The grouse comprise a Holarctic group of gallinaceous birds of considerable economic importance, currently arranged (Peters, 1934) in 11 genera and about 18 species (there may be as few as 14 species). More than half of the genera accepted by Peters are monotypic, and congeneric sympatric species are found only within the genera *Tetrao* and *Lagopus*. To enable a better appraisal of tetraonine relationships, I undertook the study of several facets of grouse morphology and biology, the results of which are presented herein. I realize that behavioral, biochemical, and further anatomical information is required before a definitive taxonomy of groups such as the *Tetraoninae* is possible. However, while we await such information, full taxonomic use should be made of external morphological characters. That this has not previously been accomplished for the *Tetraoninae* is suggested by some of my results.