PROW
Prothonotary Warbler

a zine about researching birds
Long-term studies of the Prothonotary Warbler along the lower James River

A team made up of VCU faculty, staff, students and collaborators are conducting a long-term study of the breeding biology of Prothonotary Warblers along the lower James River. Once known as the Golden Swamp Warbler due to its striking yellow color and preference for flooded forests, the Prothonotary Warbler (Protonotaria citrea) is a Neotropical species found in that breeds throughout the eastern U.S. and southern Canada.

The Prothonotary Warbler is the only warbler that breeds in tree cavities. The availability of suitable habitat is one of the most critical habitat requirement for the survival of the species. Water is another critical habitat need. Prothonotary Warblers prefer lowland forests near water for nesting sites. Their populations are declining over much of their historic breeding range in response to degradation and destruction of lowland forests and associated wetlands. In Virginia they are most commonly found nesting along tidal tributaries to the Chesapeake Bay.

This project, originally established in 1987 and led for many years by VCU faculty members Charles and Leann Blem of the Department of Biology, was undertaken for two reasons: 1) the need for conservation measures to increase the breeding success of the local population and 2) to study reproductive activities and success over an extended period of time.
Branch clipping will be conducted within a 210m transect along the shore of the riverfront and creek portions of each site...

...after a branch is collected, the leaves will be cut off at the pedicle, caterpillars removed + branch circumference measured. Both the insects and leaves will be dried in the oven at 80°C for 12 hours + weighed.
Mayflies will be collected from light traps and tested for microcystin.

Their weight will be entered into a database, along with other insect data and tree data.
Mean growth rates for nestlings will be compared on a clutch level. Mass + tarsus will be measured for all nestlings in each clutch between days 1-3 and 6-8, during which time growth is still linear.

...I expect that nests closer to greater resources will have greater reproductive success + nestling condition / growth rate.
Measurements will also be taken for adults to continue the long-term study of the population.
over the summer, doing field research and making art about it was a dream come true. In my experience, I learned how much energy there is in the process of research, how many memories and moments there are that go unrepresented in final work, which leads to a false impression that science is a thing totally different from art. It's really not. The root of art and of research is exploration, when you draw you take an idea and explore it because you want to learn. It's all about people being excited to do what they do. Go outside. Draw things. I could write a whole 12 pages about this but images really do a better job. Also.

Recycle! Conservation + the earth are so important.


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And to you!