For this project the chemical composition of soil samples taken from a coniferous forest were studied. The goal of the experiment was to see if the samples collected this spring had similar properties to the soil sample taken last fall of the same coniferous forest soil. The samples were looked at under a microscope to look at the physical properties of the sample. One property that was tested was sediment texture, which tells what percent by weight of clay, silt, and sand the soil sample was. Other properties that were tested on a sieved sample were the electrical conductivity of the sample, the pH of the sample, and the oxidation and reduction potential. A sieved sample of the soil was also placed into a spectrophotometer and the transmittance was read at 30 second intervals for the first five minutes, one minute intervals for the next 15 minutes and then two minute intervals for the next 40 minutes so the overall time was an hour. Comparisons between spring and fall samples were made for each of these variables to determine whether seasonal variations should be expected in soil samples collected as forensic evidence.