

## Trout Streams Program in Kentucky for 2009

Trout fisheries in Kentucky's streams are represented by brown, rainbow, and brook trout. Before 1980, the Kentucky Department of Fish and Wildlife Resources (KDFWR) stocked primarily rainbow trout for put-and-take fisheries. As of 2009, the trout program includes six streams (17.2 miles) that have natural brook trout populations and three tailwaters (78.4 miles) and 11 streams (59.2 miles) for put-grow-take brown trout or rainbow trout fisheries. There are a total of 294.9 miles (88.4 miles in tailwaters) of trout fisheries in 66 streams (Paint Creek and Beaver Creek listed twice) that include 14 tailwaters. Forty-four percent (130.8 mi) of the total miles of trout stream fisheries is represented by brown trout. There are 8.7 miles in two streams that are managed for put-and-take and put-grow-take brown and rainbow trout fisheries at Fort Campbell Military Reservation that lies in both Kentucky and Tennessee.

Rainbow trout have been utilized in the trout program since being stocked as catchable-size fish into both Lake Cumberland and Herrington Lake tailwaters in 1952. The U.S. Fish and Wildlife Service established brook trout in two streams from stockings in 1968. The KDFWR has expanded trout fishing waters for wild brook trout to several streams with the Owhi strain, beginning with introductions of 3-4 inch brook trout in a headwater stream in 1980 and 1981. Headwater streams are considered for wild brook trout management if they have the following: (1) at least 1 mile of suitable coldwater habitat, including a maximum water temperature of  $\leq 68^{\circ}\text{F}$ ; (2) an excellent rating for all trout stream rating parameters; (3) are within public land; (4) 100% of their watershed is in silviculture; (5) there is no road access within at least 0.5 mi; and (6) they are either located above 2,000 ft msl or have a natural fish barrier.

Brown trout (Plymouth Rock strain), 3-4 inches long, were first stocked by the KDFWR in Laurel Creek during 1981-1984, resulting in the creation of a high quality put-grow-take fishery for brown trout. This stream and eight others began to be annually stocked with fingerling brown trout in 1988. These streams were selected for put-grow-take stockings of brown trout due to being rated good or excellent, having good pool habitat for good brown trout growth and survival, and not fitting the criteria for wild brook trout management.

Annual stockings of 8-inch brown trout began in the Lake Cumberland tailwater in March 1982. Herrington Lake tailwater has been annually stocked with 8-inch brown trout since 1988. Laurel River Lake tailwater has received brown trout since 1995.

In 1986 and 1987, fingerling brown trout were stocked into 10 streams to establish wild brown trout fisheries without success. Brown trout reproduction was documented in a few of these streams, but not at a level to sustain a fishable population. Two of these streams are now being stocked annually with 4- or 8-inch brown trout for providing a put-grow-take fishery - Chimney Top Creek since 1990 with 4-inch fish and Bark Camp Creek since 1992 with 8-inch fish. Annual stockings of 8-inch brown trout began in 1997 at Slabcamp, Stonecoal, Minor, Laurel, and Big Caney creeks. Trammel Fork began to be annually stocked with 8-inch brown trout in 1991 instead of 4-inch fish to improve survival. Eight-inch brown trout have been stocked at East Fork Indian Creek (Menifee County) since 1993. Laurel River Lake tailwater was added in 1995. Brown trout stocking in Slabcamp Creek / Stonecoal Branch was discontinued in 2006.

Brown trout are stocked at a rate of about 200 4-inch or 100 8-inch trout per mile in headwater streams  $\leq 20$  ft wide; 200 8-inch trout per mile in streams 21-40 ft wide; 300 8-inch trout per mile in 41-60 ft wide streams; 400 8-inch trout per mile in 61-100 ft wide streams; and 500 8-inch trout per mile in  $>100$  ft wide streams. At 50% survival through age 6 (or 5 lb fish), the biomass from these rates would result in about 30-60 lb of trout per acre. The mean standing stock of all fish in streams in Kentucky, based on fish sampling data using rotenone by KDFWR, is about 62 lb/acre, excluding the Ohio River and lower Cumberland River.

In 2009, there were 11 streams that had designated sections for a seasonal catch-and-release season. Seasonal catch-and-release regulations first became effective in 1999 at Bark Camp Creek, Cane Creek, East Fork Indian Creek, Hawk Creek, and Rock Creek (Bell Farm Bridge to TN border). Hawk Creek was deleted from stocking in 2002. Otter Creek was added in 2002. Swift Camp Creek, Left Fork Beaver Creek, Lick Creek, and Casey Creek were added in 2003. Seasonal catch and release regulations were dropped at Lick Creek in 2008, but spring stockings continue. Beaver Creek, Elk Spring Creek, Middle Fork Red River, and East Fork Clarks River were added in 2004. East Fork Clarks River was deleted from stocking in 2007. Big Bone Creek and Clear Creek became designated as seasonal catch-and-release streams in 2006. No trout are allowed to be kept from October 1 - March 31, except at Swift Camp Creek where the seasonal catch-and-release season extends through May 31. Only artificial baits are permitted during these months. Rainbow trout are stocked at a rate of about 100-500 fish per mile, depending on number of stocking sites and stream size.

A 15-inch size limit on brown trout was imposed in 1989 at Herrington Lake tailwater, but was changed back to statewide regulations in 2008. A 20-inch size limit was implemented on brown trout at Lake Cumberland tailwater in 1996. Four brook trout streams have had catch and release regulations and no live bait restrictions on fishing tackle

since 2000. A 15-20 inch protective slot limit on rainbow trout was established at Lake Cumberland tailwater in 2004. The daily limit is 5 rainbow trout, of which only 1 fish can be over 20 inches long. A statewide 12-inch size limit and 3 fish daily creel limit on brown trout became effective in 2000.

A 3.6-mile section of Paint Creek became the first stream in 2005 to be managed with a 16-inch size limit on trout and 1 trout daily creel limit. In 2006, Chimney Top Creek (2.3 mi) and Right Fork Chimney Top Creek (1.0 mi) were added to streams having this regulation. Anglers must fish with only artificial bait in these streams where the regulation applies.

### **Trout Streams Classification**

A systematic approach to trout management began in 1983 in conjunction with an inventory and rating of both existing and potential trout streams. Streams are rated based on a score of 1 (excellent), 2 (good), 3 (fair), or 4 (poor) for each of six parameters: (1) trout utilization (if previously stocked), (2) fish population structure, (3) water quality, (4) habitat, (5) fishing success, and (6) aesthetics. A mean score of 1.0-1.4 is excellent, 1.5-2.4 good, 2.5-3.4 fair, and 3.5-4.0 poor for each stream. A stream may not be considered for trout management even though it received a fair or good rating, if any of the parameters rate poor or there is lack of public access. Several streams that have an overall rating of excellent or good are only managed for a put-and-take rainbow trout fishery due to a fair or poor rating for water quality, fish population structure, and/or fish habitat.

The classification system for trout streams is based on the management scheme and rating for each stream. Four classes of trout streams were created as follows: Class I - exceptional trout streams that are rated excellent and have natural brook trout populations; Class II - high quality trout streams that are rated either excellent or good and are managed for put-grow-take trout fisheries or have carryover beyond one year; Class III - general trout streams that are rated either excellent or good and are managed for put-and-take trout fisheries; and Class IV - marginal trout streams that are rated fair and are managed for put-and-take trout fisheries.

The trout streams classification identifies 17.2 miles in 6 streams classified as exceptional trout streams (Class I) that have an excellent rating and have natural brook trout populations. Bad Branch is not open to fishing due to the occurrence of rare plants along the stream and need for protection by Nature Preserves Commission. Class II streams provide 78.4 miles of put-grow-take fisheries for brown trout in 3 tailwaters and 59.2 miles in 11 other streams. Rainbow trout Class II put-grow-take fisheries exist in 78.4 miles of 3 tailwaters and 28.6 miles of 5 streams. Class III streams include 8.5 miles of put-and-take fisheries for rainbow trout in 9 tailwaters and 72.9 miles in 18 streams. Class IV streams provide 1.5 miles of put-and-take rainbow trout fisheries in 2 tailwaters and 57.2 miles in 19 streams. Streams that rated poor were either not considered for trout management or were discontinued as streams managed for trout.

Twelve trout streams are in the Daniel Boone National Forest that offer 50.2 miles of trout fishing water. Five of 27 streams that are rated as exceptional (Class I) or high quality (Class II) trout streams reside in the Daniel Boone National Forest. These streams represent 14.6 of the 154.8 miles (9%) of Class I and II streams.

Two streams in Fort Campbell Military Reservation have been cooperatively managed by the Tennessee Wildlife Resources Agency, Fort Campbell Military Reservation, and Kentucky Department of Fish and Wildlife Resources since 1991. Although these streams are in Tennessee, they are available to Kentucky anglers to fish with a resident fishing license and trout permit, along with an annual fishing permit for Fort Campbell. Both streams are high quality (Class II) trout streams that have a combined 8.7 miles of trout fishing water.

The trout streams classification serves the purpose of identifying trout fishing streams, their extent, and type of fishery, as well as providing a better basis for making future management decisions. The inventory and rating of trout streams have been useful in identifying streams to be recommended for inclusion in Kentucky's stream use classification as coldwater aquatic habitat. This classification will benefit other state agencies with environmental responsibilities that need this information for providing better protection of streams from habitat degradation.

Future trout stream management decisions that are based on inventory data and ratings will hopefully eliminate the addition of any more marginal streams that are stocked with trout that are given a poor rating. This classification is structured based on both the rating and type of trout management for each stream, which should serve as a guideline for deciding on the type of trout stocking to recommend.

CLASSIFICATION OF TROUT STREAMS IN KENTUCKY AS OF 2007

CLASS I STREAMS: *exceptional trout streams* that have an excellent (1.0-1.4) rating and have a natural brook trout population.

	Stream <sup>1</sup>	County	Rating <sup>2</sup>	Miles of trout fishing water	Location of trout fishery	Type of trout fishery
1)	Bad Branch (Wild River) - closed to fishing by Kentucky Nature Preserves Commission	Letcher	1.0	3.2	1,800 ft msl to headwater and lake in Right Prong	Brook - wild
2)	<u>Dog Fork</u>	Wolfe	1.0	1.0	Mouth to falls	Brook - wild
3)	Martins Fork (Wild River) - section in Cumberland Gap National Historical Park closed to fishing	Bell/ Harlan	1.0	4.2	Park boundary to headwater	Brook - wild
4)	<u>Parched Corn Creek</u>	Wolfe	1.0	1.1	Falls upstream to 2nd tributary on left	Brook - wild
5)	Poor Fork (Jefferson National Forest)	Letcher	1.0	3.1	0.4 mi below confluence of left and right forks to 1.2 mi up left fork and 1.5 mi up right fork	Brook - wild
6)	Shillalah Creek - section in Cumberland Gap National Historical Park closed to fishing	Bell	1.0	4.6	1.2 mi from 1,400 ft msl to Cumberland Gap National Historical Park and 3.4 mi from park boundary to headwater	Brook - wild
Total miles				17.2		

<sup>1</sup>Streams underlined are in the Daniel Boone National Forest.

<sup>2</sup>Streams are rated based on the mean of individual scores for six characteristics as follows: fish population structure, trout utilization, water quality, habitat, fishing access, and aesthetics. A score of 1 = excellent, 2 = good, 3 = fair, and 4 = poor.

- Catch and release required of all brook trout and no use of live bait at Dog Fork, Parched Corn Creek, Shillalah Creek below the Cumberland Gap National Historical Park (CGNHP), and Poor Fork above Hwy 932 bridge.

CLASS II STREAMS: *high quality trout streams* that have an excellent (1.0-1.4) or good (1.5-2.4) rating and are managed as put-grow-take fisheries for brown or rainbow trout or have trout carryover beyond one year. Stocking dates are not announced for put-grow-take stockings.

Stream <sup>1</sup>	County	Rating <sup>2</sup>	Miles of trout fishing water	Location of trout fishery	Type of trout fishery <sup>3</sup>
<u>Tailwaters</u>					
1) Cumberland Lake (Cumberland River, including mouth of Crocus Creek)	Russell/Clinton/Cumberland	1.4	75.2	Dam to Kentucky/Tennessee border	Brown p-g-t Rainbow p-g-t, p-t
2) Herrington Lake (Dix River)	Mercer/Garrard	1.2	2.0	Dam to mouth	Brown p-g-t Rainbow p-g-t, p-t
3) Laurel River Lake (Laurel River)	Laurel/Whitley	1.2	1.2	Dam to 1.2 mi below	Brown p-g-t Rainbow p-g-t, p-t
	Subtotal miles		78.4		
<u>Streams</u>					
1) <b><u>Bark Camp Creek</u></b>	Whitley	1.4	3.9	Mouth to U.S. Forest Service Road No. 193	Brown p-g-t Rainbow p-t; scr
2) Big Caney Creek	Elliott	1.8	8.7	Mi 0.5 - 10.0	Brown p-g-t Rainbow p-t
3) <u>Chimney Top Creek</u>	Wolfe	1.5	3.3	Mouth to 2.3 mi upstream and 1.0 mi up Right Fork	Brown p-g-t
4) <b><u>East Fork Indian Creek</u></b>	Menifee	2.0	5.3	Mouth to 5.3 mi upstream	Brown p-g-t Rainbow p-t; scr
5) Fletchers Fork	Ft. Campbell – Montgomery (TN)	1.5	2.4	Lake Tael up to 1 <sup>st</sup> tributary on left above Boiling Springs Road bridge	Brown p-g-t Rainbow p-g-t, p-t
6) Little West Fork	Ft. Campbell – Montgomery (TN)	1.2	6.3	Ringold Dam up to Mabry Road bridge	Brown p-g-t Rainbow p-g-t, p-t
7) Laurel Creek	Elliott	1.6	5.0	0.9 mi above Carter School Road crossing to 4.1 mi below	Brown p-g-t Rainbow p-t

CLASS II STREAMS CONTINUED

	Stream <sup>1</sup>	County	Rating <sup>2</sup>	Mile of trout fishing water	Location of trout fishery	Type of trout fishery <sup>3</sup>
8)	<b>Lick Creek</b>	Simpson	1.8	6.6	Mouth to 6.6 mi upstream	Rainbow p-t & carry over; scr
9)	<b>Otter Creek</b>	Meade	2.0	9.7	Mouth to 9.7 mi upstream	Brown p-g-t Rainbow p-t & carry over; scr
10)	<i>Paint Creek</i>	Johnson	1.6	3.6	Upper Hwy 460 bridge upstream to Hwy 40 bridge	Brown p-g-t Rainbow p-g-t
11)	Trammel Fork	Allen	1.8	4.4	Mi 23.4 - 27.8	Brown p-g-t Rainbow p-t
Subtotal miles :				59.2		
Total miles:				137.6		

<sup>1</sup>Streams in italics have a 16-inch length limit, 1 fish daily creel limit, and artificial bait requirement for trout; streams underlined are in the Daniel Boone National Forest; seasonal catch and release streams are in bold.

<sup>2</sup>Streams are rated based on the mean of individual scores for six characteristics as follows: fish population structure, trout utilization, water quality, habitat, fishing access, and aesthetics. A score of 1 = excellent, 2 = good, 3 = fair, and 4 = poor.

<sup>3</sup>P-g-t: put-grow-take fishery; p-t: put-and-take fishery; scr: seasonal catch-and-release

- 12-inch statewide size limit on and 3 fish daily creel limit brown trout.

CLASS III STREAMS: *general trout streams* that have an excellent (1.0-1.4) or good (1.5-2.4) rating and are managed for put-and-take rainbow trout fisheries. Stocking dates and locations are announced.

Stream <sup>1</sup>	County	Rating <sup>2</sup>	Miles of trout fishing water	Location of trout fishery	Type of trout fishery <sup>3</sup>	
			<u>Tailwaters</u>			
1)	Buckhorn Lake (Middle Fork Kentucky River)	Perry	2.4	0.5	Dam to 0.5 mi below	Rainbow p-t
2)	Carr Creek Lake (Carr Fork)	Knott	2.2	0.5	Dam to 0.5 mi below	Rainbow p-t
3)	Cave Run Lake (Licking River)	Bath/Rowan	2.4	1.2	Dam to 1.2 mi below	Rainbow p-t
4)	Fishtrap Lake (Levisa Fork)	Pike	2.2	1.7	Dam to 1.7 mi below	Rainbow p-t
5)	Martins Fork Lake (Martins Fork)	Harlan	2.4	1.0	Dam to 1.0 mi below	Rainbow p-t
6)	Nolin River Lake (Nolin River)	Edmonson	2.4	1.5	Dam to 1.5 mi below	Rainbow p-t
7)	Paintsville Lake (Paint Creek)	Johnson	1.6	0.2	Dam to Hwy 40 bridge	Rainbow p-t
8)	Rough River Lake (Rough River)	Breckinridge/ Grayson/Ohio	2.4	1.4	Dam to 0.8 mi below; 0.3 mi above Hwy 54 bridge to 0.3 mi below	Rainbow p-t
9)	Yatesville Lake (Blaine Creek)	Lawrence	1.8	0.5	Dam to 0.5 mi below	Rainbow p-t
			<hr/>			
			Subtotal miles:			
			8.5			
			<u>Streams</u>			
1)	<b>Beaver Creek</b>	Wayne	1.6	2.8	Hwy 90 bridge upstream to Hwy 200 bridge	Rainbow p-t; scr
2)	<b>Big Bone Creek</b>	Boone	2.4	2.1	Big Bone Lick State Park	Rainbow p-t, scr
3)	<b><u>Cane Creek</u></b>	Laurel	2.2	6.6	Mouth to 6.6 mi upstream	Rainbow p-t, scr
4)	<b>Casey Creek</b>	Trigg	1.2	3.6	Mouth to 3.6 mi upstream	Rainbow p-t, scr
5)	<b>Clear Creek</b>	Bell	2.4	4.6	Hwy 190 bridge downstream to mouth	Rainbow p-t

CLASS III STREAMS CONTINUED

Stream <sup>1</sup>	County	Rating <sup>2</sup>	Miles of trout fishing water	Location of trout fishery	Type of trout fishery <sup>3</sup>
6) East Fork Little Sandy River	Boyd	2.4	2.0	Mi 24.0 - 26.0	Rainbow p-t
7) <b>Elk Spring Creek</b>	Wayne	1.4	2.8	Mouth upstream 2.8 mi to upper end of Monticello Park	Rainbow p-t; scr (urban)
8) Goose Creek	Casey	2.4	1.2	Mi 4.2 - 5.4	Rainbow p-t
9) Hatchery Creek	Russell	1.4	0.3	Mi 0.0 - 0.3	Rainbow p-t
10) Line Fork	Letcher	2.0	10.0	Mi 5.0 - 15.0	Rainbow p-t
11) Lynn Camp Creek	Hart	1.8	5.1	Mi 2.9 - 8.0	Rainbow p-t
12) <b><u>Middle Fork Red River</u></b>	Powell/Wolfe	2.4	3.8	Mi 9.4 - 11.0 (1.6 mi in DBNF)	Rainbow p-t; scr in Natural Bridge State Park
13) Middle Fork Rockcastle Creek	Martin	2.4	2.0	0.1 mi upstream from Route 3 concrete bridge and Hwy 645 junction to 1.0 mi below	Rainbow p-t
14) <b><u>Rock Creek</u></b>	McCreary	1.8	18.6	Confluence of White Oak Creek to KY/TN border	Rainbow p-t, scr
15) Round Stone Creek	Hart	2.4	1.5	Mi 2.5 to KY Hwy 1140 Bridge	Rainbow p-t
16) Russell Fork	Pike	2.2	3.0	Mouth of Elkhorn Creek upstream to Virginia border	Rainbow p-t, scr
17) <b><u>Swift Camp Creek</u></b>	Wolfe	2.0	1.8	Mouth to 1.8 mi upstream	Rainbow p-t, scr
18) War Fork	Jackson	2.0	1.1	Turkey Foot Recreation Area upstream to Steer Fork	Rainbow p-t
Subtotal miles			72.9		
Total miles:			81.4		

<sup>1</sup>Streams underlined are in the Daniel Boone National Forest; seasonal catch and release streams are in bold.

<sup>2</sup>Streams are rated based on the mean of individual scores for six characteristics as follows: fish population structure, trout utilization, water quality, habitat, fishing access, and aesthetics. A score of 1 = excellent, 2 = good, 3 = fair, and 4 = poor.

<sup>3</sup>p-t: put-and-take fishery; scr: seasonal catch-and-release.

CLASS IV STREAMS: *marginal trout streams* that have a fair rating (2.5-3.4) and are managed for put-and-take rainbow trout fisheries. Stocking dates and locations are publicized.

Stream <sup>1</sup>	County	Rating <sup>2</sup>	Miles of trout fishing water	Location of trout fishery	Type of trout fishery <sup>3</sup>	
<u>Tailwaters</u>						
1)	Dewey Lake (Johns Creek)	Floyd	2.6	0.5	Dam to 0.5 mi below	Rainbow p-t
2)	Grayson Lake (Little Sandy River)	Carter	2.6	1.0	Dam to 1.0 mi below	Rainbow p-t
	Subtotal miles:			1.5		
<u>Streams</u>						
1)	Beaver Creek	Wayne	3.0	5.7	Mi 21.0 - 24.9 (Hwy 167 bridge upstream to Rick Hollas Road bridge)	Rainbow p-t
2)	<u>Big Double Creek</u>	Clay	2.6	1.2	Mi 1.7 - 2.9	Rainbow p-t
3)	<u>Craney Creek</u>	Rowan	2.6	2.0	Mouth upstream to 2.0 mi	Rainbow p-t
4)	Greasy Creek	Leslie	2.8	2.5	2.0 mi below 1 <sup>st</sup> bridge crossing on Hwy 2009 to 0.5 mi above bridge	Rainbow p-t
5)	Hood Creek	Johnson	2.8	0.3	Mi 6.5 - 6.8	Rainbow p-t
6)	Jennings Creek	Warren	2.5	6.8	Mi. 0.0 - 6.8	Rainbow p-t
7)	<b>Left Fort Beaver Creek</b>	Floyd	2.5	3.6	0.7 mi S of Price at Hwy 122 bridge upstream to S Floyd H.S. Athletic Field	Rainbow p-t, scr
8)	Little Whippoorwill Creek	Logan	3.0	4.5	Mouth to 4.5 mi upstream	Rainbow p-t
9)	<u>North Fork Triplett Creek</u>	Rowan	3.0	4.0	Mi 8.0 - 12.0	Rainbow p-t
10)	Peter Creek	Barren	2.8	7.6	Mi 9.3 - 16.9	Rainbow p-t
11)	Raven Creek	Harrison	3.0	2.0	Mi 2.5 - 4.5	Rainbow p-t

CLASS IV STREAMS CONTINUED

Stream <sup>1</sup>	County	Rating <sup>2</sup>	Miles of trout fishing water	Location of trout fishery	Type of trout fishery <sup>3</sup>
12) <u>Right Fork Buffalo Creek</u>	Owsley	2.6	0.2	Mi 1.9 - 2.1	Rainbow p-t
13) <u>Rough Creek</u>	Hardin	2.8	2.0	Rough River Lake upstream to 1.75 mi above Pierce Mill Bridge	Rainbow p-t
14) <u>Royal Springs</u>	Scott	2.5	0.7	Mouth to Georgetown Water Treatment Plant	Rainbow p-t (urban)
15) <u>Sinking Creek</u>	Breckinridge	2.6	4.5	Hwy 60 Bridge to Big Spring	Rainbow p-t
16) <u>Station Camp Creek</u>	Estill	3.0	3.0	Mi 14.0 - 17.0	Rainbow p-t
17) <u>Sturgeon Creek</u>	Lee	2.8	2.0	Mi 8.0 - 10.0	Rainbow p-t
18) <u>Sulphur Spring Creek</u>	Simpson	2.6	4.2	Mi 2.7 - 6.9	Rainbow p-t
19) <u>Triplett Creek</u>	Rowan	2.6	0.4	Dam in Morehead to 0.4 mi upstream	Rainbow p-t (urban)
Subtotal miles :			57.2		
Total miles:			58.7		

<sup>1</sup>Streams underlined are in the Daniel Boone National Forest; seasonal catch and release streams are in bold.

<sup>2</sup>Streams are rated based on the mean of individual scores for six characteristics as follows: fish population structure, trout utilization, water quality, habitat, fishing access, and aesthetics. A score of 1 = excellent, 2 = good, 3 = fair, and 4 = poor.

<sup>3</sup>p-t: put-and-take fishery; scr: seasonal catch-and-release.