

Survivor Browns—The Farmington River’s Special Strain

By Kierran Broatch

Over the years, Connecticut’s West Branch of the Farmington River (WBFR) has gained a well-deserved reputation as one of the best trout fishing destinations in the Northeast. Part of WBFR’s success is due to the fact that it is a “tailwater” fishery, meaning that its waters are immediately downstream of a hydraulic structure, in this case the Goodwin Dam in Colebrook. This is good for trout and trout anglers alike because cold, clean, well-oxygenated water from West Branch Reservoir (aka Hogback) feeds the river all year-round through the base of the 135-foot high dam. So, even during the dog days of a New England summer, the water temperature in the WBFR is ideal for cold-water species like brown trout, brook trout, and rainbow trout.

The Farmington’s chilly waters cannot take all the credit for its top-notch fishing, however. For nearly a decade, DEEP Inland Fisheries Division biologists have been perfecting a strain of brown trout known as “Survivors,” which have become a highly sought-after quarry by trout anglers visiting the Farmington River. The goal of the “Survivor” strain is to increase the proportion of fish hatched within the



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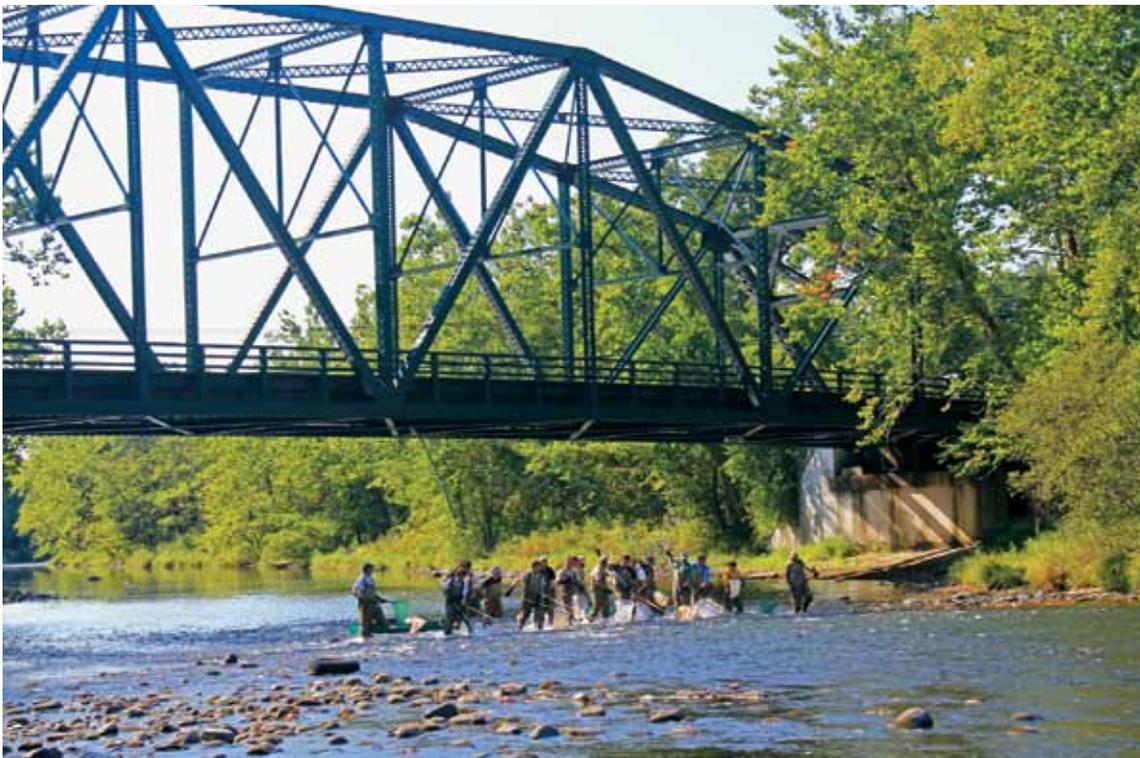
After collecting hundreds of trout from a sampling segment, biologists carefully select a handful of the best fish, based on overall condition and color, that are ripe with sperm or eggs.

river to self-sustaining levels.

The reoccurring story of the Survivor strain begins each September when dozens of Inland Fisheries Division staff amass on the banks of WBFR to sample multiple standard segments within the finest trout habitat between the Route 219 bridge in New Hartford and People’s State

Forest in Barkhamsted. The method of sampling, known as “electrofishing,” uses electric currents in the water to temporarily stun fish so they can be easily captured. It is a sight to behold, watching the large crew donning waders and carrying long-handled nets marching upstream in unison. In tow are canoes with generators that provide electricity to electrodes on long wands that are waved through the water as they make their way upstream. As fish come within range of the electrodes, they experience muscular convulsions and then zig-and-zag while the crew frantically nets and transfers them into floating holding pens that are safely out of range of the electrofishing gear.

Electrofishing is an effective way to assess fish populations. The technique sounds worse on the fish than it actually is. When electrofishing is done properly, fish snap out of their stunned state in just minutes. After the shocking crew has filled the holding pens with fish, they shut the electrofishing gear



Each September, staff from the Inland Fisheries Division use electrofishing gear to collect hold-over and wild hatched brown trout to be used for making the next generation of “Survivor” brown trout.

down in order to count, measure, and document all of the netted trout.

While handling these fish, biologists are on the lookout for the very best brown trout of the bunch. These are often the biggest and most beautiful specimens that were either hatched in the river (wild) or stocked a previous year and survived, earning them the title of “holdover.” A mix of wild and holdover male and female candidates are chosen, anywhere from 60 to 120 in all, and rushed from the holding pens to a hatchery tanker truck waiting nearby. To help determine if the fish were raised at the hatchery or in the river, several scales are collected for review. Fish scales develop differently in the hatchery than in the wild, so using a microscope, biologists can determine origin. The scales also can be used to age the fish—as fish grow, a ring is added to scales each year (just like growth rings in trees). The quality trout are then whisked away to the Burlington State Fish Hatchery where their work begins as breeders in the Survivor strain stocking program.

Their stay at the hatchery is short, just long enough to collect a sufficient amount of eggs and sperm. The breeders are released back to the wild a few weeks later, where they habitually move back to the general area of capture, sometimes to the same exact lie. Their high quality offspring are raised at the hatchery as two different size classes—adults or yearlings. The adult Survivors are stocked as two-year-olds and are typically between 14 to 18 inches in length. The yearlings are stocked after just one year in captivity and on average are between six to 12 inches.

Survivors get stocked into the WBFR each spring. On average, about 1,000 adults are put in every April, along with anywhere from 3,000 to 5,000 yearlings. While the trout stocked as adults usually max out in length under 22-inches, the Survivors stocked as yearlings can reach much larger sizes. With WBFR’s fish-friendly regulations, including a seasonal 21-mile Trout Management Area, these fish are given the chance to be caught and released over and over again, growing wiser with each angler encounter. The longer Survivors live in the river, the more they resemble the beautiful wild browns which have successfully spawned within the Farmington River.

The Survivor program has been so successful in the Farmington that it is now one of the best sources for fry stocking in other rivers in Connecticut where the Inland Fisheries Division would like to reinforce existing brown trout populations. In the Housatonic River in Cornwall, for example, approximately 500 adult and 3,000 yearling Survivors have been stocked each fall for the last three years, and they are taking quite well to their new environs.

The result of years of selective crossbreeding the finest specimens from the



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Fly fishing the West Branch Farmington River is an activity enjoyed by thousands of anglers each year. The main draw is the quantity of large colorful brown trout.



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An elastomer tag can often be found just behind the eye. The color and location of the tag can identify the year and age when the fish was stocked. These fish (2 photos) are tagged with “orange” and “left” and are adults stocked in 2014.

WBFR Elastomer Tags

The next time you land one of these tremendous fish, check behind the eyes for a small thread-like line. To differentiate Survivor offspring from other trout, their adipose fin is clipped and they are given colored identification marks called elastomer tags. These tags are implanted into the transparent tissue behind one of the trout’s eyes. Adult Survivors receive elastomers behind the left eye and the yearlings are injected behind the right eye. Each year, biologists use a different color tag, allowing fisheries staff and anglers to conveniently keep track of Survivors’ age and how long they have lived in the river.

Year	Amount / Size	Elastomer Color / Eye
2014	1,000 adults	Orange / Left
	5,000 yearlings	No elastomer, just fin clip*
2013	1,000 adults	Dark Green / Left
	5,000 yearlings	No elastomer, just fin clip*
2012	1,000 adults	Red / Left
	3,000 yearlings	Dark Green / Right
2011	1,000 adults	Chartreuse-Yellow / Left
	3,000 yearlings	Right / Red
2010	1,000 adults	Orange / Left
	3,000 yearlings	Chartreuse-Yellow / Right

* CT DEEP was unable to mark the yearling survivors in 2013 and 2014.

WBFR, Survivors are the thoroughbred race horses of the trout fishing world. These unique fish have delighted anglers for many years with their size, beauty, and holdover capabilities. The next time a quality Farmington River brown trout graces your net, keep an “eye” out for an elastomer tag (see sidebar).

Kierran Broatch has been a volunteer for the Inland Fisheries Division in recent years and is an avid year-round angler. You can read about his fishing trips on his blog, The Connecticut Yankee.

Farmington Tag summary- to date

Year	Species	Size	Color	Side	Clips	Approx. Size
With Vertical elastomer marks						
2007	BN	Lg Adults	Blue	Left	Adipose	
	BN	Yearling	Yellow	Right	Adipose	
	BN	Yearling	White	Right	Adipose	Lunch Rock
2008	BN	Lg Adults	Yellow	Left	Adipose	
	BN	Yearling	Red	Right	Adipose	
	BN	Yearling	Green	Right	Adipose	
2009	BN	Lg Adults	Red	Left	Adipose	
	BN	Yearling	Orange	Right	Adipose	
	BN	Yearling	White	Right	Adipose	
					From 219 to 318	
					From 318 to top	no Lunch rock stocking in 09
2010	BN	Lg Adults	Orange	Left	Adipose	
	BN	Yearling	Yellow	Right	Adipose	
	BN	Yearling	Green	Right	Adipose	Lunch rock
2011	BN	Lg Adults	Yellow	Left	Adipose	
	BN	Yearling	Red	Right	Adipose	
	BN	Yearling	Yellow	Right	Adipose	Lunch rock
2012	BN	Lg Adults	Red	Left	Adipose	40+cm*
	BN	Yearling	Green	Right	Adipose	34-40cm
2013	BN	Lg Adults	Green	Left	Adipose	40+cm*
	BN	Yearling	<u>NO mark</u>		Adipose	30-36cm
2014	BN	Lg Adults	Orange	Left	Adipose	40+cm
	BN	Yearling	<u>No Mark</u>		<u>No clips</u>	15-28cm
2015	BN	Lg Adults	Orange*	Left	Adipose	40+cm
	BN	Yearling	<u>No Mark</u>		<u>No clips</u>	35+cm
2016	BN	Lg Adults	Yellow	Left	Adipose	44+cm
	BN	Yearlings	Red	Right	adipose	30+cm
2017	BN	Lg Adults	Red	Left	Adipose	40+cm
	BN	Yearlings	Orange	Right	adipose	15-30cm

*note repeat color in 2015.