**Ocean migration and behavior of steelhead *Oncorhynchus mykiss* kelts from the Situk River, Alaska**

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Although steelhead (*Oncorhynchus mykiss*)is an iconic species found throughout the North Pacific rim, little is known about its ocean ecology. To provide insights into migratory routes and habitats occupied by steelhead in the North Pacific Ocean, we attached pop-up satellite archival tags (PSATs) to steelhead kelts in 2018 (n = 16), 2019 (n = 12), and 2020 (n = 35) from the Situk River, a robust Alaskan population. PSATs recorded extensive post-spawning migrations extending to the western North Pacific Ocean, and as far north as the central Bering Sea. While at sea, tagged steelhead spent the majority of their time in surface waters (<5 m) and occasionally dived to 15–20 m. Tagged steelhead kelts experienced a thermal environment of 4–16°C from June to January, after exiting the Situk River. Results from this project corroborate the limited past research suggesting that steelhead predominantly occupy surface waters and that their distribution is largely influenced by sea-surface temperatures of ~5–15°C. Additionally, results from this study suggest that the waters near the Aleutian Islands are important feeding grounds for steelhead kelts from the Situk River, and thus may play a critical role in the successful reconditioning of repeat spawners in this population. These results provide the first detailed insights into the ocean ecology of steelhead and may be used for a variety of applications (e.g., niche construction, and forecasting future range dynamics under climate scenarios).