Eastern Brook Trout: Roadmap to Restoration

Eastern Brook Trout
JOINT VENTURE

Steve Brown

Eastern Brook Trout: Roadmap to Restoration

Clint Ferguson

Our Brook Trout Heritage

The brook trout is an American symbol of persistence, adaptability, and the pristine wilderness that covered North America prior to European settlement. It is the only native trout that inhabits the cold, clear streams of the eastern United States. It is the state fish in many eastern states and is a prized sport fish by anglers. It is truly a heritage fish species.

Unfortunately, historical land uses have taken a toll on our landscape, greatly diminishing the presence of brook trout throughout its native range. Today it is estimated that less than 9% of the areas that historically supported brook trout are intact. Most brook trout are relegated to headwater streams, where forest cover is still prevalent. Unable to thrive in poor quality water or degraded habitats, brook trout are excellent indicators of clean water and healthy aquatic systems. Their disappearance within a watershed indicates environmental decline. The documented decline of brook trout throughout their eastern range should serve as a warning about the state of our nation's waters.

The situation is certainly not hopeless. Through a coordinated and focused effort, we have a unique opportunity to reverse the trend of brook trout decline by restoring habitat and improving water quality, to benefit both brook trout and human habitat for generations to come.

The Eastern Range of Brook Trout

The Joint Venture's Vision: Healthy, fishable brook trout populations throughout their historical range. In 1969 MacCrimmon and Campbell published this map of the pre-European range of eastern brook trout. This area is treated as the boundary of brook trout populations in the East, even though additional brook trout habitat exists in the upper Midwest. The study area represents approximately 70% of the brook trout range in the US, and about 30% of the brook trout

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Status of Eastern Brook Trout within the Study Area:

▶ Watersheds with survey data (62%)
- **Less than 9% is 'intact'**
- **14% area is 'reduced'**
- **43% is 'greatly reduced'**
- **33% shows brook trout have been lost**

▶ Other Watersheds (38%):
- **50% is predicted present**
- **37% are unknown with no data**
- **12 % have an unknown history of presence**

▶ Most large rivers no longer support reproducing populations.

▶ Brook trout largely have been relegated to small headwater streams.

See the full assessment report at www.easternbrooktrout.net or call your state fishery agency to learn more about brook trout status and threats.

Working Together to Bring Back Brook Trout

The National Fish Habitat Action Plan (National Habitat Plan) is leading a landmark national effort to improve our nation's fish populations, improve water quality of lakes and streams, and increase recreational fishing opportunities. In 2004 state and federal agencies, conservation groups and academics concerned about the decline of eastern brook trout formed the Eastern Brook Trout Joint Venture as a pilot partnership under the National Habitat Plan umbrella. The Joint Venture partnership provides leadership in brook trout conservation at many scales throughout its eastern range. It organizes and builds from the strengths of the individuals, organizations, foundations, businesses and public agencies committed to and active in brook trout conservation and restoration.

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range in North America. For the purpose of this document, "range-wide" refers to the study area depicted here.

Brook trout have adapted to the broad range of conditions existing from Maine to Georgia. Although severe alterations to its habitat occurred over the centuries, the fish persists in every state within its original eastern range. The map on page 3 describes the findings of the Joint Venture's 2005 brook trout assessment work. Though the fish persists, its overall condition across its range is severely impaired.

Where are we on the Roadmap?

The first step of any journey is to know the starting point. The Joint Venture's first scientific step was to develop the needed information to form a basis for future conservation decisions. Joint Venture scientists worked with fishery professionals from state and federal agencies, private firms and universities to bring together the existing information and professional knowledge concerning brook trout across its eastern range. The Joint Venture scientists, in concert with 17 state fishery agencies, assessed each of more than 11,400 eastern subwatersheds (indicating a stream's drainage boundary- hereafter called 'watersheds') with an average size of about 22,000 acres. The team determined brook trout status, impairments and threats within each of these detailed planning units where information was known. These known watersheds form the foundation for the range-wide conservation strategy.

One major finding of that assessment is that in about 38% of the watersheds, documented information was not available to make definite statements about the condition of brook trout populations. In about half of these undocumented watersheds, models do predict the presence of brook trout. Additional information is needed to fill the gaps in the remaining watersheds. In some, we may never know whether brook trout ever existed.

The watersheds were assessed for population presence, integrity and range within the watershed. They were also assessed for threats and perturbations which could impair or are impairing populations. In the instances where total loss has occurred, the probable cause was identified. The resulting information conveys the condition, threats and causes of impairment to brook trout for all known areas within the historical eastern range.

The condition of brook trout within each watershed is conveyed using the colors on the map. Green, or Intact, means brook trout inhabit more than 90% of their original range within the watershed. Yellow, or Reduced, means that 50-90% of the watershed's original range is inhabited. Red, or Greatly Reduced,

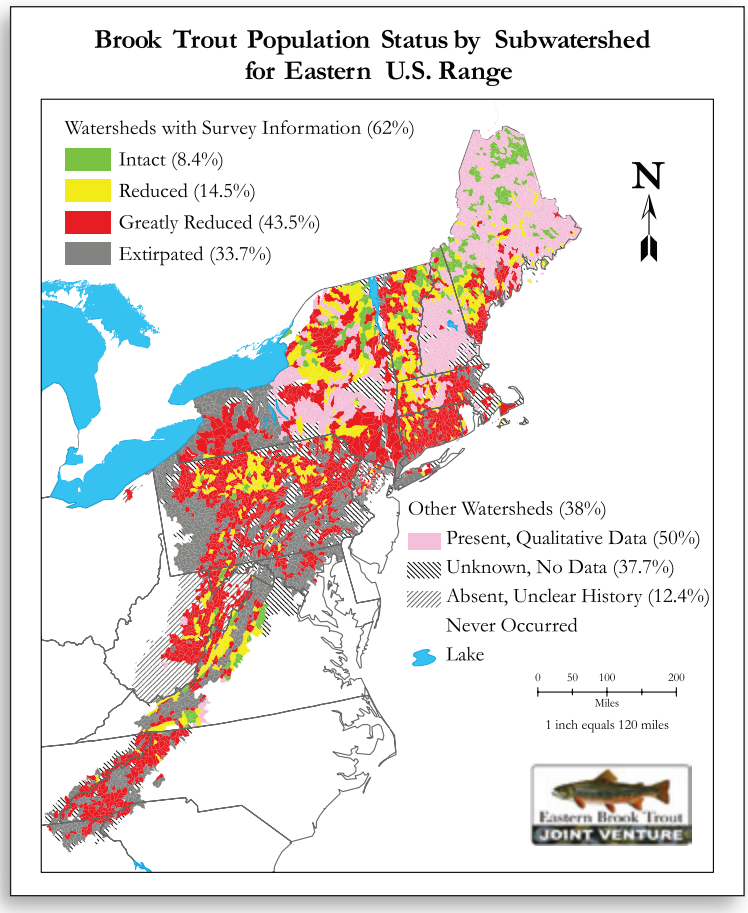
The Joint Venture Approach

Building from its landmark assessment work, the Joint Venture has developed a Conservation Strategy that provides the blueprint for brook trout conservation and restoration priorities range-wide. As it moves forward, the Joint Venture and its partners have a roadmap for the conservation and restoration of brook trout based on historical range, population integrity, habitat quality (including water quality) and vulnerabilities.

The Joint Venture has committed to a set of goals that will guide its conservation decisions at all levels of activity.

means that 0-50% is inhabited. Gray, or Extirpated, means total loss of brook trout populations within the watershed. The Joint Venture uses the color coded map to measure its progress throughout the eastern range.

The current status of brook trout by watershed—our starting point—is shown below:



Conservation Goals

Conserve, enhance or restore brook trout populations that have been impacted by habitat modification, non-native species and other population level threats.

Encourage partnerships among management agencies and stakeholders to seek solutions to regional environmental and ecological threats.

Develop and implement outreach and educational programs to ensure public awareness of the challenges that face brook trout populations.

Develop support for program implementation to perpetuate and restore brook trout populations throughout their historical range.

Using the road map, the Joint Venture and its partners encourage interested individuals, local and tribal governments, organizations, foundations and agencies to contribute at the appropriate scale.

Conservation Scales:

Brook trout conservation occurs at four scales, or levels:

1. Range-wide: The four conservation goals and five range-wide conservation objectives have been identified at this scale to guide activities at more focused scales.

2. Regional: Regional teams, led by state fish management agencies, identify focus areas, set measurable objectives, and determine preferred approaches to contribute to range-wide goals at the regional level.

3. State: States identify target watersheds, develop statewide measurable objectives and identify conservation approaches that will contribute to regional objectives.

4. Local: Local partnerships will develop projects that support the objectives outlined by the states, working with Joint Venture partners to acquire resources to complete projects.

The Eastern Brook Trout Conservation Strategy

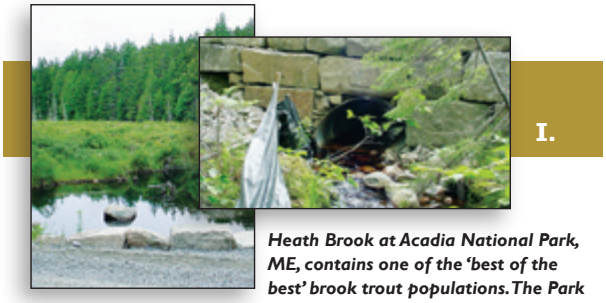
The Joint Venture's Conservation Strategy is directed by range-wide objectives to guide conservation efforts across the eastern range of brook trout. Range-wide objectives are broad statements of expected performance by the year 2025.

Although many issues affecting brook trout are range-wide in scale, conservation issues and needs do vary across the range. The Joint Venture partners divided the 17 states into three distinct regions defined by common conservation challenges and priorities. Each region will be led by a regional fishery team, which will pursue regional objectives in support of the broader range-wide goals. The regional objectives represent expectations to be achieved by 2012.

The regional approach offers several advantages. Its scale supports localized science and technology gains. In addition, the shorter five-year time horizon for goal completion provides a midterm report card. Furthermore, the regional objectives are closely tied to state conservation strategies, creating linkages between the states' practices and the Joint Venture's objectives. The regional scale introduces the idea of 'Healthy' watersheds as a planning component, which combines the Intact (green) and the Reduced (yellow) categories.

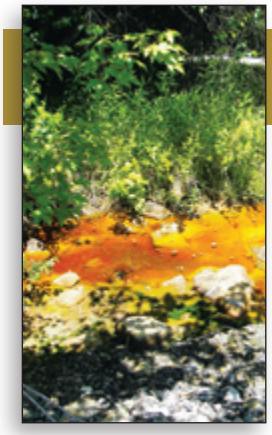
Success in meeting these objectives will be a significant stride toward meeting the vision of the Joint Venture. Success will require widespread cooperation among focused efforts on priority watersheds, and will require large resource infusions through public and private sources. The Joint Venture, working with the National Habitat Plan, will use the Conservation Strategy as its blueprint for raising and using resources at the state level. Its success will be measured against the baseline status of brook trout, defined in the 2005 assessment work.

Listed below are the five overarching range-wide objectives, to be completed by 2025. Under each range-wide objective is a specific regional goal or set of goals to be completed by 2012. Current projects related to each objective are pictured.



I.

Heath Brook at Acadia National Park, ME, contains one of the 'best of the best' brook trout populations. The Park supports brook trout populations known as 'salters' that spend a portion of their life in coastal marine estuaries. However, the culvert shown above prevents fish from moving under the road when returning from the sea.



II.

At Aaron's Run, MD the Western Maryland Resource Conservation and Development Council is leading a partnership of state and federal agencies and conservation groups to remediate all sources of habitat degradation, particularly acid mine drainage, to improve water quality and restore four miles of stream. Once completed, brook trout will be reintroduced to the stream, returning a population that was once lost.

I. Maintain the current number of intact watersheds. *We will conserve the 289 Intact watersheds.*

Maintain watersheds as Healthy (defined as green or yellow):
This regional objective reflects the states' intention to protect the 'best of the best' in each state, including those states which do not contain any Intact watersheds. This will ensure that the 'best of the best' is protected in each region. Most of the Intact watersheds are located in the Northern region, so high value is placed on the rarer 'best of the best' in the other regions. Because the majority of Intact and Reduced watersheds occur in the north, the Northern Region will direct more effort toward accomplishing this objective.

II. Establish self sustaining brook trout populations in 10 % of the known extirpated watersheds. *We will bring back the brook trout, changing 116 gray watersheds to red.*

By 2012, establish 44 self sustaining brook trout populations in watersheds where none existed in 2005 (remove gray):
Successful re-establishment of wild populations restores brook trout to their historical areas, connects isolated populations, and provides the foundation for expanding populations, habitat and fishable streams. Fisheries managers will identify appropriate watersheds and stream reaches that could potentially support wild brook trout populations. Managers believe opportunities exist, and this regional objective reflects optimism that almost 40% of the long term goal will be achieved by 2012.

III. Change the classification of 30% of the watersheds. ***We will strengthen the populations we have, changing red watersheds to yellow and yellow watersheds to green.***

By 2012, change 45 Reduced (yellow)/Greatly Reduced (red) watersheds to Healthy (yellow or green): Active conservation applied to watersheds with the potential to improve brook trout population and habitat range is expected to create classification changes in 45 watersheds evenly distributed throughout the regions. Regional fishery professionals agree this objective may be the most difficult to attain with the current resource investment levels. Wholesale, landscape change of this magnitude will require committed resources to accomplish this objective.

IV. Maintain and improve 70% of watersheds. ***We will curb the decline of population loss, preventing yellow watersheds from going red, and red watersheds from going gray, while maintaining or strengthening red and yellow watersheds.***

By 2012, strengthen Healthy watersheds range-wide: Efforts to improve 'reduced' (yellow) watersheds may fall short of crossing over to the 'Intact' (green) classification, but the work does have immense value in setting the stage for future improvement. The mid-Atlantic region will make the greatest contribution to this objective, since enhancement activities are a priority for healthy watersheds. Overall, 46 watersheds are the target for this objective.

By 2012, strengthen 45 Greatly Reduced watersheds: Actively strengthening reduced populations supports the range-wide vision by avoiding vulnerability to extirpation and provides foundation work for classification changes in subsequent planning periods.

By 2012, maintain 70% Greatly Reduced watersheds in existing condition: Avoiding loss of condition within the watershed is equally – if not more -- important at the vulnerable Reduced level as it is at the Intact level. To prevent landscape-scale backsliding to extirpation, the regional strategies support maintaining status quo on 'greatly reduced' (red) watersheds.

V. Determine status of unknown watersheds to validate the model used to predict unknown watersheds. ***We will improve our knowledge of brook trout population health and distribution by validating the factors used to predict presence of brook trout.***

By 2012, assess 50% of predicted watersheds to validate model: Data are lacking to confirm brook trout status for many watersheds in the northern region. To fill the gap in conservation management decisions, models were used to predict status. The validity of predicted values needs to be tested by ground truthing the results.

III.

Partners are working on the White River, VT to improve stream and watershed conditions to save imperiled populations that we may soon lose if action is not taken. Livestock will be fenced from the stream and floodplain, trees will be planted to shade the stream, and fish friendly crossings will be installed to reduce erosion and decrease water temperatures. This will provide improved habitat for spawning and rearing of brook trout.

IV.

Upper Kettle Creek, PA currently supports a population of brook trout that is stable but not thriving. The picture illustrates the long riffle/run complexes that make up most of the stream habitat in north central PA. Physical habitat improvements will create pools, reduce bank erosion, and create more cover for the stream. These improvements will help us meet our objective of maintaining stable populations while working toward growing healthy fishable populations.

V.

Students at West Virginia University conduct fish surveys to determine the condition of brook trout populations in streams where information is currently unavailable or insufficient. This and other survey efforts will help us 'fill in the gaps' in our understanding of the overall condition of brook trout across its eastern range.

CASE STUDY

Reducing habitat fragmentation

Stevensville Brook, Mount Mansfield State Forest, Vermont

Habitat fragmentation caused by barriers to fish passage such as dams, road crossings and culverts have been identified as one of the principal stressors of brook trout populations in the northern region. Chris Smith, Partners for Fish and Wildlife Program State Coordinator, U.S. Fish and Wildlife Service, is leading a partnership in Vermont to replace an existing failed culvert with a bridge to enable the year-round upstream movement of brook trout on Stevensville Brook. With financial support from the Eastern Brook Trout Joint Venture and other partners, the project will be completed in 2007. It will serve as an example for barrier removal in other parts of the state, region and throughout the range of eastern brook trout.

Stevensville Brook Project Partners:

State of Vermont Fishery
USFWS Partners For Wildlife Program

The top photo shows the culvert in question at Stevensville Brook. The brook trout will pass through the culvert in one direction, but will be unable to pass upstream. The fish that pass through the barrier are isolated from upstream populations. The lower photo shows an installation allowing passage in both directions. Road crossings like this allow isolated fish to reconnect and build more robust populations.

Northern Region

The last, best stronghold for brook trout in the eastern United States is in the northern region. More intact populations are found in this region than in the other two combined. It is the only region that contains all four distinct adaptations of brook trout: riverine, stream, lake dwelling and sea-run. Although the north has large tracts of uninhabited public and private land, brook trout are severely threatened by human impacts.

Challenges in the North Region:

Sediment and high water temperature caused by land use changes
Fragmented populations from dams and culverts
Exotic species such as smallmouth bass and non-native trout

Management Priorities:

Protect intact (green) populations
Determine status of "predicted" watersheds
Reduce habitat fragmentation
Improve water quality
Build partnerships

How can you help?

If you see a possible barrier to fish, contact your local state fish biologist or Partners for Fish and Wildlife Coordinator.

Before placing culverts, consult with a fisheries professional to ensure the crossing poses no barrier to fish passage.

Get involved: Work with land managers to identify and document fish passage barriers in favorite brook trout habitat.

Changes in land use affect the streams and fish living there. As urban areas expand into brook trout habitat, land use changes remove forest cover, create storm water erosion problems, and heat the water as it passes over pavement. Consideration of these factors when planning and developing land can minimize the effect on the streams and the brook trout inhabiting them.

Mid-Atlantic Region

This region has seen the greatest decline in brook trout. Within the mid-Atlantic region, brook trout populations are scattered primarily in headwater streams originating in the mountains and foothills that span the region. Brook trout also inhabit the spring-fed limestone creeks that are prevalent in central Pennsylvania. The most southern occurrence of piedmont brook trout occurs in Maryland. Much of this land area has been impacted by poor agricultural and forest land use practices, especially in the watersheds of the ridge and valley landforms common to this region.

Where they occur, acid precipitation and abandoned mine drainage severely impact Mid-Atlantic streams. There are currently no permanent methods to remediate the effects of acid in eastern lakes and streams. The most common management strategy is periodically adding limestone to streams. Source remediation can be successful and is preferred in treating mine drainages.

Growth of mid-Atlantic cities also has contributed to the loss of brook trout. This development has resulted in warm water temperatures due to loss of forest shading along streams, heated runoff from paved surfaces, over-widening streams, and loss of physical habitat and cover in streams.

Challenges in the Mid-Atlantic Region:

Poor agriculture practices
Urbanization
Exotic species
Acid effects from mine drainage and precipitation

Management Priorities:

Protect the 23 intact watersheds remaining
Improve water quality
Promote and restore riparian forest
Remove and prevent exotic fish

How can you help?

Watershed associations are powerful forces in cleaning up acid mine drainage. Join up.

Monitor acid impacted streams for water quality for pH, conductivity and metals.

Map acid plumes and determine where acid impacts water quality and where it does not.

Contact your state water quality agency and learn more about volunteer monitoring.

CASE STUDY

Mitigating Acid Mine Drainage

Williams Run, Private Property, Venango County, Pennsylvania (PA)

Valerie Tarkowski, President of the South Sandy Creek Watershed Association, and partners are treating the effects of acid mine drainage and improving the water quality in Williams Run. Extremely low pH levels have created unsuitable habitat for most living organisms in the portion of Williams Run affected by acid mine drainage. The efforts will restore Williams Run so that it can support life, with lime treatments in the short term and construction of a limestone bed system to passively treat acid mine drainage in the long term.

This project will reconnect isolated populations of native brook trout - returning them to the main stem of Williams Run. These water quality improvements on private property will benefit the stream downstream on State Forest Lands, expanding the brook trout fishing opportunities in western Pennsylvania.

Williams Run Project Partners:

South Sandy Run Watershed Association
Five private property owners
Trout Unlimited
PA Senior Environmental Corps
Knouse Foods Cooperative
Allegheny Mineral Corp.
Mineral Township
Irwin Township
Pennsylvania agencies
- *DEP Abandoned Mine Reclamation*
- *Game Commission*
- *Fish & Boat Commission*

National Fish & Wildlife Foundation
U.S. Office of Surface Mining

CASE STUDY

Eliminating Competition from Exotic Species

Lynn Camp Prong, Great Smoky Mountains National Park, Tennessee

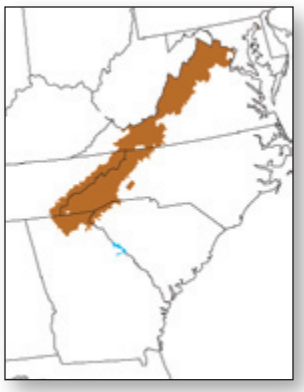
Brook trout populations have been severely impacted by brown and rainbow trout. Brook trout are unable to successfully compete for food and space with these non-native trout. The National Park Service is working to replace non-native trout with native brook trout in some of the South's highest quality habitat. Steve Moore, Fishery Biologist for the Great Smoky Mountain National Park, is leading a partnership to eliminate non-native trout species from Lynn Camp Prong. This effort focuses on the use of chemicals to eliminate rainbow trout from the stream. A natural barrier at the lower end of Lynn Camp Prong will exclude rainbow trout in the future. Approximately eight miles of stream will be restored, allowing brook trout to again inhabit the stream without competition from exotic trout species.

Lynn Prong Project Partners:

National Park Service
Little River Outfitters
Bass Pro Shops
WalMart
Federation of Fly Fishermen
Trout Unlimited
Trout and Salmon Foundation

Chemical treatment sites are designed with consideration of natural and manmade fish passage barriers which prevent exotics from encroaching upon reintroduced brook trout populations.

The Tennessee wildlife Resources Agency and the Cherokee National Forest have reintroduced brook trout into tributaries where they had disappeared. Here native southern Appalachian brook trout from an adjacent stream are released by Jim Herrig, Cherokee National Forest Fisheries Biologist. Re-introduction programs like this one help strengthen watersheds – working toward changing status and colors on the map.



Southern Region

Brook trout no longer occur in 40% of their historical range in the region. Researchers have identified a unique strain of brook trout called the southern Appalachian brook trout (SABT). This heritage strain is the keystone species of the southern Appalachians and is an important biologic, economic and recreational asset to the region. One special southern habitat is the valley spring creeks, where brook trout loss is nearly 100%. The remaining trout are generally isolated in the headwater streams, mostly on public lands.

Challenges in the South:

Agriculture practices that increase sediment and water temperature
Exotic fish
Urbanization

Management Priorities:

Protect existing brook trout from exotic competition
Improve existing brook trout habitat
Minimize land use impacts

How can you help?

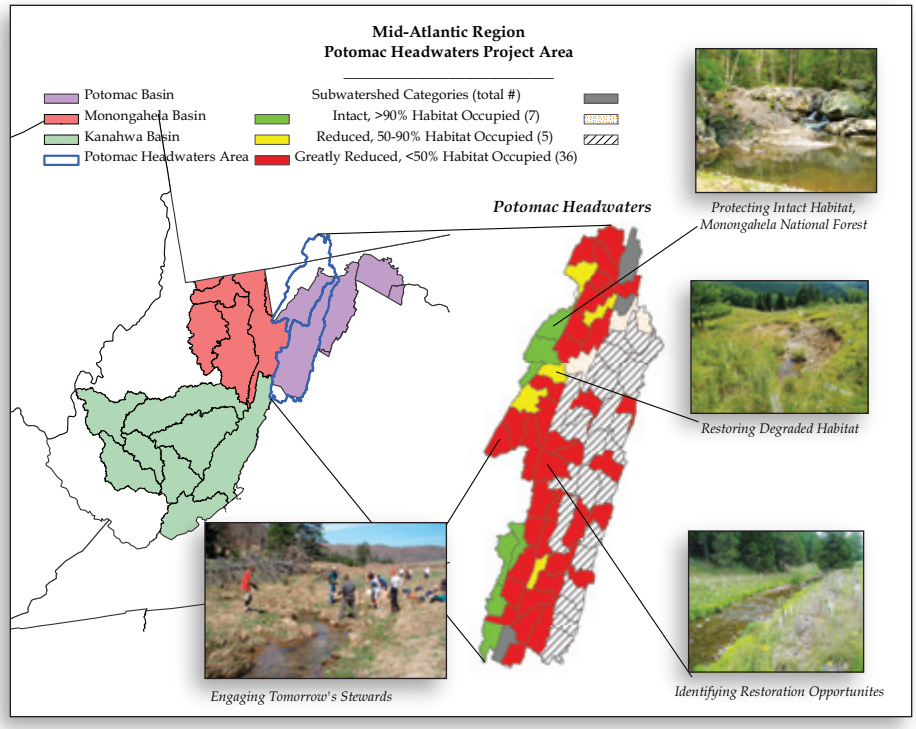
Don't use live fish as bait in brook trout streams because the bait can get free and disturb the fragile ecosystem balance.

Never carry live fish from one stream to another or from streams to ponds. Introduced fish, like bait fish, can take over the water body and displace the native fish.

Don't stock non-native fish over wild brook trout populations, including fingerlings, adults or favorite sport fish.

State Conservation Strategies

The Joint Venture is comprised of 17 states within the historical eastern brook trout range. The states address brook trout conservation by identifying priority watersheds for protection, restoration or strengthening. State plans also prioritize the assessment, monitoring and research needs based on the local conditions within the state. Many states included outreach, capacity building and educational strategies that will create awareness, build resources, and provide learning opportunities for students and stakeholders. Some states include economic factors, such as sport fishing benefits, in their brook trout conservation plans.



These 17 state planning efforts serve as the basis for the regional and range-wide conservation objectives and strategies presented in this document. The state level is where most of the watershed restoration and conservation opportunities and work occur. To demonstrate the level of detail and purpose, West Virginia's plan is a good example.

The state of West Virginia established the West Virginia Brook Trout Conservation Group. In 2006, they developed a state conservation strategy to focus resources, build partnerships and promote local action to restore brook trout habitat. Using the Eastern Brook Trout: Status and Threats report, three operational regions with target watersheds were identified for concentrated efforts. Specific streams were then identified for restoration by 2012.

One of the priority areas West Virginia identified is the Upper Potomac Headwaters. In 2005, Trout Unlimited partnered with Dominion to create the Upper Potomac River Home River Initiative, where project partners are coordinating resources to implement a watershed scale restoration of brook trout habitat. To date, riparian forests are being restored by using native riparian plant materials and fencing livestock out of riparian areas. Instream habitat improvements and abandoned mine drainage plans are moving forward. Dominion's contribution provided seed funds to identify and develop project opportunities utilizing existing state and federal programs. These projects are being implemented on public and private land.

The Joint Venture hopes to replicate this kind of public and private partnership throughout the eastern range of brook trout because it is good for the brook trout, habitat and people. It shows results.

Project Partners:

Local landowners
Dominion
Trout Unlimited
West Virginia Division of Natural Resources
U.S. Forest Service/Monongahela National Forest
Natural Resources Conservation Service
U.S. Fish and Wildlife Service
Farm Services Agency
Office of Surface Mining
WV DEP Non-point Source and AML
WV Conservation Agency
U.S. EPA Non-point Source
Potomac Headwaters Conservation District
The Mountain Institute
Pendleton County Schools
Harpers General Store
North Fork Watershed Association
West Virginia Conservation Agency

Clint Ferguson

Call to Action for brook trout restoration:

The Eastern Brook Trout Joint Venture will be successful when people, organizations, businesses, foundations, and scientists work together to conserve and restore brook trout. By doing so, we will promote healthy streams, lands, wildlife and people. This is about handing off a vibrant gift, the brook trout, to future generations.

The individual's role:

Be the eyes and ears: Be observant of streams and changes. Sometimes these changes can be subtle, like changes in color. Sometimes they can be overt like channelization, damming and poor land management. Contact your state wildlife agency when you see something that doesn't look right. Being the eyes and ears for the professionals extends and focuses the outreach and education efforts to the right audience.

Get involved in land use decisions: Planning boards, conservation districts, townships, counties and most public land management agencies ask for public input. Be there and ask the question "How does this affect brook trout?" Provide support for brook trout and efforts to improve brook trout habitat.

Educate yourself: The Joint Venture website contains lots of practical, usable information about brook trout and brook trout conservation. Educate yourself, then use your education to inform, influence and instill brook trout conservation into decisions involving brook trout or its habitat.

Donate your time to do stream work: Get involved with monitoring, restoration, watershed planning or resource boards. The website www.easternbrooktrout.net has a list of contacts for each state – use it.

The conservation organization's role:

Support Brook Trout: Brook trout are a notable keystone species because they indicate other conservation needs are being met.

Join the Eastern Brook Trout Joint Venture: The structure of the Joint Venture is designed to allow organizations to participate at the most appropriate level -- from range-wide to project level. Find the niche that best fits your organization.

Read the Eastern Brook Trout Conservation Strategy: Many organizations share conservation goals with the brook trout. Knowing how the Joint Venture works at all levels will provide many partnering opportunities for mutual benefits between non-traditional partners.

The watershed association's role:

Determine if your watershed is within the historical brook trout range: Contact your state wildlife agency to determine if brook trout are present, or historically were present, within the boundaries of your watershed. If so, then the ultimate success of the organization's goals might be intact populations of wild brook trout.

Read the Brook Trout Conservation Strategy: There may be common interests between your watershed goals and the goals of the Joint Venture. In fact, your project could receive funding and resources from the Joint Venture or its partners. Work with your state agencies to take advantage of the resources available.

Educate the membership: The motivation and momentum of watershed activity is the membership. The Joint Venture has several educational offerings at the web site available at no cost, including presentation materials.

The business' role:

Implement brook trout friendly policies: Corporate policies that are brook trout habitat-friendly can make an enormous contribution to success of the restoration of brook trout, and may qualify for tax incentives. Depending on your activity, conscientious business planning can substantially minimize impact and improve brook trout habitat.

Contribute your expertise or resources: Businesses have many varied and valuable assets and specialties that could support this program. From public relations talent to equipment rental, conservation easements to corporate volunteer programs, business contributions are needed and highly valued.

Donate matching funds: Many grants and federal programs need local private match funds. Business contributions can be leveraged by as much as 900% for certain programs used with the restoration activities surrounding brook trout. Consider donating to this cause, and use the donation for tax reduction purposes.

All individuals, organizations, associations and businesses have the opportunity to make a choice and help this movement meet the vision of healthy, fishable brook trout populations throughout their historical range.

Go to the Joint Venture website, www.easternbrooktrout.net and contact your state fishery agency to find out how you can best support eastern brook trout.

Joe Webb

Philip Smith

Some Final Words on Funding:

Like the National Fish Habitat Action Plan, the Eastern Brook Trout Joint Venture is constantly seeking to bring new funding support to priority brook trout conservation projects. The Joint Venture has already benefited from direct funding from participating state agencies; a coordination grant through the Multistate Conservation Grant Program, administered jointly by the United States Fish and Wildlife Service and the Association of Fish and Wildlife Agencies; project funding from several federal agencies and other partners; and numerous in-kind contributions from diverse local organizations. We expect funding commitments to grow over time, as demonstrated results build greater interest and momentum.

But the story and success of the Joint Venture is much bigger than new funding. It is a story built on strategic collaboration and investment. By starting with a range-wide assessment, and by gathering experts and interested citizens together to develop strategic priorities, plan work accordingly, and act collaboratively, the end result will be more measurable progress and greater sustainability than any individual organization could achieve alone.

The projects developed under the Eastern Brook Trout Joint Venture demonstrate strong partnerships and deliver measurable results, and they will help encourage greater investment in these great fish and their habitats.

Funded by a Multistate Conservation Grant from the U.S. Fish and Wildlife Service

Steve Brown

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To: _____

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