All-Play-All Line Movements

The simplest all-play-all movements are the Howells, and for small numbers they are the obvious format. For more than one session you can just repeat the movement, or you can play a barometer so that the pairs only meet each other once and the session breaks are secure.

For larger two-session events you can play a Mitchell and Double-Howell, or two Double-Howells. Details of these can be found in *Manning*. If desired, you can turn these into four-session events by playing the complete movement twice.

Perfect Multi-Session events, illustrated with the National Pairs Final movement

The National Pairs final has 50 pairs playing two boards against each of the other pairs, in seven 14-board mini-sessions.

There are three 7-table Mitchell sections and one four-table Howell. The stationary pair in the Howell remains throughout, leaving seven lines of seven pairs each, moving for each session so that they all play against everyone else once.

This format can be varied to accommodate a large range of numbers, as long as they conform to the formula

$p = (n \times r) + 1$, where p is the total number of pairs, n is the number of sessions & r is the number of rounds in a session.

n & r must be odd numbers

There will be $(n-1)/2$ Mitchell sections and one Howell section

This method was used for many years in the Young Chelsea Marathon, where 56 pairs played five 11-round sessions of three-boards each. Similarly, 46 pairs could play five 9-round sessions, or 36 pairs could play five 7-round sessions.

For three sessions you could have 40 pairs playing three 13-round sessions or, as we do in the Spring/Autumn congress finals, 28 pairs playing three 9-round sessions.

Imperfect variations

You can use the above method without a permanently stationary pair, with the formula

$p = (n \times r)$, where p is the number of pairs, n is the number of sessions & r (which must be even) is the number of rounds the Mitchell sections play in a session – equal to the number of pairs in the Howell section.

The problem with this is that the Howell section will always play one fewer round (and therefore won't play all of the boards that the Mitchells play). However, it does allow other sizes of fields to be accommodated, and conforms to the all-play-all requirement.

More recently the Young Chelsea half-marathon has had 32 pairs, and has started with 4 x 4-table Howells, followed by three session of 2 x 8-table Mitchells.

Once again p = (n x r) where p is the number of pairs, n is the number of sessions & r (which needs to be even) is the number of rounds the Mitchell sections play in a session. In this case the Howell movements (which are all played at the same time in Session 1) will each have r/2 tables, r pairs, r-1 rounds.

A similar method could be used with r being odd, using interwoven Howells for the first session and missing the first round of the second session. The disadvantage of this over the perfect format is that now all pairs will miss out one board-set in session 2.

Gordon Rainsford 2012