

## State and Transition Models

### Problems with linear succession?

- **Demographic Inertia**
- **Loss of Plant Materials**
- **Fire Feedbacks**
- **Soil Feedbacks**

### Problems with succession models (*summary*)

- \_\_\_\_\_ pathways of succession
- Multiple \_\_\_\_\_ vegetation types
- No \_\_\_\_\_ and \_\_\_\_\_ end-point

Equating climate composition to range condition confuses evaluation of \_\_\_\_\_ and their \_\_\_\_\_.

**Site Potential:** Precipitation, Temperature, Soil, Topography, Elevation

### State and Transition Model:

- Describe vegetation dynamics and assess the risk of change to another stable state
- Design and interpret monitoring based on expected responses to management or climatic changes.

**Steady State:**

**Transition:**

**Threshold:**

**Ball and Cup (trough) Analogy:**

**Stepwise Degradation:**

- **Biotic Transition:**
- **Abiotic Transition:**

Rangelands are ***Dynamic!***