and drag it up a few hills. Luckily, there was a rise in the ground which brought the bear nearly level with the pickup's bed, and the men slid the bruin into the truck.

After a quick stop home to show the bear to his family, Jason and his dad had to rush the field-dressed bear to the check-in station in Rockaway Township before it closed at 9 pm. No one realized the true size of the bear until it was hanging on the scale. After that, he worked until one o'clock in the morning getting the bear skinned and broken down at his friend's taxidermy shop in Wanaque (Sahanas Taxidermy).

guts at somewhere between 10% and 18% of that. although Jason said that the gut pile looked small compared to the size of the bear. Any way you look at it, the bear had to weigh nearly 800 pounds walking around. The Pope & Young score of the skull was 21 14/16 inches, making it a world-class trophy. The skull was also scored by Boone & Crocket and will place in the "All Time" category.

The State of N.J. has all but confirmed his bear's status as the archery record. No other bears killed during the state's first archery season were reported to weigh more.

one's deck, and the state moved it to Sussex County near Wawayanda State Park. The bear was ear tagged and its lip tattooed with an identification number for future reference. Unsurprisingly, it came back home.

When captured in 2011, the bear weighed 458 pounds. Black bears can live up to 25 years in the wild. The actual age of Jason's bear will not be known until all the data has been compiled at the end of this year.

It was apparently living a good life, considering how fat it was. It's no wonder it came back to its home range.

Dam Removals Enhance Fisheries

by Bruce Edward Litton

Four New Jersey rivers – the Musconetcong, Raritan, Lamington, and Millstone – have undergone activities involved dam removals, and the state plans for more removals, since Hurricane Floyd in 1999 raised concerns, This coincided with initiatives by American Rivers and the National Oceanic and Atmospheric Administration. This is good news for anglers, because migratory fish, including Atlantic shad and striped bass, now inhabit three of these rivers. Trout and smallmouth bass habitat is also improved.

Including two wooden coffer dams, the 12-foot Hughesville Dam, and a hand-built stone dam at Riegelsville, seven dams were demolished on the Musconetcong River. Three major Raritan River dams are gone. The Headgates Dam near the confluence of North and South branches is the next target. Two low-head Millstone River dams may soon get removed, and on the Lamington River, the Burnt Mills Remnant Dam is expected to go in 2018.

Commenting on this broad effort to remove dams, Musconetcong Watershed Executive Director Alan Hunt said, "From my understanding of the (U.S.) Department of the Interior, they understand it's part of their mission to promote dam removals especially for migratory fish."

Here in New Jersey, that mission is served by agencies too numerous to list, with tangible results so far. Co-Owner of Trout Scapes River Restoration LLC Brian Cowden said, "We're seeing striped bass caught all the way up to the Hughesville Dam. Now they can continue all the way up to the big dam in the Musky Gorge. An 18-inch striped bass on a five-weight fly rod is a lot of fun."

Stony Brook-Millstone Watershed Director Jim Waltman spoke about Atlantic and gizzard shad in the Millstone River. "What we know about shad is they're opportunistic," he remarked. "They're not like Pacific salmon drawing on cravings to get to a specific location. They should come up this river, and they're coming up this river." Unofficial reports of shad catches at the Weston Mill Dam in Manville foreshadow the likely coming of a fishery as far upriver as Carnegie Lake's dam in Princeton.

According to Waltman, the Weston Mill Dam may be removed as early as this August, although plans are not finalized. Further upstream, the Blackwell's Mill Dam is more of a problem. "We thought the Blackwell's Mill Dam would be easier to get out and kind of started focusing there first," Waltman said. "Behind that dam is a United States Geological Survey river flow gauge. The current leadership at USGS in New Jersey has been opposed to removing that dam. What we're trying to do is work with them and the U.S. Fish & Wildlife Service, which very much wants to get the dam out, to try to identify alternative ways to gauge the flows there without the dam."

Migratory fish entering the Millstone, however, first make it up the Raritan River's Island Farm Weir fish ladder. Olaf Yenson at Rutgers has been studying the weir. He believes that weir is nowhere near as effective as it was once thought to be in passing the fish. "I was told it was designed for salmon," he observed. "Some of them get through. So that's another challenge here and part of the Natural Resource Damage Project will not only be removing the Manville Dam, but also improving passage at the Island Farm Weir."

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and Sunday, April 2, in Oxford, Warren County. This free event features exhibits, fishing, a beginner archery range, wildlife artists, taxidermists, wood-carvers, and a sportsmen's flea market.

The Division of Fish and Wildlife, which today manages nearly 350,000 acres of wildlife management areas, is one of the oldest state wildlife management agencies in the nation. The division traces its beginning to March 8, 1892, with legislation calling for the appointments of three fish and game commissioners and a paid "game protector" for the "better protection of the fishing interests and of the game birds and game animals of this state, and for the better enforcement of the laws relating thereto."

This structure evolved into the New Jersey Division of Fish and Game, which was integrated into the DEP when the agency was formed on the first Earth Day, April 22, 1970. In 1979, the agency became the Division of Fish, Game and Wildlife, and in 2000, the name was changed to the Division of Fish and Wildlife to encompass its mission of managing all wildlife.

"During this 125th anniversary, we rededicate ourselves to our mission of protecting, conserving and managing our wildlife resources for the benefit and enjoyment of many generations to come," said Acting Division Director Larry Herrighty. "It is my sincere hope that residents and visitors take a few minutes to learn about our history, and all of the great work that we do and, most important, to take advantage of the many wildlife-related recreation opportunities that New Jersey has to offer."

New Jersey has ecosystems that support an amazing diversity of wildlife: the wooded and rocky ridges of the Highlands, home to bears and bobcats; the vast pitch pine forests of the Pinelands that provide habitats for unique amphibians and reptiles; the coast's beaches, dunes and salt marshes that teem with osprey, shorebirds and

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lever action rifle. It was the first multiple-shot firearm of the time. Prior to the lever action, firearms were, essentially, all muzzle-loading single-shot rifles/shotguns."

Imperato began by addressing firearms used during the Revolutionary War of 1776, and from there walked it forward to the Civil War era. Some remarkable advances had been made both pre-war and during the war, including the use of rifled bores, but those so-called advances didn't include a "repeater" or as Imperato called them, "multi-shot" firearms.

"It (the Henry) was the first multi-shot firearm of the era," Imperato explained. But what about the iconic Winchester lever action? Many, especially collectors, will unabashedly tell anyone willing to listen that the Winchester "multi-shot" (lever action) was "the gun that won the west." (Of course, that title

the rifle, hired a guy as their shop foreman. His name was (yes, you guessed it) Benjamin Tyler Henry. And, it so happened that at the time, one of the major investors in the venture was a clothing manufacturer named Oliver Winchester. Starting to come together for you?

So began the saga of a short romance between Ben Henry and Winchester. But somewhere down the line, they decided to move the manufacture of the improved version of the Volition Repeating Rifle to New Haven, Connecticut. They called it the New Haven Arms Company. That, Imperato said, was the beginning of the Winchester lever action that we know today.

Well, not quite. There were still many improvements to be made. Nevertheless, the venerable Winchester was in its embryonic form.

improved tubular magazine, all of which were designed by Henry. Thus his legal claims."

Henry's effort for a handsome raise didn't work. Subsequently, Henry departed his position with New Haven Arms and began producing his version of the lever action, which later even sported a wood forearm. Henry began producing his lever action just prior to the Civil War, according to Imperato. And it was at least partially, albeit importantly, a major element in the Union's eventual success. It was the rapidity of fire compared to other firearms on the field of battle that made the Henry the soldier's gun of choice. In fact, so popular was the Henry that "many soldiers purchased their own rather than wait for the government to purchase one for them," Imperato said.

One Confederate soldier remarked

impressive as it is extraordinary. Though most of the firearms displayed are lever actions, Imperato can't be accused of stashing one egg in his basket. There are semi-autos as well as pumps and even an AR-7 style auto-loader, single shot rifles and shotguns, and a grand array of lever actions from rimfires including the .17 caliber HMR and includes the standard .22 rimfires. There's even a limited supply of lever actions for lefties. And that's just the start. I counted something like 90 different models including a lever action .410 shotgun, and of course the iconic "mares leg" rifles in .22 caliber up to and including .44 mag and much more.

Take a gander for yourself, at henryusa.com. The selections are amazing.

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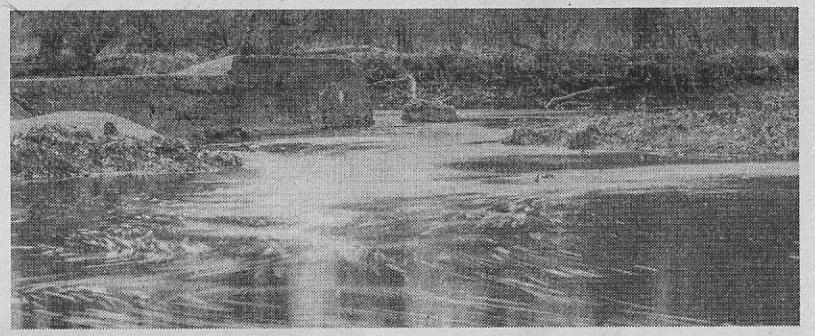
Draining into the North Branch Raritan River well upstream of the Raritan Confluence, the Lamington River isn't particularly expected to host migratory fish besides American eels, although the headway striped bass make up the Raritan during floods may seem surprising. The amazing event of a striped bass catch in the normally shallow Lamington would depend on removing the Headgates Dam. In the foreseeable future, habitat for stocked trout and smallmouth bass will see improvement.

"The Burnt Mills Remnant Dam failed in the late '50s. A big hurricane forced an unnatural bend in the river 90 degrees left, right, tearing apart that bank, working toward Milmar Street," Cowden said. Removing the dam "restores the flow to the main channel, and in a big event some water will go to the left channel."

In concert with the Raritan Headwaters Association, Trout Scapes will enter the river with heavy-duty digging equipment and additionally enhance a half mile of stream bed as suits the river's natural course. "There'll be a bunch of new pools. It's going to significantly improve fishing for stocked trout and smallmouth bass," Cowden said. "I don't know whether we can expect any wild trout. Trout production water is only a couple of miles upstream, where electro-shock in 2015 revealed wild browns." Those stretches in-between feature a lot of muddy shallows, however.

Of these four rivers with dam concerns, the Musconetcong's trout habitat has not only historically remained the best; it has the most to gain. "Hughesville Dam in itself, in my mind, is not as important as what it sets up," continued Cowden. "The removal of the 35-foot Warren Glen Dam will open up the beautiful Musconetcong Gorge, which will rival in beauty the Ken Lockwood Gorge. It's that demo that allows the Bloomsbury Dam above it to be removed as well."

A free-flowing river radically improves ecology, Cowden pointed out. "Lower water temperatures, proper sediment transportation through all these regions where the dams have been will allow much better macroinvertebrate habitat. Hatches are critical. It will give opportunity for our wild browns and our native brook trout that are in the tributaries spawning to move up and down the main stem of the Musconetcong, which strengthens genetics. Dams can interrupt that process by isolating populations between dams. One of the most exciting



The Burnt Mills Remnant Dam on the Lamington River. Bruce Litton photo.

things is to get dams out and allow the genetics to continue on and strengthen."

The Hughesville Dam removal proved less difficult than expected, which may ease the way somewhat to the next removals. "We thought there was going to be more silt that there was. There was a lot of rock. Old stumps were there from the 1800's," Alan Hunt said.

In any case, the 19th century past implies a lot about where we stand now facing the future. New Jersey, the most densely populated and built-up state in the nation, may exist as the ultimate bellwether for environmental concerns like dam removal.

"If we can do it in New Jersey, we can do it anywhere," Hunt said. "We are a state where our nation's industrial revolution happened. A good number of dams are old grist mills. They're really part of our industrial legacy. There's an adaptive reuse of industrial use for recreational use. Some of these older features of the industrial landscape are resources for our future. When you talk about why this is happening in New Jersey, it's because we've had 20 years of institution building, funding development and the capacity of non-profits. A lot of times we don't think of how dam removal can improve water quality for drinking. Our river herring are almost gone, as are American shad. And they're forage for other ocean species. These dams are affecting the entire food chain."

The importance of dam removal is undeniable. Old industry is gone, and a new age of shaping the planet to suit life on all levels is beginning.