It is the greatest honor of my professional career to serve as the inaugural Kennedy-Grohne Chair in Waterfowl and Wetlands Conservation. The future is bright for wetlands and waterfowl in this great state of Wisconsin where there is a rich conservation history. Conservation pioneers like Aldo Leopold (1887-1948), John Muir (1838-1914) and Gaylord Nelson (1916-2005) played a prominent role in this state and beyond. Additional academic descendants of conservation include Art Hawkins (1913 – 2006), Al Hochbaum (1911- 1988), Lyle Sowls (1916-2002), Bob Ellarson (1916-1993) and Dick Hunt (1926-2014).

These champions for conservation, and countless others in Wisconsin, formed foundational pillars in teaching, research and service that has been envied by many but matched by few. The Kennedy-Grohne endowment in the College of Natural Resources at UW-Stevens Point ensures the next generation of conservationists are well positioned to “carry the torch forward.”

Despite past accomplishments there remain challenges ahead. An immediate and prominent challenge is the decline of University-based waterfowl programs in North America. Thanks to the philanthropy and commitment of Messrs. James Kennedy and David Grohne this Endowment represents a trend. In fact, the Kennedy-Grohne chair is one of only seven like it in this country (four founded by Mr. Kennedy). Additional challenges include declines in critical wetland habitat and uncertainties of these wetlands related to a changing climate. As wetlands are lost or experience decline, so does interest and understanding in waterfowl and wetland conservation. Some of this interest, in my opinion, is attributed to a shift away from “hands-on” and experiential learning that students once cherished and universities nurtured. Today, most students are from urban backgrounds where opportunity, interest and, most integral to the equation – passion for the outdoors – lacks what it once was. I’m fortunate to teach at UWSP where my colleagues and I still hold these shared values and encourage them within our curriculum. I’m eager to team with other Directors, chairs and all others at universities in the U.S. and abroad to engage in coordinated and strategic efforts that enhance our collective success with these challenges.

As the inaugural Chair, I’ve set the following goals for
About the College

- Enrollment: 1,655 undergraduates, including 358 Wildlife majors - among the largest undergraduate programs of its kind in the U.S.
- 180 faculty and staff
- Over 12,500 natural resources alumni throughout the country, many in major leadership roles in management agencies
- Renowned for its emphasis on hands-on field experiences and integrated core curriculum, including coursework in forestry, human dimensions of natural resource management, soil and waste resources, water resources and wildlife
- Three field stations: Treehaven (1,400-acre education, conference, and research center); Central Wisconsin Environmental Station (200-acre teaching and learning center on glacial Sunset Lake); Schmeeckle Reserve (280-acre campus conservancy with trails, boardwalks and a 24-acre lake)
- 20 student professional organizations, including the award winning UWSP student chapter of The Wildlife Society (over 200 members), Ducks Unlimited UWSP Student Chapter, Students for Wetlands Awareness Management and Protection (SWAMP), and Soil and Water Conservation Society (SWCS).
- Faculty-mentored undergraduate student research is featured at the annual CNR Student Research Symposium (over 100 student participants each year).
- More UWSP students go on to complete doctoral degrees in science fields than any UW-System school outside of Madison
- Long history of collaboration and partnerships with Wisconsin Department of Natural Resources, USDA Forest Service, NRCS, USGS, U.S. Fish & Wildlife Service, and other UW System institutions, including UW Extension, UW-Madison and others.

For this endowment:

1. Teach and prepare undergraduate and graduate students ecology, science and stewardship of waterfowl and wetlands conservation and thereby prepare them for post-graduate careers in this field.

2. Form sustainable collaborative partnerships with state, federal, provincial and tribal agencies, other academic institutions, non-government organizations and private foundations/individuals and service the needs of these groups as needed and appropriate.

3. Primarily through graduate student-led projects, develop needs-based, relevant and impactful research in wetlands and waterfowl science that informs and benefits management decisions in Wisconsin and beyond.

These goals are attainable because of the institutional framework that already exists in the College of Natural Resources at UWSP. I work with an amazing group of talented and hardworking colleagues within the wildlife discipline as well as partners among the other disciplines and support staff in the CNR. The Kennedy-Grohne Chair is part of the Wisconsin Center for Wildlife where two other endowed positions are housed. These academic partnerships are vital for collective success in the future.

This inaugural report describes my accomplishments and experiences since my appointment last August, drawing from the many interactions with my partners and colleagues and my cadre of undergraduate and graduate students in the College. A particular point of pride is all the students I’ve had the pleasure working with. Without question, it is these students that drive my passion for learning and give me the greatest amount of confidence in our future. Enjoy!

Jacob N. Straub, PhD
Kennedy-Grohne Chair in Waterfowl & Wetlands Conservation
As this is the inaugural endowment report, I want to introduce myself. I am a proud Wisconsinite and 2004 graduate of UWSP where I received a BS degree in Natural Resource Management. My undergraduate experiences provided countless “hands-on” opportunities and other enrichment which inspired me to lead a teaching and applied research career.

Upon graduation, I secured my first “real job” as a Geographic Information Systems intern with Ducks Unlimited. Here I honed a passion for waterfowl and eventually matriculated to a graduate program at The Ohio State University (OSU). My research at OSU focused on understanding wetland food dynamics for migrating waterfowl in the upper Midwest. I received my terminal degree from Mississippi State University in 2012 where I worked with a team of researchers, students and biologists to estimate waterfowl food resources in the Mississippi Alluvial Valley.

From 2012 through 2016 I served as a faculty member in the Center for Earth and Environmental Science at the State University of New York Plattsburgh. Here I taught a variety of ecology classes to undergraduate and graduate students while also maintaining various student-driven field-based research projects. I enjoy a variety of outdoor activities including fishing, hunting, hiking and camping. My wife, Rachel Schultz, and I are proud parents of a 2 year-old, Oliver Straub, and we enjoy every minute of parenting.

I’d like to thank a few of the many who helped me along my path to the Kennedy-Grohne Chair. My parents introduced me to the many wonders of the outdoors very early in my life. My undergraduate education at UWSP solidified my passion for the outdoors and my professors along the way taught me I could get a job doing something I loved and believed in. They (some of them I now work with!) served as inspirational and outstanding role-models. My friends and colleagues at Ducks Unlimited taught me what it takes to be a working professional and introduced me to waterfowl hunting, a hobby I pursue with vigor (when I have time!). For my graduate degrees at Ohio State and Mississippi State, I can’t imagine having two more supportive, trusting, and personable advisors than Drs. Bob Gates and Rick Kaminski. I value their friendship most and I’m honored to have been one of their graduate students. Bob and Rick introduced me to the large yet connected group of waterfowl and wetlands professionals (“the duck world”) and these relationships have paid huge dividends in my career! I strive to pay this forward with my students. I thank Dr. Ken Adams, emeritus professor at SUNY Plattsburgh. Ken inspired me in many ways but most prominently his integrity and passion in the classroom are traits that I strive to emulate with my students. I thank my wife, Rachel Schultz, for supporting my career always. Rachel and I make a great team!
Collaborating to Develop a Standard Waterfowl Ecology and Management Course for Universities

In July 2016, Dr. Straub teamed up with Drs. Kevin Ringelman (Louisiana State University), Phil Lavretsky (University Texas-El Paso), Chris Williams (University of Delaware), and John Eadie (UC – Davis) in an effort to develop curriculum for a standard waterfowl ecology and management course for each respective university that is consistent and contemporary. Although this effort is still in progress, Dr. Straub was able to implement some components to a course he began teaching at UWSP in Fall 2016 (see below). The group anticipates completing the project in fall 2017.

New Waterfowl Ecology and Management Course at UWSP

In Fall 2016 Dr. Straub developed and taught a new waterfowl ecology class, WLDL 305/505 section #2, to focus on four main areas:

- Identification
- Ecology and annual cycle
- Habitat management
- Population/harvest management

The lectures were a mixture of powerpoint presentations, in-class discussions and on-the-board lectures. The labs focused on waterfowl identification skills, interpreting recent and relevant publications, and guest lectures. Guest lectures included Kent Van Horn from the Wisconsin DNR who gave a presentation on how the waterfowl regulation process works. Kurt Waterstradt (U.S. Fish & Wildlife Service) and Brian Glenzinski (Ducks Unlimited) gave lectures on private lands wetland management in Wisconsin. Dr. Straub also collaborated with Patrice Eyers at Mead Wildlife Area for a field trip where his students learned how wetland management occurs and had a chance to see eight species of Anatidae!

Management of Wildlife Habitat

Served as co-instructor for Wildlife Habitat Management Course (WLDL 451/651) in the final 4 weeks of the Fall 2016 semester. This was an opportunity to reach a new group of 29 undergraduate students, mostly wildlife majors who were not necessarily focused on waterfowl. This broadened the students’ exposure with lectures focused on wetland management and a “flyway” perspective to waterfowl management.

Wildlife Management Techniques

Dr. Straub taught Wildlife Management Techniques (WLDL 350/550), which covers techniques for managing wildlife populations: aging and sexing criteria, capture, handling and control methods, censusing, assessing food habits and quality, estimating home ranges, quantifying habitat relationships, modeling land use impacts, and conducting research studies.

New Waterbird Ecology, Management and Field Techniques Course

Dr. Straub collaborated with colleague Dr. Heath Hagy, Director of the Forbes Biological Station for the Illinois Natural History Survey. A highlight of this special topics course was a spring break field trip in March hosted by Dr. Hagy, where the students learned various field techniques, including rocket netting. The trip expenses were subsidized by the Kennedy-Grohne endowment (see photos on pages 6-7).
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**UWSP Student Chapter of Ducks Unlimited**

Dr. Straub serves as faculty advisor for the UWSP Student Chapter of Ducks Unlimited. The group is relatively new, formally established in 2015, but is one of the fastest growing student organizations on campus and is already among the most active in the nation. University chapters are playing an increasingly important role in the conservation mission of Ducks Unlimited. DU recognizes that a vibrant and strong collegiate program is the key to a healthy future for wetlands conservation, and it will continue to place a strong emphasis on the development of what has been a very successful program. Student members get involved for a variety of reasons including: social functions that build community; school pride; DU merchandise; conservation education; resume building; networking and volunteer opportunities; leadership development; and national competitions with other University chapters across the country.

Here is a sample of the UWSP DU Chapter’s recent accomplishments:

- **Fall 2016 Banquet:**
  - 211 attendees
  - Raised $27,000
- **Bi-weekly meetings, with a specific conservation topic at each meeting**
- **Invasive species removal in Schmeeckle Reserve**
- **Schmeeckle Reserve Appreciation Day**
- **Ultimate frisbee tournament**
- **Duck ID Jeopardy event**
- **Participation at the state DU convention**
- **Invited speakers for 2016-2017 school year included:**
  - Jason Fleener, Wetland Habitat Coordinator, Wisconsin DNR
  - Matt Palumbo, PhD student, Western University (Ontario)
  - Michael Okray, Author, International Hunting Guide
  - Jacob Straub, PhD, Kennedy-Grohne Chair in Waterfowl and Wetlands Conservation, UWSP

**Wisconsin Waterfowlers Association**

Served as mentor for the Wisconsin Waterfowlers Association *Learn to Hunt* program.

**Judge for Conferences/Symposia**

Served as judge for undergraduate and graduate student posters for 7th North American Duck Symposium, and for the 2017 College of Natural Resources undergraduate research symposium.

**Academic Advising**

Served as academic advisor for 23 undergraduates in wildlife ecology and management major and for 2 graduate students pursuing M.S. in Natural Resources.
Dr. Straub’s Waterbird Ecology, Management and Field Techniques Course (Spring 2017)
STUDENT SPOTLIGHT

Abigail Weigel

Undergraduate Student

Abigail Weigel is pursuing a B.S. in Wildlife Ecology and Management and will be graduating in May 2018. She grew up in Port Washington, Wisconsin, near the shores of Lake Michigan.

Abigail is involved with student organizations on campus. She is currently on the executive board as the Conference Coordinator and is Co-Leader for the Waterfowl and Woodcock Projects with the student chapter of The Wildlife Society. She and three other co-leaders of the waterfowl project are responsible for checking and maintaining 130 wood duck boxes in George W. Mead Wildlife Area in central Wisconsin. The group plans to present their findings at the Midwest Fish and Wildlife Conference in Milwaukee in 2018. Abigail is also the Vice President for the student chapter of Ducks Unlimited where she focuses on helping individuals get involved in hunting and the outdoors.

Abigail is also active in volunteering with the waterfowl community. She volunteered for Southern Illinois University graduate student Luke Fara (a 2008 UWSP alumnus) with his study on Long-tailed Ducks utilizing Lake Michigan. She also volunteered for Western Illinois University graduate student Eric Smith on his Lesser Scaup study on the Mississippi River. This included assisting the ongoing Scaup banding program.

Abigail is currently working as a Research Technician for University of Wisconsin-Stevens Point graduate student Kali Rush studying the survival of wood ducks. She would like to continue working with waterfowl and plans to pursue a Master’s Degree after graduation. Her professional aspirations are to focus on waterfowl management on a regional scale.
STUDENT SPOTLIGHT

John “Boomer” Malanchuk
Graduate Student
(M.S. Natural Resources, ’17)

John “Boomer” Malanchuk is the first graduate student to complete a master’s degree under the supervision of the newly established Kennedy-Grohne Chair in Waterfowl and Wetlands Conservation (May 2017). Boomer earned a B.S. in Environmental Science at Rhodes College in Memphis, TN, in 2014 and started his graduate work at the State University of New York in Plattsburgh in 2015.

Boomer first started working with waterfowl in the flooded timber of Northeastern Arkansas. He worked as a technician for a PhD student at the University of Memphis, Jerad Henson, focusing on mallard (Anas platyrhynchos) stress response to hunting pressure. This experience led him to the Yukon-Kuskokwim Delta of western Alaska surveying nesting waterfowl – specifically, spectacled eiders (Somateria fischeri).

Boomer’s master’s thesis project, entitled Density, Characteristics, and Use of Tree Cavities for Nesting Waterfowl at Missisquoi National Wildlife Refuge, was the first such study in the Northeastern U.S. Little research has focused on cavity-nesting waterfowl nesting ecology in natural tree cavities and this research presents a unique opportunity to inform management on public and private lands alike.

Boomer has presented his research locally, at the New York Waterfowl and Wetlands Collaborative Network, and nationally at the 7th North American Duck Symposium. His work, both as a researcher and a student, earned him the Jack Massopust Memorial Scholarship for an outstanding graduate student in wildlife from UW-Stevens Point.

Boomer hopes to pursue a PhD in waterfowl ecology and earn a professorship position advising graduate students who also desire to study waterfowl.
STUDENT SPOTLIGHT

Alissa Kakatsch

Undergraduate Student

Alissa Kakatsch is currently an undergraduate attending UWSP with a major of Resource Management: Natural Resources Planning. An Oconomowoc, WI, native was raised in a background steeped in the outdoors. She grew up an avid hunter and likes to involve herself with volunteer opportunities and organizations whenever she can, such as Ducks Unlimited and volunteer projects around the Horicon Marsh Education center.

Throughout the summer of 2017 she will be working on a “Cattail Project” on the southern portion of the Horicon Marsh alongside wildlife biologist, Paul Samerdyke (Wisconsin DNR). Throughout this project she will be observing cattail control techniques used in the marsh to determine how effective they are and what exactly they are doing. The main purpose for cattail control is to help manage wildlife populations, encourage vegetation diversity and control the water flow within the marsh. Alissa will be observing specific area units that were sprayed with the herbicide Imazapyr. In conjunction with the herbicide, the majority of these sites have also had other control techniques used on them such as water level control and burning. In the areas she will be assigned to, Alissa will be focusing on looking at diverse vegetation growth, cattail growth, wildlife usage (particularly muskrats) and water characteristics surrounding the area. The findings from this project will be used by other managers in the future along with demonstrating the value of these projects for other funding sources. In the coming years attending UW-Stevens Point, Alissa is eager to get involved with other projects and other hands-on learning experiences. She is looking forward to graduating from the College of Natural Resources at UWSP and hopes to pursue a career working in the field, being open to specific position possibilities.
Kali Rush is a graduate research assistant with the Kennedy-Grohne Waterfowl and Wetlands Conservation, University of Wisconsin-Stevens Point, pursuing a M.S. in Natural Resources. She is originally from Michigan, where she earned a B.S. in Fisheries and Wildlife at Michigan State University, East Lansing, MI, in 2016.

Kali found her love for waterfowl while attending MSU, where she founded the MSU Ducks Unlimited student chapter in 2014. She volunteered with, and was later employed by, a PhD student in the Boone and Crockett Quantitative Wildlife Center at MSU. There she assisted with surveying white-tailed deer and later conducted an undergraduate research project titled Assessing Habitat-Specific Detection Probabilities for White-Tailed Deer. She presented her results at The Wildlife Society annual meeting in Winnipeg, Manitoba in 2015, and The Wildlife Society Michigan Conference in Gaylord, MI, in 2016. In 2015, she gained employment with the Michigan Department of Natural Resources-Wildlife Division as a student assistant where she had the opportunity to assist with various projects including duck and goose banding, deer check stations, and assisting Public Land Specialists. Upon graduating from MSU, she worked for the University of Missouri-Columbia as a wildlife technician with the reintroduced elk population.

Kali began a wood duck demography pilot study in February 2016, and is currently forming her M.S. thesis. She is developing field methods for capturing and radio-marking hen wood ducks in Central Wisconsin to estimate pertinent breeding season vital rates. She plans to provide information on adult hen and brood survival within several brood habitat types for her thesis. Project partners include Wisconsin Department of Natural Resources and the Kennedy-Grohne Chair in Waterfowl and Wetlands Conservation at UWSP.
STUDENT SPOTLIGHT

Michael Barger
Undergraduate Student

Michael Barger is an undergraduate research assistant at UWSP for Dr. Jacob Straub, Kennedy-Grohne Chair in Waterfowl and Wetlands Conservation, cargo specialist with the Army - Reserves, and an advanced wildlife technician with the Wisconsin DNR. Michael was raised in Bright, IN, and then Somerset, WI.

He graduated in May 2017 with a degree in Wildlife Ecology with an emphasis in Research and Management and a minor in Biology.

Michael was an active member in the student chapter of The Wildlife Society during his time at UWSP, attending the 2016 national Wildlife Society conference in Raleigh, NC. He held internships with the U.S. Fish and Wildlife Service in New Richmond, WI, and the Wisconsin DNR in Grantsburg, WI. He designed, conducted, and analyzed data from an undergraduate research project he conducted during his internship with the WDNR. The project utilized point count data collected that summer on waterfowl broods and was used to create a detection probability and abundance framework for waterfowl on state-owned wildlife areas and wildlife refuges. The study was presented at the Wisconsin Wetlands Association conference held in Stevens Point, WI, in 2017.

Michael assisted Dr. Jacob Straub (UWSP) and Dr. Mike Schummer (SUNY) as a research assistant. This project is part of a Sea Duck Joint Venture in which the authors are surveying the managers and researchers of government and non-government organizations on the needs and current information gaps for sea duck populations on the great lakes. He also holds a position as an advanced wildlife technician with the Wisconsin DNR in the Natural Heritage Division, conducting plant and wildlife surveys for rare, threatened, and endangered species as well as assisting in critical oak barren habitat restoration on State Natural Area properties.
Sara Comstock
Undergraduate Student

Sara Comstock is pursuing a degree in Wildlife Ecology and Management at UWSP. Originally from Oxford, Wisconsin, she grew up hunting and spending her days outdoors.

During her time at UWSP, Sara has had the opportunity to study abroad with the College of Natural Resources in Poland, Germany, and Iceland, as well as most recently traveling to Illinois to band ducks with Dr. Jacob Straub and other students and professionals.

She is currently working as a field technician for Dr. Straub’s project which is looking at water bird abundance and wetland health in the Glacial Habitat Restoration Area of Wisconsin. Sara’s career goals are to continue researching and working with waterfowl and wetlands.
A total of $490,415 in extramural funding was sought, with $300,411 secured. Following are several projects that highlight Dr. Straub’s research activity:

**Project Title:** Effectiveness of wetland conservation programs in the glacial habitat restoration area of Wisconsin

**Funding:** US Fish and Wildlife Service, $82,839. Wisconsin Department of Natural Resources, $21,517.

**Collaborators:** Jason Fleener (WI DNR), Brian Glenzinski (Ducks Unlimited), Greg Kidd (NRCS) and Kurt Waterstradt (USFWS), Dr. Rachel Schultz and Dr. Scott Hygnstrom (UWSP)

**Students involved:** Ben Schuyler (B.S., UWSP ’16), David Aronson (B.S. Taylor University ’16), Sara Comstock (UWSP, Wildlife ecology and management), Zachary Loken (UWSP, Ecosystem Restoration)

**Goals of Research:**

- Evaluate wetland treatment efforts on public and private wetlands in Wisconsin’s glacial habitat restoration area;
- Inform Joint Venture partners in Wisconsin and similar settings on how to achieve greater efficacy in use of resources for wetland bird conservation.
Project Title: Wood duck demography in Wisconsin

Funding: Wisconsin Department of Natural Resources, $172,291. Bill Cook Chapter of Izaak Walton League, $1,400.

Collaborator: Taylor Finger (WI DNR).

Students involved: Kali Rush (M.S. Candidate, UWSP), Austin Fischer (B.S., UWSP ’17), Trenton Rohrer (B.S., UWSP ’17), Abigail Weigel (UWSP, Wildlife Ecology and Management), Eric Owens (UWSP, Water Resources)

Goals of Research:
- Long-term objectives (> 5yrs) include building a population model for wood ducks in Wisconsin and evaluating which life history trait/time-period is most sensitive to population growth.
- Shorter term objectives include collecting field data to estimate breeding season vital rates for wood ducks in Wisconsin. Specifically, our objectives include estimating clutch size, nesting propensity, re-nesting intensity, baseline nest success, hen breeding season survival, and brood survival.
**Project Title:** Population monitoring and information needs for management and conservation of sea ducks on the Great Lakes

**Funding:** Sea Duck Joint Venture, US Fish and Wildlife Service, $22,364.

**Collaborator:** Dr. Michael Schummer, State University of New York Oswego

**Students involved:**
Michael Barger (B.S., UWSP ‘17)

**Goals of Research:**
Develop and maintain a community of scientists, managers, administrators, and other stakeholders that share information and develop action items aimed at increasing the efficiency and effectiveness of science-based conservation and monitoring of sea ducks using the Great Lakes.

**Other Proposed Projects:**
*Estimating vital rates for Wisconsin wood ducks: phase one toward a population model.* University of Wisconsin Consortium for Extension and Research in Agriculture and Natural Resources, $34,885.

PEER-REVIEWED PUBLICATIONS


THESIS (advisor)


INVITED PRESENTATIONS


Straub, J.N. An update on teaching, research and service for the Kennedy-Grohne Chair in Waterfowl and Wetlands Conservation. College of Natural Resources Advisory Board. Stevens Point, WI, 5 May, 2017.


OTHER PRESENTATIONS


Served as project advisor for the following student presentations in the CNR Student Research Symposium (April 7, 2017):

- Project Title: Micro Plastic Presence in Dabbling and Diving Ducks of Central Wisconsin
  Student Presenters (poster and oral presentations): Brandon Johnson and Matthew Parsons

- Project Title: Factors affecting Wood Duck and Hooded Merganser Nest Box Usage and Success
  Student Presenter (poster): Logan Hennlich

- Project Title: Abiotic Factors Influencing Nest Box Use by Waterfowl in George Mead wildlife Area in Central Wisconsin
  Student Presenters (poster and oral): Trenton Rohrer, Stuart Fetherston, and Ben Murley
Outreach and Leadership

♦ Spring 2017 Waterfowl Colloquium Series

Dr. Straub developed UWSP’s first speaker series focused entirely on waterfowl and wetlands management. Presentations were well attended by students, faculty and staff, and the public, usually attracting 75-100 people. Presentations included:

- The Duck Stops Here: Managing Wildlife and Wetlands at a Continental Scale
  Jacob Straub, PhD, University of Wisconsin-Stevens Point
  (February 16, 2017)

- The NAWMP ‘Conservation Concern’ Spectrum: From Pintails and Scaup to Light Geese
  Lisa Webb, PhD and Mitch Weegman, PhD, University of Missouri
  (February 23, 2017)

- If You Build It, They Will Come: Habitat Management Success in the Mississippi Flyway
  Heath Hagy, PhD, Illinois Natural History Survey
  (March 9, 2017)

- Waterfowl and Wetland Management: How do People Fit In?
  Kent Van Horn, Wisconsin Department of Natural Resources
  (March 16, 2017)

- Series Keynote Presentation -
  The NAWMP: Grandest Continental Ecosystems Conservation Plan for Waterfowl and People
  Rick Kaminski, PhD, Clemson University
  (March 30, 2017)
Wisconsin Waterfowl Association

Since October 2016, Dr. Straub has written a monthly column for the Wisconsin Waterfowl Association member newsletter, which reaches about 12,000 waterfowl enthusiasts in the region. Following is a reprint of his “From the Chair” column published in the December 2016 issue.

It’s Science!

In my third column for WWA, I’d like focus on the topic of waterfowl and wetland SCIENCE. For those unaware, science and waterfowl management have a long and successful history. What exactly does science have to do with waterfowl management? Well, the short answer is just about everything. Science has provided answers to questions like: what do ducks like to eat?; when and where do they migrate?; what kind and how much habitat should “we” provide?; how long should the hunting season be and how many can be harvested without decreasing next year’s population?; how can we increase nest success?; and many more questions!

Most waterfowl are migratory and, as such, they often cross state and even national borders. This has at least two key ramifications on waterfowl management. First, this simple scientific fact distinguishes the management of waterfowl from other species like deer or grouse, where management of harvest is typically less complex. The flyways concept, first introduced in the 1930s, is rooted in science based on banding data and calls for states and provinces within flyways to work together. Wisconsin is in the Mississippi Flyway and managers and scientists meet at flyway councils a few times each year. The latest data, observations and science is discussed and state representatives share this information with their home states. Second, because waterfowl are considered wildlife in the public trust and they move among and between states, the US Fish and Wildlife service has ultimate authority on managing hunting seasons. How do they make decisions on these hunting seasons? You guessed it: science! Two key pieces of information inform decisions here: aerial surveys of waterfowl breeding numbers and the amount of wetlands available and harvest data collected from hunters. In fact, all of you hunters out there contribute to the science each year when you complete your Harvest Information Program (HIP) survey.

As technology has advanced, waterfowl scientists have found ways to stay on the “cutting edge.” For example, stable isotope analyses allow scientists to analyze a feather or blood sample and then determine geographic breeding origins. In other words, you could take a feather from a blue-winged teal harvested in Wisconsin in September and determine where it spent its summer. Satellites and cellular phone tower technology are advancing by the month, it seems, and scientists can place very light weight transmitters on ducks and geese to study where they go to a very fine scale of resolution. What’s more is that these transmitters can be
powered by solar energy, further reducing their size and increasing the number of points that can be logged. Thermal temperature sensors are being deployed in or near nest sites to tell scientists if, when and for how long waterfowl are using nests. Finally, quantitative scientists are always pushing the envelope with new analytical and statistical tools while population ecologists are enhancing the understanding of limiting factors for populations of waterfowl through integrated population models.

To summarize, waterfowl are an amazing family of birds that not only attract a dedicated group of hunters but an equally dedicated group of scientists. Regardless of whether your special connection to waterfowl is through a passion for science or simply a love of the outdoors, we all come together in the name of conservation!

Until next time,

Dr. Jacob Straub

♦ Federal Duck Stamp Contest

Dr. Straub served as Alternate Judge for the 2016 Federal Duck Stamp Contest, held in Philadelphia, PA in September 2016. He is also involved in the planning and festivities surrounding the 2017 Federal Duck Stamp Contest. The U.S. Fish and Wildlife Service selected the University of Wisconsin-Stevens Point as the site for the 2017 Contest, the first time this revered event will be held in Wisconsin. The contest will be held Sept. 15-16, 2017. It typically attracts art from nationally recognized wildlife artists throughout the country.
How Are the Endowment Funds Used?

- Research Supplies & Equipment: 59%
- Undergraduate Student Assistants: 17%
- Graduate Student Assistants: 11%
- Conferences & Meetings: 5%
- Teaching: 3%
- Symposia/ Presentations: 5%

Expenditures through July 2017

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