Movement of Resident and Non-Resident Anglers in the Greater Yellowstone Ecosystem: Implications for Transferring Aquatic Nuisance Species

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Humans play an influential role in the transport of aquatic nuisance species throughout the world. Understanding the movement patterns of anglers in Montana will provide information regarding the potential transport of aquatic nuisance species among drainages, states, and globally. We surveyed anglers at access sites on the Beaverhead, Madison, Gallatin, Missouri, Yellowstone, and Bighorn Rivers in Montana from June through August of 2005. Anglers were asked questions regarding their most recent prior fishing trip, fishing trips in the past month, planned fishing trips in the coming week, and their state or country of residency. Of the anglers surveyed, 60 percent were Montana residents while 40 percent where non-residents. Non-residents represented 39 states and two foreign countries. Over half of all nonresidents surveyed had fished in at least one other state than Montana in the past month. The average distance traveled by Montana residents from their home zip code was 59.2 miles (± 67.1, [95% CI], n = 112). The average distance traveled by non-residents was 1526.4 miles (± 5,943.9, [95% CI], n = 162). Our results indicate that anglers in Montana are highly mobile and that increased angler awareness campaigns and access site monitoring could be of value in preventing the spread of aquatic nuisance species.