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John Baldwin and **David Shea Vela-Vick*** (shea@math.lsu.edu), Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803. *A refinement of the contact invariant in Heegaard Floer theory.*

We present a refinement of Ozsvath and Szabo's contact invariant in Heegaard Floer theory. This invariant, denoted b , takes values in the positive integers union infinity, and extends the usual contact invariant in the sense that if $c(Y, \xi)$ is nonzero, then b is infinity. We further show that if (Y, ξ) is overtwisted, then $b(Y, \xi) = 1$, reflecting the usual vanishing of the usual contact invariant for such contact structures. In this talk, we will focus on the construction of b and discuss some of its basic properties and applications. (Received January 20, 2016)