The Intelligent Gambler ™

PUBLISHER'S CORNER
Chuck Weinstock

Welcome to the fourth issue of the *Intelligent Gambler*. In this issue we have the usual articles on poker, blackjack, and craps, and a few surprises as well. We're especially pleased to have an excerpt from Jeffrey Compton's new book on slot clubs, just published by Anthony Curtis' Huntington Press.

As our mailing list grows, printing and mailing the *Intelligent Gambler* is becoming more costly. We're exploring ways of dealing with this problem including turning the *Intelligent Gambler* into a magazine aimed at the thoughtful gambler and containing longer, more in-depth, articles. It would be sold on a subscription basis.

We haven't made any decisions on this, so if you have any thoughts on this or on ways we can make the *Intelligent Gambler* better, please let us hear from you by mail, fax, or telephone.

We invite you to visit ConJelCo on the World Wide Web where we maintain the premiere gambling site full of all sorts of information for the intelligent gambler. Look for us at http://www.conjelco.com. If you don't know how to get on the Web, give us a call and we'll try to point you in the right direction. ♠

The Long Run
Ken Elliott

In many books, articles, and other media you'll see claims about house advantage, or statements that craps can't be beaten, etc. All of these are claims are made for large numbers of rolls, typically called "the long run", as in "If you play craps you'll lose in the long run" or "the house advantage of a straight pass line bet is 1.41% in the long run." But what exactly is "the long run"? I'm sure someone out there has an Uncle Ferd who's been play-

ing craps for a zillion years and is still a lifetime winner; how does that jibe with "the long run" theory?

There are actually two ways to look at this question. The first is "how long will it take until I'm guaranteed to lose (for some initial bankroll/playing system)"; to this question there really is no answer. There is actually *no* guarantee that you will lose (or win!) for a given number of rolls, be that 10 rolls, 1,000 rolls, or 1,000,000 rolls. The only thing that can be "guaranteed" is that the longer you play, the more likely you are to wind up a overall loser. This also suggests the answer to those individuals who say "well, you can't win in the long run, but you can in the short run!" There is no way to *guarantee* that you'll win in the short run any more than you can guarantee you'll win in the long run; however, it's more *likely* that you'll wind up a net winner "in the short run" than it is in the long run (although it's even *more* likely you'll wind up a net loser in the short run than wind up a net winner short run); we'll look at this in more detail shortly.

The second way to look at it is "how many rolls will it take until I've got x% confidence that my expected loss is within plus or minus $y of what's mathematically predicted". The answer to this question is, in my opinion, only interesting to stats geeks or simulator geeks, since answering it will give an indication for when a simulation's results are statistically valid. So let's discuss the first, more interesting, question some more.

Let's say that you want to figure out the likelihood of your winding up a net winner or net loser in craps from the time you start playing to the time your oxygen tank runs out while you're in the middle of that once-in-a-lifetime hand and you keel over just as you seven out. We're going to try to find the answer via (surprise) simulation. To begin, estimate the number of craps sessions you're likely to

play for the rest of your life. Second, you have to decide how you want to model each session. Since you don't play the same way (length of time, starting bankroll, possibly even number of bets) every session, what you'd ideally like to do is set up the simulation so that it models this behavior. This is difficult, however, so it's probably good enough to pick an "average" behavior and just use that as representative for every session.

Once you have these parameters, you can then crank up your simulator and start recording the number of "lifetime winners" and "lifetime losers" there are after that particular number of sessions. You can also record the information needed to calculate the house p.c. (net loss and bet handles for each trial), and do statistical confidence checks on these numbers to ensure accuracy of winner/loser numbers.

So what might be interesting is to look at various player "lifetimes". I've performed simulations for session lengths (a session is one "session" of play at a craps table; from the time you buy in to the time you color up and leave) of 20, 50, 100, 300, and 500 sessions. For example, the 20 session case might represent someone who whet to LV once a year for 10 years (playing craps twice each year), and then got hit by a bus and didn't play anymore. The 500 session case might represent someone who estimates they'll go to LV for twice a year for 25 years, and play 10 craps sessions on each visit (2 * 25 * 10 = 500).

In the simulations, our player estimates that they'll play pass/2 comes for $5 each, full double odds, odds off on the

come-out. Starting bankroll will be $200, and they'll play until they win $100, bust out, or have played for 4 hours (400 rolls). It's important to note that the following numbers are only valid for this particular strategy; in general, the more action you have (especially if you regularly play the props, bet the inside and outside numbers, etc.) the more likely it is you'll wind up a lifetime loser (although some people will argue that if you play conservatively the more likely it is that you'll die of boredom at the craps table).

Although I only ran each for 10,000 trials (this is like the medical studies where they take data on 10,000 people; so we have 10,000 craps players we're keeping track of), the confidence limits for the simulations in most cases were consistent when taken as a percentage of the simulated net loss (this is for you statistical purists out there. What I mean is that if the result final bankroll is, say, $2,000, the confidence limits may be plus or minus $10, which is 0.5% of $2,000. If the final bankroll was $200,000, the same 0.5% confidence limits would be plus or minus $1,000).

Here are results:

# of Sessions	Lifetime Winners	Lifetime Losers
20	4239	5761
50	3940	6060
100	3442	6558
300	2391	7609
500	1814	8186

So, as you'd expect, the longer you play, the less likely it is you'll end up a lifetime winner. Surprisingly (or maybe not), even after playing 500 4-hour sessions (actually, the average was closer to about 2 hours (200 rolls) because of the stop-win/bust-out limit) there's still about an 18% chance that you'll come out a lifetime winner. Ain't craps great?

Other interesting numbers: In the 500 session case, the average amount you'd have wagered would be about $485,500. Of that, you'd have lost an average of about $3,000. However, standard deviation of this loss is also about $3,000, so losing up to $9,000 would not be considered statistically interesting. This doesn't seem like a lot to some of you high rollers, but again the simulations were done based on a $200 session bankroll and unwavering $5 pass/come bets.

On the other hand, if you've got incredible will power or the incredible bad luck

to die after only 20 sessions of craps, you'll have likely to only wagered about $19,500, losing an average of about $130 (with a standard deviation of about $650).

On a final note, Bernie Luger has mathematically calculated the number of rolls that it would take to be 99% sure of being a lifetime loser just betting the pass line, no odds: about 91,000. This means after about 91,000 rolls (if you figure 100 rolls per hour, that's about 910 hours; at 4 hours per session, that's about 230 sessions; if you go to Vegas four times a year and play four sessions per time, that's about 14 years of play!) 99 out of every 100 people will have less money than they started with. However (even more amazing) it's likely that 1 out of every 100 people is a *winner*, and those are the people you'll never convince that craps is negative expectation game!

Ken Elliott is the author of our CrapSim Professional *craps simulator, and* CrapSim Interactive *craps game.* ♠

The Benefit of Slot Clubs
Jeffrey Compton

This article is an excerpt from the new book, the Las Vegas Advisor Guide to Slot Clubs © *1995, by Huntington Press. It appears here with their permission.*

Now for the fun! You've played for a few hours (or days) and it's time to collect your hard-earned reward(s)—cash, dinner for two, or a sweatshirt to die for. First, check your watch. Though the situation is changing, few slot club booths are open 24 hours a day. Many close by midnight or 2 a.m., and do not reopen until 9 the following morning. But even if the booth is open, before you run back to claim what is yours, let's regroup for another strategy session. Remember, the more you know, the farther you'll go. Anyone can cash in points and get whatever the club says they're worth, but knowledgeable slot club members get a great deal more.

Slot club benefits can be divided into two categories: tangible and intangible. Tangible benefits, whether cash, comps, or merchandise, are directly related to your point balance and are issued on a completely objective basis determined by the computer. They are usually spelled out in the club's written material and any employee in the booth can give them to you. Intangible benefits have to be discovered, and to the best combination of detective, diplomat, and behavioral researcher goes the spoils. (Just visualize

the team of Holmes, Kissinger, and Pavlov at a slot machine and you will get the idea.)

Tangible benefits

Getting the most out of the tangible benefits requires information and some entry-level mathematical analysis (i.e., a little arithmetic). Not only do you have to compare casino to casino, you must be able to compare the value of one benefit to another. (Should I redeem my points for cash, a meal comp, or a T-shirt?)

Cash—Though more than 50% of the slot clubs award cash rebates, there are major differences in the bottom-line amounts. For example, for $100 coin-in, the Cal Club at the California rebates 10¢, the Golden Nugget's 24 Karat Club rebates 67¢, and the Celebrity Club at the Desert Inn gives back $1. All for the same $100 in action.

On the surface, it seems that your choice is simple: if you want the highest cash rebate, just compare the percentages and choose the DI. Unfortunately, it's not that cut and dried. Slot clubs seldom publish their cash-rebate percentages, which means you have to compute the figures on your own. You'll need to know two things: the countdown, which is the number of plays required to earn a point, and the number of points required to earn a $1 cash rebate. We discussed how to check the countdown earlier. Finding out how many points earn $1 is usually easier, as most casinos will tell you straight up in their literature or if you ask at the booth.

To get the cash-rebate percentage, divide $1 by the product of the countdown and the number of points required to earn $1. The equation is: $1/(cp)$, where c = countdown and p = points required to earn $1.

Here's an example. At the Golden Nugget you have to run $75 through a $1 slot or video poker machine to earn one point (c = 75). You get $1 cash rebate for every 2 points (p = 2). The cash rebate percentage equation looks like this: $1/(75 \times 2) = 0.0067$ or 0.67%. Which means that for every $100 played at the Golden Nugget you're returned 67¢, assuming you use your slot club card. Thus members of the 24 Karat Club who play a $1 video poker machine 500 times an hour for two hours are $33.50 richer than non-members ($5 per play x 500 hands x 2 hours x 0.0067 rebate percentage).

Let's take a look at what this means. If your game of choice is jacks or better and you're playing a 9/6 machine, your

return without the slot club is 99.5%. If you add a cash-back return percentage of 0.67, you raised the expected return to 100.17%. Now you're *making* money, figuring to earn 17¢ on every $100 you put into action ($99.50 + 67¢ = $100.17). Please remember that perfect play, a large bankroll, and a great deal of time are necessary to make this possible.

When you analyze cash-back returns, take particular note of the dates for double- or triple-point sessions (if the club has them). During bonus periods, a 0.25% return can suddenly become a 0.50% or 0.75% return.

Some sort of minimum point total is required to get your first cash rebate (usually the amount necessary to get back $10). Be sure to go to the booth and redeem your points as soon as you make this requirement or by the end of your trip at the latest.

After checking your photo ID, the slot club booth issues a payment voucher that resembles a check. It is not a check. Payment vouchers can only be redeemed at the casino cashier and there's often a stipulation that redemption be within 24 hours from the time of issue. Treat it as you would any other paycheck and take it directly to the cage. Ask for good old American greenbacks and walk them out the door. Do not use the voucher in the gift shop or restaurants unless you plan to spend the entire amount, because they will not give you change.

Comps/Scrip—Though the situation is changing, free rooms and meals (no cash back) are still the only slot club awards at a surprising number of casinos. Before you do anything else, determine what is being offered, a comp or scrip. A comped meal allows you to go into the casino coffee shop and eat like a sailor on shore leave. Help yourself to an appetizer, an a la carte salad, the most expensive entree, a dessert, and beverages. By yourself, you can run up a $25 tab with very little work. Don't be shy, you've earned it, and it'll only cost you the tip.

Scrip, on the other hand, limits your splurge to a certain dollar amount, maybe enough to cover the meat loaf special and coffee (and you're still responsible for the tip).

A room comp usually includes everything (except long-distance telephone calls and in-room movies). Scrip applied to a room charge only covers a certain dollar amount., leaving you to fund any unpaid difference in the bill, along with the room tax (8% on the Strip, 9% down-town), telephone charges, and other incidentals.

If comps or scrip are the only tangible benefit offered by the club, you should again figure a return percentage. At the Barbary Coast, dinner for two in the coffee shop requires 12,500 points. You need to play about $12,500 to earn 12,500 points (more or less, since the Barbary has a coin-out system). To equal a decent 0.4% return, you will have to consume $50 worth of coffee shop food (50/12,500 - 0.004). Bring a friend!

If the club offers a choice of comps or cash, take the comp only if you really want it and its value is greater than the cash it replaces. At the majority of slot clubs, the comp is indeed worth more. For example, at the Riviera, 200 points will get you either $10 cash, $11 scrip for the coffee shop, or two buffets valued at $14. (An important exception is the Las Vegas Hilton, where scrip is worth less than cash, on the theory that scrip walks out of the casino to be redeemed in the restaurants or gift shops, while a cash rebate will probably go right back into the slot machines.)

A final point on comps. It may be possible to obtain your desired room or free meal without using up club points, so invest your points only after you've exhausted all of the other routes to the comp. ♠

Kelly Plays Poker!
Bernie Luger

It's a late Saturday night. I was playing $3-$6 hi/lo Texas Hold'em Eight or Better at my favorite local card club. I've been playing since about 9:00 p.m., and it's now 4:00 a.m. Sunday morning. Most of my adversaries have gone home to hit the hay, and only a young kid who has never played this game before remains at the table. He's here to gamble, and wants to keep right on playing. I've got $130 in front of me, and I'm sure I've got the best of this deal—I outclass him immensely, especially with my short-handed play experience from hours of IRC poker.

In short, I'm staying until I either fall asleep, he leaves, or one of us runs out of money.

After an hour, I've got $100. The kid has played very poorly and calls pre-flop raises much too easily. He has been getting superior cards for most of the past hour, and I've been forced to fold my button hands with alarming regularity, since bluffing does no good against a player who will not fold. Finally, I think my ship has come in: I look down and find pocket aces on the button! I raise and the kid calls. The flop comes Ah Jh 7c, and I know I'm going to the river with this one. The kid bets and I raise; I do a double take when he re-raises, the first time he's done so in the past hour. What could he possibly have? Probably 77 or JJ, which means I'm in great shape. He could have two hearts, though, which means he has outs to beat me. Two pair is unlikely; he hasn't raised with them yet. I raise again, and he just calls my bet. The turn is the 9s, making the board Ah Jh 7c 9s. As the kid goes to bet, he accidentally drops his cards, and I see his 2h 3h, though I don't think he knew I had seen them. Now I know he's on the flush draw, and he also has all sorts of outs for low. Quickly, I try to calculate his odds here.

Seven hearts get him the whole pot (the 9h and 7h get me the whole pot), and an additional 12 low cards get him half the pot. There are 44 cards left in the deck that are unknown. This means that his expected value is:

$$E(2h\ 3h) = 1 \times 7/44 + 0.5 * 12/44 = 13/44 = 0.30$$

He's a 7:3 dog against me, so I raise. Much to my surprise, he raises me back. I raise again and he raises again. I begin to wonder if I missed something, but I'm quite confident I read his cards correctly.

We start raising back and forth, and I'm still not really sure what made him snap like this. Soon, though, I'm out of chips. The river is the 8h, giving him a flush and a low, and he scoops the pot and I'm out of the game. As I was driving home, I was kicking myself for my play. Even though I had much the best of it, I had a problem: I put in my whole bankroll on one hand that I could lose, and I paid the ultimate price—I was eliminated from the game, with no chance to get my money back.

Questions of how much one should bet in a given situation occur a lot in no-limit poker, and they occur a lot in other casino games which can have positive edges, like blackjack, video poker, and even red dog.

Intelligent gamblers soon realize that even though they have an edge it's often not to their advantage to put all of their money out, no matter what Doyle Brunson says in his book *Super/System*. In 1956, John Kelly developed a theory which predicted the optimal amount of

money to bet in these situations.[1] This has since come to be known as the *Kelly Criterion*. The math is burdensome, but the conclusion is very simple: for bets which have an even money payoff, bet the percent of your bankroll which is equal to the percent advantage that you have. For example, if you're playing a coin flipping game with a friend and the coin is biased to come up heads 51% of the time and tails 49% of the time, you would bet 2% of your bankroll on heads. Betting like this maximizes your profits while minimizing your chances of going broke. It is all one big balancing act.

In the case of my poker fiasco, the situation is a little more complicated since sometimes I win only half the pot and sometimes I get it all. Still, I was a 40% favorite, and the optimal betting size would have been closer to 40% of the chips that I had left, not all of them. I have learned my lesson the hard way, but now you don't have to.

Bernie Luger is a chemist who took up an interest in gaming a few years ago. He specializes in the design and analysis of optimal strategies for casino games. He currently lives in the Bay Area. ♠

7-7
Abdul Jalib M'hall

Basic strategy for multiple decks says to hit until you get hard 17 when you are facing a dealer 10. Players are often surprised to learn that basic strategy for single deck blackjack says to stand on 7-7 versus dealer 10 (while still hitting other 14's and 15 and 16 versus dealer 10).

A computer can provide a proof by exhaustively searching through every possible completion of the hand, but if written on paper this proof would take many more pages than this whole magazine, or a whole book for that matter. A hand-waving argument goes like this: if you have 7-7 versus 10, then by hitting you're not likely to get one of the two remaining 7's for a total of 21, nor is the dealer likely to have a 7 in the hole for a pat 17 that you could easily tie or beat by hitting your 14 and drawing a 3, 4, 5, 6, or 7, so instead just stand on 7-7 and pray that the dealer busts.

But be careful making this play. In *Turning the Tables on Las Vegas*, Ian Anderson points out that your splitting 10's

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1. John R. Kelly was actually a researcher at Bell Labs working on data information rate transfers. The statistical models which he generated for that purpose fortuitously apply to gambling.

tells the floor managers that you're either an idiot or a card counter, and if you're a card counter they can tell pretty quickly that you're not an idiot. Similarly, many floor managers know about this standing on 7-7 versus 10 expert play, and thus making this basic strategy play can cost you more in unwanted attention than the roughly 2% of a bet that it gains. My advice is to go ahead and make the play unless the casino personnel are scrutinizing your play.

I remember one particular occasion when I stood on hard 14 versus 10—I did have 7-7, but the count was so astronomically high that I would have emphatically stood on any hard 14. As the dealer turned over my two 7's, he paused and said, "you're a good player to know that play." I shrugged it off, saying "yeah, a dealer taught it to me." He snapped disgustedly, "Dealers don't know shit!" This was rather amusing, coming from a dealer, though he had been a floor manager at other casinos.

A question arises of what to do on a single deck game when you get 8-6 or 9-5 or T-4 versus dealer 10 and you have also seen two 7's. Should you hit or stand? The answer is, it depends—it depends on how many other cards you have seen.

According to *Theory of Blackjack* by Peter Griffin, the base favorability of standing on hard 14 versus 10 is -6.64%, so that means if you stand with an abstract total of 14 versus 10 with a $100 bet out there, you can expect to lose $6.64 on average. The effect of removal of a 7 from a full deck on the favorability of standing with hard 14 versus 10 is 4.21%. So if one 7 is removed, then the favorability of standing is -6.64% + 4.21% = -2.43%, so you should still hit. You need a little over 1.5 (round up to two) 7's to be removed from a full deck to stand.

If half a deck remains uncounted, then you'd need a little over half that much, or 0.75 (round up to one), *excess* 7's removed, so that means you'd need to see 2.75 (round up to three) 7's, since you'd normally expect to see two 7's in half a deck anyway.

Some additional math (left as an exercise for the reader) produces a more precise answer: to stand on 14 versus 10, you need to see the two 7's in 9 or fewer cards or similarly three 7's in 30 or fewer cards, not counting the dealer's 10 up card.

Just remember the famous hard 14 versus 10 rhyme, which I just made up...

Two in nine, stand and you'll be fine,
Three in thirty, stand or else be dirty,
Red on yellow, kill a fellow.

Actually, the last line is part of the famous venomous coral snake identification rhyme, but it can't hurt to know this, and who knows, it may even save the life of an *Intelligent Gambler* reader playing blackjack on the lower Mississippi.

As a simpler rule, generally if you have hard 14 versus 10 in face down single deck and you see two 7's in hit cards or other player hole cards that round, then you should stand.

Abdul Jalib M'hall is a professional gambler who specializes in blackjack and poker. This is his first Intelligent Gambler *byline.* ♠

The Dangers of Poker Software
Johann Ruegg

Computer simulations of poker can provide a useful practice environment to either learn a new game or tune up parts of your game that you are having trouble with. However, there are dangers in overuse of poker software. Too much practice with computer programs and not enough real live game experience can lead to certain bad habits if you are not careful.

Impatience: Many programs play at a higher speed than live games. This can lead to impatience when faced with the delays of a real game. Impatience can lead to frustration and playing too many hands. In *Sozobon Poker*, we tried to let you set the pace of the game to match a live game as much as possible. But even here, we did not insert a big delay for the cards to be shuffled or the periodic delays for a setup change. If you get too used to a steady pace of play from the computer, certain players that take a long time to decide what to do will be more annoying than before.

Predictability: Real live players are much more diverse than any computer poker program. If you play against one program long enough, you start to be able to predict exactly how your opponents will react in various situations. Your ability to read your opponents becomes almost uncanny.

Unfortunately, while some live players are predictable, many are not. You will have trouble in a live game if you start to assume that the other players must have certain cards. *Sozobon Poker* uses a more random strategy algorithm than some other poker programs to help make its players more unpredictable. But even

here you have to be careful because we did not put in certain types of really bad players. You should not assume that at a live game the other players are not crazy. The program never misreads its cards, but the most effective bluff in a live game is when the player mistakenly thinks he has a great hand.

Mixing it up: A similar problem can occur if you get used to not mixing up your play. In a live hold'em game, I like to play Ax suited in part because otherwise a smart opponent can assume I don't have any low card. When rags flop, they can use that knowledge to bluff more. I know of no poker programs that will notice you never have a deuce or trey in your hand. So you don't need to mix up your play against a program like you do need to in a live game against smart players. *Sozobon Poker* tries to keep track of its idea of whether you are tight or loose, but it does not try to remember how you handle specific situations.

Table conditions: If you are playing against a computer program, you may not even think of changing tables. You are at your computer—there is no table to change to. In real life, it can be critical to choose a beatable table. In Colorado, we have the disadvantage that the maximum bet is $5, so even the best players in the state play at the lowest limit. Fortunately, gambling is limited to two small areas and all casinos are close to each other. It is easy to go to another nearby casino if your game is too tough. In Las Vegas or Reno, you may need to go a longer distance to find a better game, but it is still often better to invest some time finding a soft game than trying to beat a bunch of solid locals.

Sozobon Poker and Wilson Software's *Turbo Texas Hold'em* both have options of periodically changing players. In *Sozobon Poker*, we replace players who go broke so there is a tendency for the table to get tougher the longer you play—just like real life.

The best advice for using computer poker programs may be to just not play them too much. They can be very addicting and you never run out of money! Try to get out of the house and do something healthy periodically—like playing for real.

Johann Ruegg is the co-author, with Tony Andrews, of our Sozobon Poker for Windows. *This is his first* Intelligent Gambler *by-line.* ♠

Professional Sic Bo
Stanford Wong

For one day in October 1994, Sic Bo was the most exciting game in any casino anywhere. On October 25 I published a special issue of my newsletter, *Current Blackjack News*, explaining how to beat the game. Flat $100 bets had the expectation of winning $1500 per hour. Ten of the people who received my newsletter by fax became professional sic bo players overnight. That made October 26 an exciting day for sic bo. Here are the details.

October 25: This is the content of the special issue of Current Blackjack News dated 25 October 1994:

A professional sic bo player reveals his secret two-step approach for getting an edge at the game. Mississippi reporter Blair Guthrie has verified that the method works.

The two steps to sic bo success are:

1 Go to the Grand casino in Biloxi.
2 Bet on 4 and 17.

Sic bo is a game played with three dice, and customers can bet on the various number combinations. Normally the casino has an edge on every possible bet. An exception is bets on 4 and 17 at the Grand in Biloxi. Of the 6 x 6 x 6 or 216 permutations of three dice, there are three ways to make 4 and three ways to make 17. If there were no house edge, the payoff would be 71:1 on those two bets. The Grand pays 80:1. That is a 12.5% customer edge. You ought to get at least 60 games an hour. The maximum bet is $100.

If you bet $25 on 4 and $25 on 17 on each game, you will win $1975 an average of twice per 72 games. You will lose $50 on each of the other 70 out of 72 games. That is a average net win of $450 per 72 games, which is just over an hour of sic bo.

I was not kidding about there being a professional sic bo player. I am sending him a year of *Current Blackjack News* to thank him for sharing his secret with us.

Sic bo is risky. You can easily go for long stretches without winning a bet, and with twin $25 bets you will lose $3000 or more an hour during those unlucky stretches.

October 26: The table opened at eleven. A couple of professional sic bo players arrived before 4 pm, but most arrived in the early evening. That probably reflects airline schedules rather than a preference for avoiding daytime sic bo. The players flew in from around the country, with several coming from Las Vegas. One fellow received his newsletter by fax in Minnesota, hopped into his car, and drove for seventeen hours to reach the casino.

By late evening all the chairs were taken, and new arrivals had to stand. Anyone could have played—you too could have gotten in on the giveaway had you been there. Long arms would have helped; those standing to make their bets had to reach over or between seated players. One sic bo pro arrived at midnight to find no empty seats at the table. He could have stood and reached in to make his bets, but he wanted to sit down. Fortunately for him, one customer was happy to sell his seat for $40. The purchaser went on to win $8,000 in the next three hours.

One late arrival was so happy to find the game still open and the 80:1 payoffs still being made that he simply stood there enjoying the scene instead of hurrying to get his first bets down. He was intending to bet $75 per number, but the first game proceeded without him having a bet on it. The result on that game: The dice totaled 4, so being slow in getting his first bet down cost him $5925. After that he made $75 bets for a while, and dropped back to $50 bets after a series of losses made him fear going bust. Every time he won he went back up to $75 bets for a while, and then dropped down to $50 bets. He lost all his $75 bets; all of his wins came with $50 bets. He ended up winning $2000, but would have been up much more had he been quicker getting his first bet down because then all his winners would have been on $75 bets.

Several players were betting the $100 max, but most were betting quarters ($25 chips). There were so many bets on the 4 and 17 that the chips overflowed the appropriate spaces on the layout. Bets in the areas around those two betting spots were understood by all to mean bets on those numbers.

Each time the dice totaled 4 or 17, a great cheer went up from the sic bo table. If you happened to be in the Grand at that time, you heard all the sic bo players and some of the floormen simultaneously shouting "Show time!" By late evening,

each time one of those numbers rolled, the casino paid out almost $50,000. Payoffs were slow. The dealer would say "I'm going to pay this $25 bet now," count out $2000, and then say, "Whose is this?" Someone would raise his hand and receive the payoff. There were no arguments; professional sic bo players are honorable people.

The players helped each other place bets too. One player at each end of the table acted as captain in charge of a betting square. (In sic bo, unlike roulette, all players use the same chips. If several people are betting the same amounts on the same numbers game after game, and on one game one player forgets to make the bet, if that number wins an argument might ensue.) The captains made sure that each player got his bet down each game. All the players were interested in keeping the game moving as quickly as possible.

The casino was unlucky. Numbers 4 and 17 each are expected to come up once per 72 games, but any given set of games can have too few or too many winners. On October 26 at the Grand in Biloxi, these two numbers came up more often than once per 72 games. Once the number 17 even came up on back to back games! The frequency with which these numbers won, combined with the large amounts being wagered on them, had the casino bosses concerned. By the end of the evening there were no less than seven supervisors in suits and ties observing the game and wondering why the casino was losing.

Normally the pace of sic bo is 60 to 75 games per hour. However, when 4 or 17 hit, it took the dealer up to fifteen minutes to pay all the winning bets. After midnight the 4 and 17 hit about twice as often as expected, slowing the pace of the game to less than 30 games per hour.

The casino was losing, so several times more chips had to be brought to the table. A fill, as the procedure is called, was welcomed by the players as a chance to use the rest room without missing any betting opportunities.

The game closed at 3 am, its normal closing time, with the sic bo players being way, way ahead of the casino. I do not know the exact amount the players won, but a Grand casino insider estimates $180,000.

Besides lining up at the cashier, the players lined up at the rest room and restaurant. Minor bodily needs tend to be ignored when the cost of satisfying them

is high. As soon as the game closed, such needs became urgent.

October 27: The game was supposed to reopen at 11 am. The sic bo pros started drifting in around 10 am so as to be able to jump right in as soon as the game opened. Also coming in at 10: a team of possibly as many as a dozen casino employees to examine everything about the game. They took the dice shaker apart to examine it. They carefully examined the dice. They checked the electrical circuitry of the table to be sure that only winning numbers lit up. They seemed completely puzzled as to how the casino could have lost so much money the previous day.

At 11 am a dealer came to the sic bo game, and the chip tray was unlocked. Two minutes later the tray was locked up and the dealer disappeared. The would-be sic bo players asked what was happening, and were told that the opening was being delayed. The people who were waiting wanted very much for the table to open so that they could play some more sic bo. But they also enjoyed the fact that they had a 12.5% edge over the casino, and the casino had no inkling of what was going on.

At 1 pm a boss came over and said "I know you boys are waiting for game to open, but we are not opening it today." The players were not happy to hear that the game would remain closed, but they were impressed by the boss's graciousness.

Later the sic bo pros noticed a casino executive with a copy of my newsletter explaining how to beat the game. So it appeared that the casino finally knew why the players won at sic bo the previous day.

The sic bo table did not reopen that day, or the next day either. Apparently the casino folks rethought the wisdom of paying 80:1 for combinations that are expected to occur once in 72 games. The table remained closed until the casino obtained a new layout that promised only 60:1 on totals of 4 and 17, giving the casino a 15.3% edge on those bets.

Stanford Wong needs no introduction to our readers. His Professional Blackjack *and other titles are some of the best books on gambling available today.* ♠

Not Everybody Wants To Gamble
Lee Jones

So, this past weekend, I was in Las Vegas, away from my normal California

raise-with-a-runner-runner-draw-to-the-second-nuts games. I sat down in a $1-4-4-8 hold'em game (mostly as a favor to a friend, but that's another story). With the bring-in just $1, and 7-8 people seeing every flop (we were 11-handed), I decided I could (or would, anyway) try to see the flop with a *lot* of hands.

Which is how I got to see J7s turn into bottom two pair when the flop came Q-J-7, rainbow. The biggest fish at the table had been pointed out to me. He had just discovered the wonders of hold'em, had plenty of money, and was ready to spend a bunch of it learning the game.

Well, that flop hits, and he fires. In California, that normally would mean that he has a queen. Or a jack. Or T8, or a 7. You get the idea. So, I give him enormous credit and put him on a queen. Maybe even a *good* queen. Of course, there's a few calls to me (he's only bet $2 of the potential $4) and I pop it to $6. He thinks, and reluctantly calls. The other players all drop.

The turn is a complete and utter blank. He checks, and since I haven't seen a single check-raise in this game (excepting those that *I* put in), I bet. He calls but he doesn't like it.

The river is another beautiful jack, filling my hand. Now he bets again ("!", as they say in the chess magazines). Hey—he had a *jack*. Maybe KJ? I raise. He reraises. OK, it's AJ. I make it four bets. He thinks and thinks and shakes his head, and calls, sure he's beat. I show down that monster, and he turns over QJ, looking astonished.

Wow, nice hand, sir.

He says, "When you raised on the flop, I figured you had three queens."

The moral, ladies and gentlemen, is to know your players. In many wild and crazy California games, you could have happily gone 6-7 bets with the jacks full of 7's. This gentleman saw the very worst kind of monsters under his bed, and unwittingly led me down the garden path.

Lee Jones is, of course, the author of Winning Low-Limit Hold'em, *and a regular contributor to these pages.* ♠

A Day as a Lion
Mike Zimmers

I was in Las Vegas, AKA the City of Sins, during the week of October 2nd, to participate in the inaugural Rick Pitino Invitational golf tournament. This tournament was jointly hosted by Rick

Pitino, the basketball coach at the University of Kentucky, and Binion's Horseshoe Hotel and Casino. I first heard of this event at BARGE last August, and needed an excuse to get out to Vegas, so I called my casino hostess at the Horseshoe to get more information. She told me that the tournament was open to all of the Horseshoe's high rollers, but I was welcome anyway. She did caution me that I'd be traveling in some rather fast company, but that seemed like an easy way to add another chapter to *KidZee Gets In Over His Head* so I took the plunge and sent in my registration.

I arrived in town Monday afternoon and was picked up by a Horseshoe limo, driven by one of their security guards. (It's pretty cool when your chauffeur carries a sidearm!) After checking into the hotel, I scouted out the poker games at the Horseshoe, but the lists were huge, so I took a cab to the Mirage. I got seated almost immediately in a 10-20 game, and just as quickly wondered if I had made a mistake: the game seemed extremely tough and aggressive. I managed to hold my own for about an hour of this until the game softened up considerably, then posted a nice win of about 16 big bets over a three-hour session.

Tuesday was the practice round for the golf tournament. All of the players were taken to the course by a Horseshoe bus. As I hadn't met any of these guys yet, I mostly just eavesdropped on their conversations, which centered around their pastimes, like breeding racehorses or developing the adjoining county. So this is how the other half does it.

The tournament was held at Angel Park Golf Club. This is a 45-hole facility bearing Arnold Palmer's name. From all but the championship tees, it's quite short and tame, though there are some interesting holes. The courses are set into the natural Nevada desert, which can result in some rather challenging lies if one strays from the manicured grass. (My sand iron is sporting some new gouges in its flange from a few unintended excursions into the native terrain.)

On the course I met three of the other players who I'd be joining for the practice round. They were really great guys, but I began to gain an appreciation for what I had talked myself into when they started to negotiate the wager for the golf game:

"So Bill, what kind of bet you want today?"

"Aw, nothing big—how about $100 per man?"
"OK by me. Automatic presses, right?"
"Of course!"

Gulp. Nice work, Mike. You've not only gotten yourself thrown in with a group of people who probably belong to at least one country club and have all kinds of time to hone their games, but their idea of flea-bets is your idea of a buy-in for a session of poker. Toss in the fact that I haven't swung a stick in about six weeks, and this is shaping up to be a downright interesting few days.

One nice thing about putting large chunks of your bankroll on the line is that it keeps your attention from wandering. I'll spare you the details of the game that afternoon, but suffice it to say that I played about as well as I could given the circumstances, and prevented any serious flow of funds from California to Kentucky. Just as I was starting to feel relaxed again, towards the end of the round, one of the guys in our foursome (a former NFL football player and current Philadelphia celebrity) observed that the original plan for a player auction for the golf tournament didn't make much sense, as most of the players didn't know one another. As I was beginning to agree with this logic, another player piped up, "OK—what say we just all pony up $1000 a man and play for that?"

I wanted to run away, or pee in my pants, or both, but I reminded myself that rubbing shoulders with these boys was my smart-ass idea, and so I'd just have to bear up to their juice. Anyway, the idea was presented to the tournament organizers, and accepted, but with a reduced purse of $500 per player, for which I was hugely grateful.

After the practice round, I headed to the Mirage again. At this point, poker had become the way for me to afford my week of golf, so I was determined to play as well as possible. Fortunately, this evening the game was quite soft, so I had little trouble beating it for a win similar to the night before. I now had paid for my golf wager —whew! This life in the fast lane stuff left a little to be desired.

With so much prize money at stake, it was really easy to stay focused on golf Wednesday. My partner and I battled the elements (including 40 MPH winds) to a fourth-place tie at the half-way point of the tournament, and I was highly confident we could move up the next day. I

was even getting a little, shall we say, smug about our chances.

Wednesday night was my best at the Mirage 10-20 game. My big hand of the night was flopping a set of 10s against rockets, then filling up on the river to beat a just-made nut flush. This pot alone was probably $300 and contributed to a $450+ win that evening. Things were looking solid.

Thursday I arrived at the golf course brimming with confidence over how I'd shoot the round of a lifetime and whip the butts of these rich boys. Sad to say, it wasn't to be—on the first hole, after hitting a 260 yard drive and lacing a 9-iron to 25 feet, I promptly three-jacked and set the tone for a day of failing to capitalize on opportunities. Despite a solid effort by my partner, we finished out of the money by a mere two strokes. After the awards banquet that night, I sat alone smoking a cigar for awhile and tried to turn my disappointment into a learning experience. I arrived at two conclusions:

- in golf, as in poker and in life itself, all it takes is that little bit of extra effort to do one's best, in order to produce superior achievements. Sadly, I came up short today, by blowing many chances that would have put us well into the money, but I resolved to keep this realization at the front of my mind in future competitive events.

- in a way, I had sort of slighted my competition by telling myself how easy it would be to beat them. Confidence is a good thing, but I had crossed the line from confidence in myself, into disrespect for my opponents. This is never good, and may well have been my mental undoing when I didn't see my opponents folding like a house of cards. The key, I now believe, is to respect the abilities of my opponents, though I will still refuse to be intimidated by them.

On Friday, I checked out of my hotel, thanked my hosts for a lovely week and headed for the airport. On the flight home, I reflected on how good it felt to leave Vegas with more money than I came with, and wondered whether I'd ever learn to look before I leap in over my head. I doubt I ever will, but as has been said before, "better a day as a lion than a lifetime as a lamb." I suppose this applies to wannabe lions like me as well.

Mike Zimmers is a computer consultant in the San Francisco Bay Area, and regularly plays there and in Las Vegas. ♠