Sound-recordings of some calls of the Grey Falcon Falco hypoleucos (adult cackle calls, juvenile begging whines) are described and presented as sound spectrograms, and compared with some equivalent calls of the Peregrine Falcon F. peregrinus (adult female cackle, juvenile begging whine, probable juvenile cackle). The Grey Falcon cackle calls are similar to those of the Peregrine, though variously softer and clearer, more 'squeaky' and/or more guttural (the Peregrine cackles being more strident and whining). Grey Falcon juvenile begging calls are more falsetto than those of the Peregrine. Fundamental frequencies differ slightly (Grey Falcon adult female cackle calls at ~700 Hz, Peregrine at ~1 kHz for juvenile begging calls, ~2 kHz for adult female cackle calls). The vocal data are consistent with the phylogenetic position of the Grey Falcon as basal to the Peregrine and 'great falcon' groups.