

Audit Report for Betstand August 2007

Auditing Basis

Punters-Paradise.com, being the “thinking mans’ betting forum”, was approached by Betstand to provide an independent audit of the Betstand results with regard to estimating future profitability and risk.

The results presented herein, apply purely to the data as presented, and may only be used for the term of this agreement (being to the end of the calendar month of September 2007). Any production, summary, replication or other use of these results, in whole or part, is strictly prohibited without the prior agreement of Punters-Paradise.com.

It is the understanding of Punters-Paradise that the figures as presented are truthful and accurate, and verified and verifiable elsewhere, and all conclusions drawn are predicated on that assumption. Punters-Paradise accepts no liability for any inaccuracy in the raw figures.

Data Presented for auditing

There were 133 bets (exclusive of voided bets) at average odds of 1.77 (maximum odds were 4.2 and 2.12, while minimum odds were 1.45 and 1.51). A strike rate of 63.9% resulted in a yield of 11.8%. The average stake was 5.73 units (maximum stakes 10 units, and minimum stake of 2 units – 2 bets each – while the remaining bets were at stakes of 4-8 units, with the majority being 5 to 7 units).

Basis of Examination

1. The betting record was examined for evidence of a correlation between perceived edge (as calculated from the given stakes and odds) and success rate. The purpose of this examination was to see whether the success rate of bets increased with perceived edge.
2. Confidence levels were established, based on the ‘null hypothesis’ that the results were the result of good fortune – i.e. that a fortuitous sequence of results led to the profit generated, and that the underlying profitability was negative and equal to the ‘overround’ of the market. Statistical tests were used to determine a confidence level at which this null hypothesis could be rejected.
3. Confidence limits were established based on the measured edge and number of bets. The purpose of these tests was to determine a minimum edge at various confidence levels – e.g. to be 95% confident that the actual underlying yield is X% or greater. These will in a sense represent the worst case scenario, where the future betting is based on an ‘over-optimistic’ estimation of the true edge.
4. The odds of the various bets were examined to ascertain how they varied about the average odds taken
5. Based on the findings in (2) a random sequence of hypothetical ‘future bets’ was generated. This sequence was 500 bets in length
6. Monte-Carlo simulations were made using the sequence of bets for each combination of the following scenarios (30 in total). The bank total was kept for each scenario and the final bank recorded 1000 times for each scenario. Each of

these thousand simulations used a sequence of uniform random numbers to determine whether each bet won or lost. Within each of the 1000 simulation runs, the same win-loss record on any individual bet was used for each scenario. A betting bank which reached zero (or less than 0.01 units from the original 100 units) was deemed defunct for the remainder of that individual simulation run and scenario, i.e. it was not possible to 'recover' – just as in real life, when a betting bank is exhausted, all betting stops. The 30 scenarios were:

- a. Given strike rate, 95% confidence strike rate (determined in 3 above), 90% confidence strike rate
- b. Fixed stakes, fixed profits and kelly staking strategies
- c. Future bet sequences of 50 bets, 200 bets and 500 bets
- d. Stake levels varied by
 - i. Equal, double and half of original level for fixed stakes
 - ii. Fixed profit to risk approximately the same average stakes as in original scenario. Double this level and half this level, also at fixed profits
 - iii. Full Kelly, Half Kelly, 1/3 Kelly and quarter-kelly stakes

Presentation of Results

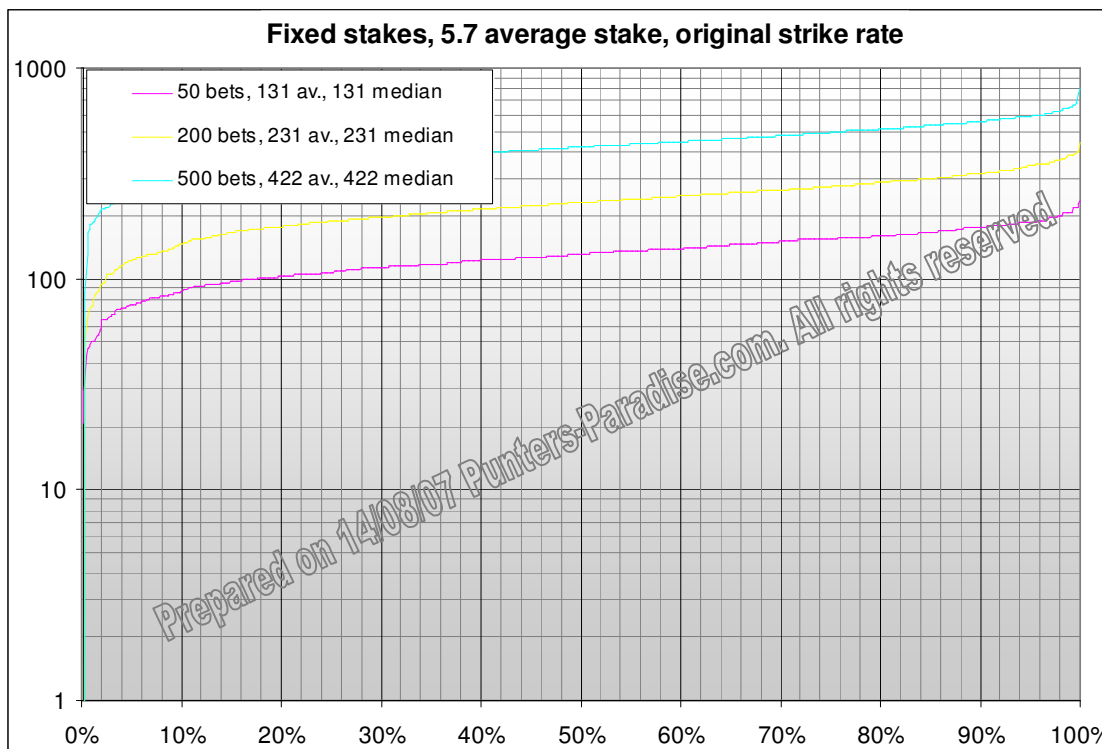
The results of the audit are presented in two separate ways. Short conclusions are stated first, followed by a series of graphs covering all the scenarios simulated. The following should be understood when considering any of these graphs:

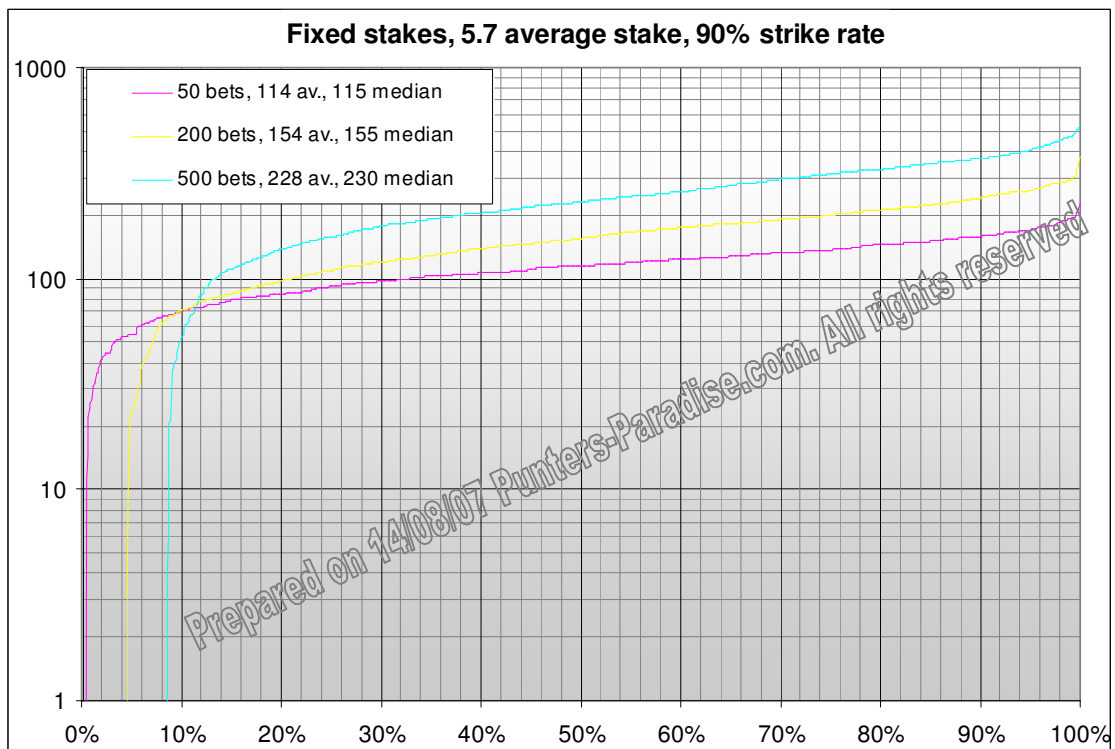
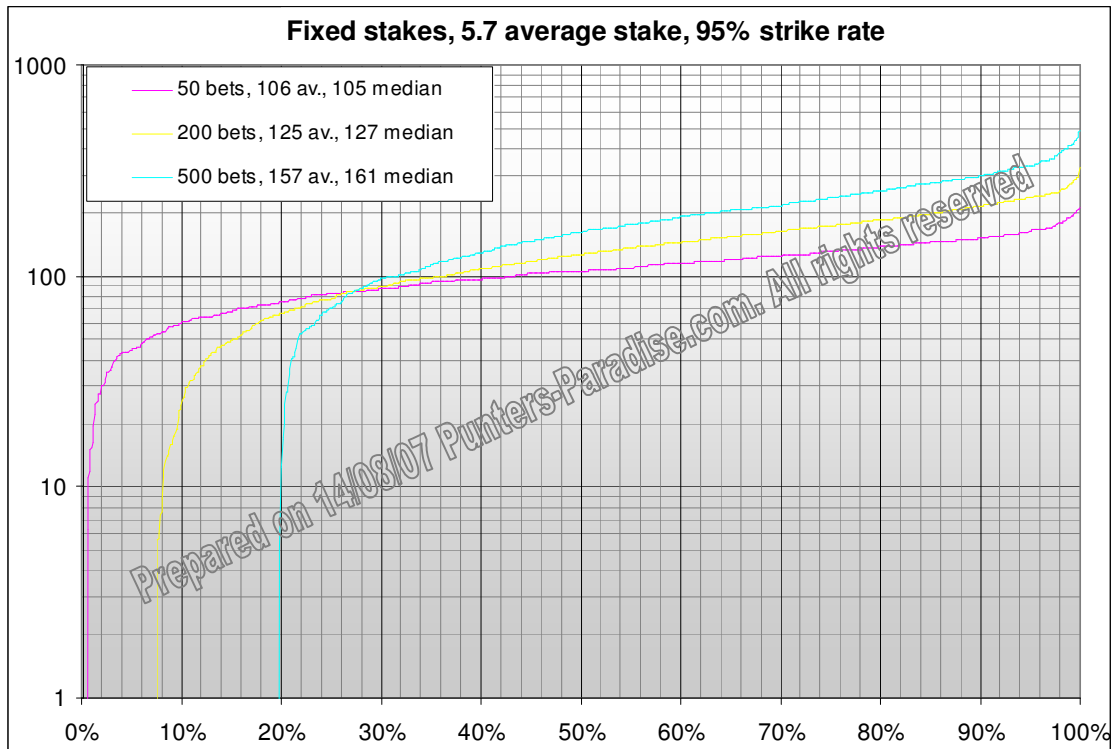
- Each graph shows the final level of betting bank for each of the three different betting runs (50, 200 and 500 bets).
- The average and median figures for end bank for each sequence (50,200 & 500) are shown in the legend.
- The x-axis shows the percentage of the 1000 simulations that have ended in a bank of this amount or lower.
- The y-axis (which uses a logarithmic scale!) shows the final level of bank. The logarithmic scale means that values at the high end (i.e. large final levels of bank) are relatively compressed, and small levels of final bank are relatively magnified. As logarithmic scales cannot go to zero, a cut-off point of 1 (starting betting bank being 100 units in all cases) was chosen. For practical purposes it can be assumed that this is zero – and in actual fact will be for the majority of cases.

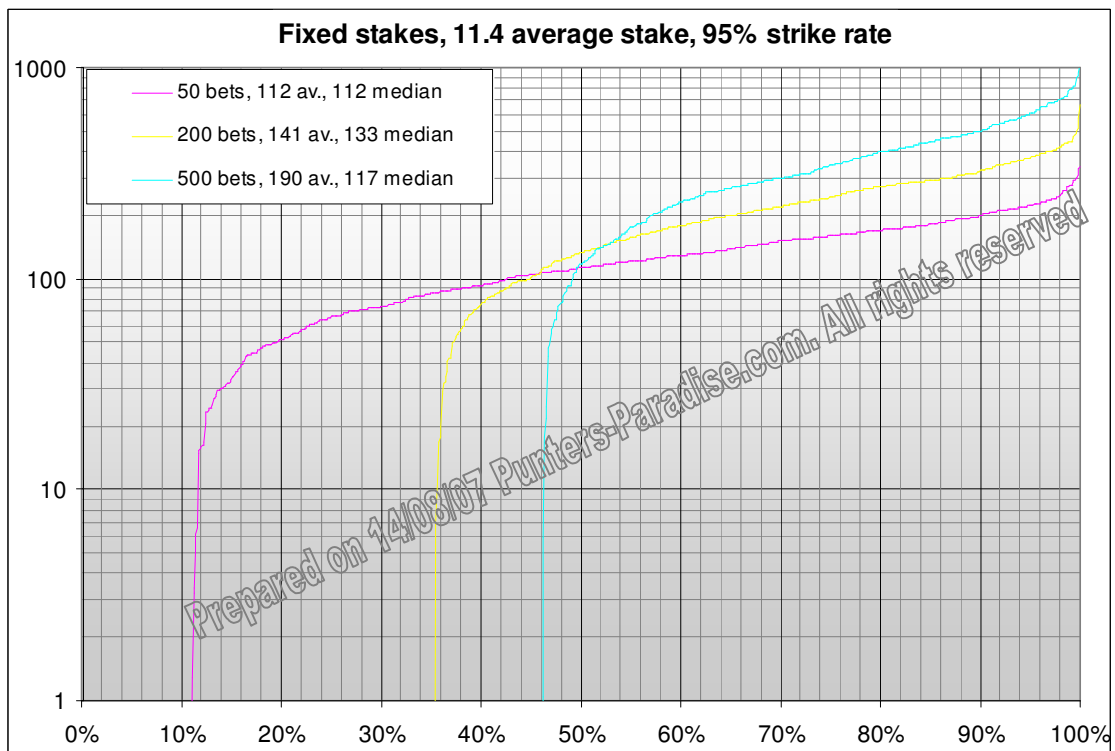
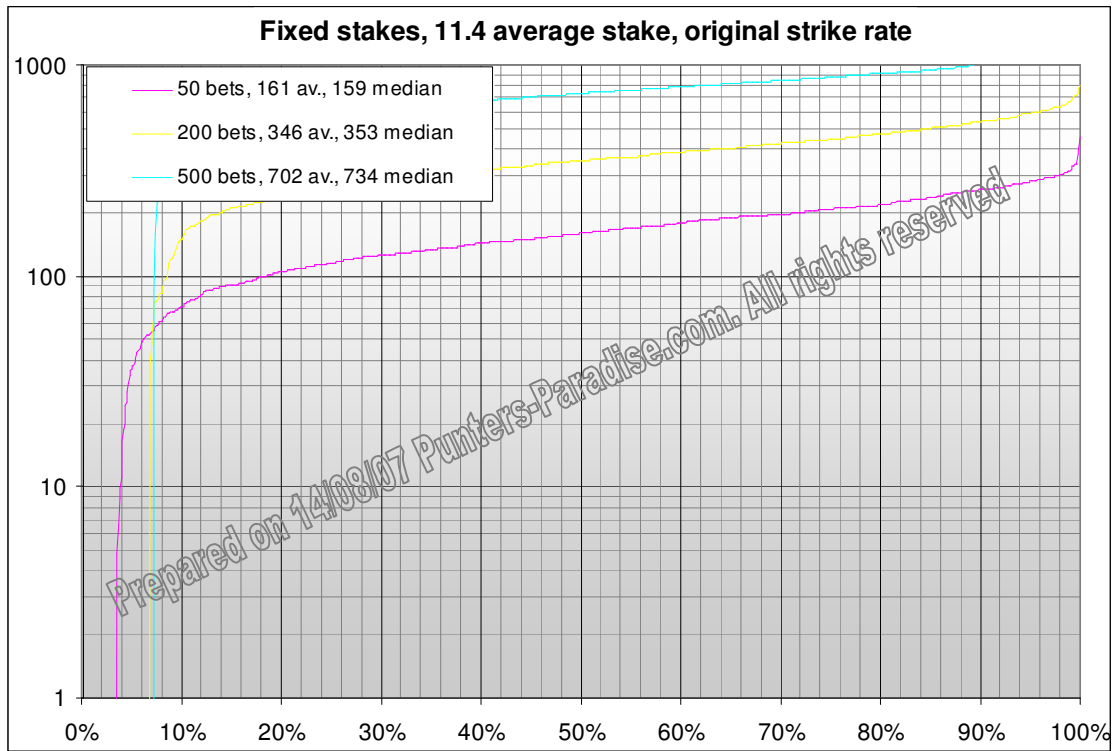
Results

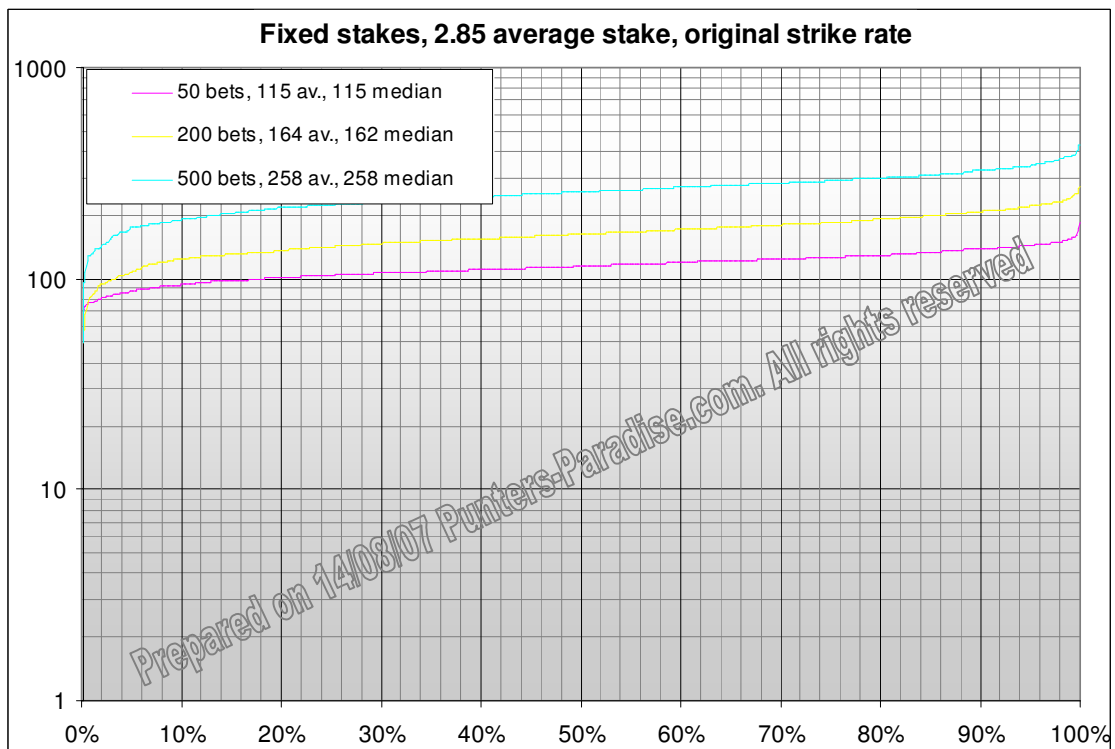
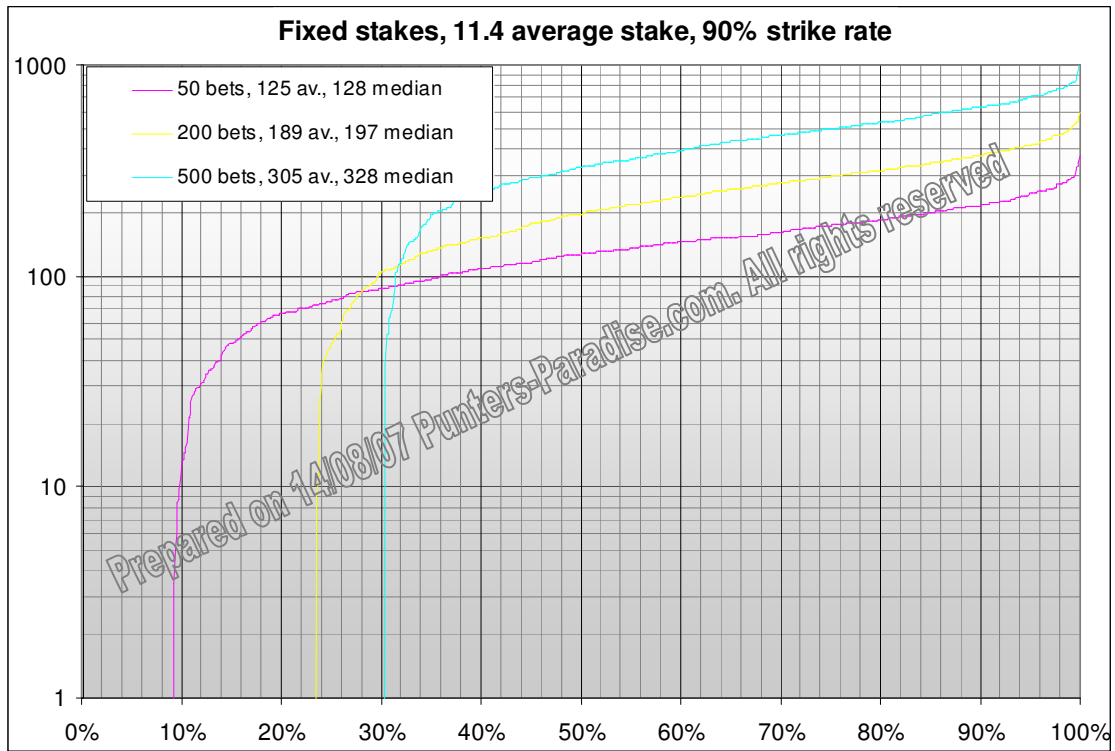
The numbers here refer to the basis of examination earlier in the report.

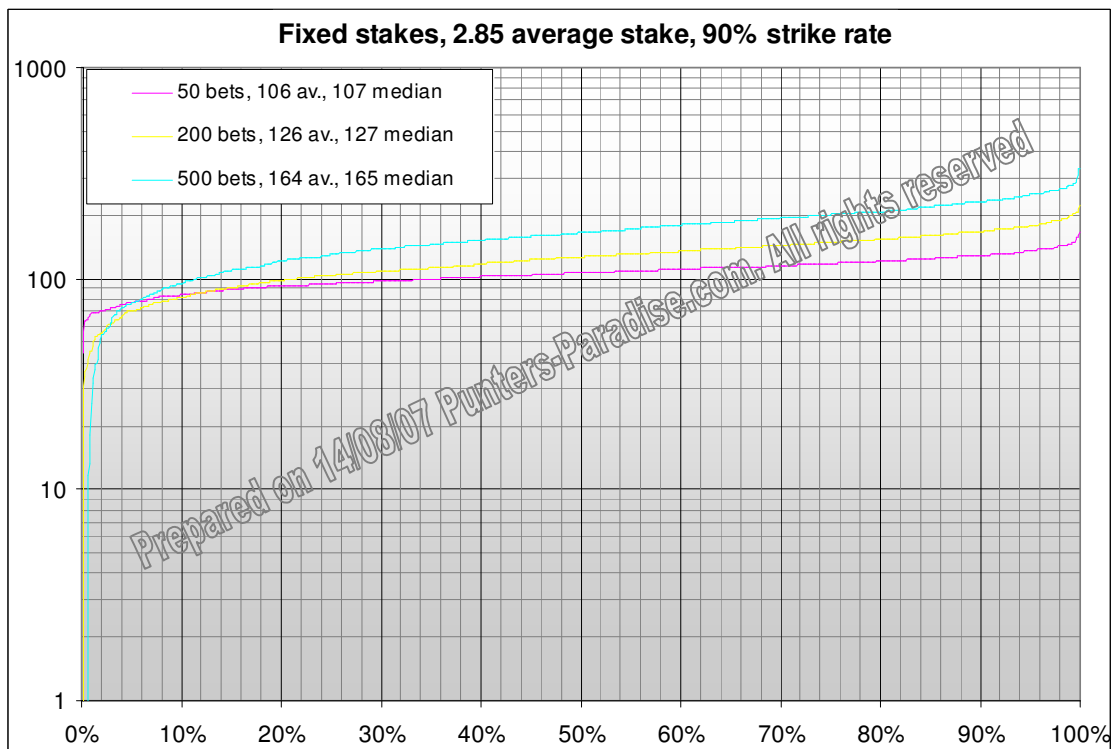
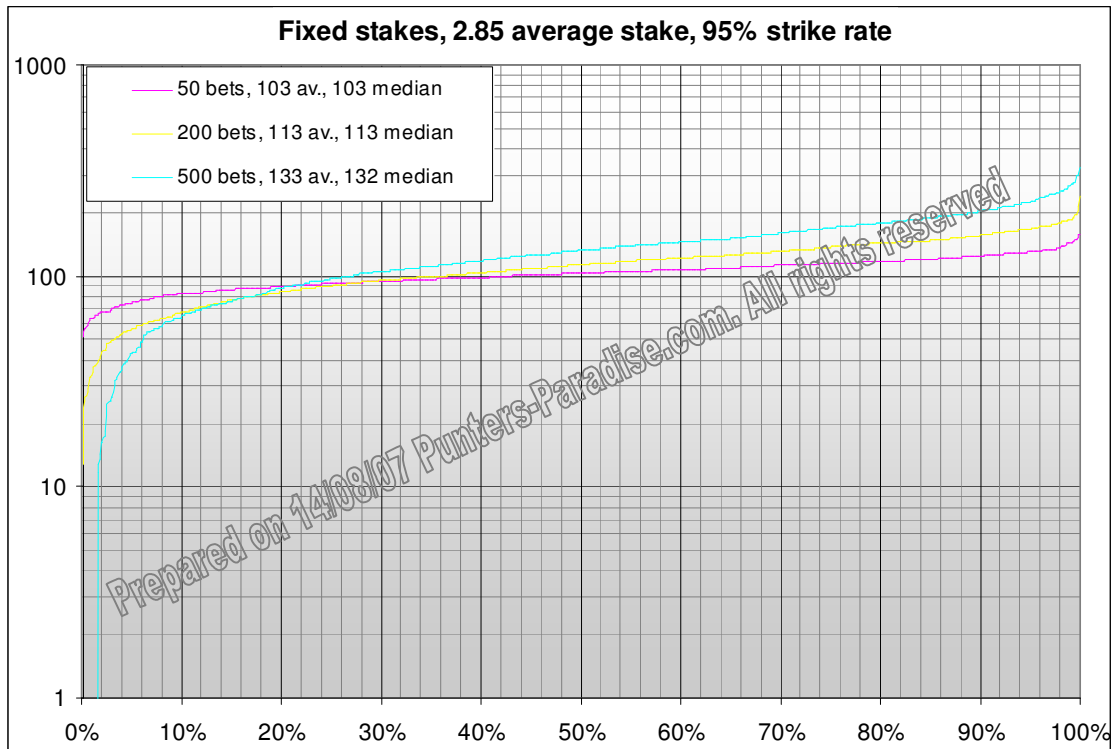
1. Nothing unusual was found, with any variations largely attributable to the relatively small sample size. The conclusion therefore is that the staking has largely followed the perceived edge – when the perceived edge is bigger more is staked and when the perceived edge is smaller, less is staked.
2. The null hypothesis was rejected (i.e. it can be stated that the underlying profitability is greater than that achieved by random selection) at the following confidence levels (market overround in brackets): - 94.7% (0% overround), 97.0% (2%), 98.8% (5%), 99.8% (10%).
3. It was determined that the underlying yield was at least 4.8% (90% certainty), 2.2% (95%) or -3.1% (99%)
4. The odds were found to vary in an approximately normal manner about the mean. The small sample size makes further conclusions inappropriate.
5. No comment required
6. See graphs

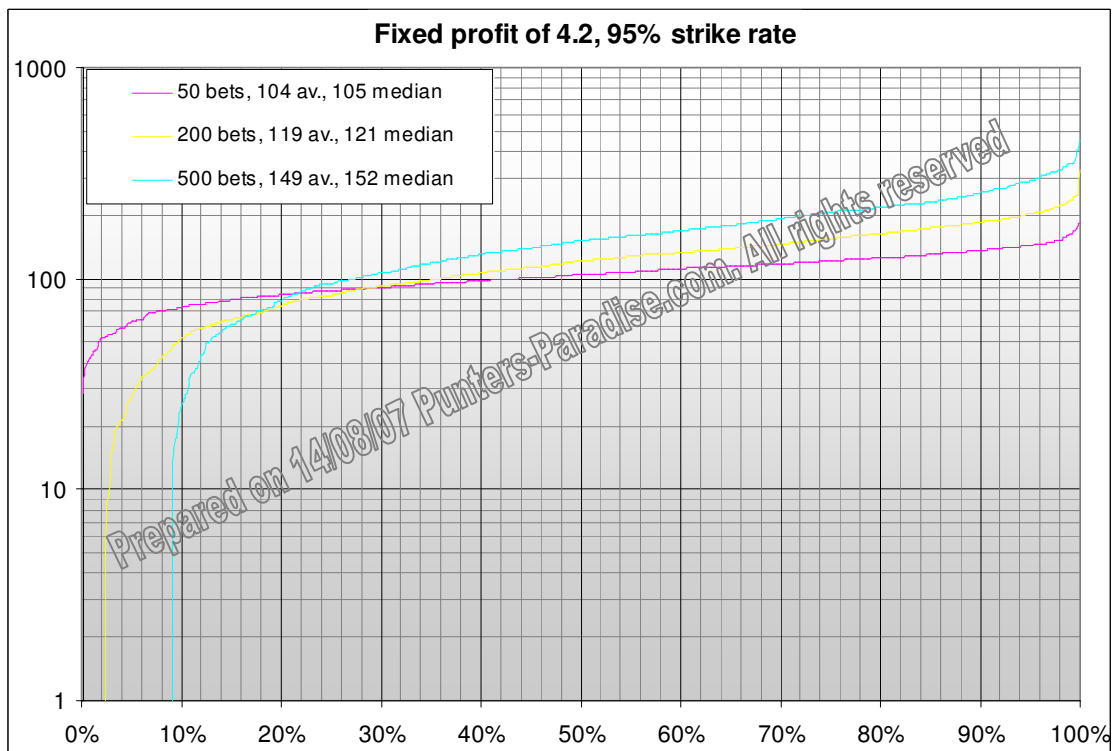
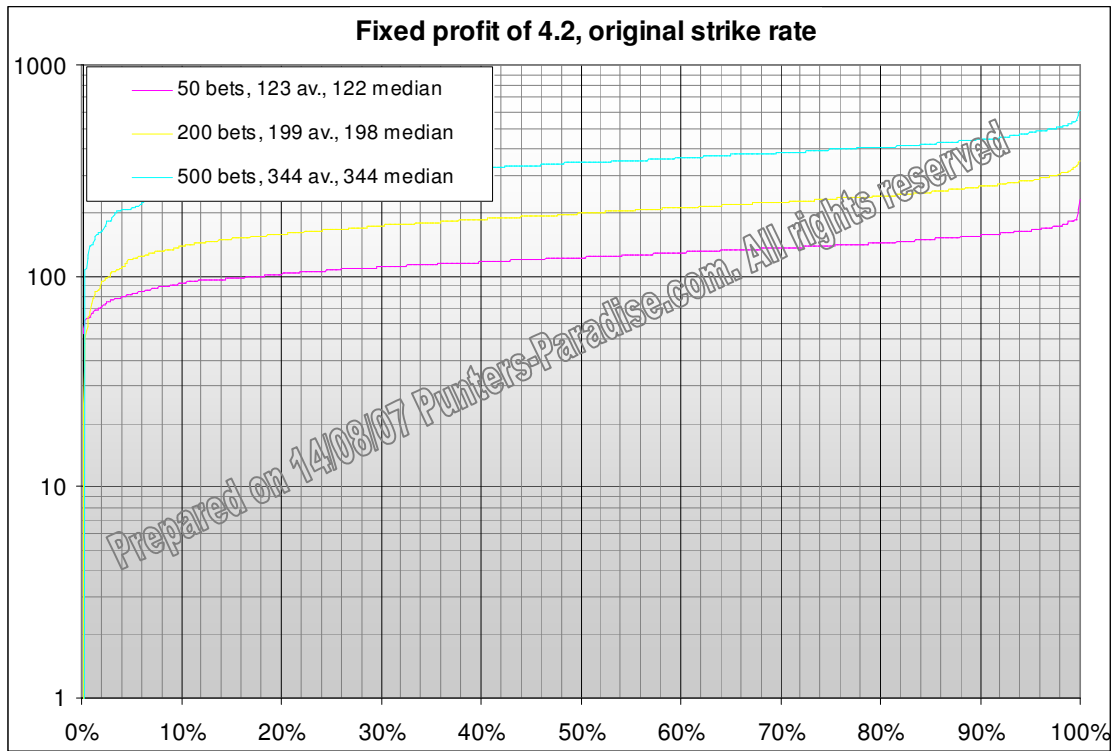


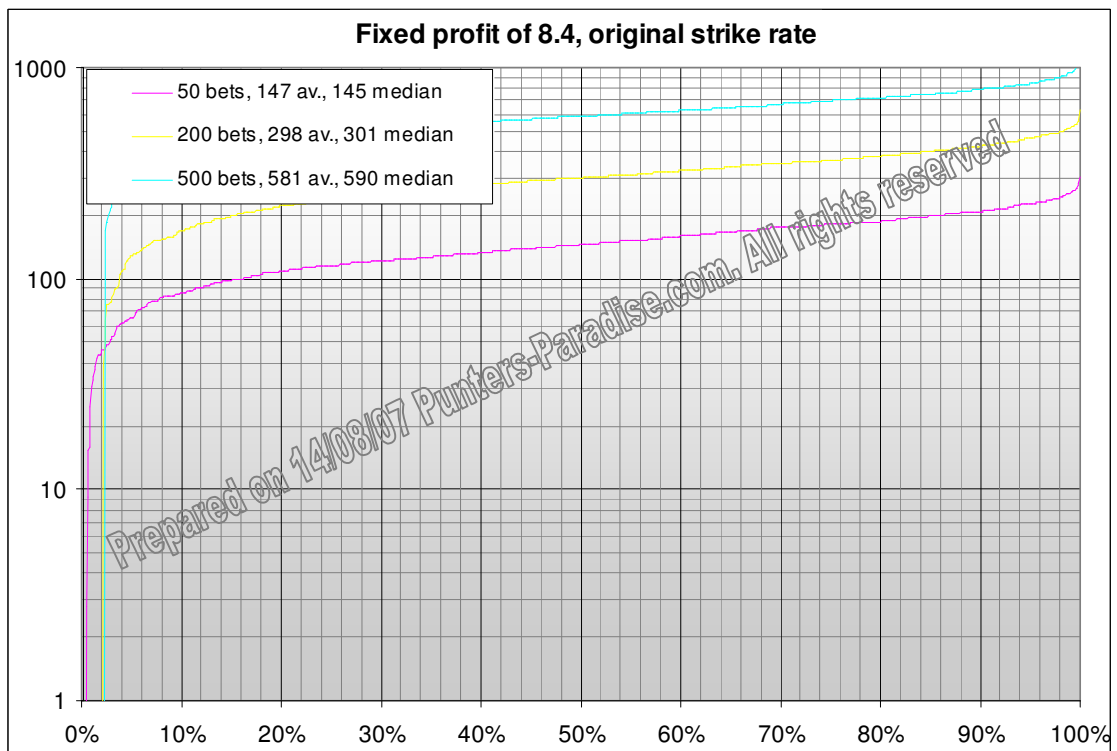
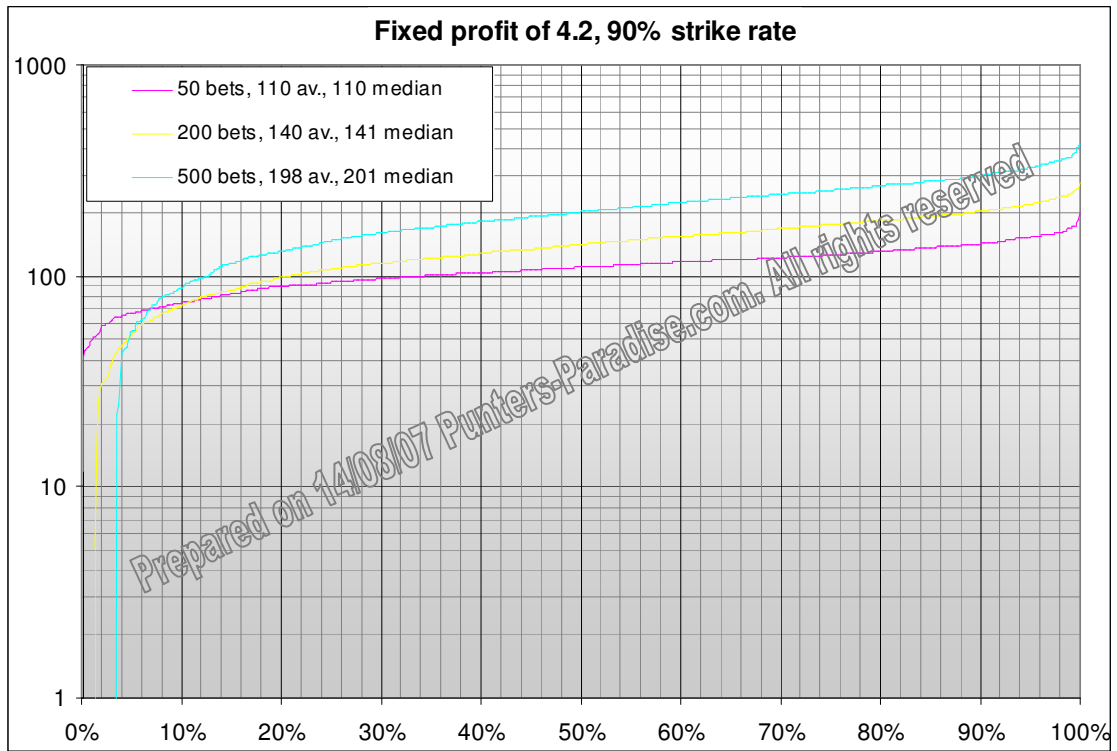


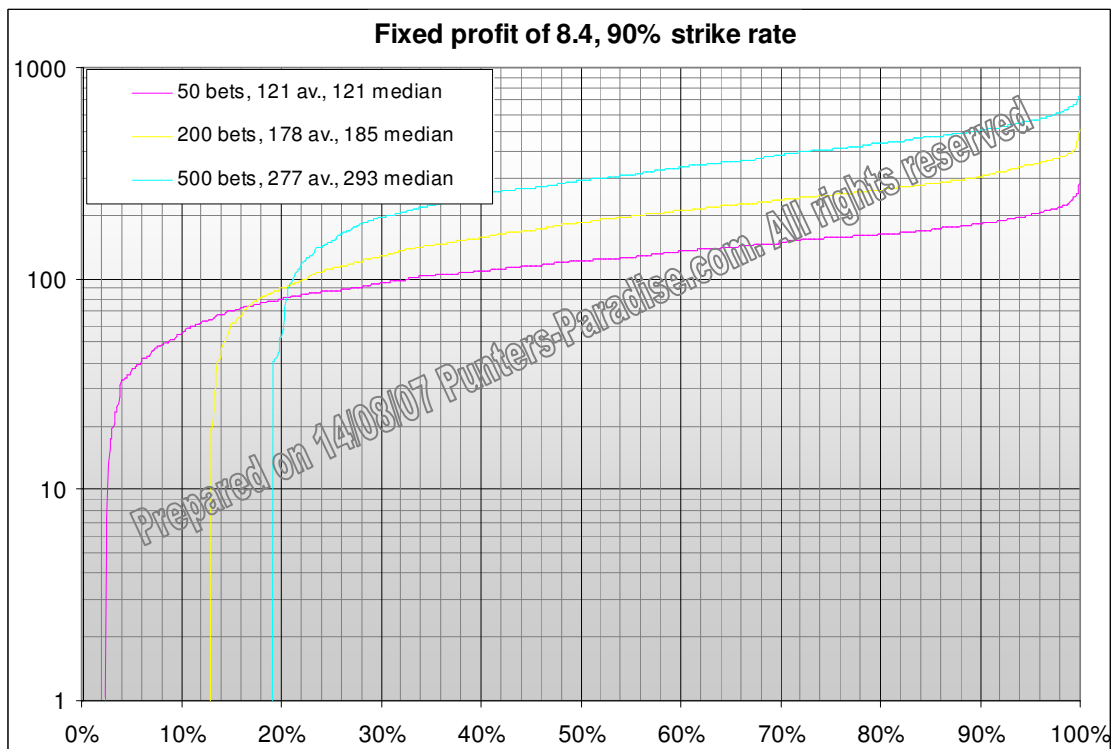
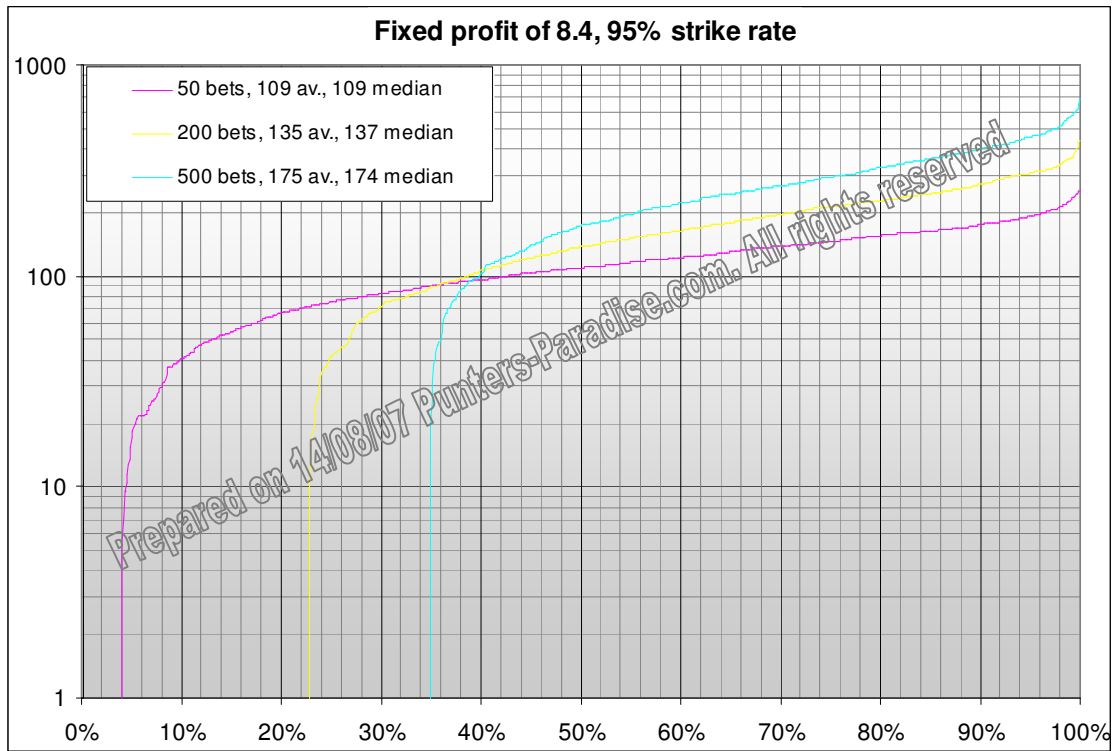


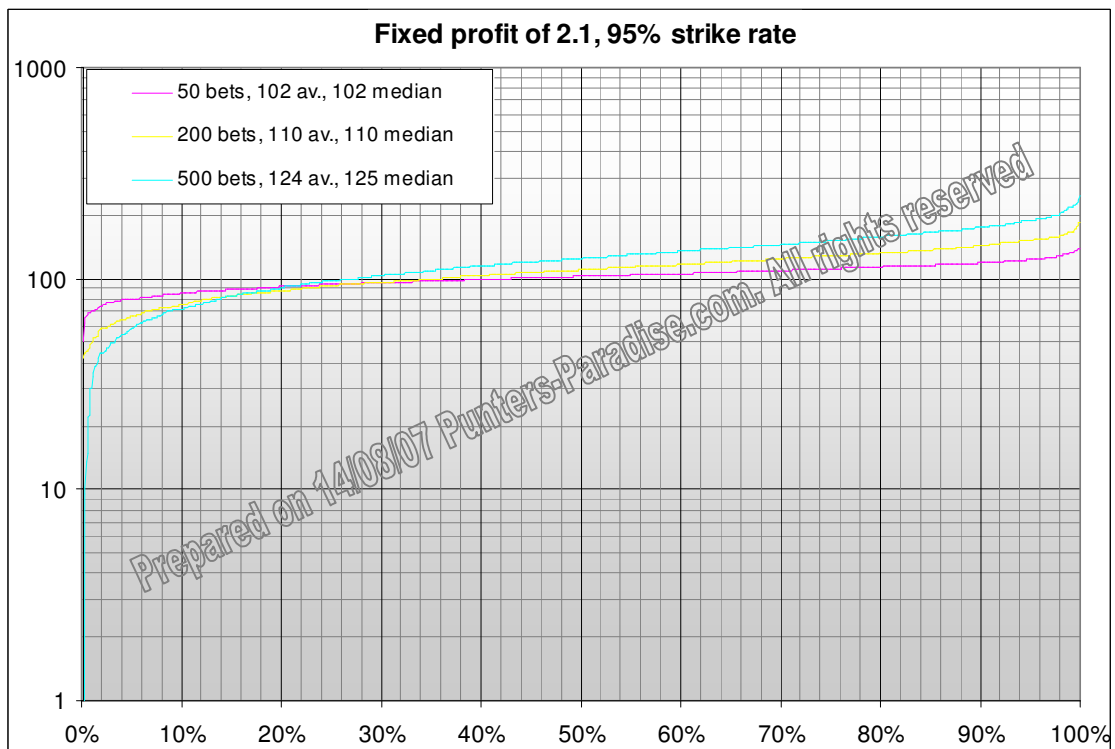
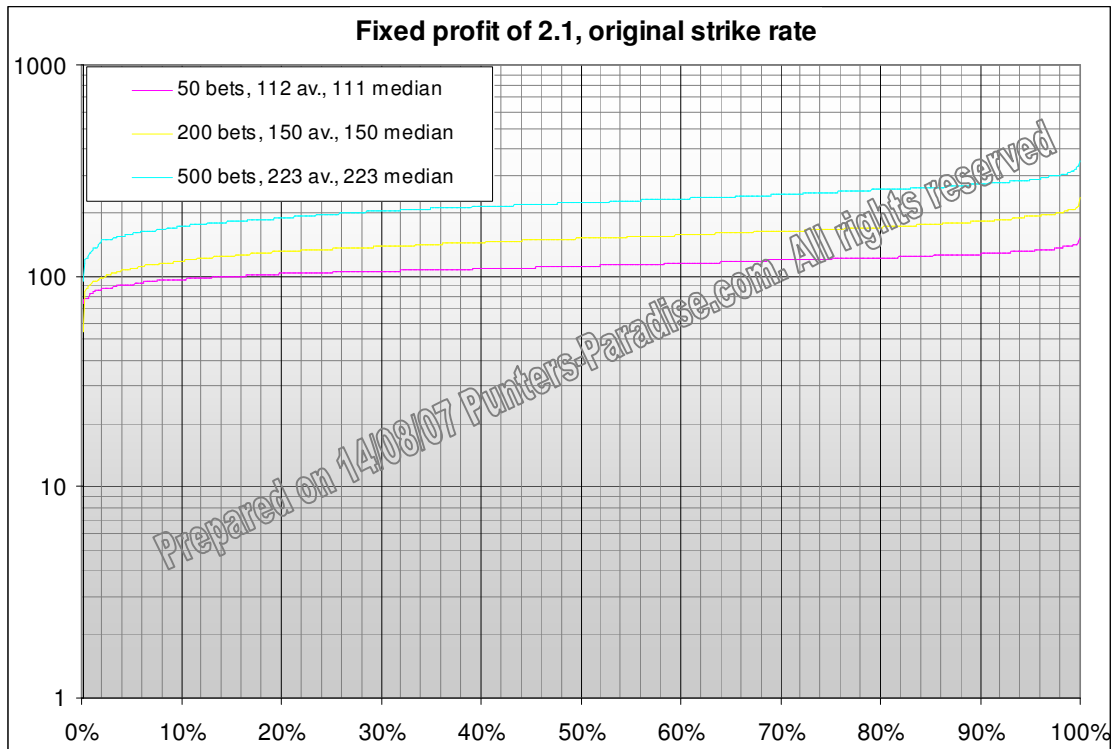


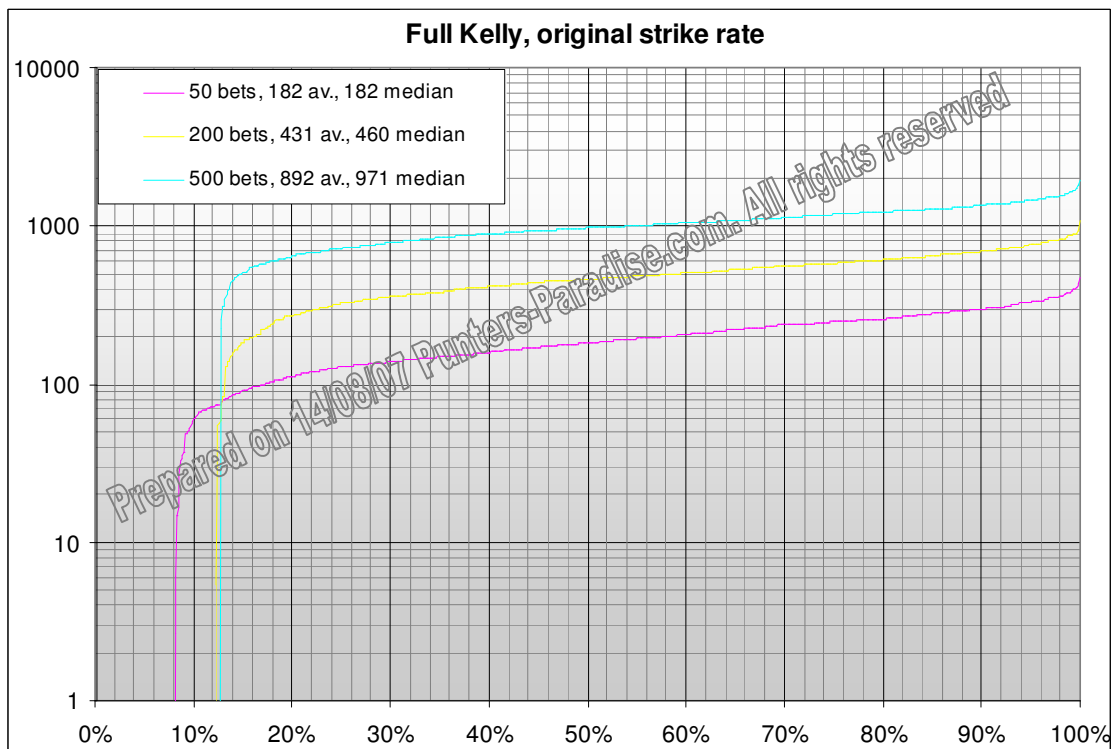
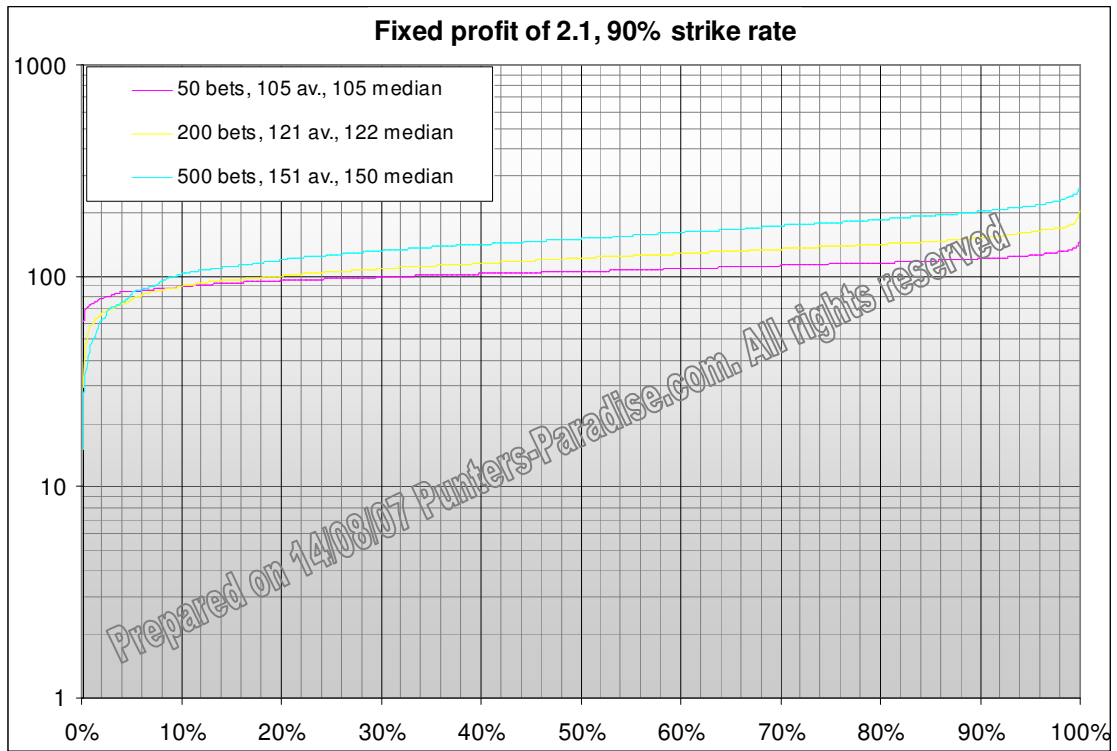


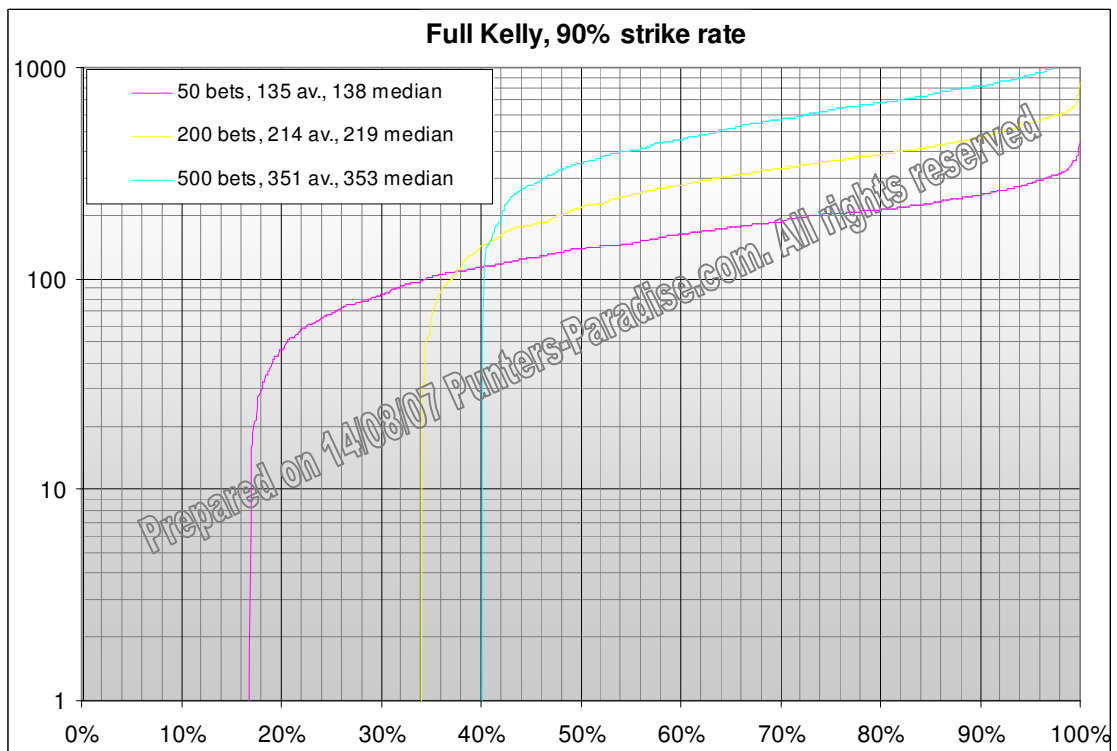
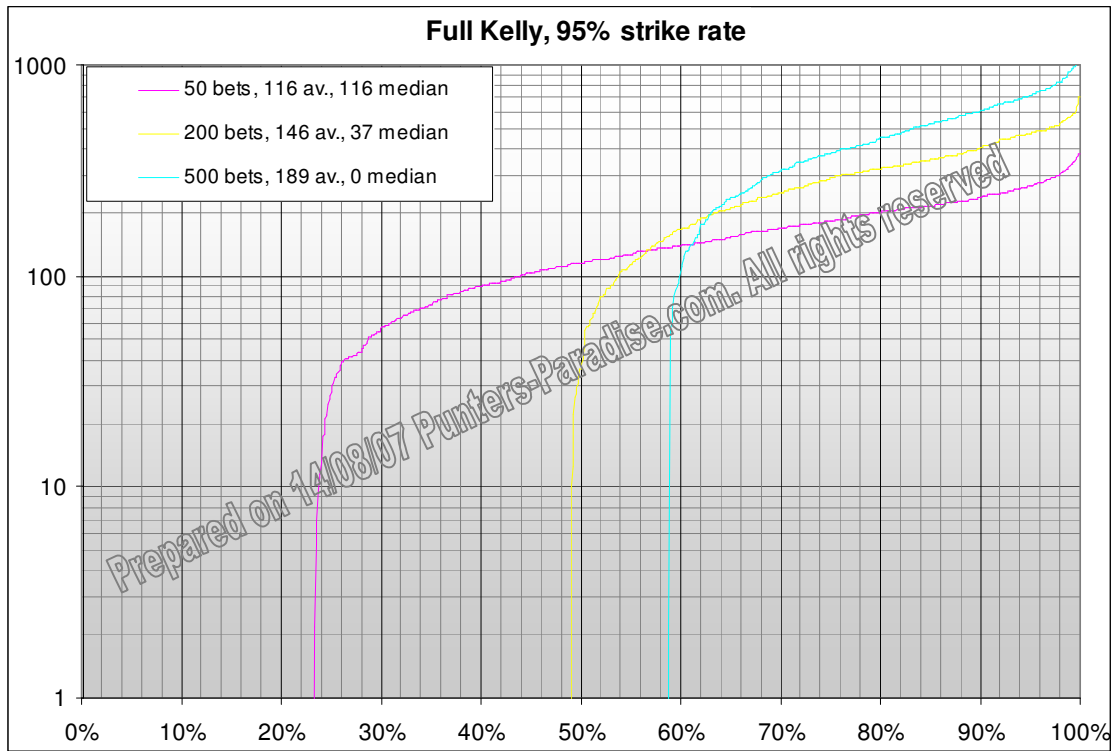


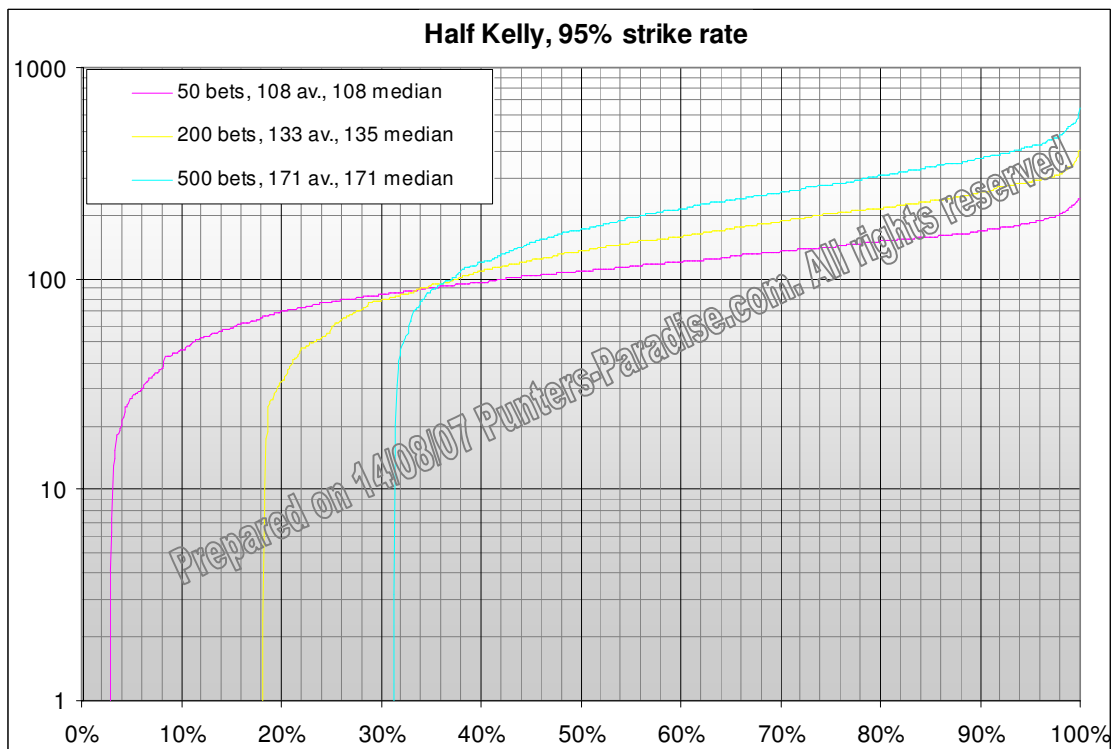
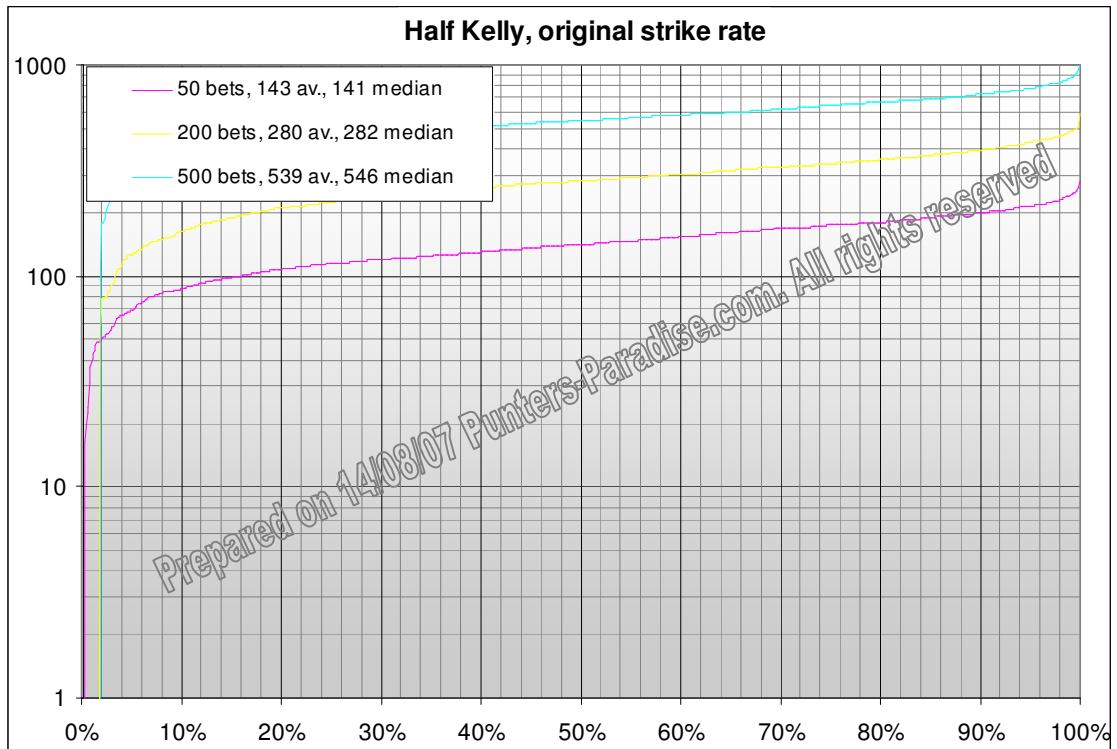


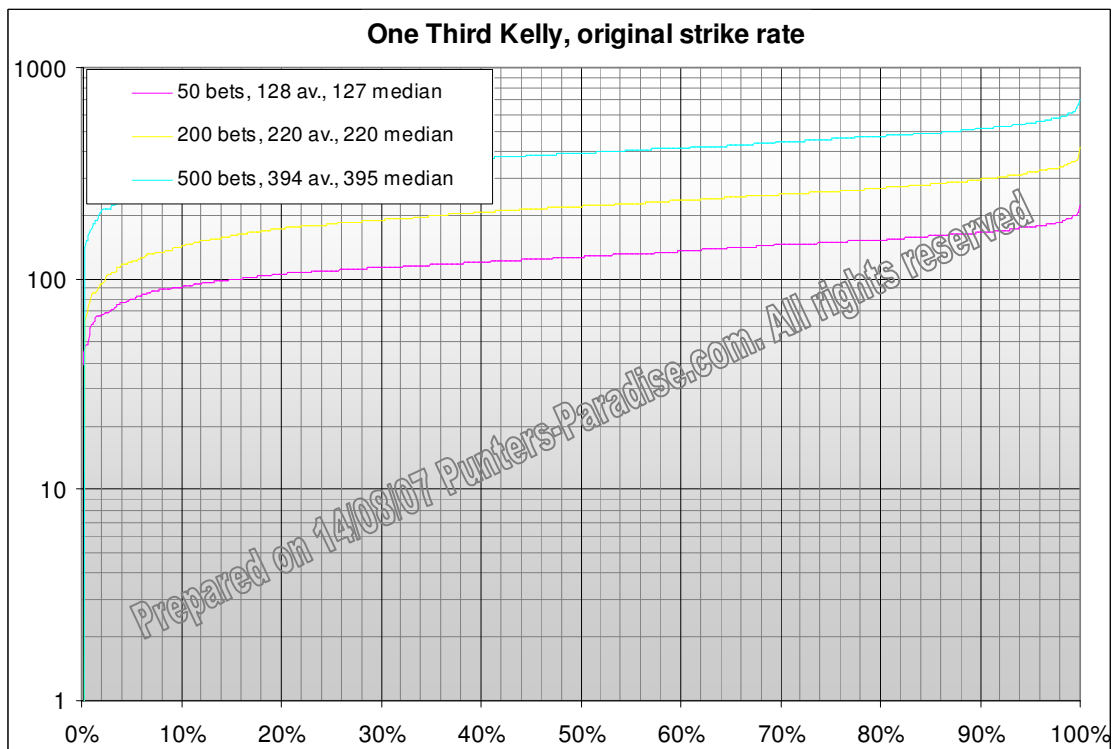
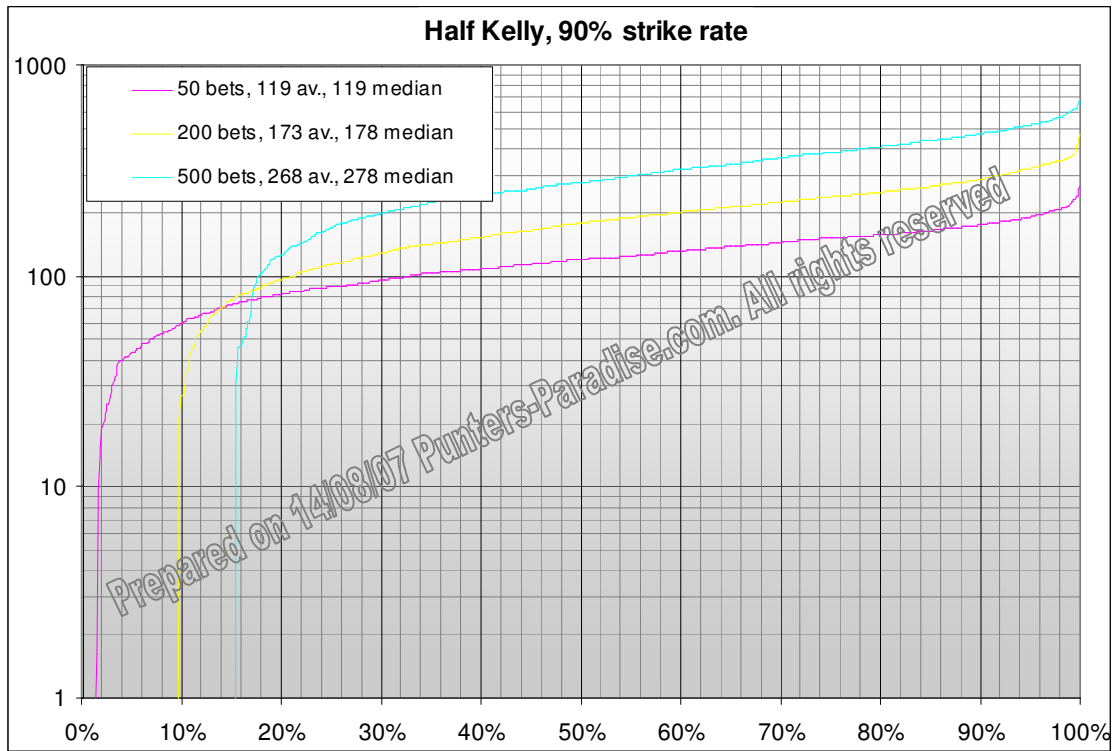


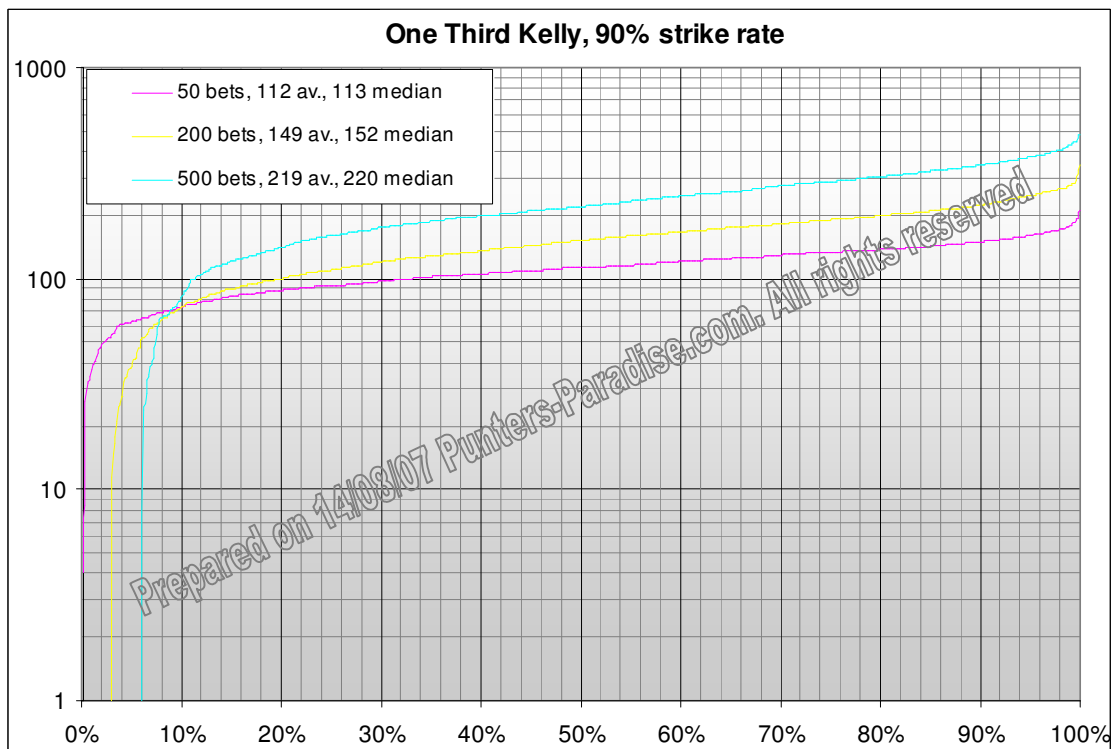
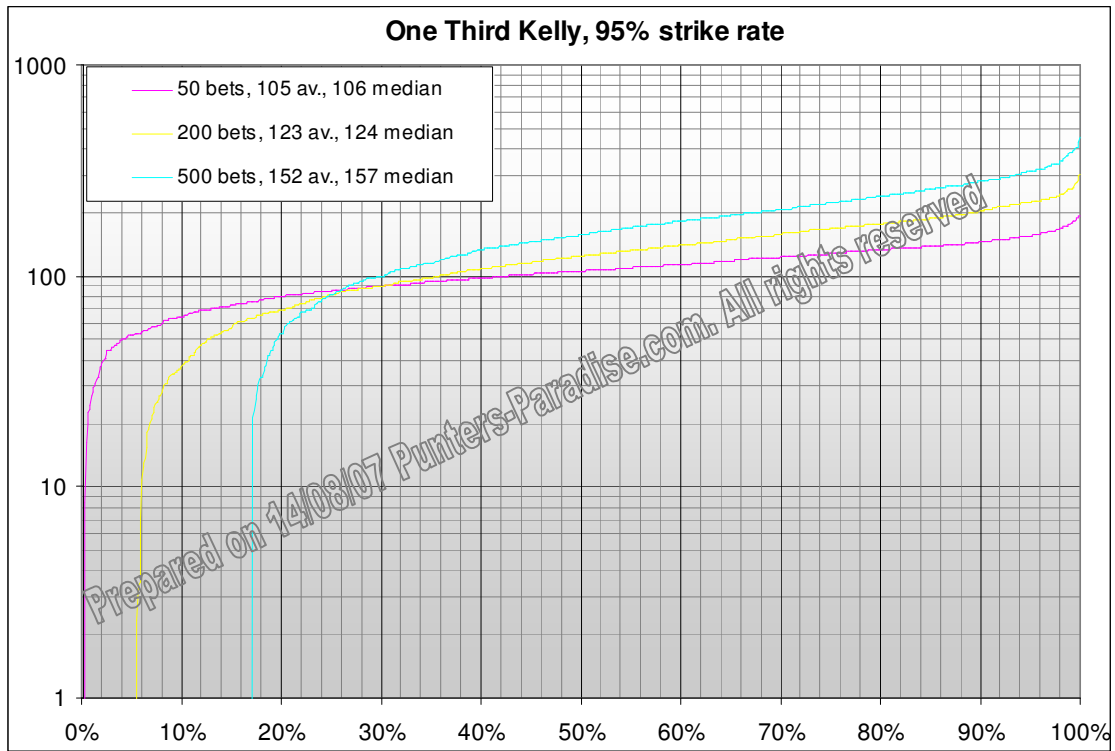


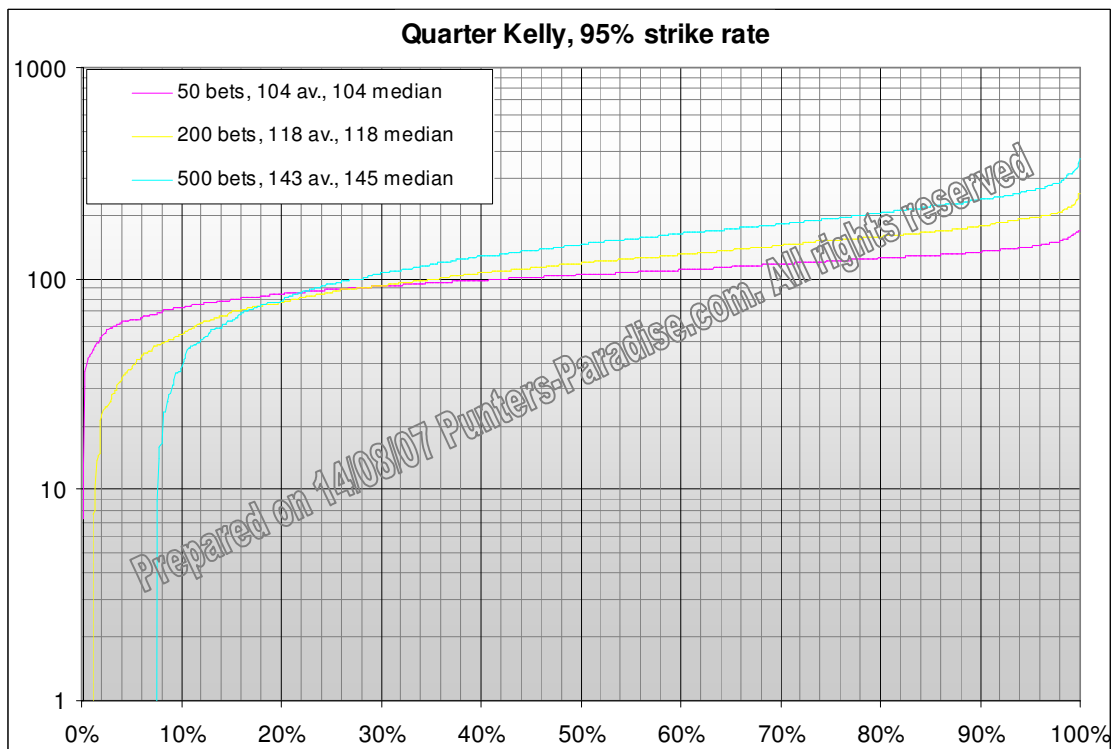
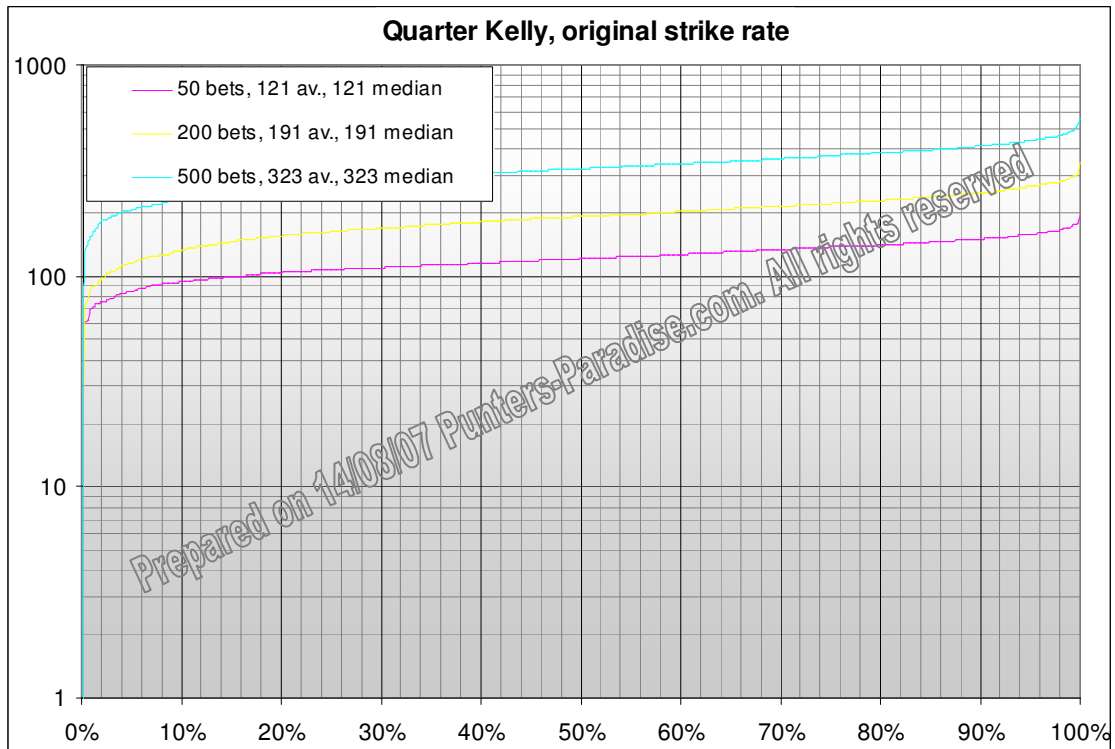












Quarter Kelly, 90% strike rate

