**Ecosystem Type: GRASSLANDS**

**Category: Biodiversity Conservation**

1. **Materials**

***Supplier*** – Grasslands are rich with a diverse group of plant species (Partel et al., 2007; Torok, Kapocsi, and Deak, 2012), as well as arthropod and bird species (Werling et al., 2014). The diversity of species in a grassland habitat depends on the geographic location; however, the number of species present also depends on the aboveground biomass of the ecosystem (Hector et al., 1999). This shows that grasslands have materials that support and biodiversity.

***Driver*** – Nitrogen has an effect on the size of the plant community and the overall diversity (Partel et al., 2007).

***Demander*** – not applicable

1. **Nutrition**

***Supplier*** – not applicable

***Driver*** -not applicable

***Demander*** - not applicable

1. **Energy**

***Supplier*** – not applicable

***Driver*** – not applicable

***Demander*** – not applicable

1. **Mediation of Waste, Toxics, and Other Nuisances**

***Supplier*** – Grasslands provide services like bioremediation, or the clean-up of harmful wastes that leach into the soils. This keeps the habitat clean and maintains overall biodiversity (Lovejoy, 1994).

***Driver*** – not applicable

***Demander*** – not applicable

1. **Mediation of Flows**

***Supplier*** – One study showed that the grassland ecosystems that were disconnected from each other due to human disturbance had lower species richness, indicating that these ecosystems help connect populations of species to each other supporting their life cycle (Eriksson, Cousins, and Bruun, 2002; Partel et al., 2007).

***Driver*** – not applicable

***Demander*** – not applicable

1. **Maintenance of Physical, Chemical, and Biological Indicators**

***Supplier*** – Grassland diversity stabilizes the physical stature of the habitat because it increases the root density of the soils (Tilman, Reich, and Knops, 2006). Not only does this improve the overall quality of the soil (Gardi et al., 2002), it creates a better habitat for a wider range of animal species.

***Driver*** – not applicable

***Demander*** – not applicable

1. **Spiritual, Symbolic, Religious, and Social Experiences**

***Supplier*** – Studies have found that people believe grasslands should be protected to maintain their biodiversity (Lamarque et al., 2011).

***Driver*** – not applicable

***Demander*** – not applicable

1. **Physical and Intellectual Interactions w/ Biota, Ecosystems, and Land/Seascapes**

***Supplier*** – Humans can physically interact with grasslands to enjoy their biodiversity. Activities may be laborious like harvesting or for recreation like hiking. One study found that Mediterranean savannas need this interaction to improve its overall biodiversity because human management and disturbance of these ecosystems prevents shrubs from spreading across the habitat and outcompeting grassland species (Bugalho et al., 2011).

***Driver*** – not applicable

***Demander*** - not applicable

**Sources:**

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