## BCA age demographic report for 2018 \& 2019

## Background:

Back in 2016 I encouraged BCA to collect age data from the membership. There was anecdotal evidence in the caving regions that numbers of active cavers were declining, but this was at odds with total BCA membership numbers which remained buoyant. Collecting age data over a period of time would allow analysis to take place to determine any trends in members' age and whether action needed to be taken. I suggested that the membership had an aging population and that this could cause future problems if not enough younger cavers were attracted to the sport to take their place. A separate discussion might be made on whether the BCA membership reflects those participating in our sport.

In the end BCA decided to collect year of birth (YOB) data but only on a voluntary basis. With the help of the BCA administrator and a retired statistician I produced a report for council in 2017. This follow up report includes data from both 2018 and 2019.

## 2018 \& 2019 report:

As with 2017 the sample sizes are adequate. In fact the number offering voluntary YOB data at membership renewal has increased slightly each year. The question is whether it is representative of the membership as there may be age bias in whether members chose to respond to the request for YOB or not. I would recommend that this field is made mandatory going forward to better analyse the age profile of the membership.
NB: The age data in 2017 was supplied differently to 2018/19. YoB numbers are clear, but the percentage and number of those who did not provide data would require more work to calculate. Therefore increases year by year are an unknown mix of new members and an increase in those willing to provide year of birth data.


The left hand graph shows the distribution of the number of members in each age group for each of the three years (those who volunteered their year of birth data). It does not necessarily show an increase in membership but more likely an increase in willingness to offer the data. However it does show an increase across all age groups. The middle graph is more helpful as it shows the percentage within each year that falls into each age group. The distribution of numbers across the age classes is broadly the same across the three years, with any differences within any age group not giving evidence of a consistent shift in age distribution. This is shown more clearly in the third graph, which shows total percentage under 10 , total percentage under 20 , etc - the lines for all three years are superimposed, showing that the underlying distributions are the same.

As with 2017 the median age remains unchanged at just under 50. For 2019 this is the year group 1970 which means half the BCA membership was born before 1970. The other figure given in the 2017 report was that $18 \%$ of the membership was over 65 and this remains the same.

There are significantly more members over 60 than there are under $30.27 \%$ are over 60 more than a quarter. The proportion under 30 varies over the three years, between 19, 21 \& 20\%, small fluctuations that you might expect but a low percentage never the less. There is value in studying any changes over a longer period. At present there is no evidence that the age structure has changed over the three years.

The graphs below reveals a separate analysis of DIMs and CIMs for 2018 \& 2019 only. This shows that CIMs are slightly younger than DIMs. This effect is more marked in 2019 suggesting DIMs are getting older relative to CIMs shown more clearly on the cumulative graphs. However, analysis over a longer period is needed to confirm any trend.

## Conclusion:

The age demographic of the BCA membership has remained much the same over the three years. This shows an old membership but not necessarily an aging membership. Data collection could be improved by making age mandatory on application. Analysing the age data over a longer period will be able to identify any worrying or significant trends. However, there are hints of trends, such as a decrease in the percentage of members in their 40 s and 50 s and an increase in those under 20 and over 70, which may be of interest. It is not yet possible to conclude whether there is enough input at the younger end of the age demographic to offset those who depart from the upper end, nor is it possible to conclude, one way or the other, that membership input is healthy across the age spectrum.

## Recommendations:

BCA should continue to collect annual membership data and analyse the results. Consider making age data collection compulsory rather than voluntary. Criteria should be set on the process of how and when data is supplied to the statistician. I would be pleased to step aside from my role and place the statistician directly in contact with the administrator. The longer term analysis of trends should inform council how to direct future efforts and budgeting towards the promotion of caving and recruitment into the sport going forward.


## Compilation:

Data supply:
Data analysis:
Report compilation:
24 ${ }^{\text {th }}$ September 2019

