

THE RESOURCES AGENCY OF CALIFORNIA  
Department Of Fish And Game

**STREAM SURVEY**

Date: August 19, 1974

NAME: HOOT OWL CREEK COUNTY: Sonoma

STREAM SECTION: Entire FROM: Headwaters TO: Mouth LENGTH: 2 miles

TRIBUTARY TO: Russian River TWP: 9 N R: 8 W SEC: 6 and 7

OTHER NAMES: None RIVER SYSTEM: Russian River

SOURCES OF DATA: Personal observations

- EXTENT OF OBSERVATION
- Include: Name of Surveyor, Date, Etc.
- LOCATION
- RELATION TO OTHER WATERS
- GENERAL DESCRIPTION
- Watershed
- Immediate Drainage Basin
- Altitude (Range)
- Gradient
- Width
- Depth
- Flow (Range)
- Velocity
- Bottom
- Spawning Areas
- Pools
- Shelter
- Barriers
- Diversions
- Temperatures
- Food
- Aquatic Plants
- Winter Conditions
- Pollution
- Springs
- FISHES PRESENT AND SUCCESS
- OTHER VERTEBRATES
- FISHING INTENSITY
- OTHER RECREATIONAL USE
- ACCESSIBILITY
- OWNERSHIP
- POSTED OR OPEN
- IMPROVEMENTS
- PAST STOCKING
- GENERAL ESTIMATE
- RECOMMENDED MANAGEMENT
- SKETCH MAP
- REFERENCES AND MAPS

**EXTENT OF OBSERVATION** - Seasonal Aid Jerry Bruns surveyed Hoot Owl Creek and an unnamed tributary to Hoot Owl Creek on foot on August 19, 1974.

**RELATION TO OTHER WATERS** - Continuous flows in the headwaters throughout the summer provide some nursery area for juvenile steelhead. Little spawning gravel is present in the system. Hoot Owl Creek contributes no summer flow to the Russian River.

**GENERAL DESCRIPTION -**

**Watershed** - The unnamed tributary and Hoot Owl Creek above their confluence flow through incised canyons. The terrain is dominated by oaks, madrones and annual grasses. This upper drainage is used for cattle grazing. Below its confluence with the unnamed tributary, Hoot Owl Creek flows across Alexander Valley to the Russian River. The terrain is dominated by grape vineyards and pear orchards.

**Altitude** - Headwaters of Hoot Owl Creek-1160', headwaters of unnamed tributary- 1520', mouth of Hoot Owl Creek-160', confluence of Hoot Owl Creek and the unnamed tributary-220'.

**Gradient** - Headwaters of Hoot Owl Creek to the mouth of the unnamed tributary -13.5 feet/100 feet, headwaters of the unnamed tributary to its confluence with Hoot Owl Creek-17.2 feet/100 feet, confluence of Hoot Owl Creek and the unnamed tributary downstream to the mouth-1.3 feet/100 feet.

**Width** - Upstream from the confluence of Hoot Owl Creek and the unnamed tributary the width ranged from 6 inches to 4 feet, with an average of 2 feet; below the confluence of the two creeks, Hoot Owl Creek ranged from

1 to 4 feet in width with an average of 2 feet.

**Depth** - Hoot Owl Creek and the unnamed tributary above their confluence: pools-range 1 to 3 feet and average 2 feet, riffles-range 1 inch to 1 foot and average 2 inches. Hoot Owl Creek downstream from the mouth of the unnamed tributary: pools-range 1 to 2 feet, average 1.2 feet; riffles-range 1 inch to 1 foot, average 2 inches.

**Flow** - Hoot Owl Creek, upstream from its confluence with the unnamed tributary, had intermittent flows. The maximum volume was about 0.1 cfs. The unnamed tributary upstream from its confluence with Hoot Owl Creek had a continuous flow of about 0.2 cfs. 300 feet below the confluence of the two creeks, Hoot Owl Creek was dry.

**Velocity** - The water velocity was slow with numerous small drops and falls between slow sections.

**Bottom** - Pools consisted of mainly finer sediments and detritus. Riffles consisted mainly of rubble, rock, bedrock. Pools: boulders 5%, rocks 15%, rubble 10%, gravel 5%, sand 20%, silt 20%, mud 0, bedrock 10%, detritus 15%. Riffles: boulders 5%, rocks 10%, rubble 60%, gravel 5%, sand 5%, silt 5%, mud 0, bedrock 10%, detritus 0.

**Spawning Areas** - Less than 5% of the total area had potentially suitable spawning gravel. Most suitable sites were located upstream from the confluence of the two creeks.

**Pools** - Pools were infrequent and small with the average pool measuring about 2 feet deep, 2 feet wide and 5 feet long. Pools made up about 20% of the area that had water in it.

**Shelter** - Terrestrial vegetation provided good cover (70%) in Hoot Owl Creek and the unnamed tributary above their confluence. About 40% of the remainder of the creek had cover from terrestrial vegetation.

**Barriers** - From Highway 128 upstream to the confluence of Hoot Owl Creek and the unnamed tributary there are 4 cement drop structures 3 to 4 feet high. Above the confluence of the two creeks there are numerous log jams and slides which may be partial barriers (see map).

**Diversions** - A 2-inch diameter hose enters the creek about 300 feet downstream from the confluence of Hoot Owl Creek and the unnamed tributary. The hose goes from the creek to a pump house. Just over the hill there is a little lake which may be where the water pumped from the creek is stored.

**Temperatures** - Hoot Owl Creek above its confluence with the unnamed tributary—air 60°F. and water 58 F at 1000 hours; unnamed tributary above its confluence with Hoot Owl Creek—air 78° F and water 65°F. at 1130 hours.

**Food** - Beetles and damselflies common, diptera and caddis flies present in fewer numbers.

**Aquatic Plants** - Sedges and equisetum common in areas that are exposed to some sunlight. Some filamentous algae present also.

**Winter Conditions** - Hoot Owl Creek and the unnamed tributary above their confluence have winter channels ranging from 4 to 25 feet. Downstream from the confluence of the two creeks the winter channel ranges from 8 to 40 feet.

**Pollution** - Cattle graze throughout the upper drainage and contribute excrement to the stream. The lower drainage runs through agricultural land and probably various organics enter the creek.

**Springs** - Numerous small springs were present (see map for locations).

**FISHES PRESENT AND SUCCESS** - Few fish were present in the Hoot Owl Creek drainage. The creek was populated exclusively by juvenile steelhead. No steelhead were sighted in Hoot Owl Creek above its confluence with the unnamed tributary. Steelhead were sighted from the headwaters of the unnamed tributary downstream to where Hoot Owl Creek went dry (about 300 feet downstream from the confluence of the two creeks). There were approximately 15 fish/100 feet. Five yearling steelhead were sighted (4-7 inches). Most steelhead were 1 to 2 inches in length.

**OTHER VERTEBRATES** - Numerous newts, frogs and garter snakes were sighted.

**FISHING INTENSITY** - None.

**ACCESSIBILITY OF STREAM** - Access gained to creek from Highway 128.

**OWNERSHIP** - Private.

**IMPROVEMENTS** - Channelization through vineyards.

**PAST STOCKING** - None.

**GENERAL ESTIMATE** - This system has limited value as a summer nursery for steelhead; there is just not enough water and pools are small and infrequent. There are numerous potential barriers. Little spawning gravel is present.

**SKETCH MAP** - Attached.

[ **REFERENCES** - USGS Jimtown, Calif. 7.5' Quad. ; NE/4 Healdsburg 15' Quad. ]

# HOOT OWL CREEK

( ) STEELHEAD LIMITS

