

THE RESOURCES AGENCY OF CALIFORNIA
 California Department of Fish and Game
STREAM SURVEY

Date: July 26, 1977

NAME: BLUE JAY CREEK COUNTY: Sonoma

STREAM SECTION: Entire FROM: mouth TO: headwaters LENGTH: 2.3 miles

TRIBUTARY TO: Ward Creek thence Austin Creek TWP: 8 N R: 12 W SEC: 13

OTHER NAMES: None known 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: Blue Jay Creek was walked from the mouth to the headwaters on July 26, 1977 by Valli Boccone and Dennis Fong, Seasonal Aids.

RELATION TO OTHER WATERS: Blue Jay Creek, a tributary to Ward Creek, supplies small amounts of steelhead spawning and nursery habitat. In years of normal rainfall the creek probably supplies water to Ward Creek for most of the year.

GENERAL DESCRIPTION:

Watershed and Immediate Drainage Basin: Blue Jay Creek lies in western Sonoma County in a narrow steep-sided canyon. The stream flows southerly parallel to Blue Jay Ridge, 3 miles west of the town of Cazadero. The creek drains approximately 1.3 square miles and is 2.3 miles in length. Dominant vegetation in the downstream section of the creek includes California laurel redwood, Douglas fir, azaleas, and to a lesser degree Pacific madrone, tan oak, horsetail and poison oak. The upstream areas had large numbers of pines along with most of the other vegetation seen in the downstream section. Canopy averaged approximately 50% for the entire creek.

Altitude: Headwaters-1,120' MSL; mouth-475' MSL.

Gradient: Overall gradient for the creek was generally moderate to gentle, averaging 280 feet/mile (5.3'/100'). The steepest section of streambed, 1/2 mile from the mouth, was a 200-yard stretch of boulders where the gradient was 17'/100'.

Width: Riffle width ranged from 1" to approximately 15', averaging approximately 1'. Pool width ranged from approximately 1' to 25', averaging 4'.

Depth: Riffle depth averaged 3" with a maximum depth of 8". Pool

depth averaged approximately 5" to 8". Maximum depth was 2'.

Flow: At the mouth was visually estimated to be 0.05 cfs. Flow was intermittent throughout the creek. The streambed was dry 1/4 mile from the headwaters. The extreme headwaters and all tributaries were dry.

Velocity: Velocity was slow throughout the creek. Most of the creek was composed of standing water in pools.

Bottom: The average bottom substrate was approximately 5% bedrock, 20% boulders, 25% rubble, 40% gravel, 5% sand, 4% silt, 1% organic debris. Although there was a large quantity of gravel, much of it was overlain with sand, silt and organic debris. Many short sections of streambed throughout the creek were dominated by boulders.

Spawning Areas: Spawning areas in the stream were generally poor; large amounts of rubble and boulders were present in the lower mile. Areas upstream of Big Oat Mountain had greater proportions of gravel than the lower section. However, the presence of silt, sand, and log barriers in the streambed would limit the use of these areas as spawning sites.

Pools: Pools were formed by depressions in the streambed and areas under falls. The average pool size was approximately 8' x 4' x 6". Maximum pool size was a circular 25' diameter pool with a depth of 2'. This pool was formed under a 15' falls at the upper fish limit, east of Big Oat Mountain.

Barriers: Twenty partial and complete log jam barriers were located in the streambed beginning from a point 0.5 mile upstream from the mouth. Sizes and locations of log jams are listed on the sketch map and the attached page. A 15' falls barrier to the west of Big Oat Mountain peak provided a barrier to anadromous fish.

Diversions: None observed.

Temperatures: Air and water temperatures were 81°F and 64°F at 1200 hours, 50 feet upstream of the mouth; 79°F and 64°F at 1345 hours in a pool west of Big Oat Mountain (at the upper fish limit).

Food: Water striders were abundant throughout the wetted areas of the creek.

Aquatic Plants: Green filamentous algae was present throughout the creek, being especially heavy in the upstream areas. Aquatic grasses and sedges were also present along most of the stream.

Winter Conditions: Blue Jay Creek appears to receive fairly heavy runoff from its watershed. Water erosion on some areas of the stream channel were approximately 10' above the streambed near the mouth, and approximately 5' through most of the central and upstream areas.

Pollution: None observed other than debris caused by prior logging damage.

Springs: None observed.

FISHES PRESENT AND SUCCESS: Juvenile steelhead were observed in pools downstream from a 15' falls west of Big Oat Mountain peaks. Sizes ranged from 2" - 3" and 4" - 8". Abundance was less than 5/100'. One salmonid approximately 10" in length was observed at the upper fish limit. All fish appeared to be in good condition. The presence of log barriers, two falls areas, a steep gradient over boulders, and abnormally low rainfall over the past two years has limited the current use of this stream by steelhead.

OTHER VERTEBRATES: Rough-skin newts, lizards, frogs, snails, deer, pigs and gray squirrels were observed.

FISHING INTENSITY: Very little or no fishing occurs on this creek.

OTHER RECREATIONAL USE: Hunting.

ACCESSIBILITY: The headwaters and main stem of the creek is accessible by a gravel road on Blue Jay Ridge, which parallels Blue Jay Creek. The mouth can be reached by walking 0.4 mile downstream on Pole Mountain Creek, at Fort Ross Road, then 500 feet upstream at Ward Creek. Blue Jay Creek flows into Ward Creek at this point.

OWNERSHIP: The entire creek is in private ownership.

POSTED OR OPEN: The entire creek is posted.

IMPROVEMENTS: Clearance of log jams in the downstream mile should be performed to allow easier access of fish to spawning and nursery areas.

PAST STOCKING: There are no records of past stockings by the Department of Fish and Game.

GENERAL ESTIMATE: Blue Jay Creek is currently in poor condition. Low water flow over the last two years, inaccessibility of parts of the creek due to barriers, and few suitable spawning areas have limited its use by steelhead. Water level and flow were low throughout the creek. The upstream areas were inaccessible to anadromous fish due to a series of log jams and a 15' falls. Silt and sand were present over many of the gravel areas. The silt and sand would probably be washed out by higher flow rates, but the watershed would contribute more silt in the winter months.

RECOMMENDED MANAGEMENT: Blue Jay Creek should be managed as a steelhead spawning and nursery area. With removal of log jam barriers in the lower mile of the creek, fish would have better access to pools and gravel areas below the upper fish limit.

SKETCH MAP: Attached.

REFERENCES AND MAPS: USGS, Fort Ross, Calif. Quad., 1943, 7.5 minute series.



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Region 3

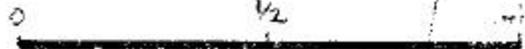
List of Log Jams on Blue Jay Creek, July 1977

<u>Number</u>	<u>Complete/Partial</u>	<u>Width</u>	<u>Length</u>	<u>Height</u>
1	P	20	15	15
2	P	20	5	4
3	P	20	20	5
4	P	20	5	5
5	P	35	15	10
6	P	30	30	20
7	C	25	30	8
8	P	10	30	8
9	P	20	15	6
10	P	4	15	5
11	C	40	20	4
12	P	30	15	10
13	C	30	40	7
14	P	20	5	4
15	P	20	25	6
16	P	5	30	6
17	C	15	20	6
18	P	15	8	6
19	C	10	20	10
20	C	40	60	20

BLUE JAY CREEK

Twp 8N, R 12W, Sec 13

N



LEGEND

- PAVED ROAD =
- UNPAVED ROAD - - - -
- UPPER FISH LIMIT }
- UNNAMED TRIBUTARY N-1
- FALLS ▲
- LOG JAM X
- BUILDING ■
- LOCKED GATE ●
- DIVERSION →
- SECTION NUMBER 4

