

VersaBet Version 4.0

Using the Set Generator

VersaBet Software and Documentation Copyright © 1987-2005
By Joseph P. Masching. All Rights Reserved Worldwide

Windows and Windows95 are Registered Trademarks of Microsoft Corporation

COPYRIGHT NOTICE AND DISCLAIMER

This software package and documentation are Copyright (C) 1987-2005 by Joseph P. Masching. All rights are reserved worldwide. The original purchaser of this software is authorized to implement it for his or her own use and to make archival copies for his or her own use. Any other use or distribution is strictly prohibited without the written permission of the copyright holder.

Joseph Masching and JPM Computer make no warranties as to the contents of this documentation or the VersaBet program and specifically disclaim any implied warranties of merchantability or fitness for any particular purpose. In no event shall Joseph Masching or JPM Computer be liable for any loss of profit or any other loss or damage, including but not limited to special, incidental, consequential, or other damages. Joseph Masching and JPM Computer further reserve the right to make changes to the specifications of the program and contents of the documentation without notice.

Section I

Quick Tutorial

I. GENERAL INTRODUCTION

The following tutorial consists of three parts. The first is this General Introduction, the next shows by example the two basic approaches to securing good number-sets, and the third outlines the Advanced Concepts. By following this tutorial step-by-step, you will see how extremely simple the Set Generator is to learn and to use effectively.

This tutorial deals only with the *Auto Mode* feature of the program and should be used in conjunction with the *Reference* section of the manual for an explanation of terms, use of the *Manual Mode*, and for detailed discussion on the concept behind, and operation of, each feature.

What Is the Set Generator?

the Set Generator is like a software Swiss Army knife. It has so many implements and options that the overall purpose of the tool may become lost to the user. **The overall purpose of the Set Generator is to lead you by the most direct route to an effective set of lottery numbers.**

Once this direct route is established, through some experimentation with the options, only a few of the options will then be essential to your particular game.

What Is a Number-Set and How Is It Used?

A number-set is a small group of numbers extracted from all of the available numbers in your lottery. It is the goal of the Set Generator to produce a number-set that contains all or most of the numbers that will be drawn in a forthcoming lottery drawing.

After the number-set is created, it is up to you to convert the numbers into actual bets using a good wheeling system or the Bet Maker bet creation component of VersaBet. How effective your *bets* will be depends on two things: (1) How many numbers the Set Generator has caught, and, (2) how many bets your budget allows you to create. The number of bets created from the Set Generator number-set determines the quality of the coverage you will get.

How Many Numbers Should the Number-Set Contain?

The Set Generator by default cuts the lottery number base approximately in half. A 44-number lottery will get a number-set of 23 numbers. **With luck**, and by following the examples in this tutorial, the 23 number set should contain all or most of the numbers drawn in the next game or the next few games.

You can reduce the size of the number-set if you wish. This will make it possible to create more tightly focused bets on a smaller budget, but will also **decrease** the possibility of catching all of the lottery numbers. You will eventually need to strike a balance between the size of the number-set and what you can afford to bet.

It is for this reason that you may want to consider playing with a group of trusted friends in a lottery *pool*, where more numbers can be played, more bets can be generated, and where the risks and rewards are divided equally.

What Kind Of Performance Can I Expect From the Set Generator?

A number-set constructed with the Set Generator using the default settings can be expected to produce all or most of the numbers for a lottery drawing within a five-game spread in any five or six-number lottery. Why a five-game spread instead of the next game? Because we are dealing with **random factors** here. Numbers jump in and out of patterns, and five games allows the pattern, if it has been correctly identified, time to reassert itself. Sorry, but there is no escaping the random nature of a lottery game.

All this means is that you should continue what is probably your normal practice anyway of using the same bets for a series of games. However, now with the added advantage of using a set of numbers that have been produced by a method based on sound principles and reasonably deserving of confidence.

What To Do First

If you have not yet installed the software, do it now using the Getting Started manual included with the VersaBet software.

If you run into a snag you can call us at 503-287-8952, but **please, do not call for an introduction to computer use**. We do not have the time or the personnel to train you on computer basics. If you need help on the basics, please refer to your computer's instruction manual, or the appropriate manual on Windows® or MS-DOS®.

After installing the software and setting it up, start the VersaBet Control Panel and run the Quick Update component to bring your game databases up-to-date. Up-to-date databases for all 5 and 6-number lotteries in the US, in VersaBet™ format, are also available free from our web site on the internet at :

<http://www.jpmcomputer.com>

After installation is complete and your database has been updated, run the Set Generator by clicking on its button on the Control Panel.

II. Step By Step Guide to Using the Set Generator

Using The Global Range Finder Method

The Global Range Finder approach is the traditional Set Generator method. It scours past game drawings all the way back to the earliest records in your database, searching for a *sympathetic* group of records that are numerically similar in construction to very recent game drawings. The best ten of these record-groups (those that most closely match the construction of *recent* games) are presented for your choice.

The chosen record-groups are then scanned with randomly generated sets of numbers until a number set is found that would have produced high quality hits over a series of games in the past drawings. The number set is then checked to ensure that the highest quality hits have not yet been produced in *recent* games.

The quality of hits for both past and recent games are controlled by a **Score Template** which the user can adjust.

When a number set is found that meets the conditions for both past and current games (as determined by the **Score Template**), it is presented to you for conversion to bets for your game play.

Step One:

Select the database to use by clicking on the database file name in the **Select Game File** screen, and then clicking on the **Ok** button.

Step Two:

Click on **Global** under the *Range Finder* section in the **Database Range** screen.

Step Three:

Click on **Start** in the **Global Range Finder** screen

Step Four:

In the **Top Ten Game Blocks** screen, double-click on the line that shows the first of the top-ten

Top Ten Game Blocks - Select a Block To Scan							
	Range Start	Range End	Block From	Block To	Block Hits	Avg Hit Per Rec	Score For This Range
✓	571	580	24	33	45	000.90	46
	532	541	63	72	45	000.90	44
✓	572	581	23	32	44	000.88	44
	517	526	78	87	45	000.90	43
✓	570	579	25	34	47	000.94	42
	533	542	62	71	46	000.92	42
✓	569	578	26	35	46	000.92	41
	534	543	61	70	44	000.88	41
✓	568	577	27	36	45	000.90	39
	519	528	76	85	44	000.88	35

overlapping ranges

listings. This will place a check-mark to the left of the line. Next look at the score for the line on the far right. Read down the right column and see if any other lines have the same or a very close score. If they do, then check the first two columns for the line on the far left. These are marked

Range Start and **Range End**. If the line that has a close score to the top line also has a **Range Start** and **Range End** that overlaps the **Range Start** and **Range End** of the top line, then double-click on that line also to place a check-mark to the left of the line. When ready, click on the **Ok** button.

Step Five:

In the Numbers in Selected Range screen, click on **Accept**

Step Six:

In the Set Generator Setup screen, make sure that the **Scan Mode** section is set to **Auto** and click on **Ok**. Click on the **Start** button.

Step Seven:

When the Number Set Display for File screen appears, make sure your printer is on and has paper, then click on **Print**. This sends a copy of the report to your printer. If you wish to save a copy of the set for import into the Lotto Manager or the Bet Maker components, and the report for printing later, click on **Save**, type in a file name up to 8 characters in length, and click on **Ok**. This will save the set and report with the file name you specified and append the extension **.SET** and **.RPT**, i.e., *JANUARY.SET* and *JANUARY.RPT*.

Step Eight:

Exit the Set Generator and use either the wheeling system of your choice, or the Bet Maker component, to convert the numbers in the Set Generator set into bets.

Fine Tuning The Global Range Finder Method:

1. Locking the Start record

The Database Range screen offers the option to prevent the **Global Range Finder** from searching all the way back to the earliest records in the database for record-group comparisons. If your database is so large that you believe the earlier records are no longer representative of current games, you can isolate them by setting the **Start Record** manually, and then clicking on the **Lock Start** option.

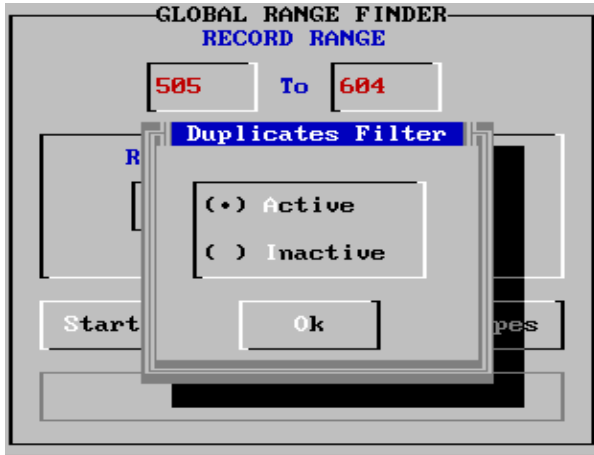
For instance, if you have 500 records in your database and wish to use only the last 100 in your calculations, you would manually set the **Start Record** to a value of 401 and the **End Record** to 500 (the default), and then click on **Lock Start**. When the Set Generator begins its backward scan to compare blocks of records to recent games, it will stop when it reaches record 401, instead of record 1. See the *Advanced Concepts* section below for a discussion on locking the **End** record (**Lock End**).

2. Manipulating the Duplicates Filter

The **Dupes** button on the Global Range Finder screen allows you to make duplicates filtering *Active* or *Inactive*. The normal condition is *Inactive*.

With duplicates filtering in its off state, the **Global Range Finder** will score as a hit any

number that it finds in a record *block* during it's backward scan that matches a number in the record *range* being examined, regardless of how many times that number may appear. Thus, the final score for a record range in the **Top-Ten Report** could reflect multiple instances of the same number.



Normally this is not a problem, as allowing duplicates usually reflects the overall strength of a given record block. However, in some instances numbers can reappear so many times that *too few unique numbers* will be available in a high-scoring block and the score presented for that block becomes misleading.

To determine if the duplicates filter should be activated, check the **Numbers in Selected Range** screen after you click on

Ok in the **Top-Ten Report** screen. Check the bottom-right section of the screen under **Numbers Found**. If the amount of numbers found is less than about 70% of the total available numbers, you should probably start over, this time with the duplicates filter set to *on*.

To start over, click on **Cancel** in the **Numbers in Selected Range** screen, then on **Cancel** again in the **Top-Ten Report** screen. This will return you to the **Database Range** screen. Click on **Reset** to restore the default Record and Field settings, then enter your original desired settings again and click on **Global**. When in the **Global Range Finder** screen, click on the **Dupes** button and then click on **Active** and **Ok**. Click on **Start** to generate a new **Top-Ten** report

When you see the report, you will notice that the ranges presented are markedly different from the last time.

3. Expanding the Record Range

The **Numbers in Selected Range** screen not only shows the amount of numbers found in the selected range, but also the total amount of *hits*, or the incidence of occurrence within the

Click Modify to include the 4 and set the Starting Record to 566

Number	Hits	Next
01	1	560
02	3	566
03	1	567
04	0	566
05	2	563
06	1	564
07	2	566
08	3	554

RECORDS USED

568 To 581

NUMBERS FOUND

32 Of 35

range, for every number in the lotteries number universe. By scrolling down the screen, you can view both the incidence of *hits*, and the *next record number back* where any

given number appears again.

If you find that a number has a hit score of 0 and you would like that number to appear in the range that is being scanned for the Set Generation, you can highlight the number by clicking on it with your mouse, and then clicking on the **Modify** button. This will reset the start of the range to the next record that contains the number in question.

If there is more than one number that you would like to include, then click on the line for the number that is closest to the top of the database (the lower record number in the *Next* column). This will automatically include the other numbers.

Using The Local Range Finder Method

The **Local Range Finder** approach differs from the *Global* in one important way; instead of searching back through distant past games looking for a sympathetic range of records, it assumes that the numbers have been repeating in clusters, and that numbers needed for future game drawings can all be found in games that have occurred *recently*.

When the **Local** method is selected, the Set Generator resets the database range to include only as many of the most recent games as needed to include at least one incidence of every number in the lotteries' number universe. The record-group is then scanned with randomly generated sets of numbers until a number set is found that would have produced high quality hits over a series of games in the recent past drawings. The number set is then checked to ensure that the highest quality hits have not yet been produced in the most *recent* games.

As in the *Global* method, the quality of hits for both recent past and current games is controlled by a **Score Template** which the user can adjust.

When a number set is found that meets the conditions for both recent past and current games (as determined by the **Score Template**), it is presented to the user for conversion to bets for game play.

Step One:

Select the database to use by clicking on the database file name in the **Select Game File** screen, and then clicking on the **Ok** button.

Step Two:

Click on **Local** under the *Range Finder* section in the **Database Range** screen, then click on **Ok**.

Step Three:

In the **Set Generator Setup** screen, make sure that the *Scan Mode* section is set to **Auto** and click on **Ok**. Click on the **Start** button.

Step Four:

When the **Number Set Display for File** screen appears, make sure your printer is on and has paper, then click on **Print**. This sends a copy of the report to your printer. If you wish to save a copy of the set for import into the **Lotto Manager** or the **Bet Maker** components, and the report for

printing later, click on **Save**, type in a file name up to 8 characters in length, and click on **Ok**. This will save the set and the report with the file name you specified and append the extension .SET and .RPT, i.e., JANUARY SET and JANUARY.RPT.

Step Five:

Exit the Set Generator program and use the wheeling system of your choice, or the Bet Maker component to convert the numbers in the Set Generator printed report into bets.

Fine Tuning the Local Range Finder Method:

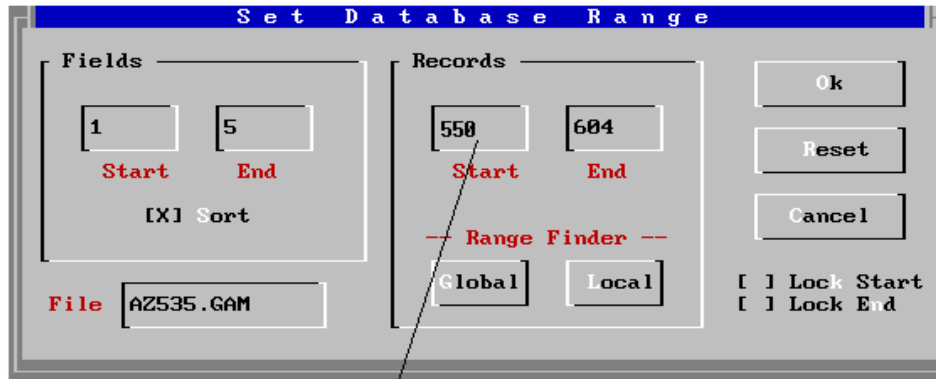
As mentioned above, the **Local Range Finder** assumes that the more recent games are the best source of numbers for upcoming games. It starts at the last record in the database, reads each record in turn as it travels backward, counts the number of occurrences of each number, and stops when it has found at least one occurrence of each number. The record in which the last number was found, whatever that number may be, becomes the first record in the scan range for bet generation. The *last* record in the scan range, using the **Local Range Finder**, is always the last record in the database.

This approach monopolizes on the fact that in most lotteries, most of the numbers for upcoming games can be found to have occurred within the last ten to fifteen games. By focusing on the *intensity of occurrence* of numbers within recent games, the Set Generator is able, through the use of the **Score Template**, to build a set of numbers that are in concert with current trends.

The drawback to this approach however is that frequently a number will become *wild* and not show up for thirty to fifty games or more. This means that the Set Generator can sometimes create a scan range that is so broad that it is no longer representative of current trends; sacrificing tight focus for inclusiveness. When this happens, it is a good idea to reset the record range manually.

To do this, start by adjusting the **Start Record** in the Database Range screen (in the **Start** text box under *Records*) so that it creates a spread of no more than ten games between itself and the **End** record. Click on **Ok** to move to the Numbers in Selected Range screen. In the Numbers in Selected Range screen, check the lower right portion of the screen under the *Numbers Found*. If the amount of numbers found represents 70% or more of all of the available numbers, click on **Accept** and continue with steps 3 through 5 above.

If the amount of numbers found represents less than 70% of available numbers, click on **Cancel**



Enter new Start record here

and return to the Database Range screen to reset the **Start** record. Reduce the **Start** record by five and click on **Ok** to recheck the numbers found. Continue this process until the amount of numbers found represents at least 70% of

available numbers.

III. Advanced Concepts

Changing Default Settings

General:

The default settings built into the Set Generator are based on broad experimentation with various types of Lotto and Keno games and have been proven, as the ads like to say, safe and effective. However, they do not necessarily represent the *optimal* settings for your particular game. It is possible to *tweak* the various settings for better performance through judicious manipulation, but a word of **caution** is in order here.

Every setting in the Set Generator effects and is effected by, every other setting. Using the Set Generator's defaults, the Set Generator report (the **Number Set Display** for File screen) should appear within a few hundred to a few thousand scans at most. Changing the default settings by narrowing the record ranges, increasing or decreasing the size of the set, changing the *Global* block or record search ranges, or changing the score conditions in the **Score Template**, could make it difficult or impossible for the scoring conditions to be found and may result in many thousands or hundreds of thousands of scans before results are produced, if they are produced at all.

If you are using a fast 486 or Pentium system and the scanning continues beyond ½ hour, you have probably done something wrong and it may be time to take another look at your settings.

Changing the Database Record and Field Settings:

1. Fields

The *Field* settings can be changed only in the Database Range screen, while the *Record* settings can be modified at various points. The only field usually changed is the *End* field, and that is usually done only to eliminate a *bonus* or *alternate* number from the calculations.

The merit of eliminating the bonus number is arguable. If you believe that the appearance of

a bonus number is a predictor of the appearance of that number as a regular number, or if the bonus pays on more than one level, then you should probably include it in your calculations. If the bonus number pays on only a single level, for example on a 5of 6 with bonus in a 6-number game, then you should eliminate it before running the Set Generator.

To eliminate a bonus number from the calculations (assuming that the bonus always appears as the last field in your data entry), simply shorten the *End* field by one number. In other words, if a bonus-number lottery has seven fields, than change the *End* field to 6 by clicking in the *End* text box, erasing the 7, and entering a 6. This will force the Set Generator to stop scanning fields at the sixth number position in each record.

2. Records

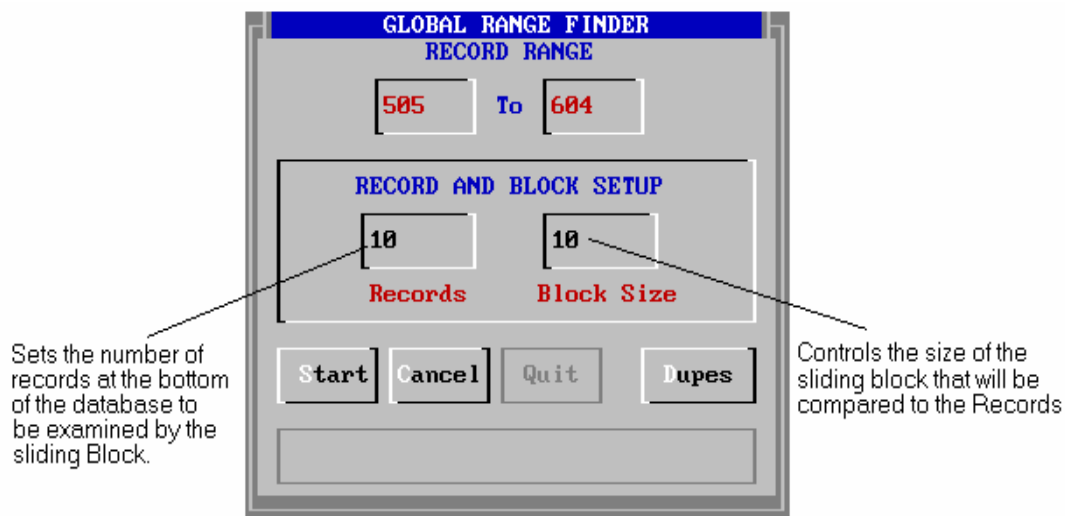
As mentioned above, record ranges *can* be changed at various points. You can change them in the **Database Range** screen, the **Top-Ten Report** screen, the **Numbers in Selected Range** screen, and, just before set generation begins, in the **Set Generator Setup** screen. *When* to change them requires some deliberation.

This initial range establishes a block of records in the past that is sympathetic to records in your recent games. Establishing an initial record range depends on which approach you choose to use of the two examples above.. The basic guideline for *modifying* the initial range is; *use the smallest range that you can, that still contains at least 70% of the available numbers in your lottery!*

In practical terms, a range is usually only modified from its initial settings in the context of the *Local Range Finder* explained previously. Ranges that have been established with the *Global Range Finder*, once the size of the database to use has been established, are not usually altered except in the *Numbers in Selected Range* screen mentioned above. For more on setting up the *Global Range Finder*, see the section below on changing the Record and Block scan sizes.

Changing the Global Scan Settings:

The job of the Global Range Finder is to find a section of records in the database of past drawing results that are similar in construction to more recent drawing results. This is accomplished by



establishing a *control* record range at the bottom of the database, to represent recent drawings, and then comparing the numbers in each record in the range to the numbers in a separate block of records that continually slides up toward the earlier records in the database.

The default settings are for a record range of ten (the last ten records in your database) and for a block range of ten records for comparison. These initial settings are based on the theory that most numbers for a given drawing are derived from the previous ten drawings. While this appears to be *generally* true, it may not be the best setting for your particular game.

If you wish to experiment with different settings, you can do so by changing the values in the *Records* and/or *Block Size* text boxes. A recommended minimum for each would be a value of 5, and a maximum would be 20. Using a smaller value than 5 would probably result in too few numbers being found, and exceeding 20 would probably result in range too large to be representative. Whatever *Block Size* you choose controls the range span that will appear in the *Top-Ten* report that is generated when you click on the **Start** button.

Changing the Set Size Setting:

The value in the *Set* box in the **Set Generator Setup** screen determines how many numbers you will get in your final number set. The default is approximately one-half of the available numbers in your lottery number universe. A 44-number lottery will have a default set size of twenty-three numbers. Changing the size of the set is simply a matter of entering a new value in the **Set** box.

The larger the set size, the more apt the set is to catch all of the drawing numbers, but the more difficult and/or expensive it will be to create tightly focused bets from the set. Conversely, the smaller the set size the easier and less expensive it is to create tightly focused bets, but the less apt the set is to catch all of the drawing numbers. The trick is in finding a set size to match your budget that will still bring a win on some level.

If you are satisfied with the overall performance of the default setting in catching drawing number and wish to experiment with a smaller set, start by reducing the set size by a single number at a time and track the performance of the new set using the *Finding the Optimal Settings for Your Lottery Game* procedures described later. Also, if you reduce the size of the set to any significant degree from the default value (three numbers or more), it is recommended that you modify the default settings in the **Score Template**. See the section below on *Changing the Score Template Settings* for details on how to do this.

Changing the Recent Games Setting:

When the Set Generator begins its set generation function, it scans the record range that was established earlier with a set of randomly generated numbers, scoring hits in the various hit categories for your particular lottery. For instance, in a five-number game, there are 6 hit categories, i.e., 0-1-2-3-4-5. If the set finds no numbers that match in a record in the selected range, a hit is recorded in the 0 category. If the set finds 1 number that matches in one record in the selected range, and then finds 3 numbers that match in a different record, then a hit is added to both the 1 category and the 3 category.

After the set has scored each record in the selected range, it proceeds to score each record in the entire database, and then each record in the recent games that was established by the value in the

Recent box in the Set Generator Setup screen.

The value in the **Recent** box determines the span of most recent games that will be used as a basis of comparison against the selected range, and should be kept relatively small. A span of recent games that is too large could reflect more than one pattern. You should find the optimal setting for your game somewhere between a spread of 3 to 6 games.

Testing the results of your settings can be accomplished by following the *Finding the Optimal Settings for Your Lottery Game* procedures outlined later in this tutorial.

Changing the Score Template Settings:

The end product of using the Set Generator is the *Number Set*. Many number sets can be created and scored during the set generation process, and the job of the Score Template is to set the conditions for accepting or rejecting a particular number set. Only if a number set meets the conditions on *both* sides of the Score Template is set generation terminated.

In the default Score Template shown here, for a five-number game, the template requires that the

number set must have scored at least one 5-5 and one 4-5 somewhere over the Selected Range. Further, it requires that the same number set match at least one number in every record in the Selected Range (No Zero Hits).

On the other side, the template requires that the same number set, when examined against the Recent Games, score nothing greater than 3-5 and contain no 'zero' hits.

This default setting ensures that the number set that is presented has scored very well over the control records, and at the same time scored strongly but at less than its full potential in recent games. If the Selected Range that has been used as a control has been correctly identified, then the number set that meets the conditions of the template should do well in forthcoming games.

When changing the template settings, pay particular attention to the terms *Required Hits* and *Allowed Hits* in the template screen headings. If a box under Required Hits is not checked, this means that hits in this category are ignored. If a box under Allowed Hits is not checked, this means that any hits that occur in this category will cause the number set to be disqualified.

The Selected Range portion of the template allows you to control only *required* hits. The Recent Games portion of the template allows you to control only *allowed* hits. In most cases, since you

usually want the number set to score high in the selected range, you will only modify the *allowed* hits on the Recent Games part of the template.

An example of changing the settings for the Recent Games would be to remove the check from the *4th from Top* and *5th from Top* categories. This would have the effect of forcing the Set Generator to reject any set that has already scored a 1 of 5 or a 2 of 5 anywhere in the recent game span, and accept only a set that has scored 3 of 5 class hits over the span. This helps to ensure a number set with very strong potential, but, if the set size remains at the default value, may make the number set very difficult to find. Remember, the same number set must also meet a different group of conditions in the Selected Range.

A good guideline for changing the template is; the tougher the conditions (on the template), the smaller the set size. A large set offers too many possibilities for combining into various categories of hits to be used with tight conditions. If this admonition is ignored, you could grow old, and your computer obsolete, while waiting for a qualifying number set to appear.

Finding the Optimal Settings for Your Lottery Game

The best way to uncover the optimal settings for the Set Generator is to play past games as if they had not yet occurred and try different setting to see which would have produced the best result (the most effective number set). With the Set Generator's *record locking* feature, this is easy to do. You can isolate a segment of your database and have the Set Generator treat it as if it were not there, while you experiment with various settings to see which combinations produce the most effective number sets.

The first thing to do is to make a hard-copy printout of the last 100 records in your database. This will allow you to quickly check results when your number set appears on the screen. In the example below, you will be using ten records at a time and a printout of 100 records will allow you to run tests and quickly check the results on ten separate groups of 10 records.

An alternative to this is simply to run a series of tests with the Set Generator, all against the same isolated segment of the database. Save each number set in turn (each under a different file name) and then exit the Set Generator and run the **Test Number Set** feature in the Lotto Manager.

Search the isolated portion of the database with each successive number set. You will quickly see the results produced on actual drawings by your various experimental Set Generator settings. When you have found the set that produced the best results, you can print the *Number Set Report* that was saved with the set to see what settings were used to achieve the results.

To configure the Set Generator for this kind of *What-If* testing, start by isolating the last ten records in your database in the *Set Database Range* screen. To do this, subtract 10 from the value shown in the *End* field in the *Records* section, and enter the new value. Then click on the *Lock End* check box. That's all there is to it. You have effectively hidden the last 10 records in your database from the Set Generator, and all experiments will be conducted as if they did not exist.

You can verify your results by continuing to exclude more records from the end of the database

in 10-record blocks and rerunning your set generations with the same settings that produced good results in the previous test. If you have found the right settings, they should produce consistently good results (with some variation) over each ten-record segment.

Section II

User's Guide and Reference

➤ **The Set Generator Concept**

The Set Generator has a single task: To reduce the amount of numbers in the lottery number-universe while still producing numbers that when combined into bets will yield a prize winning combination on some level.

It does this by scanning sections of the lottery database, extracting a set of numbers that have worked well *together* in the past, and eliminating numbers that are only peripheral.

If the amount of numbers has been cut in half and the Set Generator has trapped all of the numbers for the next drawing, then a 44-number game becomes a 23-number game. A 35-number game becomes an 18-number game. With fewer numbers to choose from, the player is better able to combine the numbers in the resulting number set into effective bets at reasonable cost.

Also, with a smaller number base, the chances of a win of *some kind* are greatly enhanced even if the Set Generator has trapped only *some* of the numbers for the next drawing.

In order to operate, the Set Generator only requires that an accurate, up-to-date database in the VersaBet format be available for its analysis.

➤ **Navigating The Set Generator**

With A Mouse:

Click on any Command Button or Input Window to make it active. Click on any directory or file name to highlight it, and then double-click on any directory or file name to select it.

With The Keyboard:

Tab to any Command Button or Input Window with the **Tab** key. Use the **Arrow** keys to position the cursor within an Input window. Move between Input windows with either the **Tab** key or the **Enter** key. Move backwards between buttons and windows with the **Shift-Tab** key combination.

Access Keys:

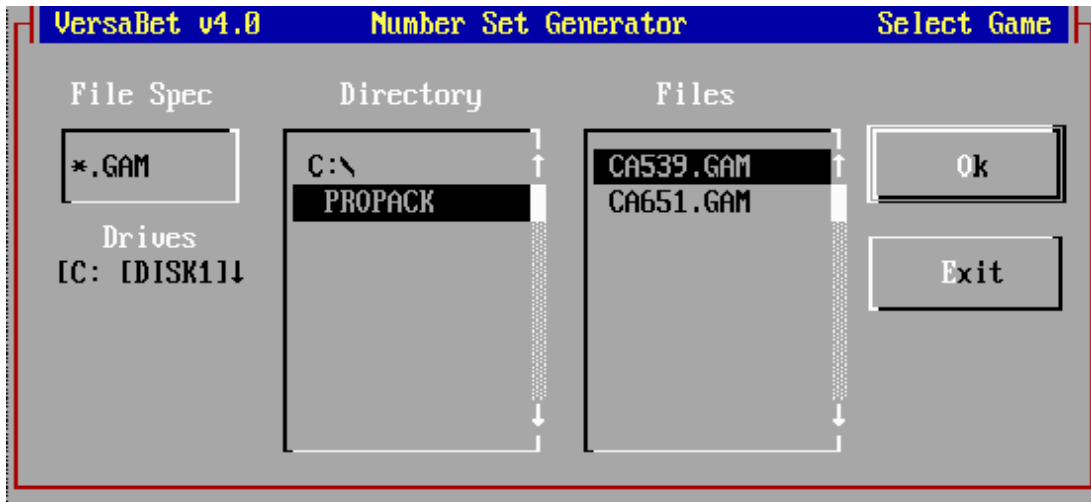
An **Access Key** is a letter key on your keyboard that corresponds to a highlighted letter on a command button or other control somewhere on your screen display. When used with the **Alt** key, it activates the function of the corresponding control.

Exiting The Set Generator:

You can exit from any part of the Set Generator (except for the Set Generator Report), and return to the previous screen, by pressing the **Esc** key. The Set Generator Report requires that you click on the **Exit** button to exit.

➤ File Selection

To select a directory, click the mouse in the **Directory** window and double-click on the correct directory, or select the Directory window with the **Tab** key, highlight the directory with the



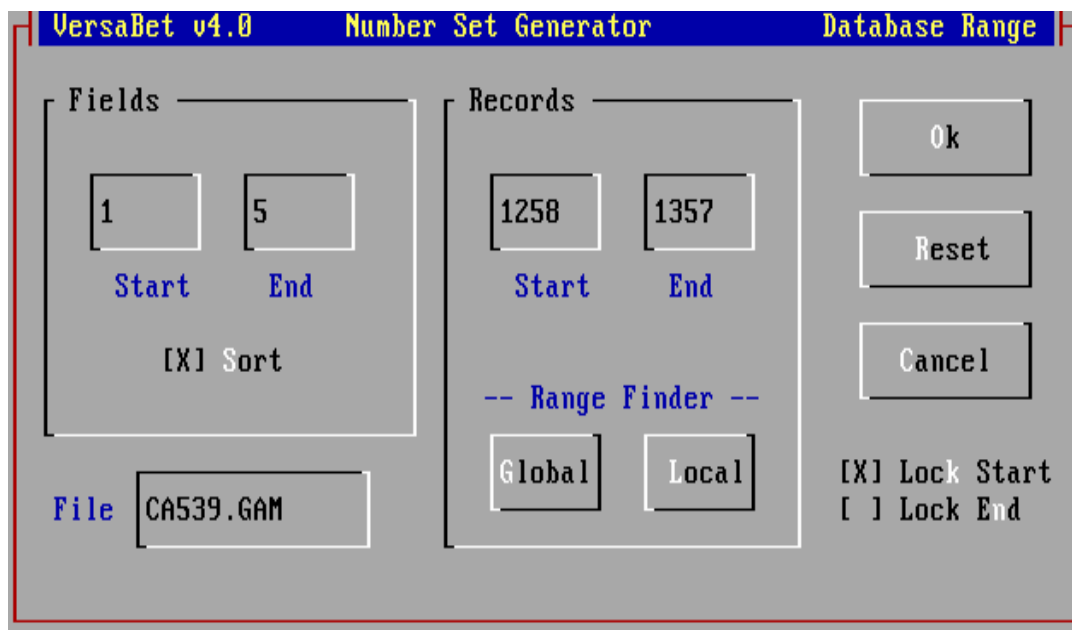
Up-Down Arrow keys, and press the **Enter** key.

To select a game file, double-click on the file name in the **Files** window, or tab to the **Files** window, highlight the file name using the arrow keys, and press **Enter**.

The Set Generator can use any game database (game file) that has been constructed with VersaBet or is in the VersaBet format.

➤ Setting Database Ranges

The Set Generator can analyze all or any part of a game database. The **Database Range** screen allows you to select both a range of records and a range of fields within each record.



The default limits are all of the records and all of the fields.

To accept the defaults, simply

click on the **Ok** key with your mouse, or tab to the **Ok** key and press the **Enter** key.

It is more usual however to scan only a small part of the database, so you will find yourself frequently adjusting the settings for the starting and ending records. To change the defaults, click the mouse in the appropriate window, use the **Backspace** key or **Del** key to erase the default information, and enter the new values. Click on **Ok** when done.

The **Database Range** screen also has a **Reset** button. Clicking on this button will restore the **Fields** and **Records** boxes to their original settings (all records and all fields).

The **Database Range** screen is divided into two sections, one for the **Records** and one for the **Fields**. A *Record* is a set of numbers that represent the results of a single game drawing. A game file may contain thousands of records. A *Field* represents a single number, by position, within a record. There are as many Fields within a Record as there are numbers drawn in a single game drawing.

A 6-number lottery would have 6 fields. A 6-number lottery that draws a bonus number would have 7 fields.

A number's Field position is determined by the order in which the numbers were recorded when you entered them into your game database. While some players record their numbers in the order in which they are drawn, numbers are most commonly entered in ascending order (low-to-high). No matter what manner they were entered, the Set Generator will always sort the fields in ascending order before beginning its analysis.

There is usually no need to change the default **Start** or **End** fields shown in the *Fields* boxes unless your lottery game uses a 'bonus' or 'alternate' number. If this is the case with your lottery, reduce the last field by the number of extra numbers drawn.

In other words, if your lottery draws six numbers and a bonus number, set the last field at 6 to exclude the bonus number from the calculations. The above assumes that the bonus number is always the last number entered. If for some reason you enter the bonus number first, then you would need to INCREASE the **Start** field by 1 to exclude the bonus number.

Selecting a record range is the most crucial aspect in the proper setup of the Set Generator. The record range settings tell the Set Generator which part of the database to scan when producing its final Set Generator report. If you accept the default values, then the Set Generator will scan the entire database for its report. If your database is small (less than 50 records) then this technique can be appropriate. On larger databases the effectiveness of this technique falls off. The information becomes watered down and less representative of current patterns and trends.

See the following sections on the Local Range Finder and the Global Range Finder for more information on selecting ranges.

➤ **The Local Range Finder**

The **Local Range Finder** works on the premise that numbers tend to repeat in short 'bursts' over a narrow range of recent games. It helps the user find a suitable range to scan by resetting the record range to use only as many of the last records as needed to include at

least one occurrence of each of the available numbers.

The range finder always uses the record value specified in the record's **End** box of the **Set Database Range** dialogue box as the starting point when it begins searching for numbers. Any change that you make in the **End** box will set a new starting point.

All of the original Record and Field settings can be restored by clicking on the 'Reset' button.

The range finder will next reset the value in the **Start** box to the last record used in its backwards search for all of the available numbers. These **Start** and **End** values are the lowest and highest records in the record range that will be scanned to create a set of numbers for the Set Generator report

Once the **Local Range Finder** has reset the scan range, shown in the **Records** window **Start** and **End** boxes, you can click on the **Ok** button to proceed to the next screen. The starting and ending record values will be retained by the Set Generator until you reset them or until you select a different database. Always be sure to check these values before beginning a new set generation sequence.

➤ The Global Range Finder

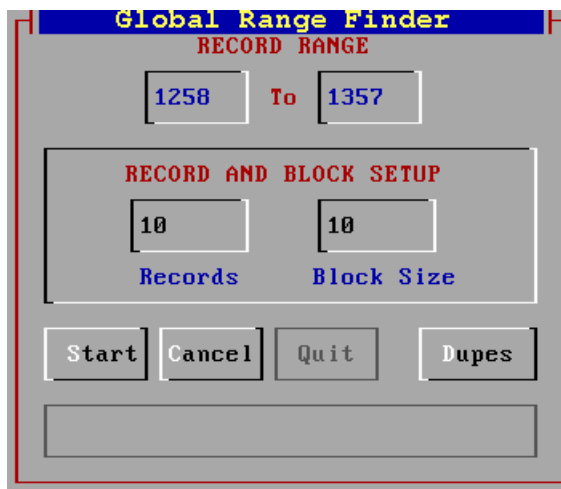
Unlike with the **Local Range Finder**, which simply counts the occurrence of numbers in the last few records of the database, the **Global Range Finder** does not directly find a range of records for the Set Generator to scan. Instead, it creates a report showing a variety of ranges scattered throughout the database, looking for those that are most representative of what has been happening in recent games.

It is based on the premise that the occurrence of patterns of numbers is cyclical, and that you should be able to identify a block of records in the past that echoes a current trend.

Once this block has been identified it can be scanned by the Set Generator to generate a set of numbers that will anticipate what is likely to occur over the next few games.

To set up the **Global Range Finder**, enter the number of records at the bottom of the database into the **Records** box to serve as a scoring target. These usually cover the most recent game drawings. Next, enter the size of a **Block** of records to compare

to the target records. The two should be of approximately the same size, usually from 8 to 10. Using the default values as an example, when the **Start** button is clicked, the Set Generator fills the Block from ten records, beginning with the first record above the last target record, treating it as one large record.



It examines every number in the **Block** against every **Record** in the target range, sliding the **Block** up by one record after every cycle, all the way back to the first record in the database. Each time a number in the **Block** matches a number in one of the target records, a score of 1 is added to the accumulated score for the **Block**.

The range finder *slides up* by one record after all target records have been examined, and refills itself with data from the next 10 records. It keeps track of relative 'games back' from each target record and retains the ten blocks with the highest scores. The 'games back' segments are then translated into actual records. The record ranges and scores are then displayed in the **Top-Ten Game Blocks** report for the user's selection.

When choosing *Records* to use, use a size that for your lottery normally contains most of the available numbers. If you enter '8' in the **Records** box, then the last eight records in the part of the database that you are using will serve as the 'target' records. The default setting is ten.

The **Block Size** box tells the Set Generator how many records to use in the moving reference block that will be scored against the target records. The **Block Size**, while it can be set to any value, is usually set at about the same size as the **Records**. The default setting for the **Block Size** is ten.

The top of the **Global Range Finder** dialogue box contains two boxes that remind you of the part of the database that you are using for your analysis. The bottom of the dialogue box displays the user options in the form of Command Buttons.

Clicking on the **Dupes** button will open a window that shows whether or not the *Duplicates Filter* is active. If active, this filter will remove all duplicate numbers from the source block prior to scanning the target records. If duplicates are removed, scoring results could be different from a scan that allowed duplicates. Experiment to see which setting produces the best results. The default setting is 'Inactive'.

Clicking on the **Start** button will begin the analysis with the current settings. Clicking on the **Cancel** button will close the window and return you to the **Set Database Range** dialogue box.

Clicking on the **Quit** button once calculations have begun will terminate the range finder calculations and send you to the **Top-Ten Report** to display whatever results have been found to this point.

➤ The Top Ten Game Blocks Report

The **Top-Ten Report** lists the ten most productive ranges of records in the past drawings of the lottery database, based on the settings in the **Global Range Finder** dialogue box.

Top Ten Game Blocks - Select A Block To Scan						
Range Start	Range End	Block From	Block To	Block Hits	Avg Hit Per Rec	Score For This Range
1341	1350	07	16	43	000.86	46
1343	1352	05	14	41	000.82	46
1340	1349	08	17	42	000.84	45
1342	1351	06	15	42	000.84	45
1279	1288	69	78	41	000.82	42
1303	1312	45	54	42	000.84	37
1281	1290	67	76	42	000.84	37
1305	1314	43	52	42	000.84	36
1282	1291	66	75	41	000.82	36
1304	1313	44	53	42	000.84	36

Ok Print Cancel Rec 10 Blk 10

To select a range to scan, or to de-select a range, double-click on it with the

mouse or use the **Up-Down arrow** keys to highlight the range and press the **Spacebar** key. When a range is marked, a check-mark will appear to the left of it. When it is unmarked, the check-mark will not be seen.

To accept the marked ranges, click on the **Ok** button with the mouse, or tab to the **Ok** button and press the **Enter** key.

The first two columns of the **Top-Ten** report show the starting and ending record numbers of each record range. These are the records that, if selected, will be scanned when the Set Generator generates its final results report. See the **Set Generator Report** section for more information on this. The last column, on the far right of the screen, shows the overall score for each range when tested against the target 'Records' set in the **Global Range Finder** dialogue box.

The other columns in the Top-Ten window relate to the 'Block' records scanned against the target 'Records' that produced the Starting and Ending record results in the first two columns.

In retrospect, these columns could easily have been left out as they offer little decision-making information. They do offer additional insight into how blocks are scored, so if you like to play with numbers, go ahead and waste your time on them.

The useful columns are **Range Start-Range End**, and **Score For This Range**.

Selecting A Range To Scan

The **Score for This Range** result is the primary guideline. The highest score is listed on top, and by referring over to the left on the same line you will find the **Range Start** and **Range End** that contained the score. Look for ranges that all have the same high score and that also overlap. Selecting a series of ranges that overlap will automatically consolidate them. Selected ranges that do not overlap will be scanned separately. Any combination, or even all, of the ranges can be selected.

➤ The Numbers Report

The 'Numbers Report' shows you how many of the unique numbers have been found in the range or ranges that you selected. It also shows you how many times each of the numbers were found in the selected range, and how much farther back in the database you must go

Number	Hits	Next
01	0	1335
02	2	1331
03	2	1338
04	0	1334
05	2	1328
06	3	1337
07	3	1332
08	2	1331

RECORDS USED: 1340 To 1352

NUMBERS FOUND: 32 Of 39

include another instance of a particular number.

You should try to include about 70% of the available numbers within your scan range, but at the same time you should try to keep your range as small as possible. Scans across too broad a range can produce information so diffuse as to be useless.

At the bottom of the **Numbers Found In**

Selected Range report window is a set of boxes that show you the scan range (Records Used) and the amount of numbers that were found within the range (Numbers Found). To accept the information as it first appears, simply click on the **Accept** button. To modify your range to include another number, or another instance of a number, either double-click on the line that shows the number or highlight the line with the arrow keys and click on the **Modify** button.

➤ Set Generator Setup

Set Generator Setup is the last preliminary to generating the **Set Generator Report**.

1. Scan Specifications

This section gives the Set Generator its guidelines for constructing the number sets.

Set

Controls the amount of numbers that the finished sets will contain. Among these numbers, hopefully, will be found all or most of the numbers drawn in the next game drawing.

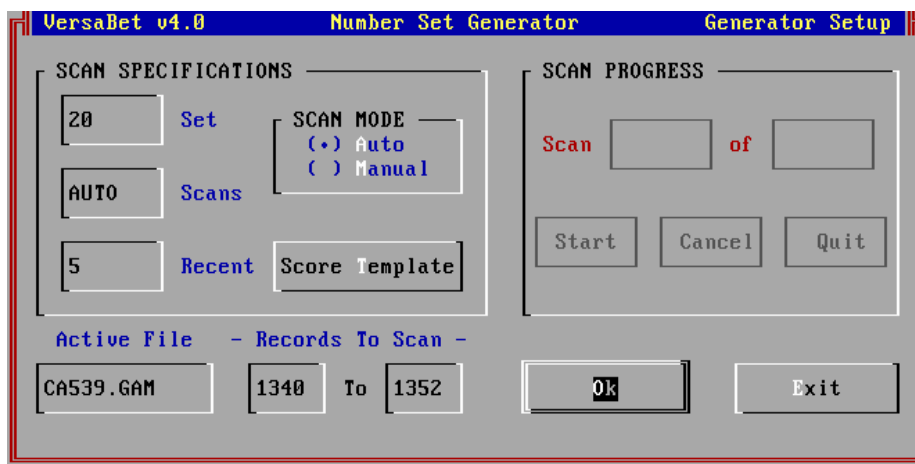
Scans

Sets the number of times the Set Generator will compare randomly generated sets of numbers, of the size set above, against the part of the database that has been specified.

Recent

Tells the Set Generator to generate a separate report that includes only the last number of games in the database as specified in this box. These will always be the last records in the entire database whether or not they were included in the scan range 'Start' and 'End' records.

The object of this is to inform how the sets have performed recently. The number of recent games usually should be no more than 3 to 5. Also, if the selected scan range is at the bottom of the database, be sure to use at least twice as many records as the number specified for 'Recent Games'.



2. Scan Mode

Two scan modes are available; **Auto** and **Manual**.

Manual mode allows you to determine how many random number-sets to generate

(Scans) to test against the various ranges. Each number-set is scored by the number of times

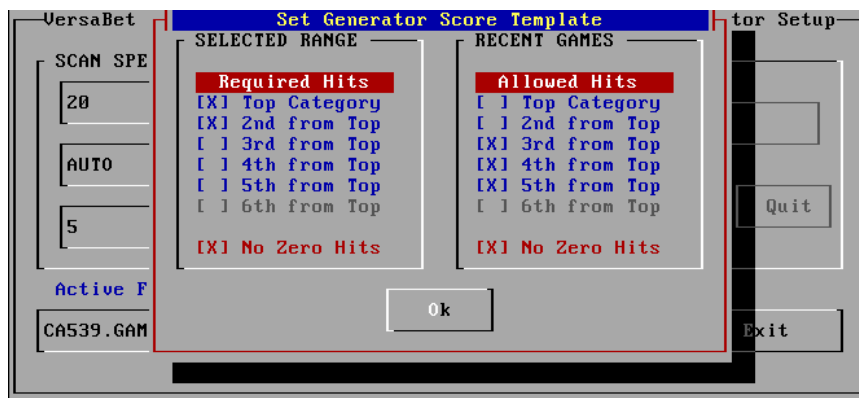
that a number it contains matches a number in the part of the database being examined. After all the number-sets have been generated and tested, you are presented with a report that shows both the strongest and weakest number-sets found, and the scores for each category of hits for each of the two sets. This mode uses only 'raw hits' as its scoring criterion.

Auto mode takes a different approach; it is 'target oriented' and assumes that there is a relationship between the *category* of hits (4/6, 5/6, 6/6, etc.) in past games, and the category of hits in recent games. Once that relationship has been established, through the use of a **Score Template**, the Set Generator continues to generate sets and scan files until it finds a number-set that meets all of the target conditions on the Score Template.

Setting Up The Template

The **Score Template** option is only available in **Auto** mode. When you press the template button you are presented with a dialogue screen that allows you to set the scoring conditions for both the **Selected Range** and the **Recent Games**.

The Selected Range side of the template is looking for hits that are *Required*. The recent Games side of the template is looking for hits that are *Allowed*. What you are trying to do here is to strike a proper balance between the two sides that guarantees a set of numbers that



will do well in games that have not yet occurred.

Each side of the template deals with only the top five categories of hits in your game, regardless of the type of game. In a 6-number game, the

top category would be a 6/6 hit. In a 5-number game, it would be a 5/5 hit.

When you click on a category box on the *Selected Range* side, you are telling the Set Generator that it must find a set of numbers in the *Selected Range* to be scanned that contains at least one hit in the checked category. You may check as many categories as you wish. If, for instance, you check the top two categories for a 6-number game, then the Set Generator must continue scanning the Selected Range until it finds a set of numbers that have produced at least one 6/6 and at least one 5/6 over the same selected range.

On the *Recent Games* side, when you click on a category box you are telling the Set Generator that the same set of numbers that qualified for the *Selected Range* criteria above, must now also find no hits in *Recent Games* that are not reflected by one of the *Recent Games* category boxes.

Here is an example of a typical setup for a 6-number game:

The illustration shows the template's default setting. In a 6-number game this template would require that a number set contain at least one 6/6 and one 5/6 over the *Selected Range*,

and nothing greater than a 4/6 over the *Recent Games*.

Note also that the *No Zero Hits* boxes on each side are checked.

This is a default setting and tells the Set Generator that no matter how well a number-set otherwise does, it must be rejected if it finds even a single record in the examined range that did not match at least one number in the proposed number-set.

This combination of settings will produce a set of numbers that has scored extremely well in the past and has scored high, *but under the maximum*, recently. If you have chosen the correct *Selected Range* to scan, you should now have a set of numbers that will do well somewhere over a spread of the next 1-10 games.

The default settings in the template are a good place to start, but you may want to adjust the settings for your own game. Some experimentation will probably be required to get it just right. Remember that each time you exit the **Set Generator Setup** screen the template will be reset to its default values, so you will need to restore your personal setting each time you access this screen.

Please review the *Local Range Finder* and *Global Range Finder* sections of this manual for information on selecting the most effective settings for the *Selected Range*.

3. Scan Progress

This section tracks the progress of the calculations. The scan begins when the **Start** button is clicked and can be terminated at any point by clicking on the **Quit** button. If the **Quit** button is activated you will be transferred to the **Set Generator Report** and shown whatever results had been calculated to the point where the scan was terminated (**Manual** mode only).

Miscellaneous

The bottom of the Set Generator Setup screen shows the name of the VersaBet game file that is about to be scanned as well as the record range that has been selected for scanning. The record range may still be modified or 'fine-tuned' at this point by clicking in the boxes and resetting the **Start** and **End** record numbers. Clicking on the **Ok** button tells the Set Generator that all of the information in the setup is correct and that it can prepare to begin the scan. The scan will not actually begin until the **Start** button is clicked in the **Scan Progress** section.

Clicking on the **Exit** button cancels the operation and returns you to the **Database Range** screen.

➤ The Set Generator Report

The Set Generator report, or **Set Report**, when using **Manual** mode, generates two number sets of the size specified earlier. One set contains numbers that were found to be most effective, and the other, numbers that were found to be least effective, in combination, over the record ranges that were scanned. These sets are displayed in the top window of the report screen and you can select between them by clicking on the appropriate item in the **Number Set** box in the bottom center of the report screen.

In **Auto** mode only one set of numbers is displayed (*Most Effective*), since the number set

that is generated must meet the scoring conditions established on the Score Template. There is no *Least Effective* in **Auto** mode.

You will notice that frequently some numbers that appear in *Most Effective* also appear in *Least Effective*. Don't be confused. Remember that these numbers must be considered *in combination* as a complete set. The individual numbers are not as important as the combined set. Below the Number Set display are the **Score For Number Set** boxes that show the results (score) for the set that is currently being displayed. There are a total of 23 boxes so that

Keno players can be accommodated, but the only boxes that are active at one time are those from 0 to the amount of numbers drawn in the game drawing, excluding any bonus or alternate numbers.

The score results are easy to understand. A five-number game will have the following boxes

active: **0-1-2-3-4-5**. A number in any box indicates how many times numbers in the active number set, when scanned against a target record, yielded the amount of matches indicated by the box label.

In other words, if the number 6 appears in the box labeled **4**, then this means that the number set contained all four numbers in six of the past records that were scanned.

Each of the two number sets has three different scores based on three different parts of the database that are always scanned. You can select among the scores by clicking on the appropriate item in the 'Results' box at the bottom right of the report screen. The score boxes will show results from the currently active number set.

The *Selected Range* score shows the results obtained from scanning that part of the database specified in the **Database Range** section of the program. The other two scores offer a different perspective and a basis for comparison.

The *Entire Database* score shows the results obtained from scanning the entire database (including the *Selected Range*), with the same number set. The *Recent Games* score shows the results of scanning just the last most recent games as set up in the **Set Generator Setup** section, with the same number set.

What To Look For

As a general rule, look for many hits at the high end when evaluating the *Selected Range* score (6 of 6, 5 of 6 in a six-number game). Next, look for many hits in the *middle range* (3

of 6, 4 of 6 in a six-number game) when evaluating the *Recent Games* score.

Usually, you do not want to see *any* high score hits in the *recent* range. This would indicate that your number set is probably at the end of a trend rather than at the start of one.

If you are not satisfied with the results you have obtained with these two main indicators, you can exit the report to the previous screen and rerun the scan until you are satisfied that you have achieved the proper balance between the two score results.

The *Entire Database* score serves as a reference for the *Selected Range* and *Recent Games* scores. A high score for *Entire Database* (many 5 of 6 and 6 of 6) reinforces the *Selected Range* as being representative of the way your lottery generally works, but it does not override the importance of accepting only middle range scores in the *Recent Games* results.

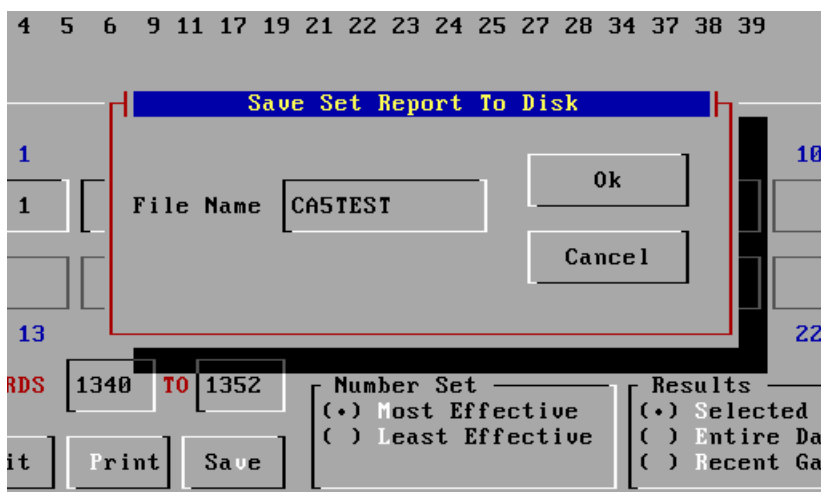
Rescanning Using The Same Settings

Rescanning your database using the same settings will produce a slightly different result each time. This is because the final number set always contains a mix of *hot* numbers found in the ranges and *colder* numbers drawn from the periphery. This can have an impact on which of the upcoming games being played will have the best result, but *which* game is impossible to predict. This is why we stress the importance of playing your number set (and the bets derived from it) over a *series* of games.

As a general guideline, go with the first number set that meets the template conditions in **Auto** mode, or the highest *Selected Range* and lowest *Recent Games* score in **Manual** mode. Don't try to second-guess the Set Generator. It's an exercise in frustration.

Printing, Saving, and Exiting

A click on the **Exit** button will take you out of the report and return you to the **Set Generator Setup** screen. Before leaving you should print and save the set and its report. Exiting automatically saves the set and report in a default file called **AUTOSAVE.SET** and **AUTOSAVE.RPT**, so that you will not loss the data if you accidentally exit without saving. This default



set and report will be overwritten each time a new set is generated.

To properly save the set and its report, click on the **Save** button and type in a file name. Do not include a period or a file name extension, as the extension **.SET** and **.RPT** will be automatically

appended to the files. A report is saved in ASCII format and can be printed later by calling the report up in a text editor or word processor and printing from there. The Set Generator

will not print saved reports, but an active report can be printed directly from the Set Generator by clicking on the **Print** button.