

JACK SMITH CREEK	MENDOCINO
From mouth to upper fish value.	5 miles
Seward Creek	T. 16N.; R. 13W.; Sec. 11
No other names known.	Russian River System
Personal observation and interviews with local residents.	

EXTENT OF OBSERVATION : Jack Smith Creek surveyed on foot from the mouth to the upper fish value, about 5 miles, on June 26, 1972 by Robert R. Klamt and Steven C. Durkee.

LOCATION : Jack Smith Creek enters Seward Creek about 2 miles above the confluence of Seward Creek and Forsythe Creek.

RELATION TO OTHER WATERS : Jack Smith Creek contributes summer and winter flow to the Forsythe Creek System and potentially extends SH spawning and nursery grounds approximately 5 miles.

GENERAL DESCRIPTION

Watershed and Immediate Drainage Basin : Jack Smith Creek drains a basin of about 5.5 square miles, about 2/3 of which is second growth redwood and 1/3 is oak grassland. The creek can be divided into 2 sections by vegetation type and stream condition. The lower section, from the mouth to about 2.5 miles upstream, flows through a wide V-shaped canyon, the dominant vegetation being oak grassland. It has a gradient of about 200ft. per mile and a gravel bed with frequent bedrock outcroppings. The upper section of about 2.5 miles, flows through a U-shaped canyon in an area dominated by second growth redwood. It also has a gradient of about 200ft. per mile, however the streambed is flat and largely gravel. The differences appeared to be due to total water flow. The upper section did not appear to have enough winter flow to cut its bed down to the bedrock substrate. The vegetation boundaries overlapped as redwood forest on the stream bed extends into the oak grassland area.

Altitude : At mouth, 880 ft., At head, 1600 ft.

Gradient : Overall, 200ft/mile; upper section, 200ft/mile; lower section, 200ft/mile.

Width : Average, 4ft.; range, 2-6ft.

Depth : Average, 4 inches; range, 2 inches to 2 ft.

Flow : At mouth and at 2 1/4 miles above the mouth, about 1cfs.  
4 miles above the mouth, about 1/2cfs.

Velocity : Moderately rapid.

Bottom : At mouth; baseball size gravel and above - 1/5, marble - 1/5, golf - 1/5, pea, sand and silt - 2/5, frequent bedrock outcroppings;  
At 2 1/4 miles above the mouth; baseball and golf - 1/2, marble - 1/4, pea, sand and silt - 1/4, occasional bedrock outcroppings At 4 miles; above the mouth; golf - 1/4, marble - 1/2, pea, sand and silt - 1/4.

Spawning areas : Fair, 2/3 area on an average.

Pools : Lower section, pool to riffle ratio - 1:1 ; upper section, pool to riffle ratio - 1:4.

Shelter : Undercut banks, boulders and logs.

Barriers : A) 12 compact log jams;

B) 16 areas of loose litter, from 15 ft. to 200 yards long.

<u>Temperatures</u> :	Air T.	Water T.	Altitude	Weather	Time
Mouth	82°F.	72°F.	880	Clear	1505
2 1/4 mi. upstream	78°F.	66°F.	960	Clear	1215
4 mi. upstream	67°F.	60°F.	1440	Clear	1115

Food : Mayfly, stonefly, caddisfly, diptera, and beetle larvae.

Aquatic Plants : Nutgrass, Juncus, Equistum, liverwort, and algae.

Winter Conditions : Lower section, 1-2 feet above summer level.

Upper section, 1 foot above summer level.

Pollution : Lower section, cattle.

Springs : Few noted.

FISHES PRESENT AND SUCCESS : Lower section - Squawfish, Rainbow Trout. Sizes : RT 1-3 in, 4-6 inches. Abundance : R1 - 1-3in.-15/100ft. 4-6in.-20/100ft. Upper section - Rainbow Trout. Size : 4-6 on. Abundance : Few.

OTHER VERTEBRATES : Frogs, Tadpoles, Salamanders.

FISHING INTENSITY : Unknown.

OTHER RECREATIONAL USES : Unknown.

ACCESSIBILITY : Accessible from Masonite Road branching off Reeves Canyon road 3 miles from U.S. 101 turnoff.

OWNERSHIP : Unknown.

POSTED OR OPEN : Posted.

IMPROVEMENTS : None.

GENERAL ESTIMATE : Jack Smith Creek at present is not being used as a SH spawning stream, although it offers roughly 5 miles of potential spawning and nursery grounds for Salmonids, The major cause of this situation appears linked to low winter flows not only on Jack Smith Creek, but also on Seward Creek which is formed by the confluence of Jack Smith Creek and Eldridge Creek.

RECOMMENDED MANAGEMENT : Further investigation of this fish movement problem before consideration of log jam removal.

SKETCH MAP : Attached.

REFERENCES : U.S.G.S. 15 minute series (Willits Quad.) 1961. Scale - 1:62500.