

Figure S1. Mean value of the ecological integrity index used in Belote et al. 2017 with each Mountain Treasure rank ordered from highest to lowest. Unicoi Mountains #1 has the lowest human modification and highest ecological integrity among the Mountain Treasures. Pigeon River Gorge has the highest degree of human modification.



Figure S2. Mean value of the corridor index from Belote et al. (2016) and used in Belote et al. 2017 with each Mountain Treasure rank ordered from highest to lowest. For comparison, the 75th and 90th percentiles for all other roadless areas are shown in grey dashed and solid lines, respectively. Siler Bald and Bald Mountain are in the top 10% Forest Service roadless areas for their value in connecting large protected areas.



Figure S3. Mean value of the ecosystem representation priority index used in Belote et al. 2017 with each Mountain Treasure rank ordered from highest to lowest. For comparison, the 75th percentile for all other roadless areas are shown in grey dashed lines. Panthertown #3 and #1, Dobson Knob, Linville Gorge Extension A, Sugar Knob, Nolichucky Gorge, and Southern Nantahala Extension D are in the top 25% most important Forest Service roadless areas for their composition of ecosystems poorly protected in conservation reserves.



Figure S4. Mean value of the biodiversity priority index used in Belote et al. 2017 with each Mountain Treasure rank ordered from highest to lowest. For comparison, the 95th and 99th percentiles for all other roadless areas are shown in red dashed and red solid lines, respectively. Nine Mountain Treasures are in the top 1% highest biodiversity priority among all Forest Service roadless areas in the U.S., and all but one Mountain Treasures are in the top 5% highest priority.



Figure S5.. The mean composite Wildland Conservation Value for all Mountain Treasures rank ordered from highest to lowest. For comparison, the 90th and 95th percentiles for all other roadless areas are shown in grey solid and red dashed lines, respectively. Twenty-nine Mountain Treasures are among the top 5% most important priorities for expanding conservation protections of wildland values among Forest Service roadless lands in the lower 48 states.