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Rollout Position...

What is a rollout?

Rollout just means to play the game to a point where a winner is determined.

Why do rollouts?

When you are trying to determine what the best move is or whether to accept or pass the cube, it is not always clear what the best choice is. You could play out the game, from that point, several times to see what the outcome would be. However, because of the high luck factor in backgammon, you will win sometimes and lose sometimes. In many situations it would take many times to determine what the best choice is. This is where the computer comes in handy. For some moves it could take thousands of times/rollouts to determine which choice is the best.

There are 3 situations where you might want to do rollouts:

- 1 You are passed the doubling cube and you are not sure whether you should accept or not.
- 2 You are not sure whether it would be appropriate for you to pass the cube (double your opponent).
- 3 You have several possible moves that you can make after you have rolled the dice, but you aren't sure which is the best.

I have found this feature to be very interesting. It has given me a few surprises. I hope it does the same for you. Using it should give you a better understanding of the game.

How accurate are the results?

The larger the number of rollouts, the greater the accuracy of the results. Anything less than 100 can give incorrect results -- luck still can have a large influence. How many depends on the situation. Comparing moves requires a greater number of rollouts than whether to pass or accept the cube.

Another factor affecting the accuracy is the quality of game play. If the game play is perfect then the results give perfect answers to perfect game players when an infinite number of games are rolled out. David's Backgammon does not play perfectly and you can't rollout an infinite number of games. Also, you don't play perfectly, so, perfect results won't work perfectly for you anyway. I hope that made sense. :-) David's Backgammon does play good enough to give very usable results in almost all situations. I have rolled out some of the board situations in Kit Woolsey's "New Ideas In backgammon" book. His book uses Jellyfish rollouts to compare different possible moves. David's Backgammon gives very similar results.

How to do Rollouts:

Do this first:

Make sure that the play options are set correctly. The rollout uses your settings except where it allows you to select it in the Rollout Setup dialog. The cube is not used during the rollouts. I felt it was not needed and would have caused confusion. The results need to be interpreted differenly when the cube is used.

If you want to use the stats in Running Scores, clear the Stats for players #4.

Should you accept a double?

- accept the double
- select Human Opponent
- click on BAR to backup to just before the computer double you
- select Rollout Position...

If you win more than 25% of the points then it is appropriate to accept the double. The breakeven point is 25%. Here is the logic. Iif you delcine the double every time in 100 games you lose 100 points. If you accept every time and you win 25% of the games then you would win 25 games. This would give you 50 points (25 x 2). You would lose 75 games. This would be a loss of 150 points (75 x 2). For a net loss of 100 points. It is the same if you accept or decline the cube. If you win more than 25% then you will do better than losing 100 points. If you win less than 25% then you will lose more that 100 points.

Should you double?

- get the board position just before the double blank dice
- select Rollout Position....

If the cube is in the center the break even point is about 68%. If you win more than 68% of the points then it is appropriate to pass the cube. If you own the cube the breakeven point is about 70%.

Which move(s) is the best?

- 1 With the dice showing and before you have made any move, save the game
- 2 Select Human Opponent
- 3 Load the game
- 4 Make the first move(s) that you want to try (blank dice should be on your opponents side of the board after you make the move(s))
- 5 Do the Rollout
- 6 Print out the Rollout Results file (it will be in the game folder)
- 7 repeat 3 thru 6 again for each move(s) that you want to test

The move(s) that gives the highest equity value is best. If the equity values are very close then you might need to

do up to 10,000 rollouts to determine the best move. If it is that close then it probably doesn't matter which move is really the best.

Miscellaneous information

Stats - Stats are accumulated in the fourth (bottom) set of players. They can be useful but you must reset them to zero when it is appropriate.

Session scores are not affected by the rollouts

Position Rollout Setup dialog

Games to play/rollout - To get a general idea you can rollout 100 to 1000 games. For close decisions, even 1000 games might not be enough. In very close situations, you might need to rollout as many as 10,000 games.

Min/Max Start - The rollout display has min/max for % of points won and lost, and for equity. In the first few games these will be all over the place. The number entered determines when the min/max data is started. The higher the number, up to a point, the more meaningful the min/max data will be. If you are running 10,000 games then a number around 1,000 might be appropriate. But it is up to you. Experimentation will give you a feel for what works for you.

The rest should be self explanatory.

Position Rollout Results display window

The row of data for each player is the number won for each category:

Points - this includes the effect of gammons and backgammons

G - gammons won

BG - backgammons won

Percent - the percent of points won (useful for doubling cube analysis)

Max% - the maximum that the % has been since the min/max start number

Min% - the minimum that the % has been since the min/max start number

Equity - the average/expected amount of points to win each game. Determined by dividing the

total games into the net points (points won by the player minus points won by the other player) won by the player. Useful for comparing several possible moves for a dice roll. Kit Woolseys "New Ideas in Backgammon" is an excellent book that uses this approach.

Game - the game number that the min/max equity is from. Also the number of games played so far -- in the bottom player row.

Rollout Results disk file

The results of the rollout are saved in a disk file named "Rollout Results.txt". It is saved to the game folder after every 100 rollouts and when the rollouts finish or are aborted.

The file contains the same information that is displayed on the screen plus the board setup for the rollouts.

If you double click on it, it will be displayed in a program that can then be used to print it out.

If you start a new rollout, the previous Rollout Results are lost.

Random Dice Rolls

Yes!!! The rolls of the dice are determined using a random number generator. There is no bias in the roles toward either player. This is true for all skill levels. Even if the random number generator did not produce completely random numbers they would not favor either player. Lucky rolls are just that. Just like when you play someone else that gets lucky rolls.

I have mentioned this because on more than a few occasions the game has been accused of favoring the computer. Luck plays a significant role in the short run in any game that uses dice. In the long run it will even out though.

The computer plays a pretty good game at the higher skill levels. In making its moves it trys to move in ways that help insure that more of the rolls it gets are good rolls. This may appear to be luck when it is just playing a good game.

For those that are still not convinced I have included several ways to eliminate any chance for bias in the rolls. You can input your own rolls by selecting **Input Rolls** from the Board menu. At the end of a game you can select either **Replay Same Dice** or **Replay Same Dice** Swapped. With either of these options the dice are the same as they were in the game just finished.

End of Game Options

New Game - starts a new game

Quit - quit the program

Print Game - prints the detail of the game

Replay With Same Dice (Swapped)

You can choose to play a new game with the same dice rolls as the last game or to swap dice with the computer so that you play the computers dice and it plays yours.

Continue Playing the Game

If the game ended due to a doubling of the cube being declined or a concession, you can continue playing the same game by selecting this option. The game is scored as if it ended at this point. There is no score for the continued game. Note: after the game continues, if either player declines another double of the cube or concedes, a new game is started.

Version 4 Enhancements

As of Version 4.0

- Added the Rollout Positon feature
- Improved the computer opponent skill in moving the pieces and doubling cube logic
- Several minor interface improvements

Version 3 Enhancements

As of Version 3.7

- Improved computer opponent skill
- Improved Tournament Play
- Improved the Concede logic
- Improved the Who Is Winning logic
- Many minor improvements and fixes
- New Options
- **Right Mouse Button Action...** Option to select action for right mouse button click
 - Load Saved Game On Startup
 - Save Game On Exit
 - **Border Pattern** selection
 - Board Frame Design selection
 - Easy Moves
 Automatic Moves

Version 2 Enhancements

As of Version 2.8.8

What's new in version 2

- Improved computer opponent skill in both playing and cube action.
- Keeps track of statistics for up to 4 pairs of player.
- Game and Session Statistics
- Faster piece movement.
- Option to have the dice roll automatically for faster play without the cube.
- Improved sound control with the choice of 2 dice roll sounds (1 is shorter for faster play).
- New Opitons:
 - Money Session play a session for money as long as you like. Winnings/losses are

saved.

- **Cube Maximum** select the maximum cube value allowed.
- **Display Blot Risk** display the risk of your blots getting hit
- Show Possible Moves shows the moves possible when a a piece is picked up.
- **Switch Sides** switch sides and play your opponents game.
- Cube Maximum Value select the maximum cube value allowed from 2 to 64.
- Winner Rolls First the winner of the previous game rolls first.
- Display the risk of your blots getting hit.
- **Automatic Rolls** your dice are rolled automatically when it is your turn.
- **Automatic Pass** play is automatically passed to the computer if you have no moves.
- Pick Up Only 1 Piece Only 1 piece can be picked up at once. Makes it easier, for some,

to put

down a piece.

- **Speak Dice...** option The value of the dice rolled are spoken by the computer.
- **Replay with the same dice** or with the dice swapped so you can use the compters dice.
- Option to **display 4 dice** when doubles are rolled
- Click After Move option for computers move
- Option to **continue playing** the game after a double has been declined or a concession
- Option to have the **pipcounts displayed** all of the time
- Dice are grayed instead of disappearing after they are used
- Improved help information
- Some new board color schemes plus some previous color schemes improved.
- Improved dialog box appearance.
- Many other minor enhancements and minor bug fixes.

About David's Backgammon

Author

David's Backgammon was designed, created, made available and is supported by one person. As such you can always count on quick support with only one person to deal with if you have a problem.

The author, me, is David Byrum. I grew up and got an MBA in Michigan. In between I spend 4 years in the Air Force. The Air Force took me to Texas, New Jersey, Indiana and Germany.

Later I moved to California to Silicon Valley. I worked there for 15 years for several computer companies and earned an MS in Telecommunications Management before moving to Portland Oregon a few years ago.

I started programming for the IBM 360 in 1971. I have been programming ever since on many different platforms and in many different languages and types of applications. I first started programming personal computers in 1981.

Philosophy Behind the Game

The philosophy was to make the game appear simple and uncluttered and easy to use as possible while, at the same time, making all of the options that people wanted available without complicating the interface. Much time and many lines of code went into developing an interface that met these goals. As such many of the features are not obvious without a little research. The Help system explains all of the features of the game. I strongly recommend looking at the contents of the Help system.

History of the Game

I started development on the game because there were no good backgammon games available on any platform.

The game was started in the spring of 1989 on the Amiga computer. The only home computer available that supported color, speech, sampled sounds, and had enough power to handle piece animation with enough left to determine a good move. It also had one more feature that proved very useful during development. It could multitask.

Eventually I ported it to the Macintosh. The next home computer capable of supporting all of the features of the game including speech.

Finally, when Windows 3.1 became available, the PC could support all of the features except speech. Speech is possible but is not that good. Windows 95 does a much better job with speech. I starting porting it over to Windows in the beginning of 1995. At that time the code was about 30,000 lines of source code. Not a small project.

I finally decided to make it available to the public in the fall of 1995. The internet and on-line services like CompuServe and all were making it possible to market the game on my own.

Even then there were very few backgammon games available with most of them not being very capable or with few options, or both. Creating a good backgammon game has proven to be very difficult. It is getting easier though since processors have become much faster in recent years.

Since it was first introduced there have been many improvements, changes and bug fixes. Thanks to many helpful suggestions and complaints of the many users of the game.

Now

This version, version 2, is a significant update. It plays a better game, it handles the cube better and offers several new options. The appearance of the game has not changed however. This would go against the philosophy explained above.

What's in the Works

Since most of the bugs have been found and fixed and since this upgrade offers several new asked for options there will not be updates as often as in the past. I will still be working on the game and will release updates when bugs are fixed or improvements are made.

One feature that I want to put in the game is **speech recognition**. I am already exploring this. The Microsoft SAPI supports speech recognition making it standardized and fairly easy to implement.

I am working on a version that supports **modem play**. The hooks are in the code but I have not been willing to support it. Not enough time. I am about ready to make it available in the Macintosh version though. I had it working in the Macintosh and Amiga versions many years ago but didn't want to support it at the time.

Once I have a modem version working I will be adding **Internet** capability.

In addition, I am always working on how good the computer opponent plays. I use a three pronged approach:

- 1 I have over 500 board situations taken from various backgammon books and backgammon quiz books. The game can test and score itself against the quizzes adjusting about 200 variables to get the best score. This technique uses the moves the best players would make to adjust the logic.
- 2 I play the game seeing where there are weaknesses making adjustments to the logic or the values of the variables. This finds weakness the quizzes might not pick up.
- 3 I use "evolutionary programming" techniques to evolve a player that can beat other players. This is blind. Whatever changes to the variables cause the player to beat the best other players

gets retained.

If you have any suggestions please e-mail at WinGammon@aol.com.

David 6/30/97 Portland Oregon

Starting a Game

The arrow in the upper right corner gives your piece color and direction of play.

To start the game click once over one of the dice. The player with the higher die plays these dice. Your dice are on the right.

If you are not accustomed to playing with the doubling cube you might want to disable the cube by turning if off in the Options menu.

Your tray for bearing pieces off the board is on the bottom. The color at the end of the tray is your piece color.

If you are in the middle of a game select New Game from the Game menu to start a new game.

Underneath the simplicity of the display are a lot of options and ways to get help and information. Reading the remainder of this help system will let you take advantage of them and thereby greatly increasing your enjoyment of David's Backgammon.

I would suggest starting with "Moving the pieces" and working down the contents.

At the very minimum you should read "Moving the pieces", "Taking back a move", "BAR", and "Helpful Information". This should only take a couple of minutes.

Enjoy!

Free Upgrade for Suggestions

Unlike many computer games David's Backgammon is continually being improved. It is riskier and takes many more hours of work. But my goal is to create the best backgammon game that is possible.

In an effort to make the best backgammon game possible I very much encourage your suggestions. Your collective help will go a long way in that effort.

It has been and will continue to be my policy to send a free password to the new version to anyone that gives me a suggestion, no matter how minor, that is incorporated in a future version. That includes bugs that are reported and fixed.

Note: to get a free upgrade you must already be a registered user.

If you are not a registered user and make me aware of a bug that affects game play, I will e-mail a free password to the fixed version of the game.

Miscellaneous Odds

Entering from the Bar
Odds of hitting a blot
Odds of rolling a number

Odds of re-entering from the Bar

Opponent Points	Odds	Percent Chance	
	For		
One Piece			
1 2 3 4 5	35/1 8/1 3/1 5/4 11/25	97 88 75 56 31	
Two Pieces			
1 2 3 4 5	25/11 16/10 1/3 1/8 1/35	69 44 25 11 3	

Odds of Hitting a Blot (if there are no opponent points in between)

Distance	Odds for	Percentage Chance
1	11/25	31
2	12/24	33
3	14/22	39
4	15/21	42
5	15/21	42
6	17/19	47
7	6/30	17
8	6/30	17
9	5/31	14
10	3/33	8
11	2/34	8
12	3/33	8
15	1/33	3
16	1/35	3
20	1/35	3
24	1/35	3

Note: For distances of 1 to 6 away, even if all points are occupied by your opponent between your piece and the blot, the odds are only reduced to 11/25 or 31% chance of hitting the blot.

Odds of Rolling a Number (on a die with both dice thrown)

	Odds for	Percent Chance	
To roll a number		11/25	31
To roll any of 2 numbers	20/16	56	
To roll any of 3 numbers	27/9	75	
To roll any of 4 numbers	34/2	94	

Windows NT and Windows 3.1

This is a 32 bit version of the game that works on Windows NT 4 and Windows 95/98.

I have a 16 bit version of the game that works with Windows 3.1 and 95/98. E-mail me at WinGammon@aol.com if you are interested or visit my web page at:

http://members.aol.com/wingammon/backgammon

Quick Play Instructions

Note: click means pressing the left mouse button once.

The arrow in the upper right corner gives your piece color and direction of play.

Your dice are on the right and your tray is on the bottom.

Roll the dice by clicking on one of the dice

See below for how to move pieces if if Easy Moves is selected.

Select the piece to move by clicking on the piece (don't hold the mouse button down)

Select the destination by clicking on the row you want your piece on

Double your opponent by clicking on the Cube

Bear-off a piece by putting it in your tray (tray with the same piece color at the end)

Take back a move by clicking the right mouse button or on the word **BAR** or by selecting the last piece moved then putting it back.

De-Select a piece by clicking the right mouse button or on the row the piece came from or click on the word **BAR**

Can't use both dice - click on the dice to continue play

Forgot where the piece came from - click the right mouse button or on the word **BAR**

Select Show Possible Moves to have the game show which moves are possible when a piece is selected.

Get context sensitive help by clicking on the arrow in the upper corner or the F1 key.

Want Information -- Run the cursor over the bottom section of the board frame. Click when the cursor turns to the appropriate letter. **P** for Pip Count, **R** for Remaining Rolls, etc.... Reference <u>Helpful Information</u>

Note: You can pick up more than 1 piece at once if <u>Picking Up Multiple Pieces Allowed</u> is seleceted. See <u>Moving the Pieces</u>.

<u>Easy Moves</u> option (this was added to make play easier on a laptop/portable w/o a mouse)

Move a piece by clicking on the row (or the tray) where the piece is to go

If more than one of the dice can be used to move to the row, the die on the left is used

To use the die on the right, press and hold the shift key when making the move or click the right mouse button (for the right mouse button to move a piece, Take back the last piece move in Right Mouse Button Actions... must be selected.)

If you want to use both of the dice on one move, but there is a piece that is the same as one of the die away, then use command-click (hold down the command key as you click to move the piece). It will ignore the one it would normally move and look for a piece that is the distant of both dice away.

Take back a move by clicking on the right mouse button

Beginners Help

If you are new to backgammon it is recommended that you do the following:

- 1 Turn off the Cube Used option. It is the first option in the Options menu.
- 2 Set the Skill level to Novice in the Skill menu.
- 3 Read the Backgammon Rules in this help file.
- 4 Read the glossary to help understand the new words in backgammon
- 5 Read the Helpful Information in this help file. See the Contents.
- 6 -Select Show Possible Moves for help on where to move.

Moving the pieces

With Picking UP Multiple Pieces Allowed NOT selected

To move a piece move the cursor over the piece then click the mouse to pick up the piece (don't hold the mouse button down). Move the piece with the mouse until the piece is over the row you wish to put it on, then click the mouse to release the piece.

With Picking UP Multiple Pieces Allowed selected

You can pick up more than 1 piece at a time with the Pick Up Only 1 Piece NOT selected.

Picking up a piece is the same, except you can pick up as many piece as you have possible moves.

Move the piece with the mouse until the piece is over the row you wish to put it on. Click over a part of the row with no piece on it to put the piece on the row. You can also put the piece down over a piece if it is the next available slot for a piece or that move uses the remainder of the roll.

Note 1: Most backgammon games require that you hold down the mouse button while moving the piece. David's Backgammon does not require this for 2 reasons:

- 1 It is easier, and
- 2 So you can pick up more than 1 piece at a time.

There is 1 drawback (not really) to this though. If you forget where it came from, with most of the games that require you to hold down the mouse button, you can just let go of the mouse button to return the piece. With David's Backgammon you just click on the right mouse button or on the word <u>BAR</u> to return the piece or pieces.

Note 2: The reason that you must click over an area where there is no piece to put it down, unless it is over the next slot or uses up all of the roll, is that if you click over a piece it thinks you want to pick up another piece.

See also: Take back a move, Bearing Off Pieces

There are 2 other methods to move the pieces; <u>Easy Moves</u> and the <u>keyboard</u>.

Take back a move

To take back a move click on the right mouse button or on **BAR** in the center of the board.

Clicking on BAR will have different results depending on the situation.

If you have made part of a move it will take back all of the pieces moved so far. If you click again it will show blank dice. If you click again it will take back the computers last move and your last move, unless you just doubled your opponent, then it will take back the double.

If <u>Easy Moves</u> is selected you can take back single moves by clicking the right mouse button.

Easy Moves

The Easy Moves option was created to make play on a portable/laptop easier. Of course, you can use it whenever you like. You might also want to select Automatic Moves. With Automatic Moves selected, the computer will automatically make any moves where there is no choice.

To **move a piece**, you click on the row you want a piece to be moved to. The dice are scanned from left to right. If the die on the left would make a valid move then it is used, if not, the right die is checked. The piece will move automatically to the row. To change the order of scanning, press the shift key as you click (shift click). Clicking on the right mouse button will do the same if Take back the last piece move in Right Mouse Button Actions... is selected.

If you want to **use both of the dice on one move**, but there is a piece that is the same as one of the die away, then use command-click (hold down the command key as you click to move the piece). It will ignore the one it would normally move and look for a piece that is the distant of both dice away.

If you decide you want to **take back the move**, click the right mouse button to take back one move. Do it again to take back another.

Notes:

If a piece is moved automatically, use shift-Click to move it back. It will stay so that Show Best Moves or Make Best Moves can be used.

You can not move pieces using the keypad while this option is selected.

Doubling Cube

Select Cube Used option from the Options menu to make the doubling cube available.

To double your opponent click on the cube.

You can take back a double by clicking on BAR

The doubling cube adds another dimension to the game of backgammon. Once you have used it for awhile it is impossible to go back to not using it.

For those new to the game the doubling cube is used to double the stakes of the game. A normal game starts out worth 1 point. At the start of the game the cube is at 1. It shows as a 64 because there are not enough sides to the cube to have a 1. The cube does not belong to either player.

Before rolling their dice either player has the right to double the stakes by changing the cube to a 2 then passing it to the other player. If the other player accepts the cube, the game is now worth 2 points. If the other player declines, the game ends immediately and is worth 1 point. The cube now belongs to the player that accepted the double.

As the game continues the cube can be doubled only by the player to last accept a double. Each time the cube is passed it is doubled from 1 to 2 to 4 to 8 to 16 to 32 to 64.

If the cube is doubled and accepted judiciously it should almost never go over 8 and most of the time never get to 8.

The doubling cube is probably not for the beginner. It takes awhile before a new player is able to evaluate well enough who is ahead in the game to use the cube. But at some time you should make yourself use the cube.

Several aids have been included to help determine who is ahead in the game and whether you should consider doubling or consider accepting a double. Reference these areas to help: <u>Doubling Advice</u>, <u>Pip Count</u>, <u>Roll Remaining</u>, <u>Whose Winning</u>.

Bearing off

To bear off a piece move it as usual, clicking over your tray to put it down.

Your tray is the tray on the bottom with a piece at the end the same color as your pieces.

Version Number

The version number can be found by selecting the About menu. The version number is displayed in the About dialog box.

Web Page and Latest Version

You can find the latest version of the game at my Web Page. The URL (address) is:

http://members.aol.com/WinGammon/backgammon

Tournament Play

In tournament play you play a tournament against the computer. When you select Start Tournament from the Game menu you are presented a dialog box where you can enter:

- 1. The number of points required to win the tournament.
- 2. Whether the Crawford rule is in effect. The Crawford rule forbids a doubling of the cube for one game after an opponent wins a game that puts him within 1 point of winning.
- 3. The starting scores of both players.

When Start Tournament is selected the following options are de-selected if they were selected.

Auto Doubles is set to 0
Beaver Allowed is turned off
Jacoby Rule is turned off
Good First Roll is turned off
Roll Over is turned off
Re-Roll First Roll is turned off
Who Rolls First is set to Random

Even though they are de selected when Start Tournament is selected they can be selected again to be used during tournament play.

When End Tournament is selected these options are set back to what they were before Start Tournament was selected.

When a game is saved during tournament play appropriate information is saved to restart the tournament later.

When you quit Davids BackGammon the tournament information is saved. The tournament is resumed the next time you start the program.

Use the Tournament Stats menu item under the Stats Menu to display the current score.

Money Session Play

In a Money Session the money won by each player is remembered until the Money Session is ended. A Money Session can last for as long as you want it to.

Instead of the points won being displayed between the 2 trays, the amount of money won or lost by each player is displayed.

To start a Money Session select "Start A Money Session" in the Game menu. To end the Money Session select "End The Money Session" in the Game menu.

Currently the wager for each game is \$1 for each point won. Look for improvements/enhancements in the features for a Money Session in the near future.

Keyboard Input

Note: keyboard Input can not be used while Easy Moves is selected.

All play can be done using the numeric keypad. First select 'Show Row Numbers' from the Board menu.

To roll the dice press the + key

To make a move enter the FROM ROW number, then a PERIOD, then the DISTANCE to move, then press the ENTER key. e.g. 24.11[ENTER key] would move from the 24 row to the 13 row.

25 is for the BAR row

- is the same as clicking on BAR(take back move)
- * is the same as clicking on the Cube for doubling
- + is the same as selecting YES
- is the same as selecting NO

ENTER key alone repeats the last FROM row using the other die.

Enter incorrectly? Just press the ENTER key. Then enter the whole move again.

If you are using the <u>Show Possible Moves</u> option the possible moves will be displayed when you enter a from row followed by the [Enter] key. This only works for the player on the right.

See <u>Helpful Information</u> for other keyboard options

Information

You can get information in several ways. The <u>help menu</u> is the best source of information on how to play the game.

Click on the arrow in the upper corner or press the F1 key at any time for context sensitive help.

By moving the cursor over the bottom section of the board frame you can get information by clicking when the cursor changes to the appropriate letter. Going from right to left they are:

- **B** Display the risk of your blots getting hit
- P <u>Display the pip count</u> of both players
- R <u>Display</u> the rolls remaining for both players
- Who's winning (a good guess)
- S <u>Display the 3 "best" moves</u>
- M Make the "best" move
- I Instant Replay of last computer move
- **D** Get <u>doubling advice</u>
- C Show computer's 3 best moves
- N Bring up the <u>note pad</u>

Others are:

H Displays context sensitive help - click in upper corners of board

Want continuous pipcount? Move the cursor in between the trays until it becomes a **P**, then click to display the pipcount for each player. Click again, when the cursor is an **S**, to change back to a display of the score for each player.

The same information can be displayed by pressing the letter on the keyboard or by selecting it in the <u>CursorOptions menu</u>.

Select <u>Show Possible Moves</u> to have the game show which moves are possible when a piece is selected.

Select <u>Running Scores</u> under the Stats menu for scores and other statistics.

Display Pip Count

Displays the <u>pip count</u> of both players. If everything else is equal the player with the lowest pip count is ahead.

Display Remaining Rolls

Displays the estimated rolls required to take all pieces off the board for both players. Later in the game this is a much more accurate assessment of the game then the pip count.

Display Best Moves

Displays the 3 "Best" moves. The moves are displayed in board rows of 1 through 24, starting with 24, in the upper left hand corner, moving clockwise with 1 in the bottom left. Note: If you reversed the direction of play, 24 will be in the upper right moving counter clockwise, with 1 being in the lower right. It is helpful to <u>show the row numbers</u> when using this, however, it can not be selected while the Best Moves are being displayed. The Bar is designated as a B in the "from" position (first character). Bearing a piece off the board is designated by a B in the "to" position (after the "-"). This might seem confusing but it's really simple. Just try it. Note: Can only be selected before the first die for a roll is used.

Can also be selected by pressing on the S key or by clicking when the cursor becomes a S when moved over the bottom of the board frame (on the right side).

Make Best Move

Moves the pieces for the "best" move. After the move is made, you have the option of using the move or taking the move back. The "best" move is the same as the first of the 3 "best" from the Show Best Moves option. Can also be selected by pressing on the M key or by clicking when the cursor becomes a M when moved over the bottom of the board frame (Center).

Notepad

The Notepad is provided for keeping notes while you play. Any notes entered will be retained after the game is quit.

Menus

<u>File menu</u>
Game menu
Board menu
Options menu
CursorOptions menu
Skill menu
Stats menu
Help menu
REGISTRATION menu

$File\ Menu\ (\mathsf{menu}\ \mathsf{item})$

Hide Game
Load Game...
Save Game...

Print Game...

Quit Game

Game Menu (menu item)

New Game
New Session
Start/End A Tournament
Start/End A Money Session
Save Game On Exit/Quit
Load Saved Game On Startup
Concede
Computer Opponent
Human Opponent
Rollout Position

New Game(menu item)

Ends the current game, starting a new game. The scores are not reset.

New Session(menu item)

The same as the New Game selection except the scores are reset.

$Start/End\ Tournament({\tt menu\ item})$

Use this to start a tournament. See the section on <u>Tournament Play</u> for an explanation of tournament play.

Save Game On Exit/Quit

When selected, the game that is being played will be saved automatically when you quit or exit the program.

If you have Load Saved Game On Startup selected, the game saved will be resumed the next time you start of the program.

Load Saved Game On Startup

When selected, the game that was saved prior to exiting the program or saved automatically with the Save Game On Exit/Quit option is resumed when the program is started.

Concede...(menu item)

Allows the player to concede the game. The number of points lost will depend on the value of the cube and the board situation at the time of the concession. You will be asked if you accept the loss and the number of points that you will loose. If you accept you will loose the points displayed. If you don't accept the game will continue.

This option needs more refinement.

Computer Opponent(menu item)

This is the default mode of play. You will be playing against the computer.

$Human\ Opponent({\tt menu\ item})$

This mode allows you to play with another person on the same computer. Play is similar to playing against the computer except that you share the mouse and the person on the left plays the direction the computer would play.

Hide Game(menu item)

During play the game can be hidden in a hurry (if your boss is coming) by pressing on the Escape key or by selecting this menu item. The game is not affected. To bring the game back into view press Alt-Tab keys until you find David's Backgammon.

With Windows 95 select it from the Task Bar.

Load Game...(menu item)

Loads a previously saved game. Play is resumed at the place the game was saved. If a comment was entered when the game was saved it will be displayed when the game is loaded

Save Game...(menu item)

Saves the current game allowing the game to be loaded and resumed at a later time. Allows the game to be saved using any name. A comment can be entered when the game is saved. When the game is loaded later the comment will be displayed.

To save a complete game select the Save Game... option when you are being asked if you want to play another game.

Print Game...(menu item)

Use this to print a history of the currently displayed game. If you want to print a complete game select this when you are being asked if you want to play another game.

Quit Game(menu item)

Quits the game.

Board Menu

Board Appearance
Show Row Numbers
Picking Up Multiple Pieces Allowed
Sound
Speech
Speak Dice
Input Rolls
Automatic Rolls
Automatic Pass
Automatic Moves
Easy Moves
Switch Directions
Switch Piece Colors
Show Possible Moves
Switch Sides
Setup Board
Setup Board Setup(Clear) Board
Piece Speed
Fit Window To Board
Click After Move
Display 4 Dice On Doubles Dight Mayes Putter Action
Right Mouse Button Action
Redraw Board

Board Appearance

Piece Shape

Board Size

Board Color

Board Frame Design

Border Pattern

Board Frame Design

Select one of the several frame designs.

Border Pattern...

Select from several border patterns.

Show Row Numbers (menu item)

This displays the row numbers on the board.

Select again to take the row numbers off the board.

This is helpful when using the keyboard to input rolls or when viewing "Best Moves"

Can not be selected when any other message is being displayed over the board.

Picking Up Multiple Pieces Is Allowed

When selected, you can have as many pieces picked up as there are moves to make. Otherwise, you can only pick up 1 piece at a time.

Each method has its advantage and disadvantages.

When not selected it is easier to put a piece down but you can only pick up one piece at a time.

When selected you can pick up more than one piece. This makes game play much faster and more natural. However, until you learn how to use it correctly it can be more difficult to put a piece down.

It is recommended that you learn how to use the game with this option selected.

$Sound... \ (\mathsf{menu} \ \mathsf{item})$

This brings up the Sound Control dialog box. You can turn sounds on or off for the dice roll and the piece movement during game play. You can turn the dice sound off separately and select either a long or short dice sound.

Speech (menu item)

When selected, any messages displayed on the message line, at the top of the board, are spoken.

To use the speech option you must have SAPI compliant speech software installed on your system.

First Byte (not sure they are around anymore) has speech software call Monologue 97 that can be used with the game. Some speech recognition software now has SAPI compliant text-to-speech software included.

I understand that speech software comes with some sound boards. In any case, it could be difficult to find SAPI compliant software.

Speech has not proven to be successful on the Windows platform yet. Perhaps if Microsoft included it with Windows, as Apple Computer has, it would be more popular.

$Speak\ Dice...\ {\tiny (menu\ item)}$

You can have the computer speak the values of the dice rolled for either you or the computer or both. You can also select whether the spoken words are the long or short version.

$Input\ Rolls\ (\mathsf{menu}\ \mathsf{item})$

Allows the rolls to be input rather than randomly selected by the computer.

Click on a die to select it.

Click on "No" if you change your mind and want the computer to select the dice randomly.

Automatic Rolls (menu item)

When selected the dice are rolled automatically.

This allows game play to go faster.

It can only be used when the cube is not being used otherwise you would not have a chance to double your opponent.

Automatic Moves (menu item)

Sometimes there is no choice for the next move. By using Automatic Moves you can select on which occasions you want the game to make the move automatically.

Automatic Pass (menu item)

When selected the play is automatically passed to your opponent when you can not make any moves.

Switch Directions (menu item)

Switches the direction of play. Moves the piece trays to the other end of the board, changes the direction of play and reverses the pieces appropriately. You should switch direction and colors once in a while so you don't get fixed on one color and direction. When you play with other people (or games) you don't always get the direction or color you want.

Switch Piece Colors (menu item)

Swaps your piece color with your opponents.

Show Possible Moves (menu item)

When a piece $\,$ is picked up an X is placed next to the rows that it can be moved to. An O is displayed next to the row that the piece was picked up from. This only works when 1 piece is selected.

Switch Sides (menu item)

This option, when selected, will switch your pieces and your cube with your opponents. It is like switching sides of the board. You could back up the moves all the way to the beginning of the game so that you could re-play with the rolls of the dice that your opponent received to see if you would do better or worse.

Of course you do have the advantage of having seen the rolls before.

$Setup\ Board\ (\mathsf{menu\ item})$

This allows you to set up any board situation you want by placing pieces where you want them, selecting the dice to be rolled, choosing who is to get the roll, and selecting the value of the cube and who has the cube. See the <u>Board Setup</u> for a more complete explanation.

$Setup(Clear)\ Board\ {\scriptstyle (\text{menu item})}$

This is the same as the Setup Board option except it clears the board of all pieces. In many situations it is easier to clear the board when setting up a special situation. See the <u>Board Setup</u> for a more complete explanation.

$Piece\ Speed\ (\mathsf{menu}\ \mathsf{item})$

Adjusts the speed of piece movement.

1 is the slowest. 10 the fastest.

$Piece\ Shape\ {\tiny (menu\ item)}$

Changes the piece shape from round to square and several steps between

$Board\ Size\ {\tiny (menu\ item)}$

Select from several sizes of boards with 1 being the smallest.

Fit Window To Board

The David's Backgammon window is made to be just larger than the backgammon board.

You can reverse this by selecting the zoom button in the upper right part of the window - to the left the X that closes the window.

Click After Move... (menu item)

Selecting this will give you the choice of selecting the option to click after the move before play is passed to the other player. You can select it for your moves or the computers moves.

After your move, this allows you to take back your moves by clicking on BAR.

Display 4 Dice on Doubles

Four dice are displayed when doubles are rolled, otherwise 2 are displayed.

Right Mouse Button Action...

You can select the action that will be taken when you click on the right mouse button. You can select the action for when a piece is selected and when no pieces are selected.

Piece Selected

You can select to have it put back all of the pieces you have selected (picked up). This is helpful if you have trouble remembering where you got the pieces from.

or

You can select to have it put down all of the pieces selected at once. This helps when you are moving doubles, putting multiple pieces in the tray, or when you have picked up 2 pieces to build a new row/point.

No Piece Selected

You can select to have context sensitive help displayed

or

You can select to have a move taken back each time you click the mouse. You can only take back moves made for the current roll of the dice. If you want to go back farther you need to click on the word BAR in the center of the board or use Ctrl-Z.

$Redraw\ Board\ (\mathsf{menu}\ \mathsf{item})$

Shouldn't ever be needed. Select this to redraw the board in the event the board gets messed up.

Board Color (menu item)

You can select one of several built in board colors or select a custom color that you have created. See <u>Custom Board Colors</u> for an explanation of creating custom color.

The appearance of any of the built-in board colors or custom board colors can be changed by selecting a different Board Frame design or a different Border Pattern.

Options Menu

Cube Used
Cube Maximum Value
Automatic Doubles
Beaver Allowed
Jacoby Rule
Computer Accepts All Doubles
Roll Over
No Backgammons
Re-Roll First Roll
Who Gets First Roll
Automatic Concessions

CursorOptions menu

This menu was added for those that didn't read the help <u>information</u> that explained how to get the same information by clicking the left mouse button at the appropriate time.

Skill Menu

Select the difficulty level in the menu. From Novice to Club Champ.

Enter Name

The name entered here is used for various messages and when the game is printed.

$Cube\ Used\ {\scriptstyle (\text{menu item})}$

Turns use of the cube on and off.

Cube Maximum Value (menu item)

Select the maximum that the cube can be during the game.

Automatic Doubles (menu item)

Selects the number of automatic doubles allowed on the first roll. The cube is doubled automatically if both players roll the same die on the opening roll up to the number selected times.

$Beaver\ Allowed\ {\scriptstyle (\text{menu item})}$

This option allows the doubled player to double the cube immediately after being doubled and still retain the cube. The player must make the double before the other player rolls his dice. You are given 3 seconds to make the choice to Beaver after the computer opponent has doubled you and you have accepted the double.

Note: The 3 second waiting period could be noticeable during play.

Jacoby Rule (menu item)

A double or triple game is not allowed unless the cube was passed at least once during the game.

$Computer\ Accepts\ All\ Doubles\ {\tiny (menu\ item)}$

If selected, the computer accepts any double from you. It tells you if it would not have accepted the double.

Roll-Over (menu item)

Allows you to roll your dice over one time during the game or have your opponent re-roll. An \mathbf{R} , in your piece color, will show in the middle of the top of the board when the option is selected. The \mathbf{R} will be displayed until the "roll over" is used. To roll over click on the \mathbf{R} .

Note: To take back an opponent's roll, your opponent must first complete his move.

Roll Overs are final. You can not regain the ability to cause a roll over by taking back moves to or past the point of a roll over.

$Good\ First\ Roll\ {\scriptstyle (menu\ item)}$

This is for newer players and for practicing first rolls. This gives you an advantage by letting you win the first roll every time and by giving you a good first roll.

$No\ Backgammons\ (\mathsf{menu}\ \mathsf{item})$

If selected backgammons are not allowed. A backgammon will be treated as a gammon.

Re-roll First Roll (menu item)

With this selected the winner of the first roll is permitted to accept the roll as is or to re-roll his dice and use the new roll (even if it is a worse roll).

Who Gets First Roll... (menu item)

You can select how the first roll of each game is determined:

Random - the player with the highest randomly selected die moves first.

Winner of Previous Game - the first game uses the Random method mentioned above. After the first game the winner of the previous game rolls first in the new game.

Human Player - You win the first roll

Human Player With Good Roll - You not only win the first roll but you get one of the better first rolls also.

Computer Player (left) - the computer player gets the first roll.

Automatic Concessions (menu item)

During game play if the computer determines that it has lost the game it will offer a concession. If you accept you will win the game for the number of points offered, otherwise the game will continue. The computer will only concede if it is a running game.

Stats Menu

Enter Name
Game Stats
Session Stats
Tournament Stats
Running Scores

$Enter\ Name\ ({\tt menu\ item})$

Allows entry of the name of the active player on the right.

The name can also be entered using the <u>running scores</u> menu item.

Game Stats (menu item)

Statistics for the current game.

Session Stats (menu item)

Statistics for the current Session. A session starts when you start the program or when you select New Session from the Game menu. The session ends when you quit the program or when you select New Session.

Tournament Stats (menu item)

Displays the tournament information, including each players points won.

Running Scores (menu item)

This brings up the Running Scores dialog box. This is a multifunction dialog box:

- Displays statistics for each set of players
- Names can be entered
- Statistics can be reset to zero for each set of players

Unless you never play against the Computer I recommend that you leave the left player as the computer for the first set of players.

Each time a different set of players is playing the active players must be changed so the statistics are accumulated for the correct players. Under the **On** column on the far left select the appropriate players.

The statistics for each set of players is kept until they are reset.

The statistics are, for the most part, self explanatory. Points and Games Won are not the same thing. Points take into account gammons, backgammons and the doubling cube.

Glossary

Automatic double an option where the cube is doubled automatically if both players roll the same die on the opening roll of the game.

Back Game a strategy used when a player finds himself significantly behind in the game.

Backgammon in addition to the name of the game, it is also the result of a game in which one player removes all of his pieces before the other player has removed any pieces and has a piece in the opponents inner board or on the Bar. This results in a triple game (worth 3 times as much.)

Back Men/Pieces the two pieces that are farthest out at the start of the game (opponent's 1 point). Also called Runners.

Bar the center divider separating the inner and outer boards. Hit pieces (blots) are placed on the bar until the piece is re-entered.

Bar Point the 7 point. A strategic blocking point.

Bearing off the process of removing men from the board.

Beaver an optional rule where the doubled player can re-double the cube after being doubled. the double must be made before the other player rolls the dice. When playing against the computer you have 3 seconds to re-double.

Block a series of contiguous points that block your opponent from advancing his back men

Blocking Game a strategy where the goal is to block your opponent's back men in your home board. The best overall game strategy.

Blot a single piece on a point. A blot can be hit by an opposing piece and placed on the Bar.

Builder a piece that can be used later to make important points later in your inner board or as part of a Block.

Combination Shot an opponent's blot that is more than six rows away from one of your pieces, and that therefore requires a roll combining numbers on both dice in order to be hit by that piece.

Come in or Come on See Re-entering

Contact Positions on the board in which all of each player's pieces have not yet gotten past all of his opponent's pieces; it is therefore still possible for one or both players to leave a blot.

Count the Position See Pip Count

Cover a Blot Move a second piece to a point/row holding one of your blots. You thus make the point, preventing your blot from being hit.

Crawford Rule The Crawford rule is used during tournament play, it forbids a doubling of the cube for one game after an opponent wins a game that puts him within 1 point of winning the tournament.

Cube the doubling cube. The cube is die shaped with the numbers 2, 4, 8, 16, 32, 64 printed on the 6 sides. The cube allows the stakes to be doubled during game play by the player that "owns" the cube. The cube starts in the middle of the board with the side with 64 facing up, being "owned" by neither player. When either player wishes to double the stakes of the game during game play, he places the side up that doubles the bet and places it on the opponent's side of the board. If the double is accepted by the other player, then the stakes have been doubled with the other player "owning" the cube, being the only one that can next redouble. If he declines, then the game ends immediately with the value of the cube being what it was before the double.

Direct Shot A blot that is within 6 pips of an opposing piece. This blot can be hit by a number on a single die greatly increasing the chance that it will be hit.

Double See Cube

Double Game See Gammon

Doubling Cube See Cube.

Early Game The first stages of the game.

End Game The last stages of the game.

Enter See Re-enter

Exposed Piece See Blot

Gammon A game in which one player removes all of his pieces before the opponent has removed any pieces from the board. This results in a double game (worth twice as much).

Hit A move that lands on an opponent's exposed piece (blot), thus placing that piece on the bar.

Home Board your inner board

Indirect Shot An exposed piece (blot) that can be hit only by using both of the dice. By definition it is 7 or

more pips away from the opponent's piece.

Inner Board the quarter of the board where you must move all of your pieces before bearing off.Jacoby Rule A double or triple game is not allowed unless the cube was passed at least once during the game.

Lead The difference between the pip count of the two players.

Off the Board Said of those pieces already removed from the board during the bearing off process. Once a piece is off the board it is placed in the tray and stays off for the remainder of the game.

On the Bar See Bar

Outer Board the quarter of the board adjacent to the Inner Board.

Pips The dots that appear on the face of the die.

Pip Count The minimum number of pips required to move all of a player's pieces off the board (assuming no blots are hit.) Can be displayed by pressing on the **P** key or by clicking when the cursor becomes a **P** when moved over the bottom of the board frame (on the right side).

Points Rows occupied by two or more pieces. A point controls that particular row, preventing an opponent from touching down on it with one of his pieces.

Prime Six consecutive points you have made.

Re-enter The process required to bring a hit piece from the bar to a point in the opponent's home board. To re-enter, a player must throw a number on one of the dice that is the same as a row that is not controlled by your opponent. All pieces on the bar must be re-entered before any other move can be made. If a player fails to throw a number that will allow a piece to re-enter, the turn is lost and the player must try again on his next turn.

Remaining Rolls the approximate number of rolls required to bearoff all of their pieces. During the later stages of a running game this gives a more accurate assessment of the game than the Pip Count. Note: this assumes that none of your blots will be hit before bearing off. Can be displayed by pressing on the **R** key or by clicking when the cursor becomes a **R** when moved over the bottom of the board frame (on the right side).

Roll-over An optional method of play whereby each side has one chance during the game to either reroll the dice or demand that his opponent do so.

Re-roll First Roll an optional method of play whereby the winner of the first roll is permitted to accept the roll as-is or to re-roll the dice using the new roll (even if it is worse).

Runners The two pieces that are farthest out at the start of the game (opponent's 1 point). Also called Back Men.

Running Game a game strategy where the player tries to get his pieces into his inner board as fast as possible. Should only use when you have a significant lead in the pip count or you have completely passed each others pieces.

Triple Game see Backgammon

Backgammon Rules

Reference a book on backgammon or a book of game rules for a complete discussion of the rules.

Objective

The objective of the game is to bear off all of your pieces from the board before your opponent does, or if using a doubling cube, to force the other player to lose by declining a double of the cube.

Piece Movement

- 1. Direction of play is from your opponent's inner board to your inner board. When the game starts, an arrow in one of the upper corners indicates your direction of play and piece color. You bear off your pieces from your inner board, at the bottom of the board, into your tray.
- 2. Play of the pieces is governed by two dice, thrown onto the board. One move for each die. If both dice are the same (doubles), then play consists of four moves of the number thrown.
- 3. The first play goes to the player making the highest opening throw. The opening throw is made with each player throwing a single die, with the winner using the number on both his own and his opponent's die for the first play.
- 4. The play of the pieces consists of:
 - a. Moving a piece the exact number of points indicated by the number of pips(dots) on a die. Either one piece can be moved using both die or by moving two different pieces.
 - b. Bearing off a piece from your inner board. This can only be done if you have no pieces outside of your inner board or on the Bar.
- 5. No play can be made that lands on a row occupied by two or more of your opponents men.
- 6. When your play lands on a row occupied by a single piece (blot) of your opponent, the blot is "hit" and is put on the Bar for entry into your inner board.
- 7. A player having a piece on the Bar may not play other pieces until that piece has been entered from the Bar. A piece is entered from the Bar into your opponents inner board.
- 8. Plays must be made for both dice if possible. Either number may be played first. If only one number can be played, and there is a choice, the higher must be played.

Bearing Off

For this discussion of bearing off, the row numbers are the same as the minimum number of pips required to bear off, 1 through 6.

- 1. As soon as a player has moved all of his pieces into his inner board, he may start bearing off his pieces.
- 2. You can bear off only if you have no pieces outside of your inner board or on the Bar.
- 3. A piece may be borne off a row of the same number as appears on the die.
- 4. A piece may be borne off from the highest occupied row if it requires less than the number on the die to bear off the board.

5. If a number is thrown for an unoccupied row, no piece below can be borne off, for that die, while any piece remains on a higher row.

Scoring

- 1. A **Single** game is won by the first player who bears off all his pieces.
- 2. A **Double** game is called a **Gammon** and is won by the player who has borne off all his pieces before his opponent has removed a piece.
- 3. A *Triple* game is called a **Backgammon** and is won by the player who succeeds in bearing off all his pieces before his opponent has borne off a piece, and still has pieces in the winner's inner board or on the Bar.

Doubling Cube

The doubling cube allows the stakes to be doubled during game play by the player that "owns" the cube, or by either player the first time it is used.

The cube starts in the middle of the board with the side with 64 facing up, being "owned" by neither player.

When either player wishes to double the stakes during game play, he places the side up that doubles the bet and places it on the opponents side of the board. If the double is accepted by the other player then the stakes have been doubled with the other player "owning" the cube, being the only one that can next redouble. If he declines then the game ends immediately with the value of the cube being what it was before the double.

Custom Board Colors

Your can change the board colors by creating a custom color file.

Use a text editor such as NotePad to create a custom color file. Below is an example file.

BORDERCOLOR 25 90 85 BOARDFRAMECOLOR 000 50 100 BOARDFIELDCOLOR 50 130 70 DARKROWCOLOR 0 50 100 LITEROWCOLOR 0 90 160 DARKPIECECOLOR 180 60 60 LITEPIECECOLOR 220 220 000

The numbers are RGB color values(Red Green Blue). They vary from 0 for the least amount of the color to 255 which is the most amount of the color. Some of the most common colors are:

red 255 0 0 green 0 255 0 blue 0 0 255 yellow 255 255 0

The words must be spelled correctly and at least one space between each item.

Save the file with any name you like with a .col extension. e.g. Green.col

If you leave out BORDERCOLOR the border will be marble.

Board Setup

By selecting either the **Setup Board** option or the **Clear Board** option from the **Option menu** you are able to setup any board situation that you want. **Setup Board** leaves the pieces where they were, **Clear Board** puts all of the pieces in the trays.

Board Setup

After selecting either of these options, move the pieces around as you like by picking them up and putting them down on the desired rows.

Pieces can be taken out of the trays by placing the hand (thumb) over any of the pieces, then clicking. A piece can be put back by placing the hand (thumb) over an empty part of the tray.

When you are finished click on **Done**. This takes you to **Cube** selection.

Cube Selection

First select the value of the Cube. It starts at 1. This places the cube in the center as it is at the start of a game. Click on the number to increase the cube value. When the cube value is correct, click on the color of the "owner" of the cube. This takes you to Whose Roll selection.

Whose Roll

Click on the color of the player who moves next.

Choose Dice

You can either select the dice to be rolled or leave it to chance. To select the dice just click on the dice you want. To leave it to chance, click on **No**

Now play as you would in normal game play.

Help Menu

The is a standard Windows Help system. Select "Contents" to read the contents of the help system.

Select "Using Help" for an explanation of the help system.

Registration

This is **not freeware**.

You can use the demo version without registering for as long as you wish.

If you have been given a version of the game that is fully functional you must pay for it if you decide that you like it and plan on using it in the future. Not to pay is illegal, not to mention that you would be stealing from me, David, who spent several years developing this game.

The price for the game is:

\$20 if you already have a registered copy of the game (it lets you finish all of the games) \$20 for the password to your copy of the game. The password makes it a fully functional version. \$25 to have the latest registered version of the game, including the manual, e-mailed to you. \$25+\$3 S&H for the latest registered version, plus the manual, to be mailed to you on a disk. Add \$2 for international orders.

To register select the REGISTRATION menu for instructions on how and to print a form that will help you send in useful information.

If for some reason you can't print out the Registration letter, what I need is:

Name and address

E-mail address (this is very important if you have one. Very helpful if there are problems.)

Platform - whether you have a Windows PC or a Macintosh

Operating System - i.e. Windows 95 or OS 8

Comments - these can be very helpful to improving future versions of the game

If you are ordering the password to your copy of the game, then I will also need the 3 letter ID and the version of the game that you have. You can find them in 3 letter ID under the Registration menu.

Mail your order to:

David Byrum 10767 SE Mather Rd Clackamas, OR 97015 USA

Credit Card Orders

If you wish to order using a credit card then go to my web page at:

http://members.aol.com/WinGammon/backgammon

Credit card orders are \$2 more since they cost me \$4 dollars for each order for processing fees.

Pip Count

The minimum number of pips required to move all of a player's pieces off the board (assuming no blots are hit.) Can be displayed by pressing on the $\bf P$ key or by clicking when the cursor becomes a $\bf P$ when moved over the bottom of the board frame (on the right side).

Rolls Remaining

The approximate number of rolls required to bearoff all of a player's pieces. During the later stages of a running game this gives a more accurate assessment of the game than the Pip Count. Note: this assumes that none of your blots will be hit before bearing off. Can be displayed by pressing on the **R** key or by clicking when the cursor becomes a **R** when moved over the bottom of the board frame (on the right side).

Doubling Advice

When it's your turn it advises if doubling your opponent should be considered. When you are being asked to accept or decline a double from your opponent, advises on whether to accept or decline the double. Can be selected by pressing on the $\bf D$ key or by clicking when the cursor becomes a $\bf D$ when moved over the bottom of the board frame (on the left side).

Whos Winning

Gives a guess of who is ahead in the game. Note that this is not always correct. Can be displayed by pressing on the \mathbf{W} key or by clicking when the cursor becomes a \mathbf{W} when moved across the bottom board frame.

BAR

Clicking on the word BAR in the center of the board is used to accomplish several things:

If a piece is selected it will return it back to where you picked it up from.

Otherwise it will <u>take back</u> moves or a double of the cube or return you to blank dice depending on what you did previous to clicking on BAR.

If you just rolled the dice it will take you back to blank dice.

If you just doubled your opponent, and it was accepted, the double will be undone.

If you just moved one or more pieces but didn't finish all moves it will take them back.

If blank dice are showing it will take back the computers last move and your last move.

Note: when you take back rolls of the dice, the same rolls are used again when you go forward. If you want a different roll of the dice select Input Rolls from the Board menu.