1035-05-480 **Guantao Chen** and **Ralph J. Faudree***, Office of Provost, 360 Administration Building, University of Memphis, Memphis, TN 38152, and **Ron J/. Gould**. *Saturation Numbers of Books.*

A book B_p is a union of p triangles sharing one edge, and a generalized book $B_{b,p}$ is the union of p copies of a K_{b+1} sharing a common K_b. A graph G is called an H-saturated graph if G does not contain H as a subgraph, but $G \cup \{e\}$ contains a copy of H for any edge not in G. The *saturation number* of H, dentoed by $sat(H, n)$, is the minimum number of edges in G for all H-saturated graphs G of order n. We show that

$$sat(B_p, n) = \frac{1}{2}(((p+1)(n-1) + \lceil \frac{p}{2} \rceil \lfloor \frac{p}{2} \rfloor + \theta(n,p)),$$

where $\theta(n,p) = 1$ if $p \equiv n - p/2 \equiv 0 \bmod 2$ and 0 otherwise, and $n \geq 2p^3 + p^2 + p$.
Also, it is shown that

$$sat(B_{b,p}, n) = \frac{1}{2}(((p+2b-3)(n-b+1) + \lceil \frac{p}{2} \rceil \lfloor \frac{p}{2} \rfloor + \theta(n,p,b)),$$

where $\theta(n,p,b) = 1$ if $p \equiv n - p/2 - b \equiv 0 \bmod 2$ and 0 otherwise, and $n \geq 4(p+2b)^{b+2}$. (Received September 08, 2007)