


PUCK POSSESSED BIATHLON

#7



CANADIAN PERFORMANCE IN BIATHLON SINCE 2000

Biathlon combines two sports – cross-country skiing and shooting – into one race. Athletes race around a closed course carrying a rifle strapped to their backs, and stop at designated spots to shoot at a series of targets. The shooting is done in either a standing or prone position. For every target missed, the athlete is penalized. Depending on the format, the penalty can be one lap around a 150m loop, or a one-minute penalty added on to their time (from USAtoday).

The International Biathlon Union (IBU) is the international governing body of biathlon. It offers competitions on three levels: Junior, IBU Cup, and Senior, for both individuals and National teams, through different events like Sprints, Pursuits, Relays, Individual and Mass Starts. This article mainly uses data from Senior-level, non-team events, unless indicated otherwise.

The data come from the IBU (www.biathlonresults.com) starting with the 2000-2001 season, and going up to (currently) the last season available (2019-2020). It combines all race results with Event, Race and Athlete data, although the Athlete data is limited to Senior and IBU Cup level. Unfortunately, the detailed race-data with ski- and shooting times per loop, is only available through PDF-files that so far provide a too-big-a-hurdle to conquer! But what the current data set provides is ranks, final times and general shooting results.

PARTICIPATION- ALL LEVELS / ALL EVENTS

While the average number of all participants in IBU events has been very steady in the last 20 years, Canada's participation has slowly increased, as shown in Figure 1. Although the growth appears to be levelling out in recent years at all three levels, over the 20 year period there is a slow incline, specifically for Junior and Senior events.

Note that the 2019-2020 season was not fully completed due to COVID19, likely leading to lower overall participation numbers.

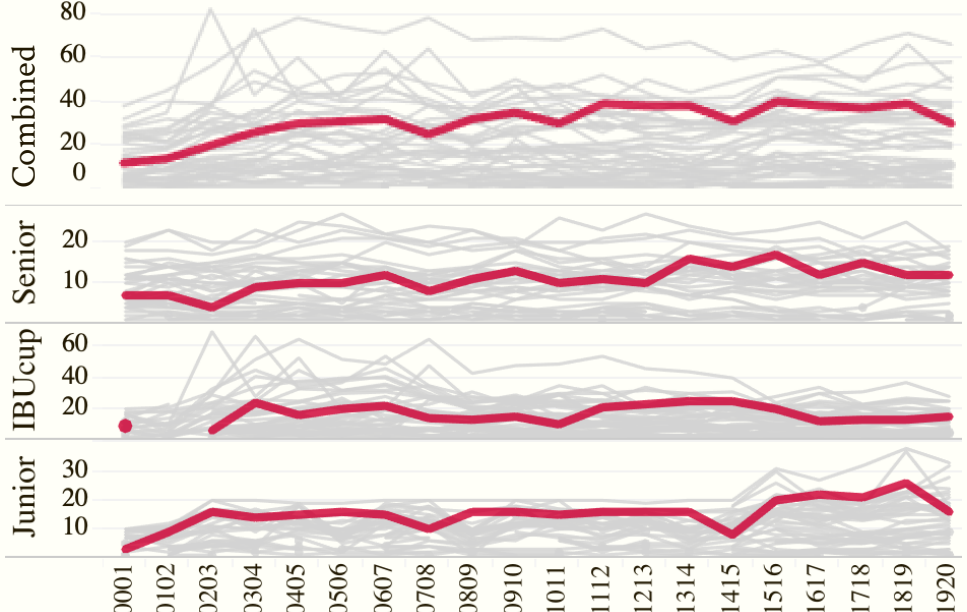


Figure 1: Canadian participation at three levels of IBU events

WORLD CUP POINTS - SENIOR LEVEL / INDIVIDUAL EVENTS

The total number of World Cup Points per nation is dependent on the number of participants and how race results are linked to points. But at this level of (semi-)professional sports, to evaluate a nation's success, the points are usually all that matters. Since the total number of points is more relevant when compared to other nations, the chart below shows national points per season at the Senior level for non-team events, for all nations, with Canada highlighted in red.

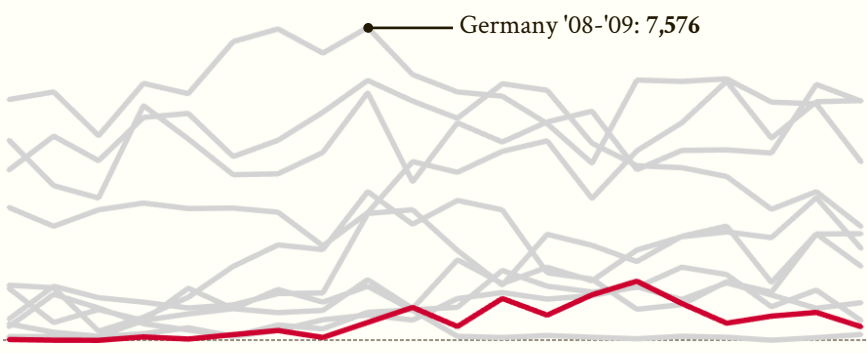


Figure 2: World Cup Points per nation per season (Senior level, team events excluded)

Unfortunately, it appears **Canada** has been in decline in the last couple of seasons.

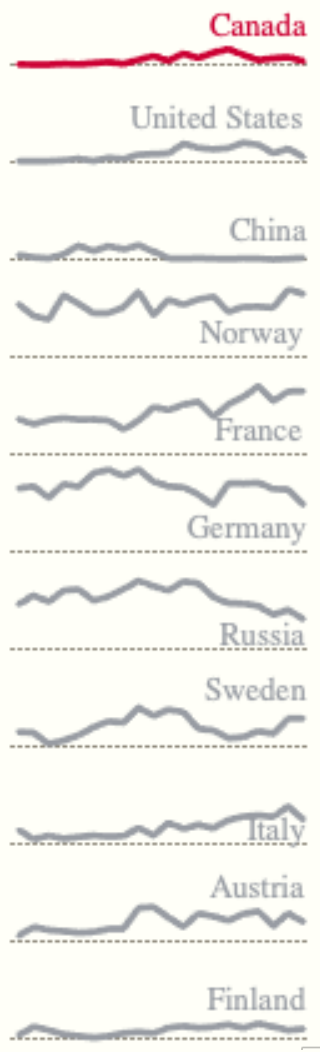


Figure 3: As Figure 2, split by Nation

CANADA'S BEST SEASONS: SENIOR LEVEL / INDIVIDUAL EVENTS

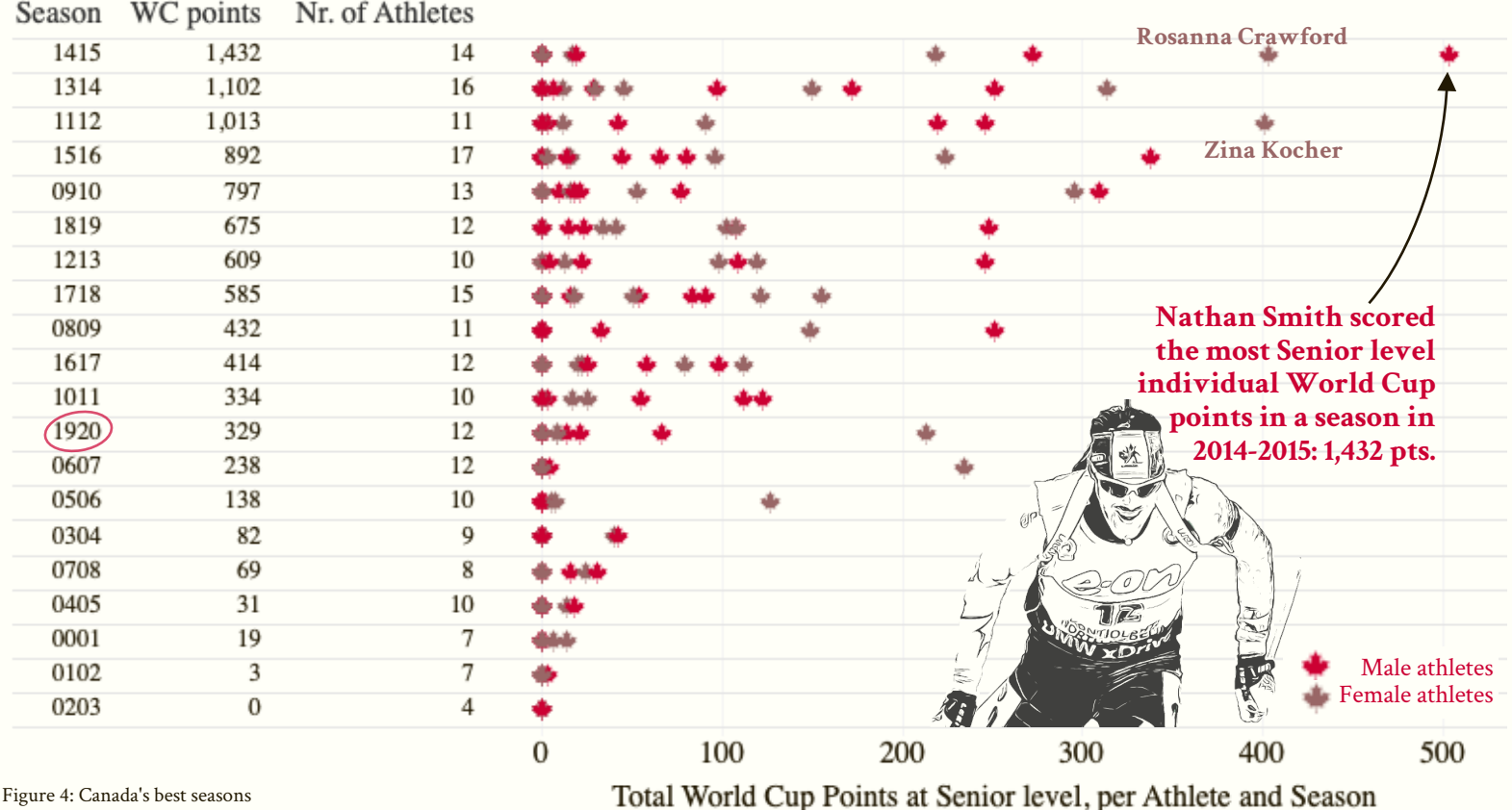


Figure 4: Canada's best seasons

The 2019-2020 season was in the middle of the pack of all seasons since 2000, but again note that it was cut short due to COVID19. The 2014-2015 season was our best so far, looking at World Cup points, with very strong performances by Rosanna Crawford and Nathan Smith.

The charts below looks more at the development of Canadian athletes, showing total World Cup points won in individual Senior events on the vertical axis, and the nth year of their career on the horizontal axis. The left side shows all athletes to highlight Canadians in the complete picture, where the right side zooms in on Canadians.

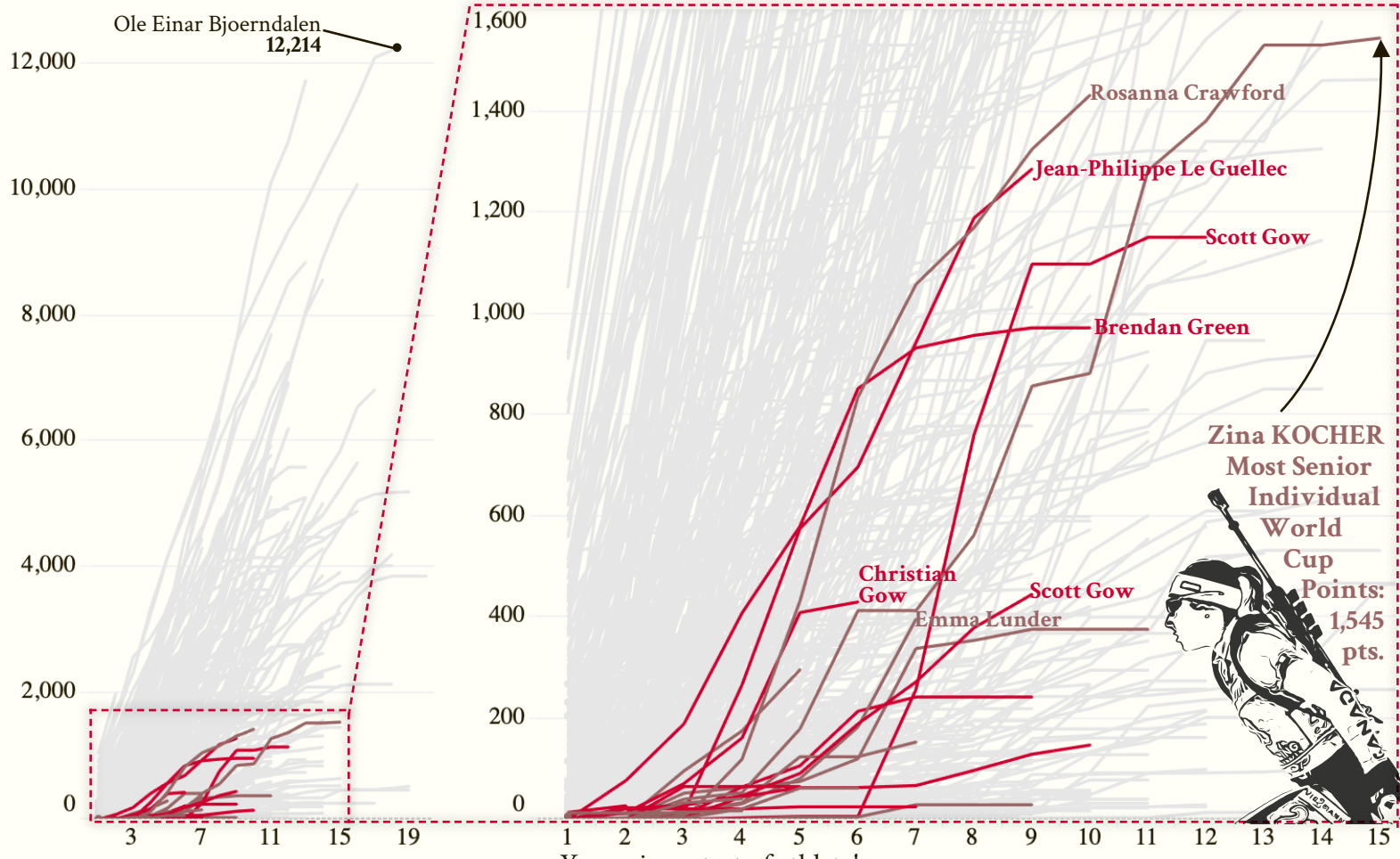


Figure 5: Canada's individual seasons

CANADA'S BEST SEASONS: SENIOR LEVEL / TEAM EVENTS

As the last couple of charts, figure 6 shows team events per nation, and how Canada performed since the 2000-2001 season by looking at the average Rank of all seasons (vertical axis) and the number of races started by a nation (horizontal axis).

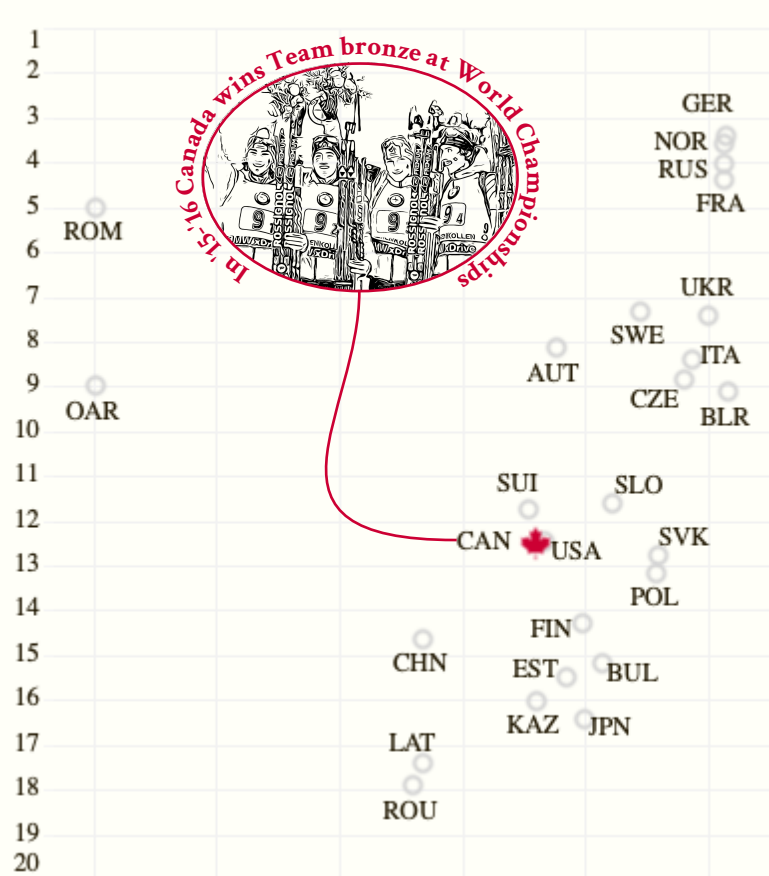


Figure 6: Canada's team seasons

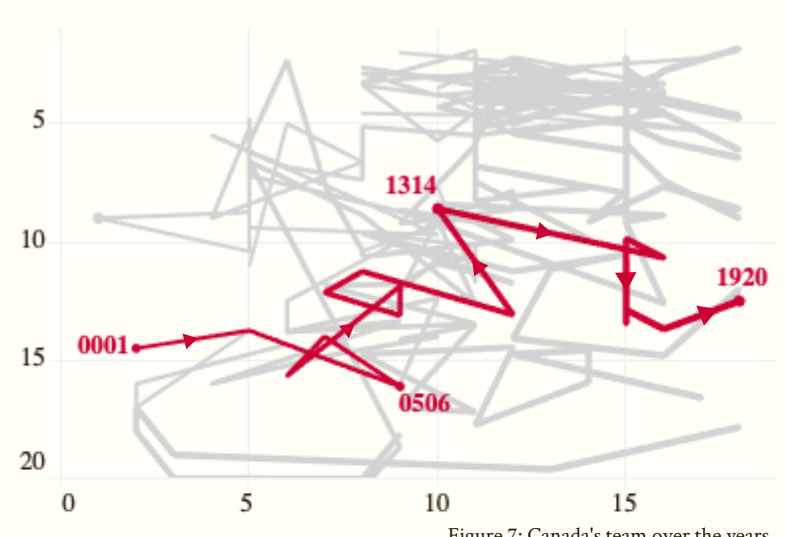


Figure 7: Canada's team over the years

In contrast to figure 6, figure 7 shows the average rank per season as a line starting in '00-'01 and ending in '19-'20. As Canada starts in the bottom left (labelled 0001 for season '00-'01) it starts moving to the right (more races) and up (better average ranking). The upward progression stops after the '13-'14 season, but the '19-'20 season shows an improvement again. Hopefully, this can be continued in the next season!