Tufted Hairgrass

Description
Tufted hairgrass is found in almost pure stands in the reference condition. These are cold sites on fine textured, often saline, and poorly drained soils. The wetlands are usually fringed by willow/bog birch on the plateau, and at higher elevations by shrubby cinquefoil.

Depending on the level of salinity, minor amounts of field sedge (more saline) or slimstem reedgrass (less saline) may be present. Meadow foxtail may be present as scattered individual plants. Reedgrass increases as sites dry with soil compaction. On the more saline sites, foxtail barley may replace tufted hairgrass in its entirety, by first colonizing the interspaces between hummocks. If a site continues to be overgrazed and trampled, hummocks will be flattened and the site may degrade and dry to a bluegrass-Baltic rush meadow.

This is one of the most affected and threatened wetland types in BC. Inappropriate road location is a key factor in the demise of these wetlands. Roads and ditch-lines without adequate culverts sever the connectivity between the adjacent uplands, shrub-carrs and the receiving wetlands. In the Chilcotin Region, it is common to see these shrunken wetlands surrounded by dry bluegrass meadows, ringed by distant (50-75 m) remnant willow fringes which once delineated the annual high water mark of the wetland. In addition, years of overgrazing, compaction, and in some cases too frequent burning have reduced the number and sizes of these wetlands and caused a conversion to earlier seral plant communities.

Have you ever seen tufted hair grass
It grows in the north where there’s wet-nass
It is pounded and degraded, cows are never satiated
In time, without change, it will pass

Location
Cold meadows in the Anaheim Lake area and higher elevation cold drainages in the southern and northern interior.

Representative Reference Area
Morrison Meadow, Venner Meadow, Christiansen East

BEC Correlation
Gs04 in IDF, MS, SBPS and SBS zones

Site Characteristics
Soils
Typically clay soils with or without gleying. High salt content
Tufted Hairgrass

Elevation range
Above 1100 m.

Seral Stages

PNC Climax & Late Seral

Tufted hairgrass community
PNC

<table>
<thead>
<tr>
<th>Plant Community PNC &amp; Late Seral</th>
<th>Canopy cover (%)</th>
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</thead>
<tbody>
<tr>
<td>Tufted hairgrass</td>
<td>90-100</td>
</tr>
<tr>
<td>Field sedge (where higher salinity)</td>
<td>1-5</td>
</tr>
<tr>
<td>Meadow foxtail</td>
<td>1</td>
</tr>
<tr>
<td>Reedgrasses (where lower salinity)</td>
<td>1-5</td>
</tr>
<tr>
<td>Mosses</td>
<td>1</td>
</tr>
</tbody>
</table>

Productivity
450 – 600 kg/ha

Range Management consideration
Soils are subject to compaction if grazed when wet. Tufted hairgrass is a bunchgrass that decreases with drying, soil compaction and moderate to heavy yearly use. Soil compaction and drier hydrological conditions favours foxtail barley, field sedge, bluegrasses, dandelion, pussytoes and gum weed.

Properly Functioning condition
Tufted Hairgrass

PNC and late seral sites will score as properly functioning.

Early Seral

Degraded (saline) site now dominated by foxtail barley.
Early-serial.

Early Seral site now dominated by bluegrasses (less saline soils)
Tufted Hairgrass

Cold drainage in Christiansen East. Shrubby cinquefoil is indicative of cold but not anaerobic soils. Other species include slimstem reedgrass, bluegrass, slender wheatgrass, stiff needlegrass and Baltic rush. Early Seral.

<table>
<thead>
<tr>
<th>Plant Community Early Seral</th>
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</thead>
<tbody>
<tr>
<td><strong>Species</strong></td>
</tr>
<tr>
<td>Foxtail barley</td>
</tr>
<tr>
<td>Kentucky and/or alkali bluegrass</td>
</tr>
<tr>
<td>Reedgrass spp.</td>
</tr>
<tr>
<td>Silverweed</td>
</tr>
<tr>
<td>Baltic rush</td>
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<tr>
<td>Tufted hairgrass</td>
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</tbody>
</table>

Productivity
90 to 300 kg/ha

Although production can still be high, the low palatability of foxtail barley as compared to tufted hairgrass means that the overall carrying capacity is reduced by about 75%. Further degradation can lead to a dry bluegrass meadow condition.

Range Management consideration
The key to recovery on these sites is rest, incorporation of litter to ameliorate soil compaction and restoration of natural water levels. These sites respond relatively quickly to rest.

Properly Functioning condition
Tufted Hairgrass

Sites will score as moderate risk to non-functional. Low scores are due to soil compaction, poor rooting depth, loss of animal habitat, lack of litter and erosion.