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## **\*\* CHARACTERIZING REARING HABITAT OF AMERICAN WHITE PELICANS USING PIT TAGS FROM CONSUMED FISH (Poster)**

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Avian predation on wild fish populations can create challenges for wildlife and fisheries managers. Frequently, managers locate and recover indigestible tags to estimate predation rates and inform decisions. We used a similar method to characterize rearing habitat for American white pelicans (*Pelicanus erythrorhynchos*). During summer 2017, we sought to discern the types of vegetation and substrate white pelicans use while nesting on breeding colonies in Canyon Ferry Reservoir, Montana. First, we located passive integrated transponder (PIT) tags from marked wild fish that had been deposited on the islands and recorded the vegetation or substrate type (cobble, mud, nettle, willow, water) for each tag. Most tags were found in cobble and willow (34.3% and 36.6%, respectively) and very few were in water (0.8%) and nettle (5.3%). Second, we sought to estimate detection probability of PIT tags, as some may go undetected, and determine what factors influence whether tags are found. We hid 200 PIT tags, 40 in each of the 5 vegetation/substrate types, and found 78, resulting in an overall detection probability of 0.39 (95% CI = 0.36 – 0.42). After accounting for detection probability, we estimate that pelicans deposited the most tags, and thus were most likely to use willow vegetation (59%), with all other vegetation/substrate types containing  $\leq 17\%$  of deposited tags. Increasing the proportion of PIT tags found will influence estimates of predation and could affect inferences regarding habitat use.