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Accountability In Everybody's Backyard

Lois Gibbs, the keynote speaker of E-Day, January 21, 1990, delivered a message to an audience of about 500 urging them to demand accountability from West Virginia's elected officials. Coverage by print and visual media was extensive and contributed to the chatter and activity at the Capitol rotunda. From within the circle, Gibbs quickly established that lack of personal wealth, lack of formal education, lack of political clout are not insurmountable obstacles to those working for change.

Identifying local efforts from placards held by some of the audience, Gibbs encouraged activities to prevent garbage dumps. Essentially, community business should involve only activities sanctioned by Community residents. Kanawha County delegate David Grubb, long-time director of WV Citizens Action Group (WV-CAG), introduced Gibbs and prefaced her thrust with the observation that past environmental legislation began at the grass roots level.

Gibbs spoke of her personal sadness and encounter with the toxic residues of the Love Canal chemical dump. Her testimony of the community's ill health — birth defects, cancers — had a powerful effect on each individual who listened. The generosity of spirit and sincerity she demonstrated was a welcome standard of integrity for the public forum. It became evident why she has come to be a symbol and why she is so effective as a touchstone for community initiative in the pursuit of environmental change.

Her advice to the crowd was specific and to the point. Everyone should confront their elected officials and demand to know how they stand on issues of ground water, land use, clean air, (and every impact to the environment) and demand to know why they hold the views they do. Further, everyone should vote for those officials who will be accountable and maintain community standards and values that are in keeping with the well-being and long-term growth and health of the community.

Wilderness

As provided for in the management process of the Monogahela National Forest (MNF) land management plan, issues and comments addressing the use of Dolly Sods Wilderness Area and Dolly Sods Scenic Area will be accepted until September 30, 1990. Send comments to District Ranger, Potomac Ranger District, Route 3, Box 240, Petersburg, West Virginia 26847.

Interest by Conservancy members should be particularly acute. Dolly Sods' unique topography and wilderness is an important spiritual keystone for areas and values the Conservancy seeks to protect and preserve.

The Forest Service requests that all comments be specific and pertinent to the area under consideration. Such broad guidelines should not constrain any moderately thoughtful reply. Specificity does not prohibit general statements that explore values defining Dolly Sods as a wilderness area.

The management protocol now being applied by the Forest Service is governed by three directives:

- *protect wilderness attributes for future generations;
- *provide a wilderness experience;
- *preserve natural ecosystems.

Techniques applied to achieve these goals include provisions that will ensure a natural succession of the forest. This is one area where your input may be especially beneficial. Identify specific actions or specific restraints to achieve an ecosystem tuned to a self-regulating expansion.

There is room for creativity. Help nature take its course by examining the management of the resources, being sensitive to natural processes, emphasizing accurate knowledge of human impacts, and exploring synergistic effects.

Not limited to the natural sciences, comments on recreational concerns and concepts to expand the cultural dimensions of the forest are also appropriate. Currently, the Forest Service policy forbids interpretive literature in the protected areas and discourages overt attentions to the area. The message to adhere to a carry-in/carry-out etiquette must be made clear. Don't omit your thoughts on how to achieve this objective. (See Page 7)

The 1990 Legislative Session

by Norm Steenstra

The most remarkable feature of the 1990 session as it neared the halfway point was the intensity of Industry's lobbying efforts against major environmental legislation.

As a result of the new ethics law, the people of West Virginia are now more fully aware of the magnitude of anti-environment lobby efforts in our state. The WV ethics Commission has published a directory of registered lobbyists. This directory lists each lobbyist, their lobby subjects and their employers. The campaign to retard environmental sanity in our state is remarkable.

At least 56 highly paid lobbyists (some from out-of-state) are currently working against HB 4100 — the Groundwater Protection Act, the bill that would fundamentally change how we regard our natural resources. These 56 lobbyists are employed by the state's traditional power brokers, including large out-of-state corporations and attorneys from the state's largest law firms.

The Oil and Gas industry leads the influence parade with at least 18 lobbyists. Other industries represented are:

Coal — 10 lobbyists

Chemical companies — 7

Large land holding companies — 4

Coal Fired Utilities — 8

Waste Management — 7

An interesting example of the united effort by industry to suppress progressive environmental legislation is that of Charleston attorney Thomas R. Cox. Mr. Cox lists among his clients Anker Energy, a large European Coal Producing company which operates several large mining complexes in the state. Other Cox clients include Capel Resources and Energy Resource Management Service Corporation.

Capel Resource is actively promoting the development of one of the two largest landfills in the state. This proposed mega-landfill will rail more than 90% of its garbage from the city of Philadelphia. The proposed landfill in McDowell County will accept 300,000 tons of trash. (The entire waste stream of the state of West Virginia is currently only 120,000 tons per month). Capels' trash will be brought to McDowell County in returning coal hopper cars.

Energy Resource Management Service Corporation (ERMS) is proposing the construction of another 300,000 ton per month landfill in Barbour County. As in the case of Capels, the vast majority of ERMS trash will enter West Virginia via returning coal hopper cars. If Mr. Cox's efforts are successful, these two proposals alone will provide West Virginia with five times the needed landfill capacity.

The increased environmental activism of the labor unions and the WV Council of Churches, coupled with the growing unity of the state's environmental community has not gone unnoticed by the traditional WV power brokers. They are united in effort and well financed.

Please keep in perspective the David-Goliath struggle that is occurring in the 1990 legislative session. Fifty-six highly paid lobbyists, versus three part time paid and two volunteer lobbyists working on behalf of the WV Environmental Council.

The house passed the Groundwater Protection Act by a vote of 83-16. The bill was then sent to the Senate and assigned to Senator Sharps Energy, Mining and Industry committee (EMI); this is the same committee that killed the measure last year. The prognosis is grim. Although Senate president Keith Burdette has "promised" that a groundwater bill will be passed out of committee, a roster of that committee indicates how weak that bill is likely to be. (Cont. on Page 6)

From Hunting To Counting

In the 19th century, teams of hunters traditionally competed on Christmas Day to shoot the largest number of wild birds and mammals. Disgusted by the killing, Frank M. Chapman, an ornithologist who spent 56 years at the American Museum of Natural History, organized a Christmas bird count as an alternative.

On Dec. 25, 1900, 27 bird watchers in the first count covered 26 locations. Last year 42,671 volunteers counted birds in 1,563 locations (40 of them in Central and South America). The counting parties are organized to minimize the chances of misidentification and limit the possibility that any bird will be counted more than once. Unusual sightings or inordinately large numbers of birds are checked by regional compilers before the data are sent to the National Audubon Society.

When scientists use the Christmas count data to calculate the size of bird populations, they try to standardize the figures by taking into account the number of observers in each party and how much time was spent in the field. (See Page 8)

Unlikely Triumvirium Genesis of the Duck Stamp

Recently, Congress and art funding became the focus of senatorial rhetoric and numerous proposals. Far off the mark in thematic content of the controversy but certainly an example of federally sanctioned art, the duck stamp has a history of 56 years.

Concern for dwindling waterfowl populations and concrete action to formally address the concerns of conservationists, duck hunters and government officials

culminated in passage of the Migratory Bird Conservation Act in 1929.

Damned rivers, periodic drought, drained wetlands, shrinking forests, plowed prairies, fashion trends, commercial demands, and the loss of suitable habitat from man-made activities seriously threatened many waterfowl species. Some of these threats remain as a source of decimation to waterfowl.

(Cont. Page 4)

Why Coal Mining Regulations Will Always Be In a State Of Flux

by Richard S. diPretoro

An oft-heard complaint from coal industry apologists is that operators can't keep track of mining regulations because they change so fast and so often. Trying to comply, they say, is like trying to hit a moving target. It's true that more than twelve years after the passage of the federal surface mine law in 1977, the regulations are still changing. Why?

There are two basic reasons. The first is that the Reagan-Bush administration came to power in 1981 with a mandate from industry to dismantle the fledgling program. The Carter administration had been putting in place federal regulations which (in retrospect) were quite strong and effective in implementing the intention of the law. Reagan's James Watt gleefully bludgeoned those regulations. Some states, seeing that federal oversight had been crippled, greatly weakened their programs. Lawsuits had to be initiated by environmentalists to counter the destruction. Because such suits take years to conclude, decisions have been trickling in. Each one requires some changes in regulations, usually strengthening environmental protections. (Industry doesn't complain about changes that weaken protection. For instance, there were no complaints in WV in 1985 when the Moore/Faerber bunch substituted regulations crafted mostly by coal industry lawyers.)

But more fundamental to regulatory instability is that coal operators and environmentalists (read citizens) will never agree on how much protection is enough. Coal mining will always be an emotional topic, both for miners and those affected. Miners will never quit trying to get the laws and regulations weakened and coalfield citizens will never quit trying to protect their water and land and other property.

Furthermore, many people experience a profound sickening when they witness the destruction of coal mining, even when it doesn't directly affect them. A case could be made that primordial survival instincts in us are triggered when the earth, which provides the basis for our very lives, is ravaged. Deep down, we know that clean, abundant water and productive land are essential to life while coal is not. Forward-thinking people everywhere, including the coal fields, are acting on that knowledge.

Meanwhile, in an increasingly competitive international market, miners are constantly trying to cut costs. Obviously, environmental protection costs are among the first to be jettisoned, if possible. Sympathetic regulatory agencies try to cooperate with companies. Ironically, agencies have begun to use the citizen complaint provisions of the law as their "safety net." There is a pervasive attitude that there is no environmental problem unless there is a complaint from a member of the public. If a stream is dewatered, springs dry up, acid is dumped, so what, if no one complains?

Those of us who work with the regulations witness the dilution of effectiveness from the federal law (a result of compromise to start with) to the federal regulations, and from the state law to the state regulations, down to permitting and finally inspection and

(Continued on Page 5)

Letter to the Editor

The West Virginia Hills At Risk

"Oh, the West Virginia hills! How majestic and how grand;
With their summits bathed in glory, Like our Prince Immanuel's land!"

We West Virginians love to sing of the natural beauties of our State.

"Is it any wonder then, That my heart with rapture thrills,
As I stand once more with loved ones On those West Virginia hills?"

But should we, our children and our grandchildren, want to sing of West Virginia's future? Will our hills remain bathed in glory or will they be buried beneath mountains of trash, our own and trash shipped into West Virginia from other states? Will our streams and groundwater be maintained at just their current mildly polluted levels or will rivers like the Greenbrier River be turned into industrial sewers polluted with carcinogenic and mutagenic compounds such as chromated copper arsenate?

West Virginians, we must awaken to the fact that our state is under attack by out-of-state companies who want to make it a national dumping ground for vast quantities of trash, medical and hazardous wastes which they are not permitted to dispose of in their own states. Other companies, some owned and operated by West Virginians, want to be allowed to pollute our streams, rivers and groundwater with chemicals so toxic that a teaspoon in 25 million gallons of water causes cancer in human beings. Many of our own citizens have rushed to participate in such schemes, no matter how damaging the consequences, for a chance to make a few dollars.

The Department of Natural Resources' inept and unconscionable granting of an operating permit for a wood treatment plant on a recently flooded, poorly drained site near an area where well water is the only source of drinking water has amply demonstrated that West Virginians cannot depend on their own state government to protect them. Neither the DNR Director nor his staff has any grasp of what they put at risk by routinely granting these permits. They have no environmental sense of values.

There is an old West Virginia saying, "If we don't change our direction we may get where we are heading." The pollution of our groundwater, which over 60% of us use for our only source of drinking water, would be an irreversible calamity. Trading a few low paying jobs for perpetually contaminated drinking water would be an extremely poor trade.

We would be fools to allow this to happen.

"O the hills, Beautiful hills, How I love those West Virginia hills"

Yes, we West Virginians love to sing of the beauties of our state. But will we fight to defend them? In past wars West Virginians were first among all of the states to volunteer to defend Europe, Asia, and our country. Will we now dedicate our lives and our resources to saving those homes of which we sing?

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"If o'er sea or land I roam Still I'll think of happy home, And the friends among the West Virginia hills."

Many West Virginians, like the Concerned Citizens of Alderson/Glen Ray, have already been on the environmental battlefields: before public hearings, county commissions, city councils, appeals boards and in the courts. They are spending their resources, fighting as best they can for a West Virginia you and I, our children and our grandchildren can continue to sing about.

Won't you join us by sending a contribution to the Concerned Citizens of Alderson/Glen Ray, or other local groups, and by insisting that the next session of the state legislature enact a strong groundwater protection bill that will force our state government to protect us?

Signed: Stephen P. Bailey
Deborah E. Bailey

No easy recipe exists for successfully stopping stream pollution. One key ingredient must be present, however; community support. One of the easiest ways to gain this is to use the media to send your message. Working with the media is not nearly as intimidating as people think. Reporters and broadcasters are simply people doing their jobs — educating the public about current events and issues.

But is stream monitoring newsworthy? Yes! Stream protection encompasses many of the elements that make activities and information "newsworthy:" timeliness, a local angle, a problem and a response. So don't be shy about making a few calls to the media. Tell them about your stream cleanups; teach them and their readers the easy techniques of stream monitoring; and offer yourselves as the local component of a national program to help save the nation's rivers and streams.

To stream savers, news coverage can transfer into many benefits:

- free publicity for activities;
- increased community support for stream conservation;
- better understanding about the importance of protecting streams.

Effective use of the media can even pressure public officials, local agencies and other policy-makers to take action on a problem. Maryland Save Our Streams (SOS), for instance, was having difficulty convincing state officials to properly enforce sediment regulations at construction sites. Although data showed such runoff was a serious threat to local waterways, the state refused to alleviate the problem, saying it had no budget for more construction site inspectors. Frustrated, activists took their concerns to the press, who ran several related stories. In response necessary public support was garnered and the state found funds to hire nine new inspectors.

Enlisting the Media To Save Streams

By Kristin Merriman

How To Begin

Make a complete list of local newspapers and magazines (dailies, weeklies and monthlies), as well as TV and radio stations. The aim is to make "contacts" — editorial page writers, local news broadcasters, journalists who regularly cover the environment or community issues. Your local library has two important reference books that make this job easy: the latest issues of *Editor and Publisher Yearbook* and *Broadcasting Yearbook*. Both list, by state, all the media outlets and their addresses, phone numbers and often even the reporters' names. Don't forget to add any publications distributed by state natural resources agencies and commissions; look in the blue government section of the phone book for these numbers. Also list any wire service correspondents and free-lance outdoor writers who have written about or shown an interest in stream conservation.

Develop regular contact with journalists. If you are with a group or organization, appoint a member to act as a media liaison. Invite the media to your meetings or events. Reporters are more likely to call people they know and trust for information. Offer yourself as a "source" for facts or comments on stream conservation issues, but research your facts and message first!

Know and respect deadlines. Every type of publication or broadcast has a series of deadlines and depends on its reporters to relay information clearly, accurately and concisely within a limited timeframe. Call to find out the deadline schedule.

Do your homework. Good research and interesting quotes carry a lot of weight in the "news" process. Find the facts and "hook" necessary to snag a journalist's interest. Starting a Save Our Streams program? Outline details such as why stream protection is important, why you decided to take on the program, how SOS began nationwide, whom you hope to involve locally, which waterways need "adopting" and what the monitoring process is.

Cite the problem and offer solutions. Specific examples add depth, color and purpose to a story. Anecdotes are also helpful if they make a clear point. Taking the journalist to a healthy, fish-laden stream, for instance, and then to a polluted one creates a foundation for comparison on which the reporter can build. Point out helpful details, such as how to recognize good and poor qualities in streams, and describe what local citizens can do. Offer the names of other knowledgeable people the reporter can call.

Press Releases and Pictures

To publicize a stream cleanup event, a press release may be the best course of action. The trick is to know some tips that will make your release stand out from the 200 other releases the average daily newspaper receives each day. The goal is to communicate all the necessary information clearly and concisely. Keep your message short and straightforward. Rarely should a release be longer than one page. If you want to include background information, attach a "fact sheet," but key information should remain on the front page.

Type or neatly print, double-spaced, leaving wide margins. Include the date of release and the names and day/night phone numbers for at least two contacts. Write a brief, catchy headline that summarizes your release; center and underline.

In the first paragraph, cover what is happening, who is doing it, when and where it is being held. Include a full street address, not just "Smith Park," and write the weekday before the date. Times must always be noted a.m. or p.m. The second and following paragraphs should expand on the first, including information such as cost, registration requirements, parking availability, further event details and perhaps a short quote. Pictures really are worth 1,000 words, so don't forget to shoot plenty of them. Use 35mm, black-and-white film, and include no more than four people per picture (faces should be at least the size of a dime). Watch for dark shadows that could obliterate features. People like to watch their neighbors doing something, so catch them in the act of taking water samples from a local stream or hauling out trash.

Develop the film as quickly as possible, and identify each person by name on labels taped firmly to the back of each picture. For especially visual events, such as a stream cleanup that results in two tons of trash, call local TV stations. News crews are often looking for good feature stories, and you can further boost your chances of coverage by inviting local celebrities, such as the mayor.

For more tips contact the IWLA national office, 1401 Wilson Blvd., Level B, Arlington, VA 22209, (703) 528-1818, for a free media brochure.

Kristin Merriman is director of media relations for the League.

SPLASH! Fall 1989

Resolved Into Language

Long after the holidays and unmistakably into the new year, it is a good time to assess the status of those resolutions and promises. Below are some phrases long ago resolved into accepted idiom or widely used metaphor. The commonality they share lies in a connection to natural objects, natural phenomena, and traditional activities of people in the natural world. New levels of relations and connections develop and additional shades of meaning accrue to existing connections. The partial list below includes some widely recognized idioms based upon natural phenomena. Developments in this decade will deliver additional expressions and contribute to the meanings of established ones.

up the creek without a paddle • once in a blue moon • no man is an island • watershed • squashed • as the crow flies • sow seeds • see you later alligator • eats like a bird • run its course • tomcat • bogged down • sweet as honey • black as coal • hibernating • worn away • take root • blue skies • horsensense • life's a beach • making waves • the forest for the trees • feeling your oats • lighten' up • sweating like a pig • cat and mouse • great divide • seed money • light as a feather • grist for the mill • fossilized • golden years • circling for the kill • when mountains crumble to the sea • blood is thicker than water • heading south • cried a river • stormy weather • don't let the bed bugs bite • blind as a bat • take a hike • a whale of a story • good catch • down in the valley • spreading like wild fire • wish upon a falling star • pigs get fat, hogs get slaughtered • at a snail's pace • solid as a rock • struck by lightning • eclipsed • broad as the heavens • tub of lard • courageous as a lion • something's fishy • dig it • you are my sunshine • turf • snake in the grass • cold as ice • time flies • crazy as a loon • horn of plenty • peaches and cream • small potatoes • shifting sands • sky high • egghead • mouth to the flame • built on rock • fool on a hill • break the ice • carrot on a stick • swan song • gone fishing • holy cow • plowed under • heart of stone • mushroomed • flood tide • bring down to earth • astronomical prices • meanwhile back at the ranch • like lemmings to the sea • black sheep • ebb and flow • fresh as a daisy • pure as the new fallen snow • left out in the cold • salt of the earth • as far as the eye can see • milked • fleeting as the seasons • curiosity killed the cat • rolling stones gather no moss • light at the end of the tunnel • rock ribbed • pig in a poke • corny • opening a can of worms • busy as a bee • monkey see, monkey do • raging like fire • where the buffalo roam • between a rock and a hard place • shrinking violet • separate the wheat from the chaff • ashen faced • hard as a rock • eyes like a hawk • call of the wild • flowering • pestilence • fog as thick as peasoup • cat's meow • pulling your leg • out on a limb • herd instinct • washed up • grass is always greener on the other side • blossoming • thorny • reaching the summit • i could eat a horse • rocky shores • autumn of life • quick like a bunny • on fire • croaked • ants in your pants • washing your hands in a muddy

stream • eat like a pig • like a chicken with its head cut off • grows like a weed • wily coyote • clinging vine • angry as a bear • squirrel away (squirrelly) • back to nature • small fry • clam up • a natural • slush fund • cash cow • feathers chased the meat away • nag • cock fight • bone of contention • milking a bull • every rose has a thorn • hung the moon and the stars • beat about the bush • drag over the coals • sacred cow • big fish in a little pond • memory like an elephant • rising star • woolgathering • at the end of the rainbow • scattered to the wind • dirty rat • squeal like a pig • test the waters • what goes up must come down • well springs • happy as a lark • fueled • wish upon a star • red herring • hayseed • sap • full of hot air • howling at the moon • cow jumped over the moon • turkey • getting to the root • old goat • chicken • drinks like a fish • as sure as the sun will rise • fat as a pig • cute as a kitten • sly as a fox • cool as a cucumber • strong as an ox • snug as a bug in a rug • wise owl • red-blooded • flew the coup • born again • breadline • thin reed • slow as molasses • shoot the bull • blind spot • bread basket • soiled • bee in a bonnet • staff of life • pussy cat • wormy • bowels of compassion • pull one's chestnuts out of the fire • cotton to • hot tomato • nature of the beast • ferret out • cry wolf • pull the wool over one's eyes • dyed in the wool • pearls before swine • knock on wood • hit the dirt • egg in one's face • flea market • heard it through the grapevine • scarce as hen's teeth • hot dog • horsefeathers • counting sheep • life in the jungle • sitting duck • dead wood • don't bug me • cook cats • eager beavers • stool pigeons • old coots • darkest hour • fair game • neck of the woods • got your goat • skin deep • back breaking • crabby • a bird in the hand . . . • wolf in sheep's clothing • gild the lily • dirt cheap • egg on • featherless biped • make the fur fly • happy as a clam • live high on the hog • hold your horses • dropping like flies • dirty rat • rat race • lion's share • logjam • grass roots • loan sharks • legal eagles • hawks and doves • culture vultures • silver lining • tip of the iceberg • catty • stingingly • bend with the breeze • beat on a dead horse • bed of roses • dead wood • second banana • dog eat dog • fish out of water

Basic Syllogism

Down through the latticework of leaves,
 Dark in shade, golden in sunlight,
 Through an eyelid half sleeping, the eye receives
 News that the afternoon blazes bright.

It blazes in traumatic splendor —
 A world ablaze but not consumed,
 As though combustion had no end, or
 Beginning, and from its ash resumed

The crackling rush of youthful flare.
 Far off, a river, serpentine
 In flame, threads fields of grass-green glare,
 And farther, mountain cliffs incline

To catch the lethal intimation
 Of sunset's utterance for climax.
 I lie, and think how soon the sun
 Its basic syllogism enacts.

I lie, and think how flesh and bone,
 And even the soul, in its own turn,
 Like faggots bound, on what hearthstone,
 In their combustion, flameless, burn.

*from Rumor Verified
 Robert Penn Warren*

In 1934, Congress passed the Migratory Bird Hunting Stamp Act, popularly known as the Duck Stamp Act. The idea of nationally known political cartoonist Jay N. ("Ding") Darling, the funds generated by the sale of the stamps belong to the Department of the Interior to buy or lease waterfowl sanctuaries.

President Roosevelt had appointed Darling as chief of the Bureau of Biological Survey, a predecessor of the Fish and Wildlife Service. The Duck Stamp Act mandated waterfowl hunters 16 years or older to buy a stamp each year. The first stamp went on sale August 14, 1934, for \$1.00. Designed by Darling, the stamp shows two mallards about to land on a marsh pond. 635,000 were sold. The two lesser scaups featured on this years stamp sell for \$12.50.

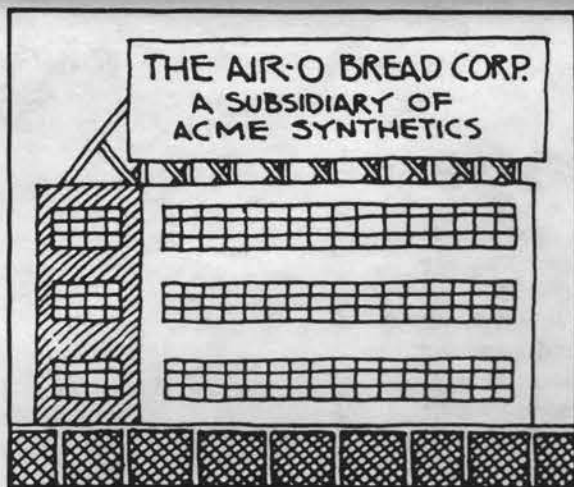
Subsequent stamps were chosen from designs by noted wildlife artists. In 1949, the contest became an open art competition. The stamps are not just sought by hunters. Conservationists and collectors also purchase the stamps.

Drawings include: Mallards, Canvasbacks, Canada Geese, Greater Scaups, Pintails, Green-winged Teal, Black Ducks, Ruddy Ducks, American Wigeons, Wood Ducks, White-fronted Geese, Shovelers, Redheads, Snow Geese, Buffleheads, American Goldeneyes, Trumpeter Swans, Gadwalls, Harlequin Ducks, Blue-winged Teal, Ring-necked Ducks, Blue Geese, American Mergansers, American Eiders, American Brant, Nene Geese, Whistling Swans, Oldsquaw Ducks, Hooded Mergansers, White-winged Scooters, Ross' Geese, Cinnamon Teal, Emperor Geese, Steller's Eiders, Fulvous Whistling Ducks, Lesser Scaups.



(Continued from Page 1)

The 1929 law authorized the Department of the Interior to acquire wetlands and preserve wetlands as waterfowl habitat. The Department lacked authorization of permanent funds to acquire or preserve wetlands until 1934.



MODERNE MAN



b. van alten 3-14-84

© Bruce Von Alten

Reasons To Join WVHC

The West Virginia Highlands Conservancy is a private, non-profit environmental organization started in 1967. Its objectives are "to promote, encourage, and work for the conservation—including both preservation and wise use—and appreciation of the scenic, historic, open space, wilderness, and outdoor recreation resources of and related to West Virginia, and especially the Highlands Region . . ."

Members include people and organizations diverse in their personal interests and professions but united by a common interest. Most WVHC members are West Virginians but many live outside the state.

The Highlands Voice, a monthly 8-page

newspaper, is sent to all Conservancy members. It is filled with environmental news on topics of interest and concern to members as well as articles about trips and outings.

The Conservancy sponsors two special weekends each year. These are usually at some scenic spot in the highlands and feature speakers, outings and board meetings.

Your contribution to WVHC is tax deductible and joining is as simple as filling out this form and returning it to the office in Charleston.

Join today and become part of an active organization dedicated to preserving West Virginia's natural resources.

WVHC Membership Categories (Circle One)

Category	Individual	Family	Organization
Senior/Student	\$ 12	\$ —	\$ —
Regular	15	25	50
Associate	30	50	100
Sustaining	50	100	200
Patron	100	200	400
Mountaineer	200	300	600

Name _____ Phone: _____

Address: _____

City/State/Zip _____

Make checks payable to: West Virginia Highlands Conservancy
 Mail to: P. O. Box 306, Charleston, WV 25321

Membership Benefits

- 1-year subscription to **The Highlands Voice**
- Special meetings with workshops and speakers
- Representation through WVHC's efforts to monitor legislative activity.

The West Virginia Highlands Conservancy is a non-profit organization. Your contribution is tax-deductible. Please keep this for your records.

Date _____

Amount _____

Check number _____

From Minnow to Sturgeon, North American Fish Are In Peril

One in three species or sub-species of native freshwater fish in North America is or may be threatened by the degradation of lakes, rivers and streams, scientists say.

Fish in waterways all over the continent are being affected by urban, agricultural and industrial development, pollution and the introduction of competitive or predatory fish, the researchers say. And though governmental efforts like the Endangered Species Act have been successful in individual cases, they have been unable to solve the overall problem.

There are about 1,000 species and sub-species of freshwater fish in the United States, Canada and Mexico. In a new report, the American Fisheries Society says 364 of them fit one of three categories: endangered, which means facing extinction in all or a significant portion of their ranges; threatened, meaning likely to become endangered in the near future; and of "special concern," meaning that relatively minor disturbances to the environment could place them in danger.

That is 113 more species and sub-species than were on the society's first list, compiled in 1979. It does not include the 40 species thought to have become extinct in this century.

From Minnows to Sturgeon

On the new list, published in the November-December issue of the journal *Fisheries*, are many types of fish throughout the continent, including all 50 states. They range from large to tiny, from obscure to well-known; the list includes species of minnows and quillfish, the paddlefish, the Colorado squawfish and two-thirds of all species of North American sturgeon.

Many kinds of game fish are also endangered or threatened, including sunfish, perch, catfish and 34 kinds of trout, but the report said that only 3 percent of all species on the list are threatened by recreational or commercial fishing.

"The situation is more alarming than we expected," said Jack E. Williams, director of the society's endangered species committee. "There has been a continuing downturn in the status of freshwater fish in North America. What is more alarming is that our report finds very few cases of success."

Since the Endangered Species Act was adopted in 1973, only four species of fish have recovered enough to be moved from the endangered to the threatened category. None has been removed from the list. In the same period, six species have become extinct and scores more have become endangered or threatened.

Scientists and environmentalists predict that burgeoning human population and development will push many more species to the brink of extinction or over it. "The rate of extinction will increase," said Dr. Williams, who is also fisheries director of the Bureau of Land Management. "If we cannot reverse this trend, we will see large-scale species losses and large-scale system failures."

(Continued from Page 2)

enforcement on the ground. The Conservancy's Mining Committee chair, John McFerrin, has aptly noted that the surface mine law ultimately is whatever the operator and inspector can negotiate on the ground. But the framework to which we return when problems arise is that of the regulations. People who care about the health and productivity of the earth will always be trying to get the strictest possible language in them. People who view every hill with gold in it as a commodity to be consumed and turned into cash will always try to get the weakest language money can buy. Regulatory "instability" will exist as long as coal mining exists.

The Death of Habitats

Dr. Peter B. Moyle, a fishery biologist at the University of California at Davis, said the list might be too conservative. "We have lost a number of species," he said, "but we are in danger of rapidly losing many more not on the list."

And Maitland Sharp, executive director of the Isaak Walton League, a conservation group, said the study showed that the Endangered Species Act was "not doing an adequate job protecting these threatened and endangered species." He added that Congress and the Federal Fish and Wildlife Service might need to reassess the law.

While there is seldom a single factor responsible for a species' decline or extinction, experts agreed that the most pervasive threat is destruction of delicate fish habitats. That destruction assumes many forms: the diversion of water for drinking and irrigation; industrial and agricultural development; sewage and chemical pollution, and the introduction of non-native species.

A new and serious threat is the proliferation of acid rain. Some lakes and streams in the Northeast and Canada have become so acidic that fish can no longer live in them. In 100,000 lakes in Ontario and Quebec, wild stocks of the endangered aurora trout have been eradicated; half the range of the endangered Acadian whitefish of Nova Scotia has been destroyed.

"Across southern Canada there has been a tremendous alteration of fishery habitats," said Charles Dauphine, coordinator of endangered species for the Canadian Wildlife Service in Ottawa. "We are quite alarmed by the scale of the threat."

But scientists agree that the hardest hit regions are in the arid parts of the Southwestern United States and northern Mexico. The fisheries society says 62 percent of the imperiled species are in five American states — California, Nevada, Arizona, New Mexico and Texas — or in the Mexican states of Sonora, Chihuahua and Coahuila.

"Every fish in the Southwest is endangered whether or not it is on the list because of the continued population growth in the regions," said Phil Pister, a biologist for the California Department of Fish and Game who is secretary of the Desert Fishes Council. "The situation is going to get nothing but worse."

The Colorado River once flowed 1,450 miles, from the Rocky Mountains to the Gulf of Mexico. Now not even a trickle often remains at the river's mouth, the water having been captured by large dams and diverted for thirsty crops and human populations.

In Special Danger: Mexican Fish

As a result, many fish species have disappeared from the Colorado and its tributaries. And many that survived the loss of habitat have been eliminated by the introduction of non-native fish like the largemouth bass, which prey on native

species or compete with them for dwindling food supplies. Compounding the crisis, many species in the arid Southwest live in single small streams or springs, fragile aquatic ecosystems that are easily disrupted.

Of the 113 species added to the American Fisheries Society's list since 1979, 56 are native to Mexico. The society says that many were added because improved techniques have identified more imperiled species, but that many others were included because growing population and pollution have devastated habitats.

"Most of our fish in Mexico are in some sort of danger," said Dr. Salvador Contreras-Balderas, a co-author of the report who is a professor at the Autonomous University of Nuevo Leon in Monterrey, Mexico.

"Strong regulations are now beginning to be enforced, but the situation will not get better," he said. He cited a lack of experts, "a lack of economic resources, a lack of ecological conscience."

In the Yucatan, for example, many people dump trash and sewage into crevices and caverns, unwittingly destroying the fragile subterranean habitat of the drama blanca ciega, a tiny blind species that faces almost certain extinction.

In the United States, scientists say, 30 Federal agencies and a plethora of state bodies have addressed the problem species by species instead of dealing with entire

communities of fish and freshwater ecosystems. And many experts agree that efforts to halt the decline of freshwater species will meet resistance from political and economic interests.

But Bob Herbst, executive director of Trout Unlimited, a sport fishing association, said something must be done to halt the decline of even small, obscure and seemingly unimportant species. "Fish are barometers for the future of humans, like the canary in a coal mine," he said. "Whether a fish species lives indicates the quality of the environment for man."

NYT 1-30-90



The Surface Mining Control and Reclamation Act (Public Law 95-87) of 1977 established the Office of Surface Mining Reclamation and Enforcement (OSMRE). The Bureau of Mines (BOM) and OSMRE are mine map repositories. Some of the information represented on the maps include: mine and company names, main and secondary roads, haul roads, railroads and tipples; creeks and streams, rivers, ponds and lakes; property ownership (mineral and/or surface), adjoining coal companies, towns and cities and old railroad towns; districts, townships, sections, ranges, counties, and municipalities; latitudes and longitudes, elevation benchmarks, surface elevations, north arrows, distance scales and dates; coal outcrop seam designation, seam thickness, coal elevations, and coal reserves; man-ways, emergency exits, mine openings, barrier pillars, and ventilation facilities; power and gas lines and gas oil wells; preparation plants, storage areas, and water and power distribution facilities. This table lists mine maps collected by BOM prior to 1984.

Number of Mine Maps Archived Prior to 1984 for Each State

States	Number of Maps	States	Number of Maps
Alabama	321	Montana	740
Alaska	6	Nebraska	0
Arizona	960	Nevada	933
Arkansas	157	New Hampshire	187
California	289	New Jersey	261
Colorado	13,322	New Mexico	263
Connecticut	472	New York	1,089
Delaware	3	North Carolina	1,545
District of Columbia	0	North Dakota	8
Florida	0	Ohio	6,914
Georgia	694	Oklahoma	890
Hawaii	0	Oregon	329
Idaho	577	Pennsylvania	6,989
Illinois	2,181	Rhode Island	0
Indiana	2,262	South Carolina	52
Iowa	1	South Dakota	326
Kansas	463	Tennessee	937
Kentucky	1,619	Texas	7
Louisiana	0	Utah	854
Maine	532	Vermont	79
Maryland	46	Virginia	2,513
Massachusetts	46	Washington	14
Michigan	8,259	West Virginia	24,421
Minnesota	3,056	Wisconsin	396
Mississippi	78	Wyoming	467
Missouri	4,846		

Total Maps = 90,404

Farming Appalachian Hillsides

The Appalachian Soil and Water Conservation Research Laboratory in Beckley was dedicated in 1980 by Senator Byrd. As part of the USDA, Agricultural Research Service, the laboratory sits on a landscaped hill amid 43 wooded acres just a short distance from the Mine Health and Safety Academy. Fully-equipped laboratories, growth chambers, and three greenhouses provide a modern research facility under one roof, with several research sites and a 150-acre hill land farm within easy driving distance providing the opportunity for field trails with plants and animals. As part of a network of similar ARS laboratories scattered across the U.S., its overall mission is to develop a more productive Appalachian agriculture base.

The contemporary disciplines of the laboratory in working out the familiar algorithm of sun and seasons examine all aspects of life's cycle at the basic science level. A list of scientific disciplines contributing to such understanding include agronomy, biochemistry, environmental biophysics, hydrology/climatology, hydraulic engineering, plant physiology, soil chemistry, soil fertility-plant nutrition, and soil microbiology.

The best defined project now underway ambitiously proposes the redevelopment of hill land farming, which was practiced on about half of the Appalachian land area at the turn of the century. This time, however, the conservation of soil and water resources, and efficient use of crop nutrients to main environmental quality, will be of primary concern to whatever systems the laboratory comes up with. As an economic option for rural areas, a successful scenario would enable typically acidic, infertile, and shallow (droughty) hillsides to become choice pastures for sheep. The development of good grass and legume forages capable of thriving under these conditions would be very important to the region, and to many other areas in the world with similar soils and climates. Alternatives to methods traditionally practiced by any responsible farmer such as liming, fertilization, and crop rotation, are being pursued by the 15 scientists at the laboratory. These include testing new species and management schemes to provide sufficient forage in all four seasons, inoculating roots with bacteria and fungi to reduce fertilizer needs, developing plants that utilize sunlight more effectively, and modelling water and energy budgets of hilly terrains.

Research on acid soils occupies a considerable amount of the attention of the scientist's efforts, and for good reason. Soils containing too much acid, either from natural processes or man-made sources via acid precipitation, severely limit crops on extensive areas in this region, as well as on practically every continent. The results of work at the Beckley facility on understanding the soil chemical reactions in acid soils, and their effect on the molecular machinery of root cells and tissues, may well point the direction in developing acid resistant forages either by classical plant breeding or new biotechnology techniques. Because of this work, and because of the laboratory's original focus on reclamation of surface mine sites, it well qualifies as a knowledgeable host for an international symposium at Pipestem State Park this summer on acid soil research.

Among the many responsibilities of the Director, Dr. Paul Murrmann, such as guiding and integrating the individual projects, and defining boundaries of the program as a whole, is that of keeping science in the forefront of often conflicting interests between industrial needs and public concerns. The laboratory's dedication to doing good basic research, tempered with environmental and societal sensitivity, is an encouraging sign to all who understand the interdependence of all parts of the ecosystem. Maybe one day, because of the research like this, the Appalachian Region will be restored to an economic and environmental level reminiscent of times past, and enjoyed by all.

EDITOR'S NOTE: Many thanks to the personnel and staff of the Laboratory with a special acknowledgment to T. E. Staley, for making this article possible.



(Continued from Page 1)

It is important to examine the makeup of the EMI committee and discuss the politics of it. Members are:

Senator	District	Friend of:
Bill Sharpe, <i>Chairperson</i>	Gilmer, Harrison, Lewis	Coal, Oil & Gas, Chemicals
Martha Wehrle, <i>Vice Chairperson</i>	Kanawha	Oil & Gas
J. D. Brackenrich	Clay, Fayette, Greenbrier	Landfills, Coal
Charles Felton	Barbour, Preston, Monongalia	Business
Tracy Hylton	Raleigh, Wyoming	Coal
Joe Manchin	Marion, Monongalia	Coal
Wayne Thomas	Wetzel, Marshall, Ohio, Tyler	Business
C. N. Harman	Preston, Barbour	Business
John Chernenko	Brooke, Hancock, Ohio	Big Business
Walt Helmick	Braxton, Pocahontas, Randolph	Coal, Forestry
Lloyd Jackson	Lincoln, Logan, Boone	Coal, Oil & Gas, Chemicals
Mark Manchin	Kanawha	Business
Keith Wagner	McDowell, Mingo	Environment

As you can see, it would be hard to design a committee that would be more anti-environment. It was no accident that Burdette has promised that "a bill" will be passed out of the committee.

Contacting your senator and particularly an EMI senator is absolutely critical. The senators must hear "HB 4100" over and over again during the next few weeks. You will not make many, if any converts, but don't despair. There is a method to this phone madness.

The Senate will very likely pass some very weak bill before the session ends. At that time, a joint House-Senate committee will try to reach acceptable compromises. The more calls and letters they receive on HB 4100, the more likely the compromise will be to our advantage.

The opponents of HB 4100 are united, well-financed and numerous. The major assets that the environmental community have are an ever-growing number of citizens committed to a strong environmental agenda and courageous, visionary leadership in the House of Delegates.

Good-By Pat — And We Hope You Come Back

by Norm Steenstra

Delegate Patrick H. Murphy, Democrat from the eastern panhandle counties of Berkeley and Morgan counties has announced that he will not seek re-election to his fifth term.

Pat Murphy has long been considered by West Virginia environmentalists to be one of the hardest working, diligent members of the House of Delegates. He is one of the very few members who took the time to read each proposed rule and regulation. His good counsel often kept us from deviating from our goals.

His district, his panhandle, the House and the entire state are losing a "good one." On behalf of environmentalists across the state, we wish you the best of luck and pray for your eventual return.

Second Annual Environmental Convention

The Second Annual Environmental Convention will be held on the weekend of September , 1990. Plan to attend this very important weekend. The major purpose of the convention will be to set legislative priorities for 1991 and coordinate environmental efforts of the 1990 general election.

For further information, contact the WV Environmental Council at (304) 346-5891.

Monongahela National Forest Hiking Guide Now Out

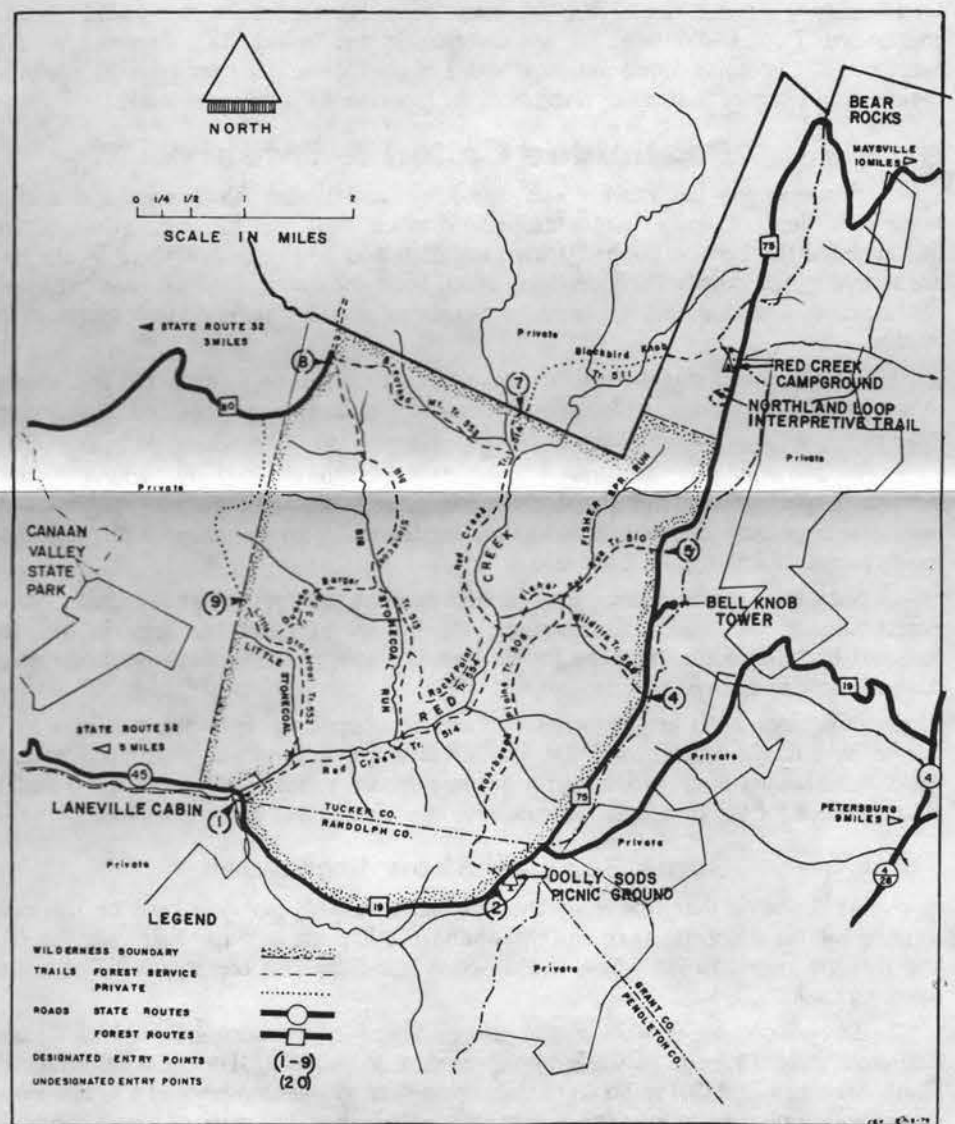
Edition 5 of the WVHC **Monongahela National Forest Hiking Guide** is now available. This edition is bigger and better than ever, with 320 pages, 60 maps, 39 photographs, descriptions of 164 trails totalling 780 miles, a new section on ski-touring, and a full-color cover. The authors are Allen de Hart and Bruce Sundquist. Allen has hiked all the trails of the Monongahela N.F. over the past few years. Bruce edited Editions 1-4. The hiking community and the U.S. Forest Service provided the authors with trail reports and photographs.

In the U.S. Forest Service's planning process that led to the 1986 Land and Resource Management Plan, over 35,000 comments were received from the public. The gist of these comments is that the Monongahela is a "Special Place." And indeed it is. The hiking and back-packing opportunities it provides are among the best in the eastern U.S. The more outstanding areas are becoming known far and wide — Otter Creek Wilderness, Dolly Sods Wilderness, Flatrock Plains, Roaring Plains, Blackwater Canyon, Spruce Knob, North Fork Mountain, Shaver's Mountain, Laurel Fork Wilderness,

Cranberry Back Country, Cranberry Wilderness, among others. This guide will help you get to know these and other special places in the forest.

Profits from the sale of these guides support a wide variety of worthy environmental projects in the West Virginia Highlands Conservancy.

To order your copy of **Monongahela National Forest Hiking Guide**, send \$9.95 plus 6% sales tax for WV residents, plus \$1.25 postage (book rate) to West Virginia Highlands Conservancy, P. O. Box 306, Charleston, 25321.



DOLLY SODS WILDERNESS

Common Cause Honors Three West Virginians

Three West Virginians were recognized for their contributions to environmental issues Saturday at an awards banquet sponsored by the state chapter of Common Cause.

About 100 people attended the banquet honoring Jean Neely of Shepherdstown, Andrew Maier of Hinton and Delegate David Grubb, D-Kanawha.

Neely, a retired Navy captain, is chairwoman of the Jefferson County Commission on the Potomac Headwaters Resources Conservation and is a leading combatant for environmental issues in the Eastern Panhandle.

"We all have to breathe the air and we all have to drink the water," Neely said as she accepted her award. "I think there's still a lot of fine-tuning we can do [to the environment] right here in West Virginia."

Maier is president of Save Our Mountains, an environmental group seeking to control garbage pollution in the state. He was a leading opponent of nuclear waste storage in West Virginia and lobbied against permitting Class A landfills — those accepting more than 10,000 tons of garbage — in the state.

Gov. Gaston Caperton has since signed an executive order banning such landfills until July 1.

Grubb is founder of the West Virginia Citizen Action Group, a statewide organization promoting consumer interests. The organization has lobbied for better monitoring of water quality and better solid-waste disposal. In January, Grubb submitted a petition to put a recycling referendum on the Kanawha County ballot in May.

"People like you help people like me," Grubb said from the podium Saturday. "Maybe together we can make a better and safer West Virginia."

Following the awards, Sergey Krasnov, third secretary of the Soviet Embassy in Washington, discussed "Glasnost and Global Perestroika."

Common Cause in West Virginia has about 800 members. The organization has been heavily involved in lobbying for the West Virginia Ethics Act, said director Bob Hall.

Nationally, the organization is pushing for campaign finance reform, Hall said. Among those in attendance at the banquet was former state first lady Dee Caperton, who has announced her candidacy for state treasurer.

*Sunday Gazette-Mail
February 4, 1990*

Annual Bird Counts Are Starting To Yield Scientific Insights

by Jane E. Brody

What began in the last century as a Christmas hunting contest has become an annual count of North American birds that provides scientists and conservationists with incomparable data about hundreds of species.

Now in its 90th year, the annual Christmas bird count began last Saturday as the first of 42,000 volunteers went out to record sightings. Under the auspices of the National Audubon Society, and aided by dozens of local nature groups, bands of bird watchers across the continent will count all the wild birds they find in a day. They will separate into more than 1,500 groups, each of which will cover a circular area about 15 miles in diameter. Before the count ends on January 3, experts expect to record more than 66 million birds.

For most participants, the Christmas bird count is just a fun way to spend a winter day. But growing numbers of scientists and environmentalists are finding a wealth of important facts among the data generated by the winter bird watchers.

More than 200 papers based on results of Christmas counts have been published, most in the last 15 years. And scores of studies are under way, all made possible by the recent computerization of 28 years of bird count data.

One of the most recent studies, done last year at the Cornell Laboratory of Ornithology, examined 20 of the 30 birds on a list of species that could become endangered. This early warning list was compiled by the United States Fish and Wildlife Service. The Christmas counts indicated that 7 of the 20 species appeared to be declining rapidly, said Gregory S. Butcher, director of the laboratory's population studies.

Pesticides Called A Threat

For example, Dr. Butcher said, the loggerhead shrike, which once had a huge range over North America, is now declining drastically all over its range. While experts had expected this because the hedgerows, woodlots and brushy fields favored by the bird are shrinking, the population is declining much faster than anyone would have predicted. Dr. Butcher suggested that exposure to pesticides may be an important factor in its decline.

He also found that the seaside sparrow, which breeds on Long Island and winters in salt marshes in Florida, is declining dramatically as humans encroach on its wintering grounds.

In addition, the study raised concerns about the spotted owl and Henslow's sparrow, a species that favors abandoned agricultural fields. These species "may be in the most danger of extinction and should be top candidates for special research programs and for conservation action," the study said.

Such information is being used to alert agencies and groups like the United States Forest Service, the Nature Conservancy, the Bureau of Land Management and the National Park Service to the need for land management practices that would encourage the birds now in decline.

"The idea is to get the word out and get something done about it before the species have totally fallen apart," Dr. Butcher said. For example, he explained, the state parks and national forest might start a mowing schedule that would provide a desirable place to breed for the Henslow's sparrow and other species that prefer grasslands.

Some Species Show Increases

At the same time, the study showed that two birds that had been on the early warning list, the trumpeter swan and the white-faced ibis, are now increasing significantly, and that the Harris hawk, which had dropped in numbers in the early 1980's, is also bouncing back.

Terry Root, an ornithologist at the University of Michigan's School of Natural Resources, used 10 years of Christmas count data to produce "The Atlas of Wintering North American Birds." The book, published last year by the University of Chicago Press, maps the distribution and abundance patterns for more than 250 species of birds.

By superimposing maps of environmental variables like temperature, vegetation and precipitation over the bird distribution maps, she was able to show that the limits of some species were determined by temperature.

Migration and Metabolic Rate

"These species go only as far north as 2.5 times their basal metabolic rate," she said, meaning that to maintain body temperature in cold weather, the birds will not raise their rate of burning fuel more than 2.5 times their usual metabolic rate at higher temperatures.

Dr. Root said she is now trying to use the bird count data on a continental scale to study the effects of global warming.

"If temperatures rise, the species that are limited by winter lows will be able to move north rapidly," she said. "But those limited by vegetation will have to wait until the vegetation they depend on grows up. This will tear apart existing bird communities and create new ones, to what effect no one yet knows."

Dr. Root said her data can also be used by conservationists as a guide to establish preserves to protect threatened species. Since the maps show relative abundance of a species in different parts of its range, conservationists can protect areas where a bird is doing the best, rather than the edges of its range.

Although Christmas counts have been available for nearly a century, scientists have been wary of using the data, in part because they were regarded as unscientifically gathered. The experts were concerned that in a race for the most birds, the thousands of amateurs might overcount or misidentify species.

More Reliance on the Count

But attitudes changed recently as more stringent counting rules and data checks were introduced and scientists began to realize that the count is "the most extensive, longest-term, continuous and most geographically comprehensive data set in American ornithology," as Susan Roney Drennan put it. Ms. Drennan, a mathematician, is editor of *American Birds*, the scientific publication of the National Audubon Society. The society corroborates, compiles and publishes the annual bird count data.

Other scientists share her assessment and have come to rely on the data base, which is far larger and more comprehensive than any individual scientist could hope to gather even with an enormous research grant.

Carl E. Bock, professor of biology at the University of Colorado in Boulder, said the Christmas count data are "ideally preadapted to address questions of why certain birds appear in particular places some years and not others."

Dr. Bock and a graduate student computerized a decade of data, under a National Science Foundation grant. In analyzing the data, Dr. Bock found that wintertime "eruptions" in the United States of birds that normally live in the evergreen forests of Canada were driven by feed crop failures in the forests. When the trees failed to produce cones for reasons not yet understood, birds that eat the conifer seeds came into the United States for winter food. These birds include the red poll, pine siskin, evening grosbeak, purple finch, red-breasted nuthatch and crossbills.

In comparing the North American bird counts with data from Europe, Dr. Bock found that the southern movements of birds from northern forests seem to be synchronized worldwide, suggesting that some global climactic changes may be involved.

Dr. Bock, who has done two dozen other studies using Christmas counts, sees a bright future for what is unquestionably the largest data base in the animal kingdom.

"The counts tell us two fundamental things about birds: their patterns in space and their patterns in time," he said. "For no other kinds of animals do biologists have data like these."

NYT 12-19-89

