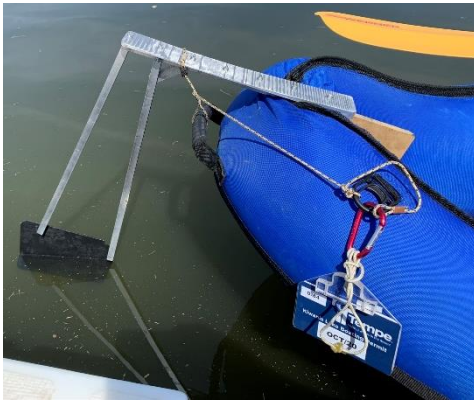


An (Almost) Traditional Skeg for My Sevylor Colorado Kayak, Version 1.0

By R. G. Sparber

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I'm still in the proof-of-concept stage as I move towards my final design of a skeg. Here you see it installed on my Sevylor Colorado kayak which is an inflatable. My previous design strapped under the kayak and had too much drag plus was hard to install and remove once in the water. The design you see here is much closer to the commercial design with a few important differences.

First of all, I have not found a commercially made skeg that installs on the back of my Sevylor Colorado.



My built-in skegs are very short and fat. I'm sure they help a little but not nearly enough even in a light crosswind.



Without the skeg, when I stop paddling, my kayak rotates around where I sit and ends up pointing in the opposite direction. I figure that the further the skeg is from this pivot point, the more effective it will be in keeping me pointing correctly.

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The key to minimum drag is to present the least surface area to the water flowing from bow to stern. But then I want the maximum drag for water flowing gunnel to gunnel. The skegs I have seen are rather thick but do have their thickness shaped to an edge which is certainly helpful.

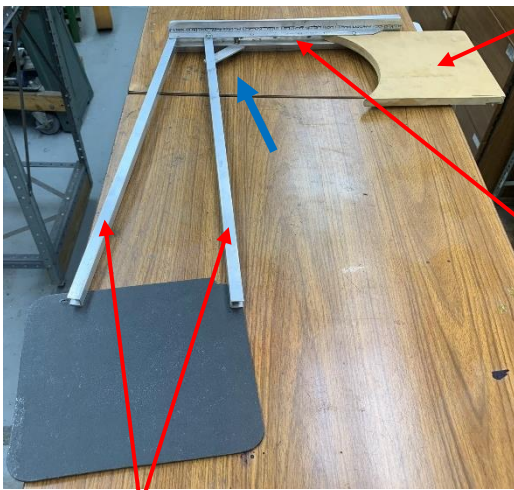
I went with a thin piece of plastic about 0.1 inches thick.

Test Results

There is no perceptible increase in drag when this skeg is placed in the water. My kayak no longer pivots when I stop paddling. As with all skegs, my design helps resist crosswinds but is not 100% effective.

Design Details

Once you get past how crude this skeg looks, it does have some things to teach.



The gunnels squeeze on a piece of MDF which is smooth. I can't have anything sharp that could puncture my air chambers.

The horizontal support is made in two pieces. A U channel is a close fit to the MDF.



Bolted on top of it is a

stiffener plate. This one looks very complex but is just what I had in my scrap drawer.

The two down arms are a close fit inside the horizontal channel. A single diagonal brace (blue arrow) is enough to resist deflection bow to stern. Recall that this force is small because the skeg is thin.

At first, I did not have the stiffener plate. The side force was enough to twist the horizontal support so the skeg was at about 45°. With the plate, there is no perceptible deflection although I suspect the MDF does tilt a little between the gunnels.



The paracord connecting the diagonal brace to a ring on the gunnel is consistent with the general rule related to kayaks: all items must be attached because we will capsize eventually.

The cord goes from the brace to the rear handle and then to the ring. This was a test to see if I needed to anchor the assembly down. I found that this was not necessary.

I plan to live with this design for a few weeks before building a clean looking model. The skeg support arms will likely fold up into a smaller package.

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