

August 2 & 6, 1974

SAUSAL CREEK AND TRIBUTARIES

Sonoma

Entire	Mouth	Headwaters		9.7 miles
Russian River		10 N	8 W	7
None			Russian	

Personal observations

EXTENT OF OBSERVATION: Sausal Creek, Grapevine Creek and an unnamed tributary to Sausal Creek were surveyed by Seasonal Aides Jerry Bruns and Brad Jackson on August 2 and August 6, 1974.

RELATION TO OTHER WATERS: Sausal Creek and tributaries provide about 4 miles of potential summer nursery habitat for juvenile steelhead. High water temperatures appear to limit the amount of potential nursery area which can actually be utilized. Spawning areas are limited. No summer flow is contributed to the Russian River because the lower section of Sausal Creek goes dry.

WATERSHED: Sausal drainage basin above the Red Winery Road is owned by cattle ranchers, and the land is used for grazing. Below the Red Winery Road the terrain is dominated by grape vineyards. The parts of the basin which are uncultivated are dominated by oak, madrone, and annual grasses. Grapevine Creek, Upper Sausal Creek and the unnamed tributary to Sausal Creek run through a series of shallow canyons, which have rather steep gradients. Sausal Creek, from the mouth of Grapevine Creek to the mouth of George Young Creek, runs through a series of canyons and valleys. The gradient is less steep in this section. From the mouth of George Young Creek to the Pine Flat Road Bridge crossing, Sausal Creek runs through a low gradient canyon. Downstream from the Pine Flat Road Bridge crossing, Sausal Creek crosses Alexander Valley and enters the Russian River.

Altitude: Headwaters of Sausal Creek-2900', headwaters of Unnamed Tributary-2000', headwaters of George Young Creek-1700', mouth of Sausal Creek-160',

Gradient: Headwaters of Sausal Creek to mouth of Sausal Creek-6'/100', headwaters of Sausal Creek to mouth of George Young Creek-14'/100', mouth of George Young Creek to mouth of Sausal Creek-1'/100'.

Depth: Sausal Creek and Grapevine Creek above their confluence: Pools-1' to 6' deep averaging 2.5 feet; riffles 1" to 1' deep averaging 5 inches. Sausal Creek from mouth of Grapevine Creek to Pine Flat Road Bridget pools-1' to 7' deep averaging 3 feet; riffles-1" to 1' deep averaging 6 inches.

Flow: Sausal Creek and Grapevine Creek above their confluence--.5 cfs. Sausal Creek from mouth of Grapevine Creek to Pine Flat Creek Bridge-1 to 1.5 cfs. Downstream from Pine Flat Road Bridge-no flow.

Velocity: Generally the flow was slow (less than 1 ft./sec.). However, the sections above the mouth of Grapevine Creek had numerous rock falls.

Bottom: Sausal Creek and Grapevine Creek above their confluence: pools-pools often formed by boulders, rocks and bedrock. Substrate consisted mainly of sands, silts and detritus. Gravel present only in isolated pockets at tail end of pools and behind rocks.

Riffles: Riffles consisted mainly of rubble, gravel, sand and silt.

Spawning Area: 30% to 35% in the lower sections and 10% to 15% in Grapevine Creek and Sausal Creek above their confluence.

Pools and Riffles: Sausal Creek and Grapevine Creek above their confluence consisted of 50% pool habitat and 50% riffle habitat, Pools averaged about 4' in length and about 3.0' in width. SH occupied both pools and riffles in this area. Sausal Creek from the mouth of Grapevine Creek to the Pine Flat Road Bridge consisted of 40% pool habitat and 60% riffle habitat. Pools averaged about 10' in length and about 5' in width. SH occupied mainly shaded riffles and some pools which had cool springs entering them.

Shelter: Sausal Creek and Grapevine Creek above their confluence were 80% shaded by oak and madrone trees. Sausal Creek, from the mouth of Grapevine Creek to the mouth of George Young Creek was 40°/shaded. Below the mouth of George Young Creek, Sausal Creek was 50% shaded.

Barriers: There is a 10' natural rock fall on Sausal Creek about 650' upstream from the mouth of Grapevine Creek. No fish were sighted above the barrier. There is a 7' natural rock fall on Grapevine Creek about 1300' upstream from its mouth. No fish were sighted above this barrier.

Diversions: None observed.

Temperatures: Sausal Creek and Grapevine Creek above their confluences air temperature 88°, water temperature 74°; Sausal Creek, 1000 feet below the mouth of Grapevine Creek—air temperature 90°, water temperature 82°; Sausal Creek near the mouth of George Young Creek—air temperature 90°, water temperature 84°.

Food: Damselfly, dragonfly, beetle, mayfly and stonefly larvae were few. Caddis and dipterans were common and comprised the bulk of the aquatic organisms.

Aquatic Plants: Filamentous algae was common in the warm unshaded sections of Sausal Creek. Equisetum was common in shaded areas.

Winter Conditions: The upper sections had a winter channel ranging from 8 to 20 feet. The lower sections had a winter channel ranging from 20 to 60 feet.

Pollution: Cattle were the main source of pollution in the Sausal Creek drainage. Manure was evident in the creek in several locations. Several homes are located adjacent to the lower part of the creek and may contribute some pollution.

Springs: Several springs were located near the creek in the upper drainage. Many of the larger springs have been converted into ponds providing water for livestock. The presence of noticeable thermal stratification in some pools and the absence of stratification in others suggests that springs may enter some pools.

FISHES PRESENT AND SUCCESS: Fish were common in Sausal Creek up to the barriers noted on the sketch map. In Grapevine Creek and Sausal Creek, above their confluence, there were approximately 25 SH/100'. Approximately 80% were from 1" to 3" in length. The remaining 20% were 4" to 7" in length. From the confluence of Grapevine Creek and Sausal Creek downstream to the mouth of George Young Creek there were approximately 100 SH/100'. Juvenile western suckers, roach and squawfish were also common in this section of stream. These non-game fish were present mainly in the pools. Steelhead were present mainly in the riffles. Ninety percent of the steelhead were 1" to 3" in length, 10% were 4" to 7" long. Suckers and roach numbered 150-200/100'. Squawfish present in numbers of 25-30/100'. About 90% of the non-game fish were less than 3" in length. From the mouth of George Young Creek downstream to where the creek dries up, 1/4 mile above the Pine Flat Road Bridge, juvenile steelhead numbered about 50/100'. Non-game fish were abundant in this area, numbering 150/100' for roach and suckers. 90% of the steelhead were 1" to 3" in length, 10% were 4" to 7" in length. A few suckers were sighted which were about 18" long. SH were most abundant in riffles that were shaded. Non-game fish were most common in the pools.

OTHER VERTEBRATES: Frogs, Pacific newt.

FISHING INTENSITY: Little or no fishing for juvenile steelhead since most of the summer water is on private property. Fishing pressure in the lower creek for adults is not known.

OWNERSHIP: All of the Sausal Creek drainage is privately owned, excepting county roads. Most of the drainage is owned by Gauer Ranch.

IMPROVEMENTS: No improvements noted.

PAST STOCKINGS Sausal Creek has been the subject of several fish rescue operations. No records of stocking have been found.

GENERAL ESTIMATE: The high summer temperatures are ostensibly the limiting factor on Sausal Creek. SH populations decrease as temperatures increase downstream. Non-game fish certainly provide some competition for food. Cattle definitely pollute the stream. Extremely low flows in dry years would also be detrimental. The creek is definitely a desirable SH nursery area and should continue to be managed as such. Present regulations are satisfactory due to the private ownership of Sausal Creek drainage.

ACCESSIBILITY: On the upper section of Sausal Creek, the most reasonable access is obtained by following the unnamed road which eventually reaches the Geysers and turning right on the dirt road, sketched on the map, one unnamed tributary crosses the dirt road approximately 1/8 mile past the turnoff. Grapevine Creek and Upper Sausal can both be reached by hiking down the jeep trail. Keys or combinations to locks on all gates can be obtained at Gauer Ranch (location is on sketch map). Access to the mouth of George Young Creek on another Gauer Ranch road can be had by following Pine Flat Road east to a point several hundred yards past Bear Canyon. A left turn onto the dirt road (combination to lock on gate is needed) and a 1/4 mile drive will reach the mouth of George Young Creek. Upper George Young Creek drainage is owned by the Calvin Ranch, located on Pine Flat Road. Several points on extreme lower Sausal Creek are crossed by roads.

REFERENCES: U.S.G.S. "Jimtown" Quadrangle.

