

89. *Pinus arizonica* (*Pinus strobiformis*) / *Muhlenbergia virescens* Forest Association (P)

Arizona pine (Southwestern white pine) / Screwleaf muhly Forest Association (P)

This forest community is characterized by a variably dense (30–60% cover) upper canopy (>5 m) dominated by Arizona pine (*Pinus arizonica*) with southwestern white pine (*Pinus strobiformis*) and a field layer (<0.5 m) dominated by perennial grasses, typically screwleaf muhly (*Muhlenbergia virescens*). The formation of this community ranges from a sparse forest/woodland with a dense understory of perennial grass to a densely forested version with lower cover and often patchy perennial grass. Gambel oak (*Quercus gambelii*) is an occasional (0.5) associate that can provide noteworthy inclusions with cover up to 10%. The lower canopy (2–5 m) and subcanopy (0.5–2 m) strata are extremely sparse (<5% cover), with no clear dominants or common associates. The field stratum (<0.5 m) is dominated by a mix of perennial grasses whose cover is linked to the density of the canopy trees. Overall, screwleaf muhly (*M. virescens*) is the most consistent, with average cover of around 10%, with some areas ranging up to 20%. In order from most to least dominant, other noteworthy graminoids include pine dropseed (*Muhlenbergia tricholepis*), White Mountain sedge (*Carex geophila*), prairie Junegrass (*Koeleria macrantha*), mountain muhly (*Muhlenbergia montana*), Pringle's speargrass (*Piptochaetium pringlei*), and Arizona wheatgrass (*Elymus arizonica*).

Common species

- *Pinus arizonica*
- *Pinus strobiformis*
- *Muhlenbergia virescens*
- *Muhlenbergia tricholepis*

This community covers 0.18% (49 ha/121 ac) of the Rincon Mountain District and is present where the low-angle basin around the Manning Camp trail system begins to drop off to the south. It is found on moderate (20–30%) slopes of varying aspects above 2,400 meters (7,874 ft). The surface cover is dominated by a thick layer of pine-needle litter and duff with patchy boulders and bedrock outcrops. The parent material is a mix of quartz monzonite and mica schist.



