

GIS-based Habitat Attributes for Potential Habitat Distribution Maps

	<i>Black woollypod</i>	<i>Charleston beardtongue</i>	<i>Charleston draba</i>	<i>Charleston goldenbush</i>	<i>Charleston grounddaisy</i>
Landform	gently sloping ridges and hills moderately dry slopes moderately moist steep slopes	moderately dry slopes moderately moist steep slopes	moderately moist steep slopes very moist steep slopes	moderately dry slopes moderately moist steep slopes	gently sloping ridges and hills moderately moist steep slopes
Elevation Range (feet)	N/A	N/A	N/A	7751-10250	N/A
Soil Series	Kylecanyon-Goodwater association Buckspring-Fletcherpeak-Seralin association	Ladyofsnow-Robbersfire-Maryjane association Mountmummy-Thesisters-Maryjane association Rubble land-Charpeak-Rock outcrop complex	Ladyofsnow-Robbersfire-Maryjane association	Ladyofsnow-Robbersfire-Maryjane association Mountmummy-Thesisters-Maryjane association	Goodwater-Doespring association, 15 to 50 percent Buckspring-Fletcherpeak-Seralin association Mackscanyon very gravelly silt loam, 15 to 50 percent slopes Maryjane-Robbersfire-Kitgram complex, 30 to 75 percent Mountmummy-Thesisters-Maryjane association
Slope (degrees)	0-45	N/A	21-45	0-45	0-45
Vegetation Type (NVCS)	Mojave Mid-Elevation Mixed Desert Scrub Sonora-Mojave Semi-Desert Chaparral	Inter-Mountain Basins Subalpine Limber-Bristlecone Inter-Mountain Basins Cliff and Canyon Inter-Mountain Basins Aspen-Mixed Conifer Forest and	Inter-Mountain Basins Cliff and Canyon Inter-Mountain Basins Semi-Desert Grassland Inter-Mountain Basins Subalpine Limber-Bristlecone	Inter-Mountain Basins Aspen-Mixed Conifer Forest and Inter-Mountain Basins Mountain Mahogany Woodland Sonora-Mojave Semi-Desert Chaparral	Great Basin Pinyon-Juniper Woodland Inter-Mountain Basins Aspen-Mixed Conifer Forest and
Annual Precipitation (inches)	14-18	20-24	20-24	20-24	N/A

	<i>Charleston ivesia</i>	<i>Charleston kittentails</i>	<i>Charleston pinewood</i>	<i>Charleston pussytoes</i>	<i>Charleston tansy</i>
Landform	N/A	cool aspect scarps, cliffs, canyons moderately moist steep slopes very moist steep slopes	gently sloping ridges and hills moderately dry slopes very moist steep slopes moderately moist steep slopes	moderately moist steep slopes very moist steep slopes	cool aspect scarps, cliffs, canyons hot aspect scarps, cliffs, canyons moderately dry slopes moderately moist steep slopes
Elevation Range (feet)	N/A	N/A	7501-10000	N/A	10751-12000
Soil Series	N/A	Ladyofsnow-Robbersfire-Maryjane association Rubble land-Charpeak-Rock outcrop complex	Leecanyon-Goodwater association Maryjane extremely gravelly loam, 8 to 30 percent slopes Maryjane-Robbersfire-Kitgram complex, 30 to 75 percent Mountmummy-Thesisters-Maryjane association	Ladyofsnow-Robbersfire-Maryjane association Rubble land-Charpeak-Rock outcrop complex	Mountmummy-Thesisters-Maryjane association Rubble land-Charpeak-Rock outcrop complex
Slope (degrees)	N/A	21-45	N/A	21-45	N/A
Vegetation Type (NVCS)	Rocky Mountain Alpine Bedrock and Scree	Inter-Mountain Basins Cliff and Canyon Inter-Mountain Basins Subalpine Limber-Bristlecone	Great Basin Pinyon-Juniper Woodland Inter-Mountain Basins Aspen-Mixed Conifer Forest and Inter-Mountain Basins Mountain Mahogany Woodland Inter-Mountain Basins Semi-Desert Grassland Inter-Mountain Basins Subalpine Limber-Bristlecone Pine Woodland	Inter-Mountain Basins Cliff and Canyon Inter-Mountain Basins Subalpine Limber-Bristlecone	Inter-Mountain Basins Cliff and Canyon Inter-Mountain Basins Subalpine Limber-Bristlecone Rocky Mountain Alpine Bedrock and Scree
Annual Precipitation (inches)	N/A	20-24	N/A	20-24	20-24

	<i>Charleston violet</i>	<i>Clokey buckwheat</i>	<i>Clokey eggvetch</i>	<i>Clokey greasebush</i>	<i>Clokey milkvetch</i>
Landform	gently sloping ridges and hills moderately dry slopes moderately moist steep slopes	gently sloping ridges and hills	gently sloping ridges and hills moderately dry slopes moderately moist steep slopes	cool aspect scarps, cliffs, canyons	gently sloping ridges and hills moderately dry slopes moderately moist steep slopes
Elevation Range (feet)	N/A	N/A	6751-7000, 8251-9000	N/A	6501-7750
Soil Series	N/A	Kylecanyon-Goodwater association Purob-Irongold association	Maryjane extremely gravelly loam, 8 to 30 percent slopes Mountmummy-Thesisters- Maryjane association	Ladyofsnow-Robbersfire- Maryjane association Mountmummy-Thesisters- Maryjane association	Buckspring-Fletcherpeak- Seralin association Goodwater-Doespring association, 15 to 50 percent Leecanyon-Goodwater association Maryjane extremely gravelly loam, 8 to 30 percent slopes Mountmummy-Thesisters- Maryjane association Charkiln-Woodspring- Buckspring association Mackscanyon very gravelly silt loam, 15 to 50 percent slopes
Slope (degrees)	0-20	0-20	0-20	46-90	0-45
Vegetation Type (NVCS)	Great Basin Pinyon-Juniper Woodland Inter-Mountain Basins Aspen- Mixed Conifer Forest and Inter-Mountain Basins Mountain Mahogany Woodland Sonora-Mojave Semi-Desert Chaparral	North American Warm Desert Wash Mojave Mid-Elevation Mixed Desert Scrub	Inter-Mountain Basins Aspen- Mixed Conifer Forest and	Inter-Mountain Basins Aspen- Mixed Conifer Forest and Inter-Mountain Basins Cliff and Canyon	Great Basin Pinyon-Juniper Woodland Inter-Mountain Basins Aspen- Mixed Conifer Forest and Mojave Mid-Elevation Mixed Desert Scrub Seeded with Crested Wheat Grass Sonora-Mojave Semi-Desert Chaparral
Annual Precipitation (inches)	16-24	12-16	14-16, 20-24	20-24	14-24

	<i>Clokey mountain sage</i>	<i>Clokey paintbrush</i>	<i>Clokey silene</i>	<i>Clokey thistle</i>	<i>Death Valley beardtongue</i>
Landform	gently sloping ridges and hills moderately dry slopes moderately moist steep slopes very moist steep slopes	moderately dry slopes gently sloping ridges and hills very moist steep slopes moderately moist steep slopes	cool aspect scarps, cliffs, canyons moderately moist steep slopes	moderately dry slopes moderately moist steep slopes	gently sloping ridges and hills moderately dry slopes
Elevation Range (feet)	N/A	8000-11750	N/A	N/A	4501-5750
Soil Series	Goodwater-Doespring association, 15 to 50 percent Mountmummy-Thesisters- Maryjane association	N/A	Rubble land-Charpeak-Rock outcrop complex	Ladyofsnow-Robbersfire- Maryjane association Mountmummy-Thesisters- Maryjane association	Boxspring-Potosi-Rock outcrop association Lastchance-Ferrogold- Commski association Zibate-Rock outcrop complex, 15 to 50 percent slopes
Slope (degrees)	N/A	21-45	21-45	21-45	N/A
Vegetation Type (NVCS)	Great Basin Pinyon-Juniper Woodland Inter-Mountain Basins Aspen- Mixed Conifer Forest and Inter-Mountain Basins Subalpine Limber-Bristlecone	Great Basin Pinyon-Juniper Woodland Inter-Mountain Basins Aspen- Mixed Conifer Forest and Inter-Mountain Basins Cliff and Canyon Inter-Mountain Basins Subalpine Limber-Bristlecone Sonora-Mojave Semi-Desert Chaparral	Inter-Mountain Basins Cliff and Canyon	Inter-Mountain Basins Cliff and Canyon Inter-Mountain Basins Subalpine Limber-Bristlecone	Mojave Mid-Elevation Mixed Desert Scrub North American Warm Desert Wash
Annual Precipitation (inches)	16-24	18-24	20-24	20-24	N/A

	<i>Flammulated owl</i>	<i>Hitchcock bladderpod</i>	<i>Jaeger beardtongue</i>	<i>Jaeger Ivesia</i>	<i>Jaeger whitlowgrass</i>
Landform	gently sloping ridges and hills moderately dry slopes moderately moist steep slopes	cool aspect scarps, cliffs, canyons gently sloping ridges and hills moderately dry slopes moderately moist steep slopes very moist steep slopes	gently sloping ridges and hills moderately dry slopes moderately moist steep slopes toe slopes, bottoms, and swales	cool aspect scarps, cliffs, canyons hot aspect scarps, cliffs, canyons moderately dry slopes moderately moist steep slopes	moderately dry slopes moderately moist steep slopes
Elevation Range (feet)	N/A	N/A	5501-9000	7001-11250	9251-11750
Soil Series	Maryjane extremely gravelly loam, 8 to 30 percent slopes Mountmummy-Thesisters-Maryjane association	Ladyofsnow-Robbersfire-Maryjane association Mountmummy-Thesisters-Maryjane association Rubble land-Charpeak-Rock outcrop complex	Lastone association Buckspring-Fletcherpeak-Seralin association Mountmummy-Thesisters-Maryjane association Seralin-Traley-Rock outcrop association	Buckspring-Fletcherpeak-Seralin association Ladyofsnow-Robbersfire-Maryjane association Maryjane-Robbersfire-Kitgram complex, 30 to 75 percent Mountmummy-Thesisters-Maryjane association	Ladyofsnow-Robbersfire-Maryjane association Rubble land-Charpeak-Rock outcrop complex Mountmummy-Thesisters-Maryjane association
Slope (degrees)	N/A	0-45	N/A	N/A	21-45
Vegetation Type (NVCS)	Inter-Mountain Basins Aspen-Mixed Conifer Forest and	Inter-Mountain Basins Aspen-Mixed Conifer Forest and Inter-Mountain Basins Cliff and Canyon Inter-Mountain Basins Subalpine Limber-Bristlecone	Great Basin Pinyon-Juniper Woodland Inter-Mountain Basins Aspen-Mixed Conifer Forest and Mojave Mid-Elevation Mixed Desert Scrub Seeded with Crested Wheat Grass Sonora-Mojave Semi-Desert Chaparral	Inter-Mountain Basins Aspen-Mixed Conifer Forest and Inter-Mountain Basins Cliff and Canyon Inter-Mountain Basins Subalpine Limber-Bristlecone	Inter-Mountain Basins Cliff and Canyon Inter-Mountain Basins Subalpine Limber-Bristlecone Rocky Mountain Alpine Bedrock and Scree
Annual Precipitation (inches)	N/A	20-24	12-24	N/A	20-24

	<i>Nevada willowherb</i>	<i>Northern goshawk</i>	<i>Palmer's Chipmunk</i>	<i>Rosy king sandwort</i>	<i>Rough angelica</i>
Landform	hot aspect scarps, cliffs, canyons moderately dry slopes	N/A	Northern aspects (Bearings > 270 and < 90) Distance to permanent water < 300 meters	moderately moist steep slopes gently sloping ridges and hills moderately dry slopes very moist steep slopes	gently sloping ridges and hills moderately dry slopes very moist steep slopes
Elevation Range (feet)	N/A	N/A	7200-10500	8001-10000	7251-8250
Soil Series	Ladyofsnow-Robbersfire-Maryjane association Luckystrike gravelly loam, 8 to 30 percent slopes	N/A	N/A	Maryjane-Robbersfire-Kitgram complex, 30 to 75 percent Ladyofsnow-Robbersfire-Maryjane association Mountmummy-Thesisters-Maryjane association	N/A
Slope (degrees)	21-45	<30% (nesting only)	Slopes < 25%	0-45	0-45
Vegetation Type (NVCS)	Inter-Mountain Basins Aspen-Mixed Conifer Forest and Inter-Mountain Basins Cliff and Canyon	Great Basin Pinyon-Juniper Woodland Inter-Mountain Basins Aspen-Mixed Conifer Forest and	N/A	Inter-Mountain Basins Aspen-Mixed Conifer Forest and Inter-Mountain Basins Subalpine Limber-Bristlecone	Great Basin Pinyon-Juniper Woodland Inter-Mountain Basins Aspen-Mixed Conifer Forest and Rocky Mountain Subalpine-Montane Riparian Shrubland
Annual Precipitation (inches)	20-24	N/A	N/A	N/A	20-24