1067-05-43   **Tyler Seacrest*** (`s-tseacre@math.unl.edu`), University of Nebraska, Department of Mathematics, 203 Avery Hall, Lincoln, NE 68588-0130, and **Stephen G. Hartke** (`hartke@math.unl.edu`), University of Nebraska, Department of Mathematics, 203 Avery Hall, Lincoln, NE 68588-0130. *Large 1-factorizable subgraphs.*

Assume G is a graph on n vertices, n even, with minimum degree $n/2$. Katerinis, and later Egawa and Enomoto, proved that G has a k-factor for some k at least $n/4$. Is it possible to get a similar result for edge-disjoint 1-factors instead? As Katerinis points out, the best known result in this direction follows from the work of Nash-Williams, gives that G has at least $n/23$ edge-disjoint one-factors.

Our contribution is that if G has minimum degree $n/2 + o(n)$, then it has k edge-disjoint 1-factors for some k at least $n/8$. Furthermore, if n is a perfect square, then G has k edge-disjoint 1-factors for $k = n/4 - o(n)$. (Received June 12, 2010)