

Abstract

This project is meant to not only to analyze the fish community of these reefs, but also to increase public awareness about the reefs as well. This research will provide insight how riverine artificial reefs are potentially beneficial for the state of Florida and whether more should be deployed. Dance et al. 2018 states that reefs are only efficient if they mimic the original natural habitat. With the use of a time-lapse camera, we can determine to what degree the reefs are being utilized, but also examine economic importance of the reefs to the area. This is a unique opportunity due to the riverine location of the reefs which allows us to observe the reef utilization not afforded when the reefs are some distance off-shore.

Site Location and Observations

A time-lapse camera was placed to track progress throughout the day (Fig 1). A five-minute interval was marked to take a snapshot of the river, which captured both reefs in the frame. Additionally active observations were done for three boat ramps throughout the Jacksonville area (Goodbys Creek, Wayne B. Stevens and City of Jacksonville (COJ) Marina) (Fig.2). Observations were done for an hour at each site, where the time throughout the day was chosen at random. This tracked the frequency of boating traffic in and out of each boat ramp and to find out who knew about the ramps in the St. Johns River.,

Camera Observations

An inshore camera was placed southwest of the Fuller Warren Bridge in Jacksonville, Florida in order to capture both the CCA and Holt Reef 's boating activity.



Fig. 3: Camera footage of boating activity on a sunny, cloudy (S,C) day

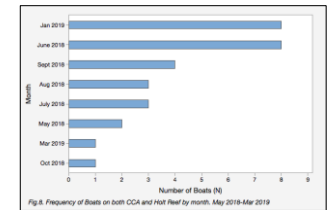
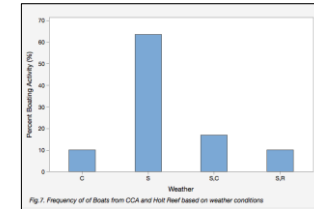
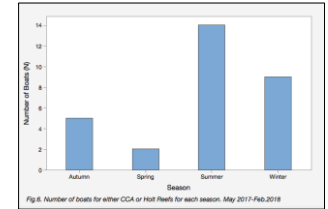


Fig. 4: Camera footage of a rainy (R) day



Fig. 5: Camera footage of a sunny (S) day

Statistics



Conclusion

Active research is being conducted by Lauren Brogley in by fishing the reefs and benthic sample analysis. From the data collected we do not see a significant difference on the number of boats per reef for either month or season.. Outreach solutions such as television or radio advertisement may be an option in helping the Jacksonville community bring back the fishing diversity and richness the St. Johns once offered. The river's location is in the heart of Jacksonville and is a great opportunity to bring recreational fishermen together for not only the enjoyment of fishing, but also the plethora of marine life that surrounds Jacksonville everyday.

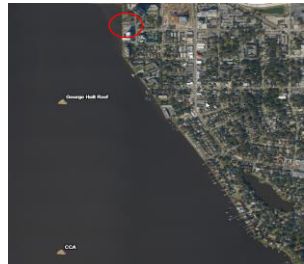


Fig 1: Camera placement for observation. SW of Fuller Warren Bridge. Jacksonville, FL

Fig.2: Boat Ramp observations at (A) Wayne B. Stevens, (B) COJ Marina and (C) Goodbys Creek Marina