

## FINAL REPORT

### Inventory of *Carex* species in high quality potential habitat on the Gifford Pinchot National Forest



A sedge in the hand . . . *Carex microptera* Gifford Pinchot National Forest

**PROJECT BACKGROUND:** The *Carex* genus is large and complex; many *Carex* species are little known, with often subtle identifying characters. In addition, until recently, resources to guide *Carex* identification have been limited. On the Gifford Pinchot National Forest, there are five *Carex* species that are considered Sensitive (2) or Strategic Species (3). In 2008, the Field Guide to the Sedges of the Pacific Northwest (Wilson et al.) was published, providing an important resource to help field personnel identify the *Carex* species that inhabit the landscape they manage, including Sensitive and Strategic species. We propose to conduct an inventory of *Carex* species on the Gifford Pinchot National Forest, with special emphasis on habitat with potential to host Sensitive and Strategic species.

**PROJECT OBJECTIVE:** The objective of this project was to gain baseline knowledge of *Carex* species growing on the Gifford Pinchot National Forest, with special emphasis on Sensitive and Strategic Species, by conducting an inventory of high quality potential habitat in 2009.

## PROJECT ACCOMPLISHMENTS:

- Linda Swartz, John Scott, and Andrea Ruchty all attended Region 6 Forest Service sponsored *Carex* identification workshops taught by Barbara Wilson and Nick Otting.
- Barbara Wilson visited the Gifford Pinchot National Forest for a 2-day field trip (8/26-27/09) with Linda, John and Andrea, focused on visiting unique/unusual sites, making *Carex* collections, and identifying difficult specimens in the office. Voucher collections of all species were collected, and placed in plant presses.
- *Carex* collections were made from a total of 14 sites across the Gifford Pinchot National Forest
- A total of 31 species of *Carex* were identified and collected from the Gifford Pinchot National Forest.

To be completed November 2009 – January 2010:

- Mount pressed specimens, accession them into Forest collections
- Enter *Carex* species data into NRIS-Rare Plants database

Some sedge habitats:



Takh Takh Meadow (from left: Andrea Ruchty, Barbara Wilson, John Scott)



Muddy Meadow with Mt Adams



South Prairie



*Carex aperta*

**SUMMARY OF SITES VISITED AND CAREX SPECIES IDENTIFIED**

<b>Site name</b>	<b>Habitat type</b>	<b>UTM location</b>	<b>Carex species collected/identified</b>
Takh Takh Meadow	Wet meadow, 4600 ft.	E 0608792 N 5125005	<i>Carex aquatilis</i>
			<i>Carex echinata</i> ssp. <i>echinata</i>
			<i>Carex lenticularis</i> var. <i>lipocarpa</i>
			<i>Carex luzulina</i>
			<i>Carex illota</i>
“Pacific Crest Trail Meadow”, also sometimes referred to as “Potato Hill” located adjacent to Forest Road 2329051	Dry meadow, south facing slope, 4510 ft. elevation	E 0614011 N 5134118	<i>Carex hoodii</i>
			<i>Carex inops</i> (not collected – post fruiting)
			<i>Carex preslii</i>
			<i>Carex microptera</i>
			<i>Carex mertensii</i>
“ <i>Sisyrinchium idahoense</i> spring” located adjacent to Forest Road 2329051	Seep in south facing meadow – ranging from wet to dry, 4469 ft.	E 0614285 N 5134044	<i>Carex neurophora</i>
			<i>Carex microptera</i>
			<i>Carex pachystachya</i>
			<i>Carex luzulina</i>
			<i>Carex laeviculmis</i>
Muddy Meadows	Large meadow at the NW base of Mt. Adams, parts which are wet, and parts which are dry 4375 ft. elevation	E 0612464 N 5129294	<i>Carex utriculata</i>
			<i>Carex vesicaria</i>
			<i>Carex arcta</i>
			<i>Carex microptera</i>
			<i>Carex lenticularis</i>

Site name	Habitat type	UTM location	Carex species collected/identified
			<i>Carex luzulina</i>
			<i>Carex halliana</i>
			<i>Carex inops</i>
Grand Meadows	Cold sink meadow, with interesting species composition (includes <i>Betula glandulifera</i> and <i>Chaemaecyparis nootkatensis</i> ).		<i>Carex utriculata</i>
			<i>Carex echinata</i>
			<i>Carex aquatilis</i>
			<i>Carex pachystachya</i>
			<i>Carex disperma</i>
South Prairie	Seasonally wet meadow		<i>Carex aperta</i>
			<i>Carex vesicaria</i>
			<i>Carex arcta</i>
			<i>Carex atherostachya</i>
			<i>Carex lenticularis</i> v. <i>lipocarpa</i>
			<i>Carex echinata</i>
			<i>Carex microptera</i>
			<i>Carex leporinella?</i> (or another sp. with aborted perigynia)
			<i>Carex microptera</i>
			<i>Carex hoodii</i>
			<i>Carex halliana</i>
			<i>Carex pellita</i>
South Prairie Bog	Sphagnum bog	E 0600891 N 584834	<i>Carex cusickii</i>
			<i>Carex limosa</i>
			<i>Carex echinata</i>
			<i>Carex leptalea</i>
			<i>Carex aquatilis</i> v. <i>aquatilis</i>
			<i>Carex simulata</i> (Note from Barbara Wilson: “The male clone from the wetter zone in the bog, with the <i>Carex limosa</i> , is <i>Carex simulata</i> . I think this is the second west-side population of <i>Carex simulata</i> known. Both are male clones in montane bogs”).

<b>Site name</b>	<b>Habitat type</b>	<b>UTM location</b>	<b>Carex species collected/identified</b>
Indian Heaven Wilderness	Shore of Junction Lake, 4800 ft.	E 0593906 N 5095335	<i>Carex saxatilis</i>
Indian Heaven Wilderness	Shore of Junction Lake, 4800 ft.	E 0593910 N 5095328	<i>Carex lenticularis</i> v. <i>lipocarpa</i>
Indian Heaven Wilderness	At the edge of Lemei Lake Trail	E 0594197 N 5095580	<i>Carex nigricans</i>
Indian Heaven Wilderness	At the edge of Riley Trail	E 0607545 N 5118166	<i>Carex deflexa</i> v. <i>boottii</i>
Upper Skate Meadow, 8400109 Rd.	wet meadows, 3750 ft.	E 0590242 N 5170502	<i>Carex spectabilis</i> (See picture below)
			<i>Carex vesicaria</i>
			<i>Carex echinata</i>
			<i>Carex luzulina</i>
			<i>Carex pachystachya</i>
McClellan Meadow	Wet meadow, dominant cover		<i>Carex pellita</i>
Gotchen Springs, Snipes Mountain Trail	Upland, dry graminoid meadow		<i>Carex hoodii</i>
			<i>Carex</i> sp. collected (not yet identified to species)
<i>Bromus carinatus</i> meadow west of South Prairie	Dry graminoid meadow		<i>Carex</i> sp. collected (not yet identified to species)



Doesn't fit the key - is it smut, or an exceptional range of variation, or late season weirdness, or really not what I think it is? – *Barbara Wilson*