ABSTRACT. We use Heegaard splittings to give a criterion for a tunnel number one knot manifold to be nonfibered and to have large cyclic covers. We also show that a knot manifold satisfying the criterion admits infinitely many virtually Haken Dehn fillings. Using a computer, we apply this criterion to the 2 generator, nonfibered knot manifolds in the cusped Snappea census. For each such manifold M, we compute a number $c(M)$, such that, for any $n > c(M)$, the n-fold cyclic cover of M is large.