



*American Fisheries Society*  
**Fisheries Administration Section**

**2022 Fall Meeting**  
**August 21, 2022, 1:30-3:30 PM (PDT)**  
**Cedar Ballroom, Davenport Hotel, Spokane, WA**

**Meeting Minutes**

1:30-1:45 – Welcome/call to order Gary Whelan/George Scholten

- Introduction of AFS and FAS officers/staff, guests
- Determine quorum – no quorum at start (12 present), 4 more joined later
- Review agenda
- Approve April 2022 meeting minutes – approval differed due to lack of quorum
- Financial Update and approval of Treasurers Report

1:45-2:00 – SFR Project Awards Lynn Quattro

- The annual Sport Fish Restoration Outstanding Project awards are intended to both highlight the importance and effectiveness of the Sport Fish Restoration program and recognize excellence in fisheries management, research, and education. The Fisheries Administration Section recognizes the absolutely critical importance of this program for state fisheries agencies and knows that the program is subject to periodic reauthorization by Congress and the ongoing scrutiny from the users who pay the excise tax.
- This year, we worked to broaden our distribution of the award call for proposals. As usual, we sent the announcement to FAS membership through our mailing list and the Fish Chiefs through the list maintained by AFWA. In addition, we worked with the USFWS Wildlife and Sportfish Restoration Program to distribute the announcement to all State Sportfish Restoration Coordinators in an effort to make more project managers aware of the award. American Sportfishing Association also forwarded the announcement to their membership. ASA would like to promote these awards to their membership, the tackle manufacturers, to make them better aware of the work their excise tax dollars are funding throughout the country. Both the USFWS and ASA will assist in spreading the word about these award-winning projects through their outreach efforts.
- Projects are solicited for submittal in three categories:
  1. Sport Fishery Development and Management
  2. Research and Survey
  3. Angler Recruitment, Retention and Reactivation (R3) and/or Aquatic Education
- This year, we received a total of 11 projects for consideration.
  - 4 in Sport Fishery Development and Management
    - New York Department of Environmental Conservation
    - West Virginia Department of Natural Resources
    - Missouri Department of Conservation
    - Oregon Department of Fish and Wildlife
  - 6 in Research and Survey
    - Oregon Department of Fish and Wildlife
    - Oklahoma Department of Wildlife Conservation

- North Carolina Wildlife Resources Commission
  - Arkansas Game and Fish Commission
  - Texas Parks and Wildlife Department
  - Florida Fish and Wildlife Conservation Commission
- 1 in Angler Recruitment, Retention and Reactivation (R3) and/or Aquatic Education category
  - Oklahoma Department of Wildlife Conservation
- The winner for the Sport Fishery Development and Management Category was from the New York Department of environmental Conservation titled “Evaluation of Steelhead Stocking Size and Location on Emigration and Adult Returns in Chautauqua Creek, NY.”

The goal of this study was to identify strategies that would maximize the return of steelhead stocked in NY waters, resulting in improved fishery performance and resiliency. The general objective was to develop a better understanding of how size-at-stocking and stocking location interact to influence emigration and adult returns. This study was completed over five years and required close coordination between hatchery, research, and management staff.

This work resulted a change in steelhead stocking policy for all of New York’s Lake Erie tributaries. Steelhead stocking sites were moved higher up in watersheds and there was a 50% reduction in New York’s Lake Erie Steelhead stocking. This reduction gave hatchery staff at the Salmon River Fish Hatchery the flexibility necessary to increase the size of stocked steelhead through modified rearing techniques. The modified rearing techniques developed for juvenile steelhead by Salmon River Hatchery staff significantly increased the average size (both length and weight) of the yearling fish stocked and provided a more consistent stocking product. The percentage of yearling steelhead >150 mm in 2020 (55%) was five times higher than prior to the stocking reduction, which resulted in an effective stocking number 2.7 times higher than before the stocking reduction despite stocking half the number of yearling steelhead. This work was further evaluated with an angler survey in 2021 and 2022 following the stocking policy changes that showed no reductions in in fishing quality because of the stocking reduction.

- The winner in Research and Survey was from the North Carolina Wildlife Resources Commission titled “Exotic-Invasive Trout Pathogens in North Carolina.”

The North Carolina Wildlife Resources Commission, in partnership with the Southeastern Cooperative Fish Parasite and Disease Lab at Auburn University, led the discovery of three exotic-invasive trout pathogens in the Southeastern United States. These pathogens comprised the causative agent of salmonid whirling disease (*Myxobolus cerebralis*) and two species of pathogenic gill lice. Each is of high concern for coldwater resource managers regionally. An intended overarching outcome of this agency-university partnership was the creation of region-specific management tools. This project generated groundbreaking information to support management and conservation efforts in North Carolina and abroad. They conducted the most comprehensive study of trout health in North Carolina, while developing a robust dataset for *Myxobolus cerebralis* epidemiology.

This project generated groundbreaking information to support management and conservation efforts in North Carolina and abroad. They conducted the most comprehensive study of trout health in North Carolina, while developing a robust dataset for *Myxobolus cerebralis* epidemiology. They discovered a new species of

Myxobolus infecting Brook Trout that is evidently not routinely pathogenic but morphologically nearly identical to Myxobolous cerebralis, which could have led to false positives in diagnostic tests for Myxobolous cerebralis. They also confirmed that Myxobolous cerebralis has a distinct life cycle in the southeastern United States, infecting an oligochaete other than Tubifex tubifex. This result was transformative to global understanding of the epidemiology and life cycle of Myxobolous cerebralis because the distribution of the pathogen is linked to the abundance and distribution of the definitive host. The project also generated pioneering information on two parasitic copepods species (gill lice) previously undescribed in the region.

- The winner in Angler Recruitment, Retention and Reactivation (R3) and/or Aquatic Education was from the Oklahoma Department of Wildlife Conservation titled "Operation Retention." In an unprecedented time of uncertainty and closings in the spring of 2020, the Oklahoma Department of Wildlife Conservation jumped into action to provide a ray of good news - The Outdoors Are Always Open. The agency acted quickly to execute a plan that reminded constituents that time spent outdoors is good for both mental and physical health. As a result, fishing and other outdoor activities saw a huge spike in participation. Oklahoma was a top three state in license sales growth per capita in 2020. In 2021, the agency shifted into Operation Retention to reduce the lapse and churn rate for this cohort of new anglers. The goal was to retain 55% of unique customers who purchased fishing licenses in 2020.

Curated fishing emails, blog articles, and the Fishing Resources webpages were paired with push notifications and other automated emails designed to "onboard" anglers with resources upon buying a fishing license. In collaboration with ODWC fisheries staff a comprehensive effort began to promote urban fishing opportunities (Close to Home Fishing Areas), including targeted emails to likely anglers near these ponds and social media ads with videos on days the ponds were stocked. The agency also initiated The RBFF program, Vamos a Pescar, in Oklahoma City to provide fishing opportunities to Hispanic families. Additionally, the agency greatly expanded the Ask An Angler series on the Outdoor Oklahoma YouTube channel. These highly popular live virtual training events share information to thousands of anglers of every skill level. The format allows individuals to interact with an experienced angler and get real time answers to practical questions.

The Operation Retention project was an outstanding success. License data indicates a total of 158,258 individual license holders were retained in 2021, resulting in a retention rate of 63.5%, exceeding the ambitious goal of a 55% retention rate.

## 2:00-2:30 – Reports and Updates

- Section Workplan Gary Whelan
  - Increase visibility and membership – Letter to go out to Directors and Chiefs to encourage membership
  - Increasing our relationship with FMS – Meet with FMS EXCOM
  - Policy engagement – Made sure that membership are aware of opportunities and have made sure the Drue and Doug are aware that we are prepared to assist
    - Ensured that our relationship and information flow with AFWA remains strong
  - Refocusing Fisheries on more thought papers

- Reestablishing our relationship with our relationship with the Institute of Fisheries Management, England that include an exchange of officers to respective society meetings
  - Disrupted due to COVID and will restart in the coming year
- FAS Website Gary Whelan
  - Ken Kurawski has done a bunch of revamping and editing to the site
    - Ken is requesting comments on the revisions so please take a look
  - All SFR award winner pictures and submissions have been added to website
- Fish Chief survey on Guiding requirements Gary Whelan
  - In early October 2021, two Michigan House Bills (HB 5358-5360) were introduced that would require sportfishing and hunting guides (outfitters) to be licensed and to report effort and harvest to legally operate. There are other requirements for these guides to be eligible for this license, but a primary concern that has arisen is related to non-residents being eligible to buy a sportfishing guide or hunting guide license in Michigan. The comment that has received attention by our legislature, and that MI DNR has been asked to address in committee is “why would Michigan allow non-residents to guide in Michigan when other states prohibit non-residents from guiding in their state?” To answer their questions, we sent out a survey to fisheries agencies across the US and Canada through the Association of Fish and Wildlife Agencies (AFWA) to obtain background information on fishing guides. While the legislation did not proceed beyond introduction, the information gathered is likely to be of interest to many state and provincial fisheries agencies and is summarized here. We are also in the process of writing up a peer-reviewed publication at this time.
  - Survey Results
    - On October 22, 2021, we sent out our fishing guide survey with the help of AFWA and the AFS Fisheries Administration Section. By March 2022, we received responses from 40 states and 2 provinces. In all of the responding jurisdictions guiding was allowed and was regulated in 30 states and 1 province. Non-resident guides were allowed in all responding jurisdictions.
    - Where regulated, 25 of 30 states and 1 province required the licensing of fishing guides and the other 5 of 30 states only required licenses on the Great Lakes or Saltwater but not inland waters. The license duration was annual for 29 of 30 states and 1 province. One state issues 5 year licenses.
    - License fees varied widely for both resident and non-resident fishing guides. Mean resident inland fishing guide fees were \$210 (range \$10-1,302) and mean Great Lakes and saltwater resident fishing guide fees were \$325 (range \$16-1,302). Mean non-resident inland fishing guide fees were \$420 (range \$10-1,615) and mean non-resident Great Lakes and saltwater fishing guide fees were \$616 (range \$50-1,615). Thirteen states and 1 province had the same fees for resident and non-resident fishing guides. For other 17 states, the ratio of non-resident to resident inland fishing guide fees was 4.2 (range 1.2-9.8). The ratio of non-resident to resident Great Lakes and saltwater fishing guide fees was 3.3 (range 1-9.8).
    - In addition to examining the licensing and fee structures for fishing guides, we also asked about reporting by fishing guides. A total of 16 of 30 states that license fishing guides require reporting and the 1 province that licensed fishing guides does not require reporting. Of those states that require reporting, five of those states only require legal or customer reporting but not catch reporting. Eleven of the 16 require catch reporting with a range of information gathered and most of these are states with either Great Lakes or saltwater fishing guides.

- Oklahoma has an interest in the guide survey database.
- Federal land guiding in west adds another layer of complexity – this information was not directly included, just state regulated guiding
- Julie Carter – can we use the section listserv for similar surveys – yes, contact Gary or George
- Hoot Owl Regulations Gary Whelan
  - The Michigan Department of Natural Resources – Fisheries Division brought together a diverse team of staff to examine the need for and implications of Hoot Owl Regulations to protect stream trout populations. “Hoot Owl” regulations close selected waters for the warmest part of the day, typically 2 PM to 12 AM, to reduce the effects of temperature on released stream trout. These regulations are imposed using temperature criteria that is based on the species being protected and is usually multiple days above some maximum daily water temperature. There is a group of our anglers that is very interested in having these regulations implemented in Michigan. One of the components of this analysis was to determine what other states have and are implementing in this area.
  - Survey Results
    - In early January 2022, a survey concerning the use of Hoot Owl Regulations was sent out to all state fisheries chiefs and responses were received from 27 states. Of these states, only Montana and Oregon have official Hoot Owl regulations and Colorado and Connecticut have mandatory temperature closures but do not call them Hoot Owl Regulations. California uses voluntary fishing closures extensively across their state and New York is implementing an educational strategy to address concerns with angling for salmonids during high water temperature periods. None of the other states that responded have either mandatory or voluntary closures based on temperature.
    - Montana uses a criterion of 73F for 3 consecutive days for most streams but will use 70F for streams with Bull Trout (*Salvelinus confluentus*). Once streams reach that the appropriate criterion, they are closed from 2PM to 12 AM and either entire river systems or segments are closed. Montana generally keeps these regulations in place until it is clear that the weather issue is past. To determine the need for these regulations, they use data from USGS, watershed groups, conservation districts, and NGOs, and a broad range of staff are involved in the decisions. Currently, these regulations are under review and are likely to be revised in the coming year.
    - Oregon does not have set criteria for closing either specific streams or closing waters statewide during adverse weather conditions but is developing a statewide policy that will have criteria for flow, temperature, and refugia. Similarly there is no reopening criterion in place at this time. To determine the need for these regulations, they use data from USGS, state agency and all available sources, and have specific staff and management biologists involved in the decisions.
    - Colorado uses Director Closure Authorities with following criteria for afternoon closures of streams: water temperatures above 71 F; average discharge below or equal to 50% of average; dissolved oxygen below 6.0 ppm; deteriorating fish conditions; and existence of a “known” event. Streams are reopened by field and senior biologists using weather forecasts, information from water users, and angler use. They use a broad range of information from USGS, Department of Water, and direct temperature measurements by staff and anglers. Colorado

also issues voluntary fishing closures without the Director's authority to discourage anglers from fishing.

- Connecticut closes thermal refuges on the Housatonic, Naugatuck, and Salmon rivers seasonally from June 15-September 15 to protect concentrated salmonids from overharvest and to reduce stress on those populations. This is done under their fishing regulations/orders for Special Management Areas.
  - Jim: Idaho has policy to not close streams due to temperature. Yes, there is increased mortality but catch rates and fishing pressure are lower – self regulates. Have a paper coming out soon that explores this issue. Popular article on website that Jim will send.
  - Julie: Several states looking into these types of regulations. Hoot Owl regulations might have a time and place such as for vulnerable, isolated populations that are affected by drought.
  - Gary: In Michigan, a fair number of streams would exceed this maximum temperature on a regular basis so many streams would be close. However, creel data shows that fishing pressure declines rapidly after some of the major hatches and before water temperatures warm.
  - Matt (ID) – ID has pulled together a lot of stream temperature data for their project and found that these exceedances are rare and short in Idaho.
  - Gary: A few anglers are often driving the process.
  - Jim: Is Montana looking to change? Gary: it sounds like they would like to make some changes.
  - Steve: This is an issue that transcends fisheries. Is there a holistic way to look at some of these changes in fisheries? There are a host of these temperature issues going on. Is the society a place to tell these stories and develop strategies?
  - Gary: Lots of social factors that go into these decisions. Michigan has a statewide climate change strategy that does provide guidance on this issue.
  - Jim: Our role should be to provide the science to decision makers.
  - Legislative Update from AFWA Gary Whelan
    - Did not receive an update from AFWA
- 2:30 – 3:30 – Joint meeting with Fish Management Section
- AFS Update
    - President's report April Croxton
      - Hutton Summit
      - 16 attendees at the Annual Meeting as part of Indigenous Outreach Program
      - Work on the AFS Procedures Manual will continue via a special committee under April's presidency
      - Planning in progress for a transition after Doug's retirement
      - Preparing for 2023 Meeting in Michigan
    - Executive Director's report Doug Austen
      - Latin American Fisheries Conference - May 2023 in Cancun Mexico. Diverse group involved in this event. Starting discussion of a new AFS entity with this group.
      - The 2023 AFS Annual Meeting will be in Grand Rapids Michigan one year from now.
      - World Fisheries Conference will be in March 2024 in Seattle for first time in the US. Call for symposia will be out in a month.
      - Upcoming AFS Meetings
        - Honolulu 2024
        - San Antonio, Texas 2025

- Multi-state grants
  - USFWS PR and SFR Funds that are overseen by the AFWA.
  - Each year there is \$1-3 million dollars for fisheries projects that affect multiple states.
  - Depository of calcified structures by Marty Hammel – this is our only proposal submitted this year and was subsequently approved for funding at the September AFWA meeting.
  - Getting a relatively low number of quality fisheries projects and need you to consider working with your peers to get more project proposals into the pipeline.
  - Calls for letters of intent – Spring with a due date in April or May with full proposals requested in June with a due date in July and selection is at the Fall AFWA Meeting.
  - We need to identify good projects and organize ourselves to take better advantage of this funding source.
- AFS Publications – 4.5 years ago we gathered to redefine our publications. Doing another one of these events in February 2023. Looking for nominees – if there are folks that you want to have in this discussion, send their names to Laura. The meeting will help redefine publications and identify where we need to go to meet your needs.
- Support for agency's have for their staff to be a part of AFS. We need to convey to Director's the importance of AFS to their staff. Generally, go to four regional meetings to talk about this – would be more than happy to go where you think this message is needed. What can AFS be doing to offer the services you need?
- AFS needs more literature in AFS Gray Literature Database.
- Policy update
  - RAWA – Excited about the prospects for passage this session. Passed House, bill in Senate has made it out of Committee and is just awaiting a vote on the floor. There are 42 co-sponsors - trying to get to 60 co-sponsors. Need help getting it across the line – encourage your Senators to support RAWA. Every voice matters in this effort.
  - Jim: Given the mid-terms coming up, how does that affect the chances of RAWA? Drue: if we don't get it passed this congress, it will need to start over after elections.
- Continue to work on AIS policy and working on suite of recommendations.
- Marine aquaculture – briefing in support
- Waters of the US (WOTUS) – AFS filled a brief with the Supreme Court. EPA has interim rule with more durable rule by end of year.
- Policy Program has grown over the past few years and has been supported by a substantial donation. Establishing a fund to continue to support these efforts.
- Gary: We are excited to assist you – we have knowledge and expertise to help AFS Policy Program
- Running another class of Climate Ambassadors. Also working on some online training.
  - Justine (WI) – staff that attended this program got a lot out of it – very beneficial

- BIL Update

Gary Whelan/Julie Carter/Jim Fredericks

- Over 60 programs funded with over \$2.5 billion dollars with much emphasis on connectivity and are generally using existing programs and authorities to move funds.
- Initial funding for some of the projects, particular those of USFWS and NOAA have started to flow but much more to come and nearly every major fish and wildlife related federal program will have funding available including USFWS, USFS, NOAA, BuREC,USACOE, FEMA, FHA, NRSCS, and USEPA.
- MI DNR is completing an analysis that we could share on the programs that will be done by the end of next week.
- Many of the federal program convened a BIL workshop at NCTC in July to generate ideas on how to implement BIL along with how to fill key gaps in monitoring, implementation, communication, and prioritization.
- A follow up BIL workshop will be held on Tuesday afternoon from 1:20-3:50 – 100A and will be a focused brainstorming on monitoring and documenting success.
- Julie: Plenary on Tuesday has 3 speakers to introduce broad concepts of BIL.
- Jim: Opportunity and challenge of a career. The effort is going to take a lot of coordination. Will be difficult given current supply-chain and other issues.
- National Fish Habitat Partnership (NFHP) Gary Whelan
  - NFHP now has full Board membership as both tribal seats were filled.
  - Board is moving to a committee/workgroup work mode to address policy and communications, along with the other existing committees that include the partnership committee
  - Board approved the FY2023 slate of projects 139 projects total with 74 designated as high priority and these are at DOI.
  - Key role at NCTC BIL Workshop.
  - FY2024 National Conservation Priorities are in development and will be voted on and approved at the September Board Meeting.
  - Other key items coming up are the Action Plan Revision, Congressional Reporting, Congressional Approval of FHPs, National Assessment Design and Implementation, and developing Board operating procedures.
- FWS Update Allan Brown
  - David H. has left USFWS.
  - Wild Fish Health Survey GIS Database is ready.
  - National Fish Health Survey – done and will be rolled out early fall.
  - Aquatic Animal Health Plan – finalized and awaiting signature.
  - NFHP – \$7.6M in President’s budget.
  - AIS – establishing national early detection and rapid response framework.
  - Lacey Act – prohibition of harmful spp, \$6 million in funding.
  - Moss Balls – next fiscal year, going back to old process, and current restrictions will be lifted.
  - AADAP
    - INAD relief is likely
    - 76 in-person and 45 virtual at Annual Meeting
    - Indexing for drugs increasing and will be focused on broodstocks and early life history phases.
      - FDA is looking drugs for early life stages.
  - BIL – coordination and notice of funding opportunity for FY23
  - High level review of habitat conservation efforts and will make recommendations to FAC to fill in gaps.
  - 150<sup>th</sup> Anniversary of National Fish Hatchery System noted.
  - Sport Fishing and Boating Partnership developing new charter.

- AFS Creel Committee Dave Smith/Jeff Koch/Gary
  - Request to develop a Special Committee to work on Angler Surveys
- Joint Award Presentation Julie Carter/Lynn Quattro