

Habitat Utilization and Movements of White Suckers (*Catostomus commersonii*) in Cobleskill Creek, NY

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Introduction

While White Suckers are one of the most widely distributed fresh-water fish, and were once commonly utilized for food by Native Americans and colonists, relatively little is known about their habitat utilization and movements (McManamay & Young 2012).

What little research that has been conducted to date has focused on large rivers and lakes (Doherty et al. 2011).

The goal of this study was to characterize the habitat utilization and movements of white suckers in a small watershed, Cobleskill Creek

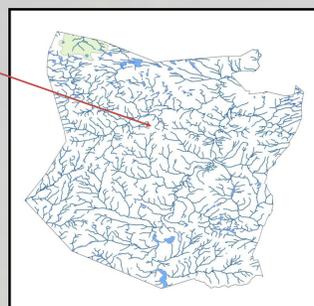


Materials & Methods

Cobleskill Creek is a 3rd order stream located in Schoharie County, NY.



Schoharie Co., NY



Eight white suckers were surgically implanted with ATS radio tags following Ross and Kleiner (1982).



Tagged suckers were 425-473 mm long and 2 to 5 years old.

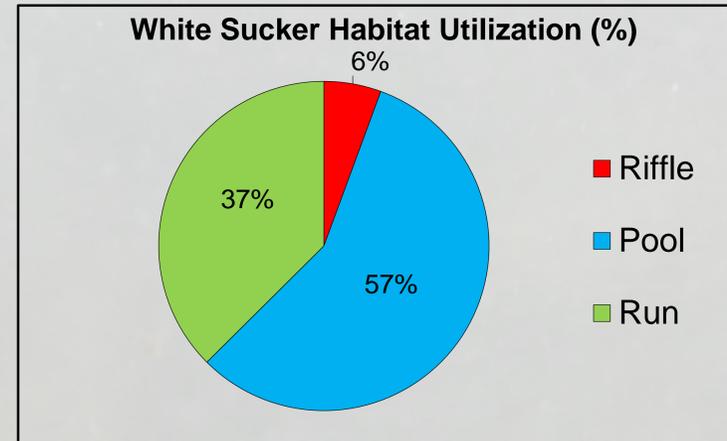
Radio telemetry was used to locate and plot 1,634 fish positions over a 2-year period from 19 November 2014 through 21 November 2016.

GPS points were used to plot habitat use and movements.



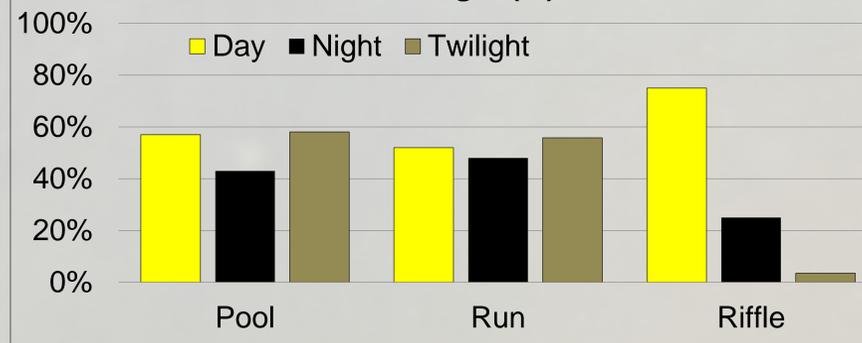
Results & Discussions

In Cobleskill Creek, the stream habitat primarily utilized by adult White Suckers was pools, followed by runs & riffles (χ^2 test, $P < .001$).



White Suckers used riffles in daylight otherwise habitat utilization was consistent throughout the day (χ^2 test, $P < .001$).

White Sucker-Habitat Utilization. Day vs. Night vs. Twilight (%)



White Suckers were most active outside of their home pool during spring spawning movements, when water temperature reached 13°C.

Spawning movements of up to 3 km were observed, but spawning movements did not occur every spring with every fish.



Conclusions

In spite of their wide-spread distribution, historical and ecological importance, this is the first study of White Sucker habitat utilization and movements in streams.

This study demonstrated that the behavior of White Suckers in streams was significantly different than that described in larger river systems (Doherty et al. 2011).



In Cobleskill Creek, White Suckers had a much more limited home range than described in river systems (Doherty et al. 2011).

White Suckers remained stationary in their home pool for most of the time, venturing into shallower riffles and runs primarily during the day perhaps to feed.

In this study, completed spawning movements did not take place every spring for every White Sucker, which indicate that spawning may not take place every year (Doherty et al. 2011).

Acknowledgements

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Literature Cited

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