MARYLAND

Research, Education, Outreach *July-August 1996*

MARINE NOTES

SPOTLIGHT ON PHILOSOPHY & PUBLIC POLICY

Living in Bay Country
The Places We Call Home

Merrill Leffler

Chesapeake Bay means different things to different people — it is a region of farmers and motel operators, commuters and vacationers. It is a playground for recreational boaters, a dumping ground for sewage wastes, a rich habitat for waterfowl and wildlife, a highway for tankers. It includes cosmopolitan cities such as Baltimore and Washington as well as towns that are distinctively oriented towards the Bay.

"The Chesapeake," says Mark Sagoff, "really takes its shape in our minds." Not necessarily from ecological forces but from interactions with human beings and from personal memories. Those memories may be connected in varying ways to different places — our homes, our communities, natural landscapes and the ones we build.

"Our aim is to provide a framework for understanding the Bay not simply in biological and economic terms, but in cultural and psychological terms."

Sagoff, senior research scholar at the Institute for Philosophy and Public Policy at the University of Maryland, College Park, says that with the decline in the economic importance of farming and fishing, the Bay has lost much of its significance as a natural resource from which people wrest their living. "Even though recreational uses of the Bay flourish," he observes, "the regional economy is no longer founded on commercial farming or fishing. As a result, a far smaller proportion of the population feels any economic connection with the Bay's ecological features and systems."

This is not to say that you need to make a living from the Bay to derive a strong sense of place and connection to it. But it may be harder to acquire, says David Wasserman, "for the rapidly growing proportion of Chesapeake residents who are commuters, spending most of their waking hours in places that have nothing to do with the Bay." Wasserman is a research scholar also at the Institute for Philosophy and Public Policy.

Since so many newcomers are moving into Bay country, just what the Chesapeake means to them becomes an important question for those concerned with its ecological restoration. The population of newcomers will eventually outnumber those whose families remember the days of farming and fishing. These more recent arrivals, Sagoff believes, often "do not have direct ties to the land or the water and, as a result, may not necessarily have strong con-

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cerns about what development does to the natural environment."

The Bay region is always in flux as new people with new interests arrive. Over the nearly four centuries since Europeans came to its shores, says Sagoff, "you could say there have been many different Chesapeake Bays." However, pristine areas and more sparsely populated coastal communities throughout the Bay watershed are perhaps experiencing more change in the last decades of the 20th century than during the entire time since Colonial settlement began. Forested and agricultural lands are rapidly giving way to new housing, new highways, new schools, new businesses, new shopping centers and strip malls. Towns and villages and once-isolated rural communities are expanding rapidly to include people who commute to distant jobs and spend most of their day away from the place where they live.

Sagoff argues that in order to restore the Chesapeake Bay ecosystem, we have to understand the values we wish a restoration to serve, which means reexamining why we and our predecessors have valued the Chesapeake. For example, what do those who live in the Chesapeake region really want? More shopping centers or more woodlands? More roads or less stormwater runoff? More rockfish on their plates or more swimming wild in the Bay?

What do people feel is most important in the place they call home — responding to human needs or the needs of the natural system, or to some combination of both?

To probe these questions, Sagoff, Wasserman, graduate student Sara Gottlieb, and journalism professor Larissa Grunig have been bringing Marylanders from varying walks of life together in focus groups, trying to gain a sense of what matters to them about where they live and how that relates to their feelings about the Chesapeake region. "Our aim," Sagoff says, "is to provide a framework for understanding the Bay not simply in biological and economic terms but in cultural and psychological terms."

"What's an oyster got to do with where you live?"

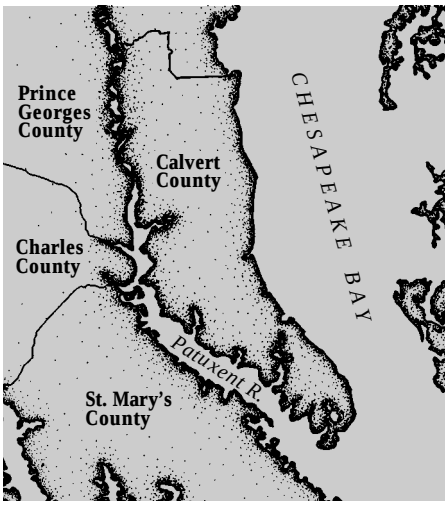
Looking to the Future

The research team chose focus groups because, says Sara Gottlieb, "they enable us to explore a single topic in depth with people who have similar interests and backgrounds." The aim is to gather enough diverse groups to give a representative cross section of society in the Bay region. The team has focused on Calvert County because it is one of the state's fastest growing counties, where new development is burgeoning, from cluster housing to large single-family dwellings to strip malls and shopping centers.

To date, the research team has met with three groups. The first comprised people who moved to Calvert County in the past eight years, with income in the middle or upper middle range. "This is the fastest growing group in the county," says Wasserman, "the vanguard of suburbanization." The second group included people born in the county or who had lived there most of their lives. A third focus group, the most recently convened, consisted of African Americans, most of whom had a long history of living in the county.

Many of the residents who recently moved to the county were attracted in part by the rural landscape and the presence of nature. As Wasserman notes, "they displayed a keen appreciation of the natural and rural character of Calvert County. But they expressed less interest in, and knowledge of, the details of the county's ecosystem or history, and relatively little involvement in activities related to the Bay."

When asked about the loss of oysters in the ecosystem, one recent arrival said, "What's an oyster got to do with where you live?" A long-term resident said that in his discussions with new county residents such attitudes were probably the most prevalent. "They weren't raised with the culture of oysters and mussels and crabs. When I was a kid," he said, "we walked out and picked up oysters and mussels, and these people aren't used to doing that. They don't even think about it." On the other hand, a newer resident said that his concern wasn't the oyster itself but the resources. "Oysters are an indicator of the health of the Bay, [which] is very important because we chose to live down here for the ecology. I think we watch those indicators. We don't go out and harvest the shellfish per se, but the presence or absence of shellfish has broader implications for us."



For families with children, there is the appeal of good schools, low crime rates and the ease, or friendliness. "The greatest thing about coming down here," said one participant, "is going down the street and seeing people by the side of the road not fighting, but talking. You wave at them as you go by. It's fantastic. You know, you can't buy that."

And yet, there is also among some of the newer residents a sense of isolation. A number of the participants in the first focus group live in large single family homes, says Wasserman. The combination of limited time at home and physical separation from others appeared to contribute to the feeling of isolation and disconnectedness that several experienced. "One of the things I've found in Calvert County," said one, "is you sort of tend to be isolated in your little pockets of development…I get a feeling

I'm not meeting a wide range of people." Another said, "There's been discussion about the damage done by five-acre zoning because it puts people so far away from each other, they don't connect." And a third, "I found down here you really have to make an effort to get out and meet people by going to the churches or getting involved in your community association. All these things take time, and people who work and have children don't really have time."

As might be expected, native residents — they make up some four percent of the population — identify with their memories of the area. For them, the Bay and Patuxent River are central. An 82-year old remembered, "We had a school boat rather than a school bus. You'd go down these peninsulas and pick the kids up to take them to school. The roads were muddy and almost unpassable, so we were told we were the only school east of the Mississippi that had a school boat."

One man recalled, "Years ago, every community had a store, and that was the focal point of the community. Some communities had more than one store, but they were all little grocery stores with a gas pump out front and a front porch where people came in the evening to sit and talk and find out what went on in the world. But [the community stores are] just about extinct. And those little communities are not there . . . except in what you see going up and down Route 4. They've become subdivisions."

Are there any common threads to these groups? A major one, says Mark Sagoff, is that a place, whether for the native or the newcomer, is defined by human relationships. "Everyone seemed to relate to some experience with others in the community. Over and over again it is the personal experience."

"A place is a location that has been claimed by shared feelings and memories," he says. "And what a place does is draw people together."

What Makes a Place Home?

To understand some of the issues that influence how people feel about place, one can look to architectural community designers like Andres Duany and Randall Arendt who have made their reputations by designing and promoting attractive cluster development and "neotraditional" towns. Both have recently published books: Duany, together with Elizabeth Plater-Zyberk, *Designing Open Space Subdivisions*, and Arendt, *Towns and Town-Making Principles* and *Rural by Design: Maintaining Small Town Character.*

One of the biggest problems with new housing developments in the Chesapeake region and other places is sprawl development. Often, Arendt says, there is nothing but the dead space of an asphalt road between two houses that confront each other across the vast expanse of their bare lawns. "There is nothing friendly about these spaces," he says.

Duany points to the evolution of sprawl. First, he says, especially after World War II, we built housing developments — places where people live but do not work or shop. He contrasts the U.S. policy for helping GIs build new homes with the Canadian policy where veterans could also use government funds to renovate and restore older homes. Second, he argues, we built shopping centers — places where people shop but do not live or work (except in the stores). And finally, he says, we created office parks — places where people work, but do not live or shop. During the process, we lost the traditional pattern of the town, the traditional glue of the community.

"In a real town the wealthy can walk out into the street and confront — imagine — the teacher of their children, right there on the sidewalk," Duany told a recent audience at a University of Maryland conference on environmental finance. The result, he says, is that both teacher and parent have the chance to discover that they are each human, and not members of some unsympathetic "other" class.

Even the cluster development espoused by Arendt and Duany cannot solve all of these problems, however. It makes no sense, says land use consultant Michael Siegal, to design a clustered town in an area where there are no services and no infrastructure. Such towns, he says, have been built in the far outlying areas of the Washington megalopolis, and people find that they must drive long distances just to take care of daily errands. Such "towns" will draw additional development their way, ultimately creating more sprawl, perhaps even the "strip development" they were intended to replace. After all, traditional towns took root in a particular area because

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something logically drew people there: a crossroads, a certain industry or business, a certain geographic feature. If the main criterion for a new "town" is simply to be away from unpleasant sprawl, it may not have the subtle critical mass required to make a town a relatively self-sufficient place to live.

Mark Sagoff distinguishes between "bottom up" and "top down" development, the first arising from the land (or the water) organically, as a harbor or fishing village might, and the second resulting from an external force, as when a corporation decides to locate in a rural setting, for example. In the first instance, the landscape and the living conditions will reflect the evolution of the people who have lived there and their livelihood, their way of life. In the second case, grocery store chains and discount stores may move in to serve the new clientele, but there will be little in this development to reflect the long history of the land or the people who have gone before.

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Sagoff and his team are still completing their project in an attempt to understand what people think and feel about their lives near the Chesapeake Bay. So far, in the focus groups, there appears to be a conundrum: our search for a place to call home — by the Bay, say, or near the woods — has taken with it our contradictory desires, for solitude and community, for beauty and convenience, for privacy and companionship. One thing seems clear, says Sagoff. How people come to terms with one another and with their surroundings will profoundly affect the natural environment of the Chesapeake Bay and plans for its ecological restoration. ■

To learn more about this project on the concept of place in Chesapeake Bay, visit Sara Gottlieb's homepage on the Web: http://cbl.cees.edu/~gottlieb/place/

Are There Better Ways to Grow?

"It was already obvious in 1970 that we would become a magnet for growth," says Bernie Fowler. "People were looking for peace and tranquility and that's what Calvert County had to offer." That was more than 40,000 people ago.

In the 1970s, the population of this largely agricultural county had already doubled since 1950. The widening of Route 2/4, Calvert County's major thoroughfare, had begun along with the building of Baltimore Gas and Electric's nuclear power plant at Calvert Cliffs.

This is the kind of public construction that invites growth, promotes development, and accelerates change. At first, Calvert County was not prepared — developers came in and started building but there was little in the way of guidelines, for instance, no subdivision regulations, no road specifications. "So much needed to be done," says Fowler, a former county commissioner and recently retired state senator.

The first step was the Peninsula Plan, a long-range blueprint that involved "bringing county residents together to try and design the best possible growth plan we could," says Fowler. This plan led to the county developing recreational areas, building a new hospital, instituting an agricultural preservation program, and improving schools. All of this progress made Calvert more attractive and even more people came. "It's like a dog chasing its tail," says Fowler.

What does this rapid development mean for the future? Is it possible to retain qualities that first attracted people to the county, while still accommodating growth — and what would it take? These are the kinds of issues that the county continues to deal with.

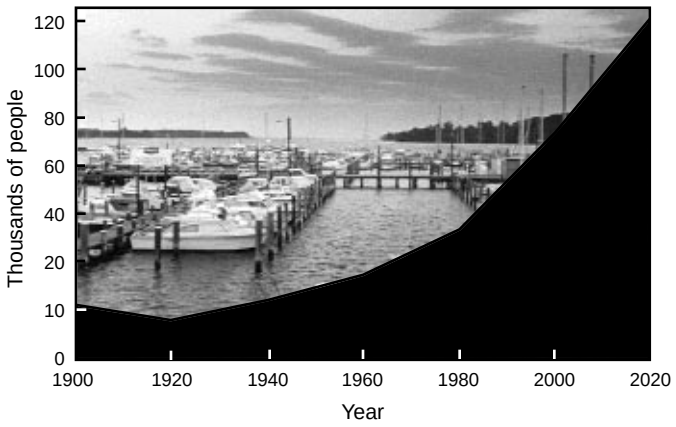
In 1992, the Department of Planning and Zoning did a survey of county residents, says director Frank Jaklitsch, to see if "there are physical things we could do to promote a sense of being at home in Calvert County, a sense of identity, as well as opportunities for interaction or involvement."

"Through forums and workshops," says Jaklitsch, "we evolved several notions dealing with town centers — identifying a sense of place with town centers, not just [building] strip malls."

"We were also interested in [giving guidance to] developers of subdivisions," he says. "Could we come up with some approaches to give people a sense of place, rather than just suburban boxes?" The outcome is a series of guidelines that new subdivisions must meet: they must be buffered from main roads and adjoining properties, they must be clustered, and they must have a "focal point," an area that is central to the cluster and gives some sense of coherence. "We wanted to be flexible," Jaklitsch says, "and not specify what such a focal point should be — we are looking for innovative approaches."

Though it is too early to say how these guidelines are working, Jaklitsch is encouraged by recent innovations in some of the new subdivisions. Still, they are only part of the answer. The big question remains, says Bernie Fowler: can we continue to grow and still sustain the kind of life we have had in Calvert County? Stay tuned to find out. ■

Population in Calvert County



Photograph by Skip Brown. Graph by Sandy Rodgers.

Coastal Bays Agreement

Skip Brown

At a June 24 ceremony in Ocean City, the state of Maryland, Worcester County, the cities of Berlin and Ocean City, Maryland, and the U.S. Environmental Protection Agency (EPA) signed an agreement to find ways to protect and restore Maryland's coastal bays. By signing the Management Conference Agreement, they all agreed to work together with other stakeholders in the area to produce a conservation and management plan in three years. The plan will form the basis for future activities needed to ensure that "the bays will retain their high commercial, recreational, and ecological values for future generations."

As a result of several recent studies and environmental assessments the following have been identified as problems or in need of further evaluation in the coastal bays: excess nutrients, loss and degradation of habitat, declines in fish communities and yields, chemical and pathogen contamination, and impacts from water-based activities. The Management Conference of local, state and federal officials, in partnership with area citizens and businesses, will work to solve these problems.

Maryland's coastal bays include the Assawoman, Isle of Wight, Sinepuxent, and Chincoteague bays and the smaller bays of estuaries within these larger bodies of water. The tributaries to these bays — St. Martin River, Turville, Greys, Manklin, Trappe, Newport, and Marshall creeks — as well as the land draining to the bays' waters are also included in the study area.

For more information, contact Nancy Howard at the Maryland Department of Natural Resources, (410) 543-6594.

MEES Graduate Receives Coastal Management Fellowship

Skip Brown

Maryland Sea Grant College is pleased to announce that University of Maryland Marine-Estuarine-Environmental Sciences (MEES) graduate Christopher Rilling has been selected as one of six Coastal Management Fellows nationwide for 1996-98. This new fellowship program is funded by NOAA's Coastal Service Center and awarded through recommendations from Sea Grant directors around the country.

The fellowships allow post-graduate advanced degree students an opportunity for professional on-the-job education and training in coastal resource and policy. Each fellow works in a different host state, providing specific technical assistance over two years to state-level coastal resource management programs related to federal policies and regulations. Rilling will begin work with Connecticut's Tidal Wetland Restoration Program in partnership with Connecticut College on October 1, 1996.

Rilling completed his masters degree in the MEES program, specializing in fisheries science. Most recently, he worked as a full-time faculty research assistant with Edward Houde at UMCEES Chesapeake Biological Laboratory.

Maryland Sea Grant recommended two applicants this year from a competitive pool of talented applicants from UMCP and UMCEES laboratories at CBL and HPEL. Overall the fellowship panel selected twelve finalists from nominees provided by the 29 Sea Grant program directors. From the finalists, who competed at a July workshop at the Coastal Services Center in Charleston, South Carolina, the six fellows selected were matched to projects chosen from a national competition of states earlier in the year.

Fellowships pay a yearly stipend of $30,000. For information on Coastal Management Fellowship program, contact Susan Leet at the Maryland Sea Grant College, by phone (301) 405-6375, or e-mail: leet@umbi.umd.edu.

Columbus Center Dedicates New Wetland Site

Thirty area youngsters joined Maryland Governor Glendening on July 19 in a planting ceremony to mark the completion and official opening of the Columbus Center's wetland site. On the southwest end of the Columbus Center's prime location in Baltimore's Inner Harbor is a newly planted wetland-in-progress — a distinctive piece of sculptural architecture which will function as an outdoor programming tool to educate the public on how vital wetlands are to maintaining the earth's ability to purify water.

Students, teachers, tourists and all other visitors to the site will learn about the working science and technology required to create such a visually compelling and environmentally useful "plantscape" in an urban environment. Student and teacher interns will maintain the site as part of the Center's future and ongoing educational programs.

To learn more about the Columbus Center, contact Paula Dozier at (410) 576-5750.

CyberNotes

CEES Web Site
http://www.co.cees.edu/

Information about the University of Maryland Center for Environmental and Estuarine Studies (CEES) is now available online via the World Wide Web. The CEES web site provides a general overview of research, education and service at the Center's three laboratories — Appalachian Environmental Laboratory in western Maryland, Chesapeake Biological Laboratory in southern Maryland, and Horn Point Environmental Laboratory on Maryland's Eastern Shore. It also provides links to more detailed information about environmental research in the Chesapeake Bay and beyond.

Included in the site is a web page on the Chesapeake Bay Observing System, which explains how scientists measure the Bay's health using moored sensing buoys that transmit information to satellites. In the near future, people will be able to log onto the web site to view continuous readings of salinity, oxygen, temperature, and wind speed that the buoys report in 15-minute intervals. Teachers will be able to take advantage of this data for use in their classrooms.

Chesapeake Bay Program Scientific Links
http://www.chesapeake.org/stac/home.html
http://www.chesapeake.org/crc/crc.html

Information about the Chesapeake Bay Program's Scientific and Technical Advisory Program and the Chesapeake Research Consortium (CRC), including CRC's Environmental Management Fellowships for bachelor's and master's level students.

Maryland Sea Grant Has Publications Online
http://www.mdsg.umd.edu/MDSG/Pubs/index.html

Maryland Sea Grant College publications and video lists are now accessible through its web site. Visitors to the site may search for topic areas or specific publications and may place orders online. Included in the list are detailed descriptions of books and videos.

Fisheries Statistics
http://remora.ssp.nmfs.gov/

The National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), has a new World Wide Web site on Fisheries Statistics. The home page allows interactive access to Marine Recreational Fisheries Statistics Survey (MRFSS) and trade data bases. Access to the historical commercial monthly landings data bases is in development.

Wetlands, Oceans and Watersheds
http://www.epa.gov/OWOW

At this web site, you can browse through EPA newsletters, fact sheets, brochures, publications, regulations, press releases, and Congressional testimony; order EPA publications online; request STORET water quality data; join in a nonpoint source discussion group; visit Know Your Watershed and Surf Your Watershed; and more.

Publications, Etc.

Northwest Salmon

The Northwest Salmon Crisis: A Documentary History, edited by Joseph Cone and Sandy Ridlington (of Oregon Sea Grant), is a new book available from Oregon State University Press. This book explores the cultural forces that have — in just 150 years — brought Columbia River salmon close to extinction.

A collection of historic documents and contemporary essays, the book examines the plight of the Pacific Northwest salmon and illustrates the early warning signs of today's crisis. *The Northwest Salmon Crisis* (hardcover, $29.95, 384 pages) is available from OSU Press, Dept. NSC, 101 Waldo Hall, Corvallis, Oregon 97331-6407. Enclose a check or money order, including postage and handling ($2.50 for one book, $.75 for each additional book).

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End Notes

Malone Named President-Elect of ASLO

■ *Thomas C. Malone,* director of the Horn Point Environmental Laboratory, part of the University of Maryland's Center for Environmental and Estuarine Studies (CEES), is the new president-elect of the American Society of Limnology and Oceanography (ASLO). ASLO is one of the leading international associations for environmental research on lakes, rivers, groundwater, estuaries and oceans. The two-year post precedes Malone's term as president which begins in 1998 and will extend through the year 2000. He was elected by the society's membership to lead ASLO in promoting aquatic sciences and the application of scientific information toward the development of sound environmental policies.

National Sea Grant Has New Director

■ Ocean scientist, educator and businessman *Ronald C. Baird* became the new director of the National Sea Grant College on June 3. NOAA administrator D. James Baker called Baird's selection "an exceptional choice." Baird will direct the National Sea Grant College Program, a network of over 300 colleges, universities, research institutions and marine organizations that work in partnership with industry, the federal government and state governments to support marine and Great Lakes research, education and extension services. To find out more about the National Sea Grant College Program, visit its web site at: http://www.mdsg.umd.edu/NSGO/index.html.

Project WET

■ Conservation education is wet, wild and wonderful. That's Project WET, Project WILD and "wonderful" Project Learning Tree, international conservation education programs developed by the Western Regional Environmental Education Council (WREEC) and administered in Maryland by the Maryland Department of Natural Resources (DNR). The programs feature six-hour workshops for training teachers (and others who work with youth) to use a series of learning activities to teach students in grades K-12 about conservation.

All three programs are currently collaborating with the Maryland Department of Education to develop mega-tasks and practice evaluations. By fall, these new tools will be incorporated into the training program. Educators who have already trained in Projects WET, WILD or Learning Tree will be positioned to take advantage of the new curriculum materials. For more information, or a brochure listing workshops available this summer and fall, contact WET at (410) 974-8478, WILD (410) 974-3195 or (410) 543-6595, or PLT at (410) 543-1950.

Job Opportunities

■ *Social scientist, NOAA Coastal Services Center, Charleston, South Carolina.* The person hired for this position will be responsible for integrating social science information and peer review processes into the activities of the Coastal Management Services area (CMS).

Qualifications for the position, which is a GS-13 or GS-14 grade, include a bachelor's degree in behavioral or social science and specialized experience. To apply, submit application form SG-171, a detailed resume or OF-612, by August 23, to: Department of Commerce, Eastern Administrative Support Center, Human Resources Division, 200 World Trade Center, Norfolk, Virginia 23510. For more information, contact Kathlyn Baker at (804) 441-6880 or Bobby Thorne at (804) 441-6805.

Call for Papers

■ *Coastal Zone '97: New Directions, July 20-26, 1997, Boston, Massachusetts.* Abstracts are invited for presentations, posters and special sessions for the International Coastal Zone Management Conference. Since it will be held during the 25th anniversary year of the Coastal Zone Management Act, this conference will focus on past as well as present and future issues. Session themes are organized under these titles: Where Have We Been? Where Are We Going? New Directions: Charting the Course. Abstracts are due no later than September 1, 1996. For details on suggested topics and format for submitting abstracts, contact: Dr. Martin C. Miller, USAE Waterways Experiment Station, Attn: CEWES-CR-O, 3909 Halls Ferry Road, Vicksburg, Mississippi 39180.

■ *With Rivers to the Sea: Interaction of Land Activities, Fresh Water and Enclosed Coastal Seas, August 3-8, 1997, Stockholm, Sweden.* This is the Seventh Stockholm Water Symposium and the Third International Conference on the Environmental Management of Enclosed Coastal Seas (EMECS). Abstracts for presentations and posters are welcome under the following general areas: understanding and solutions, governance and politics, and citizen involvement. Abstracts are due by October 1, 1996. For a more detailed list of topics and formatting instructions for submitting an abstract, contact: Joint Conference Secretariat, Stockholm Water Symposium/Stockholm Water Company, S-106 36 Stockholm, Sweden, phone +46 8 736 2022, fax +46 8 736 2022, e-mail: sympos@sthwat.se.

Calendar

SEPTEMBER

18 — Environmental Studies Program Open House

Johns Hopkins School of Continuing Studies, Homewood Campus, Shaffer, Room 3, 3400 N. Charles St., Baltimore, Maryland. The Certificate Environmental Studies (CES) Program will hold an open house where guests can meet with local environmentalists and CES coordinator Charles Stine, other CES instructors and currently enrolled students. The Certificates Programs, endorsed by the Maryland Department of Natural Resources, is for individuals who want to become actively engaged in learning more about ecology, conservation, and environmental law and policy. Three tracks are available for students: environmental studies, forest ecology and management, and wetland ecology and management. The certificates are useful to those with or without a science background and may be completed within two years. Light refreshments will be served. For more information, call (410) 516-4842.

21 — Bike and Hike for the Bay

Fourth Annual Biathlon, Solomons Island, Maryland. A bike and hike for the Bay, the Biathlon is a fun event for the whole family that's also for a good cause. Proceeds will provide scholarship funds for graduate students to support Chesapeake Bay research at the University of Maryland's CEES Chesapeake Biological Laboratory in Solomons. Participants can bike from Solomons to Calvert Cliffs State Park (6 miles) and get a ride back, or they can bike back to Solomons, or they can hike to the beach and back (3.5 miles). Helmets and bicycle inspections on site are required for all bikers. Registration costs $20 for adults and $10 for children under 12. For more information, call (410) 326-7328 or (410) 326-7214.

NOVEMBER

20-23 — Shellfish Restoration Conference

International Conference on Shellfish Restoration (ICSR '96), Hilton Head, South Carolina. This conference will gather those with a commitment to restoring degraded coastal ecosystems worldwide.

This year's conference will focus on the restoration of molluscan shellfish and their habitat. The conference should be of interest to government officials, resource mangers, local residents, industry representatives and others interested in improving the health of coastal ecosystems.

To request a conference brochure and registration information, contact: ICSR, '96, South Carolina Sea Grant Consortium, 287 Meeting Street, Charleston, South Carolina 29401, phone (803) 727-2078, fax (803) 727-2080.

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