

Surfbreak Baccarat

A High-Paced Poker Variant Field Trial Proposal

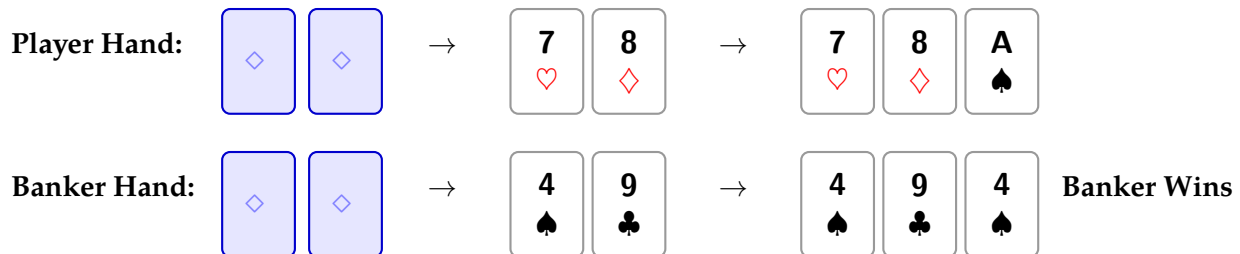
Try it out at baccarat.surfbreakgames.com

Executive Summary

Surfbreak Baccarat is a non-banked, player-versus-player table game built on standard baccarat draw mechanics. Players wager on either the **Player** or **Banker** hand, and all winnings are derived from a shared pot composed entirely of player wagers. The game combines the simplicity of baccarat with structured betting rounds that introduce controlled escalation and player interaction.

The Game

Two hands are dealt each round:



Players bet on either **Player** or **Banker** using the base bet only. Cards are flipped and dealt with the usual baccarat procedure. Winners share the common pot proportionally.

Unique Aspects of the game

- Social context to bets, similar to poker
- Fast, limited betting rounds
- Strategy is a twist on the usual **Banker** edge: Statistics of win must be balanced against relative share of the pot

Specific to California Card Rooms

Surfbreak Baccarat is specifically designed for California Card Rooms. This model produces revenue from time spent at the table, not house edge. This game encourages many small wins that don't quickly lead to bankruptcy, encouraging more time spent playing.

Monte Carlo Simulations

Monte Carlo simulations of 1000 full sessions of up to 500 rounds each was performed for Surfbreak Baccarat with six players per table with one round of raises, incorporating a strategic decision rule that balances probability of winning with expected share of the pooled pot. A total of 1,000 simulated tables were run, each with up to 500 rounds, and a starting bankroll of 20 base bets per player.

Table 1: Comparison of Surfbreak Baccarat and Blackjack (6 Players)

Metric	Surfbreak Baccarat (Strategic)	Blackjack (Base Bet 2)
Players Simulated	6,000	6,000
Starting Bankroll	20 Units	20 Units
Bet Structure	1 Base + 1 Raise	Flat Bet (2 Units)
Max Rounds	500	500
Bankrupt \leq 100 Rounds	252 (4.20%)	1,832 (30.53%)
Bankrupt \leq 200 Rounds	908 (15.13%)	2,855 (47.58%)
Bankrupt \leq 500 Rounds	3,134 (52.23%)	3,904 (65.07%)
Mean Rounds Played	369.13	258.99
Median Rounds Played	408.5	207
Mean Rounds to Bankruptcy	278.34	149.20
Median Rounds to Bankruptcy	275	110
Percent Reaching Bankruptcy	52.23%	65.07%

Comparison of Blackjack and Surfbreak Baccarat

The simulation results reveal important differences between blackjack and Surfbreak Baccarat when evaluated under comparable six-player conditions. While both games exhibit substantial long-run bankroll attrition, the mechanisms driving player outcomes and the temporal distribution of losses differ markedly.

Early-Stage Dynamics

Surfbreak Baccarat demonstrates significantly lower early-stage bankruptcy rates relative to blackjack. By 100 rounds, only 4.20% of players in Surfbreak Baccarat reached bankruptcy, compared to 30.53% in blackjack. A similar pattern is observed at 200 rounds, with 15.13% bankruptcy in Surfbreak Baccarat versus 47.58% in blackjack.

Long-Run Outcomes

Despite these early advantages, long-run outcomes between the two games converge. By 500 rounds, 52.23% of Surfbreak Baccarat players reached bankruptcy compared to 65.07% in blackjack. Although Surfbreak Baccarat still exhibits a lower overall bankruptcy rate, the difference is less pronounced than in earlier rounds.

As a result, blackjack produces smoother but inevitable losses, whereas Surfbreak Baccarat produces more variable outcomes, with some players sustaining or increasing their bankrolls at the expense of others.

Implications

From a gameplay and operational perspective, these differences are significant. Surfbreak Baccarat provides longer early-stage player survival and more dynamic interaction through strategic betting decisions. Blackjack, while simpler and more predictable, results in faster depletion under higher bet sizes and offers limited opportunity for player-driven optimization.

Overall, Surfbreak Baccarat can be characterized as a self-balancing, player-driven system with extended engagement, whereas blackjack remains a house-driven model with steady long-term loss. Its design focuses on extending time at the table, rather than a casino edge. This model makes it ideal for card rooms in California.

Please reach out if you would like to discuss bringing this game to your facility:

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