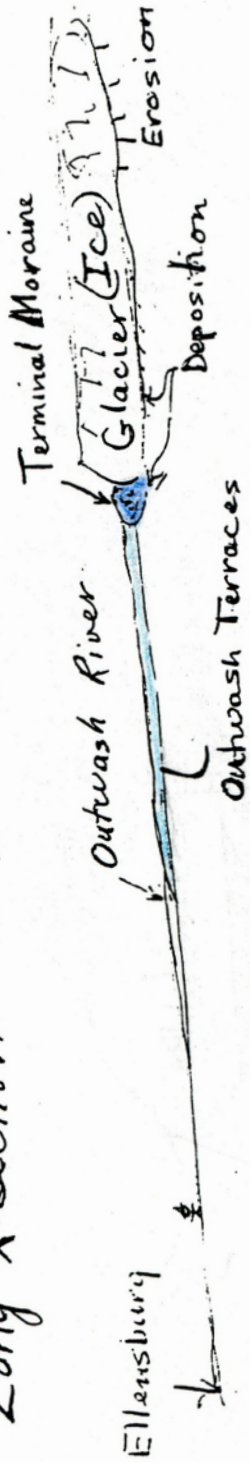
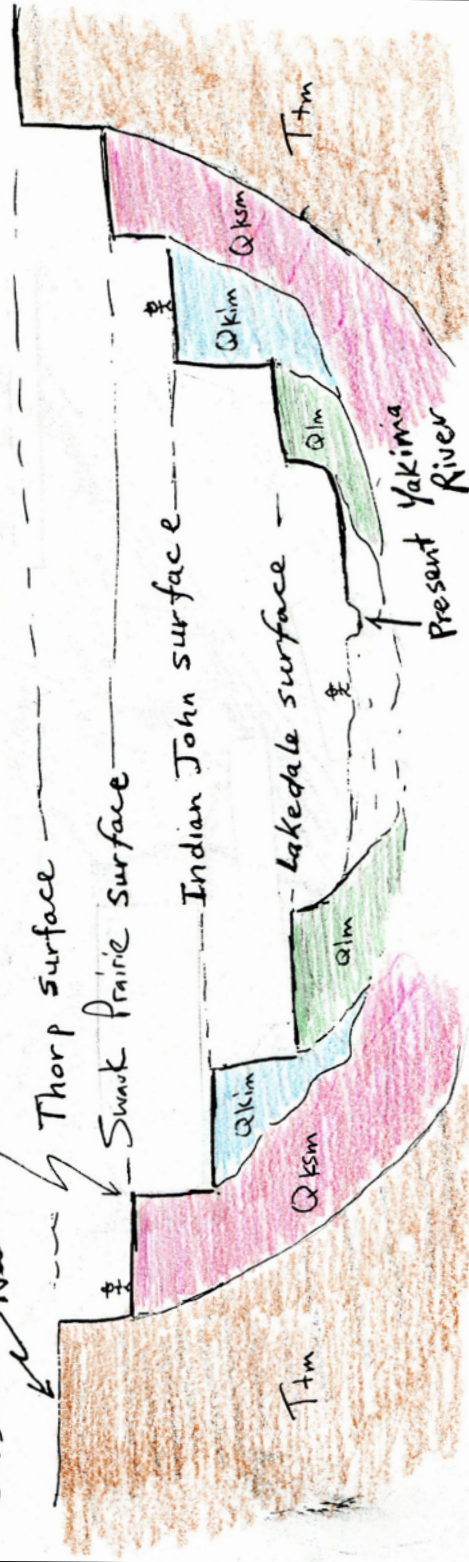


Example: Indian John Glacier

# Long X-Section



# Cross Section Nested Terraces



Bentley 45

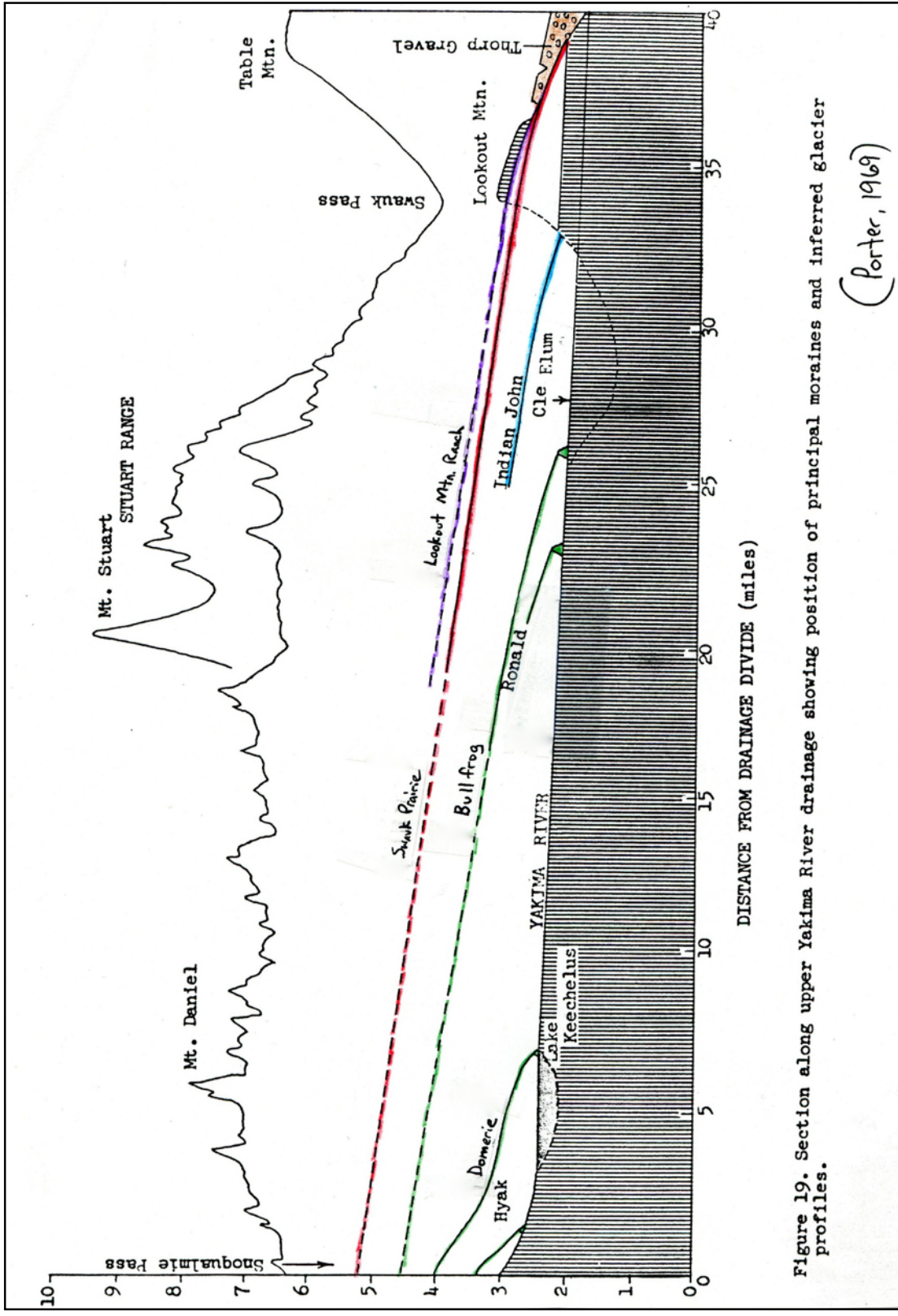


Figure 19. Section along upper Yakima River drainage showing position of principal moraines and inferred glacier profiles.

(Porter, 1969)

YAKIMA RIVER			ICICLE CREEK			
	Porter 1976	Waitt 1979	Porter Swanson 1997		Waitt 1977	Porter Swanson 2008
Hyak	11,000		11,050	Rat Creek I	(11,500 to 18,000)	12,500
Domerie	14,000		16,000	Rat Creek II		13,300
Ronald	65,000		53,900	Leavenworth I		16,100
Bullfrog	130,000		>80,000	Leavenworth II		19,100
Indian John	300,000	(130,000 to 140,000)	600,000	Mountain Home		71,900
Swank Prairie	600,000			pre-Mountain Home		93,100
Cookst Mtn.	1,000,000	750,000		Peshastin	(130,000 to 140,000)	105,400
				Boundary Butte	(700,000 to 850,000)	>165,000

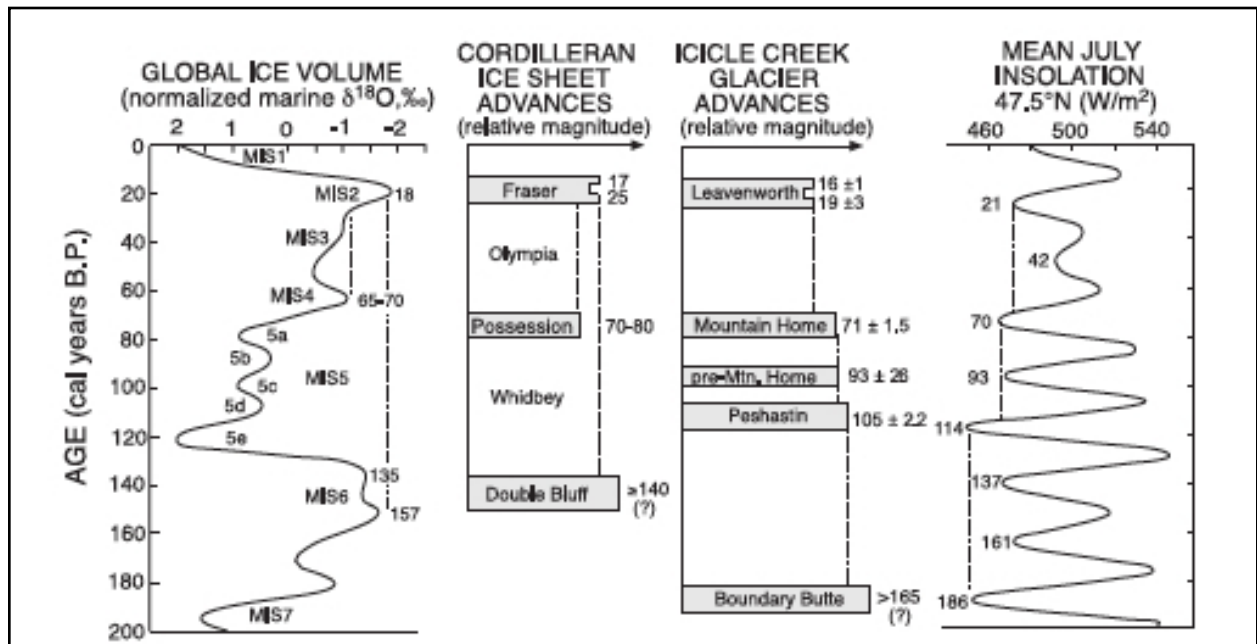


Fig. 15. Chronology and relative extent of Icicle Creek glacier advances compared with those of the Puget Lobe of the Cordilleran Ice Sheet. These records are compared with the curve of global ice volume, based on the standard marine oxygen-isotope record (Martinson and others, 1987), and with a curve of summer (July) insolation for the latitude of the Icicle Creek glacier (47.5° N; data from M. F. Loutre, personal communication, 2001). Whereas the relative magnitude of the ice sheet advances approximately match those of the last three glacial marine-isotope stages (MIS 2, 4, and 6), the relative magnitudes of the Icicle Creek glacier advances match those of prominent insolation minima (21,000, 70,000, 92,000, and 114,000 years ago) of the last 160,000 years.

Swanson & Porter, 2008

**Lower Kittitas County - Ice Age Deposits**  
**Sunday, June 8, 2014**

**12:00 pm**

**leave CWU**

West on Highway 10. Right on Hayward Road.

**12:30 - 1:00**

**1. Hayward Hill**

**N47.12037 W120.71364 elev: 2155'**

West on Highway 10. Right on Taylor Road. Right on Hart Road.

**1:30 - 2:00**

**2. Lookout Mountain**

**N47.15939 W120.79494 elev: 2715'**

West on Highway 10. Left on 970. Left on I-90E. Exit 93.  
Left on Elk Heights Road. Right on Thorp Prairie Road.

**2:30 - 3:00**

**3. Thorp Prairie**

**N47.110113 W120.75132 elev: 2195'**

East on Thorp Prairie Road. Left on Taneum Road. Right on Thorp Hwy.  
Left on I-90 E at Thorp Fruit Barn.

**I-90 milepost 119...look left for Mazama Ash Bed**  
**N46.96475 W120.33647 elev: 1936'**

I-90 Exit 136 on I-90 at Vantage. Left on Vantage Highway.  
Right on Recreation Drive.

**4:00 - 5:30**

**4. Karlson Erratic**

**N46.96180 W120.00366 elev: 1066'**

**30 minute hike from parking spot**

**N46.95403 W119.99783 elev: 698'**

**6:00 pm**

**return to CWU**