1116-VF-1494 **Neal Owen Bushaw*** (`neal@asu.edu`) and **Nathan Kettle**. *Extremal Numbers for Forestable Graphs.*

The extremal number, $ex(n, G)$, of a graph G is the maximum number of edges among all G-free graphs of order n. Of considerable recent interest is the case when the forbidden graph is made up of several disjoint copies of some smaller graph. Equivalently, one can consider $ex(n, k \cdot G)$ - the maximum number of edges among all n vertex graphs not containing k vertex disjoint copies of G. The Erdős-Stone Theorem tells us that for a 3-chromatic (or higher) graph, the asymptotics for this are identical to the asymptotics for $ex(n, G)$. For bipartite graphs, however, $ex(n, G)$ and $ex(n, k \cdot G)$ can differ significantly, even in the limit.

Perhaps the most natural way to construct an order n graph which is kG-free is to take an extremal G-free graph of order $n - k + 1$, and join it to the complete graph K_{n-1}, adding all possible edges between the two. This graph is certainly $k \cdot G$-free, as any copy of G must contain a vertex from the complete subgraph - but does it maximize the number of edges among all $k \cdot G$-free graphs?

We discuss recent progress on this question; in particular, we show that the given construction is extremal for a large class of bipartite graphs, including those which have a vertex adjacent to all cycles. (Received September 20, 2015)