Yankee Engineer

U.S. Army Corps of Engineers, New England District, Volume 45, No. 10 July 2011

Building Strong®

Corps Dredge CURRITUCK returns to New England waters

Story on page 3

Yankee Voices

Paige Kimbrough-Rowan and Tameka Chapman

Sympathy

… to Regulatory retiree Alexine Raineri on the passing of her brother, Steven Michael Raineri, June 24.

…to the family of retired Executive Office Secretary Virginia Wrobel, who passed away June 27.

…to Engineering/Planning retiree Mark Geib on the passing of his wife, Janet, June 28.

Yankee Engineer mailing list

New England District employees who are planning to retire and would like to receive the YANKEE ENGINEER by mail should contact editor Ann Marie R. Harvie and provide a mailing address. Inclusion on the mailing list is not automatic. An added benefit to being on the retiree's list is receiving the flyers to other District events such as Founder's Day.

Words worth repeating

"A house without books is like a room without windows."

- Horace Mann

Take care of yourself (and your skin) in the sun

Summer means warm weather and sunshine. As enjoyable as that may be, sunshine means increased risk of skin damage due to overexposure.

Protect yourself from harmful rays this summer with this common-sense advice:

- Choose your times. When possible, limit your exposure to the sun between 10 a.m. and 4 p.m., when the sun's rays are strongest.
- Dress appropriately. Wear loose, light clothing covering your body as much as possible, along with a broad-brimmed hat to protect your face and neck.
- Check your medications. Antibiotics and other medications can increase your sensitivity to sunlight. Talk to your doctor about how best to take care of yourself on bright days.
- Drink lots of water. Avoid overheating by staying hydrated during hot weather.
- Use sunscreen liberally. Your best line of defense is a broad-spectrum sunscreen that blocks both UVA and UVB rays. Reapply every four hours, or more often if you go swimming or sweat a lot.
- Examine yourself. Regularly check your body and skin for any strange or irregular growths that might be caused by sun exposure.

(First Draft Magazine)

Be careful with sugar intake

A spoonful of sugar may, as Mary Poppins sang, help the medicine go down. But too many spoonfuls will probably increase your need to take medicine in the first place. Too much sugar – or rather, the unproductive calories it delivers to the body – can lead to weight gain, diabetes, and heart disease, among other health problems.

How much is too much? An American Heart Association study found that Americans consume an average of 22 teaspoons a day (at least during the period of 2001-2004). AHA guidelines recommend much less: six teaspoons a day for women and nine teaspoons for men.

Check the labels of the foods you're eating: a lot of sugar can be found in most processed foods. And they don't rely on sugar substitutes like high-fructose corn syrup. Though fructose may have less impact on the body's blood sugar and insulin levels, a calorie of fructose has the same impact as a calorie of sugar. As in most things, moderation is key. *(First Draft Magazine)*

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The CURRITUCK dredges Green Harbor, Mass.

Photos by Brian Murphy

Sediment is pumped into the CURRITUCK's hopper.

The CURRITUCK opens the hull and deposits sediment at the disposal site.

CURRITUCK dredges several harbors during annual New England visit

By Jack Karalius
Navigation Section

The Corps of Engineers-owned special-purpose dredge, CURRITUCK, paid a visit to New England this spring – as it does almost every year. The CURRITUCK is a self-propelled, self-contained, split-hull hopper dredge, based out of the Corps' Wilmington District.

The CURRITUCK is 150 feet long, 25 feet wide, and has a bin capacity of 300 cubic yards. The CURRITUCK is a hydraulic dredge that uses pumps to suction bottom sediments through two arms into a hopper aboard the dredge. When the hopper is full, the CURRITUCK moves to the designated disposal site, and the material is released by splitting the hull.

The CURRITUCK is economical, safe to operate, and easy to maintain. Its shallow draft and ability to withstand sea conditions other types of dredges cannot make it a valuable resource in dredging shallow draft inlets, like those found in New England, in a timely and cost effective manner.

The CURRITUCK spent six weeks in New England District territory in May and June and dredged four harbors – Clinton Harbor in Clinton, Conn., Patchogue River/Harbor in Westbrook, Conn., Harbor of Refuge in Block Island, R.I. and Green Harbor in Marshfield, Mass. It removed the most shoaled portions of the entrance channels of these harbors, thereby increasing navigational safety.

The CURRITUCK removed about 6,000 cubic yards of material from the 8-foot-deep channel of Clinton Harbor, about 15,000 cubic yards from the 8-foot-deep channel in the Patchogue River, about 20,000 cubic yards from the 15-foot-deep channel in Block Island, and shoaled portions of the 6- and 8-foot-deep channel in Green Harbor.

The dredged material was placed at nearshore disposal sites, off nearby beaches, about one to six miles away from the dredge sites.

The use of the nearshore disposal sites keeps the sandy dredged material in the littoral zone.

The material will act as a feeder berm, and natural wave action will distribute the sand in the nearshore environment and nourish the beaches.

District projects prevent nearly $370 million in flood damages in spring 2011

By Timothy Dugan
Public Affairs

Flood damages amounting to approximately $370 million were prevented during the March 2011 storms by the U.S. Army Corps of Engineers, New England District flood risk management dams and local protection projects in New England.

"The New England watersheds experienced near normal to much greater than normal snowpack during the winter months of 2011 and the flood potential was considered very high as the late winter and early spring season approached," said Paul Marinelli, chief of the Corps' New England District Reservoir Regulation Section, in Concord, Mass. "With warming air temperatures influencing our region, the variety of storm systems affecting our watersheds produced rainfall in lieu of snowfall."

Westville Lake Dam

A March 6-7 rainstorm, with significant snowmelt contribution, caused high runoff conditions especially within southern New England watersheds, Marinelli said. The Naugatuck, Blackstone, Thames and portions of the Connecticut and Merrimack River basins within Massachusetts, experienced the highest runoff conditions. Rainfall totals of 3 to 5 inches, along with augmented snowmelt, lead to the significant runoff conditions. The upper watersheds in New Hampshire and Vermont did not experience significant runoff from this storm as the snowpack was able to absorb some of the rainfall resulting in minimum snowmelt contributions.

Total damages prevented by Corps dams and Local Flood Protection Projects was about $370 million, with 92 percent attributed to Corps dams and 8 percent to Local Flood Protection Projects.

Naugatuck, Thames and Blackstone River Basins

Approximately 2 to near 5 inches of rain occurred in a 24-hour period, and combined with significant snowmelt, caused flood runoff within the Naugatuck, Thames, and Blackstone River basins on March 7. The existing snowpack contained about 4-7 inches of water and being at "ripe" densities, allowed portions of the snowpack to melt and contribute as augmented runoff, Marinelli said.

Along the Naugatuck River, all river stations rose 2 to 3 feet over flood stage, and had Corps dams not held back significant inflows, river levels would have resulted in 5 to 6 feet over flood stage. Some flood conditions along the Housatonic River in Massachusetts and Connecticut were very significant as river levels crested as the 5th highest flood in 88 years at Stevenson, Conn., cresting at 21.7 feet, which was only 2.8 feet lower than the October 1955 flood of record. Corps dams within the Naugatuck River basin utilized between 33 and 55 percent flood storage. Along the Quinebaug River in the Thames River Basin, all river stations rose and crested just under flood stage, whereas the Shetucket River rose to flood stage. Had the Corps dams not held back significant inflows, river levels would have resulted in 2 to 6 feet over flood stage.

Corps dams within the Thames River basin utilized between 20 and 35 percent flood storage. Along the Blackstone River, all river stations rose and crested about 1-foot over flood stage. The Tainter Gate Dam, as part of the Woonsocket Flood Mitigation Project in Woonsocket, RI, was in constant operation during this runoff event. The Corps West Hill Dam flood storage project within the Blackstone River Basin utilized about 25 percent of its flood storage.

Total damages prevented during these events were $290,776,000 in the Naugatuck River basin, of which 95 percent were attributed to Corps dams and 5 percent to local flood protection projects. Total damages prevented during these events were $47,740,000 in the Thames River basin, of which 100 percent were attributed to Corps dams. Total damages prevented during these events were

$20,788,000 in the Blackstone River basin, of which 14 percent were attributed to Corps dams and 86 percent to Local Flood Protection Projects.

Connecticut and Merrimack River Basin

Approximately 2 to 4 inches of rain occurred during March 6-7, and combined with some snowmelt, caused flood runoff within the Connecticut and Merrimack River basins on March 7, 2011. The existing snowpack contained about 5-7 inches of water; however, the density was not fully ripe and as a result, the snowpack absorbed most of the rainfall within the upper watersheds in Vermont and New Hampshire, and both the main stem Connecticut and Merrimack Rivers crested below flood stage, according to Marinelli. Only the southern tributaries experienced the greatest runoff in southern New Hampshire and Massachusetts.

Along the Contoocook River in Peterborough, New Hampshire, the river rose to just over flood stage, predominantly as a result of ice jam occurrences, and along the Ware River at Barre, Mass., the river rose to about 3.5 feet over flood stage causing significant flooding to localized properties along the river. Corps-managed dams used between 10 and 50 percent of flood storage associated with this event.

New England District has been using the Geostationary Operational Environmental Satellite (GOES), known as GOES East or GOES-13, which became operational in April 2010 with advanced weather imagery, as its data collection satellite, to assist the team in managing Corps dam operations. The District data collection platforms monitor pool, tailwater, river levels, ocean levels, precipitation, and air and water temperature, recording data every 15 minutes. The data collection platforms also monitor piezometer data and record these every four to six hours, depending on the site.

By collecting information about river stages and flows and their increases and decreases from 100 data collection platforms over time, the hydrologists can effectively regulate the Corps-managed dams to minimize impacts downstream. “This system assists us in deciding when to close or throttle back water flow through our network of 35 dams to provide the maximum flood damage prevention benefits to downstream areas,” Marinelli said. Through the use of real-time hydrologic data, field collected snowpack data, and exchange of information with the National Weather Service’s Northeast River Forecast Center, significant water movement can be identified, examined and predicted.

Each winter and spring, the Army engineers compile bi-weekly summaries of snow depths and their water equivalents from 100 key locations within the Connecticut, Merrimack, Thames, Housatonic and Blackstone river basins. With the information, engineers make calculations to determine snow density and comparisons are then made to averages based on over more than three decades of such readings.

The Corps has designed a system of flood risk management projects which includes 35 flood risk management dams, 112 local protection projects, and five hurricane barriers in New England. A total of 31 of 35 reservoir projects, and three of five hurricane barriers are operated and maintained by the Corps, while the remaining projects are operated and maintained by local interests.

Cumulative flood reduction damages prevented by all projects, including local protection projects, since their construction through Sept. 30, 2010 are more than $5.2 billion. These projects cost a total of $538 million to build. New England District operates and maintains 10 of 31 reservoirs for flood risk management only. Another 17 are operated primarily for flood risk management, and seasonally for recreational activities. The remaining four reservoirs are operated as multipurpose projects, including flood risk management, water supply, recreation, non-federal hydropower and fishery storage.

Students get a feel for the Corps during Engineering briefing

Students from the School to Career Partnership traveled to Concord Park headquarters to get a feel for some of the science behind the Corps of Engineers, New England District projects and programs on June 28. The students attended a two-hour briefing as part of their three-day “Bioengineering Symposium for High School Students.” The Bioengineering Symposium is a three-day event for selected high school students to expose them to exciting and challenging opportunities.

Photo by Sally Rigione

New England District celebrates Founder's Day under the ceremonial tent at Castle Park, Hanscom Air Force Base. Photos by CJ Allen

The Corps in New England celebrates 236 years of service to the nation with traditional picnic

Let it never be said that a little rain would spoil the fun of a New England District Founder's Day celebration.

Despite steady light rain throughout the day, the District team held its annual Founder's Day picnic and celebration June 22, at Hanscom Air Force Base's Castle Park. Programs/Project Management hosted this year's celebration.

Even before the official ceremony ended, participants could smell the catered barbecue lunch being prepared, which added to the celebratory atmosphere of a traditional picnic.

At the conclusion of the awards ceremony, Mary Christopher set up shop under the ceremonial tent to paint the faces of picnic-goers both young and young at heart. Other pre-lunch activities included traditional sack races, tug-of-war and pick-up basketball arranged by Rob Russo, Jr.

When lunch was announced by Disc Jockey for the day, Greg Penta of Regulatory, participants lined up for cheeseburgers, hamburgers, hotdogs, sausages with peppers and onions, chicken, veggie burgers, various side salads, baked beans and desserts.

After getting their meals, the District team sat under the ceremonial tent to eat, enjoy each others' company and listen to the rain lightly tapping on the covering. Nearly 250 people signed up for the lunch. The smallest of the Founder's Day event-goers received tickets to visit the ice cream truck for a free frozen treat.

After their meal, the District team ventured out in the

Siamac Vaghar (left) gets it done during a soccer game.

Matt Tessier (left) and Coral Siligato play checkers under the tent.

rain to participate in a myriad of traditional picnic activities set up for them by the Founder's Day committee and volunteers. Children had their choice of bouncing in the moonwalk or playing games that included ladder-toss, lawn-dice, wiffle ball, mini golf and horseshoes. The children's games were supervised by New England District's Department of the Army interns Angela Repella and Rachel Whitermore. The bigger kids of the adult variety played horseshoes, pick up volleyball, soccer and bocce. Heather Sullivan and Steve Dunbar arranged the horseshoe games. Everyone either seemed oblivious to the rain or were having too much fun to really care.

As a special bonus this year, the Founder's Day Committee unique opportunites for gifts and prizes. Every half hour, Judy Antonellis would pick a ticket and Penta called out the lucky number. Prizes were generously donated by the District's Work Environment (WE) Committee.

Federal Occupation Nurse Linda Lindell was on hand under the medical tent in case she was needed. The WE Committee sold Corps-related items under the tent and Lt. Col. Steven Howell, New England District Deputy Commander, once again made his famous Minuteman Brew with commemorative glass available for purchase. All proceeds went to the WE Committee to defray costs of future events.

Scott Acone chaired this year's Founder's Day Committee. Other members were Judy Antonellis, Kevin McKelvey, Sarita Martinez, Santos Lara, Angela Repella, Andrea Clotz-Pittman, Bill Ragno, Helen Newcomb, Tameka Chapman, Ann Marie Harvie, Angie Vanaria, Rob Russo, Jr., Stefan Carpenter, Kane Turmelle and Gladys Leone.

Children get ready to battle it out during the Tug-Of-War match. The game was only one of many activities the committee planned for the little ones throughout the day.

The sack races were very popular with the children.

Austin Chaisson celebrates the Bruins' recent Stanley Cup victory with a face painting creation by Mary Christopher.

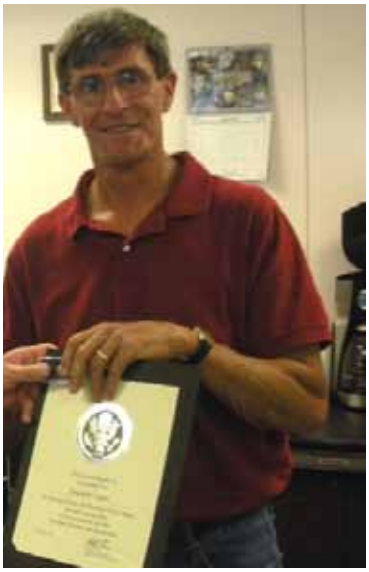
10 years

25 years

15 years

Photos by CJ Allen

Five years



25 years

20 years

30 years

35 years

Awards ceremony honors individuals for jobs well done

In New England, Founder's Day is about fun, but is also about honoring those who have continued the tradition of excellence that has been the trademark of the Corps of Engineers for the last 236 years.

Members of the New England District Team gathered under the big, white ceremonial tent at Hanscom Air Force Base's Castle Park to attend the Founder's Day Awards Ceremony, June 22. Larry Rosenberg, Chief, Public Affairs, welcomed friends, family, retirees and team members who attended. As is tradition, Rosenberg discussed the origin of the Corps of Engineers, which traces its beginnings to the opening days of the Revolutionary War when Boston native Col. Richard Gridley was named Chief Engineer of the Massachusetts Volunteers and shortly thereafter, Chief Engineer of the newly formed Continental Army by Commander-in-Chief General George Washington.

Rosenberg also inserted his own modern spin into the Corps' legendary tale. "The first Army engineering action occurred on the night of June 16, 1775, when Gridley looked over to the members of the PDT and asked the Project Manager to ensure that all costs were captured in CEFMS and all pertinent data, to include the cost-benefit analysis and the risk management plan, was entered into P2 and to schedule an after action review to eventually look at the lessons that would be learned from this first engineer action… Whew!"

Lt. Col. Steven Howell, Deputy Commander for the New England District, stepped in for Col. Tom Feir, District Commander, who could not attend. "Col. Feir sends his best wishes and a gigantic thank you for everything you do every day," he said.

Lt. Col. Howell thanked Programs/Project Management Division and the Founder's Day Committee for organizing the day's picnic celebration. He also thanked the Work Environment

Karen Hoey, (right) New England District and North Atlantic Division Interpreter of the Year.

Robert Henderson (center), FWP Supervisor of the Year.

(WE) Committee for hosting multiple fundraisers to help defray the costs.

The Deputy Commander said that celebrating Founder's Day is celebrating the Army and the Corps birthday. "The Battle of Bunker Hill marked the beginning of a long tradition of service to New England and the nation that the Corps -- that you – continue to this day."

According to Lt. Col. Howell, the New England District had a very productive year. "You all should be very proud of yourselves," he said. "We're blessed to have such a dedicated and knowledgeable team."

Several retirements occurred during the year and Lt. Col. Howell wished those employees the best. He also welcomed all of the new employees. "Welcome!" he said. "It's great to have you on board! You've joined a great team!"

He concluded his remarks by reminding everyone to be safe and to have a good time at the picnic.

Frank Fedele, Chief, Operations, named Karen Hoey, Park Ranger at Hopkinton-Everett Lake, as the New England District's and North Atlantic Division's Interpreter of the Year. She received the honor for her exceptional efforts in the area of Interpretive Outreach and Environmental Education. "Her commitment to excellence and desire to improve this field is evident in the quality of programs that she provides," he said. "She stands as a terrific example of Corps values, and is an asset to her projects, the New England District and the U.S. Army Corps of Engineers."

Heather Sullivan, Federal Women's Program Manager, named Robert Henderson, Chief, Resource Management Office, as the FWP Supervisor of the Year for 2011.

According to the citation, through Henderson's efforts to empower his team to reach their full potential, and to enhance the professional development for everyone, the Resource Management Office continues to grow in diversity. Other efforts that Henderson has made to improve the work environment includes telework, flexible work schedules, a true open door policy, as well as his ability to tap his team's talents and resources to support and bring out the best in each one.

30 years

"As a supervisor, Bob not only leads his office, but steps in as a true team player," said Sullivan. "He encourages his team by presenting them with opportunities to learn and grow. Bob emphasizes the EEO principle of fair and equitable treatment for all, and he makes it a point to recognize the special efforts of individuals who go above and beyond expectations for assignments."

After Sullivan's presentation, Lt. Col. Howell and Kim Kaminski-Donaher, Chief of Human Resources presented length service pins to employees who have served 5, 10, 15, 20, 25, 30, 35, 40 and 45 years. A complete list of recipients can be found in the New England District's Founder's Day booklet that is available upon request from the Public Affairs Office.

Scott Acone, the 2011 Founder's Day Committee Chair, thanked this year's committee, especially Angie Vanaria, Judy Antonellis; the District's Senior Leaders; Mary Christopher; Carol Charette; DA interns Angela Repella and Rachel Whitermore; Rob Russo, Jr. and Steve Dunbar for their efforts in making this year's event possible. He concluded his remarks and the official ceremony by going through the day's planned activities.

EEO presentation recalls difficult times for Japanese Americans during World War II

The New England District team took a trip through time, back to the World War II time frame, with this year's Asian American/Pacific Islander Program's guest speaker, Margaret Yamamoto.

Yamamoto documented her family's story, from the 1890's to imprisonment during World War II as well as how they rebuilt their lives after the war, in her presentation, "Justice Denied: A Personal Perspective," held in the Concord Park theatre, May 11.

Using a Power Point presentation filled with dozens of personal and historical photos, Yamamoto first went back to her mother's childhood and how she met her father. Her mother was born in Hawaii to Japanese immigrants. She talked about her grandparent's bakery and how her mother had to quit school and help run the business after her father died when she was 13.

Years later Yamamoto said her mother resisted pressures to marry, but finally married her father. The couple managed a grocery store, but when the Great Depression hit, they decided to move to Terminal Island in California where there was work and housing for Japanese and Japanese-Americans. Her parents opened up a grocery store where they worked long hours.

According to Yamamoto, when World War II began and the Japanese attacked Pearl Harbor, the FBI descended on Terminal Island and arrested the Japanese American community leaders on suspicion of collaborating with the enemy.

The FBI also searched all the houses looking for evidence that the residents were helping the Japanese.

The guest speaker said that the media was flooded with anti-Japanese sentiment to the point where instructions were published on how to determine a Japanese person from a Chinese person. Terminal Island residents were evacuated – told to take only what they could carry – and sent to temporary camps in California. From there they were moved to more permanent camps in other parts of the country.

Photo by Brian Murphy

Special guest speaker Margaret Yamamoto tells her family's story and their struggles as persecuted citizens during World War II.

Yamamoto's mother was 8-1/2 months pregnant with her when the family was evacuated, and Yamamato was 4 months old when they finally arrived at a relocation center called Gila River in Arizona.

The housing had no air conditioning, and the residents were forced to use public facilities such as toilets, showers, and a cafeteria.

While at the camp, the men were told to fill out a loyalty questionnaire. The questions were insulting, according to Yamamato and the men feared that answering "no" to certain questions would cause them to be separated from their families or sent to prison.

Despite suspicion, Japanese Americans were allowed to fight for their country. The 100th Battalion of the 442nd Regimental Combat team, made up entirely of Japanese -Americans, was and is the most decorated American military unit in history.

The unit, which had an enormous casualty record, received over 18,000 individual decorations to include Medals of Honor, Distinguished Service Crosses, Silver Stars, Bronze Stars and Purple Hearts. According to Yamamoto, despite showing their allegiance to the United States by serving, the 442nd's families were still imprisoned in Relocation Centers.

After the War, Yamamoto's family moved to Chicago where her father worked at a family run restaurant. Eventually they returned to California to open a grocery store. The business is still run by family members.

Despite everything, Yamamoto said her parents never spoke badly about their imprisonment.

In 1988, President Reagan signed a Civil Liberties Act, sent a letter of apology and a check for $20,000 to everyone who was imprisoned. The apology came too late for Yamamoto's father, who had passed away 13 years earlier. Her mother kept the letter and a copy of the check next to her father's picture.

Yamamoto said that her family's story is one of thousands and that she was lucky to be able to tell it. She concluded her presentation by taking questions from the audience.

After her presentation, Lt. Col. Steven Howell, Deputy District Commander, presented Yamamoto with a Bunker Hill plaque for her informative presentation.

Photos by Kevin Burke

During the training Park Rangers care for a "victim" who has fallen on the rip rap. (Above top) Park Rangers attend to a training dummy after a bicycle accident. (Above bottom) Canal employees take an "injured" person off a patrol boat.

Canal team takes medical response training

The Cape Cod Canal Team, in partnership with the Institute for Emergency Medical Education, held its annual Ranger Medical Response training, June 25-29 at the Canal Ranger Station in Buzzards Bay, Mass.

"The training was in two parts," said Park Ranger Roger Hagen. "The first part consisted of four hours of Health Care Provider Training, which is the professional level of CPR training to include AED training. The second part was 20 hours of First Responder Training, which is a state recognized advanced First Aid."

Sixteen employees took the CPR training and 12 employees took the first responder training. The voluntary course was open to all Canal employees.

The annual training, which was taught by paramedics from the Bourne Fire Department, covers the requirements of the American Heart Association. "Each training section has a video or Power Point followed by a lecture and a hands-on application," said Hagen. "The last day the students role-played outdoor scenarios that included a bicycle accident, a fisherman having falling on the rip rap and striking his head and a boating accident victim that was treated on a patrol boat."

Park Ranger Kevin Burke gets his injury attended to during the training.

Dredging up the past

Photo by C.J. Allen

Col. Brian Osterndorf, New England District Commander, watches the ball hit its target before going in the dunk tank during the District's Founder's Day celebration, June 23, 2000.

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