In this talk, I will describe a generalization of each of the Fine and Motzkin numbers and point out some connections between them. A generalized \( t \)-Dyck path is a path from \((0,0)\) to \(((t+1)n,0)\) using up and down steps of the form \(U(1,1)\) and \(D(1,-t)\) and never going below the \(x\)-axis. The generalized Fine sequence counts generalized \( t \)-Dyck paths with no hills, where a hill is defined as a ground level subpath of length \(t+1\) and form \(UU \cdots UD\). (Note that this is different than counting \( t \)-Dyck paths having no peaks of minimal height.) I will present a generalization of the nonobvious identity

\[
(2z + z^2)F^2(z) - (1 + 2z)F(z) + 1 = 0,
\]

where \(F(z)\) is the generating function for Fine numbers, indicating how this generalization can be used to compute the asymptotic proportion of \( t \)-Dyck paths having a given number of hills. The generalization of the Motzkin number sequence will be obtained by adding \(t\) steps of the form \((1,0), (1,-1), (1,-2), \ldots, (1,-t+1)\) to the step set of \( t \)-Dyck paths. I will describe a coloring of these modified paths which retrieves the generalized Catalan numbers and I will discuss subsets of these generalized Motzkin paths which are enumerated by the generalized Fine sequence. (Received September 13, 2013)