

*Software Updates***Modeler Wizard / Great New Features / User Guide**

The last 5 pages of this newsletter are the *Modeler Wizard User Guide 2011*. This updates all of the previous information on the *Modeler Wizard*. There are several great new features in the latest MaxVel version that will enhance your handicapping using a model tool. I'll review the new items briefly on this page and will then refer you to the full user guide that follows. The *Wizard User Guide* will be detached from this newsletter and placed on the HTR Library for review at any time should you need it.

What's New on the MaxVel Main Screen

- k2 rating was added to the "V2" screen (View option 2, click from top menu). While the k2 does not really fit with the other velocity data on this screen, it was the only open screen available with an empty slot for one-click-sorting.
- All other output was brought up to date to match HTR2 recent versions.

What's New with the Modeler

- k2 rating added to all modeler functions including "Get Full Stats" which has a complete ranking report on the factor from top to bottom. All modeling options now include k2 and it is a valuable addition as you'll discover, because k2 is computed for 100% of horses and has almost no ties.
- Modeler Wizard has two new options with report output.
 1. Wizard2 displays the top-5 Modeler *hits* (%) with the associated horses for that race. This gives you instant feedback on which factor have been the most productive and the horses that fit the modeler. Additional data is added for each horse to help your handicapping, including our key longshot/tournament factors.
 2. Wizard data "Data Dump" is an output of the entire modeler data set for complete review top to bottom.

In addition there are a number of new logistical options that will enhance the modeler handicapping.

- Maximum Races to Extract for Wizard: 10, 20 (default), or 30 are the choices.
- Save/Retrieve Edit List. Now you can save the factors you want to use or exclude, and recall the list each time you load the program.
- "Full Coverage Factors" option on the Edit screen (explained on page 12).

Much thanks to our members for their input and suggestions with MaxVel. MaxVel beta-tester Malcolm Sylvester ("Sly") has been indispensable with his excellent feedback. Donnie Nadermann contributed exciting ideas at our recent seminar and his special method is now efficiently and easily located by using either of the new Wizard options. Donnie's seminar method is explained in the User Guide. As always, a "thank you" goes to Rick and Daven for newsletter production.

MaxVel Software
Modeler Wizard User Guide

This guide deals with the Wizard aspect of the MaxVel Software Modeler only. If you need a primer on the entire MaxVel (Maximum Velocity) software and the Modeler, please refer to the "MaxVel User Guide" in the HTR Library.

Software Version

The information herein is based on MaxVel versions from November 2011 and later. The latest version of MaxVel can always be installed or downloaded from our website (see back page).

Introduction

The purpose of the Modeler as a handicapping tool is to review a race by analyzing patterns from similar recent races. Pattern recognition can be a tedious and time-consuming process when done manually. Computers can handle the data processing, sorting and number crunching far more efficiently. The Modeler Wizard takes it all a step further by performing an organizational assembly of the information in a user-friendly format. The handicapper has only to review the numbers and learn over time when the impact is highest. Perhaps the most important aspect of using a Model to handicap is the intuition you'll develop from reading the reports and watching the outcome of the races.

Getting Started with the Modeler Wizard

To use the Wizard, start on the main screen of the MaxVel software. At the top left, from the drop-down list with track/dates, select a date you want to handicap or review. Normally this will be today's date for races that will run this afternoon. It is not necessary to choose a track at this stage.

If you are handicapping today's races, be sure to click the SCRATCH button and use the Auto-Scratch-HDW feature to instantly remove the scratches before entering the Modeler screen.

Now enter the Modeler interface by clicking the [Modeler] button at the bottom of the main screen.

The Wizard tools are those found on the right side of the Modeler interface. We'll review each of the buttons, reports and options separately.

[Track List] At the top on the right, you'll see the date you chose highlighted and below it is a list box with all the tracks and races for the day. You can toggle through this list and choose any race to model from the list.

[Go To Current Race] Click this one to immediately go to a race that you were handicapping from the main screen. It is not necessary to use this function unless you are working on a specific race on the other screen and want to quickly access it in the modeler.

[Show Model for This Race] was the original modeler option for MaxVel and is not covered here.

[Wizard1] [Wizard2] [Dump]

These three options are the key functions of the *Wizard*. Their output will be covered in detail on the next few pages. When you click these buttons, the *Wizard* locates races that match the criteria and conditions for today's race. It begins with the most recent match and works backward in time. The *Wizard* looks at all of the ranked factors in common with past winners (or 2nd finishers) and compiles a statistical report.

[Edit Factor List] When clicked, a list of all the ranked factors used by the Modeler are shown on a checklist. You can un-check any of them to remove them from the modeler tests. We'll explain why you might want to do this later. If you are just learning to use the *Wizard*, ignore this option for now.

[Modeler Options] These options allow you to tailor the reports and siphon the data as desired. The defaults are reliable settings, don't change them unless you are an experienced user. We'll cover them throughout this text.

MaxVel Software
Modeler Wizard User Guide

[Wizard 1] / Report

After a race has been selected, click the [Wizard 1] button and let the *Wizard* locate the ranked factors that have the highest hit rate percentage in each of the 'Top' categories: Top1, Top2, Top3, and Top4.

The report will show the current race at the top of the screen with the rankings for all of the horses in that race. Below it are the top factors from similar recent races that winners had in common. It also displays the names and program numbers for the horses in the current race that match the rank. Example:

```

MaxVel Wizard Found 20 Similar Races to Model
Key Factor Rank1 KMS (43%)
.....
8  Chukchi Sunr    8/1                (1)
.....
Key Factor Top2 Ranks HTR (55%)
.....
4  Five Star Cr   9/2                (1)
7  Piano Kitty    10/1               (1)
.....
Key Factor Top3 Ranks F/X (84%)
.....
2  Irish View     8/1                (1)
5  Crazy Thinki   8/1                (3)
8  Chukchi Sunr   8/1                (2)
.....
Key Factor Top4 Ranks HTR (90%)
.....
3  English Roya   5/2                (3)
4  Five Star Cr   9/2                (1)
7  Piano Kitty    10/1               (1)
8  Chukchi Sunr   8/1                (3)
.....
    
```

The **top header** displays the number of similar races found that match today's conditions. Normally, the maximum search is 20 races. It is possible that fewer than 20 races would match depending on the amount of data available on your hard drive and the frequency of similar races at this track. Later we'll discuss options that can increase or decrease this race count and how to manipulate it after you gain some experience using the *Wizard*.

Key Factor Rank1: displays the factor that produced the most top-ranked winners (rank = 1). The KMS rating is the top factor in this example and it was in common with 43% of the past winners as shown in the heading (43%). The top ranked horse and its program number from the current race is listed underneath with its morning line odds.

Key Factor Top2, Top3, Top4 Ranks: The factors that were hitting the highest percentage of winners among the top-2, 3 or 4 rankings are shown in the subsequent boxes with the horse's names from the current race that match that factor. The number listed to the right in parenthesis is the ranking for the horses for the horses listed in that ranking section.

Example above: 90% of all the winners from past similar races were ranked 1,2,3,4 (Top4) with the HTR rating. This is an excellent result and the top-4 HTR ranks from the current are now strong contenders and one of them is likely to win. One of the horses from this race, #7 Piano Kitty, has a 10/1 morning line and is top ranked (1) in HTR making her a possible longshot selection and exotics key (she finished 2nd at 6/1 in this race: the 8th-GG on Nov. 6, while #3 English Royal won it).

MaxVel Software
Modeler Wizard User Guide

[Wizard 2] / Report

The Wizard-2 report locates the highest % ranking groups (best five) from among all the "Tops" and lists them in order with the associated horses in the current race.

=====

Donnie's Seminar Method

Donnie demonstrated a clever method at our July 2011 seminar that may prove useful in your modeler handicapping. After running Wizard-1 report and locating a "Top" that showed 85% or higher, he then deselected that item using the Edit Factor List and re-ran the Wizard. If another factor showed "Top-N" at 85% or higher, he then used that as his final contender selector.

Now you can use Wizard-2 to quickly find the 2nd best "Top" (85% or more) on the list without having to use the Edit list or re-run the Wizard.

=====

Here is an example of the Wizard-2 printout and 'Donnie's Method' in action. This is race-7 at Churchill on Nov. 9, 2011.

Top Five Factors by Hit Rate Wizard Found 12 Similar Races to Model

```

-----
Fr3 Top4      010              090%
-----
3 Lil Prickly    4/1    (1)p    FC HotTr HotTJ
6 Move Me Up    7/2    (3)s    BTL HotPED
9 Hunt for Col   8/1    (2)
11 Pretty Gal T 10/1    (4)

```

```

-----
KMS Top3      008              088%
-----
3 Lil Prickly    4/1    (1)p    FC HotTr HotTJ
6 Move Me Up    7/2    (3)s    BTL HotPED
10 Dare We Drea 5/1    (3)w    Razor

```

This is an abbreviated portion of the Wizard-2 printout showing only the top two panels, the regular printout has five sections showing the best five factors. Here is a rundown on the data:

Fr3 Top4 010 090%

The first section listed tells us that 'Top 4 Fr3' ranks were the most productive factor. There were 10 plays found and 90% of the winners from these races were ranked in the top-4 with Fr3. The horses that match the Top4 Fr3 from this race are shown with their program numbers on the left and the ML and Fr3 ranking on the right. The number (3) for example, indicates the horse was ranked 3rd in this case. The "w" (Win) and "p" (Place) and "s" (Show) designates the finish, if the results have been downloaded. There are additional handicapping factors listed on the right.

Why does Fr3 only show 10 matched winners from a sample of 12 races? This is because some of the past winners, probably FTS (first time starters), did not have an Fr3 rating computed. More on that later.

KMS Top3 008 088%

The second highest factor found was the KMS Top3 with 88% winners. There were 8 previous winners found in the data sample of 12 races. This is the 2nd best factor and is a good example of the 'Donnie seminar method' in action. As is always the case in example races, the Top3 KMS completed the trifecta!

MaxVel Software
Modeler Wizard User Guide

[Wizard 2 / Data Dump] / Report

Just to the right of the [Wizard-2] button on the Modeler interface, is the [Data Dump] option. This is similar to the regular Wizard-2 report except that it spills out every single factor from top to bottom. There are now 21 factors involved with the Modeler Wizard with the 'k2' having been added. The 'Data Dump' provides more data than most of us need to handicap a race, but it may be of some interest and you can peruse the bottom of the list for some anti-handicapping with the lowest rated factors. Here is an example from the same race (CD-7, Nov.9) as discussed on the previous page.

Data Dump Sorted by Hit Rate %

Factor	Plays	Hit%	Program #
Fr3 Top4	010	090%	1 6 9 11
KMS Top3	008	088%	1 6 10
KMS Top4	008	088%	1 6 10 11
(K) Top4	012	083%	1 4 6 10
A/P Top4	010	083%	1 4 6 11
L/P Top4	010	080%	1 3 9 11
Fr3 Top3	010	070%	1 3 9 11

The Data Dump is a simple presentation. Only a small portion of the entire printout for this race is shown above. Here is the top line.

Fr3 Top4 010 090% 1 6 9 11

As we noted on the previous page, 'Top4 Fr3' is our highest production factor so it is listed on top on the 'Data Dump' as well. All 21 factors and their associated Top1,2,3,4 are listed in the 'dump' with the number of plays and the hit rate (Win or Place %). The program numbers (7th race at Churchill on Nov. 9) are shown next to the factor.

What is meant by "Hit%" as opposed to "Win" in the header? Remember that the Wizard can also test Place (2nd place) horses. The term "Hit" is merely a fixed substitute for "Win" or "Place" depending on the model chosen.

There were just 12 races that matched the 7th race at CD on Nov.9 *Wizard* requested 20 matches. The reason only 12 were found is because the meet has only been underway for two weeks. This is part of the problem with modeling, you need a minimum of 7 recent races to get a decent sample. I prefer 10 or more to trust the data. This usually means waiting two weeks or longer into the meeting to get a good data set. On the next page, we'll discuss how to expand or narrow the sample size to be modeled.

Reminder that some factors will not have a full sample from the modeler because winners were unranked in that factor. In this case the KMS had just 8 winners to compute out of a sample of 12 matching races. Use the Edit Factor List to remove items that may not have full coverage. The following items always have 100% representation in any model that you run: (K), HTR, PED, TRN, JKY, and k2. Factors that rely on paceline selections such as Fr3, VEL, PAC, etc., may not always be fully accounted for in the modeler because some of the winners did not have applicable pacelines to compute (such as FTS). Also, KMS and CLA are a specific algorithms that are not necessarily assigned to every horse. A special button was added to the Edit List to instantly select these full coverage factors only (see next page).

MaxVel Software
Modeler Wizard User Guide

Tailoring the Model Output

There are several options you can use to manipulate the Wizard output on the Modeler interface.

Filters

You can use the Filter set on the left to tailor the data. I don't suggest you use this unless you are experienced with filter management and have used Robot2 extensively.

Days Back

The default days-back to search for finding matching races is set as 90 days. You can change this, but modeling is all about matching similar recent races. If you go back further than 90-days, the data becomes "stale" and may not be indicative of current reality.

Modeler Options

Trk/Dist/Surf: is the default setting and the Wizard will extract races that match the specific track/distance/surface that match the race you are handicapping.

Trk/Dist/Surf/Class: to narrow your model with greater accuracy, choose this option which will also match the class type. This will usually reduce your sample size, sometimes considerably, but may provide greater accuracy as the similarity of the past races will be more exact.

Model Place Horse (Fin 2nd): modeling is usually done on winners by default; however select this checkbox if you want to model the Place horses.

Wizard Max Race Extract

The default is 20 and I suggest you leave it there as it has proven ideal for modeling as a balance between recent races and sample size. However, if you want to reduce it to 10 matches, or extend it to 30, use the options in this section to change the number of races extracted by the Wizard.

Edit Factor List

To remove factors you don't want computed in your model, click the *Edit Factor List* button and de-select them from the check boxes. There are a variety of reasons why you might want to do this. The most common is to eliminate factors that may have less than 100% representation in the data sample. KMS is a good one to remove because this factor is assigned to a limited number of horses in most races and can distort the modeling data. If you are modeling a maiden race, you may also want to eliminate all the rankings that require pacelines such as Fr1, Fr2, PAC, PER, etc. to get a better sample for races that have several FTS entered.

The Edit Factor List now includes SAVE and RETRIEVE functions. If you have a specific set of filters you want to save, then use this options.

The Edit Factor List also includes a "Use Full Coverage Factors Only" button. As mentioned before, these are (K), HTR, PED, TRN, JKY and k2 which are assigned to 100% of all horses including FTS. If you click this button, only these factors will be in play during the modeling process and that may improve your confidence level.

Gratitude

Your feedback and error reports are important to me as are the suggestions and ideas for improving the MaxVel software and the Modeler. Thank you for helping to create a winning product!