

Hello dear people,

I thought I'd do a little more research regarding the effects of temperature, altitude, etc., on the notes created by a flute when one plays in various environments. What I found agrees with the information that Scott recently shared with us. In Lew P. Price's book, "Secrets of the Flute"(The Physics, Math and Design of Non-Mechanical Folk Flutes), he states, "Even though the concept is difficult to comprehend, by the time that specific heat, density and pressure are resolved in the tried and true equation, the only real variable regarding the speed of sound that need concern us is temperature". Lew further states, "Humidity and frequency (key of the flute and its notes) also affect the speed of sound, however, their effects are negligible." And, as Scott noted, it is the variation of the speed of sound, which primarily happens as a result of a change in temperature, that accounts for the changes in the tuning of a flute. Incidentally, I might add that it has an equal effect on all of the flute's notes, so the flute will still be "in tune with itself." If anyone wants to read Lew's book, from which I quoted, or any of his other very informative books, I believe they are all available from the Oregon Flute Store. Have a pleasant evening, Russ Venable