

Dakota Chapter

American Fisheries Society

Newsletter



Summer 2018 Issue 59

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Steve Chipps,
President Dakota
Chapter AFS

President's Message

Greetings, Dakota Chapter AFS members!

It has been a long winter, but now that the snow and ice have melted, I am sure everyone is looking forward to some sun and warmth for a few months. It was good to see everyone at our annual meeting in Brookings last February. Of course, meetings do not happen without a lot of help and coordination, so I would like to extend a special thanks to everyone who helped with the meeting arrangements and registration, especially members of the executive committee, the student subunits and Hilary Meyer. We had a total of 111 meeting attendees that included 73 professionals, 12 graduate students, and 26 undergraduate students from 13 agencies/institutions. We also ended up in the 'black' this year with respect to meeting costs. As Forest Gump says, "that's good, just one less thing". We kicked off the meeting with a halfday workshop entitled "What level of public participation is right? It depends!" that was presented by Dr. Cindy Longmire (SD GFP). Participants discussed tools and techniques such as creel surveys, public meetings, and opinion surveys used in the public participation process. Dr. Charles Fritz (International Water Institute), Kurt Forman (U.S. Fish and Wildlife Service), and Dr. Carter Johnson (Distinguished Professor Emeritus, SDSU) were guest speakers for our plenary session on tiling in the Dakotas. Speakers discussed issues that included subsurface drainage, trends in grassland and wetland conservation, and how to tile without draining wetlands. Our awards banquet this year featured a theatrical performance by the 'Fingerlings' that was followed by dinner, raffles and group games (telestrations) sponsored by our student subunits -South Dakota State University Student subunit, and Valley City State University Student subunit. As always, we were able to recognize members and organizations for their contributions to fisheries in the Dakotas. The 2018 Aquatic Resource Conservation Award was presented to Dakota Trout Unlimited for their work with cold-water fish conservation in the Dakotas. Dr. Casey Williams (Assistant Professor, Valley City State University) was presented with the Robert L. Hanten Distinguished Professional Service Award. The David Willis Outstanding Young Professional Award went to Landon Pierce with the U.S. Fish and Wildlife Service in Pierre, SD. The Best Student Paper Award was presented to Nick Kludt (SDSU) for his work with hydroacoustics in the Missouri River. Best Student Poster Award went to Allison Shorter for her work examining competition between Rainbow Smelt and Cisco In the professional categories, Dr. Brian Blackwell won the Best Professional Paper Award for his presentation comparing day and night electrofishing for Smallmouth Bass. The Best Professional Poster Award went to Brandon Maahs and Dylan Gravenhof for their work with Chinook Salmon in Lake Oahe.

On other fronts, I am sure many of you are aware that AFS recently switched to Wiley & Sons publications. The major advantage of this switch is that members can now access ALL AFS journal publications – from the first to the most recent issues. In fact, I recently read a Transactions paper published in 1919 on fish growth that stated:

"The problem of growth is an enormously complex one and has ever new angles. This is shown by the comparatively recent discovery in certain foods of special substances, to which the name of vitamines has been given, and which have a wonderful effect in accelerating growth. That, from the standpoint of growth, we can improve upon what nature shows us, is demonstrated by the use of method of force feeding in poultry and of caponization for cockerels".

Granted, I am not sure what "caponization for cockerels" means, but we have certainly come a long way in understanding fish growth since 1919. The point though, is that access to AFS journals is a major benefit of membership. Therefore, if you are not currently a member of the parent society, consider joining and take advantage of all that AFS has to offer. I am sure most of us spend more on a weekend fishing trip than AFS dues -- and there has never been a better time to join.

I would like to thank the membership for allowing me to serve and for providing input, advice and suggestions along the way. As my term as President ends, myself and other members of the Executive Committee are working to complete up-dates for the Procedural Manual and By-laws. Fun stuff, I know, but necessary every few years. So stay tuned this summer for a chance to provide input on these documents. Finally, I would like to acknowledge how great it has been working with President-elect, Josh Wert. Josh hit the ground running and has worked tirelessly with the MN Chapter in planning next year's joint meeting. We are in good hands!

Safe and enjoyable summer to all.

2018 Meeting Highlights



The "Fingerlings" performing to Kung Fu Fighting.



Dakota Chapter Student Sauger Scholarships. Second from left – Calvin Rezac, Macy Jo Murren, and Jared Hintz.



Dakota Chapter Northern Pike Scholarships. Second from left – Morgan Berquist, Yari Villanueva, Cooper Folmer, and Ethan Rasset.

Dr. James C. Schmulbach Memorial Scholarship

Second from left – Calvin Rezac



Dr. Michael Barnes (center) received the Walter White Excellence in Laboratory Science Award – for his ruthless devotion to improving fish culture practices.

Dr. Robert A. Klumb Memorial Scholarship Second from left – Joe Mrnak and Michaela Halvorson





Dakota Trout Unlimited Chapter 194 received the Aquatic Resource Conservation Award

Landon Pierce (Left) received the David W. Willis Outstanding Young Professional Award





Dr. Casey Williams (center) received the Robert L. Hanten Distinguished Professional Service Award

Student Subunit Updates

South Dakota State University (Seth Fopma, President):

Student members of the South Dakota State University sub-chapter of the American Fisheries Society have had a very busy spring semester and early summer. Many members were able to make their way across town to attend this year's Dakota AFS Chapter meeting in Brookings and several members were able to attend the Midwest Fish and Wildlife Conference in Milwaukee, Wisconsin. Graduate and undergraduate students participated in each conference by giving presentations highlighting current research occurring at SDSU. Following the Dakota Chapter meeting officer elections were held and duties were transferred to the newly elected officers.

To fund sub-unit trips and activities, members participated in numerous fundraising events; including staffing the concessions stands at Jackrabbit football games, our Annual Chili Feed and the Dakota Chapter Raffle. We would like to thank everyone who participated for their generosity, without it the sub-unit would be far less effective.

Throughout the spring semester, we held interview and resume workshops, capped off by a job fair accommodating natural resource employers from across the state. We also hosted representatives of state and federal agencies who discussed their job responsibilities in the field. Late in the semester, the sub-unit watched a documentary on coral bleaching and marine environments. The 2018 Big Sioux Water Festival again provided members with opportunities to engage with the public and teach local 4th graders about fishes and their habitats.

Our end-of-year cookout was held April 27th with good food and mediocre volleyball. Fun was had celebrating the out-going members and discussing summer internships and future graduate programs. Currently we have members scattered across the United States partaking in a wide variety of fisheries experiences. We are excited to reconvene this fall to hear of their experiences and resume scheduled subunit activities!

If you would like to keep up with current subunit activities or are curious about #FishFactFriday, look us up on Facebook: SDSU American Fisheries Society Student Subunit.











South Dakota State University AFS Club Activities

Valley City State University (Ethan Rasset, PRESIDENT):

Hello from Valley City! Our spring semester flew by, and most of us are currently engaged in our summer jobs.

In February, we wrapped up our ice fishing raffle fundraiser that began late in the fall semester. Members also got the chance to attend the Annual AFS Dakota Chapter meeting in Brookings, SD. Out of our 30 current members; we had 11 attend the meeting.

In early March, we hosted a guest speaker along with the VCSU Chapter of the Wildlife Society. Jacob Bushaw is a VCSU Fisheries and Wildlife alumnus and current graduate student at LSU in Baton Rouge, LA. Bushaw spoke about waterfowl surveys using drone technology. It was interesting to hear about experiences outside of North Dakota as well as the new technology we can utilize in the field. Bushaw also talked about his graduate school experience. This gave AFSSSU members a bit of insight into graduate school, and possibly will help them determine their future educational endeavors. During March, we took a trip out to a nearby lake to run some tip-ups. We figured it would be a great opportunity to catch some northern pike, but the fish had other plans. We ended up with a few pike, bluegill, and crappies.

We held officer elections on April 25th. Ethan Rasset (President), Cooper Folmer (Vice-President), Ellen Anderson (Secretary/Treasurer), Dillon Praus (Fundraising), and Josh Manzke and Tanner Coenen (Public Relations) are the 2018/2019 officers. New officers were sworn in at our annual end-of-the-year banquet at Chautauqua Park. We grilled hot dogs/hamburgers, played lawn games, and had a raffle! The following day we held a Spring Fishing Tournament. Ethan Rasset narrowly edged Dr. Casey Williams in this years' Spring Fishing Tournament.

Next fall we plan to put an enormous emphasis on freshmen recruitment and involvement. Various programs will be instituted to encourage greater participation. Similar to this year, we will host several fishing contests, including the fall and spring tournaments, ice and open water, and multi-species contests. This seems to be a good way to keep students involved. We have had a great year and plan to have another next year!



This photo shows the recipients of the Northern Pike Scholarship at the Annual Dakota Chapter AFS meeting. (L□R Morgan Berquist, Yari Villanueva, Cooper Folmer, Ethan Rasset)



The photo above shows Dr. Casey Williams grilling up hamburgers for our end-of-the-year banquet at Chautaugua Park.

North Dakota Happenings

North Dakota Update Greg Power

Seems to be a broken record but fishing continues to be more of the same throughout most of North Dakota ... that is good to very good. Many opportunities await despite the fact that most lakes across the state are down 3-5 feet from their all-time highs. Thankfully, we only experienced a handful of winterkill lakes this past year thus we remain at or near an all-time record of approximately 450 fishing waters.

As has become routine, our spring field activities were short-lived but intense. The first northern pike eggs were the latest on record and second latest date on record for walleye eggs. However, all the needed eggs were collected in short order. At the same time, fisheries staff trapped nearly 200,000 (ten tons) adult pike, yellow perch, smallmouth bass, bluegill and channel catfish and transported them to numerous lakes around the state including dozens of community lakes. And around 100,000 (47,000 lbs.) rainbow and brown trout were stocked into our traditional trout waters. Spring also means ongoing tagging projects. Missouri River System crews continued their efforts to capture and tag 40+" northern pike. 2018 was the second year of this effort focusing on trophy pike in Lakes Sakakawea and Oahe. Crews also continued tagging adult paddlefish above the two large reservoirs.

Fish production from Garrison and Valley City National Fish Hatcheries was again good in 2018. Although not record setting, numerous species including nearly 10 million walleye were stocked into North Dakota waters – as always, job well done by our federal partners.

Aquatic nuisance species (ANS) continues to garner a lot of attention. Department activities including information/education, monitoring, watercraft inspections, etc. have all become the norm. Full compliance of ANS rules would go a long way toward minimizing biota transfer. Unfortunately, based on Department game warden roadside ANS checks, there are still too many anglers and boaters that continue to ignore the rules. Nonetheless, to date, North Dakota has not had a single new ANS infestation for at least the past five years.

During the past year, the Department conducted numerous surveys to get a better feel what the fishing and boating public are thinking and doing. Some of the noteworthy and/or surprising results include – 5-6% of both residents and nonresidents state they never take precautions to prevent the spread of ANS; 83% of North Dakota anglers report walleye as their number one species of choice; 85% of resident anglers have a favorable opinion on North Dakotas fishing regulations – and 76% of these respondents like their fishing regulations simple and statewide; and the father figure is even more important today in introducing youth to fishing – 61% of the 2018 respondents stated their 'father' compared to 52% in 1998.

Beginning in 2001, the first of many new walleye fisheries in North Dakota became established due to the unprecedented wet conditions of the past two+ decades. As of July 1, 2018, about 60 of these new walleye fisheries (greater than 200 acres) totaling 65,000 acres have been or are being developed. Whether you're fishing on one of these highly productive prairie lakes, one of our traditional fisheries or on Devils Lake, Lake Sakakawea or Oahe a great fishing outing is a real possibility. There's no excuse for all of us to get out and wet a line!



Fri, 05/18/2018

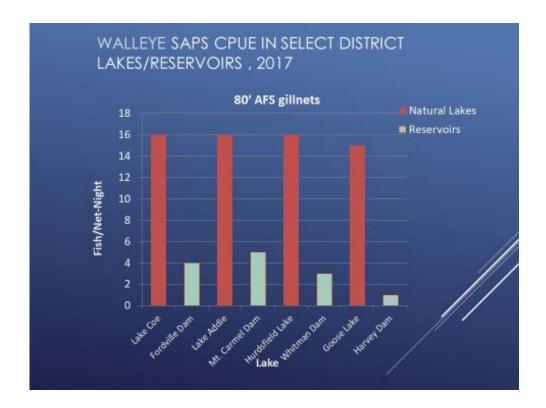
Neal Leier's walleye caught on May 18 broke the longest-standing state record fish in North Dakota, one that stood for nearly 60 years.

The Bismarck angler reeled in a 15-pound, 13-ounce walleye from the Missouri River near Fox Island, besting the old record by one ounce.

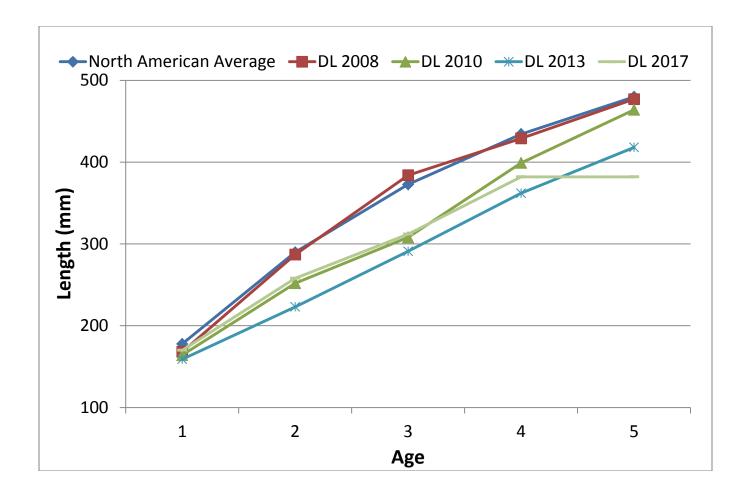
The 32 and one-half inch fish broke the record that was established from Wood Lake in 1959 by Blair Chapman of Minnewaukan.

North Dakota Game and Fish Department-Northeast District Update

- Water levels on many natural lakes in the District are down several feet and spring runoff has been minimal.
- After a long winter, it appears there may be a half-dozen winterkills in the NE District.
- Pure muskies were stocked into Larimore and Whitman Dams in the fall of 2017.
- The relatively "newer" natural lakes in the NE District continue to be the best walleye producers when compared to the older reservoirs:



- At Devils Lake, we have been ageing walleye (using otoliths) for several years now. From this work, we have gotten some interesting growth and mortality information.
- In 2008, the walleye in Devils Lake were growing very similarly to the North American average.
- By 2010, growth had slowed, and growth continued to slow until about 2013.
- Since 2013, growth has remained similar, but slow, although growth in 2017 was near 2010 levels again for younger fish.



- The range of total annual mortality that we have observed over the years is about 30% to 40%. The 2017 estimate was 29%, which was the same as in 2015. The estimates in 2016, 2010 and 2008 were about 33%. The highest estimates were obtained in 2012, 2013, and 2014 at about 40%.
- All of these estimated are probably biased somewhat high because the sampling gear we use is probably under sampling larger (older) fish somewhat.
- Tracking individual year classes through time leads to a similar mortality rate range (30%-40%). For example, the 2009 year class (which was the largest we've ever recorded) has had a 33% total annual mortality rate over their lifespa



South Dakota Happenings

South Dakota Staff Changes

The US Fish and Wildlife Service, Great Plains Fish and Wildlife Conservation Office, in Pierre, SD has expanded! We have taken on additional work with pallid sturgeon monitoring in the Missouri River below Gavins Point dam, so we have hired three people to be stationed in our first satellite office located in Yankton, SD. Jennifer Johnson (Fish Biologist), Jason Kral (Fish Biologist), and Brandon Boehm (Biological Science Technician) started on May 14 and are eager to hit the river. In addition, the Pierre crew has filled two additional positions. Dylan Turner, our former seasonal technician, was hired as a Fish Biologist and Alyssa Gunning was hired as a Biological Science Technician. We are happy to have everyone on board!"

Fisheries data management system operational

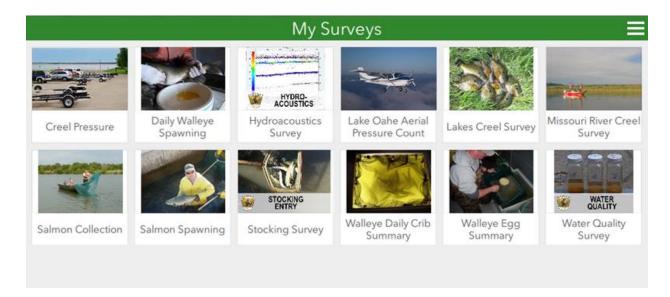
Game, Fish and Parks staff have been working to implement a new data management system over the past 5 years. The new system is designed to allow for faster data entry capabilities, better analysis options and more options for anglers and researchers to access aquatics data in South Dakota.

In 2018, all fisheries offices were outfitted with field tablets that have various applications designed to collect a wide array for fisheries data. Staff has been trained and will begin implementing the new data input process during this field season.

A new "Fisheries Report Viewer" has also been designed and went live earlier this year. This tool provides fisheries stocking information back to the early 1900's. It also provides various searchable reporting options that allow anglers to research fish populations around the state.

An interactive map is currently up and running that allows an additional option for anglers to view data spatially. This tool will be added to and improved over time to become a "one stop shopping" option for those searching out specific fisheries information.

GFP staff are excited about the new system and ready to begin testing it this year.



Catfish Research on the Lower James River, SD

Since mid-May the Southeast Fisheries Management Area has been studying the Flathead and Channel Catfish populations on the lower James River. Our study area extends from the confluence with the Missouri River near Yankton, SD upstream approximately 105 river km to Olivet, SD. A growing interest from anglers has developed to establish regulations aimed at protecting large catfish. However, these populations have not been studied since 1999-2000. Therefore, we developed a study to assess the population dynamics and angler exploitation of both catfish species.

Low-frequency, daytime electrofishing and set lining were used to collect Flathead Catfish, and hoop nets were used to collect Channel Catfish. We also collected data from angler-caught fish at two catfish tournaments on the lower James River. In addition to measuring length and weight on all fish sampled, we have been collecting a subsample of pectoral spines for age and growth analysis, identifying sex on Flathead Catfish to determine sex-specific population characteristics, tagging all catfish 305 mm or longer with Carlin dangler tags, and clipping adipose fins to assess tag loss. We established initial goals of tagging 700 Channel Catfish and 300 Flathead Catfish.



Dylan Herr, an intern out of Sioux Falls, holding a 47.8 pound Flathead collected via electrofishing, the largest catfish collected so far in 2018.



Nate Loecker, a resource biologist out of Sioux Falls, holds a large Flathead Catfish collected via electrofishing on the James River.

As of July 1st, we have collected a total of 453 Channel and 602 Flathead Catfish. We have exceeded our goal by tagging 334 Flathead Catfish, but have fallen well short of our goal for Channel Catfish tagging only 221 fish. We have collected spines on 241 Channel and 338 Flathead Catfish. Hoop net catches have been highly variable for Channel Catfish and appear to be lower than historic catches from 1999-2000. However, we have had better-than-expected success in collecting Flathead Catfish, with the largest fish collected measuring 113 cm and 21.68 kg.

Despite the number of tags in the system, we have only received six tag reports so far this summer. During our sampling efforts we have recaptured 28 Flathead and 4 Channel Catfish. Of the 32 total recaptures, all but two fish were recaptured in the same stretch of river where they were originally tagged. One Flathead Catfish was recaptured in the closest downstream stretch (less than

11.3 river km), while one Channel Catfish moved downstream approximately 50-60 km.

We attended two fishing tournaments in June. At Milltown, anglers brought in 51 Channel and 9 Flathead Catfish. All Flatheads were tagged, with the largest fish measuring 104 cm and 16 kg, and 9 Channels were tagged, the largest being 63.5 cm and 2.3 kg. The second tournament, located in Yankton, produced few fish, but the average size was greater. Anglers returned 12 Channel and 19 Flathead Catfish caught in the James River, plus one Flathead Catfish caught in the Missouri River. All fish were tagged and released into the Missouri River at Riverside Park in Yankton. The largest Flathead Catfish was 92.5 cm and 12.2 kg, while the largest Channel Catfish was 76.2 cm and 6.6 kg.



A small Flathead Catfish being tagged by a Game, Fish and Parks intern.

We plan to continue sampling during July with an emphasis on collecting additional Channel Catfish to increase our tagged sample size. Additionally, we will be attending at least one additional angling tournament at the end of July located in Scotland, South Dakota.



Flathead Catfish with a visible, orange tag dangling behind the dorsal fin.



View from the chase boat during electrofishing.

Regional Meetings



COMMUNICATING THE SCIENCE OF FISHERIES CONSERVATION TO DIVERSE AUDIENCES AUGUST 19-23, 2018

The Mid-Atlantic Chapter invites you to attend the 148th Annual Meeting of the American Fisheries Society - Communicating the Science of Fisheries Conservation to Diverse Audiences. The meeting will take place in Atlantic City, New Jersey from August 19-23, 2018. There is plenty to see and do in this exciting city. From beaches and boardwalks, to fishing and amusement parks, Atlantic City has something for everyone. The link below highlights some of the fun activities that AC has to offer and includes a message from AFS Past President (and New Jersey native) Joe Margraf.

https://afsannualmeeting.fisheries.org/



2018 Annual Meeting of North American Sturgeon and Paddlefish Society Columbia, Missouri – Courtyard by Marriott October 21-25, 2018

The North American Sturgeon and Paddlefish Society (NASPS) invites you to attend our 2018 annual meeting in Columbia, Missouri on October 21st-25th. This will be a stand-alone meeting for the society and will provide a forum for sturgeon and paddlefish professionals to discuss new and emerging research geared toward a number of themes including conservation, restoration, and sustainable management.

2019 Joint AFS Meeting Update





Save the Date!

Date: February 25-27, 2019

Location: Fargo, ND Holiday Inn

Reservations can be made now by contacting the Holiday Inn at 701-282-2700. There are a block of rooms set aside for the event. Just mention the American Fisheries Society and the State/Federal rate for rooms will apply. Additional information on the joint meeting with Minnesota will be provided in the Fall newsletter.

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Standing Committees

Planning
Steve Chipps (Chair, SD)
Joshua Wert (ND)
Casey Williams (ND)
Greg Simpson (SD)

Continuting Education
Dan James (co-chair, SD)
Greg Power (co-chair, ND)
John Lott (SD)
Dave Lucchesi (SD)

Schmulbach Scholarship
Open (chair, SD)
Wayne Nelson-Stastny (SD)
Zach Shattuck (MT)

Environmental Concerns
Geno Adams (co-chair, SD)
Michael Johnson (co-chair, ND)

Student Affairs
Position Open (chair, ND)

Information and Web Support

Mike Brown (SD) Hilary Meyer (SD)

Membership

Matt Ward (chair, SD) Casey Williams (ND) Geno Adams (SD)

Awards and Nominations
Casey Williams (chair, ND)

Greg Simpson (SD)

Resolutions

Chelsey Pasbrig (SD)
Gene Galinat (SD)

NCD Walleye Tech Committee

Mark Fincel (SD)
Todd Caspers (ND)

NCD Centrarchid Tech Committee

Nick Kludt (SD)

NCD Escocid Tech Committee

Brian Blackwell (SD)

NCD Ictalurid Tech Committee

Dave Lucchesi (SD)

NCD Rivers and Streams Tech Committee

Nick Kludt (SD)
Aaron Larson (ND)