

Presented here are the ACS's answers to a number of general questions about the statistics and history of cricket that arise from time to time. It is hoped that they will be of interest both to relative newcomers to these aspects of the game, and to a more general readership.

Any comments, or suggestions for further questions to be answered in this section, should be sent to [secretary@acscricket.com](mailto:secretary@acscricket.com). Please note that this section is for general questions only, and not for dealing with specific queries about cricket records, or about individual cricketers or their performances.

## 1 THE DIFFERENT TYPES OF CRICKET

### What are the three formats in which top-level cricket is played?

At the top level of the game – at international level, and at the level of counties in England and their equivalent in other leading countries – cricket is played in three different 'formats'. The longest-established is 'first-class cricket', which includes Test matches as well as matches in England's County Championship, the Sheffield Shield in Australia, the Ranji Trophy in India, and equivalent competitions in other countries. First-class matches are scheduled to be played over at least 3 days, and each team is normally entitled to have two innings in this period.

Next is 'List A' cricket – matches played on a single day and in which each team is limited in the number of overs that it can bat or bowl. Nowadays, List A matches are generally arranged to be played with a limit of 50 overs per side. International matches of this type are referred to as 'One-Day Internationals', or ODIs.

The most recent of the three formats is 'Twenty 20', or 'T20' (strictly, these matches come within a classification called 'List A Twenty 20'), in which each team is allowed to bat for no more than 20 overs. This format is used for many of the most celebrated competitions around the world, including the Indian Premier League, the Big Bash in Australia, the Vitality Blast in England, and many others. It is also used for matches between national sides, in games referred to as 'T20 Internationals'.

There is more about each of these three formats in the following questions and answers.

### What is first-class cricket?

Nowadays, first-class matches are defined as matches scheduled for three or more days' duration, between two sides of 11 players each, played on natural turf pitches, and played substantially in accordance with the standard playing conditions laid down by the International Cricket Council (ICC). The ICC has identified fixtures that may be regarded as first-class matches, so long as they comply with the above definition; these include all Test matches, and matches in the senior domestic competitions in each of the 12 ICC Full Member countries (see [What are Test matches?](#)). Other matches can be given first-class status at the discretion of the relevant governing body (see below), but the ICC and the governing bodies have agreed that first-class status should not be awarded to any match in which one or other of the teams taking part cannot be judged truly 'first-class'.

You can read more about this in the ICC's Classification of Official Cricket <https://resources.pulse.icc-cricket.com/ICC/document/2020/08/10/f8e2b1fd-8ad2-44ca-a488-f865aacedb71/ICC-Classification-of-Official-Cricket-July-2020.pdf>

There was no definition of a 'first-class match' before 1947. Previously, in England and Wales individual county sides were recognised as 'first-class', and matches between them were regarded as first-class matches. Similar provisions existed in other countries, but the position for many matches outside the principal tournaments in each country was more ambiguous. One of the ACS's first tasks was to try to eliminate these ambiguities and produce a definitive list of all first-class matches ever played, anywhere in the world. This exercise was not bound by the same criteria as are used to define first-class matches today, and so two-day matches, or matches played with 12 players on each side, or 'odds' matches (where a team of 11 plays a team of, say, 13), or matches played on matting wickets rather than turf, could all be considered for first-class status.

The above details refer to men's cricket only. There has never been an official 'first-class' category for women's cricket, but the Classification of Official Cricket includes a category referred to as 'Competitive women's cricket played at state, provincial level' which is intended to be the highest level of domestic women's cricket. One of the categories under this heading is matches scheduled for at least three days and of two innings per side, played between sides at least at State or Provincial level. Although not referred to as first-class matches, these are the equivalent of first-class matches in the women's game.

### **Who decides if a match is first-class?**

Today, the status of matches in official ICC competitions is decided by ICC. Otherwise, if the match is played in one of the 12 countries that are Full Members of the ICC, the decision rests with the governing body of the country where it is played. If only one of the teams comes from a Full Member country, the decision rests with the governing body of that Full Member country, regardless of where the match is played. ICC has a discretionary power to take the final decision on any particular match if its status – first-class or not first-class – cannot be decided by any other means.

The ACS advises ICC if we believe that a match may have been misclassified as first-class according to the relevant regulations, thereby helping to ensure greater consistency in decision-making.

For matches before 1947, in an effort to produce a baseline that was acceptable to statisticians worldwide, the ACS undertook a long and careful exercise to decide whether particular matches should or should not be treated as first-class. The resultant lists of first-class matches – first published during the 1970s and 1980s – have won widespread acceptance among the cricket community, although disagreements continue between individual statisticians over the status that should be accorded to a very small number of matches.

### **Is there such a thing as 'second-class cricket'?**

No. Cricket below first-class level is just referred to as 'minor cricket' – without casting any aspersions on its standard or the level of seriousness with which it is played.

For a while in England the counties that were not first-class were sometimes referred to as the 'Second Class Counties', but this term finally fell out of use just after the Second World War. The counties concerned were always more usually known as the 'Minor Counties'.

### **What are Test matches?**

In men's cricket, Test matches are first-class matches played between fully representative sides of any two of the Full Members of ICC – currently Afghanistan, Australia, Bangladesh, England and Wales, India, Ireland, New Zealand, Pakistan, South Africa, Sri Lanka, West Indies and Zimbabwe.

The current Classification of Official Cricket also allows matches between a Full Member team and a composite 'Rest of the World' side selected by ICC to be called a Test match.

Other international matches – such as games at Under-19 level, or between countries that are not Full Members of ICC, etc – may be referred to colloquially as 'Test matches', but they are not officially so classified.

The first matches that are now regarded as Test matches were played between Australia and England early in 1877. The ICC was founded in 1909 as the Imperial Cricket Conference, with just three members (South Africa being the third), but during the 1920s and 1930s India, New Zealand and West Indies also became full members. Until the Second World War there were no established rules for deciding whether matches between full-member sides should be regarded as official Test matches, but over time a list of such matches became established and accepted among cricket statisticians and historians – even though some of the teams involved were not fully representative of the strength of the country that they were representing.

In women's cricket, any match between sides representing the ten top-ranked nations, scheduled for four days, and played in accordance with the ICC's Standard Women's Test Match Playing Conditions is classified as a Test Match.

### **What is a List A match?**

Any limited-overs matches scheduled for 40 overs or more [or equivalent for games that used an eight-ball over] per side, played between sides at at least state, county or provincial level (or equivalent), may be accorded the status of 'List A limited overs matches' by the relevant governing body, as for first-class matches (see above, under 'Who decides if a match is first-class?').

Such matches scheduled for 20 overs per side are referred to as 'List A Twenty 20 matches'.

These two categories are usually abbreviated as 'List A matches' and 'Twenty 20 matches' (or 'T20 matches') respectively.

### **Who decides which matches are classed as 'List A'?**

The first List A matches were played in 1963, when the Gillette Cup was introduced in England and Wales. Initially, decisions about the classification of limited-overs matches were undertaken by the ACS. The 'List A' classification was devised, and for many years administered, by the ACS's Philip Bailey

In 2007 the ICC took over responsibility for the definition of List A status, and the answer to this question is now the same as for first-class matches, as given above. In taking over this role, the ICC and its member countries agreed not to amend the status of matches whose status – whether as 'List A' or as 'not List A' – had previously been agreed by the ACS.

There is a fuller explanation of List A status at <https://stats.acscricket.com/ListA/Description.html>

### **Is there a 'List B'?**

There is no official List B. Matches between relatively senior sides that nevertheless fall outside the definition of List A – such as warm-up matches ahead of World Cups, or matches between sides just below the level required for List A status – may be recorded separately by some statisticians, but they are not given any official 'List B' classification.

### **Which List A and T20 matches are classified as 'internationals'?**

In men's cricket, matches played in accordance with ICC's Regulations and Playing Conditions, and that are played between two Full Member teams, or between Full Member teams and one of the eight contemporary leading Associate teams, or between two of those eight Associate teams; or that are played in the ICC World Cup or the Asia Cup, are classified as official One Day Internationals (ODIs). All international T20 matches played between Full Members and/or Associate Members, are (since 2019) regarded as full Twenty20 International matches, provided that they are played in accordance with the relevant ICC Regulations and Playing Conditions.

In women's cricket, matches in the ICC Women's World Cup and ICC Women's Championship are classified as ODIs, as are matches between any two of the ten top countries as ranked by ICC. Matches in the Women's T20 World Cup, or between teams both of whom are either Full or Associate ICC members, are classified as Women's T20 Internationals, subject to compliance with the relevant Regulations and Playing Conditions.

## 2 AVERAGES

### **How are batting and bowling averages calculated?**

A player's batting average is calculated by dividing the number of runs he or she has scored by the number of times they have been dismissed while scoring those runs. So for example, a batsman who plays 28 innings, is left 'not out' four times, and scores 1200 runs during those innings has an average of 1200 divided by (28 minus 4), or 50. This figure is customarily expressed as '50.00' – see the next question.

The bowling average is calculated by dividing the number of runs conceded by the bowler by the number of wickets he or she has taken while conceding those runs. So a bowler who takes 10 wickets while conceding 150 runs has an average of 15.00.

### **Why are averages always shown to the first two places of decimals, and why are they not 'corrected' if the third decimal is 5 or higher?**

To secure distinction between players whose averages differ only in the decimal places, it is customary for all averages – even those that can be expressed as a simple whole number, like '50' in the example above – to be expressed to two places of decimals. This is regarded as sufficient to provide a meaningful ranking list of players' averages – to use only a single place of decimals would not provide sufficient distinction between two players with very similar averages, whereas two places of decimals is generally sufficient for that distinction to be clear. A third place of decimals may occasionally be used if necessary where players' averages cannot be separated by only two decimals.

It has long been the convention that batting and bowling averages are not 'corrected' to reflect the third decimal place. Thus a bowler taking three wickets while conceding 200 runs is shown as having an average of 66.66 rather than 66.67, although the latter may be used in equivalent non-cricketing contexts. The reason for this approach in cricket averages is unclear, but it is well established and even in the computer age, when these figures can be calculated electronically and when such 'correction' is standard practice for the computer, those compiling cricket averages have to amend their programs so that this 'correction' is not made automatically.

### **Do averages identify the 'best' batsmen and bowlers?**

In short, no – but.

A batsman with a career batting average of 99.94 is, surely, a better, more effective batsman than one with an average of 9.94; at the macro level their averages do indeed reflect their relative merit.

However, at a more micro level, the mere fact that one player has a slightly better average than another does not mean that he or she is automatically a better player – whatever that means. The players might have played most of their cricket in different circumstances (e.g. one in a country with more batsman-friendly pitches, one in a country where the pitches more often favour the bowlers); or they might have different roles in the batting line-up; or, if aesthetics is considered a component of deciding who is 'best', they might have entirely different batting styles; and so on.

It is also unrealistic to seek to compare players' averages in different eras. The circumstances in which a player scores his or her runs can have a major impact on their average. For example, WG Grace is recognised universally as being head and shoulders above the other batsmen playing at his time, but his career batting average of 39.45 is below that of a good first-class batsman today. That doesn't mean that Grace was no better than today's average batsman. Among other things, he had to play on much more unreliable pitches, which were not covered when rain fell, and with equipment that bore little comparison to that in use today.

### **Why is the number of not-out innings taken into account when calculating a player's batting average?**

The conventional batting average is designed to indicate the average number of runs scored by a player between successive dismissals, and not the average number scored in each innings. In this way, a batsman whose innings are cut short by a declaration, or by the match ending, or by simply running out of partners when his or her team is all out, is not penalised in his or her average.

There is of course no reason why figures of players' average number of runs or wickets per innings, or runs per match, or whatever, should not be calculated and published. But these will normally be supplementary to the 'conventional' batting and bowling averages rather than in place of them.

### **Why are there no averages for wicketkeeping and fielding?**

Figures for wicketkeepers and fielders can be calculated – for example, their number of catches per match, or for wicketkeepers the number of stumpings per match, or the number of byes that they allow to be scored compared to the total number of runs scored by their opponents. But to a large extent the factors that influence these statistics – notably the type and quality of their sides' bowlers – are outside the control of the wicketkeepers and fielders concerned, and thus any averages that are calculated are not necessarily reflections of those players' abilities or achievements.

### **Is there a way of ranking all-rounders?**

Various ways have been proposed in the past for comparing the performances of all-rounders. These may be based on their achievements in the same match, or over a season, or over a career. None has been found to be unequivocally the most satisfactory way of ranking the achievements or abilities of all-rounders.

Nowadays the most common way of recording the achievements of all-rounders is to divide their batting average by their bowling average. For a genuine all-rounder, this calculation is likely to produce a figure in excess of 1, and on paper at least the higher that figure is, the 'better' are the all-round abilities of the player.

Among other things, this method has the advantage of allowing players of different eras to be compared with each other, for each player's batting and bowling averages will both have been obtained in the same conditions (i.e. the conditions appropriate to the era in which the player played), and will thus be more directly comparable with a player from a different era, who also obtained his batting and bowling figures in the same conditions, even though those conditions may have been very different from those of the first player.

## **3 HISTORY**

### **When did first-class cricket begin?**

The ACS reckons 'great' cricket from the year 1772, and uses that date as the starting-point for its records and other statistical analyses.

1772 is the year from which we have a continuous record of scores enabling a judgement to be made about whether the quality of the match and its players was, by the standards of the day, 'first class'. There is also good evidence that around the same time the game was undergoing changes in its techniques and laws which brought it more consistently into line with the game that we know today – although of course there were also many differences.

**Why are matches before 1863 sometimes referred to as ‘great’ or ‘important’ matches? Are these the same thing as ‘first-class’?**

The ACS generally uses the term ‘great matches’ to refer to the most important matches played before 1800, and sometimes refers to the equivalent matches before 1863 (the year in which overarm bowling was legalised) simply as ‘important’ matches. These terms are used to draw attention to the fact that there were many differences in the way in which the game was played in those days. Nevertheless, from 1772 we now have an established list of the matches that were, by the standards of the time, the most important games played in each year. These matches collectively can all be regarded as ‘first class’.

**When did Test cricket and first-class cricket begin in each country?**

This table shows when matches reckoned as first-class were first played in each of the 12 countries or regions that are currently full members of the ICC, and the season in which each of those countries played its first Test match.

	First first-class match	First Test match
England	1772	1876/77 (in Australia)
Australia	1850/51	1876/77
South Africa	1888/89	1888/89
West Indies	1864/65	1928 (in England)
New Zealand	1863/64	1929/30
India	1892/93	1932 (in England)
Pakistan (formerly part of India)	1926/27; 1947/48	1952/53 (in India)
Sri Lanka	1925/26	1981/82
Zimbabwe (ex-Rhodesia)	1909/10; 1980/81	1992/93
Bangladesh (ex-East Pakistan)	1954/55; 1998/99	2000/01
Ireland	1895; 2017	2018
Afghanistan	2017/18	2018 (in India)

For Pakistan, Zimbabwe and Bangladesh, the dates are given both for the first first-class match played within the country’s current borders, and for the first first-class match played following the country’s independence as a separate nation. For Ireland, the dates are for the first first-class match ever played on the island of Ireland, and the first season in which a separate domestic competition was given first-class status.

First-class (but not Test) cricket has also been played in many other countries, including USA (between 1878 and 1913), Argentina (1911/12 to 1937/38), Hong Kong, Kenya and Nepal. The United Arab Emirates hosted Pakistan’s ‘home’ Tests in various years between 2001/02 and 2018/19.

**When did the County Championship begin?**

The first match between two representative county sides that the ACS regards as ‘first-class’ was played between Surrey and Kent in June 1773, but it was not until the mid-19th century that matches between county sides became regular and significant components of each season’s first-class fixture-list. From about the 1860s newspapers began to identify the ‘champion county’ at the end of each season, but these identifications were not official and were not made on a consistent basis, and sometimes different sources awarded the title to different teams in the same season. Some more recent statisticians have undertaken a similar exercise to identify the ‘champion county’ for each season from earlier dates in the 19th century, some going as far back as 1815.

The County Championship as we now know it was formalised between the counties themselves in 1890, and the ACS regards 1890 as the start-date of the official County Championship, and uses that date as the starting-point for its Championship records and statistics. But it is of course open to individual statisticians to include figures from earlier inter-county seasons in their records if they so wish – but preferably with the recognition that figures for the ‘Championship proper’ only date from 1890 onwards.

### **Is the Bob Willis Trophy the same thing as the County Championship?**

No. It has been decided by the ECB (the England & Wales Cricket Board, the official governing body for cricket in those countries) that the team winning the Bob Willis Trophy in 2020 is not entitled to call themselves the ‘County Champions’ for the season. In the same way, when calculating players’ career records in the County Championship, their performances in the Bob Willis Trophy should not be aggregated with their performances in the County Championship from previous seasons. They can, however, be included in the record of a player’s performances for his county, as distinct from his performances in the County Championship.

### **Why are there differences in the career figures of some players depending on what source you look at?**

These differences arise because in the past some statisticians regarded particular matches as first-class although, under the ACS’s more recent assessment of the position, those matches were not entitled to first-class status; or else past statisticians did not regard some matches as first-class but the ACS has concluded that they should, after all, be treated as first-class. These differences arise in the cases of a number of cricketers who played before the Second World War. The best-known concern the career figures of WG Grace and Jack Hobbs; those following the ACS’s match list credit WG with 54,211 runs and 2,809 wickets, as against the figures of 54,896 and 2,876 given in *Wisden* in 1916; and credit Hobbs with 199 first-class centuries rather than the ‘traditional’ figure of 197.

A fuller explanation can be found at [https://en.wikipedia.org/wiki/Variations\\_in\\_published\\_cricket\\_statistics](https://en.wikipedia.org/wiki/Variations_in_published_cricket_statistics)

## **4 LAWS AND REGULATIONS**

### **What are the rules that govern the playing of cricket?**

Cricket is governed by Laws (always called Laws, with a capital L, and not ‘rules’!) that are laid down by the Marylebone Cricket Club (MCC), who have been regarded as the guardians of the Laws since the early 19th century. The Laws were last comprehensively revised in 2017, but minor changes are made from time to time, the most recent being in 2019.

All individual competitions – including each Test series, first-class competitions such as the County Championship, limited-overs competitions such as the Indian Premier League, and even matches in minor domestic competitions (such as local leagues) – are usually subject to a series of Regulations that may vary, or add to, the Laws as laid down by MCC. The details of these Regulations can be very substantial. They vary from competition to competition, though some are applied more or less universally: for example, limited-overs matches are usually subject to tighter restrictions on the bowling of ‘wides’ than are set out in the Laws of Cricket.

### **What is the difference between a drawn match and a tied match?**

A first-class match is described as ‘tied’ only when both sides have completed both their innings, and over the course of those innings the sides have totalled exactly the same number of runs. Thus a match in which Team A scores 150 all out and 200 all out in its two innings, and Team B scores 175 all out in its first innings and is then again all out for 175 in its second innings is said to have been tied, because both sides totalled 350 runs in the match as a whole. This is a very rare occurrence: for example, there have been only nine ties in almost 9000 first-class matches in England and Wales since 1974.

All matches that do not end in a win for one side or the other, or that do not result in a tie, are described as ‘drawn’. So if Team A scores 150 and 200 in its two innings, and Team B scores 175 in its first innings but is only able to score 150 runs, with wickets in hand, in its second innings when the match ends, the match is drawn. Even if Team B had scored precisely 175 runs in its second innings when the match ended, and had wickets in hand, the match would still be ‘drawn’, because Team B needed to reach 176 if they were to win the match by outscoring Team A. Such a match might be referred to as ‘drawn – scores level’ – but it is still a draw and not a tie.

List A matches cannot be ‘drawn’ – if (for example) rain intervenes before a result is achieved, the match will be referred to as a ‘No result’, or else a method such as Duckworth-Lewis-Stern will be used to determine the winner. A List A match that ends with the side batting second having scored exactly the same number of runs as the side that batted first is regarded as a tie, although in some cases a method of settling the tie may be used to produce a winner – for example, by saying that the side that lost fewer wickets has won, or by playing a ‘Super Over’ to decide the winner.

### **What is the Duckworth-Lewis-Stern method?**

The Duckworth-Lewis-Stern method (DLS) is a mathematically-based attempt to set a statistically fair target for the team batting second in a limited-overs match that is interrupted by poor weather. The idea is that attaining the revised target should be of the same level of difficulty as reaching the original target set by the team that batted first. The basic principle is that the ‘chasing’ team in a limited-overs match has two resources available to them as they try to reach their target: the overs available in which to score the runs, and the number of wickets remaining to them. The target is adjusted proportionally to the change in the combination of these two resources as the game progresses – so for example, if a wicket falls while a side is chasing a revised target, that target will normally be revised upwards. The formula is designed to take into account reductions in playing time caused by bad weather, or other causes, either before or during the second team’s innings.

This method of calculating revised targets was initially developed by two Britons, Frank Duckworth and Tony Lewis, and so it was originally known as just the Duckworth/Lewis method (D/L). It was first used in 1997, and officially adopted by the ICC two years later. In 2014, responsibility for maintaining and developing this method passed to the Australian Steven Stern, and it has accordingly been rechristened as the DLS.

### **When does a match begin? When does an innings begin?**

Once the toss has been made, a match has officially started – so even if it is rained off without a ball having been bowled, it still counts as an ‘appearance’ for the 22 players involved.

Each of the teams’ innings start upon the call of ‘Play’ by the umpire at the start of the innings. So if – as happened in the Third Test between England and Pakistan in August 2020 – two batsmen enter the playing area in the expectation of starting the innings, but play is then called off for the day without an umpire calling ‘Play’, the team is permitted to start its innings on the following day with different opening batsmen if it so wishes.

Batsmen’s innings are timed from the moment when they cross the boundary into the playing area to start their personal innings. This does not, however, apply to the two opening batsmen, whose innings are timed from the call of ‘Play’ at the start of the team’s innings.

### **Why do scorecards say ‘retired hurt’ or ‘retired ill’ when the Laws of Cricket only talk about batters being ‘retired out’ or ‘retired not out’?**

The Laws do indeed only provide for ‘retired out’ or ‘retired not out’. But it has long been the practice for scorecards to provide a little more information by recording the circumstances when a player retires ‘not out’ - at least, when those are the (relatively) common cases of a player retiring through illness or injury. As early as 1885, *Wisden* recorded the Australian wicketkeeper as ‘retired (hurt)’ in its scorecard of the Lord’s Test of 1884. This has since become the universal practice, and it is understood by those compiling the statistics that ‘retired hurt’ or ‘retired ill’ are the equivalent of a ‘not out’ innings.

There are still occasional instances where a player is recorded as ‘retired not out’ not as a result of illness or injury, but for some other reason outside his or her control. For example, Gordon Greenidge did so in a Test match in Antigua in April 1983 so that he could be with his dying child. This is just recorded in the scorecard as ‘retired not out’, though the circumstances may be explained more fully in a note to the scorecard.

In the same way, the Laws of Cricket do not require the scorecard to name the fielder who catches a batter out, or the bowler who bowled the delivery that dismissed them, because to comply with the Laws it would be sufficient to say simply that the batter was ‘caught’ or ‘bowled’, or whatever. But naming the fielders and bowlers involved in each dismissal is extra information that is of general interest - and in the same way, identifying the most common reasons why a batter ‘retired not out’ is also seen as additional information of interest.