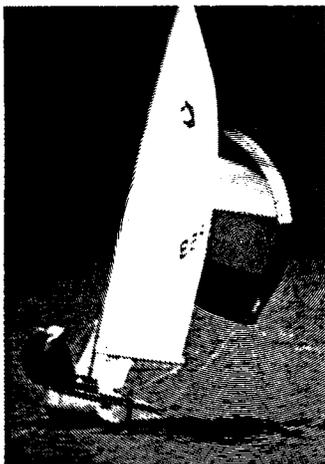




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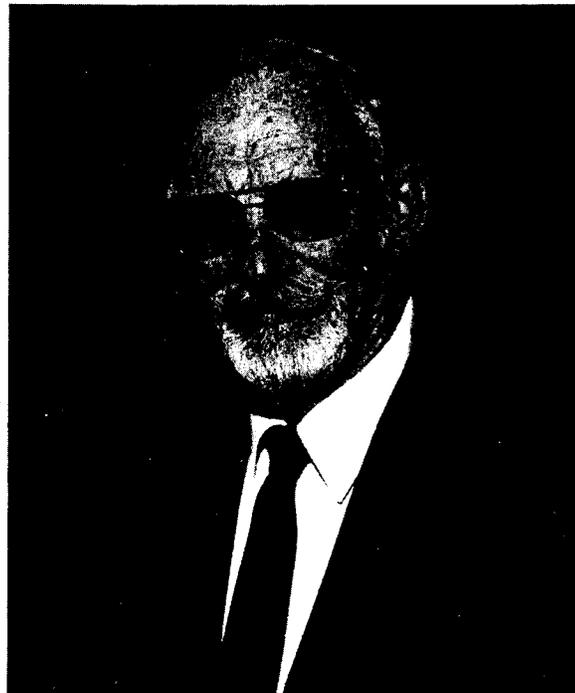
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INFORMATION EXCHANGE BULLETIN

APR 1986

FRED HUELSON presented the following paper at the 29th Annual Management Meeting of the West Virginia Department of Natural Resources and the Huntington, Pittsburgh, and Baltimore Districts of the US Army Corps of Engineers. The meeting was held at the Cacoapon State Park in September 1985. For many years, Fred was the Chief of the Recreation/Resource Management Branch, Louisville District.

This article was submitted for publication by his many friends in appreciation of its message and of his long-term commitment to the Natural Resources Management Program.



I seemed to note a growing sense of frustration in you because of your inability to manage as you would like in this period of declining resources of money and manpower. I am going to share with you my deep down, rock bottom, gut feelings on the importance of wise natural resource management to both a nation and to an individual.

What are our natural resources? It's the land we live on, the air we breathe and the water we drink, and the minerals we wrench out of the earth that sustains our high standard of living.

How important are they to a nation? I think that if you look down through the dusty pages of history you will find that many nations have arisen and fallen for a number of reasons: war, politics, famine, or any number of reasons. But whatever the reason, if you examine the cause closely you will find that, interwoven and inseparable from the causes, a nation's wise or unwise use of its

natural resources played a large role in either the rise or fall of that nation.

Cases in point. In the ancient world Lebanon was covered with a vast cedar forest. Timbers were sought after by all the nations of the world for building material. King Solomon's Temple was framed with beams from the cedars of Lebanon; yet today only a small pitiful remnant of that once great forest exists.

It is found in the high stone walls of a monastery that has been continuously occupied for about 2000 years. What happened to the rest of the forest? The timber cutters came in and cut out the prime stuff, and they were followed by the charcoal burners and oil extractors, who ravaged most of what was left. They, in turn, were followed by the sheep and goat herders, whose flocks denuded the countryside of all vegetation until they changed the drainage patterns and climate. By and large, Lebanon today is an arid, barren wasteland.

At one time the Tigris and Euphrates Valleys were known as the garden spot of the world. This was because of the complex system of irrigation canals that fed life-giving water to the area. Yet it is written in the Bible that the children of Israel sat down beside these waters and cried, not for joy but because of the never-ending task of cleaning the canals of the silt that the water carried. Today only a small vestige of this once lush agricultural area remains.

Look behind the Atlas Mountains in North Africa and you will find the ruins of once thriving Roman and Carthaginian cities; you will find the ruins of large wine and olive presses; and you will find traces of large vineyards and olive orchards. You will also find the ruins of an elaborate water collection, storage, and distribution system. As this system fell into disrepair, the cities withered and died.

Today these ruins are only seen by an occasional archeologist or a wandering Truag tribesman because they are in the north rim of the great Sahara Desert.

China is known as the birthplace of civilization. She has existed for 4000 years, through wars, several dynasties, and many upheavals. Yet throughout the centuries one thing has remained constant and it is known as China's sorrow. It is the Hwang Ho or Yellow River. It starts in north-eastern Tibet, cuts its way through the gut of China, and outlets into the Yellow Sea. The Yellow River is one of the most heavily silt-laden rivers in the world, and for scores of centuries millions of Chinese have worked out their lives trying to keep the channel clean and build dikes to contain the river. In 1882 the Hwang Ho broke the dikes and flooded 32 million acres of land. It killed about a million Chinese people.

So what is wise use of our natural resource worth to a nation? I believe it was William Jennings Bryan who said "Destroy your cities and they will rise again, but destroy your farms and grass will grow in the streets of your cities."

What is natural resource management worth to an individual? A scant 200 years ago vast hardwood forests stretched from the Atlantic seaboard to the Mississippi River here in the United States and mile after mile of long, intermediate, and short prairies went on to the Rocky Mountains. Beyond the Rockies millions of acres of virgin coniferous forests went on to the Pacific Ocean. Our streams were clear and cold, our air was fresh and pure, and millions of buffalo, elk, deer, bear, turkeys, grouse, passenger pigeons and other animals and

birds were pretty evenly distributed throughout the country. Yet in about a hundred and fifty years we had raped the land. The hardwood forests were either cleared or cut over for the most part, the prairies had been plowed under and overgrazed by cattle and sheep, many of our rivers and streams were open sewers, and in places the air was so polluted by area smoke-stack industry that a prolonged temperature inversion would trap the smoke and cause deaths. The animals and birds were either driven from their natural habitat or were sadly depleted.

My father would be about a hundred years old today if he were alive and he told me that an uncle of his had killed the last known wild turkey in Indiana in 1882. By the turn of the century, only a few buffalo were left out of the millions that had existed three or four decades before. The passenger pigeon that had once numbered in the hundreds of millions was extinct. The last one died in the Cincinnati Zoo in 1916.

I can remember as a boy the sun appearing to look red throughout the day and it raining muddy water because of dust in the air from the great dust storms that occurred in Texas, Oklahoma, Kansas, and Nebraska in 1935 and 1936. Yet the most devastating flood ever known in the Ohio Valley occurred in January of 1937. I live 3-1/2 miles from the river and had my house been standing then I would have had flood waters in my front yard. That's mind boggling.

If any good came out of the great depression and these catastrophic natural disasters, it was the heightened awareness of the American people that insofar as our natural resources were concerned we had almost reached the brink of destruction and something had to be done. It was enabling legislation that beefed up our wildlife and forestry management laws, established the Tennessee Valley Authority and the Civilian Conservation Corps (which later became the Soil Conservation Service), and it was the passage of the Flood Control Act of 1938 which put the Corps of Engineers into the dam building business.

Were these efforts successful? Somewhat. We are light years away from where we were 50 years ago, but we have a long way to go yet. I know of 4 or 5 thriving wild turkey flocks in Indiana. As late as the mid-40s if someone saw a deer it was a conversation item, now they are about as common as rabbits. Fifteen years ago if I could stand the stink when I fished the Ohio River, I might catch a

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carp or buffalo or perch or catfish, and they weren't fit to eat. In the last 7 or 8 years, I have been catching black and white bass, crappie, sauger, bluegill, and, for the last couple of years, some nice striped bass that the fisheries biologists in Kentucky tell me for the most part were as clean as any fish found in the Commonwealth.

As I said the Flood Control Act of 1938 put the Corps in the dam building business. We had barely got started when World War II started and put everything in the deep freeze for about 5 years.

After the war the Flood Control Act of 1946 directed the Corps to build recreation facilities on water resource projects. When you consider that it takes from 10 to 15 years from the planning stage through design and construction until a lake becomes operational, you can see that we didn't hit our full stride until the mid-1950s in building flood control and multi-purpose lakes. It was our policy then as it is now that we would lease all of the lake lands, with the exception of the dam and outlet works, to a responsible subdivision of government such as a state, city, or county. We weren't always successful in doing this so the Corps was dragged, kicking and screaming, back into the natural resource management field. I say back into resource management because it is a little known fact that we were the first developers of Sequoia, Yosemite, and Yellowstone National Parks before there was a National Park Service. However, none was left who had worked on these projects and few people even remembered about it. So we were back into the natural resource management field, and we made mistakes.

In the first place the Corps had been an engineering and construction agency for 175 years and didn't particularly want into the business of resource management. In fact Natural Resource Management in those early days had about the same status as a bastard stepchild at a family reunion. Corps leadership quickly recognized that if we were going to do our congressionally-mandated mission of resource management, we had to have professional managers and at about that time a not-so-young agronomist transferred from the Soil Conservation Service to the Corps as a Reservoir Manager.

That was me.

One of the first meetings I attended after I came with the Corps was at Pokagan State Park in Northeast Indiana. It was the Great Lake Park and Recreation Institute. While I was there, I met a young wild-eyed engineer from Huntington, West Virginia, who was going to change the world. His name is Pat Cantley, and he is sitting right over there. I also met another young hot-to-trot engineer from Pittsburgh, who was going to change the world through the planning process. His name is Pete Colangelo. Pete isn't with us tonight because of jury duty. We all three in due time ended up as chiefs of Natural Resource Management in our respective Districts. Now here it is almost three decades later, and I can't see that the world has changed much. We three have gotten older, fatter, grayer, and (I hope) a little smarter. We have had lean times and good times, and we are now going back into a lean period. If we three have left a legacy, it's that we have hired and trained some good professional managers and our lake resources are in good hands.

So what does this rambling lead up to? —In my case it's what good natural resource management means to an individual. Every once in a while in a man's life something happens to jerk you back to reality and to put things into sharp focus. For me it happened two weeks ago today when one of my two grandsons, the only grandchildren I have, died. I suddenly realized that that little boy will never see the sun come up out of a green forest, he will never tramp the hills and fields looking for a deer or grouse or turkey. He will never fish the rivers or streams or lakes of this great country of ours or be able to enjoy the natural resources as recreational facilities which you administer and manage, and that is a terrible loss. The other side of that coin is simply this: My other grandson and tens of thousands of kids like him, and hundreds of thousands of kids yet unborn will be able to enjoy these things because of the dedication of you and people like you who are willing to put up with the frustrations and heartburn in doing your jobs in this period of declining resources. Is it worth it? You're damned right it is! It's worth every cent and minute and hour you spend at it.

Ladies and gentlemen, I apologize for rambling on like this but I wanted to share one man's thoughts on the importance of resource management with you.



NATURAL RESOURCES RESEARCH PROGRAM

This bulletin is published in accordance with AR 310-2. It has been prepared and distributed as one of the information dissemination functions of the Environmental Laboratory of the Waterways Experiment Station. It is primarily intended to be a forum whereby information pertaining to and resulting from the Corps of Engineers' nationwide Natural Resources Research Program can be rapidly and widely disseminated to OCE and Division, District, and project offices as well as to other Federal agencies concerned with outdoor recreation. Local reproduction is authorized to satisfy additional requirements. Contributions of notes, news, reviews, or any other types of information are solicited from all sources and will be considered for publication as long as they are relevant to the theme of the Natural Resources Research Program, i.e., to improve the effectiveness and efficiency of the Corps in managing the natural resources while providing recreation opportunities at its water resources development projects. This bulletin will be issued on an irregular basis as dictated by the quantity and importance of information to be disseminated. Communications are welcomed and should be addressed to the Environmental Laboratory, ATTN: A. J. Anderson, U.S. Army Engineer Waterways Experiment Station, P.O. Box 631, Vicksburg, MS 39180-0631, or call AC 601, 634-3657 (FTS 542-3657).

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