Description

This type occurs in draws and depressions within grassland openings on xeric south, southwest or southeast facing slopes above major tributaries in northeastem British Columbia. These shrublands provide critical wildlife forage and habitat, particularly during the winter.

Location

This range type occurs in northeastern British Columbia, and is locally common around the municipalities of Fort St John, and to a lesser extent, Dawson Creek. Sites are typically small in size and are found on south-facing slopes above major tributaries of the Peace, Beatton and Halfway Rivers in association with Peace grasslands.

Representative Reference Area

The Beatton RRA captured this site. In ~ 2008, most of this site failed and slid into the Beatton River.

BEC Correlation

BWBSmw1

Site Characteristics

Soil

Typically found on well-drained soils. The soil texture is often high in clay, although lighter textured soils may be found on steeper slopes. Parent material can be glaciofluvial, morainal or (occasionally) lacustrine.

Elevation range

700 - 1000 ml



Seral Stages PNC Climax

Peace shrublands intersecting open grassland pockets near Fort St John, BC. PNC

Peace shrublands forming in depressions and drainage channels intersecting grassland pockets. PNC



Plant Community PNC & Late-Seral		
Species	Canopy cover (%)	
Saskatoon	15-25	
Prickly Rose	10-20	
Snowberry	2-10	
Smooth Aster	6-18	
Northern Bedstraw	20-35	
American Vetch	5-15	
Slender Wheatgrass	5-15	
Western Porcupine Grass	12-25	
Green Needlegrass	2-8	
Sedge	10-40	

Productivity

Production variable up to 1400 kg/ha, however extent of these communities as small, as they occur in patches across the landscape.

Range Management consideration

Peace shrublands, while small in extent, comprise an important rangeland resource. These areas provide important wildlife habitat with less snowpack and more sun exposure over the winter due to a moderating southern aspect. The shrubs in these communities are critical browse for overwintering ungulates.

Shrublands can be quite productive, but because they are important for wildlife, care should be taken to ensure use is conservative. Heavy use of these pockets can substantially alter composition and structure of the community, leading to an increase in invader and undesirable species and shifting shrub form to a hedged appearance.

Properly Functioning Condition

These communities typically score as properly functioning.

Early-Seral



Peace shrublands following a prescribed fire. This removes plant structure and sets back successional processes. Early-seral

Notice the 'hedged' look of the shrubs. This site has been heavily browsed. Early-seral.





Shrub cover and litter carryover has been reduced by overuse. Early-seral.

Plant Community Early-Seral		
Species	Canopy cover (%)	
Saskatoon	5-15	
Prickly Rose	2-12	
Snowberry	0-6	
Northern Bedstraw	2-8	
Smooth Aster	4-8	
Sedge	5-30	
Slender Wheatgrass	2-10	
Western Porcupine Grass	1-6	
Dandelion	0-15	
Kentucky Bluegrass	0-70	
Yarrow	10-30	
Strawberry	1-15	

Productivity 600-1100 kg/ha

Range Management consideration

Over grazing on these sites alters both species composition and plant community structure. Browsing can lead to "hedging" of shrubs and loss of forage and habitat for wildlife. Herbaceous composition shifts away from desirable forage species, as increases in lower-statured (dandelion, strawberry), unpalatable (yarrow) or invader (Kentucky bluegrass) species occurs.

Fire can alter species composition and structural attributes through combustion and mortality. Fire should be used very infrequently and cautiously.

Properly Functioning Condition

Early-seral condition on this range type will score at high risk or non functioning.

Seral Stage Diagram

Slender wheatgrass, porcupine grass, green needle grass, sedge Ρ Aster, Bedstraw, Vetch, N Saskatatoon, Rose, Snowberry C Yield 900-1100 kg/ha Heavy to Light use severe use Long rest G Decline in slender wheatgrass, sedge, porcupine grass. Increase in Kentucky bluegrass. Decline in desirble forbs, including legumes; increase in Ε low-statured or unpalatable Α species such as yarrow, dandelion, strawberry R Saskatoon, Rose, Snowberry; L shrubs heavily used resulting in Υ decline and alteration in form class ('hedging') T None

Yield 500-700 kg/ha

G: Grasses
F: Forbs
S: Shrubs
T: Trees