





# **Swiss Ladder and Buchholz Explained**

The Scottish Petanque Association uses the Swiss Ladder draw system and Buchholtz ranking system in most of its competitions. This competition format has become more or less standard in world petanque and the SPA uses the same software system used by the FIPJP and CEP for qualifying rounds in World and European Championships.

This document is provided to explain to players how these systems work and why we use them.

## **SWISS LADDER**

The Swiss Ladder ('Swiss') draw method is designed to pair teams with the same or similar win/loss records against each other. The idea is that, as the competition progresses, it provides more certainty that the most successful teams are likely to play each other so, in theory, you will have to have beaten your nearest rivals to win. It improves competitiveness compared to a 'snake' competition, where your opponents are simply determined by the luck of the draw.

- The first game in each competition is drawn randomly.
- After the first games have all completed, all teams who have 1 win are placed in a pot (say pot A) and all that have 0 wins are placed in the other (say pot B).
- The match ups for the second game are such that teams in pot A can only be drawn against other teams in pot A, and similarly teams in pot B will only be drawn against other teams in pot B.
- After the second round of games are complete there will be some teams with 2 wins, some
  with 1 and some with 0 (so that's now 3 pots). The draw process is then the same as before
  and so on.
- Teams are never drawn against each other more than once any competition, so the draw can become complex quite quickly. This is wny we use computer software.
- If there are odd number of teams in one pot, one team is randomly dropped into the next potso for example if three teams are in the pot on maximum possible wins, one will be drawn against a team in the next round with one less win. Teams will only drop down a pot in this way once during a competition.
- If there are an odd number of teams in the competition, the system allocates one team to receive a bye in each round. Teams who are awarded a bye are credited with a 13-7 win.

One drawback of the Swiss system is that your next opponents will not be known until all games have completed in the previous round - meaning you have to wait. This is one of the reasons we use timed games for triples matches..

# **RANKING**

Once all of the rounds are completed, to determine final placings the teams are ranked according to the following, in order of priority:

- 1. Number of wins
- 2. Buchholtz Number (BHN) where wins are tied
- 3. Fine Buchholtz Number (fBHN) where wins and BHN are tied
- 4. Points difference where wins, BHN and fBHN are tied

The higher the number in each category, the higher the relative ranking.

## **Buchholtz Number (BHN)**

A team's BHN is the sum total of all wins achieved by all of its opponents during the competition.

Ranking teams in this way means that, were two teams have the same number of wins, the higher ranked team is deemed to be that which has played tougher opponents statistically (i.e. the BHN is greater).

For teams that receive byes during the competition, their BHN is based on the number of wins achieved by the lowest ranked team in the competition, rather than 0 for the round they received the bye.

#### Fine Buchholtz Number (fBHN)

A team's fBHN is the sum total of all wins achieved by all of the opponents of all its opponents during the competition.

This is a further refinement used to separate teams that have the same BHN.

Only in the very unlikely event that 2 teams have the same number of wins, BHN and fBHN will points difference count. This means that win carry a heavy weighting, the margin of victory isn't likely to matter.