1043-20-16 **Michael A Jackson*** (majackson@gmail.com), 100 Campus Drive, Number 3130, Grove City College, Grove City, PA 16127. *Generalized Symmetric Groups with the Best Possible Strong Symmetric Genus.* Preliminary report.

The generalized symmetric groups are defined to be $G(n,m) = \mathbb{Z}_m \wr \Sigma_n$ where $n, m \in \mathbb{Z}_+$. The strong symmetric genus of a finite group G is the smallest genus of a closed orientable topological surface on which G acts faithfully as a group of orientation preserving symmetries. It is rather straightforward to show a lower bound of the strong symmetric genus for a general symmetric group $G(n,m)$. In this talk, we will look at some recent work attempting to show that for any $m > 3$, this lower bound is achieved for some n. This work uses a combination of algorithms in MAGMA and coset diagrams. (Received June 28, 2008)