

Trap Games

It was early in the NHL season (October 14, 2022) when I heard a local radio host talking about “trap games.” My understanding of a “trap game” was that it wouldn’t apply to the first few games of the schedule and, to be fair, this particular host was looking forward in the schedule.

As I had a record of every game played from 2007/2008 to the end of 2021/2022, it struck me I could see if trap games are really trap games.

Data Sources

The game-by-game records for every team comes from hockeydb.com. A lot of copying was involved, as I could only do one team for one season at a time.

What is a Trap Game?

As I listened to the radio host, he had a definition of a trap game that I could use. It had to be the first home game for the trapped team after a minimum three-game road trip. I’ll call that the Simple Trap Game because it is a simple definition.

A little online research of “NHL Trap Game” on the interweb came up with an additional feature of a trap game: the visiting team had to be worse than the home team. I’ll call this the Complex Trap Game because it has a more complex definition.

In my analysis, I’ll compare the results of home teams in trap games to the results of home teams in all their home games, using points-percentage. I’ll also indicate what the 82-game-season equivalent in actual points would be.

For example, if a team gets 17 points in 12 games, its points-percentage is 0.708, which is the equivalent of a 116-point season.

Simple Trap Games

As a reminder, the definition of a Simple Trap Game is that the home team has played its previous three games on the road. A team that has been on the road for the last six games before coming home will have played its previous three games on the road, so I only needed to look at the previous three games to determine if a game is a Trap Game.

The context for Simple Trap Games is all home games. Since 2007/2008, there have been (count count count) 17,594 games played in the NHL. The home team earned 21,187 points in those games, which is (math math math) a points-percentage of 0.602. This is the equivalent of a 99-point season.

I found 2,574 Simple Trap Games and the teams earned 3,131 points in those games. That’s a points-percentage of 0.608, which is the equivalent of a 100-point season.

In Simple Trap Games, the home team performs as well as it does in all other home games. They did not get “trapped.”

Trap Games

Complex Trap Games

The definition of a Complex Trap Game is that the home team has played its previous three games on the road and the visiting team is worse than the home team. Obviously, the definition is not meant to include as a trap game instances where the home team is a 100-point team, and the visiting team is a 98-point team. The visiting team should be significantly worse than the home team to qualify as a Complex Trap Game.

I decided to use season-level goal-differential to determine whether the visiting team was “significantly worse.” My definition was that the visiting team had to be at least 60 goals lower in goal differential to qualify as significantly worse. This means that weaker teams can’t be trapped, because they aren’t 60+ goals a season better than any other team. My Ottawa Senators are safe.

I think an example would help. On March 5th 2022, Edmonton returned home from a 5-game roadie to host the Montreal Canadiens. Edmonton’s goal-differential that season was +38 while Montreal’s was -98. Montreal was 136 lower in goal-differential than Edmonton, so the game qualified as a Complex Trap Game. Montreal won 5-2. What else could be expected? It was a trap game.

Including the Edmonton-Montreal game, there were 409 Complex Trap Games. Home teams in those games had a 328-55-26 record. Their winning percentage was 0.834, which is the equivalent of a 137-point season.

We cannot compare this result to the 0.602 home team record: it has to be compared to the record of all games where the home team had a 60+ goal differential advantage over its opponent. There were 4,182 such games, and the home team points-percentage is 0.779, which is the equivalent of a 128-point season.

The home team in a Complex Trap Game has a better record than they do in non-trap games against an overmatched opponent. They have not been “trapped.”

Myth: Busted

While “trap games” are easy to talk about, the last fifteen years of play have proved that there is no trap game effect.

Upsets happen. If there were no upsets, the record of the worst team in the league would be 0-82-0, and the best team would go 82-0-0. There is no such thing as a sure win: Montreal beat Toronto in their first game; Arizona beat Toronto in Toronto a few nights later.

In some Complex Trap Games, the home team loses to the overmatched visitors (Montreal 5, Edmonton 2). That is zero proof that there is a “trap game effect.” It is proof that upsets happen. There are underlying reasons why Edmonton lost to Montreal that day, unknown to you and me and probably undetectable in the statistics. “Trap game” isn’t a reason for losing: at best it’s an excuse.