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Csaba Biro* (csaba.biro@louisville.edu), **Paul Horn** and **D. Jacob Wildstrom**. *Extremal Aspects of Hajnal's Triangle Free Game*. Preliminary report.

Hajnal's triangle free game starts on the empty graph on n vertices. Two players take turns in adding edges to the graph while keeping the graph triangle free. In Hajnal's original game, the player who could not make a valid move lost the game. Füredi, Reimer, and Seress proposed a variation, in which the goal of one of the players is to prolong the game, and the goal of the other player is to finish the game as soon as possible. They proved that the game will last at least on the order of $n \log n$ steps. On the other hand, an unpublished result by Erdős states that the game will last at most $n^2/5$ steps. In this paper we make a slight improvement on Erdős's upper bound and we discuss related problems. (Received July 29, 2011)