

Greenville Local History Group Newsletter

June 2012, Issue 218

Dr. Titus—Trop. Storm Irene

A pleasant evening awaited the June meeting, with 30-35 attending Professor Titus's lecture about Hurricane Irene and about the contributors to such a high level of devastation. In attendance, from our regulars, were: Kathie Williams (yeay, twice this year!), Christine Mickelsen, Dot Blenis, Stephanie Ingalls, Orrin and Shirley Stevens, Bob and Marie Shaw, and Don & Debra Teator. Others who are not regulars but I caught names were: Tim & Cathy Broder, Robert & Johanne Titus, Tom and Joan Sattlerlee, Dennis and Tom Murphy, the Ryndaks (Barbara nee Wing was a neighbor of mine many moons ago), Phil Hoyt (?), George Wood (?), and several more whose names were more than my brain could hold on to. If I forgot you, remind me and I'll correct it for the next newsletter.

To be honest, I am pleased to see a larger than usual turnout, and, at the same time, I am trying to adjust so that all are served as well as I can muster.

I introduced Senior Full Professor Robert Titus, of Hartwick College, who contributes to Kaatskill Life, the Daily Mail, the Woodstock Times, and more. I'm not sure if I embarrassed him or me more, with the public unveiling of my collection of his 170 weekly articles in the Daily Mail, spanning over three years now. (There were a few chuckles from the audience.)

Robert started with the local damage along the Catskill Creek in Freehold, a perspective from which he and Johanne safely sat above (I am happy because if the water ever reaches his house, I will have abandoned home a long time before!). Water blocked access to the road for almost a mile, from the Matthews' residence until past Story's Nursery.

Robert then focused mostly on the Catskills towns and some Schoharie Valley – Windham, Prattville, Middleburgh, Schoharie, Gilboa, Breakabeen, Blenheim, Margaretville, Palenville, Delhi, Laurens, and more.

The first few slides graphically showed the bowls these mountaintop towns sit in, these bowls acting as natural water collectors and distributors.

The next slides showed the early history of town settlements. Many of them set on large alluvial fans from the big streams entering these glacial valleys/bowls, illustrated especially by Windham, Prattville, Middleburgh and Schoharie.

And then, the water hose theory. Robert illustrated by having us picture what we do with a garden hose when we want to pressure-wash the house siding or our cars. We crimp or obstruct the flow of water to make it move faster and with more pressure.

According to Robert, the same effect happens when huge waters come cascading

down the stream. If there were no alluvial fans, the stream would stretch its full width, with the water creating less damage.

However, when part of the stream is filled with the alluvial fan (with the town sitting on it), the water is constricted and moves more quickly. When a foot of water is dumped within a few hours in these collecting bowls, the water not only backed up but it also picked up speed as it rushed around bridges, structures, and people's lives, leading to the level of devastation that we saw.

Some of the 'miscellaneous' slides showed the level of damage meted out on particular houses in the wrong place at the wrong time.

Another section of Robert's lecture focused on what could happen if the full brunt of the storm had hit elsewhere, with particular attention paid to Cooperstown.

Robert fielded questions from the floor, ranging from asking about places he had not mentioned, comparisons to past storms, etc.

One questioner involved the cleanup of streams whose courses seem to have irretrievably changed. Robert noted that a first impulse is to make a straight channel, raise high steep walls, and clean out the vegetation. When asked how fast water would move down this channel, we were forced to recognize that this first impulse needs to be thought through. He gave an example or two of better solutions, noting they take time and money, something that was not in great supply in September and October of last year.

We thanked Robert for his sharing of his knowledge, and we proceeded to mingle and talk with others in the audience.

Stephanie and Christine, again, were the refreshments committee and I cannot stress how appreciative I am of that effort. Thank you both so much. And others in the audience were appreciative. (This refreshments effort is part of the "adapting" I men-

tioned before; we rarely have refreshments but with large groups, it is a nice addition.)

Other notes:

One of the benefits of being a friend and neighbor of the Tituses is the acquisition of a t-shirt that Robert calls his Rock Tour shirt, akin to the music rock star, with a listing of concert dates and places on the back. In this case, the geologist, by occupation, has a lecture tour, with the places and dates on the back. Wearing the shirt creates a few conversations wherever I go.

Robert and I agreed that a free will donation would be taken to support the restoration process by the Zadock Pratt Museum in Prattsville, our way of helping another local historical institution, and one that is in dire need.

Although I know many of you have already given or helped, it was pleasing to see a total of \$200 was collected, and has been sent on to Carolyn Bennett, director of the ZPM. On behalf of the Greenville Local History Group, I contributed to that amount, and a thank you goes to other contributors this evening: the Tituses, Broders, Murphys, Satterlees, Stevens, Stephanie, and Kathie.

The next meeting—July 9, 7:30, Library—will feature my documenting efforts of the boarding houses in the Greenville area.

The June 2nd Greene County Home Tour in Oak Hill was a wonderful chance to explore eleven examples of architecture and local history. Congratulations, Oak Hill and GCHS.

Also included in this newsletter are two articles by Robert Titus related to the flood, as well as a listing of the resorts I have found (can you think of others?) and copies of the ordinary, but now historic, papers from Sunny Hill's 1994 season (is it possible that 1994 is almost twenty years ago?)

Take care,



A-Bar-A Dude Ranch
Alberta Lodge
"Augustein"??
Balsam Shade
Basic Villa Farm
Baumann's Brookside / Brookside
Bear's Farm House
Bears Farm
Belvedere Park
Better Days / Soltys Inn
Beverly Farm,
Birch Hollow Farm
Blue Bird Farm
Breeze Lawn
Breezy Knoll Acres
Brookside Dairy Farm,
Burrless Chestnut Cottage
Butterfly Farm
Butts' Shady Lawn
Carelas Farm, Carelas Lake Hotel
Cherry Hill Farm
Cherry Hill
Colonial Manor
Creekside Lodge
Crystal Falls
Diana Farm
Edmonds Farm
Elliot Farm House
Edgewood
Edmar, The
Elysian Manor Farm
Erlowest
Evergreen Croft House
Far View Farm
Freehold House
Freehold Mills Farm
Frixel's Blue Ribbon Casino
Green Lawn Farm
Green Meadow Farm
Greenville Arms
Happy Days Ranch
Highland View
High Land Farm
Hillside
House on Hill
Holiday Lodge
(Old) Homestead B&B
Horton Farm House, Horton House
Hulick's Dairy Farm
Hunt Homestead
Hunt Dairy Farm
Ingalside Farm

Jesse's Elm Shade, Elm Shade Farm
Keohane House
Kilcar
Limelight
Locust Hill Farm (Brandy Hill)
Locust Manor Farm,
Locust Shade Farm
Maple Shade Farm
Maplehurst Farm
Maplewood Farm
McNaughton Farms
Meadow Dale Farm
Mountain Breeze Farm
Mountain Breeze Hotel
Mountain View
"O'Hara" Corners?
Overlook Lodge
Park House
Pine Bush Farm
Pine Crest Farm
Pine Hill Cottage
Willow Rest Farm / Pine Lake Manor
Pine Springs House & Cottages,
Pleasant Valley Farm,
Pleasant View Lodge
Pop's Wishing Well
Raffo Villa,
Rainbow Lodge (& Country Club)
Ravine Farm
Red Maple Farm,
Roadside Cottage
Rose Terrace
Salvesen Farm
Sanford Farm
Al Sharkey's
Shepard Farm, The
Smith Blossom
Spohler's Elm Grove; Elm Grove House
Stanton Brown Farm
Sunny Hill Farm
Sunny Slope Farm
Tall Tree Manor Summer Resort
Twelve Maples Farm
Villa Lucia
Wheel-In (Resort)
Willow Brook Farm
Woodland
Worldtop Acres
Zany "J" Ranch

-<http://www.dteator.com/zResort/resortweb.htm>
-dteator@gmail.com



Sunny Hill Resort

Summer Menu

Sunday	Breakfast	Hot & cold cereals, soft boiled and scrambled eggs w/bacon
	Lunch	Prime Rib, baked potato, broccoli or sliced Turkey & gravy or grilled cheese sandwiches. Peach melba
	Supper	Ham Steak w/Pineapple, green beans, garden blend rice or cottage cheese fruit plate or Pizza. Vanilla pudding
Monday	Breakfast	Hot & cold cereals, soft boiled eggs, pancakes w/blueberry topping
	Lunch	Hamburger/Hot Dog Cookout at Lake Loree Pavilion w/3 salads, chips, iced tea, fresh fruits
	Supper	Fresh Ham, sauerkraut, gravy, oven brown potatoes, carrots or meatloaf w/gravy. Brownie delights w/ice cream.
Tuesday	Breakfast	Hot & Cold cereals, soft boiled & fried eggs w/sausage
	Lunch	Chicken tenders, Honey Dipped Chicken, Potato salad or Tuna plate or sliced ham. Strawberry frozen yogurt
	Supper	Char-broiled N.Y. Strip Steak, baked potato, mushrooms, beets or Italian mixed vegetables. Golden yellow cake
Wednesday	Breakfast	Hot & Cold cereals, soft boiled eggs, French Toast w/Strawberry topping

Lunch
Roast Beef and/or Turkey Hero sandwiches or cottage cheese or fruit plate or grilled cheese sandwiches. Jello

Supper
Chicken BBQ at Lake Pavilion kielbasa, corn on the cob, 3 salads, wild rice, iced tea & watermelon

Thursday
Breakfast
Hot and Cold cereals, soft boiled & scrambled eggs w/home fries and ham

Lunch
Chicken Parmigiana w/macaroni or chef salad or pizza, soft chocolate ice cream

Supper
Dutch Oven Pot Roast, red cabbage, wax beans, egg noodles & gravy or Chicken w/broccoli & cheese. Homemade Cheese cake w/cherries

Friday
Breakfast
Hot & cold cereals, soft boiled or fried eggs w/sausage patty

Lunch
Fried shrimp, Fried Haddock or baked cod, stewed tomatoes, spiced french fries or cheeseburgers. Eclairs

Supper
Roast Turkey, Mashed Potatoes, Homemade Stuffing & gravy or cottage cheese & fruit plate or grilled cheese sandwich. Strawberry short cake

Saturday
Breakfast
Hot & cold cereals, soft boiled eggs, French toast w/sausage

Lunch
Italian Baked Ziti w/meatballs, salad and Garlic bread. Fruit salad

Supper
Corned beef and cabbage, boiled potatoes, carrots or chicken w/gravy or hot dogs. Apple pie ala mode.

* The meals, as listed above, are subject to change
** Additional items available for children
*** Special Diets available upon request

WEEKLY SUMMER ACTIVITY SCHEDULE

(Late June thru early September)

SATURDAY	Morning: Arrival for almost all guests Adult softball game or kids kickball game or other activity. Horseracing in the Armae Hall, a popular activity with Sunny Hill guests. Train Rides.
	Evening: Church Time Fire Engine ride, Merry-Go-Round, golf, swimming, etc. Adult softball and kids activity. Hayrides. Dance to the music of a popular local group.
SUNDAY	Morning: Church Time
	Afternoon: Fire Engine ride, Merry-Go-Round, golf, swimming, etc. Adult softball and kids activity. Hayrides. Dance to the music of a popular local group.
	Evening: Adult and kids tournaments. Lake Pavilion Cookout. Trip to Woodstock and/or Carson City. Adult softball and kids activities. Lawn concert, Magic Show and Bingo.
MONDAY	Morning: Adult and kids tournaments. Lake Pavilion Cookout.
	Lunch: Trip to Woodstock and/or Carson City.
	Afternoon: Adult softball and kids activities.
	Evening: Lawn concert, Magic Show and Bingo.
TUESDAY	Morning: Adult and kids tournaments. Trip to Cooperstown Supersonic Speedway.
	Afternoon: Adult softball and kids activities.
	Evening: "Doodle Bug" rides. Dance from 9 P.M. to midnight.
WEDNESDAY	Morning: Adult and kids tournaments. Scotch Double Golf Tournament.
	Afternoon: Riverboat cruise.
	Evening: Cookout supper at Lake Pavilion. Trip to Saratoga Harness Track. Monte Carlo Quiz Game and Pizza Party in the Armae Hall followed by music with a popular DJ.
THURSDAY	Morning: Adult and kids tournaments. Scenic Mountain Ride.
	Afternoon: Adult softball and kids activity & Merry-Go-Round. Big Dance and party of the week with music by the "Overtones." Talent Show provided by Sunny Hill guests, complimentary sandwiches offered during evening entertainment. We invite you to decorate your table (after supper) in the Armae Hall for the party.
	Evening: Adult and kids tournaments.
FRIDAY	Morning: Adult and kids tournaments and kids crafts. Train Rides and Fire Engine rides, hot dog roast and live music at beautiful Lake Loree. Bingo in the Armae Hall.
	Evening: Adult and kids tournaments and kids crafts.
TOURNAMENTS	consists of lawn bowling, shuffleboard, ping pong, jumball and video games, miniature golf, fishing, horseshoes, golf, etc. Weather will be a factor. Additionally, in-house cable movies and afternoon water aerobics included. All of this provides you with a full program of activities throughout entire season.

SPRING AND FALL SEASON PROGRAM WILL BE AVAILABLE

Prattsville: The imbricated houses
By Robert Titus – October 20, 2011

I am rather certain that you have not ever heard the term “imbricated house” before. In fact, I believe that this is the first time that term has been used. I furthermore think that you will find this notion to be very strange, almost impossible, but these have been “impossible” times in Prattsville. I have a lot of explaining to do.

Imbrication is one of my favorite physical primary structures in the science of sedimentation. As sediments come to be deposited, they are usually influenced by waves, currents or wind. These sculpt the sedimentary grains into various structures that we call physical primary structures. I have written about ripple marks in this column, and I will surely write about others. They are fun to find and recognize, but more importantly, they tell us a great deal about the nature of the environment of deposition.

Ripple marks, for example, are just what they sound like. The sediments were sculpted into ripples at the time of deposition. Most likely waves passed across the sediments and did the sculpting. Big waves make big ripples; little waves make little ones. You get the picture; we look at primary structures and they take us back through those windows in time to what it was like back when the sediments were accumulating.

There is a special type of structure which only forms in river channels. That is the imbricated flagstone boulder. Throughout the mountain streams of the Catskills we can see these in modern times.

To start the process we need a large thick flagstone boulder. There are a lot of them in our region. What happens is that they lie flat upon the stream channel floor. A river provides a constant current of water from the upstream direction. That current strikes the upstream side of the boulder and that generates a disturbance. An eddy develops as the waters start to flow in orbiting circles. Some of that flow is downwards and that begins to sweep up sediment, mostly sand, and some of that gets carried away. Soon a cavity has begun to develop in front of the rock. That leads to an even greater disturbance and a larger eddy follows. Now that cavity is getting sizable.

Soon the boulder begins to settle downwards into the cavity. In this manner it develops a slope; it is tilting into the cavity and that is also upstream. At that point it has become an imbricated boulder. Typically there are many such boulders in any Catskills stream. Also typically, all of the sand gets washed away and what is left behind is a concentration of imbricated boulders. The next time you are out walking along a mountain stream, take a good look at the flagstones and see if they don't tilt in an upstream direction. Take a picture and send it to me.

Well, I have seen this sort of thing a lot and, as I said, these are among my favorite structures to watch for in the field. But I introduced this column as being about imbricated houses, not rocks. Take a look of the photo that I took in the west end of Prattsville. It shows two homes and each of them is tilted to the right, and each of them has sunken into the ground. You get the picture; these are imbricated houses.

They speak to us of the power and violence that descended upon Prattsville at the peak of the flood. Strong steady currents are likely to have rushed through town in a northwestern direction. I wonder how many miles per hour? I guess we will never know. But these currents struck those houses and treated them like flagstone boulders. Enormous, house-sized eddies developed and great cavities were scoured out in front of these homes. Slowly, or maybe quickly they began to settle into these cavities. When the flood was done with them they were wrecked. They were left tilted into those holes in the ground; it was an awful fate.

As a geologist and a scientist I can view the wreckage and see the physics of this terrible flood. But as a human being, it is different. I don't just see buildings; these were homes. These are homes that stood in Prattsville for generations. Homes are where people were born. They are places where people grew up and maybe got married. And many times these were places where people died. Prattsville is a painful place to see today; so many people have been hurt and so too their homes.

At the far west end of Prattsville, just below the bridge, is a heap of broken lumber. Two months ago these boards were homes. Could such a thing have really happened?

Channelization: A solution or a problem?

By Robert and Johanna Titus – November 3, 2011

In these post-flood times you can see a lot of stream engineering going on. Across our devastated Catskills, stream banks have been badly damaged. Creeks and rivers have cut into roads. People hope to repair the damage and prepare the rivers for the next flood event. That gets us to one of those thorny issues in environmental science: something called channelization.

Channelization refers to a lot of different strategies of stream bank engineering. If you create a new berm alongside a river, that's a form of channelization. If you pile up boulders along the edge of a river to protect from future erosion, then that too is channelization. Sometimes it goes as far as bulldozing a whole new river channel: that really is channelization.

Well, if you travel around, you will see a lot of this going on right now. There is such a strong desire to see to it that the damage is fixed and not repeated. Suppose a stream eroded into its banks and then cut into a nearby road. I have seen many such cases since Irene. What highway engineers are likely to do is pile up a load of very sizable boulders to stabilize the banks, before filling in what was lost and replacing the highway pavement. Watch for boulders of a gray rock. These are probably the Helderberg Limestone, and they are well-suited for this sort of thing and readily available in our area. They are the boulders of choice for such repairs. They are big, heavy and very resistant to weathering; they make for good repairs.

There is nothing very controversial about such engineering; roads need repairing and this strategy does work. But will it last? That's not certain. Giant boulders of the Helderberg look like they will stay in place forever, but just wait until the next big powerful storm; it's not for certain.

Another strategy is far more controversial; that is the re-engineering of whole stretches of a stream channel. That's what's going on in Palenville. Residents, who had made it through Hurricane Irene, woke up shortly afterwards to hear and see bulldozing in Kaaterskill Creek. Over the course of a very short time, the local creek bed was rebuilt. Sizable berms of large cobbles were

bulldozed up on the banks. The channel bottom was scooped out for quite a long stretch. What's the controversy? Well all the complexities of a natural stream ecology have come to be homogenized. That will likely disrupt all the fish, amphibians, reptiles, birds and mammals that live there. The aesthetics, too, come to be degraded.

If you visit this site you may well form the impression that these changes will last forever. You would likely be wrong. The sad fact is that these new banks will be just as susceptible to erosion the next time there is a bad flood, as the old banks were during Irene. Floods of fast flowing waters are powerful agents of erosion. They can sweep up very large cobbles and even large boulders and carry them long distances. River channels, during floods, can sweep left and right quickly, and end up quite some distance from where they started out. This is bound to happen, sooner or later.

And the threat seems to be increasing. I have talked to stream flow geologists, people who study just this sort of thing. They are nervous about what has been happening in our region. Over the course of the last half century, rainfall rates have increased by at least 16 percent; we now annually receive one sixth more rain than we did during the 1960s. That's a lot, but the story gets worse. This year we are running a full 50 percent above the old averages. I think that is downright frightening. And then it gets worse. There is something called the "recurrence interval." That is the average length of time between storms of some specified magnitude. Bad storms, not necessarily as ferocious as Irene, but just bad ones, are occurring far more frequently than any time in the past.

I recently attended a US Geological Survey presentation about Hurricane Irene. They have determined that, throughout much of Greene County, Irene produced a 500 year flood. That is a real horror, but most of you saw it for yourself, I imagine that you believe the experts. As you may know we have experienced several 100 year floods over the past several decades. My point is that the numbers are getting out of date. 100 year floods are coming more frequently, because the climate has become wetter. We need to understand this. Efforts at channelization such as we see in Palenville, are likely to be expensive and, quite possibly, futile.