

Yankee Engineer

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Building Strong

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Turtle Nesting Habitat Enhancement Project

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Yankee Voices



Dara Gay and Coral Silgato

Don't let computer screens damage your eyesight

Millions of workers suffer from symptoms related to Computer Vision Syndrome (CVS). It's a temporary but unpleasant condition caused by sitting in front of a computer monitor for too long.

Symptoms include dry, burning eyes, blurred vision, delayed focusing, altered color perception, and headaches. The cause?

Studies suggest that CVS sufferers do not blink enough when sitting in front of the screen, which results in dry eyes.

To alleviate CVS, use eye drops to lubricate your eyes.

Other recommendations include stepping away from the computer for brief periods, using anti-reflective screen filters, readjusting monitors to soften display colors, and wearing tinted glasses.

(First Draft Magazine)

Employee Spotlight Cesar Lopez, Construction Division



Cesar Lopez is the Resident Engineer of the Central Resident Office, Construction Division, based out of Fort Devens, Massachusetts. As the Resident Engineer, Lopez has a myriad of responsibilities. "I am responsible for contract administration for projects assigned to the office," he said. "I manage the execution of construction work for proper performance in accordance with plans and

specifications."

According to Lopez, he also performs duties as the contracting officer's representative and Administrative Contracting Officer and represents the New England District when dealing with its customers.

Lopez has been with the District for two years. He holds a Bachelor's of Science Degree in Civil Engineering from the United States Military Academy and a Master's Degree in Business from the University of Texas – Austin.

The Resident Engineer says the diversity of work and the quality of staff are what he enjoys most about working for New England District. "It is enjoyable to come to work knowing that the interaction will lead you to associate with people dedicated to their job and willing to assist where they can," he said. "The execution of projects is a team effort, made easier by those willing to give 100-percent."

When he's not a Resident Engineer, Lopez is a dedicated Family Man. "Outside of work I enjoy spending time with my family," he said. "After spending a lot of time away on military or other service, I truly enjoy making them my first priority. An ideal afternoon for me is sitting in the bleachers watching my children participate in sports."



District, partners, move forward with Turtle Nesting Habitat Enhancement Project

By Jason Tremblay
Project Manager, Edward MacDowell Lake

The U.S. Army Corps of Engineers at Edward MacDowell Lake in Peterborough, New Hampshire has been working with state and local partners since September 2013 on a turtle nesting habitat project that will greatly benefit turtles and upland species. With the help and expertise of New Hampshire Fish and Game Department's Wildlife Division and a collaboration of biologists, foresters and soil scientists, a Wildlife Habitat Prescription Plan was developed for this project. Local partners such as the Monadnock Trail Breakers Snowmobile Club, Cub Scout Pack 8, Boy Scout Troop 308 and Venture Crew 308 will all be helping to execute the final stages of the project which involves preparing the site for plantings and securing the nesting area.



Photo provided by Edward MacDowell Lake

Turtles such as this one will benefit from the Turtle Nesting Habitat Enhancement Project.

The project involves reclaiming an existing 3.5 acres of gravel pit in order to enhance critical turtle nesting habitat. The primary goal of the project is to provide a suitable nesting area at the gravel pit, thereby increasing turtle nesting rates and decreasing turtle mortality. The habitat prescription plan, developed by the New Hampshire Fish & Game Department, targets a variety of turtle species, including three species of turtles that are currently listed as Species of Concern in the state of New Hampshire.

Edward MacDowell Lake currently supports nesting turtles at the gravel pit, located adjacent to the lake and a wetland area, and is the primary area for nest sites at the park, as identified by the New Hampshire Natural Heritage Inventory in 2000. Over time, natural succession of trees and shrubs and their associated cover has reduced the overall size of suitable nesting habitat. The project would open the canopy to help the sun heat the area for turtle egg incubation. All New Hampshire freshwater turtle species require an open canopy with well-drained soils and sparse vegetation consisting of native sedges, grasses and less than 2-5 percent low growing shrub cover for nesting.

The New Hampshire Fish and Game Department, Wildlife Division's habitat prescription plan will also benefit upland wildlife species such as smooth green snakes, grouse, turkey and a number of songbirds.

This project will be the first for turtle nesting habitat under the Handshake Partnership Program since the program's inception in 2004. The application for this Handshake Part-

nership Project went before a national committee and was awarded on Nov. 19, 2014.

By Aug. 3, 2015, the Challenge Partnership Agreement for Edward MacDowell Lake's Turtle Habitat Restoration Project was officially signed by New Hampshire Fish & Game Department's Executive Director, Glenn Normandeau, Monadnock Trail Breaker's President, Chris Raymond, Cub Scouts of America, Pack 8 Cubmaster, Jeffrey King, Boy Scouts of America Troop 308 Scoutmaster Michael Miller, and Venture Crew Adviser, Arianne Miller. Through a memorandum of delegation from Col. Christopher Barron, New England District Commander, Operations Chief, Frank Fedele provided the final signature.

The projected increase in turtle populations as a result of this project will provide the general public with more opportunities for wildlife observation and photography at Edward MacDowell Lake and naturalist led interpretive programs to demonstrate habitat enhancements.

Much thanks for their support and involvement to our local partners; Jeff King and Cub Scouts Pack 8, the Miller family, Boy Scouts and Venture Crew from Troop 308 and the members of Monadnock Trail Breakers Snowmobile Club, the New Hampshire Fish & Game Department's Wildlife Division (Jim Oehler, Denyce Gagne, Mike Marchand, Brian Lemire, and Wendy Ward from NRCS), USACE Operations Division; Kimberly Russell, Natalie McCormack, Rob Shanks, Jen Rockett, Marty Curran, Joshua Levesque and Matt Cummings.



Photos by Brian Murphy

Engineers Dara Gay and Coral Silligato hand out information to potential future engineers during Engineer's Week.

Celebrating New England District's engineers

National Engineers Week was celebrated Feb. 21-27 this year. The theme was "Engineers Make A World of Difference." The purpose of Engineers Week is to celebrate engineers and the contributions that they make to society. The Corps of Engineers has been making those contributions since the very beginning of the Revolutionary War, so it's no surprise that many Divisions and Districts participated in celebrations and events to mark the occasion.

"The Corps of Engineers has been providing engineering solutions to our nation's greatest challenges since 1775," said Lt. Gen. Thomas Bostick, Chief of Engineers, in a letter to the Corps Team. "Our legacy includes design and construction of iconic American projects, improving inland navigation and opening the American West with explorers, surveyors and map makers."

Not only has the U.S. Army Corps of Engineers been in the business of being the world's premier engineering organization, it also has been in the forefront of educating young people to become the engineers of the future. "The U.S. Army was the incubator for engineer schools at West Point, New York," said North Atlantic Division Commander Brig. Gen. William Graham. "Military-trained engineers were at the forefront of railway, bridge, harbors and road construction throughout our early history. Most engineering schools, established prior to the Civil War, were modeled on the West Point curriculum developed by the Superintendent Col. Sylvanus Thayer, from 1818 to 1833."

The New England District has engineers with varying degrees of experience that bring a lot to the District. Scott Acone has wanted to be an engineer since he was a junior in high school. "It was a toss up between

being an engineer or being a veterinarian," he said.

Engineering won out and, after 28 years of being in the profession, he is the current Chief of New England District's Engineering and Planning Division.

"Being an engineer means being a problem solver," he said. "We get to figure out how to fix things – flooding, unique building requirements, how to keep old bridges and dams working and so much more."

Dara Gay also knew early on that being an engineer was her calling. "In high school math finally clicked for me and I actually began to enjoy it," she said. "I didn't really realize I wanted to become an engineer until someone said I should give it a try."

Like Acone, Gay didn't decide on engineering immediately. "I actually wanted to be an architect and when my free hand drawings weren't enough and

I would have to take summer classes before going to college my advisor suggested civil engineering,” she said. “It has some of the same aspects and I was good at math. Thankfully it all worked out and I enjoyed it!”

Gay has been an engineer for six years and although she says it has gone by quickly, she knows that there is still a lot to learn.

“The toughest part about being an engineer is all of the unknowns,” she said. “Working in the geotechnical engineering section, there are so many unknowns with most of our work being underground. There is still so much for me to learn!”

Even seasoned engineers such as Acone understand that with the profession comes challenges. “It’s mostly great because we do so many different things from navigation to military construction to environmental clean up to disaster recovery,” he said. “But it can be frustrating too, such as dealing with strict Army regulations and budget requirements. We all want to serve the country, but sometimes it’s a struggle.”

Serving the country is one of the reasons Gay enjoys working for the Corps of Engineers. “You get exposed to so many opportunities that other engineers might not be able to,” she said. “There is always the opportunity

to deploy overseas and help our military mission and then when you’re finished there is a job to come home to.”

Acone finds that finding solutions to the unique challenges the Corps of Engineers faces is one of the best aspects of working for the agency. “There’s always something new or different,” he said. “Our missions are diverse, so we can work on all kinds of engineering problems.”

Engineers from the Corps, from as high up as the Chief of Engineers down

lets you do lots of different things and see the results of your efforts in the projects that get constructed. You can do calculations and design things or you can be on project sites managing construction. It’s the only career field that gives you limitless options going forward and provides job security as we try to keep our infrastructure safe while accommodating a growing population with different and sometimes competing needs from our society today.”

Mark Anderson is the head of the

District’s Science, Technology, Engineering and Math initiative that has included educational agreements with schools, presentations, mentorships, robotics team coaching, site visits to New England District projects and science fair judging.

The New England District’s speaker’s bureau coordinates engineers to attend

career fairs, speaking engagements and the Corps’ representation at Engineer’s Week in Boston.

This year’s Engineer’s Week event was held on February 25 at the Boston Marriott. Participants this year were John Kedzierski, Coral Siligato and Dara Gay.

“If you like building things or figuring out how things work engineering is the place for you!” said Gay. “There are so many different types of engineering and things you can do with it.”



Steve Chase briefs Col. Christopher Barron and Brig. Gen. William Graham during a tour of the Hanscom AB Middle School project.

to District engineering interns, want to encourage future engineers to seek a career with the agency, or at least in the engineering profession. The New England District has an active outreach initiative that is in keeping with the Chief of Engineers’ Campaign Initiative, “Prepare for Tomorrow.”

“If I could encourage a young person to become an engineer, I’d tell them that they get to solve tomorrow’s challenges and shape their own future,” said Acone. “It’s a job that

New England District Virtually Walks Black Heritage Trail for Black History Month

To celebrate Black History Month, New England District team members went on a virtual walk along Boston's Black Heritage Trail with keynote speaker Park Ranger Ryan McNabb, National Park Service, Feb. 9 in the Concord Park theatre.

The 2016 theme for Black History Month is, "Hallowed Ground: Sites of African American Memories." Grace Moses, Black Employment Program Manager, made introductory remarks and introduced McNabb.

McNabb started the virtual tour with an overall map, showing each historical location along the trail. The tour had over a dozen stops along the way and included the Robert Gould Shaw/54th Regiment Memorial, George Middleton House, Lewis and Harriet Hayden House, John Coburn House, Smith Court residences, Abel Smith School and the African Meeting House.

At many of the featured locations, McNabb spoke about the history of the building or the heroic acts of the people who resided in them and their work to assist slaves to freedom. Some stories McNabb related were of George Middleton, who was a Revolutionary War Veteran and well respected in his community. He became a founding member of the Free African Society. "This was a benevolent society," said McNabb. "These people were raising food for people, providing firewood for people, clothing. They were also very much involved in the struggle for equal education."

The Phillips School was constructed in the 1820's and like all the public schools at the time, it was strictly for white students. "Black families were paying taxes for that school and living on that street, but they weren't allowed to send their kids to school there."

During this period, children of color were educated either in people's homes or in private schools. In 1806 the African Meeting House was constructed. "It was a church and community center and the ground level doubled as a privately run black school called the African School," said McNabb.

The Abel Smith School was built next to the African Meeting House in the 1830's and was the first black public school in the nation. According to McNabb, it was the worst run school in Boston with a terrible headmaster and, if they were lucky, two teachers to educate more than 170 students.

William Cooper Nell was a life-long activist, second generation, as his parents were abolitionists back in the early 1800's. He was forced to go to the African School and when he realized that he was not getting the same quality education as white students, he vowed at the age of 13, "God



Ryan McNabb takes participants on a virtual tour of the Black Heritage Trail.

willing I will do my best to hasten the day when the color of your skin will no longer be a barrier to equal school rights."

Nell made it his life's work to integrate the Boston Public Schools. This was a controversial subject on both sides, according to McNabb, but Nell believed that children of all colors needed to work together at the earliest ages in order to change society. Because of his relentless work, in 1855 Massachusetts became the first state in the country to abolish segregation of its public schools. After segregation was abolished, the Phillips School became the first integrated public school in the city of Boston.

Senator Charles Sumner was one of the strongest white allies of the community. He was born in the Beacon Hill neighborhood and was an abolitionist. "He's most known for the beating he took in 1856," said McNabb.

According to McNabb, Sumner was insulting to many of the southern senators, most especially, Sen. Butler from South Carolina. Butler's relatives took revenge for Sumner's remarks by going up to Sumner on the senate floor with a heavy wooden cane and nearly beating him to death.

"No one lifted a finger to help him," said McNabb. "It took him over three years to return to work and he was never the same."

McNabb said that Sumner came back on the eve of the civil war and told President Abraham Lincoln that he would not be able to win the war without freeing the slaves and without letting black men fight. On his deathbed, Sumner talked of his national civil rights bill and begged abolitionists to pass it.

A year after Sumner's death a version of the bill passed, but then declared unconstitutional by the Supreme Court.

Another Civil Rights Bill was not passed until 1957.

Lewis and Harriet Hayden escaped from slavery in Kentucky and moved to Canada. They returned to the states and settled in Boston where they bought a house on Beacon Hill and turned it into a safe house. McNabb related several instances where the Hayden's assisted slaves who were being hunted due to the Fugitive Slave Law. The law stated that it was a federal crime for a slave to run away and a federal crime to help a slave run away. This allowed slave masters to send slave catchers north to bring back run away slaves. On one occasion Hayden threatened to blow up the neighborhood if slave catchers tried to enter his home. The Hayden's assisted more than 100 slaves get to Canada.

In 1862, John Andrew, the Republican governor of Massachusetts at the time, had Thanksgiving dinner with Hayden. The two made plans to create the first Black Regiment in the U.S. Army, the 54th Regiment after Lincoln signed the Emancipation Proclamation that following January. The Proclamation, among other things, opened up the doors to the military to black soldiers.

The African Meeting House was used as the recruitment center for the 54th Regiment. McNabb recited the recruitment speech by Frederick Douglass, renown abolitionist and civil rights activist, that inspired many people to enlist.

"It wasn't just Bostonians that signed up," said McNabb. "People from across Massachusetts enlisted and eventually



Col. Christopher Barron presents Ryan McNabb with a Bunker Hill Certificate. Photos by Brian Murphy

people from over 20 states came to Boston and joined."

Douglass helped fill the 54th Regiment and eventually the 55th Regiment, the second Black Regiment of soldiers from Massachusetts and the 5th Cavalry, which is the Black Cavalry. McNabb said the Robert Gould Shaw Memorial, erected in 1897 on Beacon Street honors the 54th Regiment.

After the virtual tour and historic facts, Col. Christopher Barron, New England District Commander, presented McNabb with a Bunker Hill Certificate in appreciation for the virtual tour.

Annual Chili event held despite inclement weather

The Work Environment (WE) Committee held its annual Chili Fest on Feb. 5 in the Concord Park Cafeteria.

Despite the nasty winter storm swirling around the District, the Fest went on as planned, much to the delight of New England District team members who braved the inclement weather to make it into work.

According to Greg Penta, Chair of the WE Committee, the Chili Fest entries were quickly eaten by all that participated. For a small fee, participants could sample all of the chilies and vote for their favorite.

"A lot of jovial conversation was had sitting around the café debating which of the chilies were people's favorite," said Penta.

This year's Chili Champion is Tom Boutilier. Linda Baker took 2nd place and Craig Martin and Ruth Ladd tied for 3rd place. According to the WE Committee all the crock pots went home empty. Kirsten Traver, Real Estate, organized this year's event.

Proceeds from the Chili Fest go into funding future WE Committee events.



Rob Russo gets a sample of chili before he votes.

Photos by Brian Murphy



Greg Penta tallies up the votes before announcing a winner.

Dredging up the past



Fred Ravens, Dick Reardon and Larry Bergen go over some drawings in this circa 1960's photo.

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