CANOE SLALOM COURSE HARDWARE - DRAFT

A do it yourself 5 minute guide

Guto Merkle, April / 2008

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This manual is available in: English, Español, Português

The next pages are a contribution to solve part of the problem. The problem of having a slalom course to train canoe slalom.

A course cheap, fast to set up, and possible to transport inside the boat.

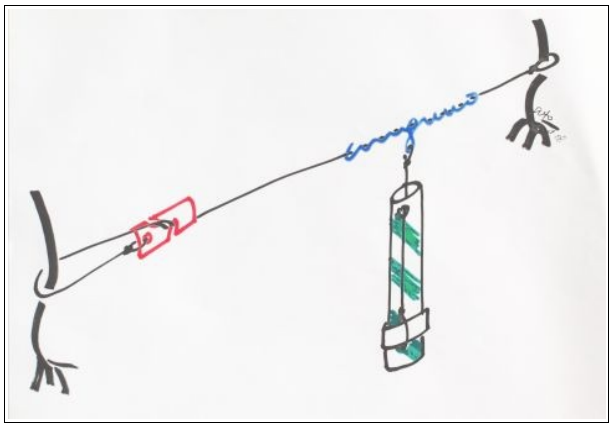
Good for training or informal races, in rivers up to class II.

The gates can be moved and adjusted from the boat and also with the option to adjust from the shore.

Read the pictures and see the instructions:

Needed tools

- A knife or penknife.
- A saw for plastic.
- A pen.



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MATERIAL

Plastic pipes for the poles

Final measures: 5 feet length, 3/4 inch diameter. (1,5m x 20mm)

The gray one at the picture is made of PVC used for irrigation.

The red one is made of polypropylene, used for water. This one floats.

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Any similar pipe will do.

The color doesn't matter if it will not be used for races, but a good idea is to paint then from different colors: green, yellow, blue, white, and so on. It is easier to explain the course during the training sections. To use colored adhesive paper seams a good idea but it will make more difficult to adjust the height further.

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After cutting the poles with 5 ft (1,5m) length (this measure fits inside the kayak for transportation), make a 1/8 inch (5mm) hole near one of the ends.

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Nylon lines ~ 1/32 to 3/64 inch (0,8 - 1mm)

It will be used to hang the poles above the river, passed from one shore to another at approximately 6 to 10 feet (2 to 3m) above the water.

Prefer the colored ones to be easier to see.

Before pass the line trough the river, roll it around a plastic bottle. It will be easier to work.

Reserve about 7 feet / pole, (2m) for the height adjusting system.

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Wire snaps (small carabiners)

Made of stainless steel wire, generally used by fishermen. Those ones showed at the pictures have about 1 ½ inch length (35mm). They are not indispensable but make the job easier and save time.

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Plastic straps

Used at the system which will adjust the pole's height.

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Spiral wire

By friction it maintains the pole in place. Nor the wind, nor a heavy touch can move it. If one shore is higher than the other and the line is with much slope, the pole will not move either.

Mysteriously it is easy to move the pole to any side, with the hands or from the boat.

It is made with an electric wire, as show in the picture. Not all the wires will work the same way. Some are too squeeze. In this case, do a higher number of rounds or bend it with the hands after it is in the line, until you find the right resistance.

Remember to turn the points back, when putting it at the line.

As we don't use cross bars, in the case it is necessary to hang a number above the gate, it is also fixed at this wire.

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Line stretcher

By stretching the nylon line which hang the poles it is also possible to adjust the pole's height. The idea is to use a piece of plastic which will act the same way as the lines in camping tents. The sequence of pictures show how to make then from any piece of plastic.

(Pic. 16 to 24. At picture 25, one made with the original line's reel.)

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How to adjust the pole's height from the boat

A line came from the snap (which is fixed at the spiral above, at the nylon line), pass trough a hole near one end of the pole and ends at the plastic strap putted around it. Moving the plastic strap it is possible to adjust the pole up or down. The system stays in place by simple friction.

(Pictures 10 and 13.)

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Adjusting the position from the shore (pic. 1 and 26)

Depending from the local conditions (and with the double of line), it is possible if one same line cross the river two times. You have to pass it by two trees and tie both points together making something as a “circle”. Then hang a pole with an spiral in one arm of the line.

Pulling the other arm the pole will move to the desired place.

At the finish, the line is stretched with the help of the same piece of plastic that is used in the normal system but used differently, as showed at the picture 26.

Note that it is still possible to move the pole from the boat the same way as before.

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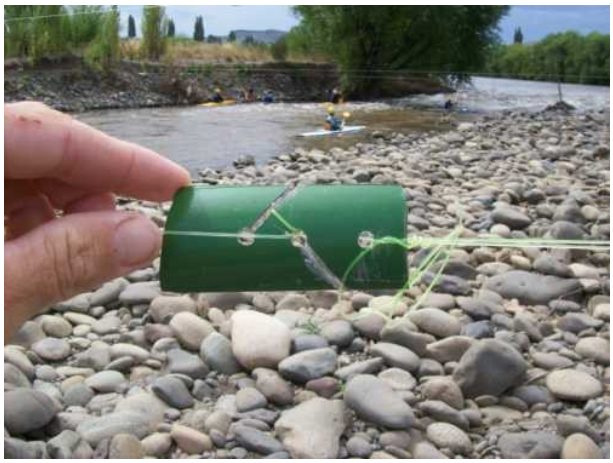

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How much?

We have calculated the price of the material for a 12 pole's course in a river approximately 70 to 100 feet wide (20 - 30mm). Values founded in Brazil in the beginning of 2008.

60 feet (18m) of PVC pipes	U$ 12
1000 ft (300m) nylon line (0.8 mm)	U$ 12
24 snaps	U$ 5
20 plastic straps	U$ 2
16 ft (5m) isolated copper wire	U$ 1
Total	**U$ 32**

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HANGING AND TAKING OUT.

Take all the precautions before pass the nylon line across the river. We are talking about class II water, but just in case...

There should not be people running down the rapid during the job.

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In general this is made by at least two people: one cross the river with one point of the line meanwhile the other one gives line from the shore. To tie the line in the back of the boat is better then keep it in the hand. As less line touch the water, better: less probability of tangle it anywhere.

Be sure that the line is coming out easily from the bottle before your partner start to paddle.

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If the water is fast and there is not a good place to park at the other shore, it can be useful a third person there, waiting to receive the line.

Another option (by the way, safer) is trowing the rescue rope, where will be tied the line to be pulled, avoiding to cross the river with a fish line tied at you.

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Always have knife at hand.

The same line can be used to go and come back, but a third cross is not recommended.

Tie the line at a place that is high, but still practical. Something about 7 to 10 feet (2 to 3m) from the water line. In a first moment the line will be a little loosed and when you hang the poles they will be touching the water. At the end of the job the thing is stretched.

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Where to tie the line if there are no trees at the shore?

Make an “X” with two branches as showed at the pictures 27 and 28. The line will pass trough the X and than be tied at something at the floor like a stick of wood under some rocks, a root, a big rock....

The picture 29 shows a cable by the floor, which runs parallel to the river, putted in place with this function.

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Knot

To know only one knot is fine. That one any fishermen uses to tie the line to the hook. Use it to tie the snaps, the stretchers, the plastic straps to the line. See the pictures 30 to 33.

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At the end of the training session

When taking out the line, ALWAYS roll it at a plastic bottle (easily founded at any river shore that is a little bit civilized). Ignore this procedure and you will loose hours tangled in a mass of knots, meantime your partners change clothes and drink hot chocolate.

If the course will stay in place for several days, be sure that all the system is well fixed. A low line near the water is dangerous for any one who came paddling.

Do not leave the course in place if it will pass several days with out attention.

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Thanks to

The rivers Aluminé, Atuel, Limay and Quequén. To all the friends who helped to hang gates at the summer of 2008.

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Communication

Did it not works? Better materials? Another solutions? Pictures? Share your solutions.

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And more!!

Totally free, how to make a trekking shoes from your "havaiana".

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