

STREAM INVENTORY REPORT

Blair Gulch, including “West Blair Gulch”

WATERSHED OVERVIEW

Blair Gulch is a tributary to Little North Fork Ten Mile River, located in Mendocino County, California. Blair Gulch’s legal description at the confluence with Little North Fork Ten Mile River is T20N R17W S10. Its location is 39°36’27" N. latitude and 123°43’20" W. longitude, according to the USGS Dutchman’s Knoll 7.5 minute quadrangle. Elevations range from about 200 feet at the mouth of the creek to 1,000 feet in the headwater areas. One unnamed tributary to Blair Gulch was surveyed, commonly know as, and herein after referred to as, West Blair Gulch.

HABITAT INVENTORY RESULTS

The habitat inventory of July 26 through July 27, 1995, was conducted by Diana Hines and David Lundby. The results from Blair Gulch and its tributary, West Blair Gulch, are presented as the Blair Gulch watershed unless otherwise stated. The total length of stream in Blair Gulch surveyed was 4,378 feet. The total length surveyed in West Blair Gulch was 858 feet, with a total length of 5,236 feet (1.0 miles) of stream surveyed in the Blair Gulch watershed (Table 1).

Flow measured at the mouth of Blair Gulch on August 4, 1995 was 0.21 cubic feet per second (cfs) while West Blair Gulch had a flow of 0.07 cfs.

Blair Gulch is comprised of one reach for the entire 4,378 feet of creek and is an F4 channel type. West Blair Gulch is also comprised of one reach, and is also an F4 channel type for the entire 858 feet of creek.

Table 1 summarizes the Level II riffle, flatwater, and pool habitat types. By percent occurrence, habitat types in the Blair Gulch watershed consisted of 22% riffles, 38% flatwater and 37 % pools (Graph 1). By percent total length, habitat types in the Blair Gulch watershed consisted of 15% riffles, 59% flatwater and 19% pools (Graph 2).

Ten Level IV habitat types were identified in the Blair Gulch watershed. These data are summarized in Table 2. Of these, mid-channel pools had the highest frequency at 27%, followed by step runs at 24%, and low gradient riffles at 22%. (Graph 3). The most prevalent habitat types by percent total length were step runs at 51%, followed by low gradient riffles at 15% and mid-channel pools at 14%.

Table 3 summarizes main channel, scour and backwater pools, which are Level III pool types. Main channel pools were most often encountered at 75% occurrence and comprised 72% of the total length of pools.

Blair Gulch

Table 4 is a summary of maximum pool depths by pool habitat types. Pools with a depth of two feet or greater are considered optimal for fish habitat. In the Blair Gulch watershed, 24 of the 72 pools (33%) had a depth of two feet or greater (Graph 4).

The depth of cobble embeddedness was estimated at pool tail-outs. Of the pool tail-outs measured, there were none with values of 1 or 2, only 1% had a value of 3 and 99% had a value of 4 (Graph 5).

Of the Level II habitat types, pools had the highest mean shelter rating at 42 (Table 1). Of the Level III pool types, main channel pools had the highest mean shelter rating at 46 (Table 3).

Of the 72 pools, 5% were formed by large woody debris (LWD): 5% by logs and 0% by root wads (calculated from Table 4).

Table 6 summarizes the dominant substrate by Level IV habitat types. Of the low gradient riffles measured, 100% had gravel as the dominant substrate (Graph 6).

Mean percent closed canopy for the Blair Gulch watershed was 100 %: 46% coniferous trees and 54% deciduous trees (Graph 7).

Table 7 summarizes the mean percent substrate/vegetation types found along the banks of the stream. Mean percent right bank vegetated was 54% while the mean percent left bank vegetated was 53%. Grass was the dominant vegetation type observed in 68% of the units fully measured. Additionally, 32% of the units had coniferous trees as the dominant bank vegetation, including downed trees, logs, and root wads. The dominant substrate composing the structure of the stream banks was sand/silt/clay, found in 88% of the units fully measured.

COMMENTS AND LANDMARKS

The following landmarks and possible problem sites were noted. All distances are approximate and taken from the beginning of the survey reach.

Blair Gulch

Position

(ft):

Comments:

257

Water flow under culvert below road. Culvert measures 30' long x 3' high.

399

Channel type measured.

Blair Gulch

1044	Possible coho observed.
2294	Right bank failure contributing gravel and sand to the channel.
3489	Creek splits into equal channels, crew took the north fork
3701	Log jam measures 30' long x 12' wide x 14' high.
3952	Right bank failure measures 40' long x 12' high.
4275	Dry left bank tributary.
4378	End of survey. Culvert (30' long) blocked, road is 18' above stream. Bank failure on other end of road blocking culvert. Fish were not observed for last 200'. Ocular survey above road done, no fish observed. A 30' long culvert enters pool 3' up from stream at road crossing.

West Blair Gulch

Position (ft):	Comments:
292	Old road crossing.
858	End of survey. Stream splits into two equal channels approaching Class III streams. Highly entrenched, highly embedded. No suitable habitat for fish, no fish observed throughout this reach.

Blair Gulch

