
MOVEMENTS OF SPAWNING AND NON-SPAWNING SHOVELNOSE STURGEON IN THE MISSOURI RIVER ABOVE FORT PECK RESERVOIR

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During the last 40 yrs there has been a lack of pallid sturgeon (*Scaphirhynchus albus*) recruitment in the upper Missouri River (UMR). However, shovelnose sturgeon (*Scaphirhynchus platorynchus*) continue to exhibit recruitment in the UMR. Understanding the recruitment dichotomy between species is receiving much attention throughout their range. The objectives of this study were to identify the effects of varying discharge on spawning locations and spawning movements for pallid and shovelnose sturgeon. Two female pallid sturgeon, 32 gravid female shovelnose sturgeon, and 32 non-reproductively active female shovelnose sturgeon were radio tagged at three locations and tracked from 1 May to 5 July 2009. Unfortunately, no data are available for spawning pallid sturgeon movements because fish were not reproductively active. Upstream movement by gravid shovelnose sturgeon varied from 20 percent of the fish tagged at Judith Landing to 56 percent of the fish tagged at Coal Banks Recreation Area (CBRA). Mean maximum upstream movement of gravid shovelnose sturgeon varied from 35.7 km at CBRA to 87.9 km at Fred Robinson Bridge (FRB), mean maximum downstream movement varied from 24.9 km at FRB to 80.3 km at CBRA. Reproductively inactive shovelnose sturgeon exhibited lower mean maximum movements than reproductively active fish (mean maximum distance 5.7 km). Shovelnose sturgeon in the UMR exhibit both upstream and downstream movements prior to spawning and are using several spawning areas. Thus, maintaining spawning habitat throughout a regulated river is important with regard to shovelnose sturgeon conservation.