

## Forel Your Game

Your Equipment Guide For The Gear Enthusiasts

Written By Jeffrey Blank, Contributor 20 October 2022

## Winterize Your Golf Ball

The fall season is one of the most enjoyable times of the year to head out to the golf course. The picturesque views, lush course conditions, and moderate temperatures make for an all-around great experience. We've talked in the past about the importance of staying warm during these rounds but it's equally important to ensure the gear you use is prepared for the conditions as well.

In this article, we will focus on the importance of choosing the right golf ball for your game considering the temperatures you may face during the cold mornings seen in October, November, and December.

## Effect of Temperature on a Golf Ball

Temperature variation has a large impact on the performance of a golf ball. From compression to flight characteristics, lack of understanding and consideration can lead to frustration. So what are the critical factors you need to be aware of before teeing it up for your next fall round?

Firstly, let's talk about the science of compression. When a golfer makes contact with the golf ball, the club imparts a force that deforms the ball. The measurement of this deformation is called compression and is viewed in two ways; peak pressure, measuring the maximum force applied to the golf ball's surface and initial velocity, measuring the rate that the golf ball travels after contact.

Generally speaking, golf balls are designed to achieve peak performance somewhere between 70° and 90°F. Reported compression data for these golf balls assume these temperatures. When viewing swing speed vs. distance charts, like below, it's based on this warm temperature range.

| Swing Speed | Distance  |
|-------------|-----------|
| 70 mph      | 185 yards |
| 80 mph      | 205 yards |
| 90 mph      | 230 yards |
| 100 mph     | 260 yards |
| 110 mph     | 290 yards |

As the temperature cools, it can have a drastic impact on distance and again, it comes back to compression and flight. The rubber material of a golf ball is a poor conductor of heat therefore it stiffens in colder temperatures making it more difficult to compress. This results in poorer overall performance.

In addition to this lack of compression, colder air is denser thus requiring increased velocity to overcome its negative impact on distance. Below is a chart which shows the impact of temperature on distance for a shot that would normally travel 220 yards at 75°F ambient temperature.

| Temperature | Distance  |
|-------------|-----------|
| 105°F       | 226 yards |
| 95°F        | 224 yards |
| 85°F        | 222 yards |
| 75°F        | 220 yards |
| 65°F        | 216 yards |
| 55°F        | 214 yards |
| 45°F        | 205 yards |
| 35°F        | 196 yards |

## Finding the Right Golf Ball for You

With the science explained, what can you do in order to maximum the performance of your golf ball in these colder conditions? No matter if you swing 70 mph or 110 mph, your normal distance is compromised with temperature variation. Fortunately, golf ball manufacturers produce high and low compression models. Simply explained, high compression balls require more energy (swing speed) in order to produce optimal launch. When it's cold, even more energy is required.

Depending on your game and swing characteristics, it may be more beneficial to put the high compression golf balls you're used to playing on the shelf in favor of lower compression options. Perform some on course testing and see what's right for you as the impact on distance, flight, and feel is different for everyone. With the right ball, it can make fall golf that much more enjoyable!