

CHESTER RIVER  
ASSOCIATION

CRA



# CURRENTS

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## Letter from the PRESIDENT

Twenty years ago, if someone told me our fledgling river association would one day have a full-time Riverkeeper, I would have had a hard time believing it. Back then, we were still debating how our volunteer, bi-county watershed association should target its efforts. Now, looking back at the conferences, public meetings, and hearings we produced and attended; our river trips, Riverfests, and publications; our Watershed Snapshots and our Chester Testers—I can honestly say we were all over the map. Just like a watershed, in fact. Turns out, it's the nature of the beast.



In 2006, our efforts still reflect the complexity of the river's problems, but we are much more sophisticated about the job ahead of us. In her three years as the first Chester Riverkeeper, Eileen McLellan helped CRA define river advocacy and put river issues on the public agenda, starting with our refusal to allow the U.S. Environmental Protection Agency to write the Lower Chester off as a dead zone.

Now, we have a new Riverkeeper in Tony Prochaska. A stream ecologist, Tony will give us vital information on the state of our creeks and streams, while continuing river advocacy. Brent Walls, Watershed Coordinator, will augment this effort by moving our testing sites from the Chester's main stem to its branches. And our new Executive Director, Bob Parks, will help us do a better job of marshalling resources for the Chester and for CRA.

This is a tremendous change, but the good news doesn't stop there. Two more full-time positions will benefit our river because of the state's intensive efforts on the Corsica. The Town of Centreville has been awarded a grant which will allow it to hire a full-time coordinator for the Corsica restoration, as well as a support person. Think about it. For the next several years there will be five full-time professionals working to improve water quality solely in the Chester River watershed. Surely, this is the moment for our citizens, public officials and business community to join forces to significantly reduce nutrient pollution, the river's most pressing problem. A summer without algae blooms? I can't think of a better way to mark CRA's 20th anniversary.

Sincerely,  
Ed Nielsen  
President, Chester River Association



The Chester River meets the Chesapeake Bay at Eastern Neck Island. From its headwaters in Delaware to its mouth at Love Point, its main stem stretches 60 miles and is fed by 43 named tributaries. The Chester is a natural boundary between Kent and Queen Anne's counties, with a watershed that covers more than 390 square miles. Open to everyone, CRA was founded in 1986 and established its Chester Riverkeeper program in 2002. Through meetings, forums, field trips, publications, habitat restoration projects, the Chester Testers and collaboration with community groups and government agencies, CRA strives to improve water quality and increase public awareness of river and watershed issues. Call us at 410-810-7556. Chester Riverkeeper Tony Prochaska can also be reached at 410-810-7556. Our office address: CRA, 100 N. Cross Street, Suite One, Chestertown, Maryland 21620. Email: [info@chesterriverassociation.org](mailto:info@chesterriverassociation.org). Our web address: [www.chesterriverassociation.org](http://www.chesterriverassociation.org). Anyone who would like to get involved in CRA's river work is encouraged to get in touch.

### *Chester River Association* **MISSION**

well as an understanding of the river's place in the economic and cultural life of our communities. In its efforts to improve water quality, educate the public and facilitate resolution of river-related issues, CRA is a voice for the Chester River.

Chester River Association is an advocate for the health of the Chester River and the living resources it supports. CRA strives to promote stewardship of the Chester River – its forests, marshes, fields, creeks and streams – as



The Chester River Association and its Chester Riverkeeper program are members of Waterkeeper Alliance, Inc., an international network of river, bay, lake, coast and soundkeepers dedicated to restoring our waterways.

Cover photo: Streams like this one could be compromised by unchecked development. See page 4.



As the Chester River Association marks its milestone 20th anniversary, the Chesapeake Bay has something to celebrate as well: the most robust oyster harvest in years.

It seems only fitting, then, that longtime Bay advocate Torrey C. Brown should serve as CRA's keynote speaker at its annual meeting. A board member of the Oyster Recovery Partnership, Brown will report on the latest results of the oyster restoration project taking place in the Chester River.

"Oysters are a critical indicator of the Bay's health. This year is very much better than last," says Brown, 69, whose lengthy public service in the state includes a 13-year stint as Secretary of the Maryland Department of Natural Resources. "It's very hard to say the Bay is cleaned up, but we're doing better. I am hopeful—I am always hopeful."

It's not perfect math, but it is encouraging: Watermen had taken 134,370 bushels of oysters from the Bay through March, compared to 72,218 bushels for all of last season, according to state DNR figures. Oyster scientists say lower rates of salinity, disease and mortality were contributing factors to the best harvest since 2002, when 148,155 bushels were reported.

Brown, who lives in Severna Park, has been at the edge of the Bay restoration movement from the outset. In 1983, as the state DNR chief, he helped develop an accord with neighboring states that led to the historic agreement to clean up the Chesapeake Bay. He was also the point person behind the first package of legislative and budgetary initiatives to address the wide-ranging nature of the Bay's problems. One of those initiatives resulted in the Chesapeake Bay Critical Areas law.

He created the Chesapeake Bay Trust with its original license plate funding to provide important financial support for schools and communities interested in Bay restoration. And he

increased the oyster repletion program, working with the state's watermen to allocate the shell planting necessary for oyster growth in more productive areas for breeding.

One of Brown's most notable achievements? It was on his watch that Maryland banned the harvesting of the state fish, the striped bass most of us know as rockfish. As he puts it: "Banning the rockfish, then seeing it come back after so many years—that is a highlight."

Brown says he has always felt a connection to the landscape around him. He grew up near Lake Michigan and he has loved the outdoors since he was a "tiny kid," an attachment formed in part by his affection for his grandfather, an Iowa farmer. Brown was introduced to the Chesapeake Bay watershed while attending medical school at Johns Hopkins University. "I loved it," he says. "It's part of the reason I never left Maryland."

His early call to environmentalism matured during his service as a Maryland state delegate from 1971 to 1983. During that time, he served as chairman of the Environmental Matters Committee, a post he says caused him to be "very interested in how you can make a difference." Since 1998, Brown has headed Intralytix, Inc., a biotech firm in Baltimore.

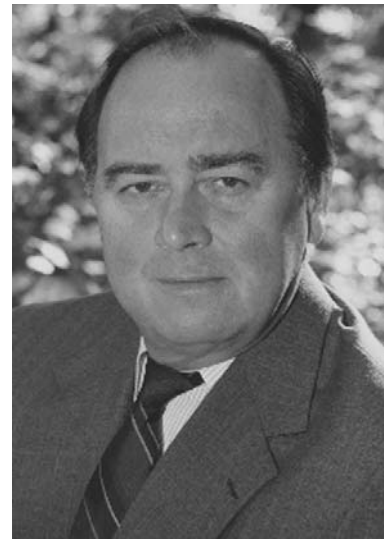
Among Brown's expected talking points at the upcoming annual meeting:

- Cleaning up the Bay—"We absolutely need to clean up the Bay. The way to do that is to clean up each river, and beyond that, each stream. In the tiniest event, each little stream plays a part."
- Paying for the clean-up—While Brown believes "the will is still there," he says not enough funding has been thrown at the problem. However, he adds:

"We're doing a lot of things right compared with what we used to do in terms of how we construct, how we grow, what we discharge into our water, how we farm. We keep at it, it will get better."

- Bringing the oyster back—Oyster restoration is one of Brown's favorite topics. As he notes, "We're trying to do it in the right place and in a way that makes it most likely they will survive."
- Never give up—"I'm never disheartened," he says. "Sure, there's a lot we can do better, and that's hard. But never give up. Never quit."

*Ellen Uzelac*



*Photo courtesy of Intralytix, Inc.*

**Date:** Thursday, June 15  
**Speaker:** Torrey C. Brown  
**Topic:** 'Will an Oyster Grow in the Chester?'  
**Place:** The Prince Theatre  
 210 High St.  
 Chestertown  
**Time:** 7:30 p.m.  
**Free and open to the public**

The signs that the Chester River watershed are in trouble are everywhere—and they are scary. Farmland that now houses McMansions.

Widespread moves to annex. And the buzz that has lifted the conversation about development in the watershed to a whole new level: *Who is going to live in these developments? What's happening to our agricultural heritage? What about traffic? What comes next?* And that's just for starters.

Just listen to how some of the watershed's chief players put it:

- "We're seeing unprecedented interest in our area," notes Gail Owings, Kent County planning director for 21 years. "It's affecting everything from affordable housing to the appearance of our communities."
- "What we're creating today is not town, it's not country, it's not community. It's not too late for the Eastern Shore but the time to act is now. A failure to do so will guarantee that the Eastern Shore will end up looking just like the Western Shore," says George Maurer, director of land use planning for the Eastern Shore Land Conservancy [ESLC.] "The threat is very real and very clear."
- "In general, our watershed restoration efforts, including the Chester, are just hanging on by a fingernail. With population growth estimates for this region, the consequences for our watershed are very sobering. We're swimming as hard as we can right now and barely staying in place," states Rob Etgen, executive director of ESLC. "We've got to do a much better job of managing growth, concentrating development and treating nutrients if our watersheds are going to survive."
- "There is an urgency now. We, many of us, feel we are at a tipping point. There is so much development pressure and such a lack of what I would call appropriate state policy. They are treating the entire state as though it's one monolith. The Delmarva is distinctly different from the central portion of the state," observes Rich Altman, executive director of Queen Anne's Conservation Association. "What people are experiencing now is not what people refer to loosely as growth. It's really migration from the Western Shore, and other places."

# A WATERSHED UNDER

## What Can YOU Do?

Vote for candidates or become a candidate yourself for local office to support change on how growth in the watershed is handled.

Become involved in the planning and zoning process in your community.

Support efforts to provide training and tools for local planning commissioners and town councils.

Testify at public hearings.

Read "Better NOT Bigger: How to Take Control of Urban Growth and Improve Your Community," by Eben Fodor, \$14.95.

At the moment, thousands of housing units, in various stages of planning and development, are in the works in Kent and Queen Anne's counties.

And here are some revealing numbers, collected by Queen Anne's Conservation, that suggest the potential for significant subdivision activity to come: Up until 2003, the county typically received in the range of 300 applications a year from property owners to perk their land. In 2004, there were more than 700. In 2005, there were 900-plus. As of May, not even halfway through 2006, 1,100 applications had been filed.

"It's a warning signal," says Altman, whose non-profit group is also tracking the rate of lot creation in Queen Anne's County, another indicator of looming development.

As for what the big picture looks like, there is this to consider: The population of the Eastern Shore's nine counties is expected to grow by 48 percent between 2000 and 2030, according to the Maryland Department of Planning. Between 2005 and 2030, the projected growth spurt is 37.6 percent.





**Rob Etgen**

*'There's been a tremendous increase in the amount of interest and participation in the planning and zoning process. Any time a controversial subject comes up, it's not unusual to see 50 to 250 people have an opinion on it. It didn't used to be that way.'*



**Rich Altman**

*'There is a tendency for people to say, 'Well, growth is inevitable. Where do you want to put it?' I think the answer is: 'It isn't inevitable. It doesn't have to be this way.'*



**Andrew McCown**

*'I'm not against growth. I'm in favor of good growth planning. I'm not talking 10 years or 20 years. I believe in 100-year growth. We need to be smart.'*

## *What Can We Do About Development?*

# SIEGE

*By Ellen Uzelac*

What does that mean locally? The population of Queen Anne's County is expected to grow by 56.1 percent between 2000 and 2030 and by 37.8 percent between 2005 and 2030. The corresponding numbers for Kent County: 20.9 percent and 18.1 percent, respectively.

What worries the Chester River watershed's stewards is that it's not jobs creation or births over deaths that's driving the population spike. It is, by and large, developers, aided by what Maurer calls the "inertia" of local governments.

"The issue here isn't that the Eastern Shore doesn't deserve development. The issue is that this is developer-driven. It's nice flat land that is easy to develop. And it's driving huge levels of development and that's a concern," adds Dru Schmidt-Perkins, executive director of 1000 Friends of Maryland, a Baltimore-based non-profit committed to development that is socially, economically and environmentally friendly. "The Eastern Shore is going through unprecedented levels of growth and we've been seeing it through the incredible number of annexations that are proposed, the Wal-Mart fights that are emblematic of the level of growth, and, now the whole debate about where another bay bridge should be placed." [Northern Kent County is being considered as a location.]

What's in peril? No less than the region's quality of life, its essence.

As Maurer puts it, the communities that have defined the Shore are being threatened as traditional development gives way to traditional sprawl.

"There is definitely a connection between traditional development, the pattern that has defined the Shore as we've known it, and protecting the environment. Traditional development is superior [to sprawl] because it minimizes impervious surfaces, it's more compact and it's less auto-dependent," notes Maurer. "What we are facing are roads that will become crowded with traffic, then widened to accommodate more traffic. The creeks and wetlands on the Eastern Shore will definitely be impacted and water quality will degrade. Oftentimes, sadly, development doesn't come to the attention of folks until it's too late, when the notice is posted on the farm field across the road that it's about to be subdivided."

**W**hat strategies can the watershed employ to deflect runaway development?

In Queen Anne's, officials have used zoning districts, densities that require open space and clustering to manage development, according to Faith Rossing, the county's planning director. As an example, she says, 88 percent of the county falls under agricultural or countryside zoning districts, and that 85 percent of the land that is so zoned must be held in open space.

"What we are doing is enforcing the regulations currently in place," says Rossing, who noted that several recent amendments to tighten zoning have failed. "At this point, the county commissioners haven't chosen [to make changes,]" she adds. "There has to be the political will to do that."

Owings looks to Kent County's 75-page comprehensive plan, just updated, as a blueprint for smart development. The document calls for slow and deliberately managed growth, not to exceed the county's historical growth rate. Among its missions: stewardship of our land and waters; preservation of historical and archeological resources; a

*Continued on page 14*

# Riverkeeper: SHARPENING THE FOCUS *on streams*



Tony Prochaska

A river is only as healthy as its streams—and in the Chester River watershed, that amounts to 265 non-tidal stream miles.

Unfortunately, according to the Maryland Department of Natural Resources, less than 20 percent of those stream miles are in "good" condition. The rest are ranked "fair," or worse yet, "poor."

As part of a new initiative, the Chester River Association is sharpening its focus on the smaller, non-tidal reaches of the watershed. Over the past couple of months, CRA's volunteer Chester Testers have turned their attention from the mainstem of the river to the feeder streams that could be vital indicators of the river's health. Moreover, Chester Riverkeeper Tony Prochaska, a stream ecologist, is setting up monitoring stations in what he has identified as "areas of concern."

The mission, as underscored in CRA's 2006 river advocacy plan: "Confirm, take action, re-evaluate." Initial stream testing will take place in the upper Chester.

"Feeder streams—our smaller streams—are the lifeblood of the river," says Prochaska. "We're looking for potential hot spots. We're going to target the problem and work with communities to mitigate the problem. If there's no problem, we move on to the next case."



Prochaska, who assumed his position in March, has a rich background in streams. He spent 12 years with Maryland DNR where, most recently, he served as a section leader for the nationally recognized Maryland Biological Stream Survey. In all, he has sampled over 1,200 streams, a good many of them in the watershed, for physical habitat, water chemistry and biological communities.

Stream ecology has its own colorful language: vernal pools, riffles, tolerant species and river continuum theory. Here, in a conversation with CURRENTS, Prochaska spells out why streams matter:

**CURRENTS** Are our streams the biggest indicator of the Chester River's health?

**Prochaska** In the upper portion of the river, there's a lot of impact from non-tidal tributaries that flow into the river. Toward the mouth, the impact is from the Bay. But, sure, the condition of the Chester River, its middle and upper portions, is mostly related to what's going on in the headwaters or smaller tributaries.

**C** Are there particular streams that tell the story?

**P** We have both extremes in this watershed, relatively unimpaired streams and those we know are degraded. I wouldn't call them pristine but there are some relatively undisturbed systems, one on Remington Farms and one unnamed tributary to Emory Creek in the Corsica River watershed. Another great stream is Cypress Branch in the upper Chester. It just meanders along, finding its own way and providing living space for things like stoneflies, mud sunfish and tadpole matdoms. These streams have high forested land use, nutrient levels are pretty low and they have good water quality. The degraded ones, like Mills Branch [north of Millington,] Morgan Creek [east of Lynch] and an unnamed tributary to Urieville have been impacted as a result of agricultural practices from 10, 20 and 30 years ago. It takes time for a stream, even if you mitigate a problem, to recover.

**C** Can you tell if a stream is good or bad just by looking at it?

**P** Yes. A coastal plain stream that's unimpaired has a particular look to it. There are very little exposed or raw areas along the banks in terms of exposed soil. Typically, the water is clear but tea-colored because of tannins. There's a lot of woody debris and rootwads that provide stable habitat for

aquatic organisms. Obviously, there's no trash. And if a stream is not disturbed, it's not straight. Streams are never straight. They meander. They are only straight when they've been altered in some way.

As an example, and you find this here, a stream will be channelized to make more land available for crop production. The result is it takes the meander out of the stream and lowers the water level in the adjacent land. Stable habitat in the form of rootwads and woody debris goes away, and that often means the bug and fish communities are compromised because they have little to live in and on. In some cases, it's what's not there that tells the story. In some of these streams, you step in and sink to your waist in silt and sediment. They're not dead but the things that live there are pretty tolerant critters. It's nasty. In addition, because channelized streams efficiently move water away from agricultural fields, they increase the rate at which nutrients and sediment are transported to downstream areas.

**C** Are there species in the watershed that are being compromised?

**P** Absolutely. On the state's endangered list: the Eastern tiger salamander, barking treefrog, Eastern narrow-mouthed toad, dwarf wedge mussel and triangle floater. We also have several that are listed as "in need of conservation" and those are the carpenter frog, mud sunfish, swamp darter and a mussel called the squawfoot.

None of these species is found only in the Chester. However, many of them have a limited geographic range and do not extend out far beyond the watershed boundary.

**C** What are the implications here?

**P** There is cause for worry. For example, there are three mussel species—the squawfoot, triangle floater and dwarf wedge mussel—that are bound for extinction in the tributaries of the Southeast Creek watershed if development pressure continues at the current pace.

Because these species require relatively clean substrate, any activity that increases sedimentation is likely to present a significant threat. In the end, you end up with a reduction in biodiversity. All species have a place in an ecosystem and when one species goes extinct, a void is created that may or may not be filled by other species.

**C** What can people do to protect our streams?

**P** If you're a member of the farming community, it's a good idea to contact the Natural Resource Conservation Service and find out what programs are available to you to protect the streams and river adjacent to your agricultural fields. If you're an individual landowner, don't overfertilize your lawn, create natural buffers between your streams and your lawn, and pump out your septic tank regularly. If you already do these things, encourage others to do the same to protect our local waterways. It needs to be a community effort.

**C** Thank you.

*Do you have a concern about a stream in the watershed? If so, contact Tony Prochaska at [riverkeeper@chesterriverassociation.org](mailto:riverkeeper@chesterriverassociation.org) or call 410-810-7556.*



*Help Us Celebrate!*

# CRA *turns*

## A DAY ON

After 20 years working on river issues, my most vivid memories of CRA's early years are the times we spent together on the water. There was the day Cawood Hadaway shared his extraordinary collection of fossils and arrowheads aboard the Annie D, as Captain Andy McCown piloted the buyboat downriver. Near Frying Pan Point, we anchored off Fossil Rock to clamber below the high banks and look for delicate impressions of ancient shells. I slipped on a stone and dropped my camera in the river, realizing I'd just have to rely on memory to recapture that lovely morning. Easy.

Over the years, John Foster, our resident fisheries expert, led canoe trips to places on the river that many of us had never seen up close—places like Island Creek, Queenstown Creek and the beautiful stretch from Millington to Shadding Reach. One memorable day, we ventured off the Chester to a branch of the Tuckahoe, and ended up portaging over a dozen fallen logs, many of which were encased in poison ivy. The Chester never looked so good.

At a "Baby Beach Walk," children under five were amazed to see minnows their own equivalent in size—mummichogs and killifish sparkling in their little hands. During the spring herring run on Morgan Creek,

we'd watch in awe as the spawning fish darted upstream in their annual ritual. There was the RiverFest "marsh muck" where a boy discovered the skeleton of a deer—and hollered back to the crowd as if he'd found buried treasure.

There were early mornings spent tonging for oysters or crabbing, thanks to Echo Hill Outdoor School and its staff, and twilight cruises on their beautiful skipjack, Elsworth. One morning at an Eastern Neck bird watch, Tyler Campbell took an impromptu portrait of our kids standing on a path. They were all under eight years old at the time. Recently, we decided we would go back someday and make the same shot again, now that everyone is in college. The kids are all still friends—and I'm convinced it's because of our days on the river.

My wish for CRA's next 20 years is that we keep that spirit of discovery alive—finding ways to get out on the water together and explore this magnificent river. Whether you're in it, on it, or by it—there's nothing like a soul-stirring day on the Chester. It just keeps you going, something CRA intends to do for a long while.

*Pat Herold Nielsen*

# RiverFest!

Conquest Beach  
Saturday

**JULY 15**

1 to 7:30 p.m.

Celebrating  
20 Years  
of the ★  
Chester River  
Association

Swimming  
Seining  
Marsh Mucking  
B.Y.O. Boat

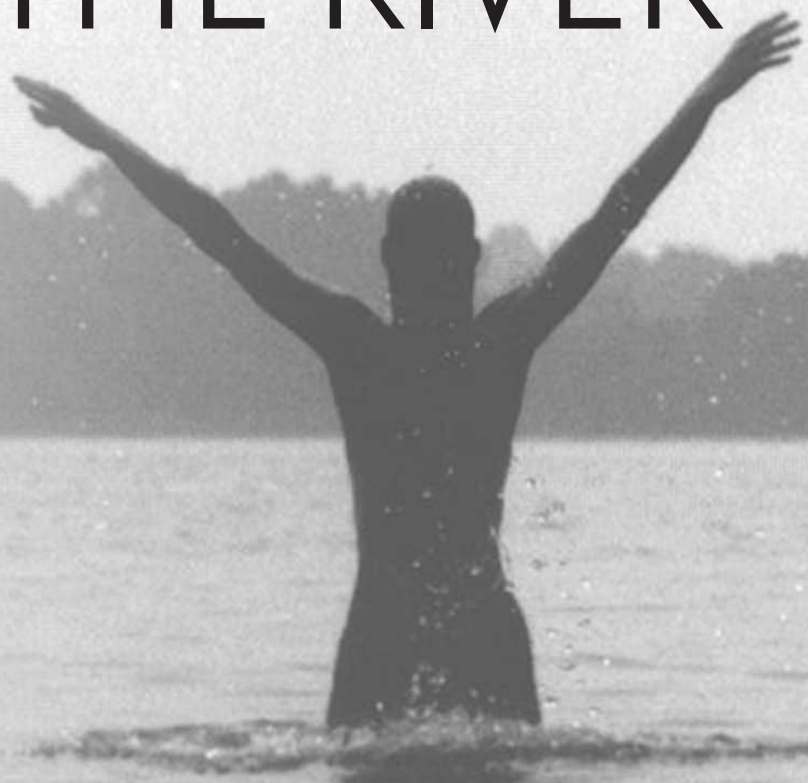


*Bring your friends and family and enjoy a day on the Chester!*



# 20!

## THE RIVER



The Chester River Association wishes to recognize those River Guardians who have supported our work with donations of \$1,000 or more each year. Our thanks go to:

Andrew and Marci Aerenson  
Thad and Renee Bench  
J. Taylor Buckley, Jr.  
Tyler and Debby Campbell  
Joseph and Genevieve Coyle  
Louisa and Robert Duemling  
Terence T. Finn and Joyce M. Purcell  
Penny and Alan Griffith  
Mr. and Mrs. Loring E. Hawes  
Ben Heilman  
Mr. and Mrs. Robert M. Hewes IV  
Jamie Hurley  
Carla Massoni Gallery  
Joe and Linda Maurelli  
Mr. and Mrs. Ellice McDonald, Jr.  
Carole and Kent Merkle  
Mr. and Mrs. Charles Mills  
Ed and Pat Nielsen  
Marilyn and Bob Parks  
Peaceful World Enterprises  
Vic and Patricia Pfeiffer  
The Ramsey Family  
The Roberts Family  
The Roy Kirby, Jr. Charitable Trust  
Mr. and Mrs. Robert F. Schumann  
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Stagwell Limited Partnership  
Jennifer and Ted Stanley  
Lea Ferguson Stutzman  
The Shared Earth Foundation  
Laura and J. Kirk Wade  
Dr. and Mrs. Clifton F. West  
Fred and Mary Wick  
Peter and Susie Wilmerding  
Chris and Jim Wright  
Anonymous (4)

Music starts at 3 p.m.  
Featuring the Pan Masters  
Steel Orchestra  
"New Grass" by  
Chester River Run-Off  
The Gospel Sounds of  
Sylvia Frazier and  
the Anointed Vessels  
and Delbert Hicks and the  
Gospel Shepherds



Admission is Free and Everyone is Welcome!



\$10 Fish Dinner  
served from  
3:30 to 5:30 p.m.

Conquest is a 758-acre preserve on the Corsica and Chester Rivers. Conquest Beach is on the Chester River shore. Take Route 213 north from Centerville to Spaniard's Neck Road, opposite North Brook homes, and follow signs to Conquest.

*Photo courtesy of Anne Nielsen*





# A LIVING SHORELINE

By Pat Herold Nielson

## House by

This spring, when gardeners are looking forward to the blooms of their favorite perennials, a group of 18 neighbors on Centreville's Quail Run Drive are eagerly awaiting the rebirth of their Corsica River shoreline—the result of an ambitious planting project they undertook together last summer.

And like hands-on gardeners who can rattle off the Latin names of their plants and the conditions they favor, residents can cite the benefits of native grasses like *Spartina patens*, also known by the friendly name of salt marsh hay, which grows one to three feet tall, thrives in brackish and salt marshes, and provides food for Canada and snow geese, black ducks and sparrows. Last June and July, the neighbors and volunteers planted thousands of plugs of *Spartina patens* along the water's edge. It's one of several species of native shoreline grasses, shrubs and trees that now crowd out the invasive phragmites that once choked a mile of their waterfront. [See related article on page 12.]

To take a look at their planting, stop at the wooden bridge that crosses the marsh at the Centreville wharf and face downriver. The marsh behind you, still overrun with "phrag," will be a bland monoculture compared to the new shoreline planting on your right—a bright ribbon of grasses of varying heights. At their most glorious, in July through September, the plants were chosen for their ability to tolerate the specific salinity and environmental requirements of the site.

### Restoring lost habitat

With so many docks on this stretch of the Corsica, you might think this busy shoreline would not be a likely candidate for restoration. But you'd be wrong. Numerous stretches of river shore can benefit from this kind of planting, according to Mitch Keiler, Resource Project Manager for the Maryland Department of Natural Resources (DNR), charged with restoring the state's "living" shorelines. "There are so many ways to control erosion other than bulkheading and riprap," Keiler says, "which obviously destroys habitat and food sources for wildlife. Here, we enhanced the stability of a fragmented marsh with native grasses that also suppress invasives."

On Quail Run, where homeowners still have large swaths of lawn, there's now more beauty to enjoy at the water's edge, with plantings that also absorb wave action and curb lawn runoff. An added benefit is the reappearance of flowering native plants—deep pink marsh fleabane and delicate rose mallow, which came back in force when given the room to grow. Keiler, who designed the shoreline planting plan and consulted with individual homeowners, hopes the project will be replicated by other waterfront communities.

"I definitely had an ugly shoreline before," says Brooks Bosley, a Quail Run resident for nine years. "It was eroded, and the quality of the bottom was bad—mucky, bumpy, and very unpleasant to walk on. I had to stand in the mud to rig my catamaran." His shore had washed out around clumps of phragmites roots, a condition that was repaired with the soft shoreline approach. With Keiler's encouragement and advice, Bosley decided to spend a little more and add a sand beach. He used biodegradable cylinders made of coconut hulls, or biologs, to establish the mid-tide line. To fill in behind them, he added three truckloads of clean sand and then planted the native grasses. This year, he says, launching his boat will be an entirely different experience.

### Why Quail Run?

The Quail Run shoreline was identified in the Corsica River Stream Corridor Assessment, a project undertaken by DNR, as a stretch of the river that was largely devoid of buffer. The assessment included all tributaries of the Corsica and its main stem, noting every type of impairment and its correctability. Each section of shoreline was photographed and tied to the GIS database that underlies the Corsica Watershed Action Strategy, the set of recommendations the state is using as the foundation of its five-year experiment to restore the Corsica.

"What was so inspiring about this project," says Frank DiGialleonardo, a neighborhood resident and project leader, "is that once the shoreline assessment was done, residents were willing to jump right in and learn what could be done for the river collectively, and on their individual properties. We organized a workshop to get answers to our questions and from there on it was steady progress."

At the start of the project, the U.S. Department of Agriculture sprayed the area to eradicate the phragmites. The grasses were planted shortly after and established themselves in a matter of two months. The flourishing shoreline was front and center on the news when pictures of a fish kill on the Corsica were aired in late September. "It was ironic," says

Alison Howard, the Queen Anne's Soil Conservation District soil conservation specialist who managed the project. "When the pictures came out we said: 'But look at the grasses!'" The fish kill was the result of oxygen depletion, one of the conditions that added the Corsica to the U.S. Environmental Protection Agency's List of Impaired Waterways, a designation it shares with the greater Chester.

### A community partnership

At a time when the Corsica is the subject of a landmark restoration effort budgeted at over \$19 million—one

whose success will depend on interagency teamwork and local involvement—the Quail Run project could set the standard for what can be accomplished with some neighborly cooperation and professional expertise.

DiGialleonardo believes it wouldn't have happened without Howard's willingness to navigate funding sources to cover costs. With support from the Wildlife Habitat Improvement Program, [WHIP,] homeowners recouped 75% of their planting budget, which averaged \$1,200 apiece. "It turned out to be the largest single WHIP application in the state that year," DiGialleonardo says, "and Alison managed 18 separate filings," one for each neighbor.

Howard, in turn, credits the homeowners who poured their time and energy into the project. "The common thread was that everyone cared about the river, and people saw that they could individually make an impact. The more they learned how trees, shrubs and grasses filter nutrients and control erosion, the more excited they got. They were just a blast," she says. "It was really mucky out there. One neighbor, Tom Scuderi, used a sled to drag his plants out into the mud."

Organizers were also realistic about the range of skills and physical abilities in the group. The first plantings were done by experienced gardeners. Then, with the help of volunteers, they tackled the properties of homeowners who were physically unable to get down on their knees and plant. Barbara and Steve Sharkey planted 1,000 plugs of native grasses on their shoreline, the average for participants. Ranging from three inches to three feet, the plants were grown by Environmental Concern, a St. Michaels company that specializes in wetland restoration. "It was hot, hard work," Barbara Sharkey says. "We were lucky to have our 12-year-old grandson Matt and his friend to help. But it was worth it, knowing what it would do for the river."

### The Corsica River Conservancy

Now the Quail Run neighbors have joined forces to form the Corsica River Conservancy, an association that welcomes other citizens in the watershed to get involved in the state's ambitious effort to restore the river. Some have been active for several years, growing and planting underwater grasses, starting an active water quality testing program, encouraging upgrades to septic systems, and participating in the monthly "implementers meetings" of the state and local agencies now focused so intently on their river.

The Conservancy encourages all of those who live in the 24,000-acre Corsica River watershed to learn what can be done in their own backyards to help improve water quality in the river. Everyone will benefit, including the fish and wildlife that were there long before we were.

*Pat Herold Nielsen is a founder and board member of the Chester River Association and a new member of the Corsica River Conservancy. Her family lives opposite Emory Creek on Corsica Farm.*

Contacts:  
Corsica River Conservancy  
410-758-8756  
corsicariverconservancy@verizon.net

Alison Howard, Queen Anne's Soil Conservation District  
410-758-3136 ext. 3  
alison.howard@md.nacdnet.net

Mitch Keiler  
Watershed Services Unit  
Maryland Department of Natural Resources  
410-260-8806  
mkeiler@dnr.state.md.us

For an in-depth look at the Corsica River, see the Corsica Watershed Restoration Action Strategy [www.dnr.state.md.us/watersheds/surf/proj/wras.html](http://www.dnr.state.md.us/watersheds/surf/proj/wras.html)

*Photo courtesy of Brooks Bosley*



*Biologs enhance the project*



# Getting a Fix on PHRAGMITES

By John Lang

The river looks desolate on the cusp of spring, when the geese are mostly gone and the ospreys aren't here yet. The sky is faded blue and the water a rough slate under a hard west wind. Distant trees are dark sticks. The Chester's most distinctive feature now and its only warm color—amber walls lining banks above Morgan Creek as far as you can see—is something that maybe doesn't belong here and certainly wasn't here like this a few decades ago.

It is phragmites, a common reed that shoreline residents despise but others view with ambivalence. It's a cane that actually does some good as it's doing harm and is a problem only because of doing what it does far too well. Left alone it chokes everything else out of every low, wet place.

Four men in a borrowed boat are churning up mud as they try to get a close look at the invading cane. Aboard are Tony Prochaska, making his first official inspection as the new Riverkeeper; two Chester River Association board members, Andrew McCown, associate director of the Echo Hill Outdoor School, and photographer Tyler Campbell; and me. Prochaska has lived on the Eastern Shore five years, and fished and crabbed the Chester, but he has no picture in his head of how the river was before that. McCown grew up on the Queen Anne's side in the 1950s and 1960s, prowling spits of land where now he can't set foot.

## Then and now

It's a watery world turned upside down. Then, sandbars were mostly bare and bottom grasses grew so thick along the riverbed they fouled the props and, McCown remembers, made the grownups cuss. Today those submerged grasses are mostly gone, as are the crabs that hid there, and those once sandy beaches are covered with stands of phragmites that can grow 14 feet high and so densely that some wildlife cannot enter.

"It's like watching the houses grow in Delaware," McCown laments.

Across the river and just upstream of Morgan Creek, he points to a narrow opening in the crowded cane. "As a kid I used to go up that creek, and I don't recall any phragmites," he says. "Then it was all cattails and wild celery and wild rice. You don't see any of that now."

That phragmites is one of the Eastern Shore's most aggressively invasive plants is obvious. Why that's so is less clear. In fact, it's not even an "alien" plant.

## A long history

Prochaska has brought along a packet of scientific papers that say phragmites has been growing inland along the Atlantic coast for thousands of years, as proven by core samples taken in peat bogs. When Capt. John Smith explored the Chesapeake Bay in 1606, he wrote that Indians of this region lived in dwellings thatched with the cane.

Currently, general scientific opinion holds that the native reed may be a stable presence where it exists—but the rapid expansion is due to the introduction of another variety of the plant brought here from Europe and Asia. It is known, for instance, that phragmites was used as packing material in crates shipped aboard sailing vessels, which may have resulted in its spread.

The giant grass is not universally disliked. People in various parts of the world have used it to make boats, paper, fishing spears, even jewelry. One study among Prochaska's batch of papers cites phragmites' role in cleansing waters of waste material,



including heavy metals and sewage. It stabilizes soil in areas prone to erosion. It can also enhance water quality through nutrient cycling.

There's much dispute over phragmites' value as food and habitat for birds and other wildlife in the U.S. More than 70 species of birds do use the plant for nesting materials and breed in phragmites stands, according to Prochaska, notably redwing blackbirds along the Chester. However, ornithologists suspect that forage for the birds becomes inaccessible when phragmites stands get too dense.

When I observe that environmentalists in Europe seem to like the stuff, McCown interjects, "I'm not saying it's good or it's bad. Just that it's here!"

Where it wasn't, he means.

## Locked out?

McCown notes that open bars of sand are critical breeding grounds for some species, like Maryland's diamondback terrapin. Yet many of those sandbars, where McCown once took students for field trips, can't be explored now because they're overgrown by the tough cane.

After slamming downriver against the wind, McCown slows the boat just off two sister points of land familiar to recreational boaters, across and up from Rolph's Wharf.



*Phragmites stand*



"That one downstream is Frying Pan. It's bigger, but now it's been covered by phrag. This one's Skillet."

I know it. Every summer, in late August or early September, I've come with a group of friends to raft up here. We anchor in the shallows, set chairs and coolers on the sand if tide allows, and celebrate the full moon rising.

Today the tide is low. But there're only a couple of feet between water's edge and the phragmites wall. This season, if we come again, there won't be much space for mingling. We'd have to stand along the bank in single file, like stalks of phragmites.

*John Lang is director of the journalism intern program at Washington College.*

# A Phragmites Primer

**What is it?** *Phragmites australis* is a perennial grass found on all continents except Antarctica. It towers up to 14 feet and is characterized by hollow stems and stiff wide leaves, with drooping clusters of tiny flowers that wave like plumes in the wind.

**What's bad about it?** It's an aggressively invasive plant that alters marshes, crowding out other native plants. It can become so dense that it steals habitats of migrating waterfowl.

**What's good?** Phragmites can stabilize stream and river banks and improve water quality by trapping sediment and removing nutrients.

**How do you control it?** That's the hard part. Recommended methods of eradicating

phragmites include mowing, disking, burning, applying pesticides (such as glyphosate and sulphides) and covering the areas with plastic. Scientists are evaluating several species of insects in Europe (where more than 100 insects attack phragmites) as biological control agents in the U.S.

**Is the state doing anything about the problem?** The Maryland Department of Natural Resources initiated a phragmites chemical control program with private landowners in 1995. Basically, the state contributes the chemicals, saving property owners up to 25 percent of the total cost. To date, the state has provided chemicals to eradicate phragmites on as little as a tenth of an acre of land to a 200-acre tract.

**Anybody else involved?** There are a number of private concerns now targeting phragmites. Shore Precision Engineering, a wetland restoration specialist in Chestertown, uses tracked mowing machines to cut phragmites stands. New Millenium Development, a non-profit based in Bowie, is working to create markets for harvested phragmites, which has the potential for use in biofuels and as roofing material. In Williamsburg, Va., master thatcher Colin McGhee is putting thatched roofs on historic reproduction buildings; McGhee's crew travels across the U.S. to thatch everything from private residences to buildings at zoos and theme parks.

J.L.

diverse, stable economy; support for agriculture; promotion of the region's working landscape.

"The comp plan gives us the background legally to be able to look at growth and come up with the teeth to enforce it," says Owings.

As for specific watershed planning, goals include river restoration strategies and the stated hope to partner with organizations [like Chester River Association, ESLC, Adkins Arboretum and the Sassafras River Association] on the development of clearinghouse materials on subjects such as living shorelines, the planting of native species, healthy septic systems and best management practices in agriculture.

**T**he comp plan also includes what Owings calls "the big one:" opposition to a bay bridge here.

"The development pressure would be unbelievable. We'd be 20 minutes from Baltimore City. My mind just won't go there. Obviously, we're very concerned," she says. "Any major change in transportation brings with it change in community, not just the bridge. We would become a highway extension of the Western Shore. You don't have to look far to see what the potential impact is if we don't do enough."

Supporters of managed growth agree with Owings that the fight starts with a strong comprehensive plan—but it's also clear that the plan is only as good as the zoning enforcement behind it.

"I don't think there are any magic solutions. There also aren't any great unknowns. We've known for half a century that if you put in bad zoning, you'll get bad development," according to Tom Horton, who has written about the Chesapeake Bay region for over three decades. "The counties not only know what to do, they have it in plans. Zoning simply doesn't back it up. The question isn't 'What do you do?' but 'How do you do what you already know you're supposed to do?'"

The watershed's stewards largely blame local government for failing to adequately police comp plans in deference to a well-heeled development community. They also fault state government for failing to address the issue at the policy level.

Here are two things they say need to happen:

- **Support farmers** The Maryland legislature just passed a bill that will funnel millions of dollars a year to help keep farmers farming while assisting them with best management practices that are friendly to the environment. "How we can maximize that into our watershed is going to be critical," according to Andrew McCown, ESLC president and a Chester River Association board member. "We may never see a flood of money like this again."

Queen Anne's County needs to provide options to farmers to preserve their land through a transferable development rights program rather than relying on the current non-contiguous development program that, Etgen says, has subverted the effectiveness of the comp plan and zoning ordinance. The county commissioners, under pressure from farmers, in April rejected an ordinance that would have tightened up the existing program.

- **Get politically savvy** With elections coming up in November, there's a push under way to educate and groom potential candidates at the local level. Joe Trippi, the well-known national political campaigner, has joined ESLC's board and is working on preservation issues. Meanwhile, 1000 Friends of Maryland in May co-sponsored a forum in Cambridge to look at the Eastern Shore's development 30 years into the future and identify policy changes that should be made. In early fall, in advance of the elections, the group will begin coaching candidates and advocacy organizations. [Visit [realitycheckmaryland.org](http://realitycheckmaryland.org) for details.]

"It's plain old changing the political scene and getting the right people elected," says Horton. "You somehow have to break this cycle of development industry dominance in funding local politics. A county is not prohibited from backing up a comp plan with zoning that doesn't make a mockery out of it. You just have to elect people who will do that. If you don't, you can't win."

*Freelance writer Ellen Uzelac, a former correspondent with The Baltimore Sun, is CRA's Publications Editor.*

## Chester River, THE SURVEY

In our CURRENTS cover story last year, we told you about the 243-mile marine survey of the Chester River, the first undertaking of its kind.

The survey, using high-tech equipment and human divers, turned up two shipwrecks, boat graveyards, the remains of several steamboat landings and historic oyster reefs. Going forward, Washington College associate professor John Seidel hopes

to get a closer look at river bottom types and wander up the shallower creeks and tributaries of the Chester.

In the past year, the push has been to produce a detailed, peer-reviewed report, now on file at the Maryland Historical Trust and the Washington College library. At the moment, Seidel is exploring a broader distribution for the report.

"We're grappling with how to make it public. Some of the specific site locations are sensitive. We don't want people to take this report and have real detailed information about a wreck, and then start taking pieces off of it," he says. "But this is our common heritage. This belongs to all of us and I think it's important we get our findings out to the public."

E.U.

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EDITOR

Ellen Uzelac

DESIGN/LAYOUT

Robin Myers

PHOTOGRAPHY

Tyler Campbell

Ed Nielsen, *President*  
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## CRA member: *Why give to CRA?*

Growing up on another river, the Northeast, I took for granted that the Chesapeake and its myriad tributaries would forever be a source of pleasure, treasure and mystery. The eel grass and wild celery that sheltered the Bay's newborns and fed the millions of ducks that came in winter were a nuisance in summer. They caught on our bass plugs and fouled the prop on our Chris Craft when we tried to water ski. What did we know? You could see to the bottom then. And the crabs would always make their way to our river by August.


My folks bought a place on East Langford Creek in 1959, opening up a whole new river to play on and plunder. Rockfish and fierce, fat blues prowled the shores. Crabs were far more abundant than up north. Everyone here had a pot tied to the end of the pier and a live box floating nearby. The spring herring run brought tons of Chesapeake caviar, which my mom would fry with bacon and serve on little pieces of toast. The boating was the best. Around every bend in every creek, it seemed, was another tidal pond full of soft crabs and grass shrimp.

When I moved my own family to an old house on the Chester in 1970, my kids thrived on the river life. Pulling the string on a crab trap, reeling in a monster white perch, running full speed down the yard and into the river—they never seemed to get enough. They delighted, too, in the comings and goings of the barges and little tankers that brought fuel oil and gasoline to the fuel depot in Chestertown. Even in darkness. When we'd see the lights, I'd say "Here comes the Yakona," and they'd run out the door and down to the shore to see if they could coax a toot from the little ship's horn.

Which, I suppose, is a round-about way of explaining why I support CRA. I sometimes say, only half-jokingly, that I contribute money and some time to preserve my investment in Kent County. Much more, of course, is at stake. How empty the lives of my grandchildren will be without the river and, by extension, the Bay. The words of the folk song say, "...you don't know what you've got 'till it's gone." But it doesn't require a lot of thought to realize that we really do know what we've got and if we don't get busy it will be gone.

*J. Taylor Buckley, Jr.*  
CRA member since 2001





Morning

Two deer stumble by my window.

A mosquito bumps against the glass.

Across the river, cars slide past one another.

The cat stretches.

White globes glow like moons along the bridge

each morning. They blink off

and the day begins. I try to catch

that moment, but it only happens

when I look away.

Meredith Davies Hadaway

*"Fishing Secrets of the Dead"*

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CHESTER RIVER  
ASSOCIATION

CRA



100 N. Cross St., Suite One  
Chestertown, Maryland 21620