United States Department of Agriculture

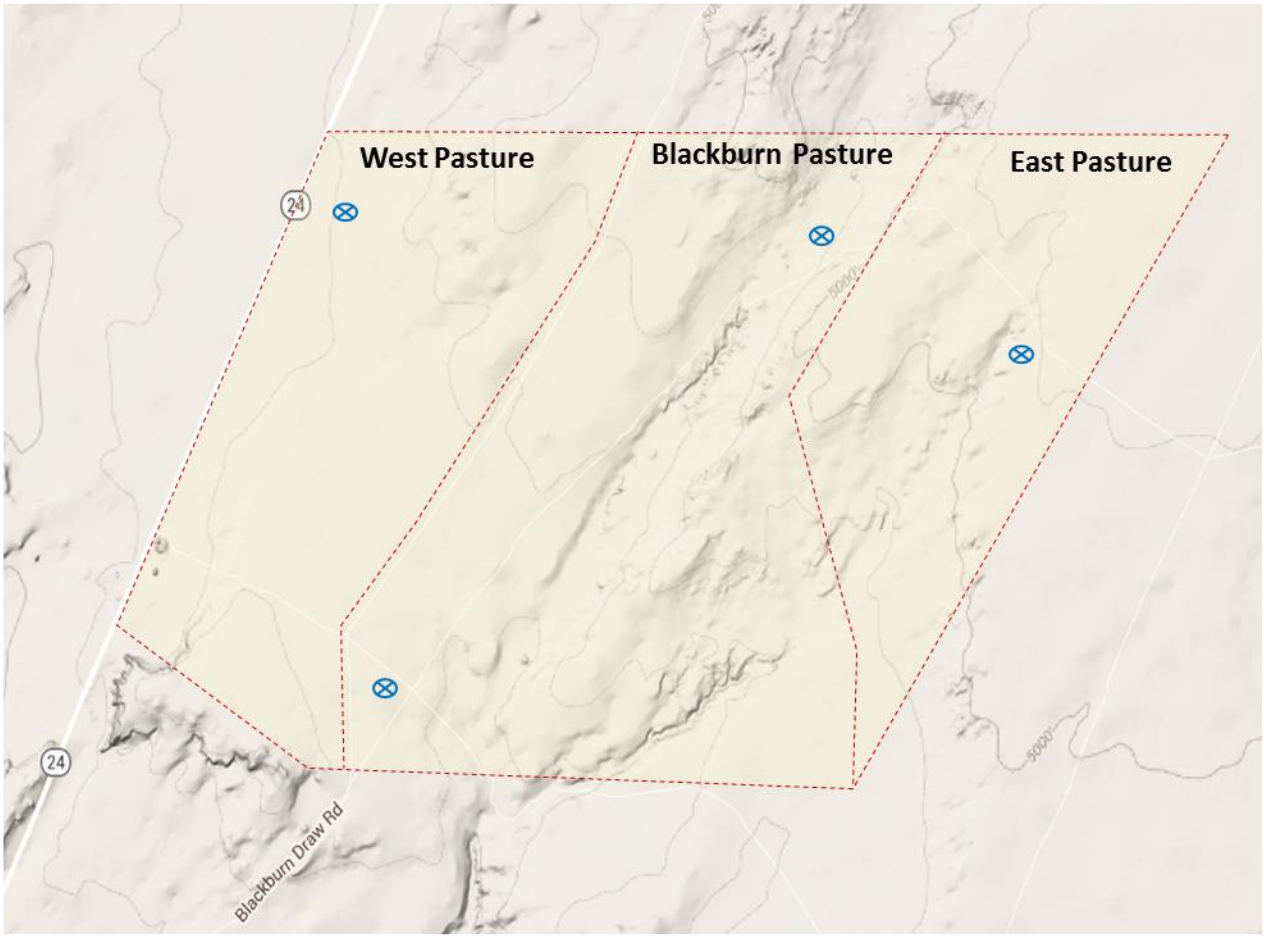
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

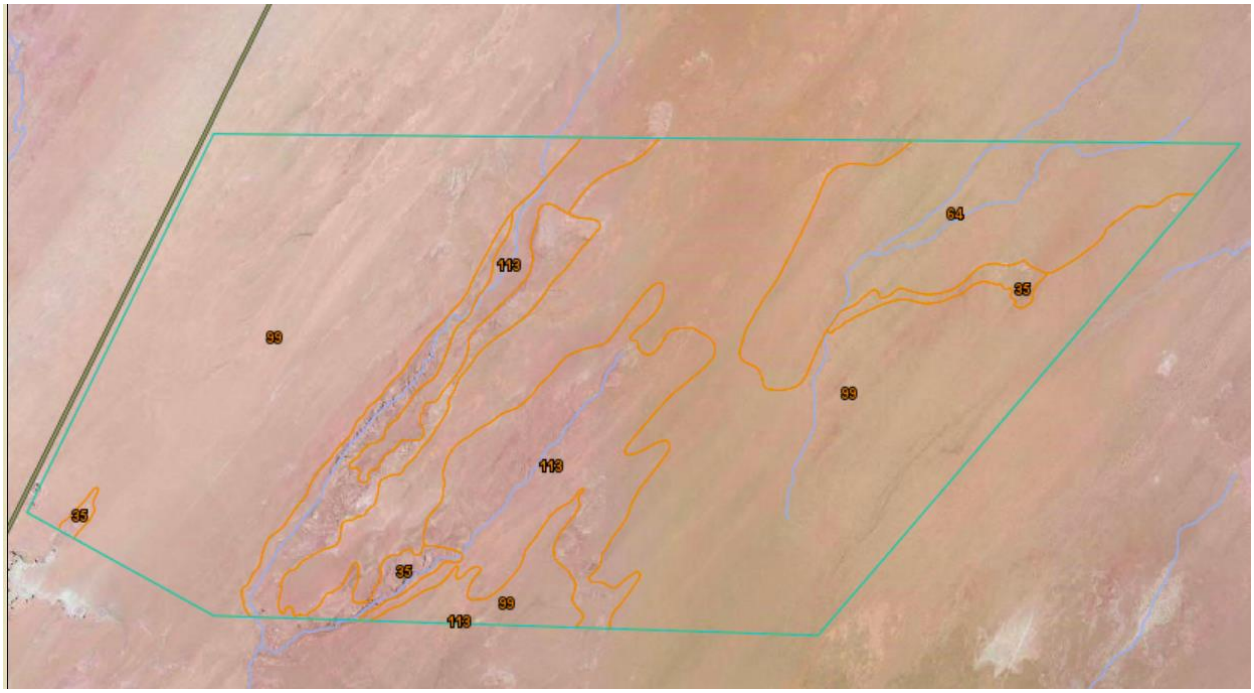
Custom Soil Resource Report for Henry Mountains Area, Utah, Parts of Garfield, Kane, and Wayne Counties

Pasture Map Blackburn Draw Allotment

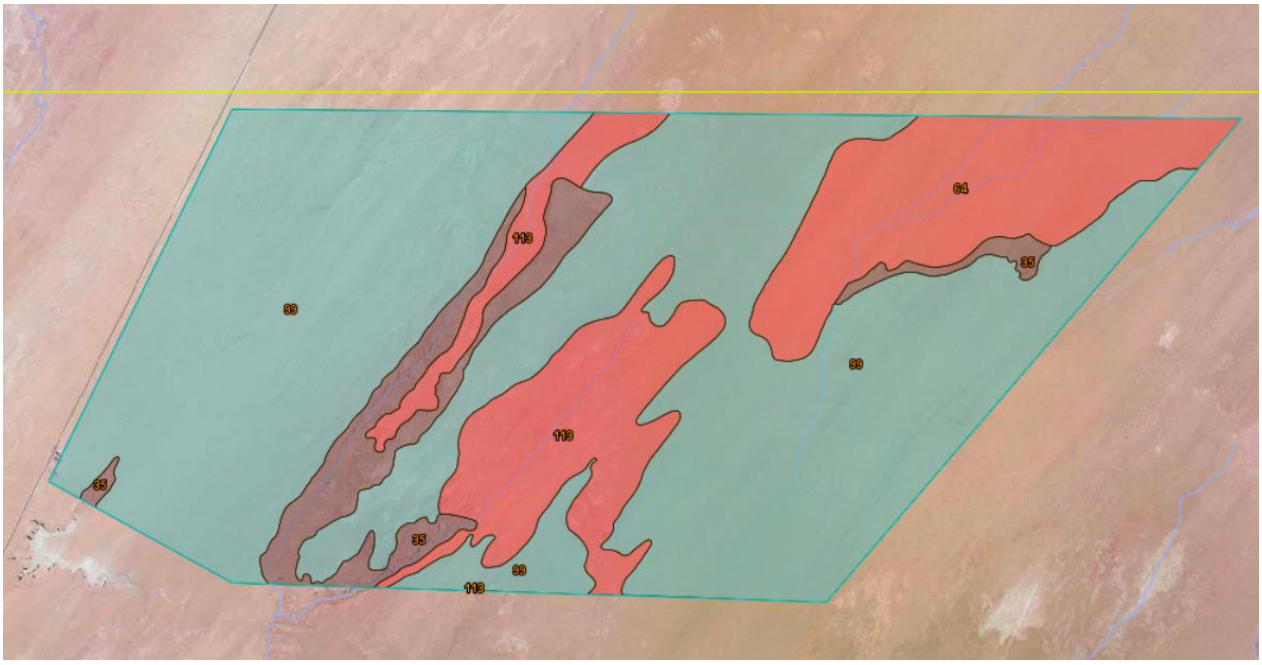


Navigate to http://goo.gl/2vZfk9 to see aria of interest in Web Soil Survey.

Soils with Soil Map Units



Ecological Sites



Soil Map Unit Legend

Henry Mountains Area, Utah, Parts of Garfield, Kane, and Wayne Counties					
Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
35	Farb-Farb,very shallow-Rock outcrop complex	Farb, very shallow (40%)	Desert Shallow Sandy Loam (Shadscale)	1,055	7%
		Farb (35%)	Desert Very Shallow Sandy Loam		
		Rock outcrop (20%)			
		Chipete (5%)			
64	Monue loamy fine sand	Monue (90%)	Desert Sandy Loam (Fourwing Saltbush)	1,877	12%
		Moffat (10%)			
99	Sheppard loamy fine sand 2 to 8 percent slopes	Sheppard (90%)	Desert Sand (Sand Sagebrush)	10,843	69%
		Moenkopie (5%)			
		Rock outcrop (5%)			
113	Trachute-Sheppard complex	Trachute (45%)	Desert Sandy Loam (Fourwing Saltbush)	1,920	12%
		Sheppard (40%)	Desert Sand (Sand Sagebrush)		
		Moenkopie (10%)			
		Rock outcrop (5%)			
Totals for Area of Interest				**15,695**	**100%**

Vegetation Productivity

Henry Mountains Area, Utah, Parts of Garfield, Kane, and Wayne Counties				
Map unit symbol	Map unit name	**Favorable** (lbs/acre/year)	**Normal** (lbs/acre/year)	**Unfavorable** (lbs/acre/year)
35	Farb-Farb,very shallow-Rock outcrop complex	230	173	86
64	Monue loamy fine sand	540	360	180
99	Sheppard loamy fine sand 2 to 8 percent slopes	630	360	180
113	Trachute-Sheppard complex	528	363	215

Total dry-weight production is the amount of vegetation that can be expected to grow annually in a well-managed area that is supporting the potential natural plant community. It includes all vegetation, whether or not it is palatable to grazing animals. It includes the current year's growth of leaves, twigs, and fruits of woody plants. It does not include the increase in stem diameter of trees and shrubs. It is expressed in pounds per acre of air-dry vegetation for favorable, normal, and unfavorable years. In a favorable year, the amount and distribution of precipitation and the temperatures make growing conditions substantially better than average. In a normal year, growing conditions are about average. In an unfavorable year, growing conditions are well below average, generally because of low available soil moisture. Yields are adjusted to a common percent of air-dry moisture content.

Practice Stocking Rate Question 2018

Information from the Web Soil Survey is attached for the Blackburn Draw Allotment just northeast of Hanksville, UT. This is a BLM allotment situated between Capital Reef and Canyon Lands National Parks.

- Look at the range resources in the Blackburn Draw Allotment (download at https://goo.gl/yoF3HC).
- The allotment, is dominated by native grasses and salt-desert or sand shrubs. The vegetation production is low because the long-term average precipitation from the area is only 5.6" per year occurring mostly in the fall (August through October).

Forage Availability – Based on the information in the Web Soil Survey, how much forage is available on the ranch? Basic assumptions:

- About 240 acres of the Sheppard Loamy Fine Sand (Soil Map Unit = 99) is quite far from water. Only about half of the forage on this 240 acre allotment is accessible.
- Because precipitation is low in the region, a proper use factor of about 40% would be appropriate.
- There are no restrictions due to slope or other factors.

1) How many pounds of available forage is grazable in a **FAVORABLE** year?

Forage Demand -

- The primary wildlife on the allotment are pronghorn. The BLM estimates that there are about 20 antelope that live on the allotment year-round. (Average weight 100 lbs; with intake factor of 3.5% of body weight/day)
- There is also occasional occurrence of wild horses that wander into the allotment from the Robber's Roost Herd Management Area. The BLM estimates that there is about 45 horse days of use each year. (Average weight 850 lbs; with intake factor of 3.5% of body weight/day)

2) How much forage do you expect **pronghorns** eat in a season? _____ lbs

3) How much forage do you expect **horses** eat in a season? _____ lbs

4) After pronghorn and horses are accounted for, how many pounds of forage will be available for cattle on the ranch? _____ pounds

   What is a reasonable stocking rate including livestock, pronghorn, and horses?_____acres/AUM