

The Upper Delaware

The quarterly newsletter about the environment and people of the Upper Delaware River

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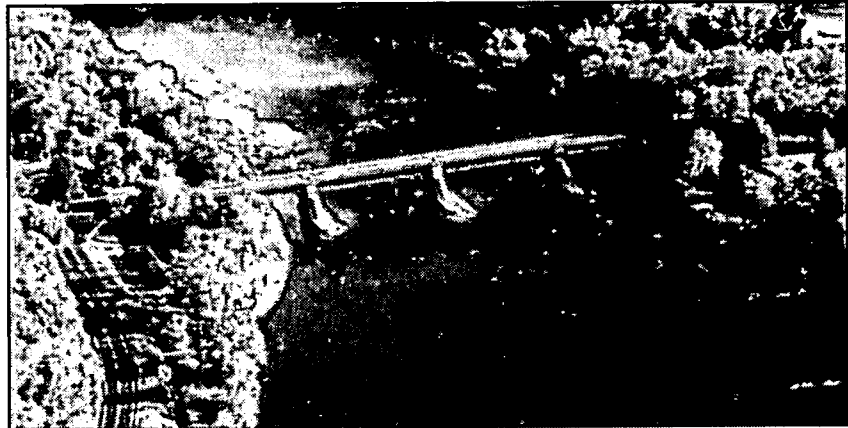
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**Do we have your ZIP+4?
Please check your address
label. If it does not include
your ZIP+4 zipcode, please
send it to us using the
form on page 7. Thanks.**



The Delaware Aqueduct as seen from the air. Photo courtesy of Frank Bedell.

Restoration of Roebling's Aqueduct Completed

Those of you who summer on the Upper Delaware may be in for a shock when you next drive down NY Route 97 and cross the river to Lackawaxen. The Roebling Bridge, aka the Delaware Aqueduct, has undergone extensive work during the past several months, resulting in a trip back in time to the days of the canal era...

In 1847 the directors of the Delaware and Hudson Canal hired John Roebling to build two aqueducts, one to carry their canal over the Lackawaxen River, and a longer span to carry the canal over the Upper Delaware. The cost for both of these structures was in the vicinity of \$75,000. The Delaware Aqueduct was completed and opened in 1849, and remained in service until 1898, when the canal closed.

The Delaware Aqueduct is the oldest existing wire cable suspension bridge in the United States which retains its principal elements. It has four spans suspended on 8½" wire cables, spun by hand at the site. The cables you see today are the same ones that were anchored in place in the late 1840s. It has been said that the Delaware Aqueduct is to engineering what the "Spirit of St. Louis" is to

aviation. Students and professionals travel from all over the world to study the Aqueduct and its engineering.

The National Park Service acquired the Aqueduct, which was then being used as a bridge, and which had fallen into disrepair, in 1980. The initial phases of restoration to the historic structure involved reconstruction of the wooden superstructure and ice breakers, cleaning and rewinding the cables, and replacing the stone missing from piers with original stones recovered from the river bottom. The final phase of the restoration, just completed, restored the aqueduct to its original appearance. All told, since 1980 the NPS has spent more than \$6 million to repair and restore the Delaware Aqueduct in three separate phases. The sides of the bridge have been enclosed in timber, as they were originally when the span carried water. The reconstructed tow paths, where the canal mules once walked to pull the canal cars across the span, now provide for a breathtaking view of the Upper Delaware from a vantage point high above the water's surface.

Many thanks to Dot Moon, Sandra Schultz, and the National Park Service for providing the background information for this article.

Most land along the Upper Delaware River is privately owned. Please be considerate and don't litter or trespass. Thanks!

---From the Executive Director ---

The month of January was named for Janus, the Roman god of gates and doorways, who could look both forward and backward at the same time. A fitting tribute, because January is traditionally a time of both looking ahead and reflecting on the past year. These long winter nights provide the perfect opportunity to assess where you've been, what you've accomplished...and where you'd like to be headed.

So, where has the UDC been? As we embark on our ninth year, we can look back at our original five-year plan and check off many accomplishments. We are an active and viable force in the river valley. Both the State of New York and the Commonwealth of Pennsylvania work closely with us on matters affecting the Upper Delaware Scenic and Recreational River. Local citizens know they can bring their concerns to us and that we will see that appropriate action is taken by whichever agency can best address the problem at hand.

River management organizations from around the country have called to learn how the Council functions and to request copies of our River Management Plan to study for adaptation to their own regions. We are the premiere example of federal, state, and local governments working in partnership to protect the rights of private landowners while ensuring the ongoing conservation and public enjoyment of one of this country's finest natural resources.

But our role in the river valley is evolving to encompass many more issues than simply ensuring local land use control, preserving water quality, and providing for the ongoing conservation of the river. Our region, which stretches beyond the boundaries of the River corridor itself, is faced with many new pressures, not the least of which is the desire to cash in on increased tourism dollars as the Upper Delaware has become a destination for hundreds of thousands of visitors each year. Scenic byways, bicycle routes, and other recreational issues and regional concerns now make their way to the UDC's table for discussion by members. This is as it should be, since we are the only

venue for all interested parties, from both NY and PA, to sit down and talk openly about matters concerning our region.

The UDC's successful Ecotourism conference in December, 1994 gave a boost to the formation of a regional tourism committee made up of local business people and representatives from several area Chambers of Commerce. This group, spearheaded by D.J. Jahn, owner of the Roebing Inn on the Delaware in Lackawaxen, PA is actively working on producing an Upper Delaware River magazine featuring attractions in the region in both New York and Pennsylvania. The UDC, recognizing the value of developing a sensible plan for regional tourism, helped this group get started. We are also supplying meeting space for a number of local and regional individuals interested in promoting bicycling throughout the river valley. And we maintain a presence at the ongoing scenic byways meetings to ensure that the interests and concerns of the towns and townships in the Upper Delaware Scenic and Recreational River valley are represented.

At the same time, we are present at fisheries meetings and forums on local landowner rights. We are continuing to work on defining issues relating to river recreators and private property. We are actively involved in water quality matters, river flow issues, and the Delaware River Sojourn. We conducted a series of very successful meetings with our Congressmen and with the National Park Service to ensure the ongoing autonomy of the Upper Delaware as agencies and budgets downsize.

As the song says, "The times they are a changin'." The Upper Delaware Council will continue to evolve as we work together to meet those changes, as evidenced by the scope of work in our current five-year plan. However, we will not lose sight of the reasons why we are here, and we will continue to be ever-mindful of our primary responsibility: The coordinated implementation of the Upper Delaware Scenic and Recreational River Management Plan.

Happy New Year! *Bill*

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The Upper Delaware is the free quarterly publication of the Upper Delaware Council, a 501(c)(3) non-profit organization comprised of member governments from New York and Pennsylvania directly affected by the River Management Plan for the Upper Delaware Scenic and Recreational River.

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WINTER ON THE UPPER DELAWARE MEANS BALD EAGLES

Eagles soar again in our region

by Robert Dugan

It's that time of year again. The eagles have returned to the Upper Delaware. Each winter, beginning in early December, the Delaware River Watershed plays host to one of the largest gatherings of American Bald Eagles in the Northeast. As lakes and rivers freeze in Canada and the northern Adirondacks, the birds leave their nests and head south to our area to roost, perch, and feed until the middle of March, when they migrate north again. More and more have been coming each year since the mid-1970's, and that's a positive sign. Before then, during a good part of this century, they hardly came at all. In 1994/95, 119 eagles were counted in one day in the watershed area—89 of them along the Delaware River between Hancock and Port Jervis, NY.

A decade ago, the American Bald Eagle was a rare endangered species in the lower 48 states. If you wanted to see eagles in any number, you had to take a charter tour to Alaska. The good news is they've recently been removed from the endangered species list and upgraded to a "threatened" species. That doesn't mean they're out of the woods yet, but it is an indication that eagles and humans are learning to live with each other again.

WHY DO EAGLES PREFER THE UPPER DELAWARE?

The watershed region seems to have the right combination of clean open running water, plentiful fish, and large expanses of thorough tree cover for the birds. Eagles from as far as Labrador (almost 900 miles away!) have been identified wintering along the Delaware.

There's even a small but promising population of native bald eagles in our area. Thanks to the efforts of the New York State Department of Environmental Conservation (DEC) program, fledgling eagles have been brought from Alaska and nurtured in "hacking" towers, three-sided enclosures built in treetops. So far, eight pairs have thrived as a result of the program. And 1995's 31 offspring

from 25 pairs statewide is a highly encouraging sign for the restoration of this bird to its natural habitat.

When these young birds mature, at about five years old, it is hoped they'll nest within a 100 mile radius of where they fledged. If all goes well, the population of native eagles in the Upper Delaware River valley should increase considerably over the next few years.

WHEN AND WHERE ARE YOUR BEST CHANCES FOR SEEING AN EAGLE?

"Eagles can be seen here all year," according to Lori McKean, Director of Resource Conservation for the New York Audubon Society. "But with the sizable winter migration, your chances of sighting one improve dramatically from December to March."

The best places to spot them are along the Delaware corridor close to where major tributaries like the Lackawaxen River, Callicoon Creek, and Halfway Brook meet the river. This constant flow of water keeps at least one river channel free of ice, providing ideal opportunities for eagles to fish—fish being their main diet. The best viewing spots usually have lots of open water and tall trees lining the shore.

There are public parking and river access spots in Callicoon, NY, just south of the Roebling Bridge on Route 97 in Minisink Ford, NY, and in Lackawaxen, PA, all popular perching and feeding sites for eagles. The Mongaup Falls Reservoir near Pond Eddy, NY, a common roosting spot, has two specially-designed eagle-viewing areas and a year-round information booth.

Bald Eagles can live in the wild for as long as 30 years, and they mate for life, returning to the same nest year after year. They'll spend a good part of the day perching in treetops, though they can also roam as far as 60 miles or more from their roosting sites in search of food. Eagles are most active between sun-up and 11 a.m. If you're in luck, you'll catch one swooping down to open water to nab a fish.

At around 4:00 p.m. or so, when the sun starts to set, they fly off to roosting areas like the Rio, Mongaup Falls, and Rondout Reservoirs in Sullivan County, NY.

HOW WILL YOU KNOW IF YOU'VE SEEN AN EAGLE?

"You'll know it," says McKean. "If you have any doubt about it, you probably didn't see one. The sheer size of the eagle is its most obvious characteristic. With a seven to eight-foot wing span, it's one of the largest birds in the Northeast. As it flies towards you, its wings are held straight out, unlike the more common turkey vulture which soars with its wings in a V-shape. As an eagle passes overhead, you'll notice that the feathers at the wing tips are widely separated, and its relatively short tail usually is fanned open. The striking white head and tail are obvious, though it isn't until the eagle reaches maturity that the white plumage develops. Younger birds are a chocolate brown, and the head, tail, and underwings are mottled with white."

In addition to the New York State DEC program, the PA State Game Commission ran a similar hacking program to reintroduce the Bald Eagle to Northeast PA. They brought fledglings from Saskatchewan and set up nest sites near the Susquehanna and Delaware Rivers. That program has been discontinued due to its success. A lot of credit also goes to National Park Service environmental awareness programs and the NYS Audubon's educational programs. (Ed. Note: Technical assistance grants from the Upper Delaware Council have funded several educational programs developed by the NYS Audubon Society, in addition to eagle awareness and educational brochures by the these and other organizations in the corridor.) As a result, the river and its environs are cleaner than they have been in decades, making this region especially attractive to the Bald Eagle as a winter--and increasingly, as a year-round home.

—Eagles, continued on p. 6—

Railroading Along the Upper Delaware

Accidents and Excitement from the Start

The story of the Erie Railroad is a story of millions of passengers, millions of tons of freight, and millions of miles of travel for more than 100 years. The track of the Delaware Division of the Erie was laid during the summer of 1848. That year the first engine, the "Eleazer Lord", was brought to Narrowsburg. Next, the engine "Orange" was taken on a boat up the Hudson River through the Erie Canal to Binghamton and from there was transferred to the Erie track. Meanwhile another engine, the "Piermont", was taken by the Delaware and Hudson Canal from Rondout to Lackawaxen. These first locomotives were used to carry rails, ties, and other materials as the track along the Upper Delaware was laid.

As work progressed, some of the famous hunters of the region mistook the whistle of the locomotive for the cry of a panther. Years later, more than one old timer told the story of how he had spent several days hunting a locomotive!

Work on the Pike County section of the track proved to be a fantastic feat of engineering, costing as much as \$100,000 a mile. Between Parker's Glen and Shohola, where the rocks rose almost perpendicularly from the river, it was necessary to suspend the laborers in baskets held by ropes. They would drill holes by hand, put in powder, light the fuse, and signal to be pulled up. In the resulting explosions, which often blew rock across the Delaware River, several lives were lost.

Two days after Christmas, on December 27th, 1848, the first passenger trains travelled through a snowstorm from Port Jervis to Binghamton, and the line was opened for business. One of the famous early locomotives on the regular run was called "Oneida" (the engineer pronounced it "one idea"). Passenger fare from Narrowsburg to New York City was \$2.20.

It wasn't long before the first accident took place. Soon after the line was opened, two passenger trains collided just a short distance east of the



Narrowsburg depot.

Superintendent Cidell ordered his clerk, Charles Sackett, to saddle a horse, ride as fast as he could to Port Jervis, and send two engines to Narrowsburg. Sackett rode by way of the old Lumberland Turnpike, through Forestburgh. The engines were quickly dispatched, and the passengers resumed their journey, delayed by "only 24 hours."

Not long after, a freight train was disabled a mile east of Narrowsburg. The conductor returned to the village, obtained several teams of horses, and hauled the train in sections until he had the entire train in the yard, thus allowing other trains to pass.

Many of the early locomotives pulled cattle cars, and a fascinating story is told of the disappearance of one of those cars. A train run by Coe Little had left Susquehanna one night with a long line of cars. Without making a stop, the train arrived in Port Jervis with one car missing from the middle of the train.

Investigation seemed futile and things looked bad for Little until a telegraph message arrived from Chauncey Thomas of Shohola. The lost car was in a field not far from his home, and the cattle had gotten out and crossed the Delaware on the ice.

As near as could be determined, a coupling pin had broken, the car had jumped the track, run down a ten-foot embankment, and broken through a fence. Meanwhile, on a downhill grade, the rest of the train had recoupled itself.

The car was returned, the cattle were recovered near Barryville, and the story became a legend in Erie

This station at Lackawaxen was built in 1902, to replace the original 1864 building. As the article describes, it was destroyed by a train crash in 1950. (Photo by J. E. Bailey, *The Next Station Will Be...A Railroadian Book* - published 1982.)

Railroad history.

Nearly 100 years later, another train wreck sounded what would prove to be the death knell for passenger service along the Upper Delaware. In September of 1950, a train wreck in the village of Lackawaxen resulted in the loss of their beautiful passenger station.

On September 6th of that year, a 120-car freight, bound from Chicago to Boston, was speeding past the depot. The diesel locomotive and several cars behind it passed safely, but suddenly the flange of a wheel broke and 25 cars jumped the track.

In all, about 400 feet of track was torn up, one freight car was crushed, and several more were broken open. Miraculously, no one was killed, and the one person to receive any injuries at all suffered only minor cuts and bruises.

But the station was a total loss. At least 6 of the derailed cars hit the building, crushing one wall and moving the entire structure off its foundation. The contents of one of the train's tank cars, which landed upside down half in and half out of the building, leaked its contents into the basement. The little stone station was damaged beyond repair.

Perhaps that train wreck signaled the beginning of the end. Such attractive passenger stations would not be needed much longer in the Upper Delaware River valley. Within a few years the Erie Railroad would no longer carry passengers along the Upper Delaware. The last passenger run took place on November 28, 1966.

Excerpted from an article written by George Fluhr, UDC Representative from Shohola Twp., PA and noted local historian.

Upper Delaware Council Annual Report

Revenue and Expenses -- Fiscal Year 1994

REVENUES

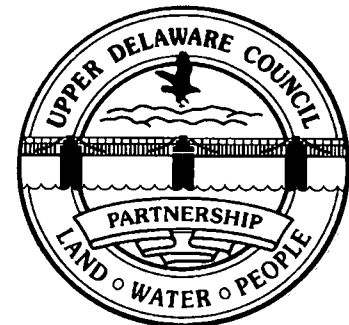
NPS Cooperative Agreement.....	\$300,000.00
Contributions.....	10.00
Interest Income.....	5,245.00
Other Income.....	3,093.00
Total Revenues.....	\$308,348.00

EXPENDITURES

	<i>Personnel</i>	<i>Special Projects/ Program Services</i>	<i>Operations</i>	<i>Interest Payable</i>	<i>Invest. in Plant</i>	<i>Total</i>
Substantial Conformance	\$ 5,340.00	\$ 610.00	\$ 1,928.00	--0--	--0--	\$ 7,878.00
Project Review	21,489.00	2,489.00	7,885.00	--0--	--0--	31,863.00
Tech. Ass't. Grants (Net)	1,967.00	20,743.00	712.00	--0--	--0--	23,422.00
Water Use/Resource Mgmt.	43,097.00	4,434.00	13,716.00	--0--	--0--	61,247.00
Public Affairs/Education	52,727.00	42,449.00	22,595.00	--0--	--0--	117,771.00
Fund Raising	203.00	24.00	74.00	--0--	--0--	301.00
Friends of the Upper Delaware	20.00	2.00	6.00	--0--	--0--	28.00
Interest Due NPS	--0--	--0--	--0--	\$4,584.00	--0--	4,584.00
Toxic Identification	4,653.00	610.00	1,721.00	--0--	--0--	6,984.00
Administration	21,999.00	2,728.00	8,752.00	--0--	--0--	33,479.00
Total Expenses	\$151,495.00	\$74,089.00	\$57,389.00	\$4,584.00	--0--	\$287,557.00
Capital Expenditures	--0--	--0--	--0--	--0--	\$9,672.00	9,672.00
Total Expenditures	\$151,495.00	\$74,089.00	\$57,389.00	\$4,584.00	\$9,672.00	\$297,229.00

Statement of Fund Balances

	Year Ending 9/30/94	Year Ending 9/30/93
REVENUES		
NPS Cooperative Agreement	\$300,000.00	\$300,000.00
Restricted Grants	--0--	13,595.00
Contributions	10.00	165.00
Interest Income	5,245.00	1,853.00
Other Income	3,093.00	3,476.00
Rent Forgiveness (GTE prior year)	--0--	11,293.00
Total Revenues	\$308,348.00	\$330,382.00
EXPENSES		
Personnel	\$151,495.00	\$138,234.00
Special Projects & Program Services	74,089.00	93,454.00
Operations	57,389.00	53,079.00
Interest Refund--NPS	4,584.00	1,373.00
Total Expenses	\$287,557.00	\$286,140.00
Revenues in Excess of Expenses	\$20,791.00	\$44,242.00
TRANSFER		
Capital Expenditures	(\$ 9,672.00)	(\$ 63,063.00)
Capital Expenditures Capitalized	9,672.00	63,063.00
Net Change in Fund Equity	20,791.00	44,242.00
Fund Equity--Beginning	125,351.00	81,109.00
Fund Equity--Ending	\$146,142.00	\$125,351.00



A partnership for
land, water, and people
working together to conserve
the Upper Delaware Scenic
and Recreational River
in New York and Pennsylvania.

The Upper Delaware Council is
classified as a tax-exempt organization
under Section 501(c)(3) of the IRS Code,
and is incorporated in the
Commonwealth of Pennsylvania as a
non-profit organization.

--Eagles, continued from page 3 --

Most threats to the eagle are man-made, including water pollution and loss of habitat. The banning of poisonous chemical pesticides like DDT in 1972 positively affected the ability of native birds to reproduce again. However, as strange as it sounds, gunshot is still a major cause of death for eagles, even though it is a crime to shoot, harass, or otherwise scare an eagle. The punishment includes a sizable fine and imprisonment.

WHAT'S THE BEST WAY TO WATCH EAGLES?

Remain in your car, or stay close to your vehicle so as not to "spook" or disturb the birds.

Use binoculars rather than trying to get closer to them. Respect their need for privacy and distance.

Remain quiet. Don't play loud music, or raise your voice, or slam car doors.

Don't bring your pets along, since barking or any sudden loud noise can irritate the birds and cause them to fly off.

Don't bring small children. The often long, cold patient hours required to catch sight of eagles can be trying for kids.

Dress warmly and comfortably. Bring along snacks and a thermos with a hot beverage.

Don't forget to bring your camera. A zoom lens will help you get a close-up shot.

Most importantly, be prepared to wait. Plan on making a day of it. Chart out your route and spend some time at each stop. Maps and guides are available from the New York Audubon Society, the National Park Service, and the Upper Delaware Council showing good eagle-watching spots.

WHAT TO DO WHEN YOU SEE AN EAGLE

In order to facilitate the monitoring of eagles in the Upper Delaware River valley, you are urged to report any sightings to the NYS Audubon Society, P.O. Box 111, Eldred, NY 12732. Their phone number is (914)

Winter, 1995/1996

557-8025. Record the time, place, and as much information about the bird as possible. If the bird is wearing an identification leg band it's good to note that, along with approximate size, coloring, where and when you made the sighting, how many birds you observed, and what the birds were doing (flying, perched, feeding, etc.). You can use a form like the one shown here, or you can jot the information down on a piece of paper.

Free Bald Eagle viewing maps are available at the UDC office, or from the NPS or NYAS.

Dugan writes the "Our County" column for the weekend edition of The Wayne Independent. A resident of Honesdale,



PA, he has also published several books. This article first appeared in The Wayne Independent this past November, and reappears here with permission of the editor, Paul Quigley.

Come watch our majestic eagles with the Friends of the Upper Delaware Sunday, Jan. 28th!

2nd Annual Eagle Watch and Walk

Last year's "Watch" sold out fast....so you won't want to miss the 1996 Friends' Eagle Watch!! Includes special slide show introduction, guided tour, a warm and comfortable tour bus, and lunch afterwards!

Space is limited!! Call the UDC office for complete info!!

Eagle Sighting Report

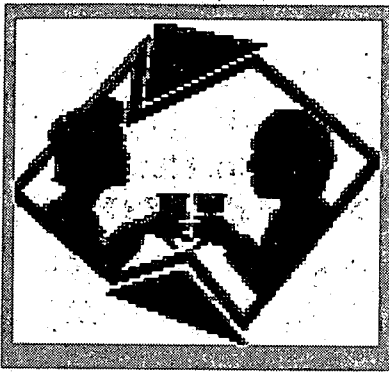
Date of sighting: ___/___/___ Time of sighting: _____ AM/PM?
 Exact Location: (please be specific. Include route numbers, mile marks, landmarks, etc.) _____

 Behavior Observed: (flying, perched, feeding, etc.) _____

 Length of Time Observed: _____
 Age of bird (circle one): Immature Adult Unknown Male Female
 Number Sighted: _____
 Other Remarks: _____

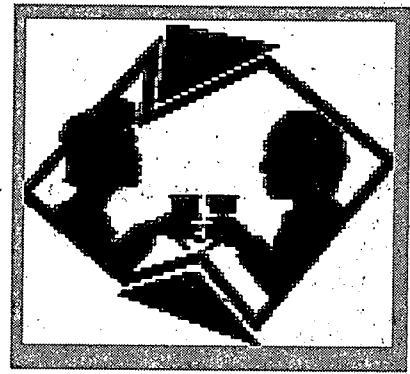
 Your Name: _____
 Address: _____
 Address: _____
 Phone: _____
 Date of Report: _____

Report sightings to:
 New York Audubon Society
 P.O. Box 111,
 Eldred, NY 12732
 (914) 557-8025



UDC 9th Annual AWARDS BANQUET

Saturday Evening, March 30, 1996
Eldred Preserve, Route 55, Eldred, NY



Reception

Cash Bar / Hot and Cold Hors d'oeuvres
4:30 p.m. - 5:30 p.m.

Dinner

5:30 p.m.

Featuring your choice of:

Sliced Roast Sirloin of Beef, Chicken Marsala, or Broiled Filet of Sole
with garden fresh tossed salad
potato, vegetable,
fresh baked rolls, and
an elegant Chef's Choice for dessert

Make your reservations now!! \$20.00 per person
(Please print clearly and note any dietary restrictions)

Entree Choice

(circle one)

Name _____

Beef

Chicken

Fish

Address _____

Daytime Phone _____

Guest _____

Beef

Chicken

Fish

Guest _____

Beef

Chicken

Fish

Guest _____

Beef

Chicken

Fish

Guest _____

Beef

Chicken

Fish

Guest _____

Beef

Chicken

Fish

Feel free to use additional paper, if necessary!

To avoid delays at the banquet, mail your reservation with your check for \$20.00 per person to:
Upper Delaware Council, P.O. Box 192, Narrowsburg, NY 12764-0192!

Questions? Give us a call @ (914) 252-3022

**Make your reservations today!! Deadline is
Friday, March 22nd, 1996! (no refunds after 3/22/96)**

Do We Have Your Correct Address?

If your address has changed, or you no longer own land in the Upper Delaware River area, please help us to update our records. Fill in your new address, or the name and address of the new owner of your property, and return this notice to The Upper Delaware Council, P.O. Box 192, Narrowsburg, NY 12764-0192

Narrowsburg, NY 12764-0192

New Address:

Old Address:

Name _____

Name _____

Address _____

Address _____

Address _____

Address _____

City/State _____

City/State/ZIP _____

ZIP+4 _____

Check here to be removed from our mailing list

Check here for info on Friends

Check here for info on Sojourn

Environmentally Sound Snow Management and Disposal

From the Pennsylvania Department of Environmental Protection

Like it or not, Winter is once again upon us...and with Winter comes the task of removing snow and ice from roads and walkways. According to a bulletin available from the PA DEP, the most environmentally sound manner to deal with accumulated snow is to allow it to slowly melt where it falls. This way, the groundwater is replenished and a slow steady flow of snow melt will drain into streams and other surface waters. This is Nature's way, and while it is cost-effective, it's not very practical. Everyone wants safe traveling conditions, and none of us has the patience, or the time, to wait for Mother Nature!

So, what's needed is an environmentally acceptable way to deal with the snow and still satisfy our transportation needs. The standard approach is to apply road deicing chemicals, followed by plowing. To be considered environmentally responsible, a snow management plan would include:

- ⇒controlling the amount of deicing chemicals applied,
- ⇒avoiding application of deicers close to streams and other surface waters and ground water drinking water systems, and
- ⇒plowing or removing and transporting the snow to areas where it can be allowed to melt slowly.

Now you may be asking, "Doesn't all the snow just end up in the water anyway, so why not just shovel it into the creek, the lake, or dump it in the river?" Depending on atmospheric conditions, some snow melts and some evaporates into the air. However, a slow snow melt serves several purposes that are much preferable to dumping directly into a waterway.

First, dumping the snow carries with it the shock loading of deicing chemicals and anti-skid agents. The chemicals and solid debris plowed or shoveled along with the snow may cause toxic and other adverse impacts in the water.

Allowing a natural melt provides a slow release of the water, dilutes the chemicals, and provides filtration of the solids through the soil.

Are deicing chemicals and anti-skid agents toxic?

Overwhelmingly, the most-used deicing chemical is sodium chloride (salt). Sodium is associated with he risk of hypertension in humans. In streams, elevated concentrations of chloride are toxic to fish and aquatic life. Chloride may also be damaging to plants.

Calcium chloride is used to a lesser degree as a pre-wetting agent and at temperatures below 20° F. Because of its higher cost, calcium magnesium

acetate is used very little. The limited use of these two chemicals makes them of much less concern environmentally than the more common road salt.

Anti caking-agents such as sodium and ferric ferro-cyanide are added in small quantities to road salt. These chemicals usually degrade in sunlight and biodegrade rapidly.

Documented cases of contamination of resources from deicing compounds are usually related to improper storage.

So, you can see that pushing, plowing, or shoveling snow off a roadway or bridge into the water is not an environmentally-sound practice. The snow should be removed to a location at least 100 feet from the water and allowed to melt. Even though chloride is very mobile through soils and will eventually be carried to the groundwater, a significant portion of it will either flow overland or evaporate due the frozen ground conditions. Following thaws and rain, the concentration of the chemicals washed into the ground will be diluted, so the impact to ground, stream and river waters will be lessened.

For more information about snow removal practices in your community contact your Highway Dept., or the PA Dept. of Environmental Protection, or the NY Dept. of Environmental Conservation.

Answer to last issue's question: October is the longest month because of the hour added when we turn the clocks back.



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The UDC meets on the first Thursday of every month at 7:30 p.m. in the Tusten Town Hall, Narrowsburg, NY. Committees meet on the third and fourth Tuesdays of every month at the UDC Office, 211 Bridge Street, across from the Town Hall. Call (914) 252-3022 for details.

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