## SOILS OF PARADISE COMMUNITY, MONO COUNTY, CALIFORNIA

Soils in Paradise are not as pleasant as the name suggests. The community is situated atop a complex of four poor, sandy soils:

- 1. Sherwin cobbly fine sand
- 2. Buscones gravelly loamy sand
- 3. Brantel gravelly loamy sand
- 4. Hovona very cobbly loamy sand

All these soils are located on top of tuff. The first 3 sit on soft tuff, whereas Hovona sits on hard tuff. Additionally, you can often find bits of obsidian in in the first 3. The primary difference between them in terms of gardening is the depth before you hit the rock below. This is related to the slope. Sherwin is very shallow (less than 1 foot) and is found on steeper slopes. Buscones may have rock more than 30 inches below the surface and will be more level, but still sloped. Brantel soils are located on slopes less than 15 degrees and have fewer pebbles on the surface than either Sherwin or Buscones. Brantel is located over tuff, but the depth is about 5 feet. Hovona soils tend to be about 7 inches deep. The soil surface is more covered with pebbles and cobbles and the look slightly different. It may not be present, but you are more likely to find Mormon Tea (Ephedra) on Hovona soils.

Hovona soil is found southwest of Alison Lane. The first 3 are found in most of the remaining area of Paradise, the type determined mostly by slope.

These four soils all have a hard time holding water. They are almost straight sand. The lack of soil depth and inability to hold water and nutrients are the biggest impediment to gardening. All 3 soils have very low cation exchange capacities which will require frequent replenishment of plant nutrients.

Soils are neutral pH and are low in salts or calcium. Be on the lookout for sulfur deficiency.

Assuming you have enough soil depth, gardens will require incorporation of organic matter to improve retention of water and nutrients. Use of a mulch will help keep the soil from drying.

Mixed with organic components like peat moss or ground bark, this soil would make a fine ingredient in a potting mix used in containers. This suggests gardening in raised beds or boxes.

The homes near Rock Creek are somewhat different. Soils near creeks are often highly variable. This area is rocky but not everywhere. Most of the non-rocky portion is itself covered in a 40-60% pavement of cobbles, gravel and rocks. It's really hit-or-miss near the creek. Good luck!

Care should be taken when fertilizing in these soils as they will be easily leached out of the soil and into the watershed.

The path of least resistance to having a good garden here, or in most sloping land, is to utilize raised beds with a sol mix with plenty of organic matter.