

SUMMER SITE FIDELITY OF CUTTHROAT TROUT IN A SMALL ROCKY MOUNTAIN WATERSHED

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Research over the last two decades has demonstrated that many trout are mobile at some point during their lives. Nevertheless, salmonids apparently home to natal areas to reproduce, and earlier work implies that at least some individuals home to sites chosen for summer growth. To evaluate whether fish show fidelity to summer growth sites, crews implanted about 4000 Colorado River cutthroat trout with PIT tags from 1996 to 1999 in the North Fork Little Snake River basin in south-central Wyoming, and relocated them from 1997 to 2001. Crews made nearly 1500 recaptures of 650 marked fish (80-230 mm total length) from one to five times. Overall, 45 percent of fish were last relocated within 50 m of where they had been originally found. The remainder were found from 50 to 7835 m away (median distance, 150 m), and > 60 percent of mobile fish moved upstream. However, fish length and the maximum number of years between locations were unrelated to the total distance moved and the probability that fish moved. Summer site fidelity appeared far lower than fidelity to natal areas, but predicting the distance and prevalence of movement remains challenging.