1063-57-127 **Tye Lidman*** (tlid@math.ucla.edu), UCLA Mathematics Department, Box 951555, Los Angeles, CA 90095-1555. *Heegaard Floer Homology and Triple Cup Products.*

We give a complete calculation of $HF^\infty(Y, \mathfrak{s}_0; \mathbb{F}_2)$ for all three-manifolds, Y, and torsion Spin^c structures, $\mathfrak{s}_0$. It turns out that this is completely determined by the cup product structure on the cohomology of Y. This calculation agrees with predictions of Ozsváth-Szabó and thus establishes an isomorphism with Mark's cup homology, $HC^\infty(Y; \mathbb{F}_2)$. (Received August 12, 2010)