Officials in NHL Games with Prolific Player Scoring

MAS Stats 405 Spring 2021 Week 4 Assignment

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Introduction

In the NHL, are some officials more likely than others to have officiated a game with a prolific individual player performance?

Utilizing regular season NHL game and player data spanning from 10-05-2005 to 03-11-2020, we produce the frequencies of officials in games where a player scored 4 or more goals.

Methodology

To answer the achieve the above result we use two objects from the given database: "nhl_gameDate_1" and "nhl_playersDate_1". The first database object provides information on game date, visiting teams, home teams, and the names of the officials. The second provides information on a player's first name, last name, the team, and total goals scored in a game. By joining these two database objects together, and filtering for players that scored more than 3 goals, we provide an answer to the above question of interest.

Results

Table 1

The first table describes the basic information associated with all games in our data where a player scored more than 3 goals. This table includes the date of the game, the player's first and last name, team name, as well as their time on ice and total goals scored. On the right-hand side of the table, there is also information regarding visiting and home teams alongside the list of officials for that game.

Table 2

The second table shows the frequency of officials who officiated games where a player scored more than 3 goals. In this table we see that officials Matt MacPherson, Steve Kozari, Brad Meier, Dan Schachte, David Brisebois, Mark Wheler, and Tim Peel all officiated 5 or 6 games where at least one player was capable of scoring more than 3 goals in a single game. This seems to be rare occurrence since most officials have 2 or less occurrences officiating games with prolific player scoring.

Table 1: NHL games where a Player Scored More than 3 Goals.

date	firstName	lastName	timeOnIce	goals	team	VT	HT	officials
10-29-2005	Dany	Heatley	19.43333	4	Ottawa Senators	Ottawa Senators	Toronto Maple Leafs	Blaine Angus: Eric Furlatt: Dan Schachte: Ryan Galloway
11-02-2005	Daniel	Alfredsson	16.16667	4	Ottawa Senators	Ottawa Senators	Buffalo Sabres	Dan Marouelli:Dave Jackson:Brad Kovachik:David Brisebois
11-02-2005	Martin	Havlat	18.38333	4	Ottawa Senators	Ottawa Senators	Buffalo Sabres	Dan Marouelli:Dave Jackson:Brad Koyachik:David Brisebois
11-11-2005	Ilya	Kovalchuk	20.16667	4	Atlanta Thrashers	Tampa Bay Lightning	Atlanta Thrashers	Blaine Angus; Tim Peel; Dan Schachte; Thor Nelson
01-25-2006	Jan	Bulis	12.15000	4	Montreal Canadiens	Montreal Canadiens	Philadelphia Flyers	Mike Leggo;Greg Kimmerly;Brian Mach;Mark Shewchyk
04-11-2006	Mats	Sundin	25,30000	4	Toronto Maple Leafs	Florida Panthers	Toronto Maple Leafs	Dan Marouelli:Greg Kimmerly:Derek Nansen:Michel Cormier
12-03-2006	Viktor	Kozlov	13.81667	4	New York Islanders	New York Islanders	New York Rangers	Kerry Fraser; Bill McCreary; Steve Miller; Jean Morin
11-16-2007	Jussi	Jokinen	11.06667	4	Dallas Stars	Colorado Avalanche	Dallas Stars	Don Koharski:Mike Hasenfratz:Vaughan Rody:Brian Mach
12-20-2007	Marian	Gaborik	20,60000	5	Minnesota Wild	New York Rangers	Minnesota Wild	Dennis LaRue:Brad Meier:Mark Wheler:Don Henderson
12-29-2007	Alex	Ovechkin	21.35000	4	Washington Capitals	Washington Capitals	Ottawa Senators	Chris Rooney;Dave Jackson;Dan Schachte;Brian Murphy
01-31-2008	Alex	Ovechkin	24.86667	4	Washington Capitals	Montreal Canadiens	Washington Capitals	Don VanMassenhoven;Dean Warren;Pat Dapuzzo;Tony Sericolo
11-23-2008	Dainius	Zubrus	15.96667	4	New Jersey Devils	New Jersey Devils	Tampa Bay Lightning	Kelly Sutherland; Dennis LaRue; Derek Amell; Tim Nowak
03-07-2009	Eric	Staal	13.91667	4	Carolina Hurricanes	Carolina Hurricanes	Tampa Bay Lightning	Dan O'Rourke:Tim Peel:Brad Lazarowich:Jonny Murray
04-02-2009	David	Backes	20.51667	4	St. Louis Blues	St. Louis Blues	Detroit Red Wings	Greg Kimmerly;Marc Joannette;Tim Nowak;David Brisebois
01-03-2010	Alex	Kovalev	18.78333	4	Ottawa Senators	Philadelphia Flyers	Ottawa Senators	Bill McCreary;Frederick L'Ecuyer;Dan Schachte;Mark Pare
04-10-2010	Thomas	Vanek	16.10000	4	Buffalo Sabres	Buffalo Sabres	Ottawa Senators	Eric Furlatt; Dean Morton; Scott Driscoll; David Brisebois
01-19-2011	Marian	Gaborik	17.46667	4	New York Rangers	Toronto Maple Leafs	New York Rangers	Wes McCauley; Francois StLaurent; Tony Sericolo; Mark Shewchyk
02-02-2011	Johan	Franzen	18.46667	5	Detroit Red Wings	Detroit Red Wings	Ottawa Senators	Mike Leggo; Kevin Pollock; Mark Wheler; Vaughan Rody
03-06-2011	Rvan	Callahan	16,70000	4	New York Rangers	Philadelphia Flyers	New York Rangers	Stephen Walkom:Francois StLaurent:Scott Cherrey:Darren Gibbs
12-03-2011	Matt	Moulson	18,30000	4	New York Islanders	New York Islanders	Dallas Stars	Brad Meier:Dean Morton:Dan Schachte:Tim Nowak
01-04-2012	Lars	Eller	15.83333	4	Montreal Canadiens	Winnipeg Jets	Montreal Canadiens	Marc Joannette; Marcus Vinnerborg; Andy McElman; Brian Murphy
02-02-2012	Sam	Gagner	17.46667	4	Edmonton Oilers	Chicago Blackhawks	Edmonton Oilers	Chris Rooney;Gord Dwyer;Scott Cherrey;Jay Sharrers
02-03-2013	Chris	Kunitz	17.45000	4	Pittsburgh Penguins	Pittsburgh Penguins	Washington Capitals	Kelly Sutherland; Tim Peel; Steve Barton; Matt MacPherson
10-08-2013	Tomas	Hertl	11.20000	4	San Jose Sharks	New York Rangers	San Jose Sharks	Dave Jackson:Francois St-Laurent:Mark Wheler:John Grandt
11-14-2013	Tyler	Seguin	14.65000	4	Dallas Stars	Dallas Stars	Calgary Flames	Rob Martell; Tom Kowal; Mark Wheler; Don Henderson
12-10-2013	Alex	Ovechkin	22.86667	4	Washington Capitals	Tampa Bay Lightning	Washington Capitals	Greg Kimmerly;Brad Meier;Matt MacPherson;Andy McElman
01-18-2014	Martin	St. Louis	24.76667	4	Tampa Bay Lightning	San Jose Sharks	Tampa Bay Lightning	Mike Hasenfratz;Steve Kozari;Darren Gibbs;Michel Cormier
01-24-2014	Eric	Nystrom	16.21667	4	Nashville Predators	Nashville Predators	Calgary Flames	Mike Leggo;Brian Pochmara;Jay Sharrers;Andy McElman
01-06-2015	David	Backes	15.45000	4	St. Louis Blues	St. Louis Blues	Arizona Coyotes	Mike Leggo; Jean Hebert; Kiel Murchison; Bryan Pancich
01-13-2015	Mathieu	Perreault	17.06667	4	Winnipeg Jets	Florida Panthers	Winnipeg Jets	Francis Charron; Chris Lee; Kiel Murchison; Matt MacPherson
01-16-2015	Kyle	Okposo	18.25000	4	New York Islanders	Pittsburgh Penguins	New York Islanders	Dan O'Rourke; Jean Hebert; Derek Nansen; Matt MacPherson
01-13-2016	Sam	Bennett	15.68333	4	Calgary Flames	Florida Panthers	Calgary Flames	Chris Rooney;Brad Meier;Ryan Gibbons;Lonnie Cameron
10-12-2016	Auston	Matthews	17.61667	4	Toronto Maple Leafs	Toronto Maple Leafs	Ottawa Senators	Wes McCauley;Francis Charron;Matt MacPherson;Tony Sericolo
12-10-2016	Max	Pacioretty	16.48333	4	Montreal Canadiens	Colorado Avalanche	Montreal Canadiens	Jon McIsaac; Wes McCauley; Shandor Alphonso; Steve Barton
01-23-2017	Patrick	Marleau	19.43333	4	San Jose Sharks	San Jose Sharks	Colorado Avalanche	Tim Peel;Steve Kozari;Scott Cherrey;Kiel Murchison
10-07-2017	Alex	Ovechkin	17.73333	4	Washington Capitals	Montreal Canadiens	Washington Capitals	Tom Chmielewski;Brad Watson;Greg Devorski;Devin Berg
01-06-2018	Patrice	Bergeron	14.30000	4	Boston Bruins	Carolina Hurricanes	Boston Bruins	Brian Pochmara; Tom Chmielewski; Brandon Gawryletz; Kory Nagy
02-05-2018	Connor	McDavid	20.21667	4	Edmonton Oilers	Tampa Bay Lightning	Edmonton Oilers	Jon McIsaac; Kelly Sutherland; Scott Driscoll; Lonnie Cameron
03-16-2018	Evander	Kane	18.58333	4	San Jose Sharks	San Jose Sharks	Calgary Flames	Brad Watson;Brad Meier;Mark Wheler;Brian Murphy
03-22-2018	Anze	Kopitar	20.51667	4	Los Angeles Kings	Los Angeles Kings	Colorado Avalanche	Frederick L'Ecuyer; Steve Kozari; Vaughan Rody; Lonnie Cameron
04-05-2018	Dustin	Brown	25.11667	4	Los Angeles Kings	Minnesota Wild	Los Angeles Kings	Francis Charron;Dan O'Halloran;Lonnie Cameron;Jonny Murray
04-07-2018	Mark	Jankowski	15.80000	4	Calgary Flames	Vegas Golden Knights	Calgary Flames	Ian Walsh;Steve Kozari;Darren Gibbs;Mark Shewchyk
11-24-2018	Patrik	Laine	18.71667	5	Winnipeg Jets	Winnipeg Jets	St. Louis Blues	Ghislain Hebert;Steve Kozari;Steve Miller;Bryan Pancich
02-28-2019	Brad	Richardson	16.11667	4	Arizona Coyotes	Vancouver Canucks	Arizona Coyotes	Chris Schlenker;Gord Dwyer;Brian Mach;Bryan Pancich
03-03-2019	Blake	Wheeler	18.38333	4	Winnipeg Jets	Winnipeg Jets	Columbus Blue Jackets	Dan O'Halloran;Ian Walsh;Derek Amell;Steve Miller
03-25-2019	John	Tavares	18.93333	4	Toronto Maple Leafs	Florida Panthers	Toronto Maple Leafs	Jon McIsaac; Tim Peel; Devin Berg; Steve Miller
10-06-2019	Anthony	Mantha	19.45000	4	Detroit Red Wings	Dallas Stars	Detroit Red Wings	Chris Schlenker;Trevor Hanson;David Brisebois;Kory Nagy
10-08-2019	James	Neal	20.98333	4	Edmonton Oilers	Edmonton Oilers	New York Islanders	Trevor Hanson;Steve Kozari;Ryan Gibbons;Ryan Daisy
10-14-2019	David	Pastrnak	16.21667	4	Boston Bruins	Anaheim Ducks	Boston Bruins	Eric Furlatt; Kendrick Nicholson; Pierre Racicot; Matt MacPherson
11-16-2019	Jack	Eichel	19.95000	4	Buffalo Sabres	Ottawa Senators	Buffalo Sabres	Jake Brenk; Corey Syvret; Andrew Smith; Derek Amell
02-13-2020	Zach	Sanford	16.35000	4	St. Louis Blues	St. Louis Blues	Vegas Golden Knights	Gord Dwyer;Jake Brenk;Brian Mach;Brian Murphy
03-02-2020	Leon	Draisaitl	17.95000	4	Edmonton Oilers	Edmonton Oilers	Nashville Predators	Jon McIsaac; Kevin Pollock; Libor Suchanek; Tony Sericolo
03-05-2020	Mika	Zibanejad	24.93333	5	New York Rangers	Washington Capitals	New York Rangers	Kyle Rehman; Jake Brenk; Greg Devorski; Derek Amell
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Table 2: Frequency of Officials who Officiated Games where a Player Scored more than 3 Goals (See Table 1)

official	number of games
Matt MacPherson	6
Steve Kozari	6
Brad Meier	5
Dan Schachte David Brisebois	5
David Brisedois	5
Mark Wheler	5
Tim Peel	5
Brian Mach Brian Murphy	4
Dave Jackson	4
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Derek Amell	4
Greg Kimmerly Jon McIsaac	4
Lonnie Cameron	4
Mike Leggo	4
Steve Miller	4
Tony Sericolo	4
Andy McElman	3
Bryan Pancich	3
Chris Rooney	3
Dan Marouelli	3
Darren Gibbs	3
Eric Furlatt	3
Francis Charron	3
Gord Dwyer	3
Jake Brenk	3
Kelly Sutherland	3
Kiel Murchison	3
Mark Shewchyk	3
Scott Cherrey	3
Tim Nowak	3
Vaughan Rody	3
Wes McCauley	3
Bill McCreary	2
Blaine Angus	2
Brad Kovachik	2
Brad Watson	2
Brian Pochmara	$\frac{2}{2}$
Chris Schlenker Dan O'Halloran	$\frac{2}{2}$
Dan O'Rourke	2
Dean Morton Dennis LaRue	$\frac{2}{2}$
Derek Nansen	2
Devin Berg	2
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Don Henderson François StLaurent	$\frac{2}{2}$
Francois Stlaurent Frederick L'Ecuyer	$\frac{2}{2}$
Greg Devorski	$\frac{2}{2}$
Ian Walsh	2

Jay Sharrers	2
Jean Hebert	2
Jonny Murray	2
Kevin Pollock	2
Kory Nagy	2
Marc Joannette	2
Michel Cormier	2
Mike Hasenfratz	2
Ryan Gibbons	2
Scott Driscoll	2
Steve Barton	2
Tom Chmielewski	2
Trevor Hanson	2
Andrew Smith	1
Brad Lazarowich	1
Brandon Gawryletz	1
Chris Lee	1
Corey Syvret	1
Dean Warren	1
Don Koharski	1
Don VanMassenhoven	1
Francois St-Laurent	1
Ghislain Hebert	1
Jean Morin	1
John Grandt	1
Kendrick Nicholson	1
Kerry Fraser	1
Kyle Rehman	1
Libor Suchanek	1
Marcus Vinnerborg	1
Mark Pare	1
Pat Dapuzzo	1
Pierre Racicot	1
Rob Martell	1
Ryan Daisy	1
Ryan Galloway	1
Shandor Alphonso	1
Stephen Walkom	1
Thor Nelson	1
Tom Kowal	1