THE TIDAL FRESH PATUXENT: WHAT'S UP THE RIVER?

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Wade Brooks was raised along the Patuxent in eastern Prince George's County. He's a diesel mechanic, and a good one, but the construction firm he works for laid him off for the spring and summer the year before last. So he went catfish potting.

When most of us think of working on the water in the warmer months, we think in terms of 36-42' workboats and several hundred crab pots. But Wade got by well with a 12' aluminum skiff, a 7½ hp. outboard, and some hoop nets. He was fishing an underutilized resource on a rich, beautiful, but underutilized section of the river, the tidal fresh portion between Magnuder's Ferry and Wayson's Corner.

A river changes as it flows to the Bay. The Patuxent between Howard and Montgomery Counties is a narrow, free-flowing upland stream running over a sand and gravel bed between banks wooded with river birch, sycamore, and red maple.

Down below, near Wayson's Corner, it changes. The bed dips below sea level, and the tides begin to affect it. Suddenly the river broadens, deepens, and begins to wind back and forth in big, looping meanders. It erodes the banks on the outsides of the bends, where the current accelerates, and drops its sediment on the insides, where it slows down. Thus the outside banks are firm sand and gravel, dropping abruptly to deep water. The inside banks are soft mud with gradual slopes down to the channel. The power of the current in these bends is great; there are several holes on this section where the river is over forty feet deep. On the high banks above them are mature hardwood trees, especially oaks and beeches.

The mud flats on the insides of the turns are formed of fertile topsoil washed in from fields along the river. These grow large freshwater marshes, some covering several hundred acres. Tidal currents in these narrow, deep channels produce an average change over two feet, greater than that at the mouth of the river.

The meandering section of the Patuxent extends down to Benedict, where the river widens considerably. From here to Solomons, it is the broad estuary that most people know, with rolling farmland, sandy beaches, and a few salt marshes.

Very few aquatic plants have adapted themselves to deal with salt in the water around them. Hence a large salt marsh on the lower river may have less than a dozen species. Not so in the tidal fresh marshes. Twenty-five species of low-salinity plants grow in thick, lush stands in the rich mud inside the meanders. Arrow arum, yellow pond lily, and pickerelweed grow in the soft muck at the very edges of the marsh. Behind them are smartweed, tearthumb, wild

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rice, and tidemarsh waterhemp. All produce high quality seeds for red-winged blackbirds, black ducks, mallards, wood ducks, pintails, teal, sora rails, and other birds. The hemp seems to do particularly well on the Patuxent, sometimes reaching heights of 14’ in its four-month growing season. Bulrushes and cattails supply healthy populations of muskrats with both food and building materials. Almost every tidal creek has a beaver dam as its head of navigation. Abundant stands of ash and alder satisfy their builders’ needs. The plants blossom late in the summer, to the delight of people along the river. White, pink, and crimson hibiscus, blue pickerelweed, purple ironweed, lavender loosestrife, red cardinal flower, and golden yellow tickseed sunflower ("butterweed") show up against a feast of tones and textures of green.

Most freshwater marsh plants die and decay faster than their saltmarsh counterparts. Even though growth is thick and tall in August, by late September many of the plants begin to die, and by Christmas the upriver marshes are mud flats covered by brown stubble. They look drab and will stay that way until April.

The scene appears to be dull and lifeless, but it holds the promise of summer and abundant life. Winter winds, rains, snows, and frosts grind the remnants to pieces and wash them out into the water. Bacteria and fungi colonize them and break them down further. The resulting vegetable soup of decayed plant material may not sound appetizing to humans, but it feeds large populations of tiny crustaceans, especially copepods, grass shrimp, and amphipods. These in turn feed everything from juvenile spot to yellow perch to great blue herons.

Like that on the banks, the community in the river and the creeks is remarkably diverse. It includes freshwater animals with localized life cycles like turtles and sunfish, animals that have come from far down the Bay like blue crabs, animals from the Continental Shelf like juvenile spot and menhaden, and creatures from the ocean like eels. It is not unusual to pull a 25’ minnow seine along the shore here and find 15 species of small fish in it. It is also not unusual to catch largemouth bass or chain pickerel, both full-time residents, with menhaden or spot, both ocean-born, in their bellies. The same forage fish also feed Wade Brook’s catfish, as well as white and yellow perch, crappie, and sunfish. Several families of river otters fish the river, as do ospreys and eagles. There are a dozen osprey nests and a couple of eagle nests on the tidal fresh part of the river.

A particularly attractive feature of the tidal fresh section is its creeks: Hunting, Cocktown, Black Swamp, Halls, Lyons, Mattaponi, and Western Branch. All are narrow and deep, with abundant plant, fish, bird, and mammal life. They are especially well-suited to exploring in small craft: canoes, rowing boats, and outboard skiffs (preferably ones equipped also with oars and pushpoles). A good starting point is the Patuxent River Park at Croom on the Prince George’s side near Upper Marlboro. Call 627-6075 or write the Park (RR 3380, Upper Marlboro, Md. 20870) for information.

Wade Brooks is back to turning wrenches. Diesels bring in more money than catfish. But he misses living with the river every day. Once a part of it, always a part of it.

A WAY OF LIFE

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130 hours of hard day-and-night racing on wide open waters (it is 11 miles west from Point Lookout to the Virginia shore, and 24 additional miles east to the main Maryland shore.) Subsequently, a quiet 5-day exploration trip was planned. We rowed and sailed 38 miles up the narrow Patuxent River to the Chesapeake Beach Railway bridge and tied close to the swinging draw to stay in deeper water. Some of the crew went ashore to find the Mount Calvert passenger station, while a few of us rowed upstream to Pig Point, made fast to Bristol Landing wharf, and bought Eskimo Pies at James Greenwell’s store (Leon Post Office) - site of the river’s first public ferry (1696).

Upon our return we found our boats covered with cinders from the passing locomotives - it looked as though the fireman had purposely heaved a shovelful of burnt coal into the two cockpit pits. During the trip back to Solomons, we counted at least twenty steamboat wharves, all in a sad state of repair. However, business must have been good as the Baltimore steamboat Calvert at Lower Marlboro wharf appeared to be fully packed with freight; the hull was down to the load water plane . . . and the bellowing of cattle on board was heard until the steamer was out of sight.

During the following four weeks, the Sea Scouts and I cruised along the Western Shore of the Bay, spending the night in a protected anchorage with a fleet of ten to twenty working sailboats which arrived at various hours of the night. To the youthful crew, this was an experience with a new way of life.

CMM CANOE CLUB

Spring must be just around the corner because the Museum’s Canoe Club is showing signs of renewed life. On March 5 twenty-one persons attended the first meeting of the new year. At that time a movie of a trip on a beautiful river gave us the opportunity to review basic techniques and reminisce about previous trips of our own.

Plans were discussed and dates were set for a number of trips and activities. Since the group is composed of beginners as well as more skilled canoeists, of people in their early teens and some over 60, our schedule includes a variety of experiences. The first trips will be easy ones leading up to some of greater difficulty, including a two-day overnight. Watch calendar in Bug-eye Times.

The trips offer rare opportunities to get away from the hubbub of civilization and enjoy gentle sounds — the zing and drip of the paddle, water lapping against the side of the canoe, and silence broken by bird song or a breeze in the trees. We have seen bald eagles and piliated woodpeckers, hemlock and cypress, muskrat houses and osprey nests. We paddle in open water and up into the head of creeks and streams, winding among the reeds and marsh grasses.
SMITH ISLAND TRIP

Have you ever explored the largest inhabited offshore island in the Chesapeake Bay? Join us for an educational weekend with The Chesapeake Bay Foundation on Smith Island, June 11-13. We'll study and enjoy the plants and animals of the intricate food web that thrives in the near-virgin estuarine marsh covering most of the island. We'll also become familiar with the culture of the watermen who depend on the productive marsh for their livelihood.

SEASONAL REFLECTIONS

ON ST. LEONARD CREEK

BY KENT MOUNTFORD

The following are excerpts taken from Kent's log. The skiff Geda is a small Smith Island Crab Scrape, which once earned its keep on the Patuxent by a shaft tonger. The Geda was donated to C., by Kent in 1977.

"WINTER"

I awoke to find about two inches of snow on the forest and cliffs and after clearing some of the walks, shovelied off our skiff Geda and put out to take pictures in the soft light of still falling flakes. I wandered west from cove to cove out St. Leonard's Creek, cutting the engine finally in Mackall Cove. I just sat there in the silence watching snowdrops slip from their perches and disappear into deep grey-green water. Buzzards circled the tree tops and some crows, pursued a hawk noisily upwind. The foghorn at Cove Point lighthouse echoed strangely through the woodlands across 6% miles of land, from the shore of the great Chesapeake. Out in the Patuxent, my passing scared up a flight of swans. Geda struck a submerged log (which gave me pause about an unwelcomed dip in 35° water) and inspired retreat up St. Leonard Creek with just a brief stop to contemplate a bamboo grove hung in white. I was dressed too lightly and chilled by falling temperatures; hence, home to a roaring hot fire and lunch.

"SUMMER"

The cove was as calm and flat as old window glass under a hazy summer sun. The first western shore locust sounded in the woods. Coming in last night under sail the (ctenophore) comb jellyfish were legion, nearly 200 per square yard at the surface; brilliantly luminescent as Galadriel sailed through. The lightning bugs in the forest were incredible from the creek with 50 or 60 flashing in each tree at one time, a surprising "Christmas tree" effect.

... Last night having mowed the field I was hot and sat down on Geda at the dock with water splashed on my head and arms to cool off. The cove was 84° F. Along the marsh, from the point, came a young raccoon, wading, stopping occasionally to munch on some shellfish, mussels perhaps. He came within 20 feet of me and watched closely as I moved first a bit then talked to him. He stepped aside only to munch on some shellfish, mussels perhaps.

... Today on the river, a doe swan across in front of us at Holland Cliff. There were two that watched me come out of the drive yesterday, then fled in unison, as though choreographed. There were 13 Great Blue herons around Milltown Landing today.

SEAFood demo

Several Calvert Marine Society members were treated to a demonstration of seafood cooking on February 6 by home economist, Claire Vanderbeek of Maryland Department of Economic and Community Development. Bluefish, flounder, rockfish, oysters, clams, mussels, hard and softshell crabs were prepared (filleted, shucked) and then cooked with such aromatic recipes that members of Patuxent Small Craft Guild, American Shipcarvers Guild, and Fossil Club eventually joined us for the final taste test of Tidewater Oyster Bake, Bankrupt Bouillabaise, and Brandied Crab.

The following helpful hints were shared by Claire during our program, which was free to CMM. When buying fish, make sure the eyes are clear, the skin is resilient to your touch, and the skin is pink inside. Marinate bluefish for thirty minutes in Italian dressing and then barbecue on your grill; save the dark meat — it has higher protein content. Oysters can be kept for 7-10 days in a shaded, dry bucket or frozen after shucking with one-inch head space in the container. Steam mussels in butter, wine, and garlic . . . heavenly. Unopped pasteurized crab meat can be kept in your refrigerator - not your freezer - for six months; after it has been opened keep it only three to five days. To prepare a softshell crab, cut off some of the front and back, lift the flap, and snip the lungs off, then marinate in Italian dressing. Keep cooked products away from raw products; use separate cutting boards. Claire mentioned Cookbook 3 will be available from her department soon, and it will feature high protein, low calorie seafood recipes. Try Cookbooks 1 and 2, also. They're available for $1.42 and $2.79 (with your 10% discount and tax) from our Gift Shop.

BOARD OF GOVERNORS

WELCOMES NEW MEMBERS

New members appointed to the Board of Governors by the Calvert County Board of Commissioners are Judge Perry Bowen, Larry Cumberland, Judy Glascock, Reid Hutchins, and Ellen Zahniser. The museum's governing board consists of fifteen members, all of whom are appointed by the Commissioners from ten nominees presented equally by the Calvert County Historical Society and the Board of Governors. Of the fifteen members, five complete their terms annually. Retiring members are Walther Ewalt, Roy Logan, Gordon Thomas, Jack Williams, and Barney Wood.

Elected officers for 1981-1982 are Albert Grosvenor, chairman; Leonard Mason, vice-chairman; George Van Winkle, treasurer; and Dorothy Oursler, secretary.
FOSSIL FACTS

Turritella Plebia Say
TURRET SNAIL

Gastropods or snails, with some 214 different species and varieties, are the most abundant of all the Maryland Miocene taxa. *Turritella plebia* Say is among the most numerous representatives of this vast snail population. Turret snails feed on plants.

*Turritella plebia*, the common turret or tower snail, is relatively small. It has a shell composed of approximately 12 convex or rounded whorls. These whorls are marked with fine, uniform spiral ribs. *Turritella plebia* is found in the St. Mary's formation, while its two varieties figured above are found in both the Choptank and Calvert formations.

*Turritella plebia*, variety A, has flat-sided whorls and very uniform, closely set ribbing. It is found in the Choptank and Calvert formations. *T. plebia*, variety B, has deep sutures and slightly flattened whorls. It is somewhat smaller than the typical *plebia* and is most common in the Calvert formation.

Gastropods, for their small size, have voracious appetites. From the many drill holes found in the fossilized remains of *Turritella plebia* there is every indication that countless numbers were victims of other meat eating snails.

Thanks To Our Volunteers!

Calvert Marine Museum has been blessed with a succession of dedicated volunteers. For the past year Barbara Wilson has been Volunteer Coordinator, Martha Darr has called hosts and hostesses (now known as Weekend/Summer Docents) for their assistance at the museum, and Elfrieda and Gordon Keefe have provided refreshments for all member events. We are also grateful for the fine people who have spent weekends and summer days greeting visitors, giving tours, watching over our collection, and lending helpful hands to the operation of the museum.

 Fifteen new School Docents and Weekend/Summer Docents have been trained to join our great crew for the 1982 Volunteer Program. Ms. Anne H. Howell has become Volunteer Coordinator and will be contacting volunteers for assistance with special events like the Members' Picnic, Christmas Yule Party, and Drum Point Lighthouse Centennial (August 20, 1983).

We need additional Weekend/Summer Docents willing to commit one morning, afternoon, or day per week, per month, or per two months to the museum. We believe we are asking too much of a volunteer to have him call fellow volunteers every week for their assistance. Volunteers, please keep an updated record of your hours in the Volunteer Registry, which is kept in the Gift Shop. This is our only record of your volunteer service. It can help you keep track of your mileage, too, which can be multiplied by $.09 (1981 figure) and deducted as a charitable contribution under "Itemized Deductions."

Calvert Marine Museum Staff Publish

One of the purposes of most museums is to publish research and disseminate information in printed form. In this manner, many persons who never visit the museum can be reached and more specific levels of information can often be presented than through an exhibition.

In this vein, three of Calvert Marine Museum's staff have recently published papers. Liz Rees Gilbert, director of education, is author of *Fairs and Festivals;* a Smithsonian Guide to Celebrations in Maryland, Virginia, and Washington, D.C. Of Course, our own Patuxent River Appreciation Days festival is included.

David J. Bohaska, registrar, published a paper with Dr. P.V. Rich of Australia on a new family of fossil owls from North America.

Ralph E. Eshelman, director, has recently published two papers with Donald G. Shomate, research associate CMM, on the maritime history of Patuxent River. These are *The Patuxent River Submerged Cultural Resource Survey: Drum Point to Queen Anne's Bridge, Maryland;* Maryland Historical Trust, Manuscript Series No. 13; and *A Developmental Model for Survey and Inventory of Submerged Archaeological Resources in a Riverine System: The Patuxent River, Maryland,* published in the Proceedings of the Twelfth Annual Conference Underwater Archaeology. Ralph has also published a paper on a Pleistocene vertebrate fauna from Meade County, Kansas, in the *University of Michigan, Museum of Paleontology Contributions.*
CMM LOSES FRIEND

The museum was saddened by the passing away of Leonard C. Rennie. Leonard was a good friend of CMM who took particular interest in our present ambitious master plan. He provided invaluable advice based on his years of consultant work with museums from all over the country.

Leonard lived in Calvert County along Island Creek in the 1940’s where he frequently sailed the beautiful Patuxent on his 21-foot sharpie made by the Elliott’s of Broomes Island in 1944.

Leonard’s words of encouragement and numerous helpful ideas will be sorely missed.

ACQUISITIONS

Captain Stanley Larrimore of the Lady Katie donated the figurehead from his 1956-built skipjack. Pepper Langley, master woodcarver at CMM, presented Stanley with a new eagle figurehead last year. The U.S. Coast Guard at Curtis Bay presented the museum with a mechanical fog bell striking mechanism in working condition. A mounted bale eagle was presented by Matt Gambril. Speaking of birds, Norm Riker and Dave Bohaska collected a rare fossil bird skeleton from the Calvert Formation. Geoffrey Footner donated several old photographs, two of which include interior views of the old marine hospital, which was once operated in Solomon by the Department of Commerce. The museum also received two early photos of the Wm. B. Tennison from descendants of the Grace H. Glover family, who owned her in the 1930’s. Joseph C. Lore, Jr. donated several important late 19th century business letters from the J. C. Lore Company, mainly concerning caviar-buying in Trilby, Virginia.

MEMBERSHIP DRIVE CONTINUES

In an effort to help raise staff support and developmental funds, the museum initiated a membership drive this past fall. The response thus far has increased our total membership over twenty percent, breaking the 1,000 mark. The following are New Life Members of CMM: Wallace L. Ashby, John B. Gray, Jr., Albert C. Grosvenor, Griffith S. Oursler, Jr., Margaret C. Smith, William E. Stevenson.

To all our members, new and old, your support is greatly appreciated. It is directly from this grass roots funding that we were recently able to hire Liz Rees Gilbert as director of education, publish our first book, Flotilla: Battle for the Patuxent, and substantially increase our endowment. Please note that we have used several different mailing lists during the search for new members. If you have received our mailings, we apologize for any inconvenience to you.

LADY KATIE CRUISES

For $55 per day, you can cruise the Chesapeake Bay on the working skipjack, Lady Katie. During the summer, the oyster dredge is laid aside and the beautiful boat is prepared for day and overnight sailing trips on our famous estuary. She is, like the other skipjacks on the Bay, a member of the last all-sail working fleet in North America. For more information, contact Captain Stanley Larrimore, Post Office Box 232, Tilghman Island, Maryland 21671.

WM. B. TENNISON CRUISES

CMM’s 61-foot passenger oyster buy-boat, which was built in 1899 as a 9-log bugeye, begins public cruises June 2. Join us for a one-hour cruise Wednesday through Sunday at 2:00 p.m. or for a 3-hour cruise the first Saturday of each month at 4:00 p.m. Cost for adults is $3.50 (one hour) and $8 (three hour), less for children with a $12 family budget rate for five people (one hour) and $25 family rate for five people (three hour). Charters are available too for $65 each hour. Catered lunches and dinners are available for charters only.
MEMBERSHIP PRIVILEGES INCLUDE:
1. Subscription to the quarterly “Bugeye Times” newsletter.
2. Quarterly calendar of events.
3. Free admission to Museum programs (films, lectures, slide-shows).
4. Invitations to previews and receptions for new exhibits.
5. Reduced rates for trips, tours, cruises and classes.

NOTE: One month prior to the expiration of your membership a RENEWAL notice will be sent to you.

MAKE CHECKS PAYABLE TO:
Calvert Marine Museum
P. O. Box 97
Solomons, Maryland 20688

PLEASE ENTER MY ANNUAL MEMBERSHIP FOR:
( ) $ 12.00 Individual
( ) $ 15.00 Family
( ) $ 50.00 Supporting
( ) $ 100.00 Sustaining
( ) $ 500.00 Patron
( ) $1,000.00 Benefactor

Name
Address
City State Zip

VOLUNTEERS NEEDED!
We need volunteers interested in researching the old Marine Hospital in Solomons and indexing The Patuxent River Submerged Cultural Resource Survey from Drum Point to Queen Anne’s Bridge, which was recently compiled by Don Shomette and Ralph Eshelman.