DON'T ROW - THROW THE OARS AWAY:
OUTBOARD MOTORING IN AMERICA: THE FIRST FIFTY YEARS

Part I: The Early Years
By Ken Kaumeyer, Curator of Estuarine Biology

The early twentieth century was an exciting time in America. Within a few years, mechanical innovation brought the marvels of "horseless carriages," airplanes, and small gasoline-powered boats. People now had the means to satisfy their natural desire to travel quickly from one place to another with the least amount of effort. Everyday life was to change very rapidly.

The development of outboard motors, in particular, had a tremendous impact on the use of our nation's waterways. Also changed were land-use patterns of adjacent shorelines, as people moved to be near the water for recreational purposes. Until the development of inexpensive, mass-produced outboards, waterway use was primarily restricted to commercial activities and the few wealthy individuals who could afford the expensive, often custom-built inboard pleasure boats. Suddenly, it became possible for almost everyone to own a small boat and enjoy the recreational opportunities they provided.

Outboard motors were quickly accepted by the American public. In 1904, there were only 15,000 recreational boats powered by electricity, steam, or gasoline in the United States. Significant production of outboard motors did not begin until 1907, when only 3,000 were produced. By 1914, however, the number of recreational boats had jumped to over 400,000, with much of this increase due to the availability of small portable outboard motors. Their popularity continued to increase until sales fell during the depression era of the 1930s, when many Americans could no longer afford leisure-time luxuries. After World War II there was another huge increase in the popularity of recreational boating, and the outboard virtually took over the sport. In the ten years after the war, inboard boats in America increased only from 520,000 to 671,000, whereas outboard boats increased from 1.3 million to 4.6 million.

The popularity of outboard motoring greatly affected the economy, social structure, and development of communities near lakes, rivers, and coastal waterways. Southern Maryland is an excellent example of how the influx of people drawn to the area for recreational boating forever changed the region's physical, social, and economic structure. We have changed from an agrarian and commercially based maritime economy to a tourist and recreationally driven society within a few decades. Much of this resulted from the development of outboard motors, which allowed people to spend their leisure time fishing, cruising, and water skiing. As people arrived for boating-related activity, waterfront property became valuable, and the need arose for marinas, restaurants, hotels, and other services to support the recreational boating community. This article will describe the evolution of the outboard motor industry, which has had such a major impact on how we spend our leisure time.

THE EARLY YEARS: HEAVY MOTORS THAT SOMETIMES RAN

The first true American outboard motors were developed in the 1880s, and were powered by electricity. Most of them, however, never got beyond the experimental stage. In 1895, the Electric Boat Company in New York started manufacturing a thirty-five-pound electric outboard. Unfortunately, the batteries used to

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DRIVE IN STYLE WITH A CMM LICENSE PLATE

Beginning April 2001, Calvert Marine Museum is implementing a license plate sales program as a fundraiser for the Cove Point Lighthouse, which opens this May. Initially, only our members are being notified of the sale via their Bugeye Times newsletters. We are giving CMM supporters the first chance to bid on Calvert Marine Museum license plate numbers 1 through 50. Minimum bids are set at $100.00, and can be submitted via a special email address, cmmauction@yahoo.com, or by mailing the inserted coupon you’ll find in your newsletter. You can monitor your bid progress against other competitors by checking www.calvertmarinemuseum.com on the Internet every few days.

Bids for plates will be open until May 1, 2001. After that date, general license plate sales will be advertised to the public at $45.00 each. For those interested in direct purchase, numbers over 50 are available for sale to members for $45.00 each via the inserted license plate order form or by calling Lee Ann Wright at 410-326-2042, ext. 17. We ask our customers to remember that all purchase requests must be forwarded to the Motor Vehicles Administration; processing can take as many as six weeks before your new plates are mailed.

Help Calvert Marine Museum and show your support to the world by getting your bid in first. Any plate price over $25 is a tax-deductible gift when made out to the Calvert Marine Museum Society, Inc. For more information, call Lee Ann Wright at 410-326-2042, ext. 17.

NEW MEMBERS ON THE CMM BOARD OF GOVERNORS

Three new members were welcomed to the museum's Board of Governors at the annual board dinner in December. Richard H. Fischer Jr. is a well know businessman in Solomons; John P. Ford, a Lusby attorney who is presently counsel for the Commerce Committee of the U.S. House of Representatives; and Edward Gregory Wells of Prince Frederick, a local attorney serving presently as Master of Domestic Relations and Juvenile Causes for Calvert County. These new board members replace outgoing members Susan M. Fischer, Michael J. Moore, and Carmen Nance Sanders. C. Bernard Fowler and Dawn M. Szot were reappointed to second terms. Board chairman for the year is John A. Simpson Jr.

Members continuing to serve include: John P. Cook, RoxAnne Riddle Cumberland, Ralph T. Eppard Jr., Mary Anne Harms, Michael S. King, Carl M. Loffler Jr., John A. Simpson Jr., John C. Smith, Robert L. Swann, and George C. Tilghman. County Commissioner John Douglas Parran and CMM director C. Douglass Alves Jr. are ex officio members. Members of the museum's Board of Governors also serve as directors of the Calvert Marine Museum Society, Inc.

SET SAIL FOR THE BIG ISLAND!

On Saturday, September 29, 2001, the Calvert Marine Museum will hold its annual Bugeye Ball on the museum grounds. The theme for this lavish evening is “The Big Island,” in celebration of our own “Big Island” here in Solomons. Caribbean music, feasts, and a beautifully decorated setting will create one night of unforgettable fun. Reminder cards will be sent in May, and invitations issued in August. Because this event will fill quickly, we hope you mark the date and respond as early as possible.

Sponsorship is another great way to become involved in this fundraising event. Begin your journey to the Big Island by joining us as a Benefactor ($1,000), Sponsor ($500), or Patron ($250). Contributors at these levels receive complimentary tickets as well as recognition on ball invitations and programs. For more information on Bugeye Ball Sponsorship, please call Vanessa Gill at 410-326-2042, ext. 18.

We’ll see you on September 29th!

NEW CMM STAFF

A new staff member has been added to the Paleontology Department: Scott Werts. Mr. Werts comes to CMM from Pennsylvania State University with a degree in Earth Science and Geology. His paleontology background and experience are drawn mostly from Ordovician and Silurian invertebrates (505 to 410 million years ago). In addition to taking over some of the department’s administration and paperwork, he has begun to gather information and illustrations for a time-line mural that will set our Miocene gallery within the broader context of Earth’s long geologic history. Scott and his wife, Michelle, have welcomed their first child, Samantha Emerson Werts, into the world on January 25.

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C. Douglass Alves, Jr., Director
Paul L. Berry, Editor
Other contributors to this issue: Vanessa Gill, Lee Ann Wright, Debra Yorty

The bugeye was the traditional sailing craft of the Bay, and was built in all its glory at Solomons, the “Bugeye Capital of the World.” Membership dues are used to fund special museum projects, programs, and printing of this newsletter. Address comments and membership applications to:
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PLANNED GIVING: A PERSONAL LEGACY MADE EASIER

As a 501(c)(3) not-for-profit organization, the Calvert Marine Museum Society (CMMS) has a responsibility to keep up with news that makes it easy and even profitable for museum supporters to donate. Often, gifts that fall under larger or long-term categories can benefit the donor as well as the receiving institution. We’ve been actively researching planned giving topics to pass on to our museum members and fans.

Many are not aware that there may be significant rewards in donating stock investments or real estate by transferring ownership to their favorite non-profit. If a donor chooses, for instance, to help the museum with a gift of stock or property, he or she will be able to write off the full current market value of the asset, as opposed to what the original price was. Furthermore, no capital gains tax is incurred, unlike if the stocks or property are simply sold by the owner. The museum, then, is also free to sell the donation and realize the gift without paying capital gains tax.

Assets that are actually costing the owner can also be transferred to CMMS. The owner simply sells the asset, takes a tax loss on the sale when filing, and gets another tax deduction for the charitable gift.

Donations can also be made over time, through vehicles such as charitable remainder trusts or charitable lead trusts. With a lead trust, the donors or heirs keep the principal of an income-producing gift, while the charity gets the income. With the remainder trust, the asset is given to the charity while the income goes to the donor. Either way, consistent statements are produced that allow donors to document and even monitor their investment, and even keep some benefit to help their heirs.

If you are in the process of making charitable donations decisions and would like to protect your tax base in the process, Calvert Marine Museum is here to help. We are coordinating with trusted local attorneys and financial consultants who can make your choices clear and easy. This fall, expect to see a planned giving seminar here at the museum, where you can meet our advisors and learn details about what types of planned giving are just right for you.

Call the Calvert Marine Museum Development Department at 410-326-2042, extension 17, for more information about planned giving or the many ways to help Calvert Marine Museum with immediate gifts that help us all prosper.

DEANNA BOGART & TOM PRINCIPATO PUT ON STELLAR PERFORMANCES FOR WATERSIDE 2001

Playing for a sold out audience, blues artist Deanna Bogart rocked the CMM auditorium on February 10 with her sultry sounds and saxophone skills. The show, which raised money for the museum, kicked off the 2001 Waterside Music Series, presented by Ralph’s Dodge-Jeep and Cumberland & Erly, LLC. For the many fans who were introduced to Bogart at the May 2000 B.B. King concert, her auditorium show was a welcome addition to the 2001 lineup. The demand for Bogart tickets was so strong, a waiting list was established for those hoping to get a peek at the energetic singer. “The goal when we play live,” says Bogart, “is to create a fusion with blues and boogie genuinely at the core.”

On March 10, blues guitarist Tom Principato brought down the house with his amazing guitar licks and musicianship. Known for his ability to get audiences to collectively drop their jaws in amazement of his guitar talent, Principato’s Waterside performance was no exception.

Sponsors for the 2001 Waterside Music Series are Ralph’s Dodge-Jeep; Cumberland & Erly, LLC; Coors, Coors Light & Killian’s; Woodburns of Solomons; RadioShack - Prince Frederick/Dunkirk/Charlotte Hall; Roy Rogers; Main Message Center; Holiday Inn Select Solomons; Comcast; Bay Weekly; SMECO; and Mom’s in the Kitchen Catering.

For more information on Waterside Music Series 2001, please call 410-326-2042 extensions 16, 17, or 18.
Bob Smith, as Benjamin Banneker, told stories on February 25 as part of Black History Month. If you missed him this year, you can catch him next year. He’ll be back on February 24, 2002.

**VOLUNTEER SPOTLIGHT**

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dream to live in Southern Maryland and volunteer at the museum. Now, in addition to donating hundreds of hours to CMM, they also volunteer with their church, Hope of Southern Maryland, Helping Hands, and a variety of other organizations.

Taking a stroll down a nostalgia path, George and Liz recall the very first Girl Scout overnight at CMM. Unlike today’s program that specifies that only twenty scouts can spend the night at any one time, the original one hosted eighty teenage girls. This would have been a daunting experience for most — chaperoning and spending the night with so many children. Liz remembers the leader sitting down and crying because the girls were behaving so badly. Liz was shocked because she could not believe children could behave so well. They have been involved with this program ever since, even though for a long time they were forced to sleep on the museum love seats in the lounge. Times have changed, and now they have their own cots.

When asked what has changed most about the Calvert Marine Museum in the past eight years, they believe it has become a much friendlier place than when they first started. They enjoy the staff and volunteer interaction and are looking forward to having a lot more wonderful experiences here.

It has been five years since I first encountered the Halvosas. No longer working weekends, I miss seeing them on a regular basis. But, I suppose Sunday mornings after a scout overnight are still the best time to have to work at the museum.
power it weighed between 100 and 275 pounds, so there was not much public acceptance. Scientific American Magazine, however, examined the new motor and correctly foretold the future popularity of outboard motors: “This very ingenious and effective invention will be gladly welcomed by the sea and river sportsman. Its handiness and noiselessness make it admirably adapted to duck shooting, and it will commend itself at once to the special needs of the fisherman.” The prohibitive weight of batteries caused designers to start using gasoline to power the outboards. In 1896 the American Motors Company of Long Island produced a portable boat motor, with power of approximately one to two horsepower. Supposedly, twenty-five of the motors were produced, but none exists today.

A Harvard law student, Cameron Waterman, in 1905 developed the first commercially successful outboard motor. He got the idea for it while testing a repaired motorcycle engine that he had strapped to the back of a chair in his dorm room. He coined the term “outboard motor,” and produced in 1906 twenty-five of the Waterman Porto outboards, nicknamed “Coughing Sarah’s.” In 1907, 3,000 were produced and quickly sold. These engines were started with a hand crank, which had to be removed quickly; the gear case was exposed and required frequent lubrication with waterproof grease; and four dry cell batteries and a remote coil had to be attached to provide a spark.

In 1909, a remarkable husband and wife team, Ole and Bess Evinrude founded the Evinrude Motor Company. Legend has it that Ole was inspired to build the motor because while courting Bess, she wanted some ice cream while they were on an outing to an island over two miles from shore. He returned to shore for the ice cream, but by the time he rowed back to where she was waiting, the ice cream had melted. After they married, he designed and constructed the first “Evinrude” in his basement. The motor attracted a lot of attention when tested, and Bess convinced Ole to manufacture it. Ole only had a fourth grade education, and Bess had completed the eighth, but they started the company with Ole building the motors and Bess handling the front office. In the summer of 1909, Bess wrote the first company advertisement, and placed it in the local Milwaukee newspapers:

DON’T ROW - THROW THE OARS AWAY:

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YOU CAN’T BEAT IT!

BUY A NEW, FAST LIGHTWEIGHT ALUMINUM MOTOR

The Evinrudes’ business was flourishing, but the birth of a son and the strain of running the company left Bess in poor health. In late 1913 they sold their interest in the firm. One of the conditions of the sale was that Ole stay out of the outboard business for five years. They spent those years relaxing and traveling the country, while Bess’s health returned. By 1919, they were ready once again to revolutionize the industry.

NEW, FAST LIGHTWEIGHT ALUMINUM MOTORS

Technologically speaking, the outboard industry had remained virtually unchanged during the five years after the Evinrudes sold the company. Motors were still constructed of heavy cast iron and bronze, which limited their practical size to a single cylinder and low horsepower. In 1919, Ole Evinrude designed a revolutionary new motor made out of lightweight aluminum castings. He felt the industry was stagnant and needed to take advantage of improved metallurgy technology, which had been developed during World War I. He offered the new motor to the Evinrude Corporation, which still bore his name, but they failed to see the potential for this innovation and rejected his offer.

Undaunted, Bess and Ole decided to produce the new motor themselves, and in 1920 once again started a new company. Bess named it Elto for Evinrude Light Twin Outboard. The new twin-cylinder motor was called a Ruddertwin, as it was steered with a large aluminum rudder that extended behind the propeller. The new motor was also much less dangerous to start than the Evinrude Rowboat Motors. To start the old style Evinrudes, a wooden knob was used to spin the flywheel until the motor fired. The tendency of the knob to strike the operator’s hand earned them the nickname “knucklebusters.” The new Eltos had an automatically retractable knob that eliminated the problem.

The Ruddertwin, with its aluminum construction, was a success, and within a few years Elto passed Evinrude in sales. Since
the aluminum Elto motors were much lighter than those of their competitors, horsepower could be increased while still maintaining portability. Once again, Ole and Bess Evinrude had built an industry-leading company from scratch in fewer than three years. Aluminum castings, pioneered by Ole Evinrude, are still used today to produce outboard motors.

Despite the fact that over thirty companies were producing outboard motors in 1921, three brothers, Lou, Harry, and Clarence Johnson, entered the business that year. The Johnsons had recently been producing bicycle motors, but were put out of business when sales fell due to the growing popularity of the Ford Model T. Previous to that, these self-taught engineers had designed and flown the world’s first monoplane in 1911, and built large marine inboard engines for racing boats.

Their first outboard motor, known both as the Light Twin or Waterbug and introduced at the New York Boat Show in 1922, was an instant success. It was a revolutionary motor that used die-cast aluminum castings, ran much smoother, and at higher rpms than anyone else’s. These truly lightweight motors were very reliable, easy to start, and — unlike the Eltos — did not require batteries for ignition. The Johnson Motor Company quickly began to dominate the industry with a series of rapid innovative designs.

In 1925 Johnson tested a new motor, the six horsepower P-30 Big Twin, which would forever alter the use and development of outboard motors. In early tests the P-30 broke the world outboard speed record of eleven miles per hour. By the time it was first sold to the public in 1926, the P-30 had pushed the record to a then phenomenal thirty-two miles per hour. The speeds resulted from the fact that the engine, for the first time, had sufficient power to make a boat plane.

Setting new world records for speed and winning powerboat races was a public relations bonanza for Johnson, boosting sales of their other motors. Other companies responded with more powerful outboards, and the competition between outboard firms for speed supremacy would last for many decades. The outboard companies never expected to sell many of the larger, faster motors, but the public relations boost from media coverage was good for sales. It turned out, moreover, that people really liked the bigger, faster motors. Once boats could be made to go fast with outboard motors, new recreational uses quickly developed. By 1927, less than a year after Johnson introduced the first four-cylinder, two-cycle outboard in 1928. The Elto Quad, which developed eighteen horsepower, pushed boats to new speed records. The Elto Quad and the smaller Speedster twin cylinder resulted in soaring popularity for Eltos, although Johnson was still the leader in sales. The original Evinrude Company, lacking in technological innovation, was in serious financial difficulty due to lagging sales. It was sold several times in the 1920s.

Johnson’s good fortunes were also to turn downward with the crash of the stock market and resulting depression era. The year 1929 started well for the Johnson Motor Company, which clearly dominated the industry in sales and innovation. In January, the new Sea Horse line was introduced, featuring a logo with beautiful advertising artwork, and offering several large new motors. These motors were very popular. Innovations that year included a release charger to make starting easier, rotary valves, and underwater exhaust for quieter running. Up until this time, outboards had above-water exhausts that were very noisy. When fishermen left early in the morning, everyone around was awakened from the noise of the loud motors.

Johnson made two unfortunate decisions, however, leading to financial ruin. In 1929 they borrowed heavily to launch factory improvements and a massive advertising campaign. Despite the recent stock market crash, they also introduced a line of beautifully styled boats to match their engines. Unable to pay off their debt, due to depression-era low sales, the company went into receivership in 1932.

That same year, Bess Evinrude’s health failed and she passed away. A brokenhearted Ole Evinrude died the next year, and the industry lost the two people most responsible for bringing the fun and sport of outboating to the American public. (To be continued in next issue)
Member's Trip to Camden Yards!

This year the museum will provide **FREE TRANSPORTATION** (an $8 per person savings) to and from the stadium while members enjoy left field LOWER BOX seats!

**Baltimore Orioles**

**vs.**

**Chicago White Sox**

Saturday, June 23rd, 1:15 P.M.

Game & Bus - $18 per person!

- Left Field LOWER BOX SEATS!
- FREE Deluxe, air-conditioned charter bus

Estimated Departures (to be confirmed)
- Calvert Marine Museum: 10:00 A.M.
- Dunkirk Market Place: 10:30 A.M
  (Safeway shopping center)

PAYMENT MUST BE RECEIVED BY MAY 4TH!

Seats are limited to first 140! Mail your form or fax it to 410-326-6691!

Tickets will be distributed as you board the bus.

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**Reservation Form - CMM Members’ Trip to Camden Yards**

**Registration Info:**
Name: ________________________________
Address: ________________________________
Daytime Phone #: ________________________________
Evening Phone #: ________________________________
We will board the bus at: ___ CMM
___ Dunkirk Market Pl.

**Reservation Info:**
Please reserve _________ tickets
x $18 = $___________ total

I would like to reserve _________ seats for the free bus ride! (You are not required to take the bus to the game in order to purchase seats through the museum.*)

*Those not taking the bus should call Vanessa Gill at 410-326-2042 x18 to arrange ticket pick-up.

**Payment Info:**
☐ Check Enclosed (payable to CMMS)

Bill to my Credit Card
☐ Visa ☐ Mastercard
Credit Card Number ____________________________
Expiration Date: ____________________________
Signature: ____________________________

Mail form to:
Membership Office
Calvert Marine Museum Society
P.O. Box 97
Solomons, MD 20688
FAX: 410-326-6691

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For more information, call
Vanessa Gill at 410-326-2042, ext. 18
VOLUNTEER SPOTLIGHT

Volunteers of the Year: George and Liz Halvosa

By Leslie King, Volunteer Coordinator

Sundays after a Girl Scout overnight used to be my favorite time to work at the museum. There would be a warm welcome, fresh coffee, and the positive, contagious attitude of happy volunteers. Even with hordes of little children running about, Liz Halvosa would just smile at any childish antic or empathize with more serious souls, while her husband George sleepily cleaned up their overnight facilities — better known as the museum lounge.

When the Halvosas were informed that the museum staff had selected them for the prestigious “Volunteer of the Year” award, they seemed genuinely surprised. For people who started volunteering in 1993, who spend one night a month “protecting the museum from the scouts,” and who assist in a variety of positions with several departments, it is not hard to imagine why they were selected for the award. Cumulatively, they have volunteered 2056.75 hours, with George at 921 and Liz at 1135.75. George took a traditional route of starting on the information desk and being an oyster house host, while Liz worked as a host in the Discovery Room and at the touch tank. Liz still works in the Discovery Room, while George occasionally works special events at the information desk. As volunteers, they consider themselves “generalists, rather than specialists.”

While interviewing the two of them, I am reminded of our pleasant Sunday coffee conversations. They wonder what sort of telling secrets I am going to reveal in this article. I will tell you that they met at a Parents Without Partners event, and George was immediately taken with Liz’s long red hair. The rest of the story, in a nutshell, is that they fell in love, got married, and finished raising Liz’s son and George’s son and daughter. Now they nurture six cats, a dog, and twenty ducks.

Before all this, they lived different lives. Liz made a career for herself in the financial aid side of private schools. Starting as a bookkeeper, she worked her way up in management. George, after graduating from Drexel University as a mechanical engineer, did not choose to become one. Instead, he spent thirty-two years working for the U. S. Patent Office as a patent examiner, specializing in brakes.

When it came time for George to retire, they decided to move to St. Mary’s County where George had spent his boyhood summers at a family retreat. It was his long-term (Continued on Page 4)