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DeLancey, B., and W. B. Worthen. Habitat selection in three species of co-occurring desmognathine salamanders in Greenville Co, SC.

Several different species of desmognathine salamanders coexist in the mountains and foothills of the Southern Appalachians. We characterized rock refugia used by 'adult' (gill-less) Desmognathus fuscus, D. quadromaculatus, and D. ocoee in several drainages at The Furman Forest—a 1500 acre tract northwest of Landrum, South Carolina. Salamanders found beneath rocks were identified to species and snout-vent length was measured. We also measured the following characteristics of the refuge: distance from open water, distance to emergent sediment, the depth of the refuge from the sediment surface (depression depth), and the depth of the refuge from the surface of the water (water depth). These characteristics were compared across species with Students ttests. D. ocoee were found in refuges with significantly deeper depressions than D. fuscus. The depression depth of D. quadramaculatus refuges was intermediate and not significantly different from the other species. *D. ocoee* refuges were significantly farther from water than those of D. fuscus and D. quadramaculatus, which did not differ from one another. The water depth of refuges used by D. quadromaculatus was significantly greater than the water depth in refuges used by the other two species. There were no significant differences in the distance from refugia to emergent sediment among the species. Previous studies with horizontal transects have also found that D. ocoee uses refuges farther from water than the other two species.