## Edge Sets 5/26/2019

The purpose of this document is to define edge sets used in both ski racing and pleasure skiing. Because we have to ski foot to foot or change the feet over which we are balancing, there is always an edge set. And, because we have to move forward to stay balanced over our skis, there is always an edge set when we change feet. The purpose of this document is to define two types of edge sets, one to increase speed and one to control speed or direction. Most people we see skiing on the hill use the one to slow down, but they do not slow down because they add a second inappropriate edge set that puts them out of balance again.

## Two Types of Edge Sets, Two Lines of Force, Edge Sets are the Key

There are two types of edge sets, one off the downhill ski and one off the uphill ski. Plus, there are two lines of force that help us balance. One is gravity pulling us against the terrain down the hill. and the other line of force is our momentum pushing us against the terrain across the hill. Edge sets are the key to helping us use these two forces to our advantage. For example, we want to use gravity to help us slow down; so, we move off the downhill ski up and forward without catching our weight to let gravity slow us down. We also use the shape of our skis and our momentum to slow down by heading up hill, but then we will need a more athletic move to change feet. After skiing up hill to slow down, we will edge set backward off the downhill ski to forward on the uphill ski, without catching our weight after the edge set to also use gravity to slow down. Many people do not slow down when they want to because they add that extra uphill foot edge set. Instead, they should float up and over the uphill ski, drifting towards the heel until the shape of their ski brings them around the corner. Stay tuned for examples of edge sets that help us speed up. They are also forward and back, but off the uphill foot.

## Edge Sets Up or Down

Edge sets off the downhill foot will always slow us down, and edge sets off the uphill foot will always speed us up. Like running forward, most skiers always move to their uphill foot off their downhill foot. They also always slow down against their downhill foot, fighting against gravity and forcing their balance to the backs of their skis. They do this because they want to control their speed, but there is an easier more efficient way. To understand how to use edge sets and lines of force for control and balance, even beginning skiers should understand how to speed up off the edge set like a racer. First, we learn how to slow down. Then, using less energy like a racer, we are free to stay balanced and forward on our skis. There are two types of edge sets off the uphill foot, and they both are designed to keep our weight balanced over the ski making the edge set. One for short swing, fall line, slalom type turns and the other is for turns across the hill with any delay or traverse, in other words giant slalom type turns. Both involve a float between the uphill edge sets, floating all the way from edge set to edge set. One is like running backwards and one is like skipping forwards. Practice running backwards to ski slalom and practice skipping forwards to ski giant slalom.

## Summary: Edge Sets

The purpose of this document is to define edge sets used in both ski racing and pleasure skiing. Because we have to ski foot to foot or change the feet over which we are balancing, there is always an edge set. And, because we have to move forward to stay balanced over our skis, there is always an edge set when we change feet. Working with gravity and momentum, edge sets are the key to balance.