The Upper Delaware Council hosted a major conference on water flows in the Delaware River on November 12-14, 1989, in Matamoras, Pennsylvania. The conference, titled "The Delaware River: Flowing to the Future," was attended by over 125 private citizens and officials representing scores of organizations, governments, corporations and academic institutions.

Conference participants expressed a broad range of challenges and concerns about the heavily used Delaware. Although its length, drainage area, and total volume flow are small compared to many other U.S. rivers, the Delaware provides water to some 10 percent of the United States' population. Much of the river's flow is controlled by water supply and hydroelectric dams on its tributaries.

The Basin a Single System

The Upper Delaware Council's interest in water flows stems from the mission assigned to it by the River Management Plan. The Council is charged with protecting the upper 73.4 miles of the river. Under the Upper Delaware River Management Plan, water quality, fish, wildlife, and recreation must be preserved and enhanced. But the river basin operates as a single system. Until it surrenders itself to the Atlantic Ocean, everything that is added to or taken from the Delaware River affects every other thing that is expected of it. A key topic of the conference was how to meet the increasing demands being made upon the river (See "Special Report," on page 6).

UDC Advocates Landfill Cleanup

The Upper Delaware Council has formed a subcommittee to focus on the cleanup of the Cortese Landfill located south of Narrowsburg, New York. The action was taken at the Council meeting on February 1, 1990. The Council directed the subcommittee to contact interested parties to request a report on the status of cleanup negotiations, and invite them to attend a meeting to discuss how the cleanup can be expedited.

The site was operated as a landfill from 1970 to 1982. Sometime during 1973 hazardous waste in 55-gallon drums was either buried or discharged into the site. Contamination of the groundwater adjacent to the site has been detected, and a plume of contaminants may be moving southwest towards the Delaware River.

Said Phil Fitzpatrick, Council representative from Westfall Township, "It is time to really focus in on the fact that there is a real threat to this river. We don't know what is in those barrels and nobody wants to dig them up. It is time to offer our services as a clearing-house for this process." As this newsletter went to press, plans for a meeting between the states of New York and Pennsylvania, Town of Tusten, U.S. Environmental Protection Agency, the Delaware River Basin Commission, the National Park Service, and the UDC were being made.
River History

Rafting the Delaware—in 1764

On any given sunny summer day, one can stand on the river bank and watch brightly colored rafts racing through the Delaware’s rocky rapids. Rafting is nothing new on the river. It was practiced over 225 years ago. But in those early times the rafts were made not of rubber and air, but of valuable timber. And the raftsmen were not recreationists, but working men who risked their lives steering huge timber rafts to downstream markets.

Ancient Trees and Sailing Ships

In 1760, most of the Upper Delaware valley was still covered with virgin forest. The trees in this ancient forest were huge. The forest canopy arched overhead at heights of over 60 feet, the point at which the trees first branched out. In the Upper Delaware valley, the ancient forest contained much white pine and hemlock in mixture with some beech, birch, maple, and cherry.

Just 200 miles downstream in Philadelphia, the wood products industry was booming. Over 40 saw mills were busy producing lumber both for export and domestic use. Much of the lumber was used by the famous Philadelphia shipyards, which were busy producing merchant vessels.

The ship building and lumber industries depended upon a constant supply of fresh timber. But by 1760 most of the forests near Philadelphia had been logged over. A fortune was waiting for anyone who could figure out how to get Upper Delaware timber to the Philadelphia market.

The Lord High Admiral of the Delaware

The man who solved the puzzle was Daniel Skinner. Skinner was a consummate frontiersman—tough, creative, and adventurous. His lust for adventure took him from colonial Connecticut to the Upper Delaware wilderness, where he helped his father found the Cushetunk settlement. After his father was shot by an unknown assailant, Skinner became a sailor working the West Indian trade routes. It was during this stint that Skinner learned the value of good masts and spars. He remembered the forested Upper Delaware valley, and returned there to try out his ideas.

First, Skinner tried cutting the logs and tossing them in the river. But the Delaware was not like other broad, slow-moving timber rivers. Logs soon came to grief upon the rocks, victims of the Delaware’s fast current, sharp bends, and rocky bottom.

Skinner realized that the logs had to be guided past obstacles. So he bundled logs together, attached oars,

(See “Rafting,” on page 12)
Deerpark Achieves Substantial Conformance

At its February meeting the Council passed a resolution declaring the Town of Deerpark, New York, to be in substantial conformance with the River Management Plan and the Land and Water Use Guidelines. Deerpark is the second town in the river corridor to benefit from such a finding. The first town to achieve substantial conformance was Lumberland, New York.

Benefits of Substantial Conformance

A town or township found to be in substantial conformance benefits in many ways. First, land use decisions continue to be made at the local level, without interference by the National Park Service, the UDC, or other agencies. Local control is the hallmark of the town-developed River Management Plan, which seeks to protect a national treasure—the Upper Delaware—through local action.

Review Process

The resolution capped several months of intensive effort by Council staff and the Project Review Committee, who thoroughly reviewed the Deerpark zoning ordinance. The timing of the substantial conformance review was good, since Deerpark was revising its zoning ordinance anyway. Part of the zoning revision was funded by the Council, which provided Deerpark with a $10,000 planning grant in (FY) 1988.

Council staff played little direct role in Deerpark zoning ordinance revision, but a UDC member played a key role. According to Dave Soete, UDC Resource Specialist: “We met once with their consultants and made some comments about the process. But really, staff didn’t have a big hand in their zoning revisions. A lot of the credit goes to Council member Frank Hartmann, who was on the Deerpark Zoning Commission and knew what the management plan said. So in the end, the zoning reflected the plan very well. This shows what a tremendous advantage it is for a town to participate in the Council.”

Other Reviews Underway

Council staff continues to forge ahead with other substantial conformance reviews. Information is currently being gathered for the review of the Town of Cochecton, New York. This year, the Council hopes to review other towns and townships that are members of the UDC. Member towns are also called “participating towns.”

“This shows what a tremendous advantage it is for a town to participate in the Council.”

In a separate action, The National Park Service continues to review the ordinances of non-participating towns and townships. The reviews are being conducted from an office in Philadelphia. The results of the NPS reviews are due early this spring.

A breathtaking view of the river from Hawk’s Nest in Deerpark. The Council has found Deerpark to be in substantial conformance. Photo by Chuck Hoffman.
UDC Elects Officers

Edward DeFebo of Lackawaxen, Pennsylvania, was elected Chairman of the Upper Delaware Council at annual elections held January 4 in Narrowsburg. DeFebo, Chairman of the Lackawaxen Township Board of Supervisors, served as Vice-Chair of the Council last year and has long represented Lackawaxen Township on the UDC. DeFebo takes over the reins of leadership from Frank Hartmann of the Town of Deerpark, who served as Chair during 1989. Ed DeFebo is the Council’s third Chairperson.

Other Election Results

The Council elected Thomas Hill, Town of Lumberland Supervisor, as Vice-Chairman. Hill has been active in river issues since the days of the Conference of Upper Delaware Townships (COUP). Thanks in part to his efforts, Lumberland became the first town to be found in substantial conformance with the River Management Plan and the Land and Water Use Guidelines. Such status provides numerous benefits to a town or township, especially one that is participating in the Council.

The Council also elected Larry Richardson as Secretary-Treasurer. Since 1989 Richardson has represented the Town of Cochecton on the Council. Richardson is an active member of his community and serves on the Town of Cochecton Planning Board.

Changes in Membership

There have been several changes in appointments to the Council by member towns and townships since the previous issue of The Upper Delaware.

George Fluhr of Shohola, Pennsylvania, has succeeded Bruce Selneck as representative of that Township. Fluhr served as the alternate representative from Shohola in 1989. He has long been involved in river issues and was the first recipient of the Council’s highest honor, the Distinguished Service Award, in 1989. Andrew Bartsch is the new alternate representative for Shohola.

Dick Gutzeit has replaced John Poley as the alternate Council representative for the Town of Cochecton, New York. Gutzeit returns after a year’s leave of absence.

Paul Brennan has succeeded Peter Melnyk as the alternate UDC representative for the Town of Lumberland. Brennan serves on the Town Board of Lumberland.

UDC Publishes Design Handbook

The Upper Delaware Council has published a handbook that uses plain English and lots of illustrations to explain the Upper Delaware Land and Water Use Guidelines. The purpose of the Design Handbook is to provide guidance for those involved in development along the Upper Delaware River. It is for local officials, builders, developers, landowners, and others involved in construction within the river corridor.

The handbook shows how to develop property in a way that insures harmony with the existing river landscape and helps to keep the river flowing free, clean, and beautiful. A free copy of the Design Handbook may be obtained by contacting the Upper Delaware Council.
New York to Buy Eagle Habitat

Governor Cuomo's Announcement

New York Governor Mario Cuomo has announced that New York will make a major land acquisition in the Upper Delaware region in a move designed to conserve the state's natural heritage while opening some of the land to the public for their use and enjoyment.

The area, to be acquired through a combination of outright purchase and conservation easements, covers more than 10,000 acres in the lower reaches of the Mongaup River in Sullivan and Orange Counties, in the Towns of Lumberland and Deerpark. Current owners of the land are Orange and Rockland Utilities, Inc., and the utility's real estate subsidiary, Clove Development Corporation. Monies for the acquisition will come from the 1986 Environmental Quality Bond Act. The Department of Environmental Conservation will manage the land.

Eagles a Priority, Public Use to Increase

In his announcement, Governor Cuomo stated that "The region boasts crucial habitat for the endangered bald eagle, our nation's symbol. It supports up to 100 of these magnificent eagles annually."

"The conservation easements will provide access to much of the area, enabling the public to enjoy the Mongaup River valley," said Environmental Conservation Commissioner Thomas C. Jorling. "Access will be monitored and regulated to minimize disturbance of the eagles."

An 80 acre site identified in the Upper Delaware River Management Plan as the proposed location for a major visitors center is among the 6,700 acres New York will be acquiring in fee. Early indications are that the New York acquisition may jeopardize NPS acquisition and development plans. The Upper Delaware Council has been in contact with the New York Department of Environmental Conservation in an effort to seek a satisfactory solution.

Council Seeks Bridge Funding

Just when everyone thought the Lordville-Equinunk Bridge was finally going to be replaced, the Pennsylvania Department of Transportation (PennDOT) announced that it will not provide its share of the construction funding as scheduled.

Surprise to Everyone

News of this apparent change of heart by Pennsylvania was contained in a December 7, 1989 letter to UDC Executive Director Bill Douglass in response to a telephone inquiry he made. Said Douglass, "The story was circulating in the Lordville area that Pennsylvania had pulled the funding. I started checking with New York DOT personnel in the Binghamton regional office about the progress of the Kellams-Stalker Bridge work and the status of the Lordville Bridge design plans, including the schedule for bidding and constructing the project. The response was that New York was working hard to meet the deadline for a March 29, 1990 letting, but that they heard that PennDOT had withdrawn their funding." Douglass then phoned PennDOT District Engineer Charles Mattei, who confirmed that funding for the project was in jeopardy and followed up with the December 7 letter.

The announcement took everyone by surprise. A groundswell of support for funding the project resulted in letters being sent to Pennsylvania Governor Casey and Secretary of Transportation Howard Yerusalim by Senator Charles Lemmond, Representative Jerry Birmelin, Wayne County Commissioners, Manchester Township Supervisors, the Upper Delaware Council, the National Park Service, and others. Each letter implored that the bridge replacement be reinstated as a priority project.

An Interstate Bridge Commission Project

The Lordville-Equinunk Bridge is one of the 10 bridges administered by the Commission, which was established in 1917. The Commission meets annually to approve work and set priorities. All costs for construction and maintenance of the bridges are shared equally by the two states, though each state is responsible for its own bridge approach. When the Commission decides to reconstruct, replace, or repair any of these bridges, the two states' Departments of Transportation must enter into an agreement to do the proposed work.

What Happens Now?

As of the end of January, no indication had been given that Pennsylvania is changing its position. Many fear that by the time Pennsylvania comes forward with funding, the New York funding will be lost. The UDC continues to lobby hard to get Pennsylvania to provide its share of funding, construction. To voice your concerns about bridge funding, contact Pennsylvania Secretary of Transportation Howard Yerusalim, Harrisburg, PA 17120.
while also providing sufficient water to sustain and enhance the river’s fisheries, wildlife populations, and thriving recreation industry.

Diversity, Common Ground Exposed

The government agencies, public interest groups, and industrial organizations represented at the flows conference frequently place competing demands on the use of the Delaware River. These interests often meet in the courtroom, a legislative hearing room, or in the competing rhetoric of the editorial page.

The conference provided these interests with an opportunity to discuss differences and find common ground. Said Joseph Conway, Director of New York City's Bureau of Water Supply: “I think that it was a good opportunity to meet with a lot of the people that the City has been dealing with at arm's length or through the media. This was an opportunity for us to hear each other's positions face to face and hopefully to get a better understanding of what we're all about and of what our goals are. I think in many cases, the goals are quite similar, whether you're talking about recreational or fisheries people, or drinking water people like ourselves.”

New Proposal Outlined

The conference was featured prominently in the news media from Scranton, Pennsylvania to Trenton, New Jersey. It made headlines when Ed Ossan, Water Resources Director of the National Wildlife Federation, unveiled an innovative proposal to increase the amount of water available for fish, wildlife, and recreation. Under the program, the states using the river would provide funding to New York City for water conservation measures. In return, the city would make half the water saved available for conservation releases.

Wide Range of Panelists

Conference panelists and participants discussed the subjects of river recreation, fisheries, and wildlife; water supply, storage, and hydropower demands; flow management and computer modeling; and water conservation, climactic changes, and other factors which could impact water quality and quantity in the future. Organizations which provided panelists include the states of New York, Pennsylvania, and New Jersey; the City of New York; Delaware River Basin Commission; National Park Service; Delaware River Master's office; Kittatinny Canoes; American Rivers; National Wildlife Federation; Theodore Gordon Flyfishers, Inc.; US Fish and Wildlife Service; Delaware River Basin Electric Utilities Group; US Geological Survey; and Watershed Association of the Delaware River.

Although many conference participants represented organizations, the Council offered a special discount rate and scholarships to encourage non-profit organizations and local citizens to attend.

Conference Highlights

Several key findings have emerged from the initial analysis of conference proceedings, including the following:

- It is in the interest of all parties to encourage water conservation, particularly by the largest water user, New York City. The City itself recognizes that conservation is a priority and is currently installing meters to monitor water use by consumers.
- Sometimes conflicting demands on river flows will continue to be made by recreational user groups: cold and warm water fishermen, boaters, and others. Education and wise river management will be the key to minimizing such conflicts. To succeed, the river management process must provide opportunities for input from competing interests in the debate.
- Fish and wildlife interests will continue to push for installation of a more precise control works at the Cannonsville reservoir. This will permit better flow management. Fishing interests will continue to push for protection of key tributary spawning areas.
- The Upper Delaware has a strong advocate that was not on the scene three years ago. The Council has a mandate to protect the upper stretch
of the river. The Council will continue to take an interest in flow management issues that affect the Upper Delaware.

• There is expected to be a tremendous increase in fishing on the Delaware, reflecting a national increase in fishing in general. Thirty-two million people live within 150 miles of the Upper Delaware. It is likely to become one of the most active recreational complexes in the world. The fishery alone is already worth several million dollars annually to the local economy. This amount is expected to increase with increased use.

Udall Hails Council Efforts

At a conference banquet held on November 13, Stewart Udall, former Arizona Congressman and Secretary of the Interior, hailed development of cooperative management on the Delaware River as a model for the protection and recovery of other rivers in the eastern United States. (See excerpts from Udall's speech on page 8 in this issue of The Upper Delaware). Said Udall, "I suspect that what you are working on is a story that at some point the whole nation needs to hear and to understand."

Conference Praised by Participants

In a UDC exit poll, participants praised the conference and its sponsor, the Upper Delaware Council. Said Gerald Hansler, Executive Director of the Delaware River Basin Commission: "I think it was a very useful conference. I think it was an opportunity for people with very divergent views on what flow management should be and for what purpose, to get together and talk."

Said Doug Roy, representing the Pike-Wayne Board of Realtors: "I was asked to attend by the Board because we have a very definite interest in the preservation of the Delaware. We like to see development, of course, because it's our bread and butter, but we don't want to see it if it's going to hurt the beautiful Delaware River. Too long have we waited to do something of this sort. It looks to me as if the conference will be successful in making people think about the problems and the issues that we all must deal with."

Conference proceedings are free to conference participants. It is for sale by the Upper Delaware Council for a $15.00 fee.
Excerpts from Udall Talk

Below are excerpts of a speech given by Stewart L. Udall, author and former Arizona Congressman and Secretary, U.S. Department of the Interior. The speech was presented on November 13, 1989, at the Upper Delaware Council-sponsored conference on the Delaware River, "Flowing to the Future," held in Matamoras, Pennsylvania.

Good evening old friends. And I do see many friends here, old and new.

When I was called by some of your leaders to be here I reached back into my memory and remembered all the things I had been involved with concerning the Delaware River. I have a lot of good memories. I said "Well, it's a long trip and a long day, but I ought to go." So here I am.

I am going to exercise the prerogatives of old age. You know, when your hair gets gray you feel you can pontificate. I am going to talk about history. When you're my age, you can set your stuff that Bill Douglass sent me and I like what you are doing. I like why you are here.

I want you to know that I'm no stranger to these parts. Mr. Lehde gave me this book earlier this evening. My picture is there in several places. When President Kennedy visited Pike County it was for the dedication of Grey Towers, the home and the library of Gifford Pinchot, a great American.

I noticed in this book that Mr. Lehde wrote, he said "The lawn on Grey Towers that fall day was America. The President was there, and there you had a little pageant of America." When I read this at the dinner table I thought there's another panorama, another snapshot, going on here in this valley. It is people struggling and arguing with each other about protecting a river.

Gifford Pinchot knew that in the nineteenth century we leveled about two-thirds of the forest in the United States. We then got smart and planted them back. They tell me there are more forested acres in the eastern part of the United States today, or at least in the northeast, than there were one hundred years ago. But rivers and river protection were essentially not on our national conservation agenda begun by Pinchot and Roosevelt a hundred years ago. In fact, most of our rivers thirty years ago were so heavily polluted that many of them were literally sewers.

I was dumb enough or smart enough to stay eight years under two Presidents as Secretary of the Interior for the same reason the Gifford Pinchot stayed about the same length of time under several presidents--I just thought I had the best job in the country. But I and my people in the Department began to talk and think about rivers.

I want to share this with you. It began really in 1961 because there were some things that were troubling. We said "Hey, does it really make sense to just build dams up every river?" That is what was then being proposed. It was called "comprehensive development" of a river.

As we talked through we began saying "To have a balanced policy for this country for rivers, shouldn't we also decide what stretches of river should be left alone?" Out of that discussion came the Wild and Scenic Rivers bill, which my people helped draft. President Johnson presented it in his State of the Union message in 1965 to the Congress. When we were writing the Wild and Scenic Rivers bill there were proposals for three or four wonderful rivers in West Virginia and Virginia. The Shenandoah was one, the Cacapon another. Senator Bob Byrd from Virginia and Senator Jennings Randolph from West Virginia came to my office and said "Would you like to put these rivers in the bill?" I was greedy and said, "of course," and put them all in.

Then we heard from their constituents. Their constituents were just like some of the people who live here. They were suspicious of the Park Service, that they were going to exercise eminent domain and grab their land--they were filled with fear. Other people filled them with more fear, and the rivers were withdrawn. They weren't put in.

I thought as I read what you were trying to do for the last decade here was how fortunate it would have been if we could have had at that time (in the 1960's) in our minds this concept that you've been working on. What is one of the great differences between our system and the system that is being wracked with change today in eastern Europe? It's the right of citizens to speak up and to tell their government and their representatives what they believe and what they want. You have to reconcile different points of view. That's what your organization is all about, and I've just been wondering when you get a little further down the road, whether this shouldn't be written up, whether this doesn't represent a model for the country.

This an important work that you are doing. I commend you for it, and I'm glad to be here. I suspect that what you are working on is a story that at some point the whole nation needs to hear and to understand. I'm going to read one of my favorite quotations. This is prose, but it reads like poetry. It is a quotation from Henry Bestin's The Outermost House, the book that he wrote up on Cape Cod.

"Touch the earth, love the earth, honor the earth. Her plains, her valleys, her hills, her rivers, her seas. Rest your spirit in her solitary places for the gifts of life are the earth's and they are given to all and they are the songs of birds at daybreak, Orion and The Bear, and dawn seen over the ocean from the shore.

Thank you."
Shohola Enjoys Rich History

Editor's Note—This is the third of a series of articles exploring the rich and fascinating history of the Towns and Townships that border the Upper Delaware River. Information for this article is adapted from John S. McKay's Pike County Historic Site and Scenic Area Survey, Volume IV: Shohola Township, edited by George Fluhr, 1979.

Shohola, the last township to be established in Pike County, lost no time in distinguishing itself as one of the most vital and celebrated areas of northeastern Pennsylvania in the 19th century. Bluestone taken from Shohola and used in city sidewalks and buildings attracted investment by some of the most notorious capitalists of the Robber Baron era. The region also became exceptionally popular with excursionists from the New York metropolitan area and it is estimated that near the turn of the century as many as 100,000 persons visited the area annually.

It was not until September 25, 1852 that Shohola was designated as a separate legislative unit of Pike County. Before that time, the area that is now Shohola had belonged in varying proportions to Lackawaxen, Westfall and Milford Townships.

This locale was always familiar to the Indians, who gave Shohola its name. There are several spellings and interpretations of the name, which is understandable since the Indians lacked written language. The most poetic interpretation of what Shohola means is “Where the Geese Rest.” It seems that where Shohola Creek empties into the Delaware was a favorite resting point along the migratory route of ducks and geese.

Early History

Long before the present village of Shohola sprang up, an Indian village was there. The first white man to settle in the region was probably James Wells who, about the time of the American Revolution, operated a saw mill and a small tub grist mill. On the Milford-Owego Turnpike at the Shohola Falls, a hotel and saw mill were built by Tobias Hornbeck in 1815.

But for the most part, Shohola remained a wilderness through the first half of the 19th century. While the opening of the Delaware and Hudson canal in 1828 brought a boom to the New York side of the river, Shohola remained mostly undeveloped.

The Railroad Brings Change

Concerted development of the Shohola village did not begin until 1849, when the New York and Erie railroad was completed through the area. During construction of the railroad a number of German immigrants began clearing farms from the rugged highlands above Shohola. Today, the area still bears the name German Hill and many old sturdy stone walls attest to the labors of those determined immigrants.

The proximity of the railroad attracted the attention of investors, including Chauncy Thomas, who purchased 2,500 acres in Shohola and built a large hotel there. The hotel still stands and is now called Rohman's. Thomas also constructed the first bridge to Barryville, replacing the ferry that had operated there.

Events in 19th century Shohola were usually linked to the railroad. The trains brought mail, supplies and visitors and in turn provided an avenue of export for Shohola bluestone and lumber.

Unfortunately, more than once mistakes and malfunctions in railroad operations resulted in tragedy. On an April night in 1868 in Parkers Glen, several derailed passenger cars plunged 150 feet down an embankment and burst into flames, leaving 40 dead and 75 injured. But by far the worst train disaster in Shohola, and one of the worst in the history of railroading in the United States, occurred during the Civil War. On a hot July afternoon a coal freight slammed into a train carrying 800 Confederate prisoners bound for a prison at Elmira, New York. Fifty-eight Confederates and seventeen Union guards died in that crash, caused by a drunken dispatcher.

The Bluestone King

In 1868, John Fletcher Kilgour of Kingston, New York began extracting bluestone from a 4,000 acre tract he had purchased at Pond Eddy. Pond Eddy bluestone was renowned for its strength, durability, color, and smooth surface. Demand for the construction material soared. Pond Eddy bluestone was used for buildings and sidewalks from Newark, New Jersey to Havana, Cuba. At their peak, Kilgour's quarries and stone mills employed over 500 men.

Tourism Booms

By the 1880's tourism was developing as an industry in Shohola. For a dollar fare, city-dwellers could board the railroad in New York and within four hours be in the wilds of Shohola. Kilgour and others developed facilities for the tourists, including 40 hotels and boarding houses that accommodated some 100,000 visitors annually.

Shohola remained a popular resort destination until after the Second World War.

Through the early part of the century, Shohola's scenery attracted more than just vacationers. A boxing camp was located there. During the early years of the cinema, several movies were filmed in Shohola, featuring such luminaries as Mary Fuller and Lionel Barrymore. Since the 1950's, Shohola has been a popular location for retirement and second homes.
Zane Grey’s Spirit Lives On

Since the purchase of the Zane Grey Museum, the National Park Service has continued former owners Helen and Al Davis’s dedication to preserving and sharing the legacy of Zane Grey. Grey is the Father of the Western Novel who spent much of his life in Lackawaxen. No stones are being left unturned by specialists to accomplish the mission of preserving his legacy.

The first study commissioned by the National Park Service revealed the three phase structural evolution of the house and the 1918 property site plan. Through deeds, historic photographs, Grey’s papers and interviews, this puzzle was put together piece by piece. Sandra Speers, Upper Delaware’s Chief of Planning, says “This report was the first formal documentation of Zane Grey’s Lackawaxen life. Prior knowledge was based on oral tradition.” An upcoming architectural report will include findings about the original color of the house, and recommendations for building load limits and utility upgrades.

Included with the purchase of the structure were nearly three thousand museum objects which need to be catalogued and prioritized for preservation, and stored or exhibited, according to Ranger Ron Terry. Of particular concern is halting the deterioration of the frieze in Zane Grey’s study, oil paintings, and myriad paper items. The papers contain acid from the manufacturing process which is still at work. Without deacidification, the papers will eventually crumble into dust.

Just as impermanent as paper are the lives and memories of people who knew Zane Grey. Cultural Resources Specialist Mary Curtis is recording interviews of Grey’s family and friends who are scattered across the country. It is a job with both budgetary and time restraints.

Not everyone has time to sift through the volumes of information Mary Curtis has collected. Objects and buildings do not speak for themselves. Ultimately, it is the pleasure of the interpretive rangers to translate the site’s significance into words for museum visitors through guided tours and exhibits. This year, the public is invited to visit the Zane Grey Museum and hear his story from 9:00 AM to 4:30 PM on weekends in April, May, September, and October, and daily from Memorial Day through Labor Day.

During a 1929 Lackawaxen visit, Zane Grey wrote to his wife: “I was overcome with the beauty, the sadness, the loneliness, the desertedness of it. Oh Dolly, the rooms are haunted. Those are our spirits here.” Thanks to care and expertise being put into the Zane Grey Home, these spirits will live on.

Sketch of frieze by Lillian Wilhelm that borders Zane Grey’s study. The frieze, adapted from Native American iconography, shows Navajo figures and stylized ferrets. Illustration courtesy of National Park Service.
River Wildlife

Spring Time is Shad Time

Early this spring on the Upper Delaware an ancient annual ritual will take place when hundreds of thousands of shad, driven by instinct, swim upriver to spawn. And, in another modern annual ritual, thousands of fisherman will flock to the riverbanks to catch the fish, prized for its roe.

The Life of Shad

The American Shad, *Alosa Sapidissima*, is an anadromous fish that lives its life in the ocean but ascends coastal rivers to spawn. It is silvery with a green or bluish back and dark spots behind its gills. Most Upper Delaware shad are about 20-26 inches long and weigh from 3-5 pounds (see illustration, center).

While at sea, shad remain offshore in deep waters. They range far seeking the 55 to 65 degree water temperature they prefer. They have been found over 100 miles from shore and at depths of over 400 feet.

Shad are filter feeders equipped with gill rakes that strain ocean water for nutritious plankton. As summer nears, the shad head north seeking cooler waters. When they are four or five years old, shad return to their home rivers to spawn.

In places, the anglers stand practically shoulder to shoulder on the river bank, trying to catch the mission-oriented aquatic vertebrate. In 1986, Miller's group did a shad anglers survey. Says Miller, "We covered the river for 9 weeks, and surveyed the area from Yardley to Hancock, New York. We counted 70,000 angler trips over that nine week period. There were 56,000 shad caught and 27,000 kept. Two thirds of the anglers fished from a boat, and the other third from shore."

For most Upper Delaware shad, their first spawning run is their last. Though in some rivers a shad may make two or even more runs, it is a long and exhausting trip from the Delaware Bay to the Upper Delaware. The shad are equipped to strain food from the ocean, not from a river, so they make the entire trip without eating. Some lose forty percent of their body weight during the journey. Few make it back to the ocean alive.

Change of Address or Ownership?

If your address has changed or you no longer own property in the Upper Delaware River towns and townships, please help us to maintain the accuracy of our records. Fill in your new address or the name and address of the new owner of your property and return this part of the page to the: Upper Delaware Council, P. O. Box 217, Narrowsburg, NY 12764. Thank you for your assistance.

The American shad, *Alosa Sapidissima*. 
Illustration by Elizabeth F. Stewart.

or early May, they're above Port Jervis." The shad are helped on their journey because, unlike many major rivers, the Delaware has no dams on its main stem.

In places, the anglers stand practically shoulder to shoulder on the river bank, trying to catch the mission-oriented aquatic vertebrate. In 1986, Miller's group did a shad anglers survey. Says Miller, "We covered the river for 9 weeks, and surveyed the area from Yardley to Hancock, New York. We counted 70,000 angler trips over that nine week period. There were 56,000 shad caught and 27,000 kept. Two thirds of the anglers fished from a boat, and the other third from shore."

For most Upper Delaware shad, their first spawning run is their last. Though in some rivers a shad may make two or even more runs, it is a long and exhausting trip from the Delaware Bay to the Upper Delaware. The shad are equipped to strain food from the ocean, not from a river, so they make the entire trip without eating. Some lose forty percent of their body weight during the journey. Few make it back to the ocean alive.

Shad Numbers Up

A 1979 survey estimated that 111,000 shad passed by Lambertville, New Jersey, during the spawning run. In 1989 the number was 831,000. The increase is a direct result of efforts to clean up the Delaware River. Says Miller "The numbers are definitely increasing because the pollution situation has improved." So, in one case at least, man's efforts to improve his environment have worked, to the delight of both fish and fisherman.

Fishermen's Delight

Joe Miller of the U.S. Fish and Wildlife Service and Fisheries Coordinator for the Delaware River Basin Fisheries Cooperative, describes what happens after the shad find the Delaware Bay.

"It's a progressive movement. The shad come into the bay in middle to late February, then progress up river. Yardley [Pennsylvania] is the early run hot spot starting about the last week of March. The major part of the run gets to the Delaware Water Gap about mid April. By late April..."
and stood on this crude raft so he could steer it. In 1764 he and a “very tall Dutchman” steered this first raft to Philadelphia. It consisted of six straight seventy foot white pines perfect for use as ship masts, and fetched the fine sum of sixty dollars.

Soon, others followed Skinner’s example. But other raftsmen recognized his contribution to the industry. They bestowed on him the title “Lord High Admiral of the Delaware.” By tradition, a first-time raftsman had to present the Admiral with a bottle of wine. Promotion to pilot cost another bottle.

The Boom

The rafting business boomed. The rafts grew larger, until some of them measured 60 feet by 200 feet. By 1830, at least a thousand rafts were coming down the river every year. Other lumber markets developed along the river, the largest of which was Easton, Pennsylvania.

Timber would be cut during the winter and skidded to the river. The timber—either logs or sawed lumber—would then be bundled into rafts. When the ice went out in spring and the river was swollen with snowmelt, the rafts would be launched. Rafts also would be launched on “freshets” that followed heavy summer storms.

Not all the timber was taken from the Delaware valley. Some was sledded over the narrow ridge separating the Delaware and Susquehanna basins, to be sold in the premiere markets in Easton and Philadelphia.

The raftsmen were a mixture of lumbermen, farmers, handymen, adventurers, and full-time rivermen. They were a flamboyant group—especially the full-time rivermen—whose incredible stories and exploits will be described in a future article in The Upper Delaware. These stories include tall tales, brawls, and one apparently true account of a fight between a raft and a furiously trumpeting circus elephant in the river near Port Jervis, New York (the elephant won).

The End of Rafting

The rafting era came to a close as the pine favored by rafters was logged out. Along the Upper Delaware, as in other parts of the young nation, sustained yield forestry practices were nonexistent. Total exploitation for fast profit was the rule. Virgin stands were annihilated, with the bare earth left to recover as best it could. To make matters worse, silt from logging activities flowed into the river, making it broader, shallower, and less navigable. By the end of the 1800’s, the industry was almost gone. In 1922, the last raft of the era floated down the river from Hancock to Callicoon.

Information for this article was provided by Mary Curtis, Historian, Upper Delaware Scenic and Recreational River.