Interactions of Forest Management and Herbivory on Community and Crop-tree Establishment (Community Data)

Metadata:

- Identification Information
- Data Quality Information
- Entity and Attribute Information
- Distribution Information
- Metadata Reference Information

Identification Information:
Citation:
   Citation Information:
      Originator: Thomas D. Stokely
      Originator: Jake Verschuyl
      Originator: Joan C. Hagar
      Originator: Matthew G. Betts

      Publication Date: 2017

      Title: Interactions of Forest Management and Herbivory on Community and Crop-tree Establishment (Community Data)

      Geospatial Data Presentation Form: Comma-separated values (.csv) file

      Publication Information:
         Publication Place: Reston, VA
         Publisher: U.S. Geological Survey

      Online Linkage: https://doi.org/10.5066/F7H1307W

Abstract:
Land management practices often directly alter vegetation structure and composition, but the degree to which ecological processes such as herbivory interact with management to influence biodiversity is less well understood. We hypothesized that intensive forest management and large herbivores have compounding effects on early-seral plant communities and plantation establishment (i.e., tree survival and growth), and the degree of such effects is dependent on the intensity of management practices. We established 225 m² wild ungulate (deer and elk) exclosures nested within a manipulated gradient of management intensity (no-spray Control, Light herbicide, Moderate herbicide and Intensive herbicide treatments), replicated at the scale of whole harvest units (10-19 ha). Herbivory and herbicide applications interacted to drive vegetation structure, composition and crop-tree establishment, with herbivory effects most evident at intermediate herbicide treatments. Control stands were too forage-rich and Intensive stands too forage-poor to be substantially affected by herbivory. However, with Moderate herbicide treatment – which approximates treatments applied to > 2.5 million hectares in Pacific Northwest U.S.A. – foraging by deer and elk exacerbated the effect of the herbicides, resulting in simplified, low-cover plant communities resembling the Intensive herbicide treatment. In the Light herbicide treatment, herbivory suppressed shrub growth following herbicide treatment, improving planted conifer seedling survival, likely via competitive release from shrubs. Minor reductions in management intensity from the Moderate to Light herbicide treatments therefore facilitated the capacity of wild ungulates to benefit seedling survival – which constitutes early evidence of an ecosystem service. However, this ‘service’ may be to the detriment of native early-seral plant communities. These results demonstrate that by changing community composition and vegetation structure, intensive forest management alters foraging selectivity and subsequent plant-herbivore interactions; such shifts in early-seral communities are likely to influence understory plant communities and tree
growth in later stages of forest development.

Purpose:
The data were collected to test the relative interactions between intensive forest management and deer and elk herbivory on plant community structure and composition as part of the Intensive Forest Management and Biodiversity research collaborative.

Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
   Beginning_Date: 20120702
   Ending_Date: 20120821
Currentness_Reference:
ground condition

Status:
Progress: Complete
Maintenance_and_Update_Frequency: Not planned

Spatial_Domain:
Description_of_Geographic_Extent:
Oregon Coast Range; Polk, Lincoln, Yamhill and Tillamook Counties, Oregon
Bounding_Coordinates:
   West_BoundingCoordinate: -123.35
   East_BoundingCoordinate: -123.8333
   North_BoundingCoordinate: 45.75
   South_BoundingCoordinate: 44.7333

Keywords:
Theme:
   Theme_Keyword_Thesaurus: None
   Theme_Keyword: herbivory
   Theme_Keyword: community
   Theme_Keyword: biodiversity
   Theme_Keyword: forestry
   Theme_Keyword: management
   Theme_Keyword: herbicides
   Theme_Keyword: silviculture
   Theme_Keyword: plantation
   Theme_Keyword: early-seral
   Theme_Keyword: trophic
   Theme_Keyword: forage
   Theme_Keyword: deer
   Theme_Keyword: elk

Place:
   Place_Keyword_Thesaurus: none
   Place_Keyword: Pacific Northwest
   Place_Keyword: Oregon
   Place_Keyword: Oregon Coast Range
   Place_Keyword: Polk County, Oregon
   Place_Keyword: Tillamook County, Oregon
   Place_Keyword: Lincoln County, Oregon
   Place_Keyword: Yamhill County, Oregon

Taxonomy:
Keywords/Taxon:
   Taxonomic_Keyword_Thesaurus: USGS Biocomplexity Thesaurus
   Taxonomic_Keywords: Plants
   Taxonomic_Keywords: Shrubs
   Taxonomic_Keywords: Trees
Taxonomic_System:
   Classification_System/Authority: about:blank
Classification_System_Citation:
Citation_Information:
  Originator: United States Department of Agriculture
  Publication_Date: 2016
  Title: United States Department of Agriculture Plant Database
  Geospatial_Data_Presentation_Form: ONLINE_Reference
  Publication_Information:
    Publication_Date: online
    Publisher: United States Government
    Online_Linkage: http://plants.usda.gov/java/
Identification_Reference:
Citation_Information:
  Originator: Jim Pojar
  Originator: Andy MacKinnon
  Publication_Date: 1994
  Title: Plants of the Pacific Northwest Coast
  Geospatial_Data_Presentation_Form: book
  Publication_Information:
    Publication_Date: Vancouver, British Columbia, Canada
    Publisher: Lone Pine Publishing
Identification_Reference:
Citation_Information:
  Originator: C. Leo Hitchcock
  Originator: Arthur Cronquist
  Publication_Date: 1973
  Title: Flora of the Pacific Northwest
  Geospatial_Data_Presentation_Form: book
  Publication_Information:
    Publication_Date: Unknown
    Publisher: University of Washington Press
Taxonomic_Procedures:
  expert advice; identification keys
Taxonomic_Completeness:
  All species were unambiguously identified based on appearance and distribution.
General_Taxonomic_Coverage:
  This dataset contains taxonomic information of early-seral plant communities of the Pacific Northwest.
Taxonomic_Classification:
  Taxon_Rank_Name: Kingdom
  Taxon_Rank_Value: Plantae
  Applicable_Common_Name: Plantes
  Applicable_Common_Name: Planta
  Applicable_Common_Name: Vegetal
  Applicable_Common_Name: Plants
Taxonomic_Classification:
  Taxon_Rank_Name: Subkingdom
  Taxon_Rank_Value: Viridiplantae
Taxonomic_Classification:
  Taxon_Rank_Name: InfraKingdom
  Taxon_Rank_Value: Streptophyta
  Applicable_Common_Name: land plants
Taxonomic_Classification:
  Taxon_Rank_Name: Superdivision
  Taxon_Rank_Value: Embryophyta
Taxonomic_Classification:
  Taxon_Rank_Name: Division
  Taxon_Rank_Value: Tracheophyta
Applicable_Common_Name: vascular plants
Applicable_Common_Name: tracheophytes

Taxonomic_Classification:
  Taxon_Rank_Name: Subdivision
  Taxon_Rank_Value: Spermatophytina
  Applicable_Common_Name: spermatophytes
  Applicable_Common_Name: seed plants
  Applicable_Common_Name: phanérogames

Taxonomic_Classification:
  Taxon_Rank_Name: Class
  Taxon_Rank_Value: Magnoliopsida

Taxonomic_Classification:
  Taxon_Rank_Name: Superorder
  Taxon_Rank_Value: Asteranae

Taxonomic_Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Ericales

Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Ericaceae
  Applicable_Common_Name: heaths
  Applicable_Common_Name: éricacées

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Vaccinium
  Applicable_Common_Name: blueberries
  Applicable_Common_Name: huckleberry
  Applicable_Common_Name: blueberry

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Vaccinium ovalifolium
  Applicable_Common_Name: oval-leaf blueberry
  Applicable_Common_Name: Alaska blueberry

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Vaccinium ovatum
  Applicable_Common_Name: California huckleberry
  Applicable_Common_Name: evergreen blueberry
  Applicable_Common_Name: evergreen huckleberry

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Vaccinium parvifolium
  Applicable_Common_Name: red huckleberry

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
Taxon_Rank_Value: Arbutus
Applicable_Common_Name: madrones
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Arbutus menziesii
  Applicable_Common_Name: Pacific madrone
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Gaultheria
  Applicable_Common_Name: snowberry
  Applicable_Common_Name: wintergreen
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Gaultheria shallon
  Applicable_Common_Name: shallal
  Applicable_Common_Name: salal
Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Primulaceae
  Applicable_Common_Name: primroses
  Applicable_Common_Name: primevères
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Lysimachia
  Applicable_Common_Name: loosestrife
  Applicable_Common_Name: yellow loosestrife
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Lysimachia nummularia
  Applicable_Common_Name: moneywort
  Applicable_Common_Name: creeping jenny
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Trientalis
  Applicable_Common_Name: starflower
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Trientalis borealis
  Applicable_Common_Name: northern starflower
  Applicable_Common_Name: starflower
Taxonomic Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Polemoniaceae
  Applicable_Common_Name: phlox

Taxonomic Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Collomia
  Applicable_Common_Name: mountain trumpet
  Applicable_Common_Name: trumpet

Taxonomic Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Collomia heterophylla
  Applicable_Common_Name: variableleaf collomia

Taxonomic Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Cornales

Taxonomic Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Cornaceae
  Applicable_Common_Name: dogwoods

Taxonomic Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Cornus
  Applicable_Common_Name: dogwood

Taxonomic Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Cornus canadensis
  Applicable_Common_Name: Canadian bunchberry
  Applicable_Common_Name: bunchberry dogwood

Taxonomic Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Gentianales

Taxonomic Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Rubiaceae
  Applicable_Common_Name: madders
  Applicable_Common_Name: rubiacées

Taxonomic Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Galium
  Applicable_Common_Name: gaillet
  Applicable_Common_Name: bedstraw

Taxonomic Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Galium aparine
  Applicable_Common_Name: bedstraw
Applicable_Common_Name: cleavers
Applicable_Common_Name: cleaverwort
Applicable_Common_Name: scarthgrass
Applicable_Common_Name: white hedge
Applicable_Common_Name: catchweed bedstraw
Applicable_Common_Name: goose grass
Applicable_Common_Name: sticky-willy
Applicable_Common_Name: stickywilly

Taxonomic_Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Galium oreganum

Applicable_Common_Name: Oregon bedstraw

Taxonomic_Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Galium triflorum

Applicable_Common_Name: sweetscented bedstraw
Applicable_Common_Name: sweet bedstraw
Applicable_Common_Name: fragrant bedstraw

Taxonomic_Classification:
Taxon_Rank_Name: Order
Taxon_Rank_Value: Lamiales

Taxonomic_Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Lamiaceae

Applicable_Common_Name: mints
Applicable_Common_Name: menthes

Taxonomic_Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Stachys

Applicable_Common_Name: hedge nettle
Applicable_Common_Name: hedgenettle

Taxonomic_Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Stachys cooleyæ

Applicable_Common_Name: coastal hedge-nettle

Taxonomic_Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Prunella
Applicable_Common_Name:
selfheal

Taxonomic Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Prunella vulgaris
  Applicable_Common_Name: heal all
  Applicable_Common_Name: healall
  Applicable_Common_Name: selfheal
  Applicable_Common_Name: common selfheal

Taxonomic Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Micromeria
  Taxonomic Classification:
    Taxon_Rank_Name: Species
    Taxon_Rank_Value: Micromeria douglasii
    Applicable_Common_Name: yerba buena

Taxonomic Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Plantaginaceae
  Applicable_Common_Name: plantains

Taxonomic Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Plantago
  Applicable_Common_Name: Indianwheat
  Applicable_Common_Name: plantain

Taxonomic Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Plantago major
  Applicable_Common_Name: broadleaf plantain
  Applicable_Common_Name: great plantain
  Applicable_Common_Name: buckhorn plantain
  Applicable_Common_Name: rippleseed plantain
  Applicable_Common_Name: common plantain

Taxonomic Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Veronica
  Applicable_Common_Name: speedwell

Taxonomic Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Veronica arvensis
  Applicable_Common_Name:
rock speedwell
  Applicable_Common_Name: wall speedwell
  Applicable_Common_Name: common speedwell
  Applicable_Common_Name: corn speedwell

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Digitalis
  Applicable_Common_Name: foxglove

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Digitalis purpurea
  Applicable_Common_Name: purple foxglove

Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Oleaceae
  Applicable_Common_Name: olives

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Fraxinus
  Applicable_Common_Name: ash

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Fraxinus latifolia
  Applicable_Common_Name: Oregon ash

Taxonomic_Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Dipsacales

Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Caprifoliaceae
  Applicable_Common_Name: honeysuckle
  Applicable_Common_Name: chèvrefeuilles

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Symphoricarpos
  Applicable_Common_Name: snowberry

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Symphoricarpos albus
  Applicable_Common_Name: common snowberry

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Symphoricarpos hesperius
Applicable Common Name: trailing snowberry

Taxonomic Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Adoxaceae
  Applicable Common Name: adoxas

Taxonomic Classification:
  Taxon_Rank_Name: Genera
  Taxon_Rank_Value: Sambucus
  Applicable Common Name: elderberry

Taxonomic Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Sambucus racemosa
  Applicable Common Name: European red elder
  Applicable Common Name: scarlet elderberry
  Applicable Common Name: red elderberry

Taxonomic Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Asterales

Taxonomic Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Campanulaceae
  Applicable Common Name: harebells
  Applicable Common Name: campanules

Taxonomic Classification:
  Taxon_Rank_Name: Genera
  Taxon_Rank_Value: Campanula
  Applicable Common Name: bellflower

Taxonomic Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Campanula scouleri
  Applicable Common Name: pale bellflower

Taxonomic Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Asteraceae
  Applicable Common Name: sunflowers
  Applicable Common Name: tournesols

Taxonomic Classification:
  Taxon_Rank_Name: Genera
  Taxon_Rank_Value: Petasites
  Applicable Common Name: butterbur

Taxonomic Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Petasites palmatus
  Applicable Common Name: arctic sweet coltsfoot
arctic sweet-colt's-foot

**Taxonomic Classification:**
- **Taxon Rank Name:** Genus
- **Taxon Rank Value:** Senecio
- **Applicable Common Name:** ragwort
- **Applicable Common Name:** groundsel

**Taxonomic Classification:**
- **Taxon Rank Name:** Species
- **Taxon Rank Value:** Senecio vulgaris
- **Applicable Common Name:** old-man-in-the-spring
- **Applicable Common Name:** common groundsel

**Taxonomic Classification:**
- **Taxon Rank Name:** Species
- **Taxon Rank Value:** Senecio sylvaticus
- **Applicable Common Name:** woodland ragwort

**Taxonomic Classification:**
- **Taxon Rank Name:** Genus
- **Taxon Rank Value:** Cirsium
- **Applicable Common Name:** thistle

**Taxonomic Classification:**
- **Taxon Rank Name:** Species
- **Taxon Rank Value:** Cirsium arvense
- **Applicable Common Name:** Canada thistle
- **Applicable Common Name:** Canadian thistle
- **Applicable Common Name:** Californian thistle
- **Applicable Common Name:** creeping thistle
- **Applicable Common Name:** field thistle

**Taxonomic Classification:**
- **Taxon Rank Name:** Species
- **Taxon Rank Value:** Cirsium vulgare
- **Applicable Common Name:** bull thistle
- **Applicable Common Name:** common thistle
- **Applicable Common Name:** spear thistle

**Taxonomic Classification:**
- **Taxon Rank Name:** Genus
- **Taxon Rank Value:** Adenocaulon
- **Applicable Common Name:** trailplant

**Taxonomic Classification:**
- **Taxon Rank Name:** Species
Taxon_Rank_Value: Adenocaulon bicolor
Applicable_Common_Name: American trailplant

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Agoseris
  Applicable_Common_Name: agoseris
  Applicable_Common_Name: mountain dandelion

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Agoseris grandiflora
  Applicable_Common_Name: bigflower agoseris
  Applicable_Common_Name: shortbeak agoseris

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Anaphalis
  Applicable_Common_Name: pearly everlasting
  Applicable_Common_Name: anaphalis
  Applicable_Common_Name: pearly everlasting

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Anaphalis margaritacea
  Applicable_Common_Name: western pearly everlasting
  Applicable_Common_Name: common pearly everlasting
  Applicable_Common_Name: pearly everlasting
  Applicable_Common_Name: pearly everlasting
  Applicable_Common_Name: western pearly everlasting

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Lactuca
  Applicable_Common_Name: lettuce

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Lactuca serriola
  Applicable_Common_Name: prickly lettuce
  Applicable_Common_Name: China lettuce
  Applicable_Common_Name: wild lettuce

Taxonomic_Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Crepis
Applicable_Common_Name: hawksbeard

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Crepis capillaris
  Applicable_Common_Name: smooth hawksbeard
  Applicable_Common_Name: smooth hawk's-beard

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Erechites
  Applicable_Common_Name: burnweed

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Erechites minimus
  Applicable_Common_Name: coastal burnweed

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Hieracium
  Applicable_Common_Name: hawkweed

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Hieracium albiflorum
  Applicable_Common_Name: white hawkweed
  Applicable_Common_Name: whiteflower hawkweed

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Hypochaeris
  Applicable_Common_Name: cat's ear
  Applicable_Common_Name: catsear

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Hypochaeris radicata
  Applicable_Common_Name: hairy cat's ear
  Applicable_Common_Name: common cat's-ear
  Applicable_Common_Name: false dandelion
  Applicable_Common_Name: frogbit
  Applicable_Common_Name: gosmore
  Applicable_Common_Name:
spotted catsear
  Applicable_Common_Name: hairy catsear
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Lapsana
  Applicable_Common_Name: nipplewort
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Lapsana communis
  Applicable_Common_Name: common nipplewort
  Applicable_Common_Name: nipplewort
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Leucanthemum
  Applicable_Common_Name: daisy
  Applicable_Common_Name: leucanthemum
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Leucanthemum vulgare
  Applicable_Common_Name: oxeye daisy
  Applicable_Common_Name: oxeye-daisy
  Applicable_Common_Name: oxeyedaisy
  Applicable_Common_Name: ox-eye daisy
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Madia
  Applicable_Common_Name: tarweed
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Madia gracilis
  Applicable_Common_Name: grassy tarweed
  Applicable_Common_Name: slender tarweed
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Sonchus
  Applicable_Common_Name: sowthistle
  Applicable_Common_Name: sow thistle
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Sonchus
asper
Applicable_Common_Name: spiny sowthistle
Applicable_Common_Name: prickly sow thistle
Applicable_Common_Name: prickly sowthistle
Applicable_Common_Name: spiny-leaf sow-thistle
Applicable_Common_Name: perennial sowthistle

Taxonomic_Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Mycelis
Applicable_Common_Name: mycelis

Taxonomic_Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Mycelis muralis
Applicable_Common_Name: wall-lettuce

Taxonomic_Classification:
Taxon_Rank_Name: Order
Taxon_Rank_Value: Apiales

Taxonomic_Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Araliaceae
Applicable_Common_Name: ginseng

Taxonomic_Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Oplopanax

Taxonomic_Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Oplopanax horridus
Applicable_Common_Name: devilscub

Taxonomic_Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Apiaceae

Taxonomic_Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Osmorhiza
Applicable_Common_Name: sweetroot
Applicable_Common_Name: sweetroot

Taxonomic_Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Osmorhiza berteroii
Applicable_Common_Name: sweet cicely
Applicable_Common_Name: mountain sweetroot
Applicable_Common_Name:
sweet cicely

**Taxonomic Classification:**
- **Taxon Rank Name:** Genus
- **Taxon Rank Value:** Torilis
- **Applicable Common Name:** hedge parsley
- **Applicable Common Name:** hedgeparsley

**Taxonomic Classification:**
- **Taxon Rank Name:** Species
- **Taxon Rank Value:** Torilis arvensis
- **Applicable Common Name:** hedge parsley
- **Applicable Common Name:** hedgeparsley
- **Applicable Common Name:** Canada hedgeparsley
- **Applicable Common Name:** spreading hedgeparsley

**Taxonomic Classification:**
- **Taxon Rank Name:** Order
- **Taxon Rank Value:** Boraginales
- **Taxonomic Classification:**
  - **Taxon Rank Name:** Family
  - **Taxon Rank Value:** Hydrophyllaceae
  - **Applicable Common Name:** waterleaf
  - **Applicable Common Name:** hydrophyllacées

**Taxonomic Classification:**
- **Taxon Rank Name:** Genus
- **Taxon Rank Value:** Nemophila
- **Applicable Common Name:** blue-eyes
- **Applicable Common Name:** blue eyes

**Taxonomic Classification:**
- **Taxon Rank Name:** Species
- **Taxon Rank Value:** Nemophila parviflora
- **Applicable Common Name:** smallflower blue-eyes
- **Applicable Common Name:** smallflower nemophila

**Taxonomic Classification:**
- **Taxon Rank Name:** Genus
- **Taxon Rank Value:** Phacelia
- **Applicable Common Name:** scorpion-weed
- **Applicable Common Name:** phacélies

**Taxonomic Classification:**
- **Taxon Rank Name:** Species
- **Taxon Rank Value:** Phacelia nemoralis
- **Applicable Common Name:** shade phacelia
Taxonomic Classification:
  Taxon_Rank_Name: Superorder
  Taxon_Rank_Value: Caryophyllanae
Taxonomic Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Caryophyllales
Taxonomic Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Caryophyllaceae
  Applicable_Common_Name: pinks
cariophyllacées
Taxonomic Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Cerastium
  Applicable_Common_Name: chickweed
  Applicable_Common_Name: mouse-ear chickweed
  Taxonomic Classification:
    Taxon_Rank_Name: Species
    Taxon_Rank_Value: Cerastium glomeratum
    Applicable_Common_Name: sticky chickweed
Taxonomic Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Polygonaceae
  Applicable_Common_Name: knotweed
  Applicable_Common_Name: renouées
  Applicable_Common_Name: buckwheat
Taxonomic Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Rumex
  Applicable_Common_Name: dock
Taxonomic Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Rumex acetosella
  Applicable_Common_Name: sheep sorrel
  Applicable_Common_Name: field sorrel
  Applicable_Common_Name: red sorrel
  Applicable_Common_Name: common sheep sorrel
Taxonomic Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Montiaceae
Taxonomic Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Claytonia
  Applicable_Common_Name: springbeauty
Taxonomic Classification:
  Taxon_Rank_Name: Species
Claytonia sibirica

Siberian springbeauty

Superorder: Lilianae
Applicable Common Name: monocots
Applicable Common Name: monocotyledons
Applicable Common Name: monocotylédones
Order: Liliales
Family: Liliaceae
Genus: Lilium
Species: Lilium columbianum
Applicable Common Name: Columbia lily
Applicable Common Name: Columbian lily
Genus: Streptopus
Species: Streptopus amplexifolius
Applicable Common Name: clasping twisted stalk
Applicable Common Name: twisted stalk
Applicable Common Name: claspleaf twisted stalk
Genus: Prosartes
Species: Prosartes hookeri
Applicable Common Name: drops-of-gold
Genus: Prosartes
Species: Prosartes

Applicable Common Name: largeflower fairybells

Taxonomic Classification:
  Taxon Rank Name: Family
  Taxon Rank Value: Melanthiaceae

Applicable Common Name: false hellebore

Taxonomic Classification:
  Taxon Rank Name: Species
  Taxon Rank Value: Veratrum californicum
  Applicable Common Name: California false hellebore

Applicable Common Name: Pacific false hellebore

Taxonomic Classification:
  Taxon Rank Name: Genus
  Taxon Rank Value: Trillium
  Applicable Common Name: trillium

Taxonomic Classification:
  Taxon Rank Name: Species
  Taxon Rank Value: Trillium ovatum
  Applicable Common Name: Pacific trillium

Taxonomic Classification:
  Taxon Rank Name: Order
  Taxon Rank Value: Poales

Taxonomic Classification:
  Taxon Rank Name: Family
  Taxon Rank Value: Juncaceae
  Applicable Common Name: rushes
  Applicable Common Name: joncs
  Applicable Common Name: Rush Family

Taxonomic Classification:
  Taxon Rank Name: Genus
  Taxon Rank Value: Luzula
  Applicable Common Name: woodrush
  Applicable Common Name: woodrush

Taxonomic Classification:
  Taxon Rank Name: Species
  Taxon Rank Value: Luzula comosa
  Applicable Common Name: Pacific woodrush

Taxonomic Classification:
  Taxon Rank Name: Species
  Taxon Rank Value: Luzula parviflora
  Applicable Common Name: millet woodrush
  Applicable Common Name:
smallflower woodrush

Applicable_Common_Name:
smallflowered woodrush

**Taxonomic Classification:**

- **Taxon_Rank_Name:** Family
- **Taxon_Rank_Value:** Cyperaceae
- **Applicable_Common_Name:** sedges
- **Applicable_Common_Name:** foins coupants
- **Applicable_Common_Name:** laîches
- **Applicable_Common_Name:** rouches
- **Applicable_Common_Name:** rouchettes

**Taxonomic Classification:**

- **Taxon_Rank_Name:** Family
- **Taxon_Rank_Value:** Poaceae
- **Applicable_Common_Name:** grasses
- **Applicable_Common_Name:** graminées

**Taxonomic Classification:**

- **Taxon_Rank_Name:** Genus
- **Taxon_Rank_Value:** Agrostis
- **Applicable_Common_Name:** bentgrass

**Taxonomic Classification:**

- **Taxon_Rank_Name:** Species
- **Taxon_Rank_Value:** Agrostis exarata
- **Applicable_Common_Name:** spike bentgrass

**Taxonomic Classification:**

- **Taxon_Rank_Name:** Genus
- **Taxon_Rank_Value:** Bromus
- **Applicable_Common_Name:** brome
- **Applicable_Common_Name:** brome spp.

**Taxonomic Classification:**

- **Taxon_Rank_Name:** Species
- **Taxon_Rank_Value:** Bromus vulgaris
- **Applicable_Common_Name:** Columbia brome

**Taxonomic Classification:**

- **Taxon_Rank_Name:** Genus
- **Taxon_Rank_Value:** Cinna
- **Applicable_Common_Name:** woodreed

**Taxonomic Classification:**

- **Taxon_Rank_Name:** Species
- **Taxon_Rank_Value:** Cinna latifolia
- **Applicable_Common_Name:** drooping woodreed
- **Applicable_Common_Name:** slender wood-reed

**Taxonomic Classification:**

- **Taxon_Rank_Name:** Genus
- **Taxon_Rank_Value:** Deschampsia
- **Applicable_Common_Name:**
hairgrass
Taxonomic_Categorization:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Deschampsia danthonioides
  Applicable_Common_Name: annual hairgrass

Taxonomic_Categorization:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Elymus
  Applicable_Common_Name: wildrye
  Taxonomic_Categorization:
    Taxon_Rank_Name: Species
    Taxon_Rank_Value: Elymus glaucescent
    Applicable_Common_Name: blue wildrye
    Applicable_Common_Name: blue wild rye

Taxonomic_Categorization:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Lolium
  Applicable_Common_Name: ryegrass
  Taxonomic_Categorization:
    Taxon_Rank_Name: Species
    Taxon_Rank_Value: Lolium perenne
    Applicable_Common_Name: perennial ryegrass
    Applicable_Common_Name: Italian ryegrass

Taxonomic_Categorization:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Poa
  Applicable_Common_Name: bluegrass
  Applicable_Common_Name: bluegrass spp.
  Taxonomic_Categorization:
    Taxon_Rank_Name: Species
    Taxon_Rank_Value: Poa pratensis
    Applicable_Common_Name: Kentucky bluegrass

Taxonomic_Categorization:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Brachypodium
  Applicable_Common_Name: false brome
  Applicable_Common_Name: falsebrome
Taxon_Rank_Value: Brachypodium sylvaticum
Applicable_Common_Name: slender false brome

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Aira
  Applicable_Common_Name: hairgrass
  Applicable_Common_Name: European hairgrass

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Aira caryophyllea
  Applicable_Common_Name: silver hairgrass

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Holcus
  Applicable_Common_Name: velvetgrass
  Applicable_Common_Name: velvet grass

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Holcus lanatus
  Applicable_Common_Name: velvetgrass
  Applicable_Common_Name: Yorkshire fog
  Applicable_Common_Name: common velvetgrass

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Vulpia
  Applicable_Common_Name: fescue

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Vulpia bromoides
  Applicable_Common_Name: brome fescue
  Applicable_Common_Name: desert fescue
  Applicable_Common_Name: brome six-weeks grass

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Vulpia myuros
  Applicable_Common_Name: rat-tail fescue
  Applicable_Common_Name: rat-tailed fescue
  Applicable_Common_Name:
rattail fescue
Applicable_Common_Name:
foxtail fescue

Taxonomic_Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Asparagales

Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Iridaceae

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Iris
Applicable_Common_Name: iris

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Iris tenax
Applicable_Common_Name: wild iris
Applicable_Common_Name: toughleaf iris

Taxonomic_Classification:
  Taxon_Rank_Name: Superorder
  Taxon_Rank_Value: Magnolianae

Taxonomic_Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Piperales

Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Aristolochiaceae
Applicable_Common_Name: birthworts

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Asarum
Applicable_Common_Name: wildginger

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Asarum caudatum
Applicable_Common_Name: British Columbia wildginger

Taxonomic_Classification:
  Taxon_Rank_Name: Superorder
  Taxon_Rank_Value: Ranunculanae

Taxonomic_Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Ranunculales

Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Ranunculaceae
Applicable_Common_Name: buttercups
Applicable_Common_Name: boutons d'or
Applicable_Common_Name: crowfoot

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Anemone
Applicable Common Name: anemone
Taxonomic Classification:
  Taxon Rank Name: Species
  Taxon Rank Value: Anemone deltoidea
Applicable Common Name: Columbian windflower

Taxonomic Classification:
  Taxon Rank Name: Genus
  Taxon Rank Value: Ranunculus
Applicable Common Name: renoncules
Applicable Common Name: buttercup

Taxonomic Classification:
  Taxon Rank Name: Genus
  Taxon Rank Value: Actaea
Applicable Common Name: baneberry
Taxonomic Classification:
  Taxon Rank Name: Species
  Taxon Rank Value: Actaea rubra
Applicable Common Name: western baneberry
Applicable Common Name: red baneberry

Taxonomic Classification:
  Taxon Rank Name: Species
  Taxon Rank Value: Actaea elata
Applicable Common Name: tall bugbane

Taxonomic Classification:
  Taxon Rank Name: Genus
  Taxon Rank Value: Aquilegia
Applicable Common Name: columbine
Taxonomic Classification:
  Taxon Rank Name: Species
  Taxon Rank Value: Aquilegia formosa
Applicable Common Name: crimson columbine
Applicable Common Name: western columbine

Taxonomic Classification:
  Taxon Rank Name: Genus
  Taxon Rank Value: Coptis
Applicable Common Name: goldthread
Taxonomic Classification:
  Taxon Rank Name: Species
  Taxon Rank Value: Coptis laciniata
Applicable Common Name:
Oregon goldthread

**Taxonomic Classification:**
- **Taxon_Rank_Name:** Family
- **Taxon_Rank_Value:** Berberidaceae
- **Applicable_Common_Name:** barberries

**Taxonomic Classification:**
- **Taxon_Rank_Name:** Genus
- **Taxon_Rank_Value:** Achlys
- **Applicable_Common_Name:** vanillaleaf

**Taxonomic Classification:**
- **Taxon_Rank_Name:** Species
- **Taxon_Rank_Value:** Achlys triphylla
- **Applicable_Common_Name:** deer-vetch vanillaleaf
- **Applicable_Common_Name:** vanillaleaf
- **Applicable_Common_Name:** deer-foot
- **Applicable_Common_Name:** sweet after death

**Taxonomic Classification:**
- **Taxon_Rank_Name:** Genus
- **Taxon_Rank_Value:** Mahonia
- **Applicable_Common_Name:** holly grape
- **Applicable_Common_Name:** Oregon-grape
- **Applicable_Common_Name:** barberry
- **Applicable_Common_Name:** algerita
- **Applicable_Common_Name:** berbéris

**Taxonomic Classification:**
- **Taxon_Rank_Name:** Species
- **Taxon_Rank_Value:** Mahonia nervosa
- **Applicable_Common_Name:** Cascade barberry

**Taxonomic Classification:**
- **Taxon_Rank_Name:** Genus
- **Taxon_Rank_Value:** Vancouveria
- **Applicable_Common_Name:** insideout flower

**Taxonomic Classification:**
- **Taxon_Rank_Name:** Species
- **Taxon_Rank_Value:** Vancouveria hexandra
- **Applicable_Common_Name:** northern inside-out flower
- **Applicable_Common_Name:** white insideout flower

**Taxonomic Classification:**
- **Taxon_Rank_Name:** Family
- **Taxon_Rank_Value:** Papaveraceae
Applicable_Common_Name: poppies
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Dicentra
Applicable_Common_Name: bleeding heart
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Dicentra formosa
Applicable_Common_Name: Pacific bleeding heart
Taxonomic_Classification:
  Taxon_Rank_Name: Superorder
  Taxon_Rank_Value: Rosanae
Taxonomic_Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Fagales
Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Betulaceae
Applicable_Common_Name: alder
Applicable_Common_Name: birch
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Alnus
Applicable_Common_Name: alder
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Alnus rubra
Applicable_Common_Name: red alder
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Corylus
Applicable_Common_Name: hazelnut
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Corylus cornuta
Applicable_Common_Name: beaked hazel
Applicable_Common_Name: western hazel
Applicable_Common_Name: beaked hazelnut
Taxonomic_Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Rosales
Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Urticaceae
Applicable_Common_Name: nettles
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
**Taxon_Rank_Value:** Urtica
**Applicable_Common_Name:** nettle

**Taxonomic_Classification:**
- **Taxon_Rank_Name:** Species
  - **Taxon_Rank_Value:** Urtica dioica
  - **Applicable_Common_Name:** California nettle
  - **Applicable_Common_Name:** slender nettle
  - **Applicable_Common_Name:** tall nettle
  - **Applicable_Common_Name:** stinging nettle

**Taxonomic_Classification:**
- **Taxon_Rank_Name:** Family
  - **Taxon_Rank_Value:** Rosaceae
  - **Applicable_Common_Name:** roses

**Taxonomic_Classification:**
- **Taxon_Rank_Name:** Genus
  - **Taxon_Rank_Value:** Prunus
  - **Applicable_Common_Name:** chokecherry
  - **Applicable_Common_Name:** plum

**Taxonomic_Classification:**
- **Taxon_Rank_Name:** Species
  - **Taxon_Rank_Value:** Prunus emarginata
  - **Applicable_Common_Name:** bitter cherry
  - **Applicable_Common_Name:** bittercherry

**Taxonomic_Classification:**
- **Taxon_Rank_Name:** Genus
  - **Taxon_Rank_Value:** Rosa
  - **Applicable_Common_Name:** wildrose
  - **Applicable_Common_Name:** rose

**Taxonomic_Classification:**
- **Taxon_Rank_Name:** Species
  - **Taxon_Rank_Value:** Rosa gymnocrpa
  - **Applicable_Common_Name:** dwarf rose

**Taxonomic_Classification:**
- **Taxon_Rank_Name:** Genus
  - **Taxon_Rank_Value:** Rubus
  - **Applicable_Common_Name:** framboises
  - **Applicable_Common_Name:** ronces
  - **Applicable_Common_Name:** brambles
  - **Applicable_Common_Name:** blackberry
armeniacus
  Applicable_Common_Name: Himalayan blackberry

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Rubus leucodermis
  Applicable_Common_Name: whitebark raspberry

Applicable_Common_Name: western raspberry

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Rubus nivalis
  Applicable_Common_Name: snow raspberry

Applicable_Common_Name: snow raspberry

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Rubus parviflorus
  Applicable_Common_Name: western thimbleberry

Applicable_Common_Name: whitebark raspberry

Applicable_Common_Name: thimbleberry

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Rubus spectabilis
  Applicable_Common_Name: salmonberry

Applicable_Common_Name: salmonberry

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Rubus ursinus
  Applicable_Common_Name: California blackberry

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Holodiscus
  Applicable_Common_Name: oceanspray

Applicable_Common_Name: oceanspray

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Holodiscus discolor
  Applicable_Common_Name: hillside oceanspray

Applicable_Common_Name: hillside oceanspray

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Oemleria
Taxonomic Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Oemleria cerasiformis
Applicable_Common_Name: Indian plum

Taxonomic Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Rhamnaceae
Applicable_Common_Name: buckthorns
Applicable_Common_Name: nerpruns

Taxonomic Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Rhamnus
Applicable_Common_Name: buckthorn

Taxonomic Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Rhamnus purshiana
Applicable_Common_Name: Cascara buckthorn
Applicable_Common_Name: Pursh's buckthorn

Taxonomic Classification:
Taxon_Rank_Name: Order
Taxon_Rank_Value: Myrtales

Taxonomic Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Onagraceae
Applicable_Common_Name: evening primroses
Applicable_Common_Name: onagres

Taxonomic Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Epilobium
Applicable_Common_Name: willow weed
Applicable_Common_Name: willowweed
Applicable_Common_Name: willowherb

Taxonomic Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Epilobium brachycarpum
Applicable_Common_Name: autumn willowherb
Applicable_Common_Name: autumn willowweed
Applicable_Common_Name: tall annual willowherb

Taxonomic Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Epilobium ciliatum
Applicable_Common_Name:
hairy willowherb
  Applicable_Common_Name: hairy willowweed
  Applicable_Common_Name: fringed willowherb
  Taxonomic_Classification:
    Taxon_Rank_Name: Species
    Taxon_Rank_Value: Epilobium angustifolium
    Applicable_Common_Name: fireweed

Taxonomic_Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Sapindales

Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Sapindaceae
  Applicable_Common_Name: soapberries

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Acer
  Applicable_Common_Name: maples

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Acer circinatum
  Applicable_Common_Name: vine maple

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Acer macrophyllum
  Applicable_Common_Name: bigleaf maple

Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Anacardiaceae
  Applicable_Common_Name: cashews

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Toxicodendron
  Applicable_Common_Name: poison ivy

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Toxicodendron diversilobum
  Applicable_Common_Name: Pacific poison oak

Taxonomic_Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Geraniales

Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Geraniaceae
Applicable_Common_Name: geraniums
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Geranium
  Applicable_Common_Name: geranium

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Geranium bicknellii
  Applicable_Common_Name: northern crane's-bill
  Applicable_Common_Name: Bicknell's cranesbill

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Geranium carolinianum
  Applicable_Common_Name: Carolina crane's-bill
  Applicable_Common_Name: Carolina geranium

Taxonomic_Classification:
  Taxon_Rank_Name: Order
  Taxon_Rank_Value: Fabales

Taxonomic_Classification:
  Taxon_Rank_Name: Family
  Taxon_Rank_Value: Fabaceae
  Applicable_Common_Name: peas
  Applicable_Common_Name: legumes

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Medicago
  Applicable_Common_Name: alfalfa

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Medicago lupulina
  Applicable_Common_Name: black medick
  Applicable_Common_Name: black medic clover
  Applicable_Common_Name: black medic
  Applicable_Common_Name: hop clover
  Applicable_Common_Name: hop medic
  Applicable_Common_Name: nonesuch
  Applicable_Common_Name: yellow trefoil

Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Lathyrus
  Applicable_Common_Name: sweet pea
Applicable_Common_Name: vetchling
Applicable_Common_Name: peavine
Applicable_Common_Name: pea
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Lathyrus nevadensis
Applicable_Common_Name: Sierra pea
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Lupinus
Applicable_Common_Name: lupine
Applicable_Common_Name: lupins
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Lupinus arcticus
Applicable_Common_Name: arctic lupine
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Vicia
Applicable_Common_Name: vetch
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Vicia americana
Applicable_Common_Name: American vetch
Applicable_Common_Name: American purple vetch
Applicable_Common_Name: vesse d'Amérique
Applicable_Common_Name: American deervetch
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Vicia cracca
Applicable_Common_Name: bird vetch
Applicable_Common_Name: tufted vetch
Applicable_Common_Name: cow vetch
Taxonomic_Classification:
  Taxon_Rank_Name: Genus
  Taxon_Rank_Value: Lotus
Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Lotus crassifolius
Applicable_Common_Name: big deervetch
Taxonomic Classification:
Taxon_Rank_Name: Order
Taxon_Rank_Value: Malpighiales

Taxonomic Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Violaceae
Applicable_Common_Name: violets
Applicable_Common_Name: violettes

Applicable_Common_Name: violets
Applicable_Common_Name: violet

Taxonomic Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Viola
glabella
Applicable_Common_Name: pioneer violet

Taxonomic Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Viola
glabella
Applicable_Common_Name: pioneer violet

Taxonomic Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Viola
glabella
Applicable_Common_Name: violet

Taxonomic Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Viola
glabella
Applicable_Common_Name: violet

Applicable_Common_Name: violettes
Applicable_Common_Name: violet

Taxonomic Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Salicaceae
Applicable_Common_Name: willows
Applicable_Common_Name: saules

Applicable_Common_Name: saule
table:saules
Applicable_Common_Name: saules
Applicable_Common_Name: willow

Taxonomic Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Salix
sitchensis
Applicable_Common_Name: Sitka willow

Taxonomic Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Hypericaceae

Taxonomic Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Hypericum
Applicable_Common_Name: St. Johnswort

Taxonomic Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Hypericum perforatum
Applicable_Common_Name: St. John's wort
Applicable Common Name:
common St. John's wort
Applicable Common Name:
Klamathweed
Applicable Common Name:
Klamath weed
Applicable Common Name:
St. Johnswort
Applicable Common Name:
common St. Johnswort

Taxonomic Classification:
Taxon_Rank_Name: Order
Taxon_Rank_Value: Oxalidales

Taxonomic Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Oxalidaceae

Applicable Common Name: oxalis

Taxonomic Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Oxalis

Applicable Common Name: wood sorrel

Applicable Common Name: woodsorrel

Taxonomic Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Oxalis oregana

Applicable Common Name: redwood-sorrel

Taxonomic Classification:
Taxon_Rank_Name: Superorder
Taxon_Rank_Value: Saxifraganae

Taxonomic Classification:
Taxon_Rank_Name: Order
Taxon_Rank_Value: Saxifragales

Taxonomic Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Grossulariaceae

Applicable Common Name: gooseberries

Taxonomic Classification:
Taxon_Rank_Name: Genus
Taxon_Rank_Value: Ribes

Applicable Common Name: currant

Taxonomic Classification:
Taxon_Rank_Name: Species
Taxon_Rank_Value: Ribes lacustre

Applicable Common Name: prickly currant

Taxonomic Classification:
Taxon_Rank_Name: Family
Taxon_Rank_Value: Saxifragaceae

Applicable Common Name: saxifragas

Applicable Common Name: saxifragacées

Taxonomic Classification:
**Taxonomic Classification:**

*Taxon_Rank_Name*: Genus
*Taxon_Rank_Value*: Saxifraga
*Applicable_Common_Name*: saxifrage

*Taxonomic Classification:*

*Taxon_Rank_Name*: Genus
*Taxon_Rank_Value*: Tellima
*Applicable_Common_Name*: fringecup

*Taxonomic Classification:*

*Taxon_Rank_Name*: Species
*Taxon_Rank_Value*: Tellima grandiflora
*Applicable_Common_Name*: bigflower tellima

*Taxonomic Classification:*

*Taxon_Rank_Name*: Class
*Taxon_Rank_Value*: Pinopsida
*Applicable_Common_Name*: conifers

*Taxonomic Classification:*

*Taxon_Rank_Name*: Subclass
*Taxon_Rank_Value*: Pinidae

*Taxonomic Classification:*

*Taxon_Rank_Name*: Order
*Taxon_Rank_Value*: Pinales
*Applicable_Common_Name*: pines

*Taxonomic Classification:*

*Taxon_Rank_Name*: Family
*Taxon_Rank_Value*: Pinaceae
*Applicable_Common_Name*: pines

*Taxonomic Classification:*

*Taxon_Rank_Name*: Genus
*Taxon_Rank_Value*: Tsuga
*Applicable_Common_Name*: hemlock

*Taxonomic Classification:*

*Taxon_Rank_Name*: Species
*Taxon_Rank_Value*: Tsuga heterophylla
*Applicable_Common_Name*: Pacific hemlock
*Applicable_Common_Name*: West Coast hemlock
*Applicable_Common_Name*: western hemlock

*Taxonomic Classification:*

*Taxon_Rank_Name*: Genus
*Taxon_Rank_Value*: Pseudotsuga
*Applicable_Common_Name*: Douglas-fir

*Taxonomic Classification:*

*Taxon_Rank_Name*: Species
*Taxon_Rank_Value*: Pseudotsuga menziesii
*Applicable_Common_Name*: red fir
*Applicable_Common_Name*:
Applicable_Common_Name: hollyfern

Applicable_Common_Name: holly fern

Taxonomic_Classification:
  Taxon_Rank_Name: Species
  Taxon_Rank_Value: Polystichum munitum
  Applicable_Common_Name: western swordfern

Access_Constraints: none
Use_Constraints: none
Point_of_Contact:
  Contact_Person_Primary: FRESH Metadata Coordinator
  Contact_Organization: USGS Forest and Rangeland Ecosystem Science Center
  Contact_Address:
    Address_Type: mailing and physical
    Address: 777 NW 9th Street, Suite 400
    City: Corvallis
    State_or_Province: Oregon
    Postal_Code: 97330
    Country: USA
  Contact_Voice_Telephone: (541) 750-1030
  Contact_Electronic_Mail_Address: fresc_outreach@usgs.gov

Data_Set_Credit:
  Weyerhaeuser Company, Forest Capital Partners, Hancock Natural Resources Group, Plum Creek Timber Company, Inc. and the Oregon Department of Forestry provided land access and implemented silvicultural treatments; funding was provided by the United States Department of Agriculture, Agriculture Food and Research Initiative grant (AFRI-2009-04457), the National Council for Air and Stream Improvement to MGB, the Giustina Foundation, the Oregon Forest Industries Council, and the Oregon State University College of Forestry Noble fund and Dean’s fund; Jesse Hannon assisted with data collection.

Analytical_Tool:
  Analytical_Tool_Description: R statistical software
  Tool_Access_Information:
    Online_Linkage: http://www.R-project.org/
    Tool_Access_Instructions: http://www.R-project.org/
  Tool_Citation:
    Citation_Information:
      Originator: R Core Team
      Publication_Date: 2012
      Title: R: A language and environment for statistical computing
      Geospatial_Data_Presentation_Form: statistical software

Data_Quality_Information:
  Attribute_Accuracy:
    Attribute_Accuracy_Report:
      To ensure accuracy of data collection, we double checked cover estimates per plant and then went about:blank
through the dataset three times to check for erroneous data entries.

**Logical Consistency Report:**
To ensure accuracy of data collection, we double checked cover estimates per plant and then went through the dataset three times to check for erroneous data entries.

**Completeness Report:**
The dataset is complete and samples balanced. We excluded a research block from exclosure construction and data collection as the site was too steep for feasible fence construction. We did not conduct an analysis of functional groups with unknown status (i.e. plants not identified to species) but those plants were included in vegetation cover and richness estimates.

**Positional Accuracy:**

*Horizontal Positional Accuracy:*  
**Horizontal Positional Accuracy Report:**  
No formal positional accuracy tests were conducted

*Vertical Positional Accuracy:*  
**Vertical Positional Accuracy Report:**  
No formal positional accuracy tests were conducted

**Lineage:**

**Methodology:**

**Methodology Type:** Field  
**Methodology Description:**  
Original data collection. Protocols were developed specifically for this research project, although methods discussed in Helm and Mead (2004) were used to assess plant cover by species. During mid-summer (July-August) of 2012, we recorded visual estimates of total plant cover and cover by vascular species for each of the 12, 1x1 m quadrats systematically placed throughout each herbivory plot. Cover estimates were recorded from 1 to 100% (1% increments from 1-15% and 5% increments from 15-100%) and calibrated based on each 10 x 10 cm area being 1% (Helm and Mead 2004). Species present with cover less than 1% were recorded as 0.5%. For each species, cover was averaged among quadrats to obtain a plot mean. We also measured the maximum canopy height per species per quadrat to the nearest 1 cm and averaged among quadrats to obtain a plot mean. For testing vegetation structure hypotheses, we summarized vegetation data into five response groups: plant cover and richness, forage cover and life form cover and average height. Plant cover was measured as the total visual estimate of all vegetation (i.e., < 100 percent) and richness was simply the cumulative number of species measured in each herbivory plot. We used information from Cook et al. (2016), Ulappa (2015), Cook (2002), Neill (2012) and the USDA Plant Database (NRCS 2016) to group species into high-quality, moderate-quality and non-forage groups. The forage ‘quality’ functional groups represent potential forage quality (i.e., digestible sugars, astringency, and crude protein) and the degree to which deer and elk select species as forage in the region. We also grouped species into life-form functional groups.

**Methodology Citation:**

**Citation Information:**  
**Originator:** D.J. Helm  
**Originator:** B.R. Mead  
**Publication Date:** 2004  
**Title:** Reproducibility of vegetation cover estimates in south-central Alaska forests  
**Geospatial Data Presentation Form:** Journal article  
**Online Linkage:** http://dx.doi.org/10.1111/j.1654-1103.2004.tb02234.x

**Process Step:**

**Process Description:**  
Data processing was conducted by T. Stokely in the Fall of 2012, which included taking an average among quadrat level cover estimates for each species per plot. For univariate vegetation analysis, we used methods from Pinheiro et al. (2016) for mixed effects models. For multivariate analyses, we used methods outlined by Anderson (2002) for PERMANOVA analyses and McCune and Grace (2002) and McCune (2015) for non-metric multidimensional scaling ordination. We used mixed effects models to test hypotheses with the R statistical software (R Core Team 2012), LME function of the NLME package (Pinheiro et al. 2016). Anderson, M. J. 2001. A new method for non-parametric multivariate

Process_Date: 2012

Entity and Attribute Information:
Detailed Description:
Entity Type:
Entity_Type_Label: Forest management and cervid herbivory (Community Data)
Entity_Type_Definition: Comma-separated value (.csv) file
Entity_Type_Definition_Source: dataset developer

Attribute:
Attribute_Label: YEAR
Attribute_Definition: Year in which the data was collected, July 1st through August 31st
Attribute_Definition_Source: dataset developer
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: 2012
Enumerated_Domain_Value_Definition: Data were collected in 2012
Enumerated_Domain_Value_Definition_Source: dataset developer

Attribute:
Attribute_Label: BLOCK
Attribute_Definition: Four-digit alphabetic code identifying experimental herbicide treatment replicate blocks
Attribute_Definition_Source: dataset developer
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: BLRO
Enumerated_Domain_Value_Definition: Black Rock
Enumerated_Domain_Value_Definition_Source: dataset developer

Attribute:
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: LUCK
Enumerated_Domain_Value_Definition: Luckiamute
Enumerated_Domain_Value_Definition_Source: dataset developer

Attribute:
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: WILL
Enumerated_Domain_Value_Definition: Willamina
Enumerated_Domain_Value_Definition_Source: dataset developer

Attribute_Domain_Values:
Enumerated_Domain:
  Enumerated_Domain_Value: GRRO
  Enumerated_Domain_Value_Definition: Grand Ronde

Enumerated_Domain_Value_Definition_Source: dataset developer

Attribute_Domain_Values:
Enumerated_Domain:
  Enumerated_Domain_Value: FOGR
  Enumerated_Domain_Value_Definition: Forest Grove

Enumerated_Domain_Value_Definition_Source: dataset developer

Attribute_Domain_Values:
Enumerated_Domain:
  Enumerated_Domain_Value: TRSK
  Enumerated_Domain_Value_Definition: Trask

Enumerated_Domain_Value_Definition_Source: dataset developer

Attribute_Domain_Values:
Enumerated_Domain:
  Enumerated_Domain_Value: SLTZ
  Enumerated_Domain_Value_Definition: Siletz

Enumerated_Domain_Value_Definition_Source: dataset developer

Attribute:
  Attribute_Label: STAND
  Attribute_Definition: Unique four-letter name assigned to individual, within-block experimental stands.
  Attribute_Definition_Source: dataset developer
  Attribute_Domain_Values:
    Unrepresentable_Domain:
      Unbounded list of text

Attribute:
  Attribute_Label: HBIV
  Attribute_Definition: Herbivory treatments assigned within each stand
  Attribute_Definition_Source: dataset developer
  Attribute_Domain_Values:
    Enumerated_Domain:
      Enumerated_Domain_Value: A
      Enumerated_Domain_Value_Definition: Deer and elk excluded
      Enumerated_Domain_Value_Definition_Source: dataset developer

Attribute_Domain_Values:
Enumerated_Domain:
  Enumerated_Domain_Value: O
  Enumerated_Domain_Value_Definition: Open to deer and elk access
**Enumerated Domain Value Definition Source:**

dataset developer

**Attribute:**

*Attribute Label:* HCID

*Attribute Definition:*

Herbicide treatment randomly applied to each of the four stands per block

*Attribute Definition Source:*

dataset developer

**Attribute Domain Values:**

*Enumerated Domain:*

- *Enumerated Domain Value:* C
  - *Enumerated Domain Value Definition:* Control
  - *Enumerated Domain Value Definition Source:* dataset developer

- *Enumerated Domain:* L
  - *Enumerated Domain Value:* Light
  - *Enumerated Domain Value Definition Source:* dataset developer

- *Enumerated Domain:* M
  - *Enumerated Domain Value:* Moderate
  - *Enumerated Domain Value Definition Source:* dataset developer

- *Enumerated Domain:* X
  - *Enumerated Domain Value:* Intensive
  - *Enumerated Domain Value Definition Source:* dataset developer

**Attribute:**

*Attribute Label:* SPP

*Attribute Definition:*

Individual species identified in each herbicide and exclosure treatment plot, four-letter codes based on first two letters of genera and first two letters of species nomenclature. For unidentifiable species or plants where family, tribe or genera are unknown, unique identifiers were assigned (HERB, HERB2, DCOT, and UNKN). A value of "total" reflects the total plant cover (< 100%) of each series of unique STAND x HBIV column entries. Total cover estimates were only used in the model for total vegetation cover and were excluded from all multivariate analyses. Analyses were based on SPP column, not SCI column.

*Attribute Definition Source:*

dataset developer

**Attribute Domain Values:**

*Unrepresentable Domain:*

- Unbounded list of text

**Attribute:**

*Attribute Label:* COV

*Attribute Definition:*

Ocular cover of each species, averaged across 12 quadrats for each herbicide and herbivory treatment plot.
Attribute: HLF
Attribute Definition:
Average height of species measured, averaged among the maximum heights taken for each species among the quadrats where species were present. Cell values of "NA" indicate data not reported for that record.

Attribute: SCI
Attribute Definition:
Scientific name (Genus species) of plant species. Values of "none" indicate that vegetation was not identified to genus and species.

Attribute: ORI
Attribute Definition:
Identifies origin of vegetation species.

about:blank
Attribute Domain Values:
Enumerated Domain:
  Enumerated Domain Value: NA
  Enumerated Domain Value Definition:
    Indicates data not reported for this record.
  Enumerated Domain Value Definition Source:
    dataset developer

Attribute:
  Attribute Label: FX1
  Attribute Definition:
    Broad life-form group assignment for each species; variable used for LH and SH analyses only.
  Attribute Definition Source:
    dataset developer

Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: DW
    Enumerated Domain Value Definition:
      Deciduous woody
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: EW
    Enumerated Domain Value Definition:
      Evergreen woody
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: F
    Enumerated Domain Value Definition:
      Fern
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: LH
    Enumerated Domain Value Definition:
      Perennial herbaceous
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: SH
    Enumerated Domain Value Definition:
      Annual and biennial herbaceous
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: U
    Enumerated Domain Value Definition:
      Unknown
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
Enumerated Domain:
  Enumerated Domain Value: UH
  Enumerated Domain Value Definition:
    Unknown herbaceous
  Enumerated Domain Value Definition Source:
    dataset developer
Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: NA
    Enumerated Domain Value Definition:
      Indicates data not reported for this record.
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute:
  Attribute Label: FX2
  Attribute Definition:
    Fine life-form group assignment for each species; variable used for DT, DS, EB, F analyses only.
  Attribute Definition Source:
    dataset developer
Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: DS
    Enumerated Domain Value Definition:
      Deciduous shrub
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: DT
    Enumerated Domain Value Definition:
      Deciduous tree
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: EB
    Enumerated Domain Value Definition:
      Evergreen shrub
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: ET
    Enumerated Domain Value Definition:
      Evergreen tree
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
  Enumerated Domain:
    Enumerated Domain Value: F
    Enumerated Domain Value Definition:
      Fern
    Enumerated Domain Value Definition Source:
      dataset developer

Attribute Domain Values:
**Enumerated_Domain_Value:** LG  
**Enumerated_Domain_Value_Definition:** Perennial grass  
**Enumerated_Domain_Value_Definition_Source:** dataset developer

**Attribute_Domain_Values:**  
**Enumerated_Domain:**  
**Enumerated_Domain_Value:** LH  
**Enumerated_Domain_Value_Definition:** Perennial herbaceous  
**Enumerated_Domain_Value_Definition_Source:** dataset developer

**Attribute_Domain_Values:**  
**Enumerated_Domain:**  
**Enumerated_Domain_Value:** SG  
**Enumerated_Domain_Value_Definition:** Annual and biennial grass  
**Enumerated_Domain_Value_Definition_Source:** dataset developer

**Attribute_Domain_Values:**  
**Enumerated_Domain:**  
**Enumerated_Domain_Value:** SH  
**Enumerated_Domain_Value_Definition:** Annual and biennial herbaceous  
**Enumerated_Domain_Value_Definition_Source:** dataset developer

**Attribute_Domain_Values:**  
**Enumerated_Domain:**  
**Enumerated_Domain_Value:** UG  
**Enumerated_Domain_Value_Definition:** Unknown grass  
**Enumerated_Domain_Value_Definition_Source:** dataset developer

**Attribute_Domain_Values:**  
**Enumerated_Domain:**  
**Enumerated_Domain_Value:** UH  
**Enumerated_Domain_Value_Definition:** Unknown herbaceous  
**Enumerated_Domain_Value_Definition_Source:** dataset developer

**Attribute_Domain_Values:**  
**Enumerated_Domain:**  
**Enumerated_Domain_Value:** NA  
**Enumerated_Domain_Value_Definition:** Indicates data not reported for this record.  
**Enumerated_Domain_Value_Definition_Source:** dataset developer

**Attribute:**  
**Attribute_Label:** FORAGE  
**Attribute_Definition:** Forage quality group assignment for each species; variable used for L, M, H analyses only.  
**Attribute_Definition_Source:** dataset developer

**Attribute_Domain_Values:**  
**Enumerated_Domain:**  
**Enumerated_Domain_Value:** H  
**Enumerated_Domain_Value_Definition:**

---

**about:**blank
High quality

*Enumerated_Domain_Value_Definition_Source:* dataset developer

**Attribute_Domain_Values:**

**Enumerated_Domain:**

*Enumerated_Domain_Value:* L
*Enumerated_Domain_Value_Definition:* Non-forage
*Enumerated_Domain_Value_Definition_Source:* dataset developer

**Attribute_Domain_Values:**

**Enumerated_Domain:**

*Enumerated_Domain_Value:* M
*Enumerated_Domain_Value_Definition:* Moderate quality
*Enumerated_Domain_Value_Definition_Source:* dataset developer

**Attribute_Domain_Values:**

**Enumerated_Domain:**

*Enumerated_Domain_Value:* U
*Enumerated_Domain_Value_Definition:* Unknown
*Enumerated_Domain_Value_Definition_Source:* dataset developer

**Attribute_Domain_Values:**

**Enumerated_Domain:**

*Enumerated_Domain_Value:* NA
*Enumerated_Domain_Value_Definition:* Indicates data not reported for this record.
*Enumerated_Domain_Value_Definition_Source:* dataset developer

---

**Distribution_Information:**

**Distributor:**

**Contact Information:**

**Contact Person Primary:**

*Contact Person:* U.S. Geological Survey
*Contact Organization:* U.S. Geological Survey - ScienceBase

**Contact Address:**

*Address Type:* mailing and physical
*Address:* Denver Federal Center, Building 810, Mail Stop 302
*City:* Denver
*State or Province:* Colorado
*Postal Code:* 80225
*Country:* USA

*Contact Voice Telephone:* 1-888-275-8747
*Contact Electronic Mail Address:* sciencebase@usgs.gov

**Distribution Liability:**

Although these data have been processed successfully on a computer system at the U.S. Geological Survey, no warranty expressed or implied is made regarding the accuracy or utility of the data on any other system or for general or scientific purposes, nor shall the act of distribution constitute any such warranty. This disclaimer applies both to individual use of the data and aggregate use with other data. It is strongly recommended that these data are directly acquired from a U.S. Geological Survey server, and not indirectly through other sources which may have changed the data in some way. It is also strongly
recommended that careful attention be paid to the contents of the metadata file associated with these data. The U.S. Geological Survey shall not be held liable for improper or incorrect use of the data described and/or contained herein.

**Standard Order Process:**

**Digital Form:**

**Digital Transfer Information:**
- **Format Name:** Comma-separated values (.csv) file
- **Format Version Number:** none

**Digital Transfer Option:**
- **Online Option:**
  - **Computer Contact Information:**
    - **Network Address:**
      - Network Resource Name: [https://doi.org/10.5066/F7H1307W](https://doi.org/10.5066/F7H1307W)

**Fees:** None. No fees are applicable for obtaining the data set.

**Metadata Reference Information:**

**Metadata Date:** 20170210

**Metadata Contact:**

**Contact Information:**
- **Contact Person Primary:**
  - **Contact Person:** FRESC Metadata Coordinator
  - **Contact Organization:** USGS Forest and Rangeland Ecosystem Science Center

**Contact Address:**
- **Address Type:** mailing and physical
- **Address:** 777 NW 9th Street, Suite 400
- **City:** Corvallis
- **State or Province:** Oregon
- **Postal Code:** 97330
- **Country:** United States

**Contact Voice Telephone:** (541) 750-1030

**Contact Electronic Mail Address:** fresc_outreach@usgs.gov

**Metadata Standard Name:** FGDC Biological Data Profile of the Content Standard for Digital Geospatial Metadata

**Metadata Standard Version:** FGDC-STD-001.1-1999