

Performance statistics;

	selections	winners	strike%
This period:	28	7	25%
To Date:	119	31	26%

Progress graph;



A quiet month for Timeform followers.

But the poor results only effect a 2 point dent in the coffers.

The performance of our 3/1 filter system applied to the horses-to-follow lists follows on the next page . . .

3/1+ FILTER - Only backing selections of 3/1 or greater.

	SP	3/1+	high profit	high loss
Raceform	£14.55	£9.00	£20.44	-£18.25
Jumping Prospects	-£19.68	-£12.25	£8.56	-£19.68
One Jump Ahead	-£21.49	-£5.00	£12.81	-£22.99
Timeform	-£23.14	-£24.67	£5.02	-£30.72
Freebies	-£54.70	-£41.00	£10.53	-£54.70
Marten Julien	-£71.95	-£62.50	£3.00	-£77.83

Raceform is now stretching the field after it's excellent month when all seem to be falling by the wayside. Timeform and Marten Julien now no longer equal their highest losses but the Freebies is still there at the moment and has been joined by Jumping Prospects even though it lies in 2nd place!

Four of the lists are now currently being helped by the use of this 3/1+ filter.

Award for best result of the month goes to Raceform having 5 winners from 5 selections on 2nd February giving a 28.79 point profit on the day. Lets hope Cheltenham brings some better news for the chasing pack.

Ten To Follow	balance
Simon Holt	£16.92
PA Racing Desk	-£5.18
Carl Llewellyn	-£5.33
Michael Clower	-£5.90
Dave Ord	-£7.25
Rob Brady	-£8.74
George Primarolo	-£10.85
Karl Dennis	-£15.52
Steve Jones	-£20.18

Freebies List Breakdown

Channel 4 pundit Simon Holt's inclusion in our freebies list is good news for the list. His 10-to-follow is currently 22 points clear of the nearest rival, made up from Sporting Life website journalists, jockey Carl Llewellyn and tipster Karl Dennis

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