History of Wild Trout Management in Pennsylvania
Early Years (1866 – 1923)

- Governor appoints first commissioner of fisheries, no staff.
  - Address two environmental problems & prepare annual report.
    1. Dams blocking shad runs.
    2. Widespread pollution from logging & mining in "mountainous areas."

Need for conservation is recognized.
Early Years (1866 – 1923)

- In 1873 PA Fish Commission created to encourage fisheries restoration.
  - 1st Annual Report stated; “The large number of streams running through our state have become so depopulated of fishes by pollution and persistent wanton slaughter as to render them almost valueless to the people as a source of food.”
- Legislature viewed fishing as a citizen’s right to harvest a food supply.
Early Years 1866 – 1923

- PFC finds itself in the position of having to be sympathetic to citizens’ needs while being responsive to a growing conservation ethic.

- Recognizes wanton exploitation not sustainable.

- Rudimentary attempts at restoration and reductions of illegal take occur.
Early Years (1866 – 1923)
Restoration - Hatcheries & Stocking

- 1876 Corry Hatchery opens & 10,000 Brown Trout eggs arrive from Germany in 1886.
- 1883 Lehigh Hatchery opens.
- 1885 Erie Hatchery opens.
  - A few years later Rainbow Trout are stocked in the Susquehanna River.
Early Years (1866 – 1923)

Restoration - Hatcheries & Stocking

- Fry and Fingerlings are stocked gratuitously throughout Pennsylvania via Railroad & Horse and Buggy.
  - Nearly every county received Brook Trout.
  - How much did these fish contribute to past & present wild trout populations?

- 1888 Commissioner’s report:
  - “hundreds of depleted streams have been restored.”

- Little was done to address pollution & habitat loss.
Early Years (1866 – 1923)

Law Enforcement

• 1909 1st PA law makes it illegal to discharge wastes deleterious to fish.

• 1915 Wardens finally empowered to make arrests for pollution and enforce the few other laws that exist.
  • (i.e., gear types, seasons, no Sunday fishing)
Middle Years (1924 – 1968)

Trout Regulations

- **1924:** 1st trout creel limit – 25
  (6 inch length limit).
- Trout creel limit higher than for any other species.
- **PFC recognized:**
  1. Harvest could limit natural resources.
  2. A redistribution of harvest among anglers was necessary.
  3. Stocking legal size trout (6”) could supplement or replace wild trout fisheries.
## Creel Limit History

<table>
<thead>
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<tr>
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<td>25</td>
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<td>1933</td>
<td>20</td>
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<td>1936</td>
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<td>1952</td>
<td>8</td>
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<td>2000</td>
<td>5</td>
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Middle Years (1924 – 1968)

Environmental Law

- **1929** “Streams are...overloaded w/ poisonous matter.”
  - “To preserve and improve the purity of the waters of the Commonwealth for the protection of public health, animal and aquatic life, and for industrial consumption and recreation...”
- **1948** - Federal Water Pollution Control Act.
  - First major U.S. law to address water pollution.
Modern Era (1969 – Present)

1969 Wilderness Trout Program – Birth of direct wild trout management.

Credit: Rickalon Hoopes and Bruce Hollander

- Implemented after biological surveys.
- Five management guidelines evolved over time.
  1. Road access: no more than one point in two miles.
  2. Streams at least 2 miles long or 1 mile from nearest access.
  3. Reproduction must be adequate to sustain fishery.
  4. No Brown Trout introductions over wild Brook Trout.
  5. Streams must be open to public.
- There are no biomass requirements.
Modern Era (1969 – Present)

• 1969 -1972 - Ralph Abele was instrumental in the development and passage of Article 1, Section 27 of the Pennsylvania Constitution, the Environmental Rights Amendment.

“The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.”

• 2017 – Validated by PA. Supreme Court, which stated that the Commonwealth is not just a proprietor; it is a trustee of the environment.
Modern Era (1969 – Present)

- **1972 - Federal Clean Water Act.**
  - Improves on the 1948 Water Pollution Control Act.
  - Ralph Abele becomes Executive Director.
    - “Speak for those (organisms) that can’t speak for themselves.”

- PFC elevates its emphasis on resource protection by creating the Division of Environmental Services.

- 1970’s - PFC’s Robert Hesser works with Pa DER to properly classify and protect all streams in Chapter 93, Water Quality Standards.
Modern Era (1969 – Present)

- 1976 Big Spring Creek becomes 1st apparent wild trout special regulation area with a biological objective.

- 15” rainbow, brown, brook trout size limit, 2 fish creel limit, as part of brook trout population enhancement since most brook trout were < 15”.
Modern Era (1969 – Present)


- Before this very limited information on many stocked streams.
  - “fished hard by locals - stock 30 cans.”

- All stocked trout streams sampled starting in 1976.
  - Biological, Chemical, Physical and Social data collected.
  - Wild trout resources in stocked streams identified and quantified.
Population estimates run when \( \geq 30 \) WT collected in 300 meters of electrofishing.
Modern Era (1969 – Present)

- **Purpose of the Coldwater Inventory.**
  - Develop a trout stream classification system.
    - Stop stocking based on political boundaries.
    - Divide streams into management sections.
    - Stock similar sections similarly statewide via classification.
  - Manage the best wild trout sections without stocking.

Credit Delano Graff
Richard Snyder, & Martin Marcinko
Modern Era (1969 – Present)

- **Wild trout in the Coldwater Inventory.**
  - **Unknowns:**
    1. How many wild trout streams existed in Pennsylvania.
    2. How widely they were distributed.
    3. What biomass defined PA’s best wild trout streams on a statewide scale.
    4. How many wild trout streams met or exceeded that biomass.
  
- **Known:**
  1. Removing wild trout sections from stocking would be challenging.
Modern Era (1969 – Present)

- 1981- PFC approved Policy for the Conservation and Management of Fisheries Resources.

- Operation FUTURE was implemented.
  - Later, the PFBC motto “Resource First” was adopted under that program and evolved to a slogan and then to a philosophy.
Modern Era (1969 – Present)

Most pertinent aspects related to wild trout:

1. Manage wild fish as renewable natural resources that are to be conserved.
   
   “renewable” implied sustained yield, not necessarily C&R.

   “conserved” meant wisely used.

2. Stock fish where wild trout populations are inadequate to sustain fisheries at desired levels. Does not say “do not stock over any wild trout.”
Modern Era (1969 – Present)

- 1983 Management by Classification begins.
  - Wild trout biomass classifications developed in 1982 are implemented.
    - Classes A, B, C, and D
  - Class A’s met biomass requirements, which were fine-tuned based on measures of quantity and quality. Class A’s would not be stocked.
    - 87 Class A stream sections were removed from trout stocking program.
Modern Era (1969 – Present)

- **1983** Trout size limit raised from 6” to 7”
  - Protect older or faster growing wild brook trout for another year.

- Trophy Trout Program created (14”, 2/day, artificial lures): 1st biologically based special regulation program for wild trout streams, wild brown trout in this case.

- Limestone Springs Wild Trout Program started.
Modern Era (1969 – Present)

- **1995 Selective Harvest Program implemented.**
  - For wild trout streams where habitat limited trophy potential.
  - 12” size limit for Brown Trout and 9” size limit for other salmonids.
  - 2/day, artificial lures.
Modern Era (1969 – Present)


- 1997 All-tackle option added to Trophy Trout Program.
- 1999 All-tackle option added to Selective Harvest Program.
- 2006 All-tackle option added to Catch & Release Program.
Modern Era (1969 – Present)

- 1990’s PFBC’s Leroy Young led multi-agency wild trout instream flow study.
  - Produces model used by PFBC, PA DEP, SRBC in water allocation permit reviews for wild trout streams.
  - Estimates habitat loss associated with various withdrawal amounts.
  - Habitat protection criteria are linked to PFBC biomass classes.
Modern Era (1969 – Present)

- 1990’s & 2000’s habitat improvement accelerates.
  - Dam removals – PA becomes national leader.
  - Stream bank fencing and agricultural BMP’s.
    - Many groups and agencies.
  - Riparian buffer zones & In-stream habitat.
Modern Era (1969 – Present)

• 2003 PFBC adopts policy for listing WT streams.
  • Legally strengthens PA DEP & PFBC abilities to protect wild trout streams when reviewing stream & wetland encroachment permits.
    • Wetlands on flood plains of wild trout streams & tributaries receive Exceptional Value protection.
    • Either no encroachment permits issued or highest care required.
Modern Era (1969 – Present)

- 2005 Wild Brook Trout Enhancement Regulations Implemented.
- 2010 Unassessed Wild Trout Waters Program begins. Responds to:
  1. Rapid housing & commercial development.
Modern Era (1969 – Present)

- **2000’s: Selected wild trout related evaluations.**
  1. 2004 study of angler use & harvest on 200 wild trout stream sections.
    - Result – low harvest of wild trout occurs in PA averaging 11/mi. per season.
    - No statewide trout regulation changes needed.

  - Result - no program-wide improvement in the number of legal trout.
    - Again indicating no need for statewide regulation changes.
Summary

• Early years (1866 – 1923).
  1. Wild trout streams were degraded.
  2. Restoration was attempted through statewide restocking.
  3. Became illegal to discharge wastes that were deleterious to fish.

• Middle years (1924 – 1968). Recognition that:
  1. Harvest could limit natural resources.
  2. Stocking legal size trout could supplement or replace wild trout.
  3. There was a desperate need for clean water.
Summary

  - Recognition that wild trout are exceptional recreational resources in their own right with vulnerabilities that require further environmental protection and enhancement.
TO PROTECT, CONSERVE, AND ENHANCE

The History of the Pennsylvania Fish & Boat Commission

By Kenneth C. Wolensky, Ed.D.