

Run Timing, Abundance, and Distribution of Adult Coho Salmon in the Kasilof River Watershed, Alaska, 2008

Run timing, abundance, and distribution information was collected on coho salmon *Oncorhynchus kisutch* in the upper Kasilof River watershed during 2008 using fish weirs equipped with underwater video systems and radio telemetry. A combined total of 1,315 coho salmon was counted past the Nikolai ($N=721$) and Shantatalik ($N=594$) creek weirs between 27 August and 2 November. Peak weekly passage occurred between 7 and 13 September for both creeks. Radio-transmitters were implanted in 240 coho salmon captured in the Kasilof River between 18 August and 13 October. Seventy-two percent ($N=144$) of the radio-tagged coho salmon designated as spawners ($N=200$) selected locations in the study area upstream of the Kenai National Wildlife Refuge boundary at Silver Salmon Rapids (rkm 24). Of those fish, 94 spawned in the upper mainstem Kasilof River and 50 selected spawning locations in tributaries of Tustumena Lake. Tustumena Lake tributary streams included Shantatalik ($N=6$), Nikolai ($N=4$), Indian ($N=20$), Fox ($N=1$), West ($N=9$), Glacier ($N=9$) and Clear ($N=1$) creeks. Other radio-tagged fish spawned outside the study area in Crooked Creek ($N=9$), Coal Creek ($N=1$) and the mainstem Kasilof River downstream of the refuge boundary ($N=46$). All remaining radio-tagged fish ($N=40$) were determined to not have spawned and were classified as “Dead/Regurgitated”, “Harvested”, “Back Out”, or “Unknown”.

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