Canadian Pony Club



A BASIC GUIDE TO COURSE DESIGN

Abstract

To provide some basic insight into course design and considerations when building a course (XC and SJ)



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Basic considerations for SJ and XC

2025

Loyalty Character Sportsmanship

TABLE OF CONTENTS

Overview	2
Course Flow	
Types of Stadium Jumps	
Types of Cross-Country Jumps	
Liverpools	
Combination Jumps	4
Related Distances	
Flags	6
Equipment	6
Footing	6
Good Design	F



A GUIDE TO COURSE DESIGN

Basic considerations for SJ and XC

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Loyalty Character Sportsmanship

Overview

The purpose of this document is to provide some insight into how to design and build a course and highlight some factors that should be taken into consideration. Please note that this document is a guide and that in a testing situation the testing procedures should be followed so the course meets the requirements.

Course Flow

A stadium course should consist of 8 to 12 jumps and include two changes of direction. The track should be even and flowing to allow the horse and rider the best chance of success. Things to consider when building a stadium course:

- If possible (arena space allows) try and build jumps away from the arena walls.
- Corners while on course should follow the principle of a 20m circle to allow horses time to rebalance.
- Always work on a minimum of 3 straight strides from a jump into a 90-degree turn, and a minimum of 3 straight strides to the jump.
- When coming around the circle more than 90 degrees, remember you will need to allow for more strides out of the turn to the next jump.

Types of Stadium Jumps

There are three types of jumps in stadium jumping: verticals, oxers and triple bars. A well-designed course could include any of these three types of jumps with triple bars only being used at the higher levels (typically 1.0m and above).

The Vertical: The vertical fence is the most basic form of the jumping fence and is usually designed with just rails or a combination of rails and a filler.

The Triple Bar: The triple bar is generally regarded as one of the easier fences and is built using 3 rails in front (or rail plus fill), one rail in the center and one rail on the back. Care should be taken to ensure that the triple bar is not made to look hollow. This can be achieved by moving the center rail closer to the front, thus giving the fence a more rounded look.

The Oxer: The ascending oxer is built with two rails in the front (or a rail plus fill) and one rail in the back. Square Oxers are built with two rails on both front and back standards/ sides if being jumped in both directions or can be built with two rails in front and one rail on back if being jumped in one direction. Oxers can be built either square or ascending with ascending being the friendly choice. Square oxers can be jumped in both directions if they are built symmetrically whereas ascending oxers



A GUIDE TO COURSE DESIGN

Basic considerations for SJ and XC

2025

Loyalty Character Sportsmanship

must be jumped in one direction from low rail to high. Ascending oxers should always be used for lower levels.

Types of Cross-Country Jumps

A cross-country jump is any natural obstacle which is permanently fixed such as a log set out in the open. Cross country fences should be staked so that they do not move if a horse slides into them. It should be noted that hay bales are not a safe cross-country fence. It is recommended that all cross-country jumps have a ground line.

There are many types of cross country jumps such as:

Coop: a solid, triangular-shaped obstacle that resembles a stylized A-frame roof or a small cabin sitting on the ground.

Roll Top: a smooth, rounded obstacle, similar to a natural log or mound, with a convex shape instead of a sharp, flat top. This design is often constructed from logs or timber and mimics natural terrain.

Logs: A log permanently fixed to the ground with a clear ground line.

Open Ditch: A constructed and clearly defined shallow ditch.

Table: An oxer type jump with a solid top.

*Keyhole: A Keyhole is a jump that you jump through. Jump it straight and center just like you would jump a normal fence.

Weldon's Wall: A Weldon's Wall is a ditch with a wall on the far side of it. This type of jump is ridden just like a triple bar oxer. The ditch acts as the first rail, the wall acts as the third tallest rail, and the middle rail is up to your imagination.

*Coffin: Coffins usually consist of a rail (A element) to ditch (B element) to rail (C element) combination with a related number of strides in between.

Banks: Banks are either steps up or steps down. Up banks are ridden like verticals while down banks ride like you are jumping off a ledge.

Trakehner: A Trakehner is a jump that consists of a ditch with a log suspended over it.

Tiger Trap: A triangle cage over a ditch.

Chevron: A Chevron is a narrow V shaped jump. Chevrons are usually placed as elements in combinations to test how much control the rider has over the horse to navigate them through narrow flags. Or can be a jump that is made up of a series of triangles.



A GUIDE TO COURSE DESIGN

Basic considerations for SJ and XC

2025

Loyalty Character Sportsmanship

Corner: A Corner is a jump that sounds like exactly what it is. Corners are shaped in a triangle design where the horse and rider are asked to jump the corner of it. The higher the level, the wider and narrower the corner becomes. It is important to use visual cues such a flowerpots to help the horse read the spread.

Liverpools

A Liverpool has some sort of shallow water tray placed below a vertical or oxer. It can be used on course and is an excellent training tool. Here are some things to consider when using Liverpools:

- A narrower Liverpool is more inviting at the lower heights.
- Centering the Liverpool under the jump is friendlier and more inviting than putting it behind the jump.
- A Liverpool if included in the course design is recommended to be added to the second half of the course and it is recommended it be jumped towards the in-gate.

Combination Jumps

Combination jumps comprise of several elements and can be built in several different ways, the most basic of which is a two-stride combination of verticals. A combination which is well constructed and has an inviting appearance will encourage better jumping than one that is built in a demanding situation or is set on an impossible corner which does nothing for the flow of the course. Things to consider when building combinations:

- Combinations shouldn't be used under 0.90m
- If ponies are entered in the class combinations should always be a vertical coming out
- They will always ride better after a related line of fences than before
- Fill should only be used at the first fence of the combination
- The easiest combination is a vertical, two strides to a vertical
- Vertical to oxer or oxer to vertical is an average level of difficulty
- Oxer to oxer is not recommended
- We recommend that combinations appear later in the course after fence number 3 and in cross country they should appear in the middle third of the course.
- The distance is measured from the base of the obstacle on the landing side to the base of the next obstacle on the take-off side.



A GUIDE TO COURSE DESIGN

Basic considerations for SJ and XC

2025

Loyalty Character Sportsmanship

Related Distances

The chart below is a guide to related distances. Three-stride lines should be avoided in evaluation / testing situations and horse shows. It is recommended that three stride lines are only used for training purposes.

Horse Strides

Number of Strides	Feet	Meters
3	48 feet	14 - 15 m.
4	60 feet	17.5 - 18.5 m.
5	72 feet	21.5 - 22.5 m.
6	84 feet	25.5 - 26.5 m.
7	96 feet	29.5 - 30.5 m.
8	108 feet	32.5 - 33.5 m.
9	120 feet	36.5 - 37.5 m.

Pony Strides

Number of Strides	Smal Pony	Medium Pony	Large Pony
3	40 feet	42 feet	45 feet
4	50 feet	52 feet 6 inches	56 feet 3 inches
5	60 feet	63 feet	67 feet 6 inches
6	70 feet	73 feet 6 inches	78 feet 9 inches
7	80 feet	84 feet	90 feet
8	90 feet	94 feet 6 inches	101 feet 3 inches



A GUIDE TO COURSE DESIGN

Basic considerations for SJ and XC

2025

Loyalty Character Sportsmanship

Flags

All courses both in stadium jumping and cross country should be flagged in a competition situation. White flags should be placed on the left side of the jump and red flags on the right side of the jump. The flags must be visible to the rider while on the course.

Equipment

Jump standards come in a variety of shapes and sizes – the main overriding factor must always be SAFETY for both horse and rider.

All standards, fillers and other jump materials must be free from sharp corners and cutting edges in the case of an accident. Planks should primarily be used as fill and never be used as a top rail. All jumps with fill should have a pole on top of the fill for safety.

For safety reasons, a breakaway must be used for back rails of all spread fences. For a triple bar, the center and back rails must always be on breakaway cups.

CPC strongly recommends the use of safety cups on all jumps. It is required to use a breakaway device on the back rails of oxers. The use of rebar or loop jump cups are strictly prohibited.

It is required to use a breakaway devices on the middle and back rail of a spread fence.

Footing

The most common footing problems on courses are either deep, muddy footing or overly dry, hard footing, with the latter being more of a problem from an injury standpoint. Courses may need to be adjusted based on the footing conditions to reduce the risk of injury or falls. Horses will tire more easily in deep mucky footing but will sustain more concussion and risk of slipping on hard dry footing.

Good Design

The key to a good design is to have flowing lines that allow the horse and rider to establish rhythm and maintain this throughout the course. It is important therefore to stick to a few basic key principles such as:

 Consider building islands as they help riders find the correct track and help to prevent riders from taking dangerous inside turns



A GUIDE TO COURSE DESIGN

Basic considerations for SJ and XC

2025

Loyalty Character Sportsmanship

- There are no actual rules on width of jumps, so the general rule of thumb is 3" wider than the height of the fence refer to the testing procedures for guidelines to use during an evaluation/testing
- If the warmup ring footing isn't ideal, then make the first three fences on course easy to build confidence again in the horse and rider
- A square oxer, if used, should not be wider than its height
- Make sure the tracks change in difficulty based on the height of the class. The 0.6m. track should not be the same track as the 1.10m.
- Make sure that there are some easier fences halfway around the course for the horse and rider to have a bit of a break or recovery
- 1/3 of the jumps should be max height
- The top rail on the fence should touch the gate filler or leave a small space based on the holes in the standards
- A short approach to an oxer will always test the rider
- Using a minimum 20m diameter circle through turns and curved lines (track)
- Allow a minimum of three straight strides coming off of an end wall and before a turn at the end of the ring
- Allowing two or three changes of rein/direction
- Starting towards the in gate with the first one or two obstacles
- Avoid impressive fill in early obstacles and combinations
- Place combinations in a general direction of the gate
- Avoid large spread obstacles away from the gate
- Distribute the obstacles evenly around the arena. Approximately half the obstacles will be on the left rein and the rest on the right rein. You must keep in mind that the overall complexity of the track must be in keeping with the type and level of the competition
- A balanced course will have similar numbers of verticals and oxers