
****SNAPPING TURTLE POPULATIONS AND MOVEMENTS IN SOUTH-CENTRAL MONTANA (Poster)**

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Snapping turtle (*Chelydra serpentina*) populations were surveyed on a number of tributaries and other water bodies in south eastern Montana along the Yellowstone River in 2016 and 2017. While records exist from incidental observations, systematic surveys for snapping turtles have not previously been conducted in Montana. Little is known about their population density and specific habitat requirements in northern parts of their range. Anthropogenic changes in land use and hydrology may affect nesting sites and hibernacula and thus snapping turtle vital rates, while also impeding metapopulation connectivity or recolonization after localized extinctions. Eighty two snapping turtles (including nine recaptures) were recorded primarily in small creeks, ponds and lakes. Only one snapping turtle was captured on the Yellowstone River though many were found in small tributaries. When analyzed separately capture success rates were significantly different amongst five creeks ($p < .05$) with a higher proportion of males in all populations ($p < .05$). After identifying several creeks with larger numbers of snapping turtles present we fitted turtles over 8 kg with radio transmitters, beginning June 2017. Movements of radio-tagged

individuals were recorded at least monthly to determine average distances moved. Maximum river miles moved per turtle were averaged (females = 0.83 miles and males = 1.21 miles). Low numbers of females could indicate higher female mortality related to risks during nesting such as crossing roads. Snapping turtle abundance was highest in creeks dominated by cattle grazing or agricultural uses. Creeks with lower abundance were dominated by urbanization and higher density of road crossings, potentially leading to increased mortality and lower hatchling success rates.