In a 2011 paper by Beeler and Hoilman generalized the traditional game of peg solitaire to graphs. Since then, a number of papers have expanded on ideas of this paper. In this talk, we survey many of the more interesting results discovered so far. We will also discuss a couple variations of peg solitaire. In addition, this talk highlights many of the more interesting (and difficult) open problems and conjectures regarding peg solitaire on graphs. (Received January 21, 2015)