

# A Gift of the Number 13 for G4G13 from Joe DeVincentis

You should find enclosed with this message a blue spruce cone. Let me show you how to count to 13 on this cone.

## The Spirals

The cone is covered in scales. These scales form two sets of spirals. It is easiest to see them if you hold the cone with the flat end upward (with the light shining down onto it).

One set of spirals goes down at a moderate slope to the left; the other goes down very shallowly to the right. Count the spirals of each type. The scales look alike, so it can be hard to tell when you have counted them all. Either start at a distinctive scale (a broken one or one with a distinctive bit of the tree's white sap on it), or mark your starting scale with a marker like a Sharpie.

You should find 8 of the spirals to the left; when you reach the 9<sup>th</sup> one, it will be another part of the first one you counted. In the same way, you should count 5 of the shallow spirals to the right. That makes 13 spirals in all. It is also possible (though harder to see on some cones) another set of spirals which slopes down very sharply to the right. There are 13 of these spirals.



## About the Cone and Tree



These cones are the seed bearers of the blue spruce tree (also called Colorado spruce and other names). All the cones provided as a part of this gift were produced by one blue spruce tree located at my home in Salem, Massachusetts and were collected during 2017.

When the cone is dry, the cone's scales open as shown in the photo above. When the cone is wet, it closes up as shown here. You can still count the spirals on a wet cone. Even though this is a seed cone, you probably cannot grow a tree from it. The seeds are quite small (one grows along each scale on the cone) and they usually disperse from the cone while it is still attached to the tree. If you would like to have such a tree, you will probably have better luck finding a seedling at your local nursery. If you do plant one



of these trees, be sure to give it plenty of space. The tree shown in the photo is about 40 years old, 40 feet tall, and the branches at the bottom extend about 9 feet from the trunk (and may have grown wider if the space it is growing in was not constrained).