Maryland Chapter of the Sierra Club

Early Summer 2004

Not in My Back Yard: Having a Lawn That's Green, and Green

What's Dying Besides the Pests?

CAUTION

How Pesticides Harm Maryland Wildlife

by Lisa M. Mayo — Summer brings sandals; a thirst for tall, cold drinks; volleyball; and the annual appearance of warm-weather pests. From threats of Lyme disease or West Nile virus to the promise of a lush green lawn, this summer will force Marylanders to decide whether or not they will use pesticides around their homes.

In the United States, home pesticide use is a big business. The EPA estimates that Americans spend over

\$2 billion a year on home and garden pesticides, while applying nearly 70 million pounds of active pesticide ingredients to urban lawns — 10 times as much chemical pesticides per acre as farmland. And the diversity of pesticides being used is no less troubling: a 1994 Maryland Department of Environment survey conducted on nearly 500 homes in the Baltimore area

found that nearly 50 herbicides, insecticides and fungicides were commonly applied by residents or commercial applicators.

But while consumers and lawn care companies fer-

vently apply these pesticides and dutifully put up those little pesticide flags to warn neighbors about pesticide use, they give little thought to how this proliferation of chemicals affects wildlife. The truth is, wildlife is often a hidden and unintended victim of the use of pesticides.

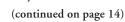
Consider the following situations:

A homeowner decides to treat his family's lawn with insecticide granules in order to reduce the tick population in his yard and thus lower the risk of Lyme disease,

> but he fails to realize that the birds at his backyard feeder will also eat the poisonous granules, with potentially fatal results. He also fails to consider the fact that the granules are highly toxic to aquatic animals and could easily wash into the stream that is running through the lower end of his property.

Another homeowner decides to treat her lawn with the popular her-

bicide 2,4-D, but doesn't heed the label that warns against using the product on windy days. The drift carries the pesticide into her neighbors' yards and into a



The Grass Crop of the **Chesapeake Bay Watershed**

Spring is here and the grass is growing. Combine sunshine, water and soil together, and you get a lush green yard. The total biomass produced by a suburban lawn is impressive — nearly two tons of grass clippings are produced by one acre of lawn during a single growing season (dry weight). In this article, we explore the surprisingly large "crop" of grass grown in the Chesapeake Bay watershed, and assess its impact on the health of the Bay.

According to a recent survey, almost 90percent of Bay residents have a lawn. It may surprise some, but turf grass is a significant and growing crop in the Chesapeake Bay watershed—covering some 3.15 million acres and growing at a rate of five to ten percent each year. In Maryland, the area devoted to managed turf consumes more land area than corn, soybeans and wheat combined. To put it in perspective, there are more than twice as many acres of managed turf in the Chesapeake Bay watershed as there are freshwater wetlands.

A lot of fertilizer-where does it go?

According to a recent survey, just about half of Bay residents fertilize their lawns, with the average homeowner (continued on page 16)





Letter from the Chair

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You and I Have to Start Talking



Betsy Johnson, Chair

that the Bush adminis-

tration has rolled back

since it took office in

January, 2001. I've

been following the

Bush administration's

environmental policy

for two years, and I had

never seen anything

that brought home more clearly the extent of the dam-

age being done to our country's environmental legacy.

As we stood lined up along the scroll, which did not

even fit in the hotel meeting room, some of us took

turns picking out items at random and reading them

off. And as we did, we could hear audible gasps from

the other people in the room. This is truly heart-stop-

On a recent trip to a Sierra Club event in San Francisco, I had occasion to hear a talk on the environment given by Senator Barbara Boxer of California. She surprised us by rolling out a very long scroll (30 feet long, two feet wide) that presented a list of all the environmental protections

Most Americans don't know or believe that the Bush Adminstration is systematically rolling back our environmental protections.

Sadly, most Americans don't know or believe that the Bush administration is systematically rolling back our environmental protections. That is why you and I have to start talking. We need to learn to talk about these issues to our friends, our family, our neighbors and co-workers. But how do we start this conversation? Well, fortunately, we at the Sierra Club have a little project to help folks discover how to start conversations about the Bush administration's record on environmen-

tal issues. It's been tried in a number of venues, the last one being Virginia where a participant was heard saying "I didn't know what I was going to say to my neighbor and now I do."

We'd like to present it to lots of folks - so I'm going to challenge you all to think about groups you belong to that might like to have an interesting program that teaches people how to start productive conversations with their neighbors. And when you do, give me a call at 301 656-4948, and we'll work out a time to get together. Looking forward to hearing from you.



Club, Cheney Face Off at Supreme Court Vice President Seeks to Keep Energy Task Force Documents Secret

No Public

On April 27, the Sierra Club went manoa-mano with Vice President Dick Cheney before the Supreme Court. The Club is demanding that Cheney reveal the role played by energy industry executives in crafting the administration's national energy policy, arguing that the secrecy of the vice president's 2001 Energy Task Force is a violation of the Federal Advisory Committee Act (FACA), a sunshine law from the Watergate era.

The District Court ruled for the Club in October 2002, rejecting the administration's contention that its actions cannot be reviewed by the courts. The D.C. Circuit Court of Appeals then ruled against the administration in July of 2003, and when the appeals court refused to reconsider that opinion Cheney appealed the case to the Supreme Court.

The vice president's contention, says Club attorney Sanjay Narayan, who argued the case before the appeals court, is radical and unprecedented; Cheney claims that he is entitled to executive immunity that places him above the law and beyond the reach of the courts, Congress, and the public.

Within two weeks of taking office in 2001, President Bush established a task force to formulate energy policy, headed by Vice President Cheney. After a parade of energy executives and lobbyists (like former Enron CEO Ken Lay) met with the administration behind closed doors, the task force released its plan in May 2001. The energy bill, which has been rejected twice by the Senate, but may yet again be resuscitated, was hatched from the task force and includes an industry wish list of 1950s-era prescriptions, such as opening more federal lands to oil, gas, and coal development and removing environmental protections against dangerous pollutants.

Alan Morrison, an experienced Supreme Court litigator, argued the case on behalf of the Club. Narayan, along with the Club's Legal Director Pat Gallagher, Deputy Legal Director Alex Levinson, and Senior Attorney David Bookbinder also attended the hearing. The vice president did not appear. Solicitor General Ted Olson—the administration's top Supreme Court lawyer—argued the administration's case.

The actual oral arguments were far less dramatic than the issues at stake, says Narayan. "The case is about openness and

public accountability in a democracy, but the discussion in court centered on a classic lawyers' issue: jurisdiction." The oral presentation lasted only about an hour, with each side receiving a half-hour to discuss the case with the justices. The appearance in front of the Supreme Court

is often a relatively small part of the decision-making process, Narayan says. The bulk of the argument and deliberation generally occurs through the written briefs.

The court is expected to make its ruling by July.

The energy task force case has recently been overshadowed by the controversy over Justice Antonin Scalia's refusal to recuse himself after a January duckhunting trip with Vice President Cheney. But Narayan says it's essentially the same story: whether it's fair for one party to have access to decision-makers when everyone else with a stake in the outcome is

shut out of the process.

FACA requires advisory committees that include non-government parties to conduct their affairs openly—in essence, it prevents the government from allowing special interests to secretly write public policy. The law aims to prevent undue influence by industry groups. According to Pat Gallagher, "Beyond the legal issues, this case seeks to vindicate the core American value that our government should be open and transparent to the public."

The administration has been criticized widely for its secrecy, raising the

question: Why has Cheney fought this so fiercely and refused to release the information?

"One reason may be the scandal we know about," says Narayan, "which is that energy industry executives and lobbyists were allowed to craft the nation's energy policy." But a second

possibility is "a scandal we don't know about." Narayan suggests that the documents could reveal something like the alleged "overlap between energy policy and 'rogue state policy," as reported by Jane Meyer in a February *New Yorker* story about Cheney and Halliburton.

Meyer cites a National Security Council document from February 3, 2001, which directed the NSC staff to cooperate with the energy task force as it "considered the 'melding' of two seemingly unrelated areas of policy: 'the review of operational policies towards rogue states,' such as Iraq, and 'actions regarding the capture of new and existing oil and gas fields'."

As for the "scandal we know about," there's some evidence of improper industry influence. For example, Energy Department officials had meetings with energy executives pushing for eliminating controls on polluting power plants—and lo and behold, out of the Energy Task Force came recommendations precisely matching industry proposals.

As Paul Krugman says in his *New York Times* column of April 27, "the Bush administration is so deeply enmeshed in the energy industry that it's hard to know where one ends and the other begins."

Two days after the Supreme Court hearing, on April 29, the Senate rejected a "slimmed-down" version of the energy bill as an attachment to an Internet tax bill. When the bill last surfaced in its bloated entirety, it contained tens of billions of dollars of subsidies and tax breaks to the coal, oil and gas, and nuclear industries, and called for increased drilling on public lands and weakening of the Clean Air Act. Meanwhile, it included no improvements in fuel economy standards for cars, trucks, and SUVs; nor any meaningful provisions promoting energy conservation and renewable energy sources.

The Sierra Club and its allies have twice defeated efforts to include oil drilling of the Arctic National Wildlife Refuge in the bill, but even without Arctic drilling, the bill would be, says Club Executive Director Carl Pope, "one of the worst environmental disasters in years."

To sign a petition telling the Bush administration it's not above the law and should release the task force documents, go to sierraclub.org/petition/supremecourt.

This article was excerpted from The Planet.

The Big Picture

Clear Skies? Healthy Forests? Top Ten Bush Administration Environmental Misdeeds

If you judged the Bush administration's environmental initiatives by their names alone—like "Clear Skies" and "Healthy Forests"—you might conclude that the Bush team was fighting to protect our air, water, and wildlands.

But upon closer examination it becomes clear that the laws and rules the administration has enacted since taking office constitute a broad and sweeping attack on environmental protection, and payback for the campaign-trail generosity of the coal, oil, and other dirty industries. Whenever polluters' interests have collided with those of citizens, the polluters have prevailed. There is a better way.

Since the passage of the Clean Air and Water Acts in the early 1970s, we have made progress in cleaning the air we breathe, and ensuring that our rivers and lakes are safe for swimming and fishing. Our national parks and forests provide recreation areas for millions of visitors every year and habitat for thousands of species. Environmental laws have succeeded, and their benefits far outweigh their costs. A 2003 report by the White House Office of Management and Budget found that environmental standards return benefits (fewer hospital visits, lower medical costs, and work days that might otherwise have been lost) five to seven times greater than their costs.

Millions of Americans, however, still breathe unhealthy air and drink unsafe water. Technology to reduce polluting emissions is widely available and cost-effective, as are ways to reduce our dependence on polluting fuels. But the Bush administration has ignored these solutions and put polluter profit ahead of public health.

Here are ten of the most egregious examples:

1. Three Times More Mercury. Ten More Years.

Despite findings by the EPA and the Food and Drug Administration that mercury

threatens the health of more Americans than previously believed, Bush's EPA Administrator Mike Leavitt announced a plan that would allow three times more mercury in our air and water than simply enforcing the Clean Air Act as currently written. And it would give utilities 10 years more to reach these standards. The EPA itself says we can eliminate 90 percent of the mercury from our air by 2008 by enforcing the Clean Air Act and using existing technologies. 1 But instead of reducing allowable mercury emissions to five tons before the end of the decade, the Bush plan calls for emission levels of 15 tons by 2018.

The largest source of mercury in the United States is coal-fired electric power plants. Mercury is emitted from smoke stacks, and eventually reaches waterways where fish ingest it and pass it on to people who eat the fish.

The EPA estimates that one in six women of childbearing age has mercury levels in her blood high enough to put her babies at risk. That means as many as 630,000 infants are born in the U.S. every year with unsafe mercury levels—double what was previously estimated.²

"The EPA's own numbers say the Clean Air Act alone will reduce power plant emissions nearly twice as fast as Bush's new proposal," said *Time* magazine (February 25, 2002).

www.sierraclub.org/mercury

2. Polluter Pays? Not Anymore.

"You make a mess, you clean it up." That's what the Superfund law intended when President Carter signed it in 1980 to clean up the nation's worst toxic messes. But the current Bush administration has broken with more than two decades of policy and rejected the principle of "polluter pays." In 1995, taxpayers paid 18 percent of the cost of cleaning up abandoned toxic waste sites. In 2004, taxpayers will foot the entire bill. Under the

Bush administration, Superfund site cleanups have fallen to fewer than 50 sites a year compared with more than 80 sites per year during the 1990s. 4 One in four Americans lives within a short bicycle ride of a Superfund site. 5

www.sierraclub.org/toxics

3. More Dirty Air

The nation's oldest and dirtiest power plants were exempted from meeting pollution standards set by the Clean Air Act, but they were not allowed to expand without installing modern anti-pollution technologies like scrubbers. The Bush administration has all but eliminated this provision, called "New Source Review," allowing these polluting power plants to emit even more soot, lead, mercury, and other contaminants. This dismantling of the Clean Air Act affects 17,000 factories and power plants found in every state in the nation.⁶ Old facilities emit up to ten times more pollution than modern ones.

New Bush administration rules would allow almost unlimited changes to be classified by plant operators as "routine maintenance"—a utility can spend up to 20 percent of the plant's cost on expansion without triggering the requirements of New Source Review. So the operators of an aging \$1 billion power plant can add approximately \$200 million worth of new generating equipment without having to install modern pollution controls. The previous level recommended by the EPA was 0.75 percent.⁷

The American Lung Association calls these rule changes, "the most harmful and unlawful air-pollution initiative ever undertaken by the federal government." In *The New York Times* magazine story, "Changing All the Rules," on April 4, 2004, Bruce Barcott writes, "The administration's real problem with the new-source review program wasn't that it didn't work. The problem was that it was

about to work all too well." www.sierraclub.org/cleanair

4. Fire Up the Chainsaws

The Bush administration's so-called "Healthy Forests Initiatve," which was signed into law in 2003, promises to protect communities from forest fires, but is really a gift to the logging industry, allowing the harvesting of old-growth trees deep in forests, far from affected communities. Forest Service scientists have shown that the best way to protect communities is by clearing the wooded areas located within 500 yards of homes.

The Bush administration bill calls for the thinning of 190 million acres of forest land. But according to *USA Today*, "there were only about 1.9 million acres of private and federal forestland—one percent of the Bush administration's estimate—that are both at high risk of fire and close enough to communities to ignite homes." (July 2, 2003)

The Atlanta Journal-Constitution said, "President Bush's so-called 'Healthy Forests Initiative' is anything but. The measure—purportedly designed to prevent destructive Western wildfires—does little to accomplish that task. Its real goal is to please timber companies by increasing the amount of logging in federal forests, including the southern Appalachians." (October 20, 2003) www.sierraclub.org/forests

5. The Energy Plan: Dig, Drill, & Destroy

Hatched from the secret Cheney energy task force meetings, the Bush administration's energy bill calls for subsidies and tax credits to the coal, oil, and nuclear industries totalling in the tens of billions of dollars, but does nothing to reduce our dependence on oil. It opens coastal areas to offshore oil drilling, encourages methane drilling on land owned

(continued on page 5)

Big Picture

(continued from page 4) by farmers and ranchers, and protects the makers of the cancer-causing chemical MTBE from being prosecuted.

The bill does all this without raising fuel economy standards for cars, trucks, and SUVs, without addressing problems with the nation's power grid that led to black-outs in 2003, and without making meaningful investments in renewable energy sources. The bill has been rejected twice by the Senate, but administration allies continue to push for its passage.

In September 2003, Vanity Fair magazine said: "The president has made future energy needs a top priority. Unfortunately, massive drilling on public lands is deemed necessary to meet them. Inside his agencies, 'preservation' has become a dirty word—a word that gets your transferred if you insist on it...instead of proposing to auction mineral rights to the highest bidder."

www.sierraclub.org/energy

6. Hogwash!

Despite the massive amounts of animal waste discharged into our air and water by huge factory farms operated by Tyson Chicken and other giant meat producers, the Bush administration rewrote the Clean Air Act in September 2003 so that it will not apply to such facilities. Under the new rules, developed after backroom negotiations with factory-farm representatives and without public input, factory farms will be able to continue to discharge animal waste—approximately 2.7 trillion pounds per year in all—into our rivers, streams, lakes, and air, and suffer only minimal consequences such as a \$500 fine. sierraclub.org/factoryfarms

7. Drilling Wilderness

Despite the fact that 63 percent of public lands in the West are already available for leasing without restrictions, the Bush administration has turned over control of an additional five million acres to oil

(continued on page 26)

Transit and Traffic

Montgomery and PG Commuters: Let the Governor Know You Support the Purple Line, Oppose the ICC

Frustrated with rising fares and overcrowded trains? Local and state governments aren't adequately funding Metro and are trying to shift more of the burden of cost onto Metro riders. Now Governor Ehrlich wants to mortgage our transportation future on the wasteful Intercounty Connector (ICC), a \$3 billion project (with financing costs) that won't relieve our traffic problems. Metro's \$1.5 billion funding shortfall has it close to a "death spiral" of overcrowding and service breakdowns. The Purple Line is in a holding pattern. Why does Governor Ehrlich want to spend all our transportation money on a speculative highway we don't need?

Building this sprawl highway would not relieve our traffic problems. But it would divide communities, increase noise and air pollution in many neighborhoods, and cause irreparable damage to valuable wetlands, forests, streams, and threatened plants and wildlife. And to fund the ICC, Governor Ehrlich would need to borrow against future federal transportation dollars, leaving Maryland short-funded to meet transportation needs for the next fifteen years.

Studies have shown consistently that outer beltways are engines of economic shifts within a region, not economic growth across the region. The ICC would concentrate even more development and sprawl in the I-270 corridor, at the expense of Prince George's Countyand Baltimore.

Regionally, Metro needs \$1.5 billion to meet critical needs: fixing degrading tunnels and stations, buying eight-car trains, and expanding bus service to relieve overcrowding. Without this fund-

ing, Metro crowding, delays and breakdowns will worsen. Commuters will retreat to their cars, further congesting gridlocked roads and degrading already polluted air. Montgomery and Prince George's Counties need the Purple Line and rail on the Wilson Bridge to improve mobility around beltway communities and job centers. We need to invest in the Purple Line for our future!

Please help by letting Governor Ehrlich know that you want to keep Metro an attractive, convenient, and viable commuting option in Montgomery and Prince George's Counties. Clip out the statement below, add your name and address, and send it to the Governor. Address your envelope to:

GOV. ROBERT EHRLICH 100 STATE CIRCLE ANNAPOLIS, MD 21401

Dear Governor Ehrlich,	
increase noise and air pollution in many r to our open spaces. Montgomery County and Prince of system to get us to work and to keep our than they already are. Investing in the Pur transportation future.	Fic problems, but it would divide communities, neighborhoods, and cause irreparable damage George's Counties need a working Metro highways from getting even more congested rple Line would give the best return on our the Purple Line with rail on the Wilson Bridge
Sincerely, NAME ADDR CITY, ST, ZIP	

Transit and Traffic

Bush Administration Misses the Train

Sierra Club Report Shows Bush Administration Ignores Demand for Public Transportation, Could Threaten Purple Line

by Eric C. Olson — The Bush administration's transit policies are missing the train, and American workers are paying the price. That's the conclusion of a new Sierra Club report, which details how local economic pressures feed a growing demand for light rail and other public transit projects, and how the administration's bias against transit is out of touch with America's communities and commuters.

The recent surge for public transportation underscores an important realization that is taking hold in communities across the country: that public transit helps with revitalization and redevelopment, creates better economic opportunities than sprawling roads, and it does so without the smog and other drawbacks of building single mode transportation systems that just put more cars on the road.

"Unfortunately, the Bush administration seems to be ignoring what appears obvious to places like Milwaukee, Port-

land, and Cincinnati, all cities with new transit projects waiting in the wings," reads the report.

Purple Line Progress Jeopardized

Among hundreds of public transportation projects that could be significantly stalled due to the Bush administration's transportation proposal, the report highlights a dozen public transportation projects, including Maryland's "Purple Line."

The Purple Line promises to ultimately become a circumferential transit line around the Washington, DC area, connecting spokes of the existing Metrorail system, and serving passengers inside the Beltway. The leg of the Purple Line (now dubbed the "Bi-County Transitway" by Governor Ehrlich's administration) that is in the federal pipeline for alternatives analysis and preliminary engineering would run from Bethesda to New Carrollton, and serve Silver Spring, Langley Park, College Park and the University of Maryland among

other areas. This segment of the line is projected at 70,000 ridership trips daily, taking people out of cars, spurring economic revitalization and helping to improve our air quality. The Sierra Club believes, however, that the Purple Line section across the Wilson Bridge should also be given high priority and should be built now so it can be operational soon after the bridge is completed.

The Ehrlich administration has done plenty to slow the Purple Line while pushing for roads like the Inter County Connector. This is in the same tradition as the Bush administration's transportation proposal that would cut into the federal share for transit projects while providing a perverse incentive for states and localities to build more roads.

Need for Greater Transit Investment

The Sierra Club report documents the benefits of transit and the costs of the Bush administration policies. The report argues that the United States deserves a balanced transportation plan that is sensible for both the environment and the economy. Maryland Senator Paul Sarbanes (D) is a key figure in the transportation debate and will sit on the powerful Conference Committee between House and Senate members working on transportation.

In recent years, local demand for public transportation has increased significantly, and new transit ridership has greatly exceeded projections. Since the last time Congress took up a major transportation funding bill in 1998, public transit ridership has increased 21 percent. New transit lines are greatly exceeding projected ridership in Dallas, Denver, Salt Lake City and elsewhere. New Starts, the federal program that helps promising transit projects get off the ground, has a record backlog of over 200 projects, reflecting the fact that more and more communities are embracing, and clamoring for, public transportation.

The report lays out the economic issues behind this growing support for public transit in America's cities, looking at employee stress levels, the challenges of low-wage commuters, development linked to transit, and jobs directly in the transit sector.

Those benefits seem lost on the Bush administration, which proposed, as part of its six-year transportation plan, a radical change to the ratio for federal matching transit funds. Currently, the federal/state funding match for all new transportation projects is 80:20; however, the Bush administration would like to dramatically increase the state share to 50 percent for all new transit projects. In doing so, this administration would put hundreds of transit projects across the country in jeopardy, and with them, the jobs and economic benefits those projects (continued on page 27)



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Bay Watch

Maryland Fishers Face Dwindling Resources

by Bill Bartlett — Many years ago I was sitting in a restaurant with the local game warden. He had just retired. He talked about his life and why he became a game warden. He had always liked the outdoors. He was the son of a local waterman (commercial fisherman in the Chesapeake Bay). His father said that he would never be on the water. He said that the resources of the Potomac River would soon be depleted and he would have no livelihood.

It is easy for me to remember the time when commercial and recreational fishers were at peace. There were no regulations, no licenses. There were plenty of fish, oysters, and crabs for all. As the resources dwindled, things began to change. First, there were not enough oysters left in the river. Maryland owns the river but the oystermen from Virginia wanted a share. It got to the point where shots were fired and people were killed.

It often occurred to me that there would be problems on the water if resources and catches declined. Now the resources are dwindling and problems are coming, not the least of which is the watermen losing their livelihood. There is no need to regulate the oyster catch; oysters are just about gone. It's hardly worth the effort for anyone to try to harvest them. The crabs have been declining for years. And as much as the watermen would like to think that it is just another cycle, there are conditions in the water—dead zones—that say it is not.

As everything about the river declines, there are steps taken to try to fix things. First there are limits put on how many of each fish you can keep or how many crabs you can take in a day. Licenses are issued to keep down the numbers of those fishing or crabbing. The restrictions keep coming until we reach the point where none of a species can be legally harvested, as happened with the striped bass a few years back.

We try to head things off by form-

ing private-sector groups like councils, advisory boards and commissions, and government groups like state Departments of Natural Resources and national fishery regulatory groups. These groups make decisions and set policy which affects those that fish. The fishers begin to squabble over what resources are left, each trying to get their share, and vying for advantage by participating in the various groups. Others say that although the resources belong to all, commercial fishermen are a special group that has access to the fishery, while the general public that owns the resource does not.

The continued decline of the fisheries will bring more squabbling. I would guess that more people have left commercial fishing because of low levels of resources than for any other reason. If things continue as they have, more will leave. That would leave the recreational fisher to catch what is left, and to face future restrictions if the fish population decreases further. That thought probably has been behind things like the "Right to Fish" acts that have recently been enacted by some states.

As the general public becomes aware of the dwindling resources, they too form groups that grow in size and power. They now range from small local groups to worldwide organizations. Some groups have specific goals, like making striped bass a sport fish that would put it off limits to commercial fishing. Others go as far as saying that there should be no fishing at all — ever! Most groups are concerned with having a fishery that is sustainable. Many of the environmental groups want to see clean air, water and land and the fishing is just a tangent to what they do.

I have seen these things come about in the area where I live, and I have seen that they are happening around the world. Where does it end? When will things get better?

Population

Fertility Rates Decline, But Overpopulation Is Still a Problem

by Mace Olcott — "Population growth is no longer a problem." The major media bombards us with this message. But the message is not true. The United Nations' projects that the world population will grow by nearly 3 billion people (to 8.9 billion) by 2050. This increase alone is equal to the world's total population in 1960.

The current world total fertility rate (TFR, the average number of children born to a woman) is 2.8. This is a great improvement over the 3.4 TFR of the early 1990s and far lower than in the 1960s. If this trend continues, it is possible that the world TFR could reach 2.1, the first step towards population stabilization. We must not forget though that even while fertility rates are going down, world population is still growing by about 75 million people every year. Consequently, global environmental trends remain ominous:

- Tropical rain forests are in rapid decline.
- Global air and water pollution are getting worse.
- Plant and animal species are being driven to extinction at a rate not experienced since the age of the dinosaurs. If current trends continue, almost a quarter of the world's mammals face extinction within 30 years.
- Deserts are spreading across the world, reducing arable land and the prospects for meeting the growing demand for food.
- Fresh water shortages are increasing across the globe and water wars loom.
- Global warming will cause oceans to rise and put populous coastal regions under water, including large portions of Florida and Louisiana.

What Should Be Done?

Policies need to be undertaken to speed the reduction in fertility in the parts of the world where the population is growing most rapidly. About 75 poor-to-verypoor nations (total population about two billion) have fertility rates far above the world average. The populations of these nations are likely to double or even triple by 2050. If this occurs, they will not be able to develop successfully, and mass poverty, environmental disasters, wars and terrorism will increasingly be their fate.

The United Nations Population Fund (UNFPA) does great work in poor nations to help impoverished couples plan their families and prevent unwanted pregnancies. In addition to educating couples and subsidizing contraceptives, the fund works to empower women to improve their own and their families' lives.

Sadly, the U.S. Congress cut off \$34 million a year to the UNFPA program in 2002. This relatively small amount of money (the U.S. spends seven times as much each day in Iraq!) would prevent two million unintended pregnancies, 800,000 abortions, 77,000 infant and child deaths, and 4,700 maternal deaths each year.

The Bush administration continues to oppose U.S. funds for UNFPA, and is forcing other U.S. international family planning money to be used for ineffective "abstinence only" programs. The Bush administration has also imposed the odious Global Gag Rule on private non-governmental health care providers around the world.

William Milliken, former Republican Governor of Michigan, has stated that "The right wing is seeking to impose an entire set of doctrinaire beliefs that will sharply restrict health care for women, and as a result, actually increase the number of abortions worldwide."

Of course population stabilization alone cannot end our ecological crisis. For example far more emphasis is needed on energy conservation, especially in the U.S. And more investment is needed to develop renewable energy sources. But the single most important step is population stabilization — in the poor nations of the world and in the U.S.

Watts Going On: A Digest of Energy News

Renewable Energy Bill Passes!

by Charlie Garlow — On May 26 the Governor signed a bill that will promote the use of more renewable energy. The bill had passed with wide margins in both the Senate and the House.

Many environmental, health, faith and other groups testified in favor of the Renewable Portfolio Standards bill, as did PEPCO and BGE/Constellation. The Maryland Sierra Club testified in favor, with strengthening amendments. Although we did not get all we wanted, the bill contains several features that are better than other renewable portfolio standard bills considered or passed by any other state.

House Bill 1308, and its Senate version SB 869, establish a requirement for utilities to buy a small but growing amount of their electricity from renewable energy sources. Starting off small at 1 percent, but growing to 7.5 percent, the renewable requirement will require that more solar, wind, biomass, etc. become part of our "portfolio" of electricity sources, so that our portfolio is diversified. As natural gas prices have been on the rise lately, the diversification may be good for consumers, too. Utilities have announced a rate increase to take place this July, which for residential consumers could be around a 15 percent increase in costs.

Some of the bill's good features include double credit for solar energy, which is seen as the most benign of renewables. The bill also denies credit for biomass from invasive species and ancient forests, with an extensive definition of these terms. A technical advisory group will develop recommendations on siting, operational, and monitoring criteria for wind-powered electricity, to address avian and bat issues. This last is an innovation, supported by our national Sierra Club

lobbyists, that is not even in the national renewable portfolio bill. These enhancements may not be all we wanted, but they have advanced the cause of providing more energy from non-fossil fuels. Other states can learn from our bill and do even better with their own renewable portfolio legislation. Pennsylvania, for example, is considering such a bill. Maryland joins 13 other states, including Texas and California, as a leader in promoting the use of renewables.

Maryland Congressmen Introduce Bill to Curb Global Warming Emissions

by Charlie Garlow — On March 30, Rep. Wayne Gilchrest (R-MD) for the first time introduced a nearly-identical House counterpart to the McCain-Lieberman global climate change bill. Cosponsors include another Marylander, Chris Van Hollen (D-MD), as well as Reps. John Olver (D-MA), Sherwood Boehlert (R-NY), Christopher Shays (R-CT), and Jay Inslee (D-WA).

Way to go, Congressmen Gilchrest and Van Hollen! The U.S. Senate and U.S. House bills would require global warming emissions to be reduced to year 2000 levels by 2010. Although the chances of passage are still slim, getting votes on these bills keeps the issue alive and in public discussions. Please call or write your U.S. Senators and Congressmen in Maryland to urge them to vote for these good bills. Call 202-224-3121 for the U.S. Capitol switchboard, to be connected with your congressional representative's office.

Clean Energy Funding Woefully Inadequate

by Charlie Garlow — The Bush administration's proposed 2005 budget would provide the Department of

Energy's Office of Energy Efficiency and Renewable Energy (EERE) with \$876 million for energy efficiency programs and \$375 million for renewable energy programs—about the same levels as actual funding in 2004. Given the escalating prices of natural gas and the escalating impacts of global warming, this is not enough. We can do and need to do a whole lot better.

Two-to-one funding (energy efficiency to renewable energy) is akin to what we see on the state levels in Maryland and other states. More money and attention have always been focused on energy conservation and efficiency (insulating the homes of the poor and others,

buying more efficient appliances) than on renewable energy like solar and wind. That is as it should be, since we all recognize that conserving our energy is Job One. But we need much more money and "energy" devoted to both of these sides of the clean energy battle.

Take Action! Write or call your representatives on the federal, state and local level and level with them! Tell them we need more attention paid to clean energy. Write letters to the editor. Join the Maryland Sierra Club's Clean Air and Clean Energy Committee by calling Charlie Garlow, 301-593-9823 or email to charlie.garlow@juno.com.

Help Us Gather One Million Comments: Take Action to Keep Mercury Out of Our Air and Water

A record 511,000 Americans have already urged the Bush administration to start cleaning up toxic mercury pollution from power plants as soon as possible. Now, the EPA has extended the deadline on the comment period until June 29, 2004, giving the public more time to urge the administration to protect public health, not polluter's wealth. Please comment today and tell friends about this issue to help us reach our goal of one million comments by the end of June.

The EPA estimates that one in six U.S. women of childbearing age has mercury levels in her blood high enough to put her baby at risk. In 2001, the EPA estimated that by 2008, a 90 percent reduction in mercury emissions from coal-fired power plants was possible with available technology and strong enforcement of the current Clean Air Act. Instead of requiring power plants to use modern technology that could start reducing mercury pollution within four years, the Bush administration's ill-conceived plan would delay cleaning up this dangerous pollutant for decades.

Visit www.sierraclub.org/mercury to take action today! Or send a letter directly to: EPA Docket Center (Air Docket) U.S. EPA West (6102T), Room B-108 1200 Pennsylvania Ave. NW. Washington, DC 20460, Attention Docket ID No. OAR-2002-0056

Air and Energy

Solar PV—the Most Benign of Renewable Energy Sources—Surges Ahead

by Charlie Garlow — World solar photovoltaic (PV) market installations soared to 574 megawatts in 2003, representing growth of 34 percent over 2002, according to industry sources.

The star national performer among the top three markets was Germany, with 76 percent growth. In combination, Japan, Germany, and the United States accounted for 75 percent of the world solar photovoltaic market. The major driver of demand was the strong grid-connect sector, up 57 percent globally to account for 77 percent of the total market. Japan's PV market reached 219 megawatts, Germany's reached 145 megawatts and the United States' market increased to 66 megawatts, spurred on by grid-connect applications in California. Other countries in Europe, outside Germany, recorded a very healthy 109 percent growth rate in 2003. The strong growth resulted in a worldwide solar photovoltaic market worth over \$4 billion last year.

Solar PV is considered by many to be the most benign of renewable energy sources because it has no moving parts and can be located on the roofs of already existing buildings. Grid-connect allows any surplus power generated by the PV installation to be exported and sold to the power grid. When power consumption exceeds power generated by the PV array, power is imported from the grid as usual. Did you know that in Maryland you can get a \$2,000 tax credit towards the installation of a PV system on the roof of your home or business? Depending on funds availability, of course. Go solar! ■

Wind Farm Tour on Backbone Mountain

by Charlie Garlow — The Maryland and West Virginia chapters of the Sierra Club

sponsored a tour of the year-old wind farm at Backbone Mountain, WV, south of Deep Creek Lake, MD, on Saturday, May 1. Three car loads of Maryland Sierrans piled into high-gas-mileage Toyota Prius cars for the four-hour trip to Western Maryland and WV. We had a light lunch, interesting speakers, and capped the day with several songs, including a rousing crowd-pleaser, "Blowing in the Wind," featuring Sierran Chuck Becker on the mandolin and yours truly on the banjo accompanying a handful of full-throated singers. Several other carloads of tourists drifted in and out, as is typical of this wind site.

Our main guest speaker was Jim Kotcon, legislative chair of the WV Sierra Club Chapter. He was joined by the WVchapter chair, Paul Wilson and the MD Chapter's conservation chair, Dan Boone. Linda Cooper, a long-time environmentalist from Morgantown, WV, also shared her thoughts, and fielded questions from the crowd of about 35. Kotcon said that they consider coal-fired power plants to be the biggest threat to the environment, and they are fighting a proposed coal plant near Morgantown, WV, where he lives. Jim also concluded that the Backbone Mountain site, private land in an industrial woodland, is a pretty good place to locate a wind farm. (Industrial woodland that is forestland that is not old growth or unique forest and that is harvested as frequently as possible.)

After the tour of the wind farm, these trekkers hiked down to beautiful Blackwater Falls. Nine of the crew stopped for dinner at Weaver's Restaurant in Hancock, MD. Not even the bad jokes at the dinner table could ruin the lemon meringue and cherry pies!

The Sierra Club has supported renewable energy, solar, wind and other forms, since 1973. For more information on renewable energy, contact Charlie Garlow, air and energy chair, at 301-593-9823 or charlie.garlow@juno.com.



Chuck Becker, left, and Charlie Garlow prepare to regale the wind farm tour group on Backbone Mountain.

Air and Energy



Want to Buy Green Energy?

by Charlie Garlow —PEPCO Energy Services, www.pepcoenergy.com, is offering green and wind-powered juice to light up your home. The green power is mostly landfill gas and solid waste incineration. It is good to incinerate the methane gas that might otherwise leak from landfills; methane is a more powerful global warming gas than carbon dioxide. But solid waste incineration is not what most call the greenest way to make electricity. The Renewable Portfolio Standards bill [see "Renewable Energy Bill Passes" on page 4] will phase out the current preference for solid waste incineration.

Cleaner electricity costs a little bit more just now, although with the rate caps coming off this summer, costs may even out soon. Regular electricity costs residential users about \$0.07 per kilowatt hour (kwh), although a 15 percent rate hike would make that about \$0.08/kwh. Green electricity costs around \$0.075 cents/kwh. You can also choose 50 percent wind for about \$0.09/kwh or 100 percent wind for almost \$0.10 cents per kwh. These charges will appear on your regular bill. You must sign up for at least a year. Call 1-800-ENERGY9 for more information on the PEPCO and BGE service areas.

RECYCLING CELL PHONES

by Charlie Garlow — In a previous issue of *Chesapeake*, an article appeared, written by me, about recycling cell phones. It turned out that the information I was given changed or was wrong, so people who took their cell phones to local Staples were met by clueless Staples staff.

Don't give up. Here is another option which sounds promising.

ReCellular Inc., a buyer, seller, and recycler of used cell phones, pagers, and PDAs, is expanding its retail recycling program across the country. The company will establish more than 10,000 drop-off points in stores such as Best Buy, Sprint PCS, and Verizon Wireless, with all locations listed at www.wirelessrecycling.com.

ReCellular offers a variety of solutions for retail organizations to offer recycling.

More information: www.recellular.com

Coal and Mercury: The Maryland Story

by Gary Skulnik — Coal-fired power plants are arguably the most polluting kinds of electricity generators. Here in Maryland, we have eight of these power plants with over 100 megawatts of generating capacity. These coal-fired energy producers are a direct threat to our health and to our environment. Burning coal to create electricity produces several pollutants, including carbon dioxide (CO₂), sulfur dioxide (SO₂), nitrogen oxide (NOx), and mercury. CO2 is the main global-warming gas. SO₂ and NOx are well-known contributors to acid rain and ground-level ozone. Mercury is a neurotoxin that harms human health. Coal plants account for the largest part, 40 percent of mercury emissions. Because of our over-reliance on coal power, Marylanders' health and quality of life are at

According to the Environmental Working Group, an environmental research organization, seven of Maryland's eight coal-fired power plants released an estimated combined total of 2,774 pounds of mercury in 1998. Of that, 1,781 pounds were emitted as air pollution. The worst offender was the Morgantown plant in Charles County, which released an estimated 645 pounds of mercury, 404 pounds of which was airborne pollution. The Brandon Shores plant in Baltimore was next, releasing 604 pounds of mercury, with 489 pounds released into the air. These two plants came online more than 30 years ago and do not have the most advanced pollution control technologies. (See www.ewg.org/ reports_content/mercuryfalling/ maryland.pdf for more details.)

All the mercury they produce doesn't just disappear. It's going into our air and water, and eventually into the seafood many of us eat. As recent government reports demonstrate, the tuna fish that's beloved by so many Marylanders is dangerous for women of childbearing age or young

children to eat in certain quantities, because it is contaminated with mercury.

Coal is also the most carbon-intensive energy source, releasing more CO₂ per unit of energy produced than any other fossil fuel. Take the Morgantown plant, for example. It is the single biggest global warming polluter in the entire state of Maryland. According to the Maryland Power Plant Research Program, the Morgantown plant uses 10,000 tons of coal a day at peak operation. That puts 57,200,000 pounds of CO₂ into our air every day. To put that in perspective, the Morgantown plant emits as much CO₂ into the air as a fleet of 634,000 Hummer H2s would put out on an average daily drive (41 miles). The next time you see a Hummer H2 on the road and curse the pollution it's causing, imagine how much global warming pollution 634,000 of them would create!

If we are going to be serious about addressing global warming and public health concerns, we are going to have to take a long look at the coal-fired power plants in our midst. Responsible leadership means tackling these polluting behemoths head-on.

The Federal Angle

EPA had proposed to control mercury from power plants under the air toxics standards by reducing emissions by 90 percent in three years. Now the Bush EPA has changed the proposal to consider a cap-and-trade system, which would delay the clean up and not achieve as much emission reductions. The trading provision could produce mercury "hot spots," which are locations that have not cleaned up their mercury, but instead bought "credits" from other plants that cleaned up more than required, resulting in some citizens being exposed to the same or greater levels of mercury than before the

Gary Skulnik is a Montgomery County Sierran, and Director of Clean Energy Partnership, www.cleanenergypartnership.org.

Air and Energy

An Energy Diet? Try It!

by Charlie Garlow — You may have read in the papers lately about obesity and how it is now challenging tobacco as the biggest killer of Americans. We all should watch our weight, eat more fruits and vegetables, and exercise more.

How about an energy diet? If we don't cut back on our "intake" of dirty, polluting fossil fuels, we will soon see global warming and other forms of smog and water pollution become a big killer of people and wildlife all around the world. Think globally and act locally.

Think of polar bears threatened by melting ice caps in the Arctic, and coral reefs that are bleaching and dying in the Caribbean. Australia's Great Barrier Reef, home of Nemo, the fish, is similarly endangered. Think of Nemo and act locally. Reduce your energy use. Here's a checklist you can add to:

- 1. Turn your thermostat down in the winter and up in the summer. This saves energy and is perfectly healthy. In the winter, put on one of those lovely sweaters you hardly ever wear. In the summer, it's okay to sweat or "glow" a little. It might even be sexy in those shorts of yours!
- 2. Don't blow-dry your hair. Electric resistance heating is one of the big wasters of energy.
- 3. Unplug the refrigerator you have in the garage waiting for the big beer bash. It is out there wasting your money and energy, for no good reason.
- 4. Turn off lights in rooms that you aren't using. It's a simple thing, but try to remember to hit the switch when you leave a room.
- 5. Insulate your home and hot water heater. It helps keep the house cool in the summer, and will improve the efficiency of the water heater, too.
- 6. Stop leaks and drafts in your home. This means caulking and weather-stripping. Or maybe it's time for replacement, high-efficiency windows.
- 7. Get pleasure and exercise by walking or biking . Think of other ways to enjoy yourself while using less energy.
- 8. Walk or bike to work, and reduce that waistline while watching your energy diet!
- 9. Use a rake instead of a leaf blower, a hand mower instead of a power mower. More exercise for you puts that glow in your cheek.
- 10. Make energy conservation part of your lifestyle.

Environmental Justice

Redefining the Environmental Movement

by Julian Bond, Chairperson, NAACP—In 1970, Webster's Dictionary defined the word "environment" as "that which surrounds you." In 1970, what surrounded people living in urban neighborhoods were contaminated rivers that caught on fire, air pollution that prevented children from playing outside, crumbling tenement housing and skyrocketing infant mortality rates. That year, fueled by collective outrage and anger, 20 million people joined under the umbrella of the first Earth Day to demand a safer, cleaner and healthier world, starting with the deplorable condition of many of their own neighborhoods.

That fall, environmental activists defeated seven of a "dirty dozen" of Congressmen with the worst environmental records. The creation of the Environmental Protection Agency quickly followed, as did the passage of the Clean Air and Clean Water Acts. For the next twenty years, the environment was a political priority. Then, slowly, the momentum was lost. Now every scientific improvement or higher environmental standard meets unrelenting resistance from corporate interests and sometimes even our government.

Thirty-four years later, the reality is that most of America's urban and working poor are struggling with the impacts of environmental factors that are no longer funding or policy priorities. Those factors, the result of social and economic neglect, have created new and frightening environmental, health and social problems— especially for people of color, urban dwellers, and children.

For example, asthma is now the leading chronic illness among children, including 15 percent of all children in Detroit. Wayne County continually fails to meet federal clean air standards, leading to increased asthma attacks, emergency room visits, medical costs, and school and work absences.

Detroiters are not alone. Those who live in lowincome areas around the country are much more at risk of developing asthma and other respiratory diseases. Pollutants and other toxins are more common in low-income neighborhoods and communities of color.

Children are at-risk for other reasons. The average U.S. public school is 42 years old, and over 60 percent report at least one serious maintenance problem. Many schools are in such desperate need of repair that they are an actual threat to our children's health. Many schools in low-income communities are built near polluting industries, causing additional health problems in children.

These are just some of the examples of how low-income and communities of color are affected by their environment, but there are others. The low-income family that cannot find safe, affordable housing; the mother that lives in a neighborhood without parks for her children; the man who needs better public transportation to travel to the suburbs for work because most employers do not locate in the inner-city.

As we near the November election, it is time to mobilize to protect and improve our surroundings and choose politicians whose job it is to implement laws and programs in keeping with those goals. Yet, the belief that one's vote does not matter is most prevalent in communities of color, where people see little connection between their day-to-day life and the vote they may or may not cast in an election.

Just ask the individuals who reach out to the urban poor and communities of color to register them to vote or sign a petition or ask for support for a candidate. People in these neighborhoods want to know what you are going to do about the abandoned lot that is a magnet for drug dealers or the run-down public housing or the lack of parks and transportation in their neighborhood. That is what they want to talk about – their environment.

This year, NAACP National Voter Fund is joining with Earth Day Network and a consortium of non-environmental partners to launch "Campaign for Communities." This coalition includes a broad range of organizations that are working for safer schools, more parks, cleaner drinking water, affordable housing, living wage jobs and sufficient public transportation, etc. The campaign will also register and mobilize one million voters in the November election who will vote on these issues.

We are a significant voting bloc. We are a huge, growing and motivated constituency that is willing to back politicians who have the courage and the vision to join us in this fight. Together we can redefine the environmental movement as one founded on the belief that all of us deserve the same opportunity to live in healthy communities and that all of us are entitled to the same basic human rights, regardless of geography, income, race and gender.

This piece was created by Earth Day Network (EDN) and Julian Bond/ the NAACP as part of the communication for Campaign for Communities. For more information see www.earthday.net.

Agriculture

Sierra Club Launches "True Cost of Food" Campaign

The United States, with less than 5 percent of the world's people, consumes over 25 percent of its resources.

And that's not even the bad news. The really scary news is that the rest of the planet is scrambling to catch up with our lifestyle. If all 6.4 billion people did so, we'd need four more Earths to accommodate them.

In response, the Sierra Club Sustainable Consumption Committee has launched a new national grassroots campaign. It's focused on the one major aspect of American consumption that's probably the easiest to change: our dietary lifestyle.

American food production has a huge impact on the environment:

- •Agriculture is the largest source of water pollution in the United States.
- •Our industrialized farming poisons the soil, encourages pests, and destroys biodiversity.
- •More than half of the land in the continental United States is devoted to agriculture or grazing, and much of the cropland produces grain for cows, not people.

The Club expends enormous resources fighting the symptoms of unsustainable agriculture, from water pollution and toxins in the food chain to loss of habitat and species.

What the Club has not previously done is to seriously challenge the root cause of the above: American food consumption patterns. By and large, our diet is so unsustainably produced that it jeopardizes not just the environment but also our health. Our diet completely ignores the true cost of food.

That's about to change. We're responding with the "True Cost of Food" campaign to make the Club a leader in sustainable eating. Our goal is an America that eats:

- Low on the food chain.
- Organically produced food.
- Locally grown food when practical.

The first prong of this campaign is building a nationwide network of activists who will target local markets



to provide more food that is organically grown, locally produced, and reasonably priced. These goals are practical and doable. There already exists a pent-up public demand for organic food. Rapidly growing numbers of local farmers want to give up their dependence on poisons. And the Sierra Club already has the ideal structure and experience to galvanize this movement.

The second prong is educational. We're producing brochures and fact sheets for activists, and articles for local newsletters. We're completely redoing our web site: www.sierraclub.org/sustainable_consumption. This campaign has one special advantage: It shows environmentally oriented people how they can immediately start making a big difference in their everyday lives. That's empowerment. And empowered people are already halfway to becoming activists. Consider the value of this one fact to someone who is already trying to conserve water: It takes 2,500 gallons of water to produce a pound of beef. This equals a five-minute shower every day for six months!

The third prong is a concept we are promoting, "Sustainable Tuesday." On Tuesdays, we encourage everyone (not just activists) to make a fun-filled effort to live more lightly on our Planet. It might be a group outing for a prearranged sustainable meal at a local restaurant or an intimate sustainable potluck family din-

ner. We could turn the thermostat up or down, depending on the season. We could walk or use alternate transportation if possible. Maybe we could hike in the park with a friend instead of going shopping. The main thing is to make it fun!

Our "True Cost of Food" campaign can potentially bring a whole new group of people into the heart of the Club. There are thousands of environmentally sensitive folks who don't gravitate to our more traditional efforts on land use, pollution, and so forth. But they will warm up to a campaign like this. We can find allies in the following communities:

- •The organic food or vegetarian movements
- The health community
- The simple-living movement

The Club's traditional work on forests, habitat, clean air, and so forth must be strengthened. And few things will help more than addressing one root cause of these problems, the excessive and wasteful consumption in our society. That's where the Sustainable Consumption Committee comes in. Switching consumer demand to low-impact food is our current focus area, but we will also educate on sustainable wood production, energy use, water consumption, and related issues. Furthermore, we plan to talk about the Madison-Avenue-driven, buyand-consume craze that has virtually become our national religion.

We'd love to have you get involved at any level of activity you're comfortable with. Please contact our volunteer coordinator, Gordon LaBedz at glabedzmd@aol.com, or Diana Artemis at 703-671-4916, artemdi@yahoo.com.

Are you a Club activist with too much on your plate? Here's an easy way to help! You probably know someone that has an interest in sustainable food or belongs to one of the above-mentioned communities. This person ought to be delighted to find out the Club is working on this, and should be encouraged to contact Gordon or Diana.

Vanishing Acts

The Sixth Great Extinction The first mass extinction that humans will witness firsthand

by Janet Larsen — Almost 440 million years ago, some 85 percent of marine animal species were wiped out in the earth's first known mass extinction. Roughly 367 million years ago, once again many species of fish and 70 percent of marine invertebrates perished in a major extinction event. Then about 245 million years ago, up to 95 percent of all animals—nearly the entire animal kingdom—were lost in what is thought to be the worst extinction in history.

Some 208 million years ago, another mass extinction took a toll primarily on sea creatures, but also some land animals. And 65 million years ago, three quarters of all species, including the dinosaurs, were eliminated.

Among the possible causes of these mass extinctions are volcanic eruptions, meteorites colliding with the earth, and a changing climate. After each extinction, it took upwards of 10 million years for biological richness to recover. Yet once a species is gone, it is gone forever.

The consensus among biologists is that we now are moving toward another mass extinction that could rival the past big five. This potential sixth great extinction is unique in that it is caused largely by the activities of a single species. It is the first mass extinction that humans will witness firsthand—and not just as innocent bystanders.

While scientists are not sure how many species inhabit the planet today, their estimates top 10 million. Yet each year thousands of species, ranging from the smallest microorganisms to larger mammals, are lost for good. Some disappear even before we know of their existence.

The average extinction rate is now some 1,000 to 10,000 times faster than the rate that prevailed over the past 60 million years. Throughout most of geological history, new species evolved faster than existing species disappeared, thus continuously increasing the planet's bio-

logical diversity. Now evolution is falling behind.

Only a small fraction of the world's plant species has been studied in detail, but as many as half are threatened with extinction. South and Central America, Central and West Africa, and Southeast Asia—all home to diverse tropical forests—are losing plants most rapidly.

Today nearly 5,500 animal species are known to be threatened with extinction. The IUCN-World Conservation Union's 2003 Red List survey of the world's flora and fauna shows that almost one in every four mammal species and one in eight bird species is threatened with extinction within the next several decades. (For access to IUCN's Red List of Threatened Species database, see www.redlist.org.)

Of 1,130 threatened mammal species, 16 percent are critically endangered—the highest threat level. This means that 184 mammal species have suffered extreme and rapid reduction in population or habitat and may not survive this decade. Their remaining numbers range from under a few hundred to, at most, a few thousand individuals. For birds, 182 of the 1,194 threatened species are critically endangered.

Although the status of most of the world's mammals and birds is fairly well documented, we know relatively little about the rest of the world's fauna. Only 5 percent of fish, 6 percent of reptiles, and 7 percent of amphibians have been evaluated. Of those studied, at least 750 fish species, 290 reptiles, and 150 amphibians are at risk. Worrisome signslike the mysterious disappearance of entire amphibian populations and fishers' nets that come up empty more frequently—reveal that there may be more species in trouble. Of invertebrates, including insects, mollusks, and crustaceans, we know the least. But what is known is far from reassuring.

At the advent of agriculture some 11,000 years ago, the world was home to 6 million people. Since then our ranks have grown a thousandfold. Yet the increase in our numbers has come at the expense of many other species.

The greatest threat to the world's living creatures is the degradation and destruction of habitat, affecting nine out of ten threatened species. Humans have transformed nearly half of the planet's ice-free land areas, with serious effects on the rest of nature. We have made agricultural fields out of prairies and forests. We have dammed rivers and drained wetlands. We have paved over soil to build cities and roads.

Each year the earth's forest cover shrinks by 16 million hectares (40 million acres), with most of the loss occurring in tropical forests, where levels of biodiversity are high. Ecologically rich wetlands have been cut in half over the past century. Other freshwater and terrestrial ecosystems have been degraded by pollution. Deserts have expanded to overtake previously vegetated areas, accelerated in some cases by overgrazing of domesticated animals.

A recent study of 173 species of mammals from around the world showed that their collective geographical ranges have been halved over the past several decades, signifying a loss of breeding and foraging area. Overall, between 2 and 10 percent of mammal populations (groups of a single species in a specific geographical location) are thought to have disappeared along with their habitat.

Direct human exploitation of organisms, such as through hunting and harvesting, threatens more than a third of the listed birds and mammals. Other threats to biodiversity include exotic species, often transported by humans, which can outcompete and displace native species.

A recent survey of some 1,100 animal and plant species found that climate change could wipe out between 15 and

37 percent of them by 2050. Yet the actual losses may be greater because of the complexity of natural systems. The extinction of key species could have cascading effects throughout the food web. As John Donne wrote, "no man is an island." The same is true for the other species we share this planet with: the loss of any single species from the web of life can affect many others.

Healthy ecosystems support us with many services—most fundamentally by supplying the air we breathe and filtering the water we drink. They provide us with food, medicine, and shelter. When ecosystems lose biological richness, they also lose resilience, becoming more susceptible to the effects of climate change, invasions of alien species, and other disturbances.

The 1992 Convention on Biological Diversity provides a framework for countries to conserve biological diversity and promote sustainable development. It has been signed by 168 countries, notably excluding the United States. The parties, which recently held their seventh conference in February 2004 in Kuala Lumpur, have set a target of substantially reducing biodiversity loss by 2010. Yet the convention lacks mechanisms for action and enforcement, which may make it difficult to achieve the target.

Consciously avoiding habitat destruction and mitigating the effects of land use change, reducing the direct exploitation of plants and wildlife, and slowing climate change can help us stop weakening the very life-support systems we depend on. While this may be the first time in history that a single species can precipitate a mass extinction event, it is also the first time in history that a single species can act to prevent it.

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Green, Green Lawns

What's Dying Besides the Pests?

(continued from page 1)

nearby park, affecting pets and the local wildlife.

A well-meaning homeowner chooses a lawn care company that has advertised itself as environmentally friendly. The company tells the homeowner that herbicides and chemical fertilizers are compatible with a natural lawn, even though they are not. When the homeowner asks to see the labels of the chemicals being used, the company spurns the request. The homeowner is cowed by the "experts" and allows them to apply environmentally unsafe chemicals to his property.

The uncomfortable reality is that pesticides are poisons. Whether they come in the form of herbicides, insecticides, fungicides, or rodenticides — the point of a pesticide is to kill, mitigate, or repel life, and that is why the EPA's stated position is that no pesticide should be considered completely safe, even when used as directed.

In this age it seems unrealistic to believe that all homeowners will swear off pesticides anytime soon, but they can act more responsibly by learning how their pesticides affect wildlife and what non-chemical options exist for controlling pests around the home.

What Else Is Dying Besides the Pests?

A common misconception in America is that if a pesticide is registered with the EPA, it means the government believes it is safe. Registration is not an endorsement of safety or even an indication that the pesticide has been thoroughly tested. The nonprofit group Beyond Pesticides reports that of the 36 most commonly used lawn care pesticides registered before 1984, only one has been fully tested and evaluated — sulfur. Health effects of these 36 lawn pesticides show that: 14 are probable or possible carcinogens, 15 are linked with birth defects, 21 with reproductive effects, 24 with neurotoxicity, 22 with liver or kidney damage, and 34 are sensitizers and/or irritants. In addition, of the over 2,300 substances the EPA believes are used as inerts (ingredients in pesticides that have a "trade secret" status and generally go unregulated and untested by the EPA), over 1,700 are classified as "of unknown toxicity." Based on the EPA's approach to both pesticides and their secret ingredients, it seems the agency's philosophy is that if the public wants pesticides, then they must accept certain risks — both to themselves and to the environment.

Scientists are becoming more aware of how easily pesticides move through the environment and how they

carry their poisoning effects to unlikely places. Even the more remote forms of wildlife - from frogs in the mountains of the Sierra Nevada to beluga whales in the St. Lawrence river — have pesticides in their bodies. Residual pesticides remain in the environment from days to months after they are applied, and natural processes such as drift, surface runoff, leaching, soil erosion, predation, and bioaccumulation can result in pesticides killing non-target wildlife. Richard Stroud, a veterinary pathologist with the National Fish and Wildlife Forensics Lab in Oregon, points out that even sublethal doses are problematic: "When life is a fight for survival, imagine how something as simple as a tremendous headache will set you up for increased predation. Because we only see the acute deaths, we don't pick up the chronic problems associated with pesticide exposure." When looking at



the indiscriminate nature of the 36 most common lawn pesticides, Beyond Pesticides discovered that 14 pesticides were detected in groundwater, 6 have the potential to leach, 11 are toxic to birds, 21 to fish and aquatic organisms, and 12 to bees.

Among the most chemically sensitive wildlife groups are pollinators, such as bees and honeybees, which are vital to the food industry. The EPA states that domesticated honeybees and thousands of different species of wild bees pollinate more than 150 food crops in the United States, including cotton, potatoes, almonds, onions, and melons. When pesticides are used, not only do the pollinators suffer but so does the economy. Dr. David Pimentel, a professor of Insect Ecology and Agricultural Sciences at Cornell University and also a board member of the Rachel Carson Council, reported in 1998 that the estimated pollination losses to food production from pesticides' effects on honeybees and wild bees was

\$200 million per year.

Ironically, earthworms are also frequent victims of lawn pesticides, even though their presence is beneficial to any lawn. An earthworm's "castings," or waste material, are incredibly rich in nutrients and greatly benefit soil fertility. And both "castings" and earthworms themselves serve as food sources for a multitude of wildlife. But the Pennsylvania Department of Agriculture reports that when pesticides are used regularly in a given area, 60 to 90 percent of earthworms are killed.

Amphibians, which are natural predators of pest insects, are exposed to pesticides and fertilizers when rain carries the chemicals into streams and wetlands. Due to their porous skin, amphibians (such as frogs, toads, and salamanders — especially at the egg and tadpole stages) are highly susceptible to fertilizers and pesticides that enter their habitat. Exposure to chemicals can lead to the deformities that are often reported in the nightly news, such as frogs that have missing limbs, multiple limbs, missing internal organs, or missing eyes. In addition, atrazine, a widely used herbicide, has been found to severely affect the reproductive condition of frogs — demasculinizing tadpoles and turning them into hermaphrodites. The EPA currently allows up to 3 ppb (parts per billion) atrazine in drinking water, although researchers have found effects on frogs at concentrations as low as 0.1 ppb.

Birds, which are also natural predators of pest insects, are poisoned by pesticides at a rate of 60 - 70 million a year according to the EPA. The Rachel Carson Council reports "In the early 90s, following a routine application of the insecticide diazinon to the turf of a condominium in Indianapolis, 47 mallard ducks were fatally poisoned. The Oak Brook, Illinois, lawn-care company responsible, although apparently observing the written product label directions, was nevertheless fined \$4,700. The professional applicator was found guilty of a misdemeanor under the Migratory Bird Treaty Act." The lawn-care company followed the label instructions and used an EPA-registered pesticide, yet the result was still devastating to the local bird life.

After insects and crustaceans, fish are the third most vulnerable group to pesticides. In the publication 18 Major Lawn Care Chemicals, the Rachel Carson Council states that of those chemicals surveyed in their report, 85 percent were in the range of toxic to highly toxic to fish. A lab study by the University of Maryland (continued on page 15)

Green, Green Lawns

What's Dying Besides the Pests?

(continued from page 14)

Biotechnology Institute found that household and garden chemicals, in the same quantities as found in the Chesapeake Bay, can cause damage to the sexual reproduction and development of fish.

And no discussion of wildlife and pesticides can be complete without mentioning the impact of chemicals on perhaps the most highly valued resident of the Chesapeake Bay — the blue crab. Crustaceans, such as blue crabs and lobsters, are the wildlife group that is the second most vulnerable to pesticides after insects. The Rachel Carson Council's publication on pesticides and wildlife titled Wildlife at Work reports that "The pesticide most widely used for non-agricultural purposes and the sixth most common for agricultural use, the herbicide 2,4-D, can be highly toxic to crustaceans like the blue crab. An organophosphate insecticide, naled, also highly toxic to crustaceans, continues to be sprayed close to bodies of water in Maryland for mosquito control." Rachel Carson herself discussed the blue crab's vulnerability to pesticides in her landmark book Silent Spring where she reported "These crabs are so highly susceptible to insecticides that every spraying of creeks, ditches, and ponds in tidal marshes kills most of the crabs living there. Not only do the local crabs die, but others moving into a sprayed area from the sea succumb to the lingering poison."

What's a Homeowner To Do?

While it's clear that pesticides are hazardous to wildlife and often haphazard in their impact, the fact is homeowners still have the need to control pests around the home. So what does a homeowner do when he or she wants to control pests in environmentally responsible way?

- Most important is to correctly diagnose the source of the problem. If mosquitoes are the target pests, then first make sure that there is no standing water on the property. A mosquito can lay eggs in a capful of water. If an unhealthy lawn is the problem, eliminate causes such as poor soil drainage, non-native plants, or over-fertilizing. At least one half of all observed landscape problems are not caused by insects or disease.
- If there is a pest, be sure it is abundant enough to warrant attention. The mere presence of a pest does not mean there's a problem. And re-

member that only 10 percent of insect species are considered plant pests.

- Take the time to look for non-chemical solutions to pest control, including beneficial insects, biologicals, and preventive management. And use the Internet to find out more about Integrated Pest Management in Maryland, as well as Bay-Friendly Landscaping guidelines.
- Avoid over-fertilizing plants as it can lead to pest problems.
- Use plants that are native to the area when landscaping as they often require less water, fertilizer, and pesticides than non-native plants.
- Keep leaves and grass clippings out of gutters and storm drains to prevent them from being washed into rivers and streams by storms and rain.

If a homeowner feels that he or she must use pesticides, then some precautions are advised:

- * Before buying a pesticide (particularly on the Internet), obtain a copy of the label and read it carefully. Also obtain and read labels for any pesticides that are used by lawn-care companies or that are promoted for use in the neighborhood. Remember that it is against the law to use a product in any way other than as specified on the label.
- When applying a pesticide, be sure to follow the directions on the label. Look for language that warns against using the pesticide during bird migration season, on a windy day, or before a rain. And only apply the recommended amounts. More is not better it's just more dangerous.
- Do not spray right to the edge of water. Leave a buffer zone of natural vegetation.
- Store and dispose of pesticides properly.
- Ask your local government and neighborhood organizations to avoid products that are known to be dangerous to wildlife.
- ◆ Contact a group like the Rachel Carson Council if you have questions about the toxic characteristics of chemicals, how those chemicals might affect humans and wildlife, and whether there are safe alternatives. ■

The Rachel Carson Council

Rachel Carson was a resident of Maryland for most of her life, and is well known around the world as the author of the seminal book, Silent Spring, which sounded the alarm about DDT and pesticide abuse. Published in 1962 (just 19 months before her death from cancer), Silent Spring has been credited with bringing about the banning of the pesticide DDT, inspiring the creation of the EPA, and igniting the modern environmental movement. The Rachel Carson Council (RCC) was created by her friends and colleagues in 1965 and was then known as the Rachel Carson Trust for the Living Environment. In 1980, the name was changed to the Rachel Carson Council, yet the group's mission remained the same: to continue her efforts to educate the public about the abuse of pesticides and to protect the environment she loved so deeply.

Today the RCC uses its expertise, its extensive library, and its network of consultants to help citizens and professionals in the United States and abroad find answers to their concerns about health and environmental problems.

Interested persons can learn more about pesticides on the RCC's website, at its conferences and workshops, and in the group's 150+ publications.

Contact information website: members.aol.com/rccouncil/ourpage email: rccouncil@aol.com address: P.O. Box 10779, Silver Spring, MD 20914-0779 phone: 301-593-7507

Green, Green Lawns

The Grass Crop of the Chesapeake Bay Watershed

continued from page 1

making about two fertilizer applications each year. The exact contribution of these lawn fertilizers to the Bay's nutrient problems is not fully known but may be quite severe. Lawns are not the sponge many people think. Most lawn soils are extremely compacted, and recent research indicates that about half of all rain storms produce at least some runoff from lawns. Scientists have also discovered that nitrogen and phosphorus levels in lawn runoff are about two to ten times higher than any other part of the urban landscape such as streets, rooftops, driveways or parking lots. There is no longer much doubt that lawn fertilizers are reaching the Bay; the remaining question is simply the magnitude of the nutrient load

that is delivered. Given the risk of nutrient pollution, and the fact that one can maintain a respectable lawn with little or no fertilizer use, homeowners may want to seriously reevaluate the need for annual lawn fertilization.

Lawn care and stream pesticides

Many think that the largest source of pesticides to our waters are crops, but this is no longer the case. The most comprehensive national pesticide monitoring study to date detected the higher levels of insecticides in urban streams compared to agricultural ones. This is not surprising when one considers that the average acre of maintained suburban lawn receives five to seven pounds of pesticides each year.

About half of Bay residents reported that they had applied pesticides to their lawn or garden in a recent survey.

These pesticides are reaching local streams and rivers. According to the same national monitoring study, one or more pesticides were detected in 99% of urban streams sampled. Pesticides levels in urban streams exceeded national water quality standards to protect aquatic life in one out of every five samples. Even more troubling was the finding that 100% of fish in urban streams had detectable levels of pesticide in their tissues, with 20% exceeding recommended guidelines for fisheating wildlife (such as raccoons, kingfishers, ospreys and eagles).

Becoming a better grass farmer

There is perhaps no better way for you to directly make an impact on the Chesapeake Bay than by rethinking how you manage your lawn. Some simple choices can keep the Bay clean and your lawn green. Most of them can save you a lot of time and money. Check out the "Slackers Guide to Lawn Care" [Below] for a few easy tips.

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The Slacker's Guide to Lawn Care



Your choices in maintaining your lawn make a real difference in the health of the Bay. Indeed, you can help protect the Bay and have a respectable looking yard by doing virtually nothing at all. Take a minute to consider some easy tips to simplify lawn care. With all the time you save, you can spend more time on your deck snoozing, watching clouds, or enjoying a cold beverage.

- 1. Keep the spreader in the garage this year. Unless you plan to have livestock graze your lawn, you simply don't need to be fertilizing your grass every year. About half of Bay area residents never fertilize their yards, and their lawns are still green. Take a break for a year and see how your lawn responds.
- 2. Use a composting lawn mower. These mowers recycle lawn clippings on your yard, help build your soils, and preserve landfill space. According to surveys, nearly 60% of Bay area residents practice this form of grass recycling. Using a composting mower helps meet at least a fourth of the nutrient needs of your yard, and saves dozens of hours of bagging over the course of a summer.
- 3. Mow higher and less frequently. You can control weeds by shading them out. Set your mower height to three inches, and you will have both a healthier lawn and fewer weeds. Turf grass experts cau-

tion that cutting grass too short is a major cause of problem lawns.

- 4. Don't bother with herbicides; you really can't win. An average acre contains more than 200 million seeds in the top six inches of soil, which germinate under the right moisture, light and temperature conditions. Indeed, when you turn over grass and expose the underlying soil, about five percent of these seeds can germinate, or about 250 weeds per square foot. Don't get involved in a battle you can't win, and remember that the naked eye generally cannot distinguish between a perfect lawn and one containing up to 15 percent weeds.
- 5. Take advantage of a hard winter. One of the few benefits of a hard winter is that extreme cold temperatures and frozen ground greatly increase the mortality of many common insect pests in our region. Given this year's hard winter, we can expect fewer insect problems compared to

what followed the mild winters of years past. So, you might want to keep the pesticide applicator in the garage this summer

- 6. Shrink your lawn. A great way to save a lot of time is to try to shrink your yard by about five percent each year. Start with the soggy and/or steep areas that are hard to mow. There are many attractive ways to shrink a yard. You can lay down three or four inches of mulch and plant some container grown plants. Or go to your local lawn and garden store, and, for about ten bucks, you can buy a meadow-seed mix, which contains seeds for colorful annuals and perennials that can attract butterflies and hummingbirds to your home.
- 7. Plant a fruit tree or native shrub. Birds love to eat insects and grubs, so try attracting them by planting native trees or shrubs that produce tasty berries. Then, sit back on your deck and let the birds do the work. Big insect-eaters include blue(continued on page 17)

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Lawn Care

The Slacker's Guide

(continued from page 16) birds, cardinals, robins, nuthatches and tufted titmice.

- 8. Select a good natural lawn care company. About 25% of us are true slackers, in that we pay a lawn care company to take care of our yards. While it's laudable to get somebody else to do the sweating, a good slacker should insist on a company that uses organic fertilizers and natural pest management techniques. Although just about every lawn care company has "green" in its name, they don't necessarily practice environmentally responsible lawn care. Before you sign a contract, check them out to see if they use natural or organic methods. In a recent survey, fewer than two percent of Chesapeake Bay area residents that hired lawn care companies chose an environmentally responsible natural lawn care company.
- 9. Turn off the spigot. Given the record rainfall last year, your yard probably recovered nicely by this spring. Established lawns can and will survive a few weeks without rain, so save both money and time by reducing or eliminating lawn watering.
- 10. Turn your lawn into a Bayscape. Several great web sites are available to help you design a great bayscape in your lawn or to create backyard wildlife habitat. Check out the Bayscapes website: www.alliancechesbay.org/bayscapes.cfm or the backyard wildlife planner www.nwf.org/backyardwildlifehabitat/

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Invasive Species and Biodiversity

Volunteers Battle Foreign Invaders with Gardening Tools

by Jay Friess — On a recent warm and sunny Sunday morning four student volunteers from the University of Maryland gathered in the parking lot of Ruth B. Swann Memorial Park in Bryans Road.

It was a beautiful day for battle.

Led by Marc Imlay, biodiversity/endangered species chairman for the Maryland chapter of the Sierra Club, the students armed themselves with canvas gloves, shears and pitchforks, and plunged into the park's backwoods on a mission to seek out foreign plant invaders and destroy them.

"It's not the plant that we're fighting" Imlay explained. "It's just in the wrong place."

After a half-hour of trudging through undulating terain on a trail punctuated by overturned trees and giant mud puddles - remnants of Hurricane Isabel's fury - Imlay located the enemy. An Asian bittersweet vine (*Celastrus orbiculatus*), a more obnoxious cousin of the endangered American bittersweet, could be seen snaking up the side of a tall deciduous tree, culminating in a poof of leaves that crowded the tree's branches, competing for the light.

On the ground nearby lay a twisted pile of vines, casualties from the last assault Imlay and another group of volunteers made on the bittersweet. Imlay dropped to his knees and demonstrated how to kill the constricting vine. First, he cut the climbing vine off from its lifegiving root system with the shears. Then, using the pitchfork, he carefully lifted the shallow root system from the topsoil, taking care not to encourage erosion by disturbing the soil too much. With his hands, he found every last branch of the root system, removing it all to prevent regrowth. The roots were thrown on the pile to die.

Imlay said that Asian bittersweet made its debut in North America in the 1860s. It was innocently cultivated for vine cover and as a Christmas decoration, but quickly exploded out of control. The red berries it produces often end up in landfills after the holidays, and whole colonies of the vine have been known to spring up around East Coast dumps.

"The patch we have got here is part of an old homestead," Imlay said.

The bittersweet, like many Asian plant species that have taken root here, has few natural competitors or predators in Charles County, and local environmentalists are working to ensure that it does not over run and eradicate local species.



Student volunteer Josh Webb grasped a vine and gave it a yank.

"What you just touched was poison ivy," Imlay said. Then, with a chuckle, he added, "That's what we're trying to protect."

Imlay said that the threat posed by invading foreign species is rapidly becoming a worldwide economic concern, causing longtime political enemies — the en-

vironmental and business lobbies — to suddenly join forces against it in what he calls "the last great environmental movement" to "rescue our native ecosystems."

"The people I've been opposed to all my life ... we're shaking hands and drinking beer," he mused.

He said that the Bush administration, often assailed by environmentalists for relaxing air and water quality standards at the behest of big business, has made native species defense one of its top environmental priorities.

"[President George W. Bush] has fully supported this part of the environmental movement," Imlay said.

In the ongoing battle to keep foreign plants, animals and microbes in their place, it's often the outbreaks that grab the headlines, such as the spread of West Nile virus. However, recent containment efforts, such as the Maryland Department of Natural Resources' battle with the Asian snakehead fish in Crofton and the Sierra Club's efforts at Swann Park, are examples of successful containment and eradication strategies that are slowly turning back the tide.

The club has erased Japanese stiltgrass from the park, and by the end of the day, Imlay and the students had cut and uprooted all the remaing bittersweet and Japanese honeysuckle.

"I'm really happy that we got all of the bittersweet," Imlay said. "It's all done."

Jay Friess is a staff writer with the Maryland Independent. This article originally appeared in the Maryland Independent and is reprinted with permission.

Natural Selection: Books and Writers

Carl Pope and Paul Rauber discuss the gap between the administration's rhetoric and its record

Strategic Ignorance

Why the Bush Administration Is Recklessly Destroying a Century of Environmental Progress

and PAUL RAUBER

by Ed Stennett — Paraphrasing Robert Redford's praise recorded on the back cover: This book will leave the reader astonished at the sheer scope of the Bush administration's ideologically-driven dismantling of a century of environmental stewardship and protection. In large measure this simple statement captures the essence of the book.

The book covers so much ground that it is impossible to mention all its various arguments in a short essay. Instead, I will touch on just one point: the duplicatous nature of the Bush administration's approach to environmental matters.

James Watt, Secretary of Interior under Reagan, made it easy to understand what the Reagan administration was up to. He referred to environmentalists as "Nazis" and "Bolsheviks." Railing against "Big Environmentalism," Watt announced his intention to reverse 25 years of bad resource management. He openly declared that national stewardship was an obsolete ideal and would be discarded. He said "we'll mine more, drill more, cut more timber."

Watt's "in-your-face" approach rekindled some zeal among environmentalists and engendered some congressional opposition to the administration's anti-environment

policies. But neither the environmentalists nor Congress were able to stop Reagan from reversing two decades of environmental progress. To polluters, clear-cutters, and strip miners, the Reagan administration was heaven sent.³ If such people were happy then, they are surely ecstatic now.

Strategic Ignorance makes it clear that the G.W. Bush administration is even more anti-environment than the Reagan administration, but more sophisticated. While James Watt was openly hostile, appointees in Bush's administration are "stealth Watts." Their modus operandi is: "Never admit what you are up to. Rather, assert

the opposite, repeatedly and despite all available evidence." Thus Bush regularly has his picture taken in natural settings and wraps his anti-environment policies in benign names like "Clear Skies" and "Healthy Forests."

We are all familiar with the role that Karl Rove plays in shepherding Bush, but how many of us are familiar with the name "Frank Luntz"? Luntz is a pollster, an expert on what the public likes and dislikes. His advice to the Bush administration includes:⁴

The three words Americans are looking for

in an environmental policy are: safer, cleaner, and healthier. Any discussion of the environment has to be grounded in an effort to reassure a skeptical public that you care about the environment.

- Don't attack the Environmental Protection Agency even if you agree with Tom Delay that it is the Gestapo of govern-
- Argue that Republicans have a better approach to solving environmental challenges, not that the environment is not a significant issue.
- No matter how many experts know that the Superfund

law or the clean Water Act or the Clean Air rules don't work as they should, the public doesn't perceive them as broken. They are popular programs [and should be weakened with great care].

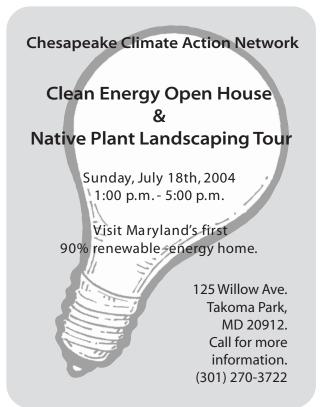
In other words, Luntz's role is to advise an administration intent on rolling back conservation to the days before Teddy Roosevelt how to do it in a way that will be least likely to cause effective resistance from the American people.

Reading Strategic Ignorance will incite any environ-

mentalist to action. And for this reason it should be read by every environmentalist. But be warned; the reading experience is sobering – perhaps even deeply discouraging. This is so because we learn that there are thousands of powerful people in the Bush Administration who are quietly, competently, dedicated to bringing back the days of social Darwinism and robber barons.

Before I had read even half of the book, I was reminded over and over again of Rachael Carson's 1953 statement: "It is one of the ironies of our time that, while concentrating on the defense of our country against enemies from without, we should be so heedless of those who would destroy it from within." •

- ¹ Losing Ground, Mark Dowie, MIT Press, 1995, p67
- ² Strategic Ignorance, p25
- ³ Losing Ground, p68
- ⁴ Strategic Ignorance, various locations
- ⁵ Lost Woods, Edited by Linda Lear, Beacon Press, 1998, p100



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Meditation

Sacred Space

The solemnity of the moment derived not only from the mystery of what we were observing, but also from a realization of its fragility.

by Bill Breakey — It was a pilgrimage that began at day. You may glimpse them in your back yard or over Querétaro, in central Mexico. We rented a car and drove 150 miles south on mountain roads through wonderful scenery to the old mining town of Anguangeo. Several miles up a potholed road, we turned off at the sign for Sierra Chincua on a very rough stoney dirt road and continued uphill for another three miles until the road ended. From there we continued on horseback. The horses were essential because at 9,000 feet in the Sierra Madre Mountains, the air is thin and very little rapidly exertion rendered us coast dwellers breathless. The well-behaved horses carried us uphill and downhill for several miles until, at a clearing in the forest, they came to the end of their territory, and from here on it was on foot. With dry, dusty forest floor beneath our feet, the going was not too bad. In some parts it was quite steep, but we took it slowly. I thought of the pilgrims at Croagh Patrick in the West of Ireland. That 2,000 foot mountain is where Saint Patrick, according to legend, fasted for 40 days. The most devout pilgrims climb the mountain on their knees.

After about 45 minutes walking on steep hillsides we arrived at our destination. On all sides tall firs stood like the pillars in a cathedral. We later discovered that, appropriately enough, these trees are Abies religiosa, the sacred firs. In front of us, hanging in great masses from branches high above the ground, were what had drawn us to this place: millions of monarch butterflies. Some of them, as the sun warmed their fragile bodies, took wing and sailed through the mountain air among the trees: golden prayers rising on the shafts of sunlight.

Monarch butterflies are splendid: gold and orange and black. But their uniqueness is not in their beauty. It is in the fact that they alone among butterflies migrate for enormous distances. From all over the United States and Canada, east of the Rockies, monarchs migrate to this one spot in central Mexico. Every year. To the same spot. These apparently fragile insects fly distances of as much as 2,000 miles at a rate of 50 miles a the waters of the Bay or on the Eastern Shore, head-

ing south in August and September. They are voyaging to this small patch of forest in the mountains of Mexico.

About 50 of us were gathered there. A few were foreigners, but most were Mexicans, young couples and families

from Mexico City, local people. We all stood or sat on the ground or on fallen trees, silently taking in the wonder we beheld. There was no music, no singing or chanting, no unison prayers, but this was a sacred moment for us all,

awed by the mystery of what was before us. Nobody knows how the monarchs from 2,000 miles away find this place, or what force attracts them here. For millennia, presumably, they have been coming to this patch of coniferous forest.

The solemnity of the moment derived not only from the mystery of what we were observing, but also from a realization of its fragility. Any one of these insects could be crushed in an instant, but the greater danger lies in the potential for loss of their habitat. The Mexican government has established a nature reserve to protect these mountain forests, but the pressure is great. The surrounding population is poor and the trees could provide a source of income for them. Lumbering and carpentry are important local industries. Destroy this forest and you would destroy a species, with ecological repercussions all over North America. Which is more important, hungry people, or butterflies? The answer no doubt is to find ways to address their poverty without damaging one of the wonders of the natural world.

As we sat and watched the butterflies in their clusters or fluttering in the sunlight, this sacred place became a place for rededication. We vowed silently to protect the earth, the trees, the water, the air so that we and all of God's other creatures, beautiful or ugly, may live out our days and share in the mysteries of life. What God has created, let no one despoil.

Create an Environmental Legacy

equests have played a key role in the Sierra Club's environmental successes over the years.

Planning now may make your gift more meaningful and reduce taxes on your estate. We have many gift options available. We can even help you plan a gift for your local Chapter. For more information and confidential assistance, contact:

John Calaway Director, Gift Planning 85 Second Street, 2nd Floor San Francisco, CA 94105 415-977-5639 or e-mail planned.giving@sierraclub.org



Explore, enjoy and protect the planet

Invasive Species

Invasive Removal and Habitat Restoration Events

Chevy Chase, Woodend Sanctuary

The Audubon Naturalist Society is seeking volunteers to help remove non-native plants from its Woodend Sanctuary, in Chevy Chase, MD, every second Saturday of the month between 9 a.m. and noon. Volunteers will be trained by staff and/or experienced volunteers. Call 301-652-9188 x30 for more information or to sign up.

Fort Meade Exotic plant removal

A partnership between the Department of the Army, the Maryland Native Plant Society, the Maryland Chapter of the Sierra Club, and volunteers

Help remove Japanese stilt grass, English ivy, garlic mustard, tree of heaven, multiflora rose, crown vetch, Japanese honeysuckle, common privet, phragmites, Asiatic tearthumb, etc. You will receive a short training session from personnel from the Maryland Chapter of the Sierra Club or the Maryland Native Plant Society in the identification of, removal and control techniques for non-native invasive plants. People of all ages, backgrounds and interests are invited to spend a day outdoors, hand-pulling some nonnative weed populations while learning about the differences between native and non-native plants and helping to preserve the health and native wildlife of the natural areas located on a U.S. Army installation.

Where and When
Fort Meade Army Installation
Second Saturday of every month at 1

Second Saturday of every month at 10:00 a.m.

Directions: Take Route 175 East from the 295 Baltimore Washington Parkway. Take Llewellyn Avenue South onto the installation. A Ft. Meade representative will meet you at guard station to escort you to the work site.

Bring hand tools, gloves, lunch and water. Long sleeves and pants recommended. Contact Don Marquardt at 301-677-9185 or email

marquardtd@emh1.ftmeade.army.mil

Caroline County, Adkins Arboretum

Adkins Arboretum in Caroline County on Maryland's Eastern Shore is seeking volunteers to assist the staff in the removal of invasive non-natives on the Arboretum's 400-acre site. Volunteers will be trained by the Arboretum staff.

Workdays are Wednesday from 1 p.m. to 3 p.m. For more information, contact Sylvan Kaufman at 410-634-2847 x13.

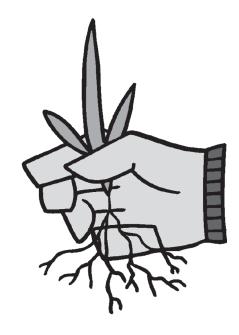
Greenbelt, Greenbelt Homes Inc Housing Cooperative

The Greenbelt Homes Inc. (GHI) housing cooperative in Old Greenbelt has 85.6 acres of stewardship forest as well as other wooded parcels. The Woodlands Committee is actively involved with urban forestry management. Regular work sessions for the removal/eradication of non-native invasive plant species are scheduled throughout the year. Also scheduled are bird counts and plant identification seminars and field experience.

The City of Greenbelt has passed, in principle, a forest ordinance for large parcels of its woodlands. The City is establishing a committee to work out the management details. For more information on GHI Woodlands Committee activities, contact Mary Kingsley at mkingsley@hotmail.com. Mary and her husband, Roger, are also Sierra Club members.

Ruth Swann Park and Chapman Forest , Charles County

Dates: First Sundays, monthly Time: 10:00 a.m. - 4:00 p.m.



Remove invasive non-natives from the 200-acre Swann Park and 800 acre Chapman State Park. There will be time for plant identification and a beautiful beach lunch. Participating organizations include MNPS and Sierra Club. To empower ourselves, there are general methods and species-specific methods such as best season for species, wet soil condition for pulling, handouts, extent of area of natives seen rescued, delayed gratification, targeted use of herbicides, and matching funds for staff to do what volunteers find hard to do.

Directions: Meet at the Ruth B. Swann Park-Potomac Branch Library parking lot, 20 miles south of Washington Beltway (I-495) on Rt. 210 (Indian Head Hwy). Give yourself 30 to 40 minutes from the Beltway. Car pool info: Meet at Sierra Club chapter office at 9 a.m. and return at 5 pm. Call Laurel Imlay at 301-277-7111. Bring gloves, lunch, and water. Durable long sleeves and pants recommended. Contact: Marc Imlay 301-283-0808. RSVP is welcome.

Sligo Creek Park, Montgomery County

Friends of Sligo Creek welcome your help with invasives in this eight-mile tributary of the Anacostia, running from Silver Spring south into D.C. Work is usually organized by section stewards and features protection of ponds, floodplains, upland woods, as well as narrow, urbanized sections. In cooperation with M-NCPPC staff and the Weed Warrior program, Sligo Friends sponsor work parties and many small-group opportunities to work together to uncover Sligo's many treasures and to work out techniques for dealing with the usual range of invasives. Contact: Sally Gagne at sgagne@erols.com or Laura Mol at 301- 681-9686 for more information.

Brookside Gardens, Montgomery County

Weed Warriors are needed for the forested areas surrounding the gardens. You will be given directions so that you may work independently, weekends or weekdays, on your own schedule.

Contact: Stacy Parsons at 301-962-1417 or stacy.parsons@mncppc-mc.org
Websites: www.BrooksideGardens.org
and/or www.MC-MNCPPC.org/environment/weed_warriors/intro.shtm.

Montgomery County Parks

WEED WARRIORS WANTED

The Maryland-National Capital Park and Planning Commission's (M-NCPPC) forest ecologist is assembling a team of volunteers (weed warriors) to monitor and remove non-native invasive plant species in Montgomery County parks, and we need your help! As a weed warrior volunteer, you will receive a short training session from the forest ecologist in the identification of, removal and control techniques for non-native invasive plants. Weed warriors can then work at their own pace and choose a schedule that

Invasive Species

best suits them. Many current weed warriors live near a M-NCPPC stream, valley, park, or regional park and do their volunteer work while walking their dogs or taking an occasional hike through their neighborhood park. Whether you choose to work individually or in a group, your efforts will contribute to the control of non-native vegetation in the 28,000 acres of Montgomery County parkland.

Contact: Carole Bergmann, M-NCPPC forest ecologist, at 301-949-2818 for more info or to sign up.

Invasive Exotic Plant Removal Events- Howard County

Conservation Stewardship Project at the Middle Patuxent Environmental Area (MPEA) and elsewhere in Howard County will be meeting on the fourth Tuesdays of the month from 9:30 a.m. til noon. Each trip will have both an educational component and a work component.

Tuesday, June 24: Learn about butter-flies and dragonflies from MPEA park naturalists while we work to remove milea-minute vines. Meet 9:30 a.m. at Trotter Road parking lot located 0.8 miles south of Route 108 in Clarksville. Please bring water and gloves and wear protective clothing. For information, directions or to register, contact Aylene Gard, 410-992-9889, or Robin Hessey, rmhessey@umd.edu. The Conservation Stewardship project is sponsored by Howard County Recreation and Parks and the Howard County Master Gardeners.

Myrtle Point Park, St. Mary's County

Third Saturday monthly at 8a.m. 'til 11:30 a.m.

Directions: From Washington, take Rt. 4 south, crossing over the Patuxent River

at Solomons. About two miles past the bridge, make a right onto Patuxent Blvd. Go about two miles to Myrtle Point Park. Meet in the park lot. For more info, or to receive updates about workdays e-mail Bill Burruss at billymilkweed@starpower.net

Washington County, Licking Creek

Weedbuster workday, Thursday, June 17, 10 a.m .to 4 p.m. There is a large but manageable infestation of Ailanthus altissima, the tree-of-heaven (also known as the "tree from hell" among land managers), just uphill from a rare limestone forest community. Our continuing goal has been to extirpate this non-native invasive so that its seeds don't drop downhill and degrade the rare plant habitat. For two years we have conducted "hack and squirt" treatments on the larger trees with great success. This year our task will be foliar spraying of new growth with herbicide. For information call Meredith Malone, conservation steward, The Nature Conservancy, at mmalone@tnc.org or 301-897-8570.

Greenbelt, Greenbelt National Park

Greenbelt invasive removal Saturday, July 3 and August 7, 2004 (1st Saturdays). Located just 12 miles from Washington D.C., Greenbelt Park is a beloved retreat from the city and an important refuge for native plants and animals. Come join us in defending Greenbelt Park from encroachment by alien invasive plant growth. Volunteers will be hand-pulling harmful non-native plants such as Japanese honeysuckle, beefsteak mint, mile-a-minute weed and garlic mustard.

People of all ages, backgrounds and interests are invited to spend a fun day outdoors while learning about the differences between native and non-native plants and helping to preserve the health and native

wildlife of this local natural area. Bring lunch, drink, and appropriate clothing for weather.

Directions: From the Beltway, take Kenilworth Avenue south about 1/4 mile to Greenbelt Rd, MD 193 (Kenilworth goes under 193). Stay to the right so you can take MD 193 East (a left to go over Kenilworth) for only a few hundred yards to the park entrance. Follow the signs to the Sweetgum picnic area. For any questions and information about upcoming events, contact Tom Crone at tomnjan@erols.com or 301-864-1959 or Kate Odell at kateo@wam.umd.edu or 301-474-5395.



We're Gearing Up

for a continuous presence on the Mall starting in June.

We'll hand out materials on the Bush Administration's environmental record.

We'll entertain the kiddies with a fish pond and some free goodies while we talk to their parents.

We need lots of volunteers to cover as many days as possible. Please contact Betsy Johnson if you can help.

301-656-4948, betsy_johnson@comcast.net

Chesapeake 21 Early Summer 2004

Outings & Events

Sierra Club outings are open to everyone, and normally go, "rain or shine." Reservations are not required, unless noted in the announcement.

Each outing is intended to be a wholesome, safe, and enjoyable experience in the out of doors. For that to happen, each participant must have the clothing, equipment, and stamina suitable to the event. Inexperienced/new participants are encouraged to first join trips that are rated "easy" or "moderate", to evaluate their own individual suitability for more difficult adventures.

If you have questions about the terrain, the duration of the trip, or about recommended clothing or equipment, please contact the outing leader.

Each outing participant should carry an adequate supply of food (lunch, snacks or more), a personal first aid kit, any personal medications that may be needed during the event, and at least one quart of water for every two hours that he or she expects to participate in the event. On hot days or on more strenuous outings, more water is likely to be needed.

Unless noted in the announcement, Club outings are intended for adults. Before bringing a minor to an outing that is not specifically designated for children, please consult the leader to determine if it is appropriate.

Minors (under 18 years of age) must be accompanied by a parent or a legal guardian, or they must have both 1) a signed permission slip, and 2) the leader's prior consent, to participate in the Club outing.

All outdoor adventure activities carry some risk. Participants should be aware that Club outings are often to places where professional emergency medical aid may be two or more hours away. All participants should consider the implications of this fact. People with health concerns should consult their doctor to determine the advisability of participating in these activities.

Sierra Club outings normally begin and end at the trailhead, canoe put-in/take-out point, or some other similar starting/ending point. Travel from the advertised meeting place to the starting point and back, is the sole responsibility of each participant. While the Club encourages car-pooling, such arrangements are strictly between the riders and the drivers, and are not a part of the outing. Participants must assume full responsibility and liability for all risks associated with such travel.

All participants on Sierra Club outings are required to sign a standard liability waiver. If you would like to read the waiver before you choose to participate on an outing, it is available on the Sierra Club website, at

http://www.sierraclub.org/outings/chapter/forms/index.asp .

The following outings are planned and managed by volunteers from the Chapter's local groups, and the Metropolitan Washington Regional Outings Program (MWROP). Each organization is identified in the announcement by the following abbreviation:

AA = Anne Arundel Co. Grp.

CA = Catoctin Group

ES = Eastern Shore Group

GB = Greater Balto. Group

HC = Howard Co. Group

MC = Montgomery Co. Grp.

MW = M.W.R.O. Program

PG = Pr. George's Co. Grp.

SM = Southern Md. Group

WM = Western Md. Group

Sierra Club outings are free of charge, unless specified in the announcement. However, the Club may ask for a donation to help defray the expenses associated with the outingsprogram.

Take only pictures, leave only footprints, and have fun out there. ■

John Railey – Outings Coordinator 410-752-0104 – jrailey7007@aol.com

MWROP'S HIKE RATING SYSTEM

One point is assigned to each mile & each 400 feet in elevation change (up and down) - the higher the points, the more difficult a hike. For example, a 5 mile hike with 1,200 feet of elevation change (400 feet up plus 800 ft. down), is given a total of 8 points and rated "B"; an 8 mile hike with an elevation change of 3,600 feet is assigned a total of 17 points and rated "E".

HIKE RATINGS

<u>Rating</u>	<u>Points</u>	<u>Rating</u>	<u>Points</u>
A (Easy)	7 or less	E (Moderate)	17 - 19
B (Easy)	8 - 10	F (Hard)	20 - 22
C (Moderate)	11 - 13	G (Hard)	23 - 25
D (Moderate)	14 - 16	H (Hard)	more than 25

June

Sat 19

Overall Run, SNP. HC. Strenuous 8.5 mile hike featuring wading pools and Shenandoah's tallest waterfall. Footwear change suggested for multiple stream crossings. Bring lunch and water. Depart at 8:00 from the west lot of the park & ride on Broken Land Parkway at Rt. 32. Contact Mike Juskelis, 410-439-4964, mjuskelis@cablespeed.com.

Great Falls, VA. HC. Moderate six mile hike on the cliffs overlooking the Potomac River, then along the Difficult Run rapids. Bring lunch and water. Depart at 9:00 from the west lot of the park & ride on Broken Land Parkway at Rt. 32. Call James Perschy, 410-964-1902, jmatp@starpower.net.

Susquehanna State Park. GB. Moderate. 8 mile hike beginning at historic Rock Run Grist Mill, along hilly trail overlooking the Susquehanna River and through deciduous forest. Meet at the parking lot at K-Mart on Route 1 north of Belair Road exit from 695 at 8:30 AM. Ron 410-767-0106

Rachel Carson Conservation Park,
Sunshine, MD. MW. 9am-noon. Rated A.
This park was nominated as a National
Natural Landmark in a report that says
"the site contains the best known
examples of mature chestnut oak
forest in the Middle Atlantic States and
contains rare orchids and other
unusual plants." Walk about 3 miles,
observe the natural beauty of this
little-known park and discuss County
plans for its recreational uses. Leader:
Ron LaCoss 301/946-1106 before 9pm
or ronenviroed@aol.com.

C&O Canal Towpath Shepardstown and Upstream. MW. Rated B. Out and back for 10 miles. Leisurely stroll from Lock 38 to Snyders Landing.

Exceptionally scenic area, Killiansburg Cave, cliffs. For more details see website after June 1 or contact leaders,

Outings & Events (June, July)

Carol Ivory, carolivory@verizon.net, and Dave Burd, dburd301@netzero.net.

Little Devils Stairs. MW. Rated E. Moderate circuit hike in northern SNP of 10.7 miles with 2,800 feet elevation change. Hike up scenic canyon along Keyser Run. Meet at north parking lot of the Vienna Metro at 8am. Leader: Marcia Wolf 301/565-3165 before 9pm or wolfmk@comcast.net.

Seneca Creek Cleanup – by Canoe. MW. Not Rated. Join Sierrans and many other volunteers to clean up Seneca Creek from the park near Montgomery Village to its mouth at the Potomac River. Cut out major logs, take out smaller branches, and de-trash this beautiful nearby creek (full of wildlife) to make it canoe-accessible. Picnic celebration follows. Leader: Jim Finucane 301/365-3485 before 9pm.

Loch Raven Forest Stewardship Hike. GB. Moderate. A leisurely hike with State Watershed Forester Rob Northrup, City Watershed Manager Gene Scarpulla and Sierra Club forest biologist Dan Bonne to discuss options for managing nearly 18,000 acres of forests adjoining Liberty, Loch Raven and Prettyboy reservoirs. We'll meet 9:00 a.m. Loch Raven Drive at Morgan Mill Road. Parking is available along Loch Raven Drive north of Morgan Mill. For further details contact Richard at 410-654-3021 or GBSierra@ceds.org.

Sun 20

Four States Tour 2004 AT Series (plus poetry). MW. Rated E. An 11-mile hike from Big Flat to Caledonia. Bring poetry if you like. Limited to 20 people. Leader: David Cheng 301/980-6112 before 10pm, dmcheng@yahoo.com.

Father's Day Outing at American Chestnut Land Trust, Calvert County. SM. 1:00- 3:00 p.m. The Sierra Club Southern Maryland Group is having its second outing to explore the trails in the southern section at Chestnut Tree Land Trust in Calvert County.Directions: From route 2/4 in

County.Directions: From route 2/4 in Calvert County turn east onto Parkers Creek Road (about 4 miles south of Prince Frederick), cross Route 765 and turn right onto Scientists' Cliffs Road; drive 0.8 miles to the ACLT parking lot on the left. For more information call Bob Boxwell at 410-414-3311 or e-mail at bobboxwell@hotmail.com.

Tue 22

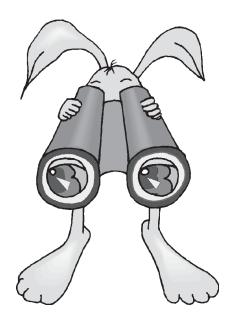
Runkles Gap, Massanutten Mtn. MW. Rated H. About 15 miles, 3000 ft climb. This year we will ascend pretty Morgan Run returning via Fridley Gap on the Massanutten South Trail and the Boone Run Trail. Leader: Chris Nolen, 301/469-8931 or chrishiker@erols.com.

Fri-Sun 25-27

Roaring Plains Camping, WV. HC. Car camping in Monongahela National Forest, at modern Seneca Shadows campground. Strenuous 11.5 mile hike on Sat. along a rocky Canadian plateau full of wind-swept red spruce and blooming mountain laurel. Reservations recommended. Contact Mike Juskelis, 410-439-4964, mjuskelis@cablespeed.com.

Sat 26

GPS Hike: Austin Mountain and Surrounding Peaks. MW. Rated H. 17– 19 miles, approx. 4,000 ft elevation gain. Explore a very seldom visited area on western slope of the Southern SNP — breathtaking views of southern end of the Massanuttens and surrounding Blue Ridge peaks. We'll cover as many peaks in one day as possible. Partly unscouted. Short bushwhacks to some peaks. PATC Map 11. Meet: Oakton Shopping Center near McDonalds at 7:30am. Leader: Dimitri Tundra, tartakd@hotmail.com or 301/770-9639.



Four States Tour 2004 AT Series. MW. Rated D. An 8.5-mile hike from Pine Grove to Big Flat. Meet 8:00 am at Shady Grove Metro in front of the pedestrian tunnel to the station, by the kiss-and-ride dropoff and bus kiosks. Leader: Frank Wodarczyk 703/569-6737 before 9pm.

Tue 29

Strickler Knob. MW. Rated H. A 15-mile circuit in the Massanuttens featuring 1,100 ft. bushwhack to the rocky top of Strickler Knob. Leader: Chris Nolen, 301/469-8931 or chrishiker@erols.com.

Wed 30

Outings Committee Meeting. GB. Come plan new outings and meet other outings leaders. New and prospective outings leaders welcome. 6:30 PM. Jack:410-256-3963.

July

Flag Ponds Nature Park. HC. Easy 4 mile hike down to the beach on the Chesapeake Bay, where we will hunt for shark teeth and other fossils eroded from Calvert Cliffs. Optional trip to Solomons for restaurant lunch, then visit the Maritime Museum. Or bring lunch to eat on the beach. Depart at 8:00 from the west lot of the park & ride on Broken Land Parkway at Rt. 32. Call Ken Clark, 301-725-3306, kenclark @comcast.net.

Sun 27

Gunpowder Tube Trip. GB. Wear old shoes or water shoes and have a way to keep keys from falling out of your pocket. Bring a tube or rent one at Monkton Bike Shop. Meet at Monkton Station at I:00 PM. Jack: 410-256-3963

Sat 3

Gunpowder Tube Trip. GB. Wear old shoes or water shoes and have a way to keep keys from falling out of your pocket. Bring a tube or rent one at Monkton Bike Shop. Meet at Monkton Station at I:00 PM. Jack: 410-256-3963

Piney Ridge / Thornton River, SNP. HC. Moderate 10.5 mile circuit hike with several stream crossings. Bring lunch, water and a change of footwear. Depart at 8:00 from the west lot of the park & ride on Broken Land Parkway at Rt. 32. Contact Mike Juskelis, 410-439-4964, mjuskelis@cablespeed.com.

Chesapeake 23 Early Summer 2004

Outings & Events (July, August)

Morgan's Run at Liberty Reservoir. HC. Moderate 8 mile hike, with some stream crossings. Bring lunch and water. Meet at the Bagel Bin off Rt. 40 in the Enchanted Forest Shopping Center, for an 9:00 departure. Call James Perschy, 410-964-1902, jmatp@starpower.net.

Fri - Sun 9-11

Lake Sherwood Camping, WV. HC. Car camping in Monongahela National Forest in a tent area with nearby modern facilities. Main hike is 9 miles, moderate with stream crossings, featuring azalea and rhododendron thickets along the ridge. Reservations recommended. Contact Mike Juskelis, 410-439-4964, mjuskelis@cablespeed.com.

Sat 10

Patapsco Valley State Park, Hilton area. HC. Moderate 7 mile hike, to the Buzzard Rock outcrop, over the swinging bridge, and along a cascading stream. Bring lunch and water. Meet at 10:00 inside the park, off Hilton Avenue, at the parking lot just inside the park entrance on the right. Call Tim Ryan before 9:30 PM, 410-248-2974, timothy_ryan@urscorp.com.

Sat 17

Splash in the Middle Patuxent, in Savage Park. HC. Cool down with a leisurely 3 hour walk in the middle of the river, from Murray Hill Road to Savage Park. Wear old sneakers, and be prepared to get wet. Due to hidden slippery rocks in the river, this hike is not appropriate for people with bad ankles/knees/backs. Bring a snack and water, and a change of clothes for an optional restaurant lunch after the hike. Meet at 9:30 at the Savage Park Wincopin Trail parking lot, off Vollmerhausen Road, a quarter mile east of the bridge over I-95. Call Ken

Clark, 301-725-3306, kenclark 7@comcast.net.

Caledonia/Michaux Forest, PA. GB. Moderate. 7.5 mile hike through a forest of towering hemlocks, a forest of deciduous trees and along free-flowing mountain streams bordered by rhododendron. Circuit hike will include parts of Locust Gap and Hosack Run Trails and Quarry Gap portion of Appalachian Trail with 800 foot change in elevation. Bring lunch and water. Meet at Park & Ride just north of I-70 on Route 32 at 8:30 AM. Ron 410-767-0106

Sun 18

Patuxent Research Refuge Bike Ride. HC. Bike 16 miles on paved roads with small hills. Helmet required, binoculars recommended. Bring lunch and water. Meet in the refuge at 8:45 at the North Tract Visitor Contact Station. Call Sue Muller, 301-498-8462, sonicsue@boo.net.

Sat 24

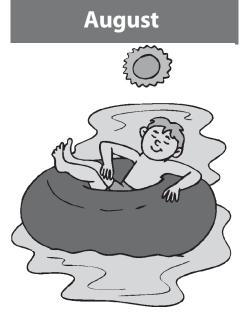
Piney Ridge / Piney Branch, SNP. HC. Moderate 9 mile circuit hike with several stream crossings. Waterfalls! Bring lunch, water and a change of footwear. Depart at 8:00 from the west lot of the park & ride on Broken Land Parkway at Rt. 32. Contact Mike Juskelis, 410-439-4964, mjuskelis@cablespeed.com.

Thu -Sun 29-Aug 1

Tea Creek Backpack, WV. HC. Camp first night at Tea Creek primitive campground, then two day backpack, 17 miles in the Tea Creek watershed. Possible additional night in the campground. Limit of 10 participants. Contact Mike Juskelis, 410-439-4964, mjuskelis@cablespeed.com.

Sat 31

Gunpowder Falls, MD. HC. Moderate 8.5 mile circuit hike utilizing the Mingo Branch, Gunpowder South and Highland and Bunker Hill trails. Bring lunch and water. Depart at 9:00 from the west lot of the park & ride on Broken Land Parkway at Rt. 32. Contact Call James Perschy, 410-964-1902, jmatp@starpower.net.



Anytime

Gunpowder River Tubing Trip. GB. Bring a tube or rent one at Monkton Station. Wear old sneakers or water shoes and have a way of keeping your keys from falling out of your pocket. Cool weather alternative will be a hike. Meet at Monkton Station at 1:00 PM. For details call Jack at 410-256-3963.

Sun 1

Splash in the Middle Patuxent, in Columbia. HC. Cool down with a leisurely 2 hour walk in the middle of the river, through the Middle Patuxent Environmental Area. Wear old sneakers, and be prepared to get wet. Optional restaurant lunch afterwards, so bring a change of clothes. Meet at 10:00, 0.8 mile south of Rt. 108 on Trotter Road, at the gravel parking lot on the left (east). Call Ken Clark, 301-725-3306, kenclark 7@comcast.net.

Sat 7

Weverton Cliffs. HC. Moderate 12 mile hike along the Appalachian Trail from Gathland State Park to Weverton Cliffs and return. Bring lunch and water. Meet at the Bagel Bin off Rt. 40 in the Enchanted Forest Shopping Center, for an 8:30 departure. Call Tim Ryan before 9:30 PM, 410-248-2974, timothy_ryan@urscorp.com.

Sat 14

Catoctin Mountain Park, Wolf and Chimney Rocks. Moderate 9 mile hike, to the falls and rock outcrops. Bring lunch and water. Depart at 8:00 from the west lot of the park & ride on Broken Land Parkway at Rt. 32. Or meet at the park, call James Perschy, 410-964-1902, jmatp@starpower.net.

Sat 21

Patapsco Valley State Park. HC. Moderate hike, details to be announced. Call Ken Clark, 301-725-3306, kenclark 7@comcast.net.

Fri - Sun 27-29

Blue Bend Camping, WV. HC. Car camping in Monongahela National Forest, along scenic Anthony Creek under hemlocks and surrounded by mountains. Hike Blue Bend and Anthony Creek trails. On the way home visit Humpback covered bridge and scenic Goshen Pass. Contact Mike Juskelis, 410-439-4964, mjuskelis@cablespeed.com.

Outings & Events (September, October)

September

Sat 4

Kennedy Peak, Massanutten, GWNF. HC. Moderate 8.5 mile circuit hike featuring a fantastic view of the Shenandoah Valley. Depart at 8:00 from the west lot of the park & ride on Broken Land Parkway at Rt. 32. Contact Mike Juskelis, 410-439-4964, mjuskelis@cablespeed.com.

Fri - Mon 10-13

Otter Creek Backpack, WV. HC. Camp first night at modern Stuart Recreation Area, then two day backpack, 14+ miles in Otter Creek wilderness.

Several wide stream crossings. Limit of 10 participants. Reservations recommended. Contact Mike Juskelis, 410-439-4964, mjuskelis@cablespeed.com.

Sat 11

Blockhouse Point. HC. Moderate 7 mile hike, starting flat at Pennyfield Lock on the C&O canal, then over hilly terrain leading to a great view of the Potomac River from the cliffs over the canal. Bring lunch and water. Depart at 9:00 from the west lot of the park & ride on Broken Land Parkway at Rt. 32. Call Ken Clark, 301-725-3306, kenclark 7@comcast net

Fox & Turners Gap History Hike. GB. Moderate. Seven easy paced miles on the Appalachian Trail, from Fox Gap to the Washington Monument and back, with a 600 foot elevation change. Along the way we will talk about trail maintenance, geology and conservation, but mostly about the history of this area; the National Road and the battle of South Mountain (Sept 14, 1862). Lunch will be at the Washington Monument, which

provides an excellent view of the Hagerstown Valley to the west. Depart Giant/Walmart Parking, SE Corner of Route 40 & Rolling Rd., at 9:45 AM. John 410-752-0104

Sat 18

International Coastal Cleanup Day. HC. Pick up beach trash at Terrapin Nature Area on the Chesapeake Bay, then eat lunch on the beach and return to Columbia by 1:00. Bring lunch and water. Depart at 8:00 from the west lot of the park & ride on Broken Land Parkway at Rt. 32. Call Sue Muller, 301-498-8462, sonicsue@boo.net.

Harford Glen. GB. Easy. This is a leisurely walk of 2.5 miles, followed by lunch and an optional post-lunch walk of similar length. Bring lunch and water. Mud is possible; stream crossings are certain. Waterfowl and migrating hawks likely. Meet at the park at 11:00 (west end of Wheel Road, at first parking area on the right, by the pond). Call Betsy for details at 410-569-5202.

Fri-Mon 24-27

Seneca Creek Backpack, WV. HC. Camp first night at Spruce Knob Lake Campground, then two day backpack, 14+ miles in the Seneca back country. Several wide stream crossings. Limit of 10 participants. Reservations recommended. Contact Mike Juskelis, 410-439-4964, mjuskelis@cablespeed.com.

October

Sat - Mon 9-11

Michaux Forest Camping at Caledonia State Park. GB. Moderate. Day hiking along lakes and streams with good mountain views. Will discuss the history of this area. For details call Jack at 410-256-3963.

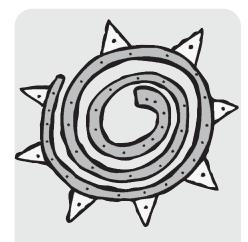
Sat - Tues 9-12

Fall-time Rambling through the Endless Mtns & Loyalsock Country. MW. Not Rated. On a memorable Columbus Day holiday weekend amidst brilliant autumn foliage of hardwood forests, participate in two half-day hikes and two full-day hikes on the challenging Loyalsock Trail in northcentral PA. Wander through Lycoming and Sullivan Counties' Endless Mtns' rugged, scenic and forested backcountry: sharp knobs, high plateaus and ridges, escarpments, and steep-sided ravines. Capacity: 12. To avoid being wait-listed, reserve early. Leader: Cliff Noyes. Details by prospectus: send e-mail request to lourich77@aol.com.

Sat 23

Sweet Air. GB. Moderate.
Approximately 6 miles of hilly terrain.
Mud is likely in places. Bring lunch and water. Will discuss the ecology of this area. Meet at the small shopping center on the southeast corner of the intersection of 152 and Baldwin Mill Road at 10:00. Call Betsy for details at 410-569-5202.





Tour of Solar Homes

October 2-3

Mark your calendar now for the 14th Annual Tour of Solar [and Energy Efficient] Homes and Buildings!

Solar hot water, photovoltaic, off-grid, underground, dome homes and more.

Do you know of good homes that should be on the Tour? Want to help organize the event?

Call or email charlie.garlow@juno.com at 301-593-9823.

The Tour of Solar Homes is great fun! The first step in saving our Earth.

BICO Outings

For additional information on BICO (Baltimore Inner City Outings), see www.sierraclub.org/ico/baltimore, or call Bob Burchard at 410 744-0510. Please contact BICO for information on rain delays.

June

Sat 26

DHH - Patapsco Valley State Pk.

BICO Volunteer Party & Pot Luck Dinner

July

Sat 12

BICO meeting

Sat 17

** LI - canoeing on Patapsco Middle Branch and/or archaeological digs

Sat 24 or 31

CGCC - Cunningham Fall Park hike

TBA

Choice - Tubing on the Shenandoah at Harpers Ferry

DHH - Thorpewood in the Catoctins: stream ecology & hike

August

Fri 6-Sun 8

DHH - Camping in Pokomoke State Pk.

Sat 7-Sun 8

** LI - Camping at Cape Henlopen, DE

TBA

Choice - Caving in Pennsylvania CGCC - Caving

September

Sat 11-Sun 12

BICO Leader Training

Sat 11

** LI - Hiking, Sugar Loaf Mt.

TBA

Choice - Biking on the NCR Trail CGCC - Environmental education on CBF's Snow Goose DHH - Orienteering in Federal Hill & swimming

October

Sat 2-Sun 3

** LI - Camping at Assateague Island

Fri 15-Sun 17

DHH- Camping at Assateague Island

TBA

CGCC - Camping, Assateague Island Choice - Camping (tentative)

* BICO Teams:

Choice = the UMBC Shriver Center's Choice program DHH = Digital Harbor High School LI = Learning, Inc. CG CC = College Gardens

** Rain date: one week later,

(Please visit <u>www.sierraclub.org/ico/baltimore</u> for updates & more information)



Top Ten Misdeeds

Bush Administration's Rhetoric and Record

(continued from page 5)

and gas companies. This includes some of the nation's most environmentally sensitive and beautiful places, like coastal Alaska, the Powder River Basin in Montana and Wyoming, and the Rocky Mountain Front. In spring 2003, the BLM approved drilling of 82,000 new oil and gas wells in the Powder River Basin alone.⁹

On October 13, 2003, the *Seattle Post-Intelligencer* said: "The Bush administration has ordered federal managers to remove regulatory obstacles to oil and gas development along the Rocky Mountain Front. It acted with no public consultation or examination of competing land use values."

www.sierraclub.org/energy

8. Global Warming Put on Back Burner

During his 2000 presidential campaign, George W. Bush repeatedly vowed to address carbon dioxide emissions, the main compound that causes global warming, but once in office, the Bush administration has refused to set limits on the pollutant.

After dismissing the Kyoto Protocol—which was signed by 155 other nations—as flawed, the administration offered no alternatives. Then in late 2003, in response to a suit filed by the Sierra Club and other advocacy groups, the EPA acknowledged the dangers of global warming, but claimed it lacks the authority to do anything about it.

www.sierraclub.org/globalwarming

9. Failing to Protect Workers at Ground Zero

After 9/11, the White House instructed the EPA to hide potential health risks in lower Manhattan from the World Trade Center collapse. On September 14, the EPA sent a proposed press release to the White House, emphasizing that its tests had shown dangerous asbestos levels. Yet the Bush administration's edited version,

released to the public and media on September 16, was altered to read: "Our tests show that it is safe for New Yorkers to go back to work."

MSNBC reported that "a report by the EPA's Office of the Inspector General released on Aug. 21 states, among other criticisms, that the White House reviewed and even changed EPA statements about public health risks to make them sound less alarming." (September 11, 2003)¹⁰

9/11 Environmental Action at www.911ea.org

10. The Big Bite

Every administration since Teddy Roosevelt's has left office with more lands protected than when it entered, except the current Bush administration, which has weakened protections on an incredible 234 million acres of our public land, an area equivalent to the states of Oklahoma and Texas. The administration weakened the Clinton administration's Roadless Area Conservation Rule, which protected almost 60 million acres of national forests, by exempting the Tongass and Chugach national forests in Alaska and giving governors a loophole to exempt national forests in their state.

"Assault on Wild America" at sierraclub.org/sierra/200403

SOURCES: 1. EPA presentation to the Edison Electric Institute, 12/4/01. 2. EPA statement released February 2004. 3. "The Truth About Toxic Waste Cleanups: How EPA is Misleading the Public About the Superfund Program," Sierra Club and U.S. Public Interest Research Group, February 2004. 4. epa.gov/superfund/sites/query/queryhtm/nplccl1.htm 5. "Superfund Program: Current Status and Future Fiscal Challenges." United States General Accounting Office. Report no. GAO-03-850. Page 1 6. 67-Federal Register 80186, 12/31/02; 68-Federal Register 61248, 10/27/03.
7. Bruce Barcott, "Changing All the Rules," New York Times Magazine, April 4, 2004.

8. Clean Air Task Force: catf.us/press_room/ 20030501-Final_Comments_on_Proposed_Rule.pdf 9. Powder Basin Environmental Impact Statement, 2002. 10. msnbc.msn.com/id/3076626

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Club Elections

Club Members Elect Board of Directors

Club members turned out in record numinvolvement of outside groups. bers this year to elect five new more members—171,616 members or 22.7 percent of the Club's members voted than in any previous election. Voters elected incumbent directors Jan O'Connell, an insurance executive and environmental organizer from Grand Rapids, Michigan, and Nick Aumen, a biologist from Loxahatchee, Florida, to a second term.

Top vote-getter Lisa Renstrom, an environmental activists from Charlotte, North Carolina, received 141,407 votes. She served on the board from 2001 to 2003. Consumer lawyer Sanjay Ranchod from San Francisco and student David Karpf from Philadelphia were elected for the first time.

The election was widely reported on in the press because of controversial disagreements about the Club's immigration policy and concerns about the

Sierra Club President Larry Fahn members to the Board of Directors. Far says the grassroots organization's membership sent a clear message through its record voter turnout: "Nearly a quarter of our members have elected active leaders in the Sierra Club who support our core agenda to protect the environment and educate Americans about the destructive environmental practices of the Bush administration."

> "Twenty-two percent turnout is extraordinary. We need to find ways to keep that level of participation going," says Renstrom.

> O'Connell echoes those sentiments. "I campaigned like crazy. I contacted almost 14,000 Club members—by phone, by e-mail, by postcard, and in person. My goal is to go back to those people, keep networking, keep them engaged in our work."

> For specific vote totals and more information, see www.sierraclub.org/bod.

Bush Administration Misses the Train

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bring locally.

We Can Do Better

We can enjoy easier commutes, more sensible development, jobs in better locations, and a better environment with a stronger commitment to public transportation. Unfortunately, the Bush administration has chosen to reward its friends in the road lobby rather than promote a balanced transportation policy. What's more, communities across the nation are eager for public transportation, but they will be waiting longer and paying more for transit under the Bush administration's plan.

The report will be released to the

public on June 16. Please see www.sierraclub.org/sprawl/report04 for a copy of *Missing the Train*.

Eric C. Olson works for the Sierra Club's national Challenge to Sprawl Campaign.

Hate Sprawl? **Contact Chris Carney** Conservation Organizer for the Sierra Club Metro DC Challenge to Sprawl Campaign 703-312-0533 chris.carney@sierraclub.org

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The opinions expressed in this newsletter are in general aligned with those of the environmental community in Maryland but are strictly those of the authors and not necessarily official policy of local, state or national Sierra Club entities. The Sierra Club prides itself on being a grassroots volunteer organization. The concerns and opinions of all its members are welcome in these pages.

Items for publication are best submitted by email to <maryland.chapter@sierraclub.org> or <laurel.imlay@sierraclub.org> with "For Chesapeake" and

or laurel.imlay@sierraclub.org with "For Chesapeake" and title in subject line. I tems must include the author's address and telephone numbers. Material may be edited for length, content or clarity at the discretion of the editor. Photographs, illustrations and other works of art are welcome. Materials cannot be returned unless accompanied by a stamped, self addressed envelope.

Change of address: send address changes to the Sierra Club, 85 Second Street (2nd Floor), San Francisco, California 94705-3441. For fastest service, please include your old and new addresses along with your 8-digit membership number. For local membership information contact the Maryland Chapter Office 301-277-7111/410-813-2225 or write: Maryland Chapter/Sierra Club, 7338 Baltimore Ave (Suite 101A), College Park, MD 20740.

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Action Items

June

Contact the governor to support the Purple Line

June/July/August

- ☼ Volunteer to educate voters at the Mall in Washington, D. C., about the Bush administration's environmental record
- Register to vote!

Anytime

maryland.sierraclub.org/action



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inside this issue...

- How to Have a Green, Green Lawn
- Bush Administration's Top 10 Environmental Misdeeds
- Support the Purple Line!
- Renewable Energy Bill Passed
- "True Cost of Food Campaign"
- Carl Pope's New Book
- Outings, Events, and Much More