PSL Winter Fixturing Information Session

Introduction

PSL Winter (PSL) receive many queries after the fixtures have been completed about the schedule and some perceived biases. This document has been written to explain the reasons for most of the queries that are asked and to give information and understanding of the complexities of scheduling a home and away season for sixteen clubs with ground and capacity restrictions.

Grading and its Effects on Fixturing

Grading is completely different to fixturing, grading is the process to place teams into a grade (division) to ensure competitive competitions.

Grading complicates fixturing by generally creating competitions of differing sizes. That being 4 team competitions, 6 team competitions and 8 team competitions. The effect of having different sized competitions is explained in fixture patterns later on.

Fixture Patterns

Being a home and away competition it is important that any fixture pattern can be used across all competitions with similarity of home and away games to ensure that clubs can function by having as many teams at home at one time, with the consideration of ground capacity, at the same time. This allows clubs to provide umpiring and other volunteer services at the ground in the most efficient manner.

The order of priority of fixturing is to accommodate

- 1. Ground restrictions/ground share (easiest to fix)
- 2. 2 and 3 team clubs aligned (find number gaps)
- 3. 4 team clubs or greater, aligned or similar pattern (find remaining gaps)
- 4. Capacity restrictions, these are the most difficult and in realty are the result of the club over subscribing itself and requires another club with same issues so they can share an alternating number

To accommodate this

- 1. Teams in clubs may have up to one home game removed from it schedule.
- 2. Teams in a club may have up to two home games added to it schedule
- 3. May have games left for it to decide how it will play them by either finding another club to host them or by playing a home game away

The Issues of Having Two Teams in a Competition

Below is taken form the Perth Softball Winter Nomination Form

Team Nominations

Senior team nominations require a Venue (Ground Name), Sub Venue (Diamond 1, Diamond 2, Diamond 3 or Diamond 4), and a Start Time for Home Games (11:00, 13:00, or 15:00) These must be unique and not clash with any other division nominations.

There are 10 Divisions available for nomination, 4, 5, 6, or 8 teams per division. PSL reserves the right to reduce or expand the amount of divisions based on responses from clubs.

Two teams will only be permitted in the same division if

- 1. The club has put forward a compelling reason to the Perth Softball Winter Committee that two teams in a division are essential for the club requesting.
- 2. The club accepts that by placing two teams in a division that they will placed in a fixture pattern that does not adversely affect other competing clubs fixture pattern and may not be an ideal fixture pattern for the requesting club.
- 3. There are spare spaces available in the next highest division but not enough spaces to for a lower division to be successfully created.
- 4. The Perth Softball Winter Committee deems that in the best interests of the competition fairness that it is necessary for club to have two teams in a competition.

The highlighted section is there for a reason.

If a club is requesting two or more teams in a competition, they are removing the available numbers from the other clubs. If the requesting club has teams in a 6 team competition they then take an extra number from 1 to 6 it is manifestly unfair on the other 16 clubs playing in the competition that that club takes up two numbers in a competition, if there are two clubs requesting more than two teams in a grade they take up 50% of the remaining in an eight team competition and 66% of the numbers in a six team competition. Hence the statement above, the club gets the gap number, if you want two teams in a competition. The fixtures are then manually manipulated to remove as many capacity clashes as possible, but there will be remainders. Remember your request, your problem.

As there are no two numbers in the fixture pattern that are the same in a home/away pattern. So at some point in time that team will be out of alignment with the other teams in that club, however they can be similar and if PSL have placed you there as a result of grading then it will be as similar as possible.

It becomes more problematic when that club also has a ground restriction or capacity restriction as by requesting two teams in a competition this will undoubtably push the ground over capacity at some time in the fixturing during the year.

Myths

Myth 1

Question.

You should be able to schedule teams regardless of how many there are to able to play home and away every second week.

Answer

Can't be done...

Eight Team Fixture

Round 1

1 v 6

2 v 7

3 v 8

4 v 5

Round 2

7 v 1

8 v 2

5 v 3

6 v 4

The reason it can't be done is if 1,2,3, and 4 are home one week then away the next week, when do 1,2,3, and 4 play each other if they are all home or all away? Same applies to 5,6,7 and 8.

Myth 2

Question

My club has 8 diamonds available every month and 7 teams I should always be able to play my games without going over in capacity in that month.

Answer

This can only happen if PSL schedule you as a priority over everyone else and that means your ground problem becomes everyone's ground problem.

Myth 3

Question

You should be able to give every club a number in the pattern that just belongs to them.

Answei

There are 16 clubs and only a maximum of 8 numbers available.

Your club will get a number that is as consistent as it can be in the pattern, you may not get it this every year but you may get it years to come. The reality is the larger clubs that don't have capacity issues are the clubs that can absorb an offset fixture pattern better than others, we do try to alternate it from year to year.

Myth 4

Question

You prioritise some clubs over others when they have a ground restriction.

Answer

No, if those clubs have the capacity to play all their games at that venue they just get a number like every other club. If PSL don't accommodate this then at some point in the year club A will be scheduled to play club B and there won't be a venue for either of them to play at.

Double Headers to Remove Byes

If PSL have decided to remove byes by scheduling in double headers if you have a bye round, either home or away, then you will travel to a double header.

Your club hasn't lost a home game, you have just gained a game that wouldn't have been played normally if PSL left the bye in the round.

Conversely if you host a double header you are playing a normal game and a game that would have had to have been played at night at Mirrabooka.

However there are capacity issues at some grounds and all double headers cannot be played so those games will still be scheduled at night at Mirrabooka

Division 1 and 2 Tournament Byes

If a club has requested a tournament bye, then that tournament will be at the expense of a scheduled home game. Your club will host a tournament it is more than fair that this should not affect other clubs where possible.

Requests

Reasonable requests

My club has an event scheduled between dd/mm/yyyy and dd/mm/yyyy. This can be accomplished if the window is wide enough, 2 week to 3 week window. A single date may not be achievable due to other club having ground restrictions.

Our ground is not available for dd/mm/yyyy to dd/mm/yyyy dates. This can also be achieved if there are not too many other clubs with the same request. Please understand that this may not be achievable and Mirrabooka is available on these occasions.

Unreasonable Requests

My club does not want to play 9am and 11am away games. The competition has capacity issues you need to play when scheduled.

My club has a function, and we want all away teams on dd/mm/yyyy to play at 1pm so they can get back to our club function. The competition has capacity issues you need to play when scheduled. You don't get dictate game times to other clubs.

My club has arranged a function on this date dd/mm/yyyy and we request ever team at home. The competition has capacity issues you need to play when scheduled. Wait until the fixtures are released before arranging functions.

My club wants the last game of the season with everyone at home, this is so common it's ridiculous and won't be considered

Finals

Finals are predominately always scheduled at Mirrabooka.

Due to the sheer number of games and teams comprising a combination with juniors and seniors players it is not achievable in such a restricted venue to play as per a normal Sunday timeslot, expect to play at any time between 9am to 7pm, you will be scheduled between these times and unfortunately it will be not negotiable. This includes Father's Day

If due to inclement weather the finals are rescheduled to another date or venue the times may change, please be accepting of these changes. Again, this is unavoidable and not negotiable.

If on the day, due to inclement weather or overtime games, your teams start time is changed, it's changed, again it is unavoidable and not negotiable.

Season Fixtures

Standard 4 team into Standard 6 team into Standard 8 team patterns.

Standard fixture patterns are typical of the automatic patterns that were generated by the previous SportsTG platform.

Four team fixture

Round 1

1 v 4

2 v 3

Round 2

4 v 2

3 v 1

Round 3

1 v 2

3 v 4

Then inverted and repeated until 21 games have been produced.

Six Team Fixture Round 1 3 v 6 1 v 5 2 v 4 Round 2 6 v 5 3 v 2 4 v 1 Round 3 4 v 6 5 v 3 1 v 2

Then inverted and repeated until 20 games have been produced.

Eight Team Fixture

Round 1

1 v 6

2 v 7

3 v 8

4 v 5

Round 2

7 v 1

8 v 2

5 v 3

6 v 4

Round 3

1 v 8

2 v 5

4 v 3

7 v 6

Round 4

5 v 1

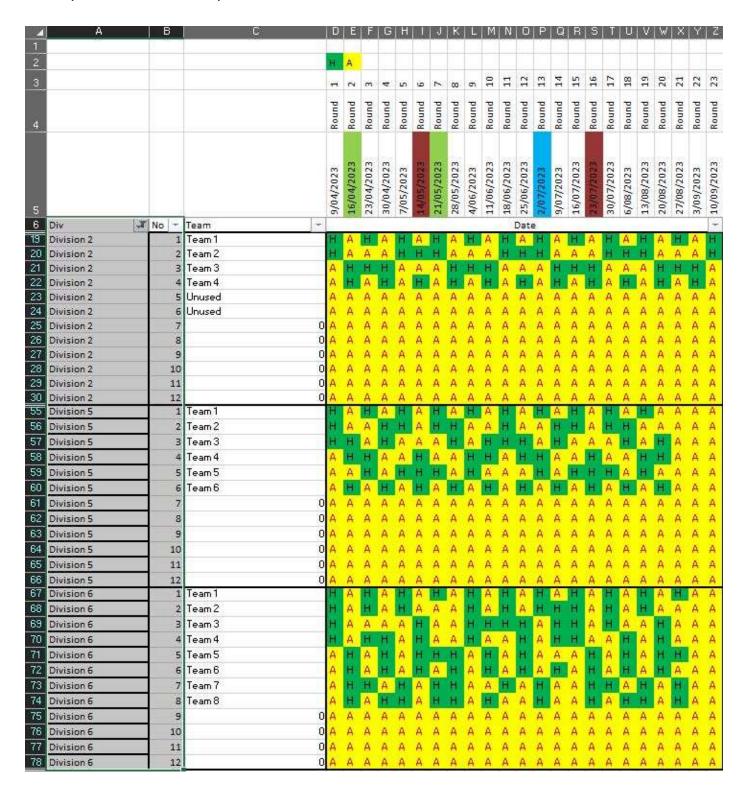
4 v 2

6 v 3

8 v 7

Then inverted and repeated until 21 have been produced.

Visually looks like this as a pattern



As you can see, there is only two clubs that will have games aligned if they have teams in these competitions, Team 1 and Team 6. The rest of the teams will hardly ever line up and manual manipulation of the fixtures will be extensive.

So the predictability of the fixtures, as in every 6 weeks team 1 plays team 6 in a 6 team fixture, is not preferred as it then creates significant challenges for the whole season.

		Team 1	Team 2	Team.3	Team 4	Unused	Unused	0	0	0	0	0		
Team 1	home	0	4	3	4	0	0	0	0	0	0	0	-	7 11
Team 1	away	- 0	3	4	3	Ö	ő	Õ	Õ	Ö	ō	Ö		10
Team 1	home night	ō	Ö	O	ō	Ō	Ö	Ō	Ō	Ö	Ö	Ŏ	21	Ö
Team 1	away night	ō	o o	Ö	ō	Ō	ō	0	0	Ō	ō	ō		11 10 0 0
		0	7	7	7	0	0	0	0	0	0	0		
Team 2	home	3	0	4	3	0	0	0	0	0	0	0		10 11 0 0
Team 2	away	4	.0	3	4	0	0	0	0	0	0	0	04	11
Team 2	home night	0	0	0	0	0	0	0	0	0	0	0	21	0
Team 2	aw ay night	0	0	0	0	0	0	0	0	0	0	0		0
		7	0	7	7	0	0	0	0	0	0	0		100
Team 3	home	4	3	0	4	0	0	0	0	0	0	0	î .	11
Team 3	away	3	4	0	3	0	0	0	0	0	0	0	21	11 10
Team 3	home night	0	0	0	0	0	0	0	0	0	0	. 0	21	0
Team 3	aw ay night	0	0	0	0	0	0	0	0	0	0	0		0
		7	7	0	7	0	0	0	0	0	0	0		
Team 4	home	3	4	3	0	0	0	0	0	0	0	0		10
Team 4	away	4	3	4	0	0	0	0	0	0	0	0	21	11
Team 4	home night	0	0	0	0	0	0	0	0	0	0	0	21	0
Team 4	aw ay night	0	0	0	0	0	0	0	0	0	0	0		11 0 0
E	8	7	7	7	0	0	0	0	0	0	0	0		
Unused	home	0	0	0	0	0	0	0	0	0	0	0		0
Unused	away	0	0	0	0	0	0	0	0	0	0	0	0	0 0 0
Unused	home night	0	0	0	0	0	0	0	0	0	0	0		0
Unused	aw ay night	0	0	0	0	0	0	0	0	0	0	0	L	0
0.000000		0	0	0	0	0	0	0	0	0	0	0		1000
Unused	home	0	0	0	0	0	0	0	0	0	0	0		0
Unused	away	0	0	0	0	0	0	0	0	0	0	0	0	0
Unused	home night	0	0	0	0	0	0	0	0	0	0	0	1	0
Unused	aw ay night	0	0	0	0	0	0	0	0	0	0	0	Į.	0
		0	0	0	0	0	0	0	.0	0	0	0		

Standard 4 Team Matrix

		Team 1	Team 2	Team3	leam.4	Team5	TeamS	io	10	2 0 0	.0	*0*		
Team 1	home	0	2	2	2	2	2	0	0	0	0	0		10
Team 1	away	0	2	2	2	2	2	0	0	0	0	0	1 00 [10
Team 1	home night	0	0	0	0	0	0	0	0	0	0	0	20	(
Team 1	aw ay night	0	0	0	0	0	0	0	0	0	0	0		(
T .		0	4	4	4	4	4	0	0	0	0	0		
Team 2	home	2	0	2	2	2	2	0	0	0	0	0		10
Team 2	away	2	0	2	2	2	2	0	0	0	0	0	20	10
Team 2	home night	0	0	0	0	0	0	0	0	.0	.0	0	20	(
Team 2	away night	0	0	0	0	0	0	0	0	0	0	0		
		4	0	4	4	4	4	0	0	0	0	0		
Team 3	home	2	2	0	2	2	2	0	0	0	0	0		10
Team 3	away	2	2	0	2	2	2	0	0	0	0	0	20	10
Team 3	home night	0	0	0	0	0	0	0	0	0	0	0	20	
Team 3	away night	0	0	0	0	0	0	0	0	0	0	0		1
		4	4	0	4	4	4	0	0	0	0	0		
Team 4	home	2	2	2	0	2	2	0	0	0	0	0		10
Team 4	away	2	2	2	0	2	2	0	0	0	0	0	20	10
Team 4	home night	0	0	0	0	0	0	0	0	0	0	0	20	- 1
Team 4	aw ay night	0	0	0	0	0	0	0	0	0	0	0		(
		4	4	4	0	4	4	0	0	0	0	0		
Team 5	home	2	2	2	2	0	2	0	0	0	0	0		10
Team 5	away	2	2	2	2	0	2	0	0	0	0	0	20	10
Team 5	home night	0	0	0	0	0	0	0	0	0	0	0	1	
Team 5	awaynight	0	0	0	0	0	0	0	0	0	0	0		(
		4	4	4	4	0	4	0	0	0	0	0		
Team 6	home	2	2	2	2	2	0	0	0	0	0	0		10
Team 6	away	2	2	2	2	2	0	0	0	0	0	0	20	10
Team 6	home night	0	0	0	0	0	0	0	0	0	0	0	3756	
Team 6	awaynight	0	0	0	0	0	0	0	0	0	0	0		30
à.		4	4	4	4	4	0	0	0	0	0	0		

Standard 6 Team Matrix

		Teem 1	Team 2	Team 3	Team 4	Team 5	Team6	Team 7	TeamS	0	0	0		
Team 1	home	0	2	1	2	1	2	1	2	0	0	0		7 1
Team 1	away	0	1	2	1	2	1	2	1	0	Ö	Ö		10
Team 1	home night	Ō	Ó	ō	Ó	0	Ó	0	Ó	0	Ö	Ö	21	Č
Team 1	away night	o o	0	0	0	0	0	ō	0	Ō	0	0		
		0	3	3	3	3	3	3	3	0	0	0		1
Team 2	home	618	0	2	1	2	1	2	1	0	0	0		10
Team 2	away	2	0.	1	2	1	2	1	2	0.	0.	0.	24	1
Team 2	home night	0	0	0	0	0	0	0	0	0	0	0	21	
Team 2	aw ay night	0	0	0	0	0	0	0	0	0	0	0	1 .	
î		3	0	3	3	3	3	3	3	0	0	0		1
Team 3	home	2	1	0	2	1	1	T.	2	0	0	0		10
Team 3	away	1	2	0		2	2	2	. 1	0	0	0	21	1
Team 3	home night	0	0	0.	0	0	0	0	0.	0	0.	0.	821	
Team 3	away night	0	0	0	0	0	0	0	0	0	0	0		
		3	3	0	3	3	3	3	3	0	0	0		1
Team 4	home	1	2	1	0	2	1	2	1	0	0	0		10
Team 4	away	2	1	2	0	1	2	1	2	0	0	0	21	1
Team 4	home night	0	0	0	0	0	0	0	0	0	0	0	21	- 0
Team 4	away night	0	0	0.	0	0	0	0	0	0	0	0.		
		3	3	3	0	3	3	3	3	0	0	0		
Team 5	home	2	1	2	1	0	2	1	2	0	0	0		1
Team 5	away	1	2	1	2	0	1	2	1	0	0	0	21	10
Team 5	home night	0	0	0	0	0	0	0	0	0	0	0	- 21	
Team 5	away night	0	0	0	0	0	0	0	0	0	0	0		
	on control of the con	3	3	3	3	0	3	3	3	0	0	0		
Team 6	home	1	2	2	2	1	0	1	1	0	0	0	1	10
Team 6	away	2	1	1	1	2	0	2	2	0	0	0	21	1
Team 6	home night	0	0	0	0	0	0	0	0	0	0	0	21	
Team 6	away night	0	0	0	0	0	0	0	0	0	0	0		
		3	3	3	3	3	0	3	3	0	0	0		
Team 7	home	2	1	2	1	2	2	0	1	0	0	0	1	1 1
Team 7	away	1	2	1	2	1	1	0	2	0	0	0	21	10
Team 7	home night	0	0	0	0	0	0	0	0	0	0	0	:41	
Team 7	away night	0	0	0	0	0	0	0	0	0	0	0		
		3	3	3	3	3	3	0	3	0	0	0		
Team 8	home	1	2	1	2	1	2	2	0	0	0	0		1
Team 8	away	2	1	2	1	2	1	1	0	0	0	0	21	10
Team 8	home night	0	0	0	0	0	0	0	0	0	0	0	94.1	
Team 8	away night	0	0	0	0	0	0	0	0	0	0	0		
		3	3	3	3	3	3	3	0	0	0	0		1

Standard 8 Team Matrix

Modified 4 team into Standard 6 team into Modified 8 team patterns.

So that the challenges of using the standard fixture patterns are removed and teams align, there are options, modify the 4 team fixture and modify the 8 team fixture to fit with 6 team fixture.

In this option we use a 6 team fixture to create a 4 team fixture and not use teams 3 and 5. The fixture is then balanced so that all the teams play each other evenly. The eight team fixture is modified using the six team fixture as its base, leaving teams one to six in their home and way pattern but include teams 7 and 8.

The modified fixtures are too large to show on this page but visually the pattern looks like this.

А	В	D C	D	E	E,	G	H		J	K	L	М	N	0	P	Q	R	S		Ų	٧	W	X	Y	Z
			н	Α																					-
			100				02	SEC.		1865	-22	10	11	12	13	14	15	16	17	18	19	20	21	22	23
				2	m	₹	ın	0	7	00	60			-312	20	2.00		-5-3	55		Con	-313	7.9	2.65	COL
			Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round	Round
										-												-			Series de
			023	2023	2023	2023	023	2023	2023	2023	023	2023	2023	2023	023	023	2023	2029	2023	023	2023	2023	2023	023	2023
			9/04/2023	16/04/2023	23/04/2023	30/04/2023	7/05/2023	14/05/	21/02/2023	28/02/2023	4/06/2023	11/06/2023	18/06/2023	25/06/2023	2/02/2023	9/07/2023	16/07/2023	120/62	30/07/2023	6/08/2023	13/08/2023	20/08/2023	27/08/2023	3/09/2023	10/09/2023
Div	No -	Team		103300		1.00	2.000		NA STATE	102	12.2	123	-	Date	B. 10.	100000	ESS-P-			KATO:	g.0000c	1077	1.578	100000	T
Division 1	1	Team 1	H	Α	H	Α	H	Α	H	A	H	Α	H	A	H	Α	H	A	H	Α	H	A	H	Α	A
Division 1	2	Team 2	H	Α	A	H	Н	Α	H	H	A	Α	H	A	A	H	H	A	H	Н	A	A	A	Α	Α
Division 1	3	Unused	Α	Α	A	A	A	A	A	A	Α	A	A	Α	A	Α	A	A	A	A	A	A	A	A	Α
Division 1	4	Team 4	A	H	1	A	A	H	A	A	H	H	A	H	H	А	A	Н	A	A	H	Ħ	H	Α	Α
Division 1	5	Unused	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Division 1	6	Team 6	Α	H	Α	H	Α	H	Α	H	Α	H	Α	H	Α	Н	Α	H	Α	H	Α	H	Α	Α	Α
Division 1	7		0 A	Α	A	A	A	Α	A	A	Α	Α	A	A	Α	Α	A	A	A	Α	A	A	A	Α	A
Division 1	8		0 A	Α	A	Α	Α	Α	A	A	Α	Α	A	Α	Α	Α	A	A	A	Α	A	A	Α	Α	A
Division 1	9		0 A	Α	A	A	A	Α	A	A	Α	Α	A	A	A	Α	A	A	A	Α	A	A	A	Α	A
Division 1	10		0 A	A	A	A	A	A	Α.	A	A	A	Α.	A	A	A	A	A	A	A	A	A	A	A	A
Division 1	11		0 A	A	Α.	A	A	A	Α.	A	A	A	Α.	A.	A	A	Α.	A	A	A	A	A.	A	A	A
Division 1	12	+	0 A	Α	A	A	A	A	A	A	A	A	A	A	A	Α	A	A	A	A	A	A	A	A	A
Division 7	1	Team 1		*	H	A	П			A	H	4	Щ	A	H	A		4		A	н	A	*	A .	A
Division 7	2	Team 2	- 5	Α	Α	7	H	A	Н	H	A	A		A	A		н	A	н	Ħ	A	A	A	A	A
Division 7	3	Team 3	H	#	Α	H	Α	A	Α	H	Α	H	H	Н	Α	Н	Α	A	A	H	Α	Н	Α	Α	Α
Division 7	4	Team 4	Α	Н	щ	Α	A	H	Α	A	Η.	Ħ	А	Н	H	Α	Α	H	A	Α	Н.	H	Α	Α	Α
Division 7	5	Team 5	A	A	H	A	H	Ħ	H	A	H	Α	Α	A	H	Α	Н	H	H	A	H	A	A	Α	Α
Division 7	6	Team 6	A	Н	Α	Н	Α	Н	Α	Н	Α	H	Α	Н	Α	H	Α	H	Α	Н	Α	Н	Α	Α	Α
Division 7	7		0 A	Α	Α	A	Α	Α	Α	Α	Α	Α	Α	A	Α	Α	Α	A	Α	Α	Α	A	A	Α	Α
Division 7	8		0 A	Α	Α	A	Α	Α	Α	Α	Α	Α	Α	A	Α	Α	Α	A	Α	Α	Α	A	Α	Α	Α
Division 7	9		0 A	Α	Α	A	Α	Α	Α	A	Α	Α	Α	A	Α	Α	Α	Α	Α	Α	Α	A	Α	Α	Α
Division 7	10		0 A	Α	Α	A	Α	Α	Α	A	Α	Α	Α	A	Α	Α	Α	A	A	Α	Α	A	Α	Α	Α
Division 7	11		0 A	Α	Α	A	Α	Α	Α	Α	Α	Α	Α	A	Α	Α	Α	A	A	Α	Α	A	Α	Α	Α
Division 7	12	ē.	0 A	Α	Α	Α	Α	Α	A	A	Α	Α	A	A	Α	Α	A	A	Α	Α	A	A	Α	Α	A
Division 8	1	Team 1	1	Α	H	A	H	Α	H	A	糠	Α	H	A	肽	Α	H	A	III.	Α	H	A	H	Α	A
Division 8	2	Team 2	H	Α	A	H	H	Α	A	H	Α	Α	H	A	A	Ħ	H	А	A	Ħ	A	H	H	Α	A
Division 8	3	Team 3	H	H	A	H	A	Α	A	H	A	Ħ	H	H	A	H	A	A	H	H	A	A	H	A	A
Division 8	4	Team 4	A	H	H	A	A	H	A	H	H	H	A	H	H	Α	A	H	Α	Α	H	H	A	Α	A
Division 8	5	Team 5	A	Α	H	А	H	H	H	A	H	Α	A	A	H	Α	H	Н	H	Α	H	A	A	Α	A
Division 8	6	Team 6	A	H	A	H	A	H	A	H	A	Ħ	A	H	Α	H	Α	H	A	Ĥ.	A	H	A	Α	A
Division 8	7	Team 7	H	Α	H	H	Ħ.	Α	A	Α	Α	Α	H	A	H	H	H	A	Α	Α	A	Н	H	Α	A
Division 8	8	Team 8	A	H	А	А	A	H	н	Н	H	H	A	H	A	Α	A	H	H	H	H	А	A	Α	A
Division 8	9	Encor- 14. \$5.95	0 A	Α	A	A	A	Α	A	А	Α	Α	A	А	A	A	A	А	Α	Α	A	А	A	Α	A
Division 8	10		OA	A	A	A	A	A	A	A	A	A	A	A	A	Α	A	A	A	A	A	A	A	Α	A
Division 8	0		O A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	10	A
Division 8	12		OA	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

Now you can see that teams one to six are aligned across all competitions and we have created inverse teams as well, an example is that team 2 and team 4 don't clash and can be used for ground share or capacity issues. This also applies to teams 1 and 6, teams 7 and 8 and teams 3 and 5

The problem with this pattern is that in the 8 team fixture teams do not travel evenly, this is a result of the compromise of fitting the patterns of 4 teams into 6 teams into 8 teams. However those clubs still get a 10/11 split of home and away games over 21 rounds.

Also any team playing in a 4 team competition is restricted to numbers 1,2,4, and 6 across the rest of the competition for purposes of alignment

		Team 1	Team 2	Unused	Team 4	Unused	Team 6	0	0	0	0	0		
Team 1	home	0	3	0	3	0	5	0	0	0	0	0		1
Team 1	away	Ō	4	0	4	0	2	0	0	0	0	0	24	1
Team 1	home night	0	0	0	0	0	0	0	0	0	0	0	21	1
Team 1	aw ay night	0	0	0	0	0	0	0	0	0	0	0		
		0	7	0	7	0	7	0	0	0	0	0		1
Team 2	home	4	0	0	3	0	3	0	0	0	0	0		1
Team 2	away	3	0	0	4	0	4	0	0	0	0	0	21	
Team 2	home night	0	0	0	0	0	0	0	0	0	0	0	"	
Team 2	aw ay night	0	0	0	0	0	0	0	0	0	0	0		8
		7	0	0	7	0	7	0	0	0	0	0		
Unused	home	0	0	0	0	0	0	0	0	0	0	0	l.	
Unused	away	0	0	0	0	0	0	0	0	0	0	0	0	
Unused	home night	0	0	0	0	0	0	0	0	0	0	0		3
Unused	aw ay night	0	0	0	0	0	0	0	0	0	0	0		1
		0	0	0	0	0	0	0	0	0	0	0	e.	
Team 4	home	4	4	0	0	0	3	0	0	0	0	0		
Team 4	away	3	3	0	0	0	4	0	0	0	0	0	21	1
Team 4	home night	0	0	0	0	0	0	0	0	0	0	0		
Team 4	away night	0 7	7	0	0	0	7	0	0	0	0	0		
Unused	1		33.53	0		0		0	0	0				-
Unused Unused	home away	0	0	0	0	0	0	0	0	0	0	0	la .	
Unused	home night	0	0	0	0	0	0	0	0	0	0	0	0	
Unused	away night	Ů	ő	0	ő	Ö	Ö	Ö	ő	Ö	ő	ő		
Oriased	awayriigrit	ů ů	Ö	Ö	o O	0	ő	ő	0	0	0	Ö		1
Team 6	home	2	4	0	4	0	0	0	0	0	0	0	-	1
Team 6	away	5	3	ő	3	ő	ő	ő	ő	ő	ő	ő		
Team 6	home night	0	0	ő	0	ő	ő	ő	ő	ő	ő	ő	21	
Team 6	away night	Ö	ő	ő	ő	ő	ő	ő	ő	ő	ŏ	ő	1	
	an ay riigin	7	7	ŏ	7	ő	ő	ő	ő	ő	ő	ő		4

Modified 4 Team Matrix

		Team 1	Team 2	Team3	leam.4	Team5	TeamS	io	10	2 0 0	.0	*0*		
Team 1	home	0	2	2	2	2	2	0	0	0	0	0		10
Team 1	away	0	2	2	2	2	2	0	0	0	0	0	1 00 [10
Team 1	home night	0	0	0	0	0	0	0	0	0	0	0	20	(
Team 1	aw ay night	0	0	0	0	0	0	0	0	0	0	0		(
T .		0	4	4	4	4	4	0	0	0	0	0		
Team 2	home	2	0	2	2	2	2	0	0	0	0	0		10
Team 2	away	2	0	2	2	2	2	0	0	0	0	0	20	10
Team 2	home night	0	0	0	0	0	0	0	0	.0	.0	0	20	(
Team 2	away night	0	0	0	0	0	0	0	0	0	0	0		
		4	0	4	4	4	4	0	0	0	0	0		
Team 3	home	2	2	0	2	2	2	0	0	0	0	0		10
Team 3	away	2	2	0	2	2	2	0	0	0	0	0	20	10
Team 3	home night	0	0	0	0	0	0	0	0	0	0	0	20	
Team 3	away night	0	0	0	0	0	0	0	0	0	0	0		1
		4	4	0	4	4	4	0	0	0	0	0		
Team 4	home	2	2	2	0	2	2	0	0	0	0	0		10
Team 4	away	2	2	2	0	2	2	0	0	0	0	0	20	10
Team 4	home night	0	0	0	0	0	0	0	0	0	0	0	20	- 1
Team 4	aw ay night	0	0	0	0	0	0	0	0	0	0	0		(
		4	4	4	0	4	4	0	0	0	0	0		
Team 5	home	2	2	2	2	0	2	0	0	0	0	0		10
Team 5	away	2	2	2	2	0	2	0	0	0	0	0	20	10
Team 5	home night	0	0	0	0	0	0	0	0	0	0	0	1	
Team 5	awaynight	0	0	0	0	0	0	0	0	0	0	0		(
		4	4	4	4	0	4	0	0	0	0	0		
Team 6	home	2	2	2	2	2	0	0	0	0	0	0		10
Team 6	away	2	2	2	2	2	0	0	0	0	0	0	20	10
Team 6	home night	0	0	0	0	0	0	0	0	0	0	0	3756	
Team 6	awaynight	0	0	0	0	0	0	0	0	0	0	0		30
à.		4	4	4	4	4	0	0	0	0	0	0		

Standard 6 Team Matrix

		Team 1	Team 2	Team 3	Team 4	Team 5	Team 6	Team 7	Team 8	0	0	0		
Team 1 Team 1 Team 1	home away home night	0 0 0	2 1 0	2 1 0	0 3 0	3 0 0	0 3 0	2 1 0	2 1 0	0 0 0	0 0 0	0 0 0	21	11 10
Team 1	aw ay night	0	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0	0	0		0
Team 2 Team 2 Team 2 Team 2	home away home night away night	1 2 0 0	0 0 0 0	1 2 0	3 0 0	1 2 0	2 1 0	1 2 0	1 2 0	0 0 0 0	0 0 0	0 0 0	21	10 11 0
Team 3 Team 3 Team 3 Team 3	home away home night away night	3 1 2 0 0	2 1 0	0 0 0 0	2 1 0	3 1 2 0	3 3 0 0	1 2 0	3 1 2 0	0 0 0 0	0 0 0 0	0 0 0 0	21	11 10 0
Team 4	home	3	3	0	3	3 1	3	3	3 2	0	0	0		1
Team 4 Team 4 Team 4	away home night away night	0 0 0	3 0 0	2 0 0	0 0 0	2 0 0	1 0 0	1 0 0	1 0 0	0 0 0	0 0 0	0 0 0	21	10 0
Team 5 Team 5	home away	3 0 3	2 1	2 1	2 1	3 0 0	2 1	2 1	3 0 3	0 0 0	0 0	0 0		10
Team 5 Team 5 Team 5	home night away night	0	0	0	0	0	0	0	0	0	0	0	21	
7 0		3	3	3	3	0	3	3	3	0	0	0		1
Team 6 Team 6 Team 6 Team 6	home away home night away night	3 0 0	1 2 0	0 3 0	1 2 0	1 2 0	0 0 0	3 0 0	1 2 0	0 0 0	0 0 0 0	0 0 0	21	10 11 0
Team 7 Team 7	home away	3 1 2	3 2 1	2 1	3 1 2	3 1 2	0 0 3	3 0 0	3 3 0	0 0	0 0	0 0	24	10
Team 7 Team 7	home night away night	0 0	0	0	0	0 0	0 0 3	0	0	0 0	0	0	21	
Team8 Team8 Team8	home away home night	1 2 0	2 1 0	2 1 0	1 2 0	3 0 0	2 1 0	0 3 0	0	0 0	0	0	21	11 10
Team 8	aw ay night	0 3	0 3	0 3	0 3	0 3	0 3	0 3	0	0	0	0		0

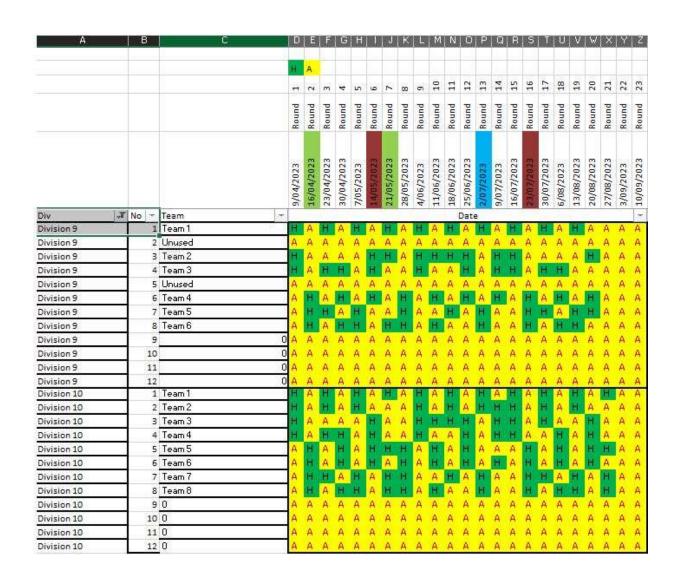
Modified 8 Team Matrix

The future

If PSL can manage, as it did this year (2023), and only have six and eight team competitions. The six team and eight team patterns will more than likely look like this.

By modifying the 8 team pattern to accommodate 6 teams, Team 2 and Team 5 unused, the pattern will look like this.

This will also remove the uneven home and away draw from the modified 8 team pattern in the modified 4 into the standard 6 and modified 8 team draws



		Team 1	Unused	Team 2	Team3	Unused	Team 4	Team 5	Team 6	0	0	a	
Team1 Team1 Team1 Team1	home away home night away night	0 0 0	0 0 0 0	2 2 0 0	2 2 0 0	0 0 0	2 2 0 0	2 2 0 0	2 2 0 0	0 0 0	0 0 0	0 0 0	20
Unused Unused Unused Unused Unused	home away home night away night	0 0 0 0	0 0 0 0	4 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0
Team 2 Team 2 Team 2 Team 2	home away home night away night	2 2 0 0	0 0 0	0 0 0	2 2 0 0	0 0 0	2 2 0 0	2 2 0 0	2 2 0 0	0 0 0	0 0 0	0 0 0	20
Team 3 Team 3 Team 3 Team 3	home away home night away night	2 2 0 0	0 0 0 0	2 2 0 0	0 0 0 0	0 0 0 0	1 3 0	2 2 0 0	3 1 0	0 0 0 0	0 0 0 0	0 0 0 0	20
Unused Unused Unused Unused Unused	home away home night away night	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0
Team 4 Team 4 Team 4 Team 4	home away home night away night	2 2 0 0	0 0 0 0	2 2 0 0	0 3 1 0	0 0 0 0	0 0 0 0	2 2 0 0	0 1 3 0	0 0 0 0	0 0 0 0	0 0 0 0	20
Team 5 Team 5 Team 5 Team 5	home away home night away night	2 2 0 0	0 0 0 0	4 2 2 0 0	2 2 0 0	0 0 0 0	2 2 0 0	4 0 0 0	2 2 0 0	0 0 0 0	0 0 0 0	0 0 0 0	20
Team 6 Team 6 Team 6 Team 6	home away home night away night	2 2 0 0	0 0 0 0	2 2 0 0	1 3 0	0 0 0 0	3 1 0	2 2 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	20

Modified 8 team draw to use 6 teams Matrix

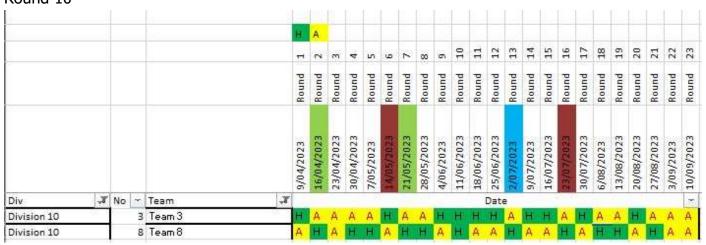
Note that the uneven draw is still there, but reduced somewhat, effectively we have moved some of the issues of the 8 team modified draw to the 6 team draw

PI		Team 1	Teem.2	Teem.3	Tesm.4	Team 5	Team 6	Tesm.7	Team 8	0	0	O		
Team 1	home	0	2	1	2	1	2	1	2	0	0	0		11
Team 1	away	0	1	2	1	2	1	2	1	0	0	0	2204	10
Team 1	home night	Ō	0	0	0	0	0	0	0	0	0	0	21	10 0
Team 1	awaynight	0	0	0	0	0	0	0	0	0	0	0		0
		0	3	3	3	3	3	3	3	0	0	0		
Team 2	home	1	0	2	1	2	1	2	1	0	0	0		10
Team 2	away	2	0	7	2	1	2	7	2	0.	0.	0	21	11
Team 2	home night	0	0	0	0	0	0	0	0	0	0	0	41	0
Team 2	awaynight	0	0	0	0	0	0	0	0	0	0	0		0
Î		3	0	3	3	3	3	3	3	0	0	0		
Team 3	home	2	1	0	2	1	- 1	1	2	0	0	0		10
Team 3	away	1	2	0	1	2	2	2		0	0	0	21	11
Team 3	home night	0	0.	0.	0.	0.	0.	0	0.	0.	0.	0.	821	0
Team 3	away night	0	0	0	0	0	0	0	0	0	0	0		0
		3	3	0	3	3	3	3	3	0	0	0		
Team 4	home	1	2	1	0	2	1	2	1	0	0	0		10
Team 4	away	2	1	2	0	1	2	1	2	0	0	0	21	11 0
Team 4	home night	0	0	0	0	0	0	0	0	0	0	0	1000	
Team 4	aw ay night	0	0.	0.	0	0	0.	0.	0	0	0	0		0
	15 35	3	3	3	0	3	3	3	3	0	0	0		
Team 5	home	2	1	2	1	0	2	1	2	0	0	0		11
Team 5	away	1	2	1	2	0	1	2	1	0	0	0	21	10
Team 5	home night	0	0	0	0	0	0	0	0	0	0	0	343	0
Team 5	awaynight	0	0	0	0	0	0	0	0	0	0	0		0
		3	3	3	3	0	3	3	3	0	0	0		
Team 6	home	1	2	2	2	1	0	1	1	0	0	0		10
Team 6	away	2	1	1	1	2	0	2	2	0	0	0	21	11 0
Team 6	home night	0	0	0	0	0	0	0	0	0	0	0		0
Team 6	away night	0	0	0	0	0	0	0	0	0	0	0		0
		3	3	3	3	3	0	3	3	0	0	0		
Team 7	home	2	1	2	1	2	2	0	1	0	0	0		11
Team 7	away	*10	2	1	2	1	1	0	2	0	0	0	21	10 0
Team 7	home night	0	0	0	0	0	0	0	0	0	0	0		0
Team 7	away night	0	0	0	0	0	0	0	0	0	0	0		0
		3	3	3	3	3	3	0	3	0	0	0		
Team 8	home	9	2	1	2	1	2	2	0	0	0	0		11
Team 8	away	2	1	2	1	2	1	1	0	0	0	0	21	10
Team 8	home night	0	0	0	0	0	0	0	0	0	0	0	240	0
Team 8	away night	0	0	0	0	0	0	0	0	0	0	0		0
		3	3	3	3	3	3	3	0	0	0	0		

Standard 8 Team Matrix

However the result is that the inverted draws are no longer exist, but they are available as 90% fit.

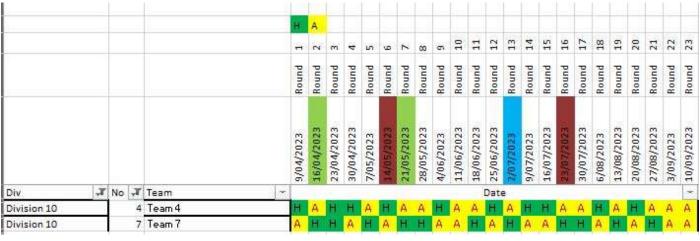
Example 1 8 Team Competition Number 3 and 8 Round 10



Example 2

8 team Competition Number 4 and 7

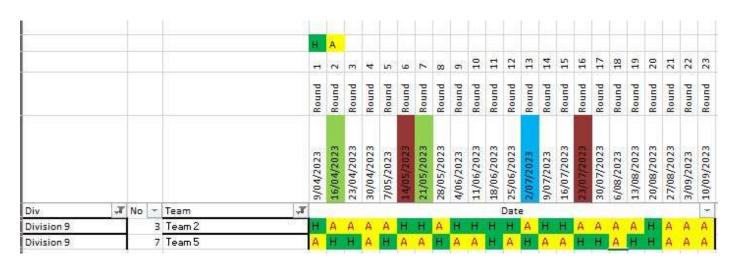
Round 3



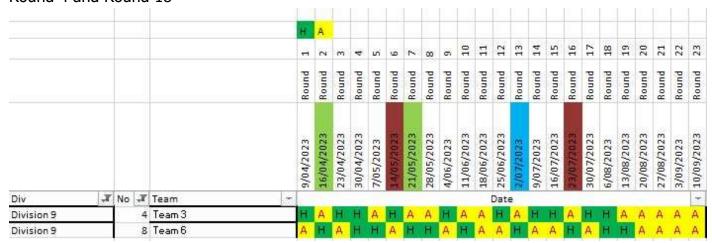
Example 3

6 Team Competition Number 3 and 7

Round 11 and Round 20

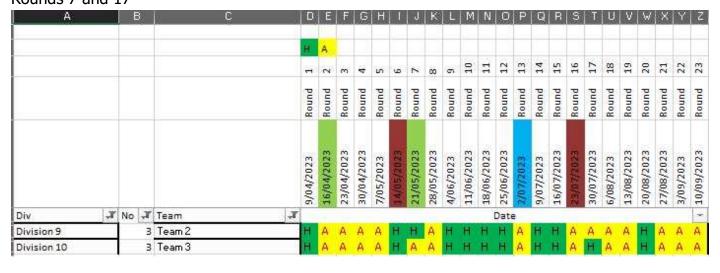


Example 4
6 Team Competition number 4 and 8
Round 4 and Round 18

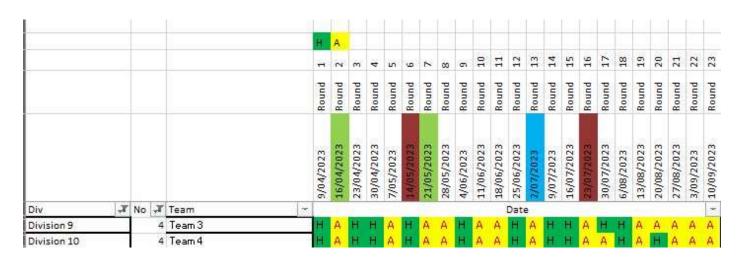


As with inverted patterns not being perfectly available nor are the aligned patterns perfectly available

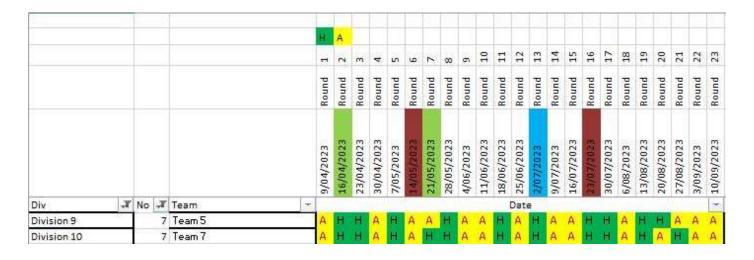
Example 1 6 and 8 Team Competition Number 3 Rounds 7 and 17



Example 2 6 and 8 Team Competition Number 4 Rounds 17



Example 3
6 and 8 Team Competition Number 7
Rounds 7 and Round 20



Closing

PSL Winter hopes by providing this document clubs now understand the complexities of arranging a large home and away season using limited grounds. In 2023 PSL scheduled 779 games across 16 grounds and 29 diamonds with 3 games as un-schedulable within the constraints presented. This is a 99.61% success rate for the season.

PSL Winter expects that with competition growing that these challenges will continue. The PSL Winter Committee is confident that it will continue to find solutions in fixturing so that our shared goal of promoting fastpitch softball is successful.