

# BCA Demographics Report 2020



## Publications & Information

Author: R. Namaghi with special thanks to A. Morgan, K. Easton

## Introduction & Aims

The purpose of this report is to accurately reflect the age and sex composition of the BCA membership of the BCA. It will form the basis of a reference model for demographic reports to accompany surveys. This will help in determining how reflective a sample is of the membership.

This is a follow up report to one Tim Allen and Kay Easton wrote in 2017. The findings of this report confirm the previous findings of an old membership profile, even relative to that of the UK population. It also confirms that participation among young women is increasing relative to men.

## Method

The data was collected on 03/12/2020 from the membership database, anonymised and then sent to Publications and Information Officer. The data was transferred to an Excel spreadsheet and simple statistical tests carried out as per previous iterations of the report. Club individual members (CIMs) and Direct Individual Members (DIMs) were subcategorized.

Incomplete records were noted in order to aid in our understanding of how incomplete the database is.

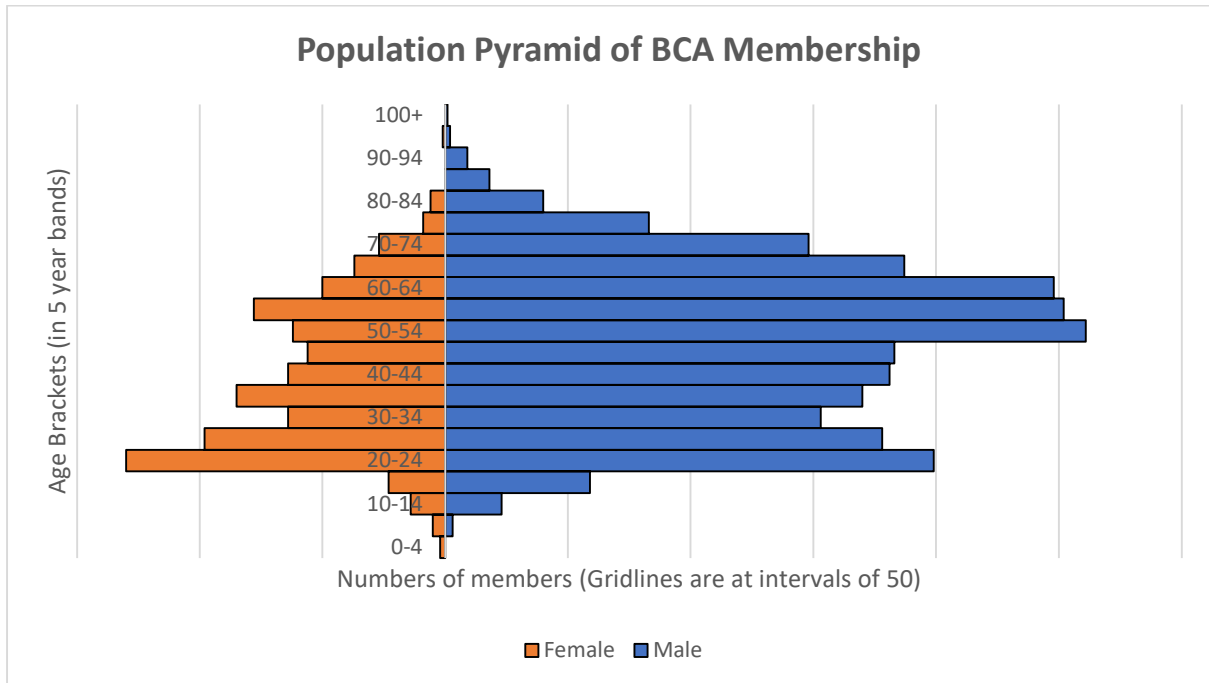
## Results

Results Per Membership Category			
Category	CIM	DIM	Total
Total Records	6293	782	7075
Complete Records (%)	3252 (51.7%)	62 (7.9%)	3614 (51.1%)
Sex data (%)	5371 (85.3%)	72 (9.2%)	-
Age Data (%)	3256 (51.7%)	696 (89.0%)	-
Records with no demographics	875	77	952
Male:Female Ratio	73.9:26.1	79.8:20.2	75.3:24.7
Female Mean Age (Years)	-	-	40.6
Male Mean Age (Years)	-	-	48.6
Mean Age (Years)	46.7	49.4	47.2
Median Age (Years)	48	51	49

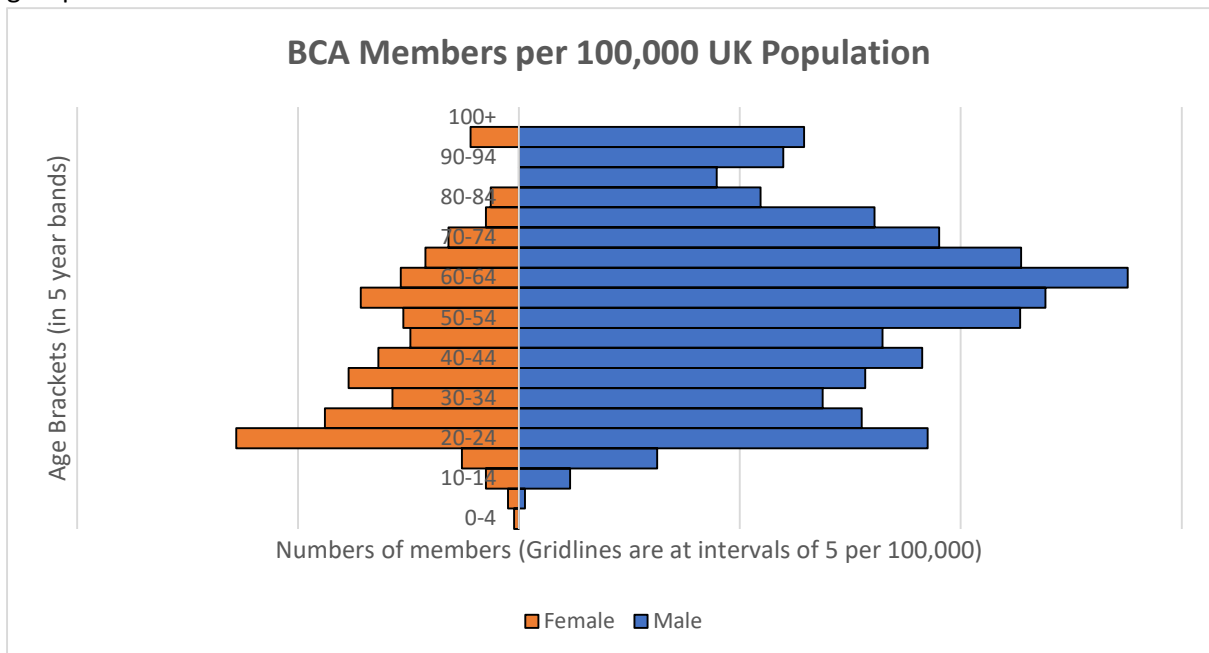
The prevalence of BCA members in the UK population is 4.8 per 100,000, with the numbers being 7.3 and 2.4 for Males and Females respectively.

## Population Structure of the BCA Membership

Population Pyramid of all complete records



For reference this is covers per 100,000 of the 2018 ONS population projection estimate by age group.



\*the 100+ Demographic is omitted as it would heavily skew the graph.

## Discussion

The population of cavers has been subject to much speculation with estimates generally ranging from 5-10,000. The reason for the wide range is because people disagree on what constitutes a caver. The fact that a significant number of BCA members are mine explorers and that not all cavers are members of BCA shows why the membership data has often been ignored.

Appendix V of the Clubs and Cavers of Britain 1971-1972 estimates the caver population at 16-17,000 with over 400 clubs. There is sporadic data from then until 2009. The 2004 change from the NCA to the BCA took about 5 years to get the membership administration system sorted to the point it could produce figures (the 2057 figure in April 2004 seems like a dramatic low outlier). However reliable data, with date collected cited starts appearing in 2009 (of which it was 5609), in 2014 this was 6094 and last year stood at 7075.

Context is critical here – sustained general growth may be more a marker of clubs needing insurance, which may reflect a rapidly growing need in liability cover over the last 2 decades (the BCA's own scheme was increased from £5 to £10 million in cover). It also may be a marker of the University sector stabilising and the baby boomer generation shifting up the pyramid. There is a significant generation of the membership between the ages of 50 and 65. This is also reflected in the fact that when you correct for the general population pyramid we are still dramatically over represented in this demographic.

We can safely rule out that the BCA giving free membership to under 18s has significantly skewed the statistics given that they make up <2% of the population. This may reflect poor knowledge of this available benefit.

The initial peak in the early twenties corroborates Mehew's report (Appendix 1.2) in 2017 and the 2019 Vision Questionnaire. This peak currently corresponds with a nationwide dip in the demographic while the 55 (2020) peak corresponds with the 46 peak (2009) in the general population. There may be room for cautious optimism if our 'recruitment demographic' is set to grow – though it should be pointed out that the University sector is experiencing significant contraction and that is the traditional engine of growth.

The female population is significantly younger as demonstrated by the overall average (40.6 to 48.6). In fact the ratio of the 2 peaks goes from roughly 2:3 (Female to Male) to 1:7 in the older peak.

With regards to complete records on the database, the 3948 complete records is significantly lower than the 5283 ballots that were sent out in the 2017 referendum. Although addresses were not supplied so this cannot be verified, we can conclude that the database is patchy and inconsistent at best. As has been stated frequently since 2005 BCA online with a direct portal is the way forward, with guidance on GDPR concerns to be sent to clubs.

In conclusion, we have seen the growth of BCA membership by approximately 1500 over the last 10 years but cannot comment if this reflects that the sport is growing or that our database is maturing. We can clearly see that our population is older than the baseline population of the UK and some good news that female participation in the sport appears to be increasing.

## Recommendations

The following has been implemented during the writing of the report:

- The IT group is to investigate the high number of loss of sex data for DIMs. It may be due to a user interface issue.

The following are to be implemented:

- Surveys are to collect demographic data and produce an analysis of how representative/how well we have listened to a targeted demographic. Setting a standard to meet will only be possible once we have established a decent dataset and have a good appreciation of our capabilities.
- That this report be reproduced in early December 2021 (To be published in January 2022) and at least annually after that as part of the P&I group.
- That further investigation into past data sources to determine long-term trends be continued. This will be much more possible once covid restrictions have been lifted and the British Caving Library can be visited far more easily.
- Conduct further studies with the following questions that need to be answered:
  - **How much does the early thirties drop rebound naturally?**
  - **Will our 70+ generation rapidly expand in the next 10-20 years?**  
(and what are the potential challenges of that?)
  - **Are women an increasing proportion of the sport?**  
(i.e. Are there structural issues that can be addressed to remove barriers to participation and are we monitoring to ensure increasing female participation is sustained)
  - **How long do people stay in caving?**  
i.e. a follow up study to R. Mehew's work in 2017.

Other points to consider:

- GDPR advice to clubs on complete records
- The re-implementation of BCA Online is a good opportunity to repair the database.
- Consideration of other categories like ethnicity data for the database would be prudent.

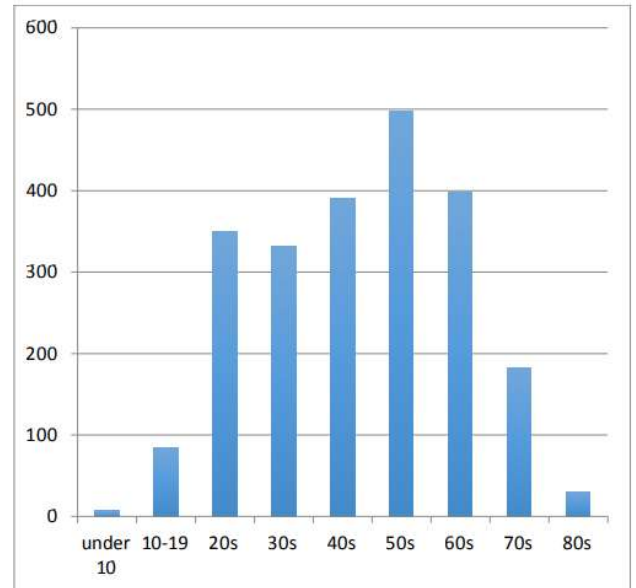
## Appendix

### 1.1 Tim Allen's June 2017 report

Age demographic report of BCA membership to June 2017 Council Meeting.

It is of concern that there appear to be less active cavers about. It is noticeable in the once hotspot areas of the Yorkshire Dales for instance. BCA pointed to the relative consistency of annual membership renewals, so what could be happening here? Perhaps the membership is ageing and becoming less active. If older members leave and are not replaced by sufficient numbers of younger cavers this can have consequences for BCA in achieving less income and fewer 'human' resources to take on the roles of running the organisation.

I suggested BCA collect 'date of birth' data at membership renewal to find the age demographic of the current membership. Council decided it could only ask for 'year of birth' (YOB) on a voluntary basis. That data has been passed on to me and with some input from a retired statistician I am able to offer the following report.



2270 members returned credible YOB data out of a total of 4942. A small number of entries were removed from the sample which gave ages over life expectancy or were not actually a YOB. The sample size is adequate. The question is whether it is representative of the membership. There may be age bias in whether members chose to respond to the request for YOB. Never the less it is all we have to go on.

There are considerably more members in their 50s than in their 20s and 30s.

The median age is 49 – nearly half the membership is 50 or over.

18% of the membership is over 65.

The BCA has an 'old' population. Overall BCA membership numbers are likely to fall unless 20 and 30 year olds can be increased by around 40%.

Tim Allen

## 1.2 Bob Mehew's October 2017 report

### Annex 1 - Membership Age Spectrum

Tim Allen presented a report at the last Council meeting indicting the age spectrum of BCA based on the sizeable sample indicated BCA had an 'old' population. The data set comprises of collecting year of birth and linking it to year of joining and started with 2017 renewals. Stuart Francis suggested another analytical approach but unfortunately it relies on having the additional year of leaving data which will only build over the years. A further analysis of an updated data set from July 2017 involving some 2600 members has been carried out. The plot of number of members verses age of joining is:

**[No graph available]**

This also shows the predominance of middle aged members but also highlights a peak at around age 20.

	Age on joining														Grand Total	
No. years member	0	1	2	3	4	5	6	7	8	9	10	11	12	13		
19	15	16	2	6	5	2					3	2	1		3	55
20	24	22	10	5	5	1	3	5	3	3	5		2	1		89
21	21	18	7	1	5	2	4	4	1	1	7	1	3	3		78
22	9	12	4	5	5	1		4	5	3	3	1	1	3		56
45	5	2	5	5	3	3	3	1	4		6		6	16		59
46	6	7	8	2	4	3	3	4		2	3	2	8	18		70
47	5	6	4	3	4	2	2	2	2	4	7	3	9	19		72
48	8	4	3	3	2		3	2	3	4	4	4	1	14		55
49	4	3	7		2	1	1		2	2	2	2	5	24		55

An analysis of years of being a member against age at joining gives the following table of part of the Minutes edited for clarity only. The meeting was subject to an audio recording for minute clarification purposes only. The audio recording has been securely destroyed following acceptance of the Minutes at the subsequent Council Meeting.

The key feature of this table is that most of the 20 / 21 year olds have only just joined or been members for one year whilst a sizeable portion of middle aged members have been members since the start of BCA. This suggests we should focus on keeping these young members by means such as a reduced subscription extended beyond the end of their student days.

My thanks go to Andrew Brooks, Keith Edwards and 'andrewmc' who provided the program to undertake the years of membership verses age of joining analysis.

B Mehew

24 October 2017