1025-05-31    **Ronald J Gould\*** (`rg@mathcs.emory.edu`), Dept. of Mathematics and Computer Science, Emory University, Atlanta, GA 30322, **Tomasz Luczak**, Dept. of Mathematics, Adam Mickiewicz University, Pozan, Poland, and **John Schmitt**, Dept. of Mathematics, Middlebury College, Middlebury, VT 05753. *On Cycle - Saturated Graphs.*

A graph $G$ is said to be $C_l$-saturated if $G$ contains no cycle of length $l$, but for any edge in the complement of $G$ the graph $G + e$ does contain a cycle of length $l$. The minimum number of edges of a $C_l$-saturated graph was shown by Barefoot et al. to be between $n + c_1 \frac{n}{l}$ and $n + c_2 \frac{n}{l}$ for some positive constants $c_1$ and $c_2$. This confirmed a conjecture of Bollobás. Here we improve the value of $c_2$ for $l \geq 8$. (Received January 02, 2007)