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 and 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 - High Scoring Players

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 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 - Game Officials

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 a rare occurrence since most officials have 2 or less occurrences officiating games with prolific player scoring.

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	5
David Brisebois	5
Mark Wheler	5
Tim Peel	5
Brian Mach	4
Brian Murphy	4
Dave Jackson	4
Derek Amell	4
Greg Kimmerly	4
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	2
Chris Schlenker	2
Dan O'Halloran	2
Dan O'Rourke	2
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Dean Morton	2
Dennis LaRue	2
Derek Nansen	$\frac{2}{2}$
Devin Berg	
Don Henderson	2
Francois StLaurent	2
Frederick L'Ecuyer	2
Greg Devorski Ian Walsh	$\frac{2}{2}$
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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

Table 3 and 4 - Top Officials: Matt MacPherson and Steve Kozari

As seen in table 2, two officials, Matt MacPherson and Steve Kozari, each officiated six games where players scored more than 3 goals. The following two tables show the first and last names of these six highest scoring players with their respective officials. Both tables also include information on the date of the game, visiting and home teams, as well as the number of goals scored. Almost all players scored a total of four goals with the exception of Patrik Laine, who scored five while Kozari officiated.

Table 3: Highest Scoring Players in Games Officiated by Matt MacPherson.

date	firstName	lastName	VT	НТ	goals
02-03-2013	Chris	Kunitz	Pittsburgh Penguins	Washington Capitals	4
12-10-2013	Alex	Ovechkin	Tampa Bay Lightning	Washington Capitals	4
01-13-2015	Mathieu	Perreault	Florida Panthers	Winnipeg Jets	4
01-16-2015	Kyle	Okposo	Pittsburgh Penguins	New York Islanders	4
10-12-2016	Auston	Matthews	Toronto Maple Leafs	Ottawa Senators	4
10-14-2019	David	Pastrnak	Anaheim Ducks	Boston Bruins	4

Table 4: Highest Scoring Players in Games Officiated by Steve Kozari.

date	${\it firstName}$	lastName	VT	HT	goals
01-18-2014	Martin	St. Louis	San Jose Sharks	Tampa Bay Lightning	4
01-23-2017	Patrick	Marleau	San Jose Sharks	Colorado Avalanche	4
03-22-2018	Anze	Kopitar	Los Angeles Kings	Colorado Avalanche	4
04-07-2018	Mark	Jankowski	Vegas Golden Knights	Calgary Flames	4
11-24-2018	Patrik	Laine	Winnipeg Jets	St. Louis Blues	5
10-08-2019	James	Neal	Edmonton Oilers	New York Islanders	4