

## How does the Temperature Effect My Golf?

Do you ever wonder about why we hit the ball so much shorter during colder weather and how much shorter the ball actually travels? Cold weather can wreak havoc on your distance control and your ego. The first thing to note is that golf balls are not as resilient as the temperature drops and the air is more dense as compared to warm temperatures. Both of these factors result in a loss of distance.

With the use of the TrackMan Normalizing feature, we can demonstrate exactly how much the temperature affects a given shot. Take for instance the shot below, struck solidly with a 5 iron:



As you can see, this 5 iron swing generated 87.3 mph of club head speed and had a carry distance of 177.4 yards. This is on an unusual day here in Palm Desert, CA where it was cool, damp and cloudy with a temperature of 55\*. The exact same shot with the exact same numbers, just adjusted for temperature, struck on a normal day that is 80\* would result in the shot below. The same 87.3 mph of club head speed would result in a shot that carried the ball 187 yards! A full club difference due to the temperature. Imagine what would happen if it was even cooler outside.



As the temperature drops, a good rule of thumb for estimating how far you hit each club is to subtract one foot from your carry distance per degree the temperature drops below 80\*. So, if you normally play at 80\*, a shot that would fly 187 yards on a normal day will only fly  $(80^* - 50^* = 30^* = 30' = 10 \text{ yards})$  approximately 177 yards, just as in the example above. If the temperature was 30\* that same shot would have flown another 7 yards shorter or 170 yards.

Another factor to consider is the elasticity of your muscles. Cold muscles will not allow you to stretch as far as a warm muscle. In fact, if you do not warm up properly, which is hard to do when it's cold, your muscles can become even tighter than normal to protect themselves from being stretched to their normal range of motion on a warm day. Add to this the fact that most of us will wear more layers of clothing and you can start to see why we won't be able to generate as much club head speed during cold weather. Less club head speed translates to shorter shots as well.

So, next time you play, make sure to take a look at the forecast, warm up properly and use the 1' per degree rule to more accurately estimate how far you will hit each club.