

Watershield, *Brasenia schreberi*, Weed Control in Ponds

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Educational Objectives

- Determine biological make up
- Determine effective biological, mechanical, & physical control measures
- Determine what chemical control measures were effective and not cost prohibitive
- Distribute educational data about Watershield to landowners and producers through:
 - one on one consultations
 - social media
 - field days

Teaching Methods

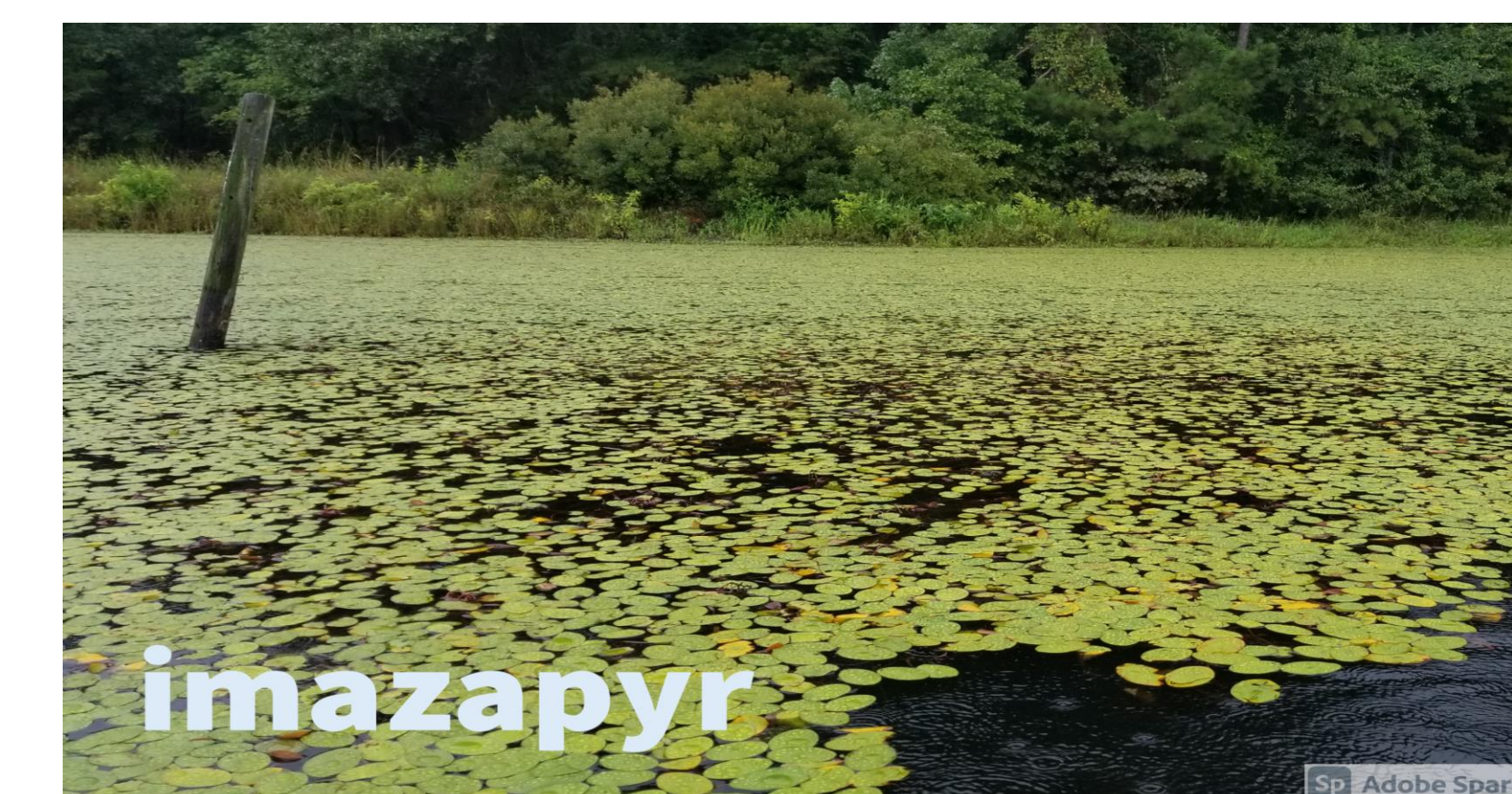
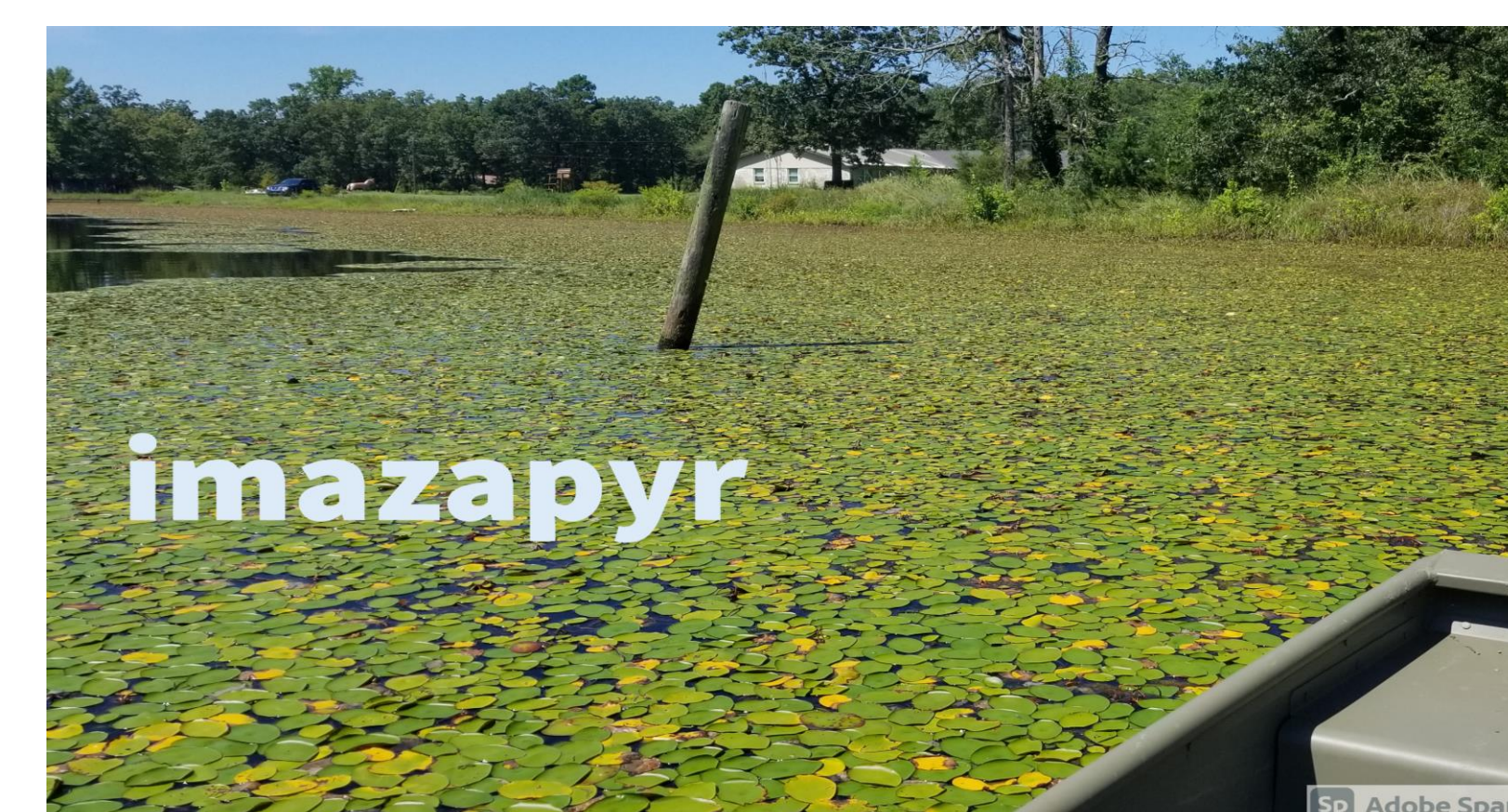
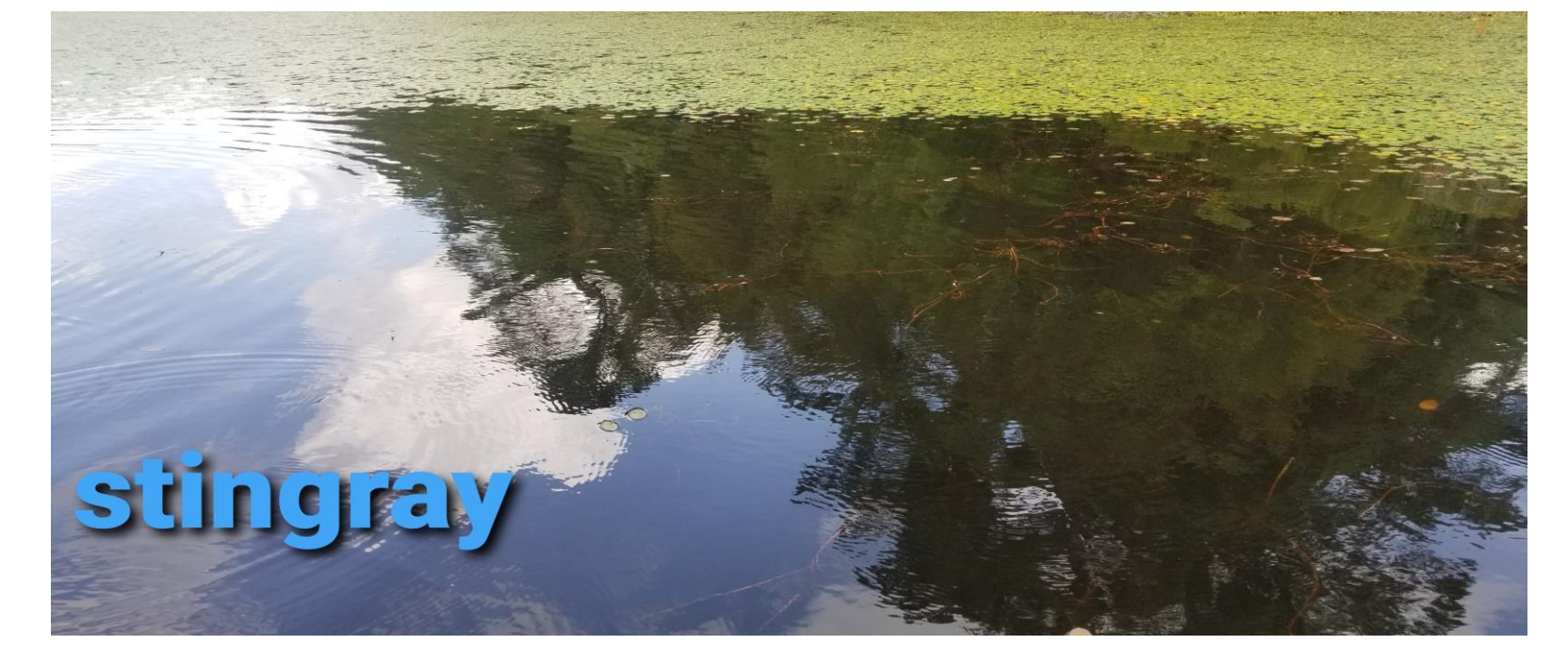
- Covid restrictions have reduced our ability to include this material in a classroom style educational situation or, even to a degree, face to face situations.
- One on one consultations have been applied (Covid restrictions considered).
- Social media platforms were used to expand, increase, and maintain our audience outreach
- Our Facebook feed has continually increased, especially so for the 'Weed Wednesday' segment that we do, in which Watershield was featured.
- Phone calls, emails, Zoom, and Microsoft teams as Covid friendly educational opportunities were also offered

Research Demonstration

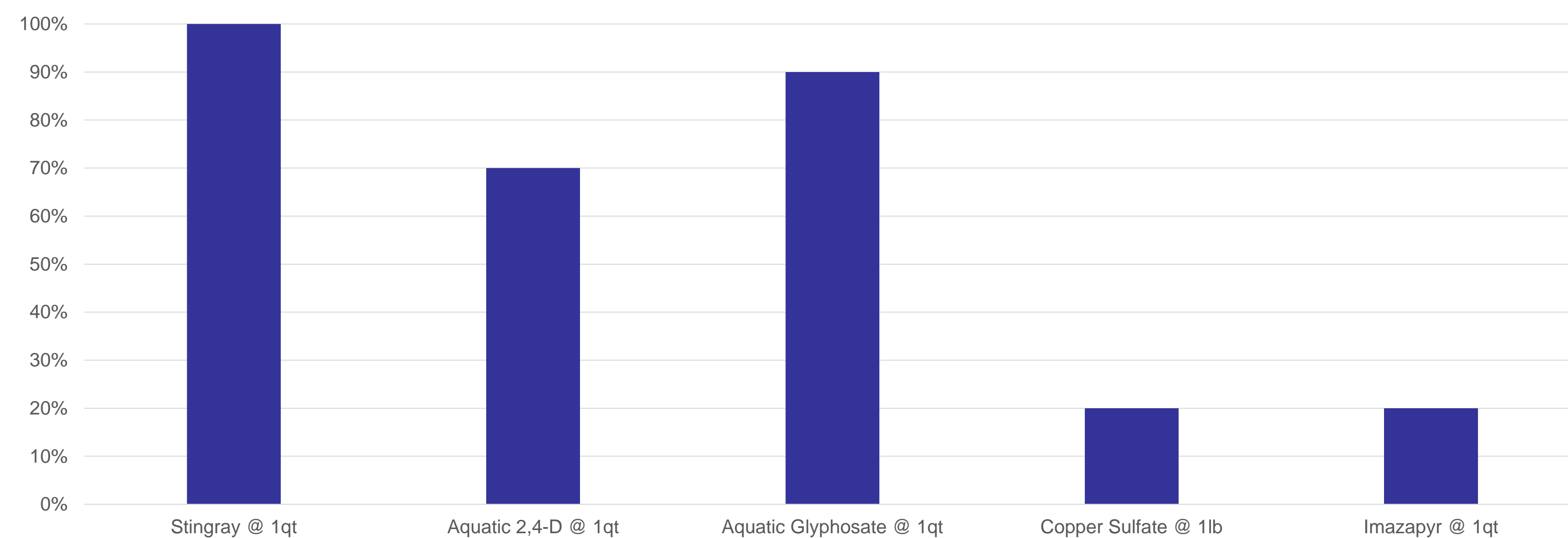
Treatments were applied August 18, 2020 and rated on September 9, 2020
See below pictures representing treatment date on left and rating date on right

Stingray @ 1 qt/acre, Aquatic 2,4-D @ 1 qt/acre, Aquatic Glyphosate @ 1 qt/acre, Copper Sulfate @ 1 lb./acre, and Imazapyr @ 1 qt/acre were evaluated.

Treatment #	Treatment Name	Rate/Ac	Percent Control	\$ Approximate / Ac
1	Stingray	1 qt	100%	\$143.00 / Ac
2	Aquatic 2,\$-D	1 qt	70%	\$3.37 / Ac
3	Aquatic Glyphosate	1 qt	90%	\$5.88 / Ac
4	Copper Sulfate	1 lbs	20%	\$6.00 / Ac
5	Imazapyr	1 qt	20%	\$42.00 / Ac



Watershield Weed Control in Ponds - based on 1 acre rates



Impact

- Research has shown very little to no physical and/or mechanical control options
- Research has shown that chemical control options are available for Watershield.
- Demonstrations were conducted to determine the impact of each herbicide application and develop an overall cost vs. outcome scenario to benefit producers.
- This case study identified 2 chemicals that would be the preferred method of treatment in most instances; Aquatic 2,4D and Aquatic Glyphosate
- After reviewing findings:
 - The landowner was provided with the results via phone and written consultation
 - Results were published social media platforms
 - A statewide report was sent out via email to all other agents and immediate supervisor
- Landowner was able to continue to utilize this resource as part of his personal operation.
- Data collected through this trial has provided valuable information for the producers in the surrounding area