How To Weight Your Boat for Wakesurfing

From www.wakemakers.com

With how quickly the wakesurfing movement is growing, there's no question that it's one of the most popular activities behind the boat. With that much interest there is a lot of bad information out there on how to achieve the best possible wake from your boat. In an effort to clear the water, and help our customers achieve the best possible wake, we've compiled the following guide on how to produce a wake everyone will enjoy surfing all summer.

The Physics

The first thing to understand about building the perfect wake is how the wake is produced in the first place. When a boat is sitting in a lake, it's taking up space that would otherwise be occupied by water. The amount of volume taken up by the boat is known as the *displacement* of the hull, and depends on a myriad of details such as wetted surface area, gross weight, etc. Essentially though, the heavier the boat, the lower in the water it sits and the more water the boat's hull is displacing. The wake is created once the boat starts moving and water rushes back into place as the boat moves through it. So in order to make a bigger wake, increase the weight in your boat.

These days, while most wakeboarding specific boats do come with a factory ballast system, it won't be enough weight to create a great wakesurfing wake. So in order to create a wake big enough and consistent enough to wakesurf behind you're going to need to add more ballast to your boat. But building a great wakesurfing wake doesn't stop there. It's easy to think that all you need is a bigger wake in order to wakesurf, however contrary to this belief, size isn't everything and the shape of the wake is almost just as important as the size. And while wake size might be an easy concept to visualize (more weight = bigger wake), the shape is more about finesse and placing the added ballast weight in specific locations through out your boat. Each boat is different and it might require some trial and error, but by finding those sweet spots in your boat you'll be able to not only create a bigger wake but also a better shaped one that's easier to surf.

Generally, when you're out surfing, only one side of the boat's wake is being surfed. In which case, a surfing ballast set up will focus the weight to that side of the boat. Key point: *To increase the wake's size on either side of the boat, increase the amount of weight on that side of the boat.* It is possible that one side of your boat might make a better surf wake than the other, so don't be completely surprised if a ballast configuration that produces an epic surf wake on one side doesn't work as well on the other.

Now, if you only have one extra ballast bag or maybe two, focus that extra weight in the back corner of the boat on the side you'll be surfing. This will get the maximum wake size out of your ballast. If you're able to add more ballast after that, you can start playing around more with placement of the weight in order to create a more optimal shape for wakesurfing. When working on the shape of your wake, remember that *the more weight you add to the back of the boat, the taller the wake will be in height but the shorter it will be in length. By adding weight to the front of the boat, the wake will be shorter the wake in height and the longer in length.*

Therefore, an optimal wakesurfing wake would generally include the majority of the ballast weight in the back corner with smaller amounts of ballast distributed towards the front in order to lengthen and smooth out the wake. Giving your wake more "volume", meaning more water is moving/pushing the rider. The more volume, the better and the easier the wakesurfing.

While we recommend liquid ballast for building your wakesurfing wake, it is possible to use solid ballast. People are a great example of solid ballast that can be used to fine tune your wake after you get the liquid ballast set up. If you've got a bunch of friends with you in the boat, don't be afraid to move them around in order to produce the best wake possible. Another tip to creating a great wakesurfing wake is to make sure you're surfing in deeper water. It's been said that anything over 8ft-10ft will help produce a better wakesurfing wake for your boat.

Always remember to drain your ballast before you put your boat back on the lift or trailer. By leaving the extra ballast weight in your boat, you're causing more stress and wear on the tanks/bags.

Len's Cove marina wishes you a great experience wakeboarding behind your boat. Let us know if we can do anything to make your wake even better!