

## **QUILLAYUTE -- SOL DUC DOLLY VARDEN**

In the 1998 inventory, this stock was called a bull trout/Dolly Varden stock. Subsequent genetic analysis of a sample collected in 1997 (N = 50) indicated that all of the fish in the sample were Dolly Varden.

### **STOCK DEFINITION AND ORIGIN**

Dolly Varden in the Sol Duc River have been identified as a distinct stock based on their geographic distribution. Dolly Varden have been documented only above Sol Duc Falls (RM 65.5). Anglers fishing the lower Sol Duc and the rest of the Quillayute system report no native char in the anadromous zone. The population above the falls is a resident population.

Spawn timing and locations are unknown.

Sol Duc Dolly Varden are native and are maintained by wild production.

### **STOCK STATUS**

The stock status is Unknown. There is insufficient information to assign stock status with confidence.

There are no historic reports of native char being caught on hook and line gear in the Sol Duc River.

Olympic National Park (ONP) staff sampled three fish collected by a sport angler in the upper Sol Duc River one-half mile above the Sol Duc Falls (RM 65.5) in September 1994. Two were mature females four to six inches in length. All three fish scored as Dolly Varden (-4.07, -4.08 and -4.78) using the Haas (1988) method for distinguishing bull trout from Dolly Varden. ONP staff also electrofished the river above the falls in September, 1994 and August, 1995. In 1994, electrofishing took place one-half mile above the falls. Eighteen fish were collected and were determined to be Dolly Varden (Brenkman 1995) based on Cavender's (1978) criteria. The Haas method was not used.. Thirty-one Dolly Varden were collected from three electrofishing sites one-eighth mile to two miles above the falls in 1995. The data are presented in the Stock Status Profile. Data quality is fair.

### **FACTORS AFFECTING PRODUCTION**

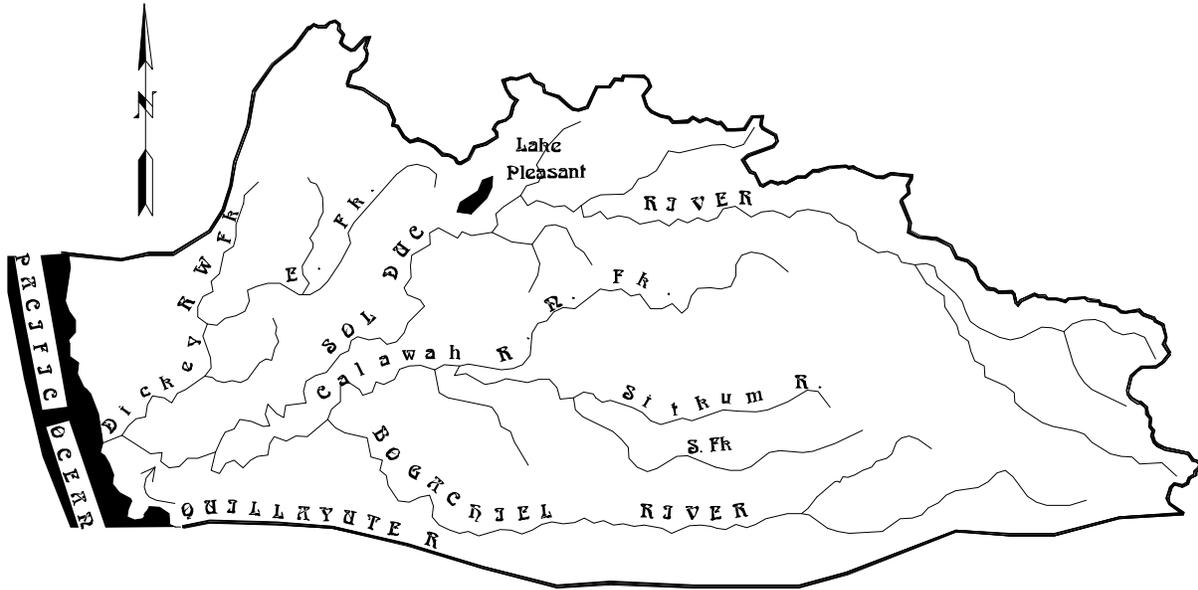
**Habitat**--The upper Sol Duc River above the falls is within the ONP boundaries. It is steep-gradient habitat in excellent condition and well-suited for bull trout/Dolly Varden.

# STOCK DEFINITION PROFILE for Sol Duc Dolly Varden

## SPAWNER DISTRIBUTION

DISTINCT? - Yes

Spawner distribution is distinct for this stock, but specific spawning locations are unknown



## TIMING

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	DISTINCT?
												Unknown

Spawn timing is unknown for this stock.

## BIOLOGICAL CHARACTERISTICS

DISTINCT? - Unknown

# STOCK STATUS PROFILE for Sol Duc Dolly Varden

## STOCK ASSESSMENT

DATA QUALITY -----> Fair

Return Years	FW PROD Total	FW PROD Fish/Hr		
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73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97

18 15  
31 62

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## AVERAGE RUNSIZE DISTRIBUTION

Data not available.

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## STOCK SUMMARY

Stock Origin

***Native***

Production Type

***Wild***

Stock Distinction

***Distribution***

Stock Status

***Unknown***

Screening Criteria

**Harvest Management**--The Sol Duc River has been closed to fishing for bull trout and Dolly Varden since 1994. The ONP has catch-and-release regulations for bull trout and Dolly Varden in all park waters. There may be some mortality from hook and release in fisheries targeting other species.

**Hatchery**--There is no release of hatchery-origin salmonids in the Sol Duc River within Olympic National Park boundaries. Consequently, we know of no interactions between wild Sol Duc Dolly Varden and hatchery salmonids.