1046-20-36 **Michael A. Ginter** (`ginterma1@gcc.edu`), **Susannah E. Johnson** (`johnsonse1@gcc.edu`) and **James E. McNamara*** (`mcnamaraje1@gcc.edu`), 200 Campus Drive, Number 2391, Grove City College, Grove City, PA 16127. *The Strong Symmetric Genus of Small Generalized Symmetric Groups.*

The generalized symmetric groups are defined to be $G(n,m) = \mathbb{Z}_m \wr \Sigma_n$ where $n, m \in \mathbb{Z}^+$. It can be shown that $G(n,m)$ is isomorphic to $HK \leq GL_n(\mathbb{C})$ where H is the group of $n \times n$ diagonal matrices with entries that are m^{th} roots of unity and K is the group of $n \times n$ permutation matrices. 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. This talk will discuss the strong symmetric genus of the groups $G(n,m)$ for $n = 3, 4, 5$, as well as establish an upper bound for the strong symmetric genus of all generalized symmetric groups. This project was supervised by Dr. Michael A. Jackson. (Received June 25, 2008)