



Growing and Improving: Recommendations for Chesapeake Bay Submerged Aquatic Vegetation (SAV) Watchers

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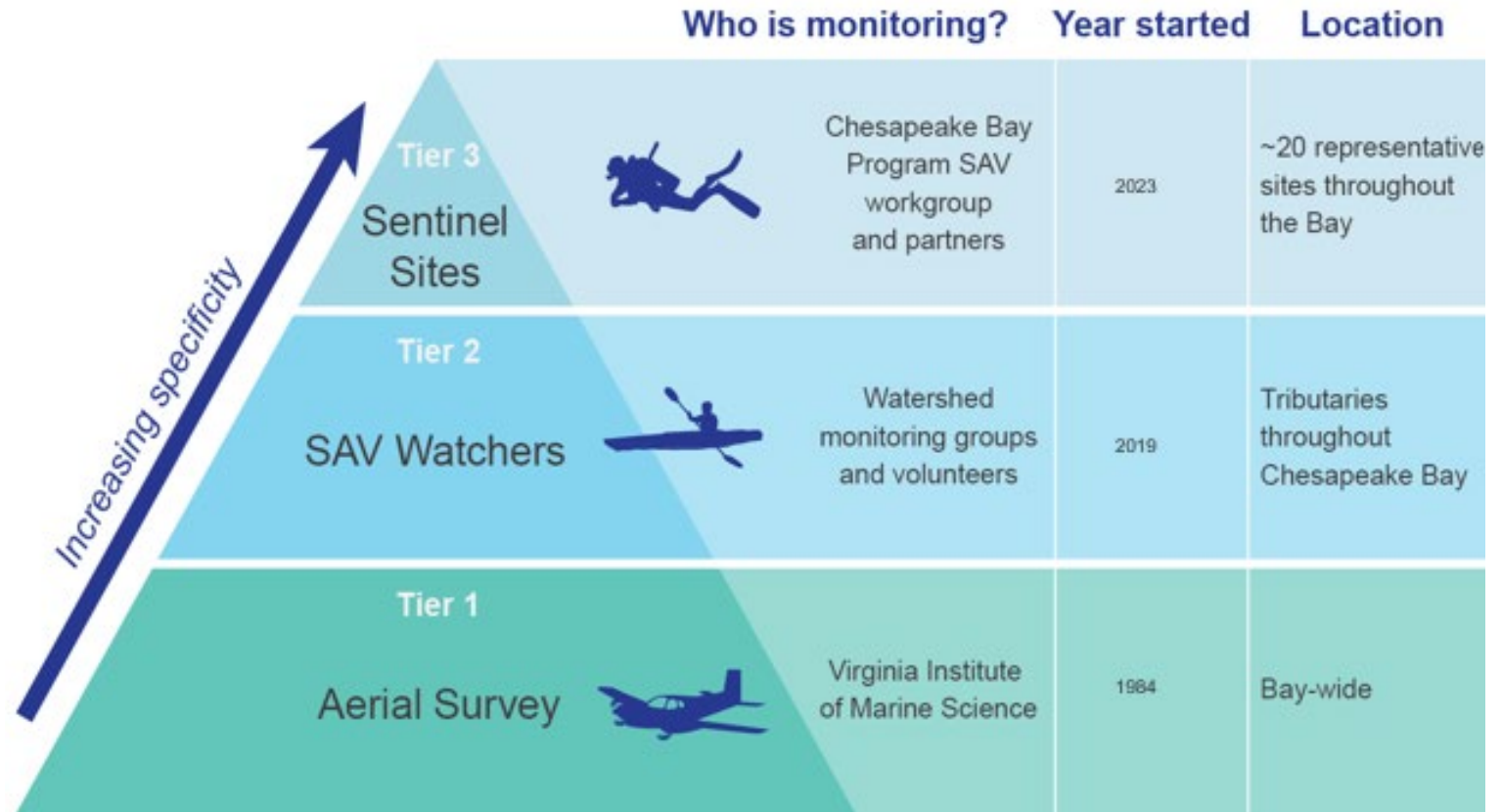




A project was seeded...

SAV Watchers Overview

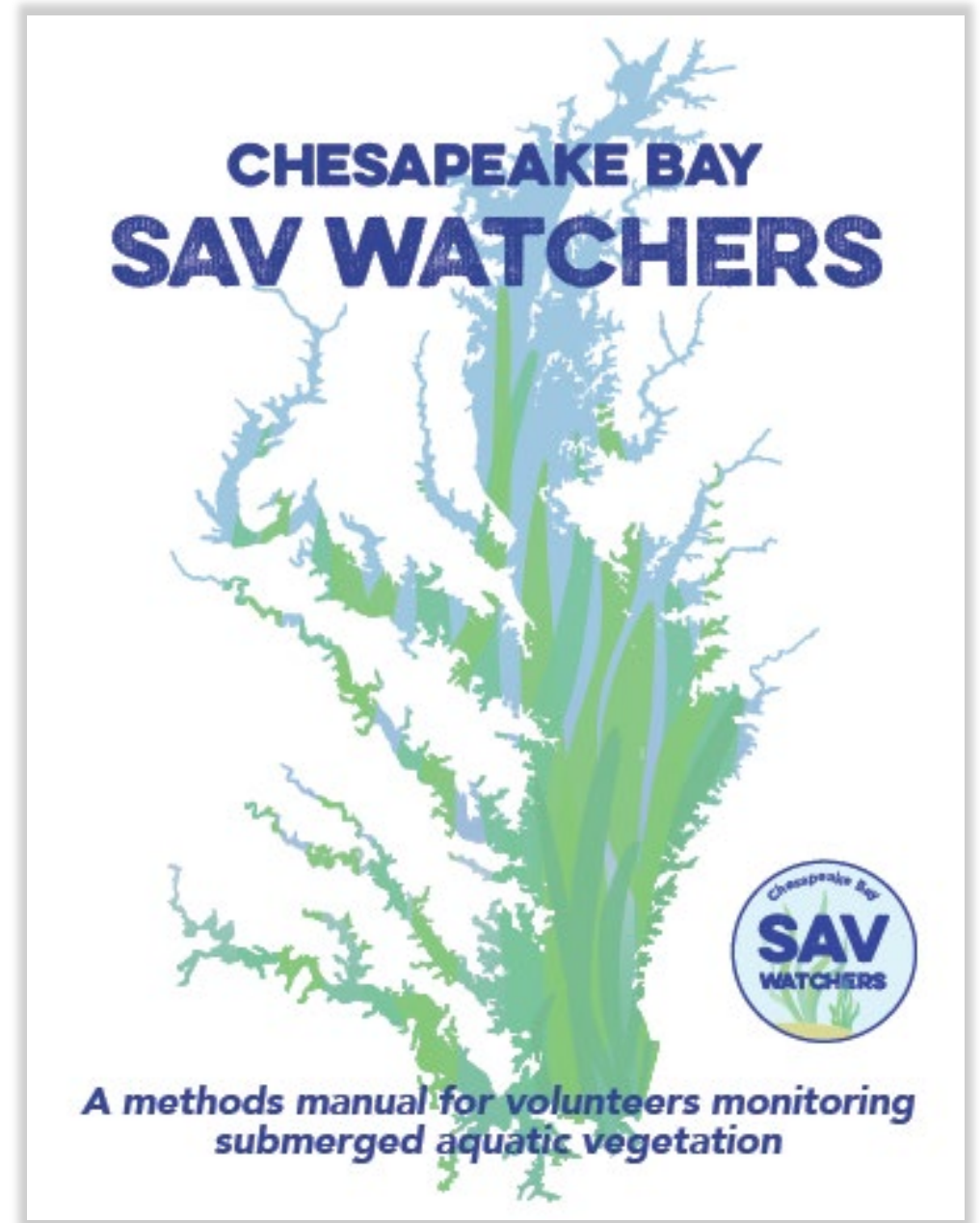
- Chesapeake Bay Program SAV Workgroup
- Provide an engaging and educational experience while also generating useful data
- Pilot began 2017 → full rollout in 2019
- Uses “Train-the-Trainer” approach



Program = SAV Watchers & coordinator
Organization = trainers implementing volunteer groups

Program Evaluation: Main Questions

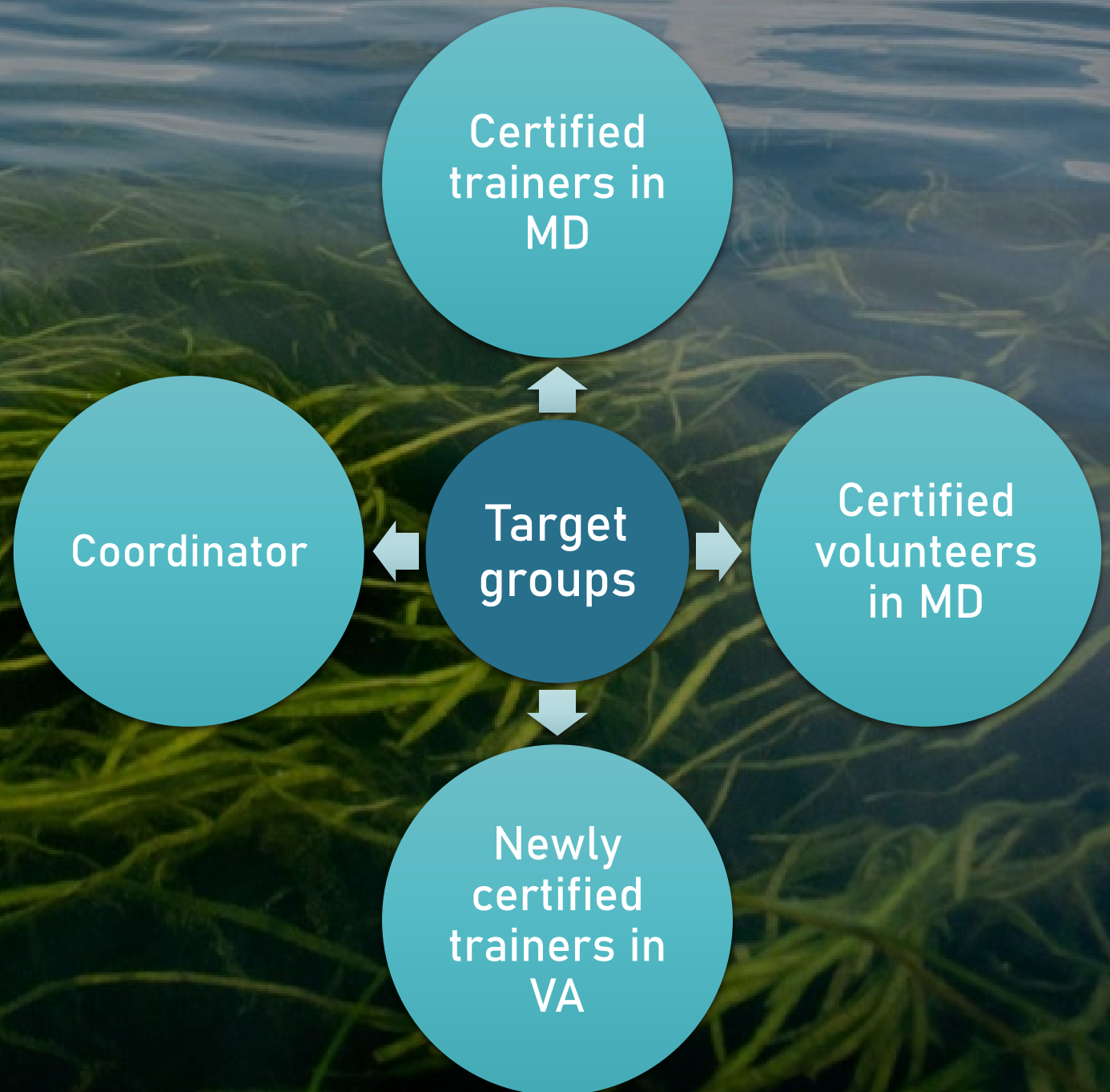
- 1) What is the SAV specific **scientific literacy** of SAV Watcher trainers and volunteers?
- 2) What is the **effectiveness** of the program, including successes and areas for improvement?
- 3) What are the anticipated **challenges of expansion** into VA*?



*First VA training was in August 2024 to introduce program and gauge interest

Mixed methods:

- ✓ Surveys
- ✓ Interview
- ✓ Focus groups



Surveys

- Three content areas:
 - Background
 - SAV literacy (analyzing volunteers' scientific observation skills)
 - Program evaluation
- Validation of survey instruments (4 reviewers)
- Virtual & asynchronous via Qualtrics (Dec – Jan)
- Participation incentive: stickers
- Response totals:
 - 19 MD Trainers
 - 11 MD Volunteers
 - 9 VA Trainers





Photo: CBNERR-VA/Erin Shields

Focus Groups & Interview

- Questions informed by survey results & interview
- Facilitated via Zoom (Feb)
- Recorded digitally and transcribed
- Member checking
- Thematic coding with an inductive approach in MaxQDA
- Participation incentive: sun shirts
- Participation totals:
 - 7 MD Trainers
 - 5 Volunteers (same org)
 - 2 VA Trainers
 - 1 coordinator

Participant Backgrounds

Volunteers

- Most retired, half working in STEM, & most have graduate/professional degrees
- Representation across first trained year, with most started after 2020
- All were active volunteers = last surveyed in 2024

MD & VA Trainers

- Most work full time & in STEM, most have bachelors or graduate/professional degrees
- 53% of MD trainers who responded have established monitoring with volunteers
- Most MD trainers were recently certified, but all years represented

Theme 1: Growth and Development



A word cloud featuring various adjectives and nouns in shades of blue. The words are arranged in a cluster, with 'good' and 'helpful' being the largest. Other prominent words include 'able', 'different', 'great', 'own', 'sure', 'important', 'cool', 'new', 'initial', 'specific', 'easy', 'difficult', 'big', 'nice', 'interested', 'long', 'same', and 'great'.

able helpful
difficult
easy
cool
initial
own
specific
new
different
great
good
sure
important
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big
interested
long
same

Theme 1: Growth and Development

Trainer &
volunteer
motivations

- Want to help Chesapeake Bay conservation and monitoring efforts
- Personal interest

Volunteer
successes

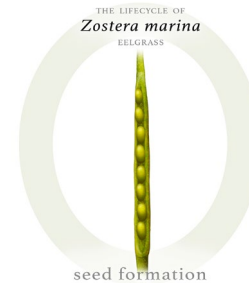
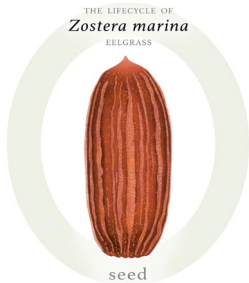
- Enjoyable
- SAV Stewardship ✓
- Volunteer ingenuity

Overall
successes

- Growth
- Materials & resources
- Data & discoveries ✓

Theme 2: Invest Further, Achieve More

1. Program
Infrastructure
2. Data use



Theme 2: Invest Further, Achieve More Program Infrastructure

- #1 challenge = species identification!
- More practice wanted by trainers
 - Post-training support helps
 - Improvement in progress
- Most volunteers somewhat comfortable
 - Increases w/time, practice, & trainer support
- Monitoring quiz!
 - Overall – 90%
 - VA trainers – 94%
 - MD trainers – 90%
 - Volunteers – 82%





Photo: SAV Watchers

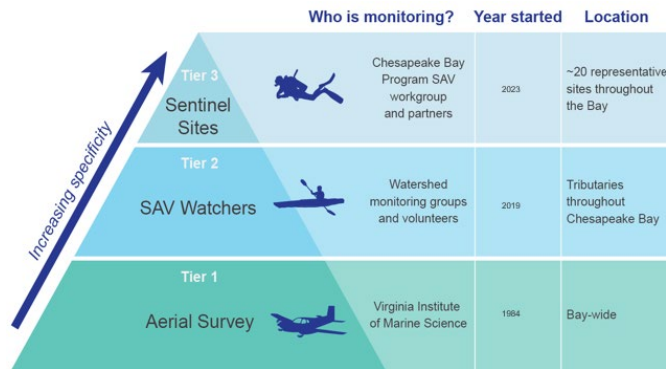
Theme 2: Invest Further, Achieve More Program Infrastructure

- Train-the-Trainer event experiences
- Training with volunteers
 - In-person
- Increased communication pathway between trainers & volunteers
 - Clarifications
 - Technology

Theme 2: Invest Further, Achieve More

Data Use

- Regulatory frustrations
 - SAV protection zones
 - MD State Code



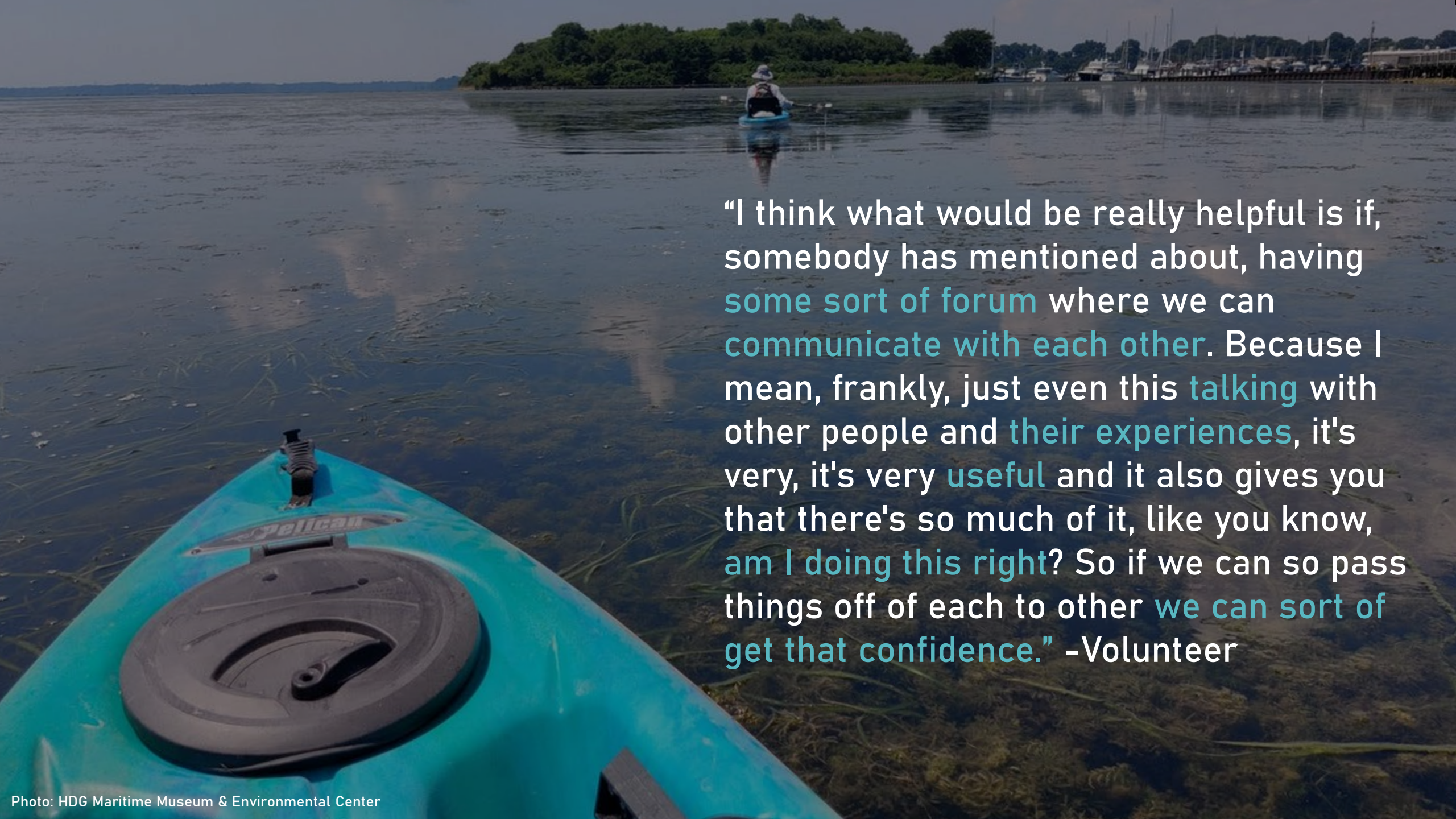
- Lack in communication

Theme 3: Sustained Engagement

- Funding
 - Barrier to implementation!
- Volunteer to volunteer communication
- Trainer to trainer communication



Photo: Marielle Scott/Chesapeake Bay Program



“I think what would be really helpful is if, somebody has mentioned about, having some sort of forum where we can communicate with each other. Because I mean, frankly, just even this talking with other people and their experiences, it's very, it's very useful and it also gives you that there's so much of it, like you know, am I doing this right? So if we can so pass things off of each to other we can sort of get that confidence.” -Volunteer

Suggestions: Overall

1. Ensure in-person training opportunities and refreshers
2. Increase communications about data use
3. Formalize feedback pathways and adjust accordingly





Suggestions: Overall

4. Ensure Train-the-Trainer event is effective and efficient
5. Provide trainers with more resources and additional “how to” training
6. Foster community and collaboration
7. Secure funding for increased coordination efforts

Suggestions: Expansion

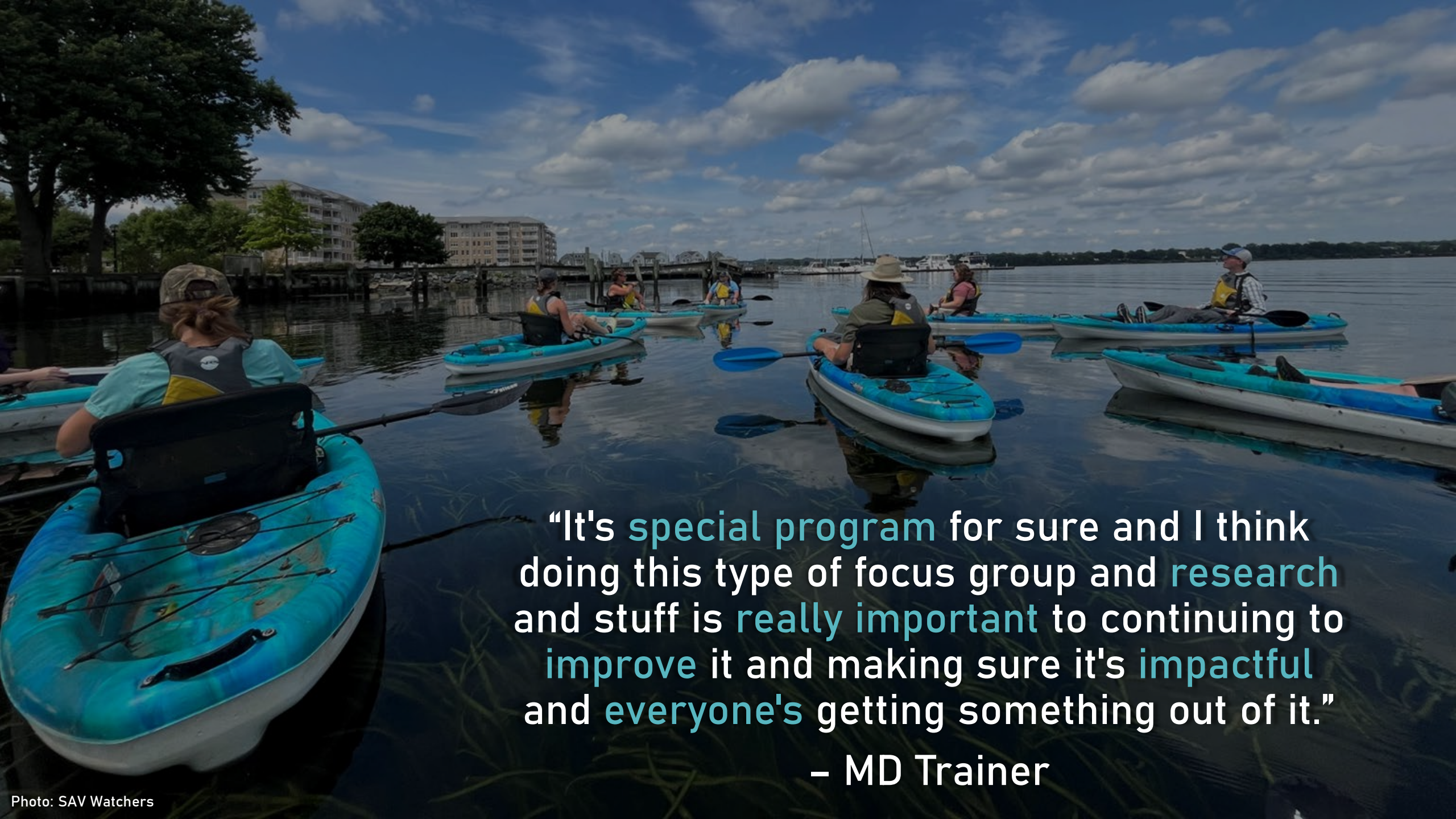
1. Invest in state expansion leader
2. Strategically engage by identifying goal audiences and leaning on partnerships
3. Consider Train-the-Trainer event format and trainer backgrounds
4. Create a regional communication plan
5. Consider data use in Virginia



Conclusion

- Valuable program for stewardship building & filling data gaps in SAV
- Opportunity in VA to expand
- Volunteer monitoring should not be overlooked → underappreciated method
- Mixed methods research produces deeper understanding





“It's special program for sure and I think doing this type of focus group and research and stuff is really important to continuing to improve it and making sure it's impactful and everyone's getting something out of it.”

– MD Trainer

Thank you! Questions?

Special thanks to...

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Photo: Zoe Brumbaugh