



- The -
WILDLIFE SOCIETY
Wyoming Chapter



2014 Winter Edition Newsletter

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Cover Photo: Free-range bulls lope ahead of the helicopter in Sweetwater Canyon. Stan Harter.

Background, pp2: Monotone frost skirts the edge of a frozen stream. Mark Gocke.

Photos in “Conserving our Future at the WY TWS Annual Meeting” courtesy of Andrea Orabona.

PRESIDENT'S MESSAGE— FOCUSING ON TOMORROW

As many of you are aware, this year marks the 40th anniversary of our Chapter. In preparing for this inaugural message, I took a moment to ponder and reflect on the magnitude of this accomplishment. The journey led me to reflect on many things. My professional career began as a biologist hooting Spotted Owls for the largest private timber company in northwestern California. Between our daily site visits and hooting at our designated call points during the night we had little time to spare. Occasionally though, when owls cooperated, we would be done early and I would steal a few moments of remaining daylight to read a few pages of Aldo Leopold's A Sand County Almanac, before I headed off into the darkness with a compass, headlight, and my best impersonation of a Spotted Owl 4-note call.



Considered the father of our profession, Aldo Leopold was a talented writer. His essays on conservation still ring true today, particularly those in the almanac, and are a must read for every biologist in our profession. Chapter 2 - Good Oak, one of my personal favorites vividly describes the process of cutting up a felled giant oak tree for firewood on the Leopold farm. He invites us to join him on a journey through time that parallels the kerf of his saw. With each pass, the saw transects decades and we are reminded of the historical events that coincide with growth rings of the tree. His story is powerfully humbling and the journey reminds us of how easy it is to forget the events and forces that shape the world around us.

Forty years ago, our Chapter didn't exist. There wasn't a forum in Wyoming that allowed wildlife professionals to transcend their organizations or agencies. Opportunities for professional development and networking were limited. Our founders dared to dream of a bold vision. Wildlife professionals needed more and needed to organize if they were to bridge this gap. These visionary leaders drafted the bylaws for our Chapter in 1974 and elected Roger Wilson as the first president of the Wyoming Chapter of The Wildlife Society the following year. Since then, 39 others, including myself, have taken their turn in leading this Chapter.

Undoubtedly, the resilience of our Chapter, our membership, and our profession is remarkable or we would have survived 10 let alone 40 years. We all know that change is inevitable today, however the road to profound change is traveled slowly. Think back to the glaciers that carved up the landscape during the last ice age. On a daily basis, it would have been impossible to see them move and to witness them crushing and changing the landscape beneath. Only after we look retrospectively at the events over large time intervals do we begin to recognize that the glaciers moved several hundred miles and created new landscapes. This is the power of slow or profound change.

Past-president Mong at our banquet shared an old adage with us. "If you want to travel fast, you go alone. If you want to travel far, you travel together." This statement resonates with me, and I hope with you as well. This statement is the essence of slow change. I am truly excited about where we are headed as a Chapter. We are gaining national recognition for programs and solutions that have taken multiple years to develop. These are leading to new opportunities for the Chapter. Building on the success of defining wintering areas

...PRESIDENT'S MESSAGE, CONTINUED

for Sage-Grouse in the Pinedale area, we have recently been asked by the Wyoming Game and Fish Department for guidance on how best to use available data and to help them with defining migration routes for ungulates in Wyoming. Several new endeavors are in the planning stages and I hope to share these with you in the coming months as these new opportunities “begin to grow legs.” Our work doesn’t end there and we need your help to keep this momentum going. We all know at least one wildlife professional that is not a member of the Chapter or Society. Reach out to your colleagues and start a conversation about your interests in The Wildlife Society. I encourage you to share your passions and perhaps we can open the door for others to join us our journey.

We have all heard and witnessed the many challenges that we face in Wyoming. I won’t spend time reiterating those here. The number and complexity of the issues we are involved with is growing at a staggering rate. Yet as the world around is changes rapidly, we will be presented with countless opportunities to make slow change. I invite you to view a different perspective. Instead of focusing on what happened in the immediate past (e.g., yesterday or minutes ago), focus on what happened 10, 20, or 30 years ago. Use this new perspective to challenge yourself. Take a moment and ask yourself what can I do that will make a huge impact in 6 months or a year. Our founders seized the opportunity 40 yrs ago. Will you?

M. Grenier, WYTWS President

WY TWS BOARD MEETINGS: WINTER BULLETS

The Board has had a busy few months, with new members (Secretary Nichole Cudworth was replaced by Daly Edmunds, Board Member at-Large Dan Thompson was replaced by Kevin Monteith, and Eric Maichak joined the Board as President-Elect) and a meeting in January (Laramie) and another via webinar in February. Below is a list of some of the topics discussed and decisions made. Board meetings are open to the membership, so participation is always welcome! For complete meeting minutes, please contact Daly Edmunds at dedmunds@audubon.org.



Daly Edmunds, WY TWS Secretary

- The 2011-2014 Strategic Plan was reviewed by the Board. Based on the strategies identified within, the Board members decided to focus this year’s efforts on Objective IV Strategy I, “Identify, support, and promote opportunities to increase and diversify membership and member involvement (e.g. Board and committee participation) within the Chapter.”
- WY-TWS has a new Facebook page, being managed by Ian Abernethy. Jason Carlisle continues to improve the WY-TWS website (<http://wildlife.org/wyoming/>). Please check them out! If you have content information or ideas, please let Eric know (eric.maichak@wyo.gov).

...Winter Bullets, Continued

- Planning for the joint WY-TWS/CMPS meeting is kicking in to high gear. This year's annual meeting will be in Sheridan, Aug 26-28. The meeting will include continuing education opportunities through 8 workshops ranging from collaborating with the media to chemical immobilization, as well as birding, habitat, and necropsy field trips! Call for papers opens March 1st and ends June 30. Members are being asked to help find sponsors and auction items to donate.
- The Board is pursuing conversations with the Wyoming Landscape Conservation Initiative (WLCI) regarding possibly doing a joint meeting with them for the 2015 annual meeting. Potential benefits include reduced cost and increased attendance.
- Based on the Summer 2013 membership survey, the Board is pursuing organizing a multi-day GIS workshop. Matt Hayes will be organizing and teaching it. Planning continues.
- An audit of WY-TWS finances is being worked on.
- National TWS is trying to engage State Chapters in getting legislatively active, while developing a process for cooperation across states and between chapters. To do so, National is proposing that States develop a Conservation Affairs Committee. Discussions continue, don't want duplication of duties of existing committees.
- In 2013, membership requested that WY-TWS engage in defining migration routes so as to improve ungulate management. State and Federal agencies have echoed this desire. This has been sent to the Science Committee to pursue.
- Per interest from membership, the Board is considering developing a white paper on mitigation.
- The Board approved funding the Fellowship Program for two more years. The program has received financial support from the donation of a Commissioner's Tag from Commissioner Klouda and a generous donation from a WY-TWS member. Corinna Riginos, research ecologist at Teton Science School and a WY-TWS member, has volunteered to serve as coordinator. Advertising efforts have been intensified to increase the number of applicants. While this continues to be a WY-TWS Program, Teton Science School will continue to play an important partner role. The Fellowship Committee and Coordinator will be reviewing applications.
- The Board approved a \$1,000 scholarship to a deserving graduate student. Anna Chalfoun (Zoology & Physiology Department/Cooperative Fish & Wildlife Research Unit) will be leading the university-wide search effort. Applications are due March 14.
- The Board approved providing \$1,000 to the UW Student Chapter. This funding will go towards sending 15 students to the Western/Central Mountains and Plains Section (CMPS) Student Wildlife Conclave, hosted by the University of Nebraska-Lincoln Student Chapter of The Wildlife Society at Mahoney State Park in Nebraska (March 14-17). This forum provides college students with valuable hands-on training in wildlife management and conservation, and networking opportunities with wildlife professionals. Expect to hear about the Conclave at our annual meeting and in future newsletters!
- The Board approved providing two \$250 travel awards to graduate students, distributed by the CMPS. This award is to assist in attendance at TWS meetings, including our own.
- The Board is pursuing using webinar conferencing capabilities, to reduce travel expenses and increase effectiveness of the Board.

D. Edmunds, WYTWS Secretary



Call for Professional and Student Abstracts

THE WYOMING CHAPTER of THE WILDLIFE SOCIETY HOSTS the CENTRAL MOUNTAINS & PLAINS SECTION of THE WILDLIFE SOCIETY 2014 ANNUAL CONFERENCE

Submission Deadline: June 30, 2014

The Wildlife Society (TWS) Wyoming Chapter will be hosting the Central Mountains & Plains Section (CMPS) of TWS and invites submission of abstracts from all states/provinces of the CMPS for the annual conference to be held August 26-28, 2014 at the Holiday Inn in Sheridan, Wyoming. The theme of this year's conference is "Manifesting the Destiny of Wildlife & Habitat Science, Stewardship, & Solvency".

Presentations on any pertinent wildlife or habitat related issue will be considered, but submissions in the following areas are especially encouraged:

1. "New Tricks: Methods, Models, & More" – results of research explaining novel or revolutionary monitoring and modeling techniques for wildlife and habitat. Includes technological break-throughs.
2. "Mitigating Habitat Loss, Implementing Habitat Success" – results of research evaluating on- and off-site habitat management (e.g., prescribed fire) and response of vegetation and/or wildlife species.
3. "Costs of Creature Comforts: Wildlife versus Human Development" – results of research explaining interactions of human development (e.g., oil, wind) and wildlife species.
4. "Adapting Management, Changing Policy" – results of research explaining how scientific data were used to alter wildlife or habitat management practices and/or policies of private entities or government agencies.

POSTER PRESENTATIONS can be up to 5 feet wide by 4 feet tall and will be August 26th from 6:30 to 8:30pm. We strongly encourage anyone who is currently developing a research study plan, presenting preliminary data, or would prefer to share their research in a format other than an oral presentation to present a poster.

ORAL PRESENTATIONS are tentatively 15 minutes in length, including 2-3 minutes for questions from the audience, and will be in electronic format (MS PowerPoint preferred). Due to the limited number of slots available for student (n=30) and professional (n=28) oral presentations, we strongly encourage abstracts submitted for oral presentations to be from completed projects.

An abstract is required for those submitting for either the ORAL or POSTER sessions, and submitters will be notified about the status of their abstracts by July 18, 2014. If an abstract submitted for oral presentation is denied, the submitter will have the option of presenting during the poster session and is required to notify the abstract submission point of contact (see below) by July 25, 2014 that they will be presenting a poster.

Please complete the attached application form and submit abstracts electronically via email attachment to:

For Students:

Mr. Ian Abernethy
University of Wyoming
(307) 766-3035
fisher@uwyo.edu

For Professionals:

Dr. Dan Thompson
Wyoming Game and Fish Dept
(307) 349-9129
daniel.thompson@wyo.gov

For successful abstract submissions, we encourage both oral and poster presentations that incorporate large font, minimal text, and high quality photos and/or graphics.

STUDENTS, please note that there will be up to \$500 available for travel awards to help offset conference and travel costs. Stay tuned for the formal announcement and application by checking the CMPS website at www.wildlife.org/cmp/ or WYTWS website at www.wildlife.org/wyoming/

ABSTRACT SUBMISSION INFORMATION

At the **top of your abstract**, please provide the following:

1. Name of Submitter/Author:
- 2a. Specify is Submitting as STUDENT or PROFESSIONAL:
- 2b. If student, please specify if UNDERGRAD, MASTERS or PhD:
3. Institution:
4. Mail Address:
5. Telephone/Fax Numbers:
6. Email Address:
7. Specify if Submitting for the ORAL or POSTER session:

REQUIRED ABSTRACT FORMAT: 300 word limit, 12 point font in Times New Roman, 1" margins, single-spaced, capitalize title, provide full name, affiliation, and address for all authors (using superscript numbers to link to appropriate contact info), & underline presenting author. *See example below.*

Due to volume, abstracts must follow the **required format** and be **submitted as MS Word documents.**

Sample Abstract Submission Information & Abstract : Please refer to following page.

2014 Conference of The Wildlife Society – Wyoming Chapter & Central Mountains & Plains Section
Abstract Submission

1. **Submitter/Author:** Hall Sawyer
2. **STUDENT OR PROFESSIONAL:** Professional
3. **Institution:** Western Ecosystems Technology, Inc
4. **Mail Address:** 200 South 2nd St., Suite B. Laramie, WY 82071
5. **Telephone/Fax Numbers:** Phone
6. **Email Address:** hsawyer@west-inc.com
7. **Submitting for the ORAL or POSTER session:** Oral presentation submission

A FRAMEWORK FOR UNDERSTANDING SEMI-PERMEABLE BARRIER EFFECTS ON
MIGRATORY UNGULATES

Hall Sawyer^{1*}, Matthew J. Kauffman², Arthur D. Middleton^{3,4}, Thomas A. Morrison³, Ryan M. Nielson¹,
Teal B. Wyckoff^{3,5}

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²US Geological Survey, Wyoming Cooperative Fish and Wildlife Research Unit, Department of Zoology and Physiology, University of Wyoming, Laramie, WY 82071, USA.

³Wyoming Cooperative Fish and Wildlife Research Unit, Department of Zoology and Physiology, University of Wyoming, Laramie, WY 82071, USA.

⁴Program in Ecology, University of Wyoming, Laramie, WY 82071, USA.

⁵Wyoming Geographic Information Science Center, University of Wyoming, Laramie, WY 82071, USA.

Impermeable barriers to migration can greatly constrain the set of possible routes and ranges used by migrating animals. For ungulates, however, many forms of development are semi-permeable, and making informed management decisions about their potential impacts to the persistence of migration routes is difficult because our knowledge of how semi-permeable barriers affect migratory behavior and function is limited. Here we propose a general framework to advance the understanding of barrier effects on ungulate migration by emphasizing the need to: 1) quantify potential barriers in terms that allow behavioral thresholds to be considered, 2) identify and measure behavioral responses to semi-permeable barriers, and 3) consider the functional attributes of the migratory landscape (e.g., stopovers) and how the benefits of migration might be reduced by behavioral changes. We used global position system (GPS) data collected from two subpopulations of mule deer *Odocoileus hemionus* to evaluate how different levels of gas development influenced migratory behavior, including movement rates and stopover use at the individual level, and intensity of use and width of migration route at the population level. We then characterized the functional landscape of migration routes as either stopover habitat or movement corridors, and examined how the observed behavioral changes affected the functionality of the migration route in terms of stopover use. We found migratory behavior to vary with development intensity. Our results suggest that mule deer can migrate through moderate levels of development without any noticeable effects on migratory behavior. However, in areas with more intensive development, animals often detoured from established routes, increased their rate of movement, and reduced stopover use, while the overall use and width of migration routes decreased.

WY TWS Science Committee: Taking the Next Step in a Long Migration



Seems odd writing about winter as the snowmelt around the house is reminiscent of June, but then again last week it was -20; which of course speaks to the adaptability and sense of humor of the natural world. We gained several new members at the Annual Meeting in Rock Springs this Fall and look forward to their contributions! The Science Committee will be fervently busy in the upcoming months after receiving a request from the Wyoming Game and Fish Department to develop a definition of wildlife migration routes in Wyoming. This request comes at a significant time where critical migration routes and corridors are being used to better manage our wildlife populations in an inter-agency collaborative approach.

Rather than go into the boring semantics of “what has happened since the last time” type of report, I wanted to share an excerpt from a powerful essay written by Jack Ward Thomas in 1985 for the North American Wildlife and Natural Resources

Conference. This was sent to me earlier by Tom Ryder (past-president of National TWS and Wyoming Chapter), and is something that every person in the field should read. Take the time to find the full essay, but here’s a snippet that is amazing in its timelessness!!

“For those interested in wildlife management, indeed in the management of natural resources, these are confusing and often discouraging times. Natural resource management professionals have great responsibilities to keep the faith and serve steadfastly as advocates and agents of good stewardship and management. These are indeed interesting times – times of testing. It is useless to look back for the good old days – they are gone. It is pointless to look around for others to lead – they aren’t there. For better or worse, we’re it. Whether we recognize it or not, we are agents of change in how natural resources are treated, considered and used. If we succeed, there will be accolades from historians. If we fail, historians will, doubtless, take little note – but history will be much different. In my opinion, we stand at one of those moments in history that is a watershed for our nation in terms of how we treat our natural resources. We need to be fully aware of who we are, what we are and where we are in history.”

D. Thompson, Science Committee Chair

The Wyoming Chapter of The Wildlife Society strives to:

- ◆ *Provide an organization of wildlife management professionals from which statements affecting wildlife can be made exclusive of agency limitations.*
- ◆ *Provide for the exchange of ideas and information between wildlife workers without agency consideration.*
- ◆ *To strengthen The Wildlife Society, its objectives and goals.*
- ◆ *To promote and provide for intradisciplinary communication and training to keep abreast of modern needs and technological developments.*
- ◆ *To promote awareness of and continued improvement in wildlife management.*

WYTWS Announces \$1000 Graduate Student Scholarship! Deadline for Application, March 14

Eligibility:

To be eligible, applicants must be:

- a student in good standing and currently pursuing a graduate degree (MS or Ph. D) and conducting research that furthers the scientific knowledge of wildlife, habitats or human dimensions in wildlife management
- a member, The Wildlife Society, at the time of application *

Note: Previous recipients of this award are not eligible.

Application Components:

Applicants must submit copies of the following materials:

- Part I: Applicant information – name, email address, physical mailing address, daytime phone number, hometown, department, name of advisor, specify degree being pursued (MS or PhD), expected date of graduation
- Part II (not to exceed one page in length): Description of your existing research project – including title of research, objectives, methods, hypotheses and relevance to the resource management field,
- Part III: Resume or curriculum vitae,
- Part IV: Current graduate transcript,
- Part V (not to exceed one page in length): Describe your extracurricular activities, interests and ambitions with regards to the Mission of The Wildlife Society.

Submission Information:

Please send completed applications with all materials in one aggregated file to Anna Chalfoun at Achalfou@uwyo.edu by March 14th, 2014. Please include “WY-TWS Graduate Student Scholarship” in the subject line. Applicants will receive an e-mail acknowledging receipt of their application. Selected recipient of the scholarship will be notified by April 4, 2014.

Responsibilities of Scholarship Recipient:

- Attend part or all of WY-TWS annual meeting – scheduled for August 26-28 in Sheridan, WY.
- While at annual meeting, present either a poster or give oral presentation on graduate research. Deadline for submission of abstracts for consideration is June 30, 2014. For information regarding abstract submissions, send inquiry to Ian Abernethy Fisher@uwyo.edu.
- Write an article for the WY-TWS quarterly newsletter (coordination on topic, likely related to graduate research, and timeline to be made with newsletter editor).
- Willing to have name released as the recipient of the WY-TWS Graduate Student Scholarship.

* To join the Wyoming Chapter of The Wildlife Society, please contact the Chapter Treasurer, Therese Hartman, at therese.hartman@wyo.gov, or visit the website to join online:
<http://wildlife.org/Wyoming/membership>

University of Wyoming Cooperative Moose Research

Sublette Moose Project

Brendan Oates

Collaborators: WY Cooperative Fish & Wildlife Research Unit, WGFD, USFS-Bridger Teton.

At the southern extent of their range, moose are experiencing a combination of potentially limiting factors such as climate change, disease, predation and energy development. As Wyoming landscapes become increasingly fragmented by residential and industrial development, there is an urgent need to collect baseline information on how moose populations might respond to such disturbances. This project is evaluating movement behavior and

demography of moose in relation to potential energy development along the Wyoming Range front in Sublette County. There are currently 44,720 acres in Bridger-Teton National Forest that could be developed for natural gas (hereafter, the 44-7 leasing zone). Although moose are relatively abundant in the 44-7 leasing zone, very little is known about their demography or habitat use. Our study has thus far revealed that moose in the Wyoming Range are in surprisingly poor body condition and exhibit low pregnancy rates, suggesting additional stress from development could further reduce population performance. The completion of this project will yield comprehensive information on moose nutrition and demography. It will also identify key movement corridors and seasonal ranges in relation to the 44-7 leasing zone. Should leasing occur, our delineation of important moose habitats would allow wildlife managers and forest planners to minimize the impact of energy development on Wyoming Range moose. Such information, on important moose habitat in this area, does not currently exist.



Dr. Kevin Monteith (left), M.Sc. Student Brendan Oates (middle) and Jenny Jones of the Wyoming Cooperative Fish and Wildlife Research Unit collect data from F15 in South Beaver Creek during 2013 captures.



Ph.D. student Brett Jesmer and scat dog Wicket from Working Dogs for Conservation locate moose droppings that will be analyzed to identify diet quality and composition of moose across the state.

Statewide Moose Habitat Project

Brett Jesmer

Collaborators: WY Cooperative Fish & Wildlife Research Unit, WGFD, CO Parks & Wildlife, Grand Teton NP, USFS, USFWS.

Agencies manage for large yet sustainable populations of moose to serve a variety of public interests. Since the time of Aldo Leopold, managers have understood that population densities must remain at or below carrying capacity—the balance between population density and habitat condition—if long-term stability of wildlife populations is to be achieved. However,

tools to help managers strike such a balance are limited and lack the ability to incorporate the environmental variability that makes determining local carrying capacities a moving target. As populations approach carrying capacity they begin experiencing reduced forage quality, nutritional condition, reproduction and recruitment of young. Therefore, our research goals are threefold: 1) understand the linkages between climate, habitat conditions and pregnancy and recruitment rates, 2) identify populations experiencing habitat limitations, and 3) discover habitat and nutritional signals that will identify a population's proximity to carrying capacity. We are developing monitoring tools and quantifying habitat and nutritional thresholds indicative of close proximity to carrying capacity. Currently, we are linking calf-cow ratio data collected by the Wyoming Game and Fish Department with statewide surveys of: 1) seasonal patterns of precipitation, 2) annual rates of spring 'green-up', which determines the amount of high-quality forage available, 3) summer diet quality and composition, 4) willow condition on winter ranges, 5) spring and autumn nutritional condition, and 6) population-level pregnancy rates. With our results we aim to provide managers with tools that aide them during the decision making process by providing them with a means to monitor habitat-demography relationships.

Elaeophora Project

Amy Williams

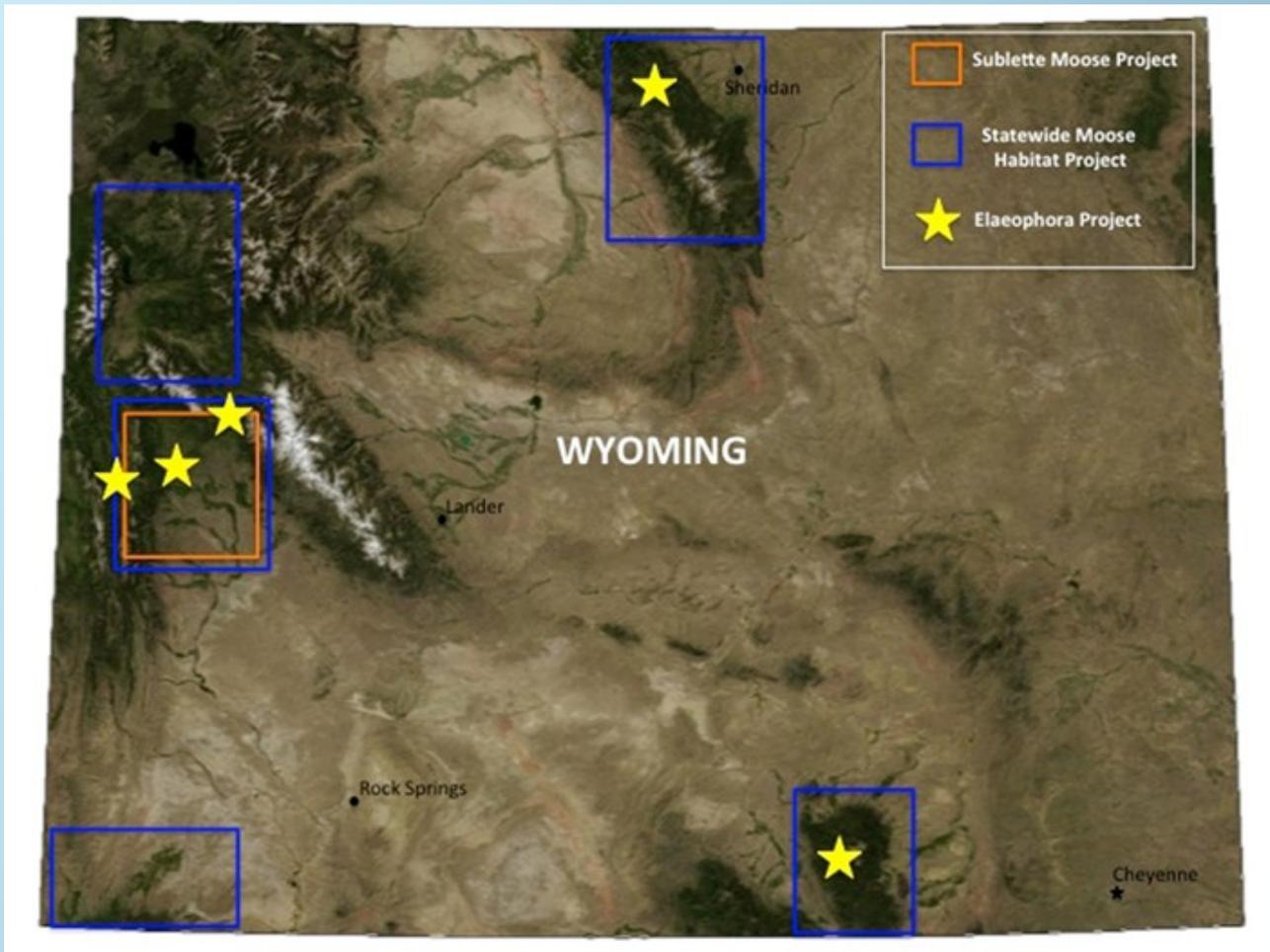
Collaborators: WSVL, WGFD, TSSCRC, MBRWF.

Moose face many obstacles that threaten their fitness and population growth. The arterial worm *Elaeophora schneideri* has recently been found in many moose herds around Wyoming. Prevalence of this parasite has increased from zero to more than 25 and 48 percent in Teton and Fremont counties, respectively. The Snowy Range moose herd has experienced high occurrence (82.6%).

Elaeophorosis can cause morbidity and mortality in abnormal hosts such as moose, and has been found to depress population growth in elk. To better understand what drives the prevalence of *E. schneideri* in moose, we are examining the tabanid vector and it's relationships with potential ungulate hosts. From over 1,700 field-collected horse flies, we have identified 18 different species among four study regions (see map). These horse flies are being tested for *E. schneideri* larvae using real-time PCR. We expect the differences in species composition of horse flies to represent variances in the prevalence of *E. schneideri* among the 18 different species of horse flies identified to date. In addition, we are using real-time PCR to determine if moose are being selected for blood meals more than other animals on the landscape using species-specific primers. The results from this study will help researchers better understand the dynamics of *E. schneideri* transmission and the conditions that lead to elaeophorosis in moose.



M.Sc. Student Amy Williams collects horse flies trapped in a Manitoba flytrap from the South Beaver Creek area in Sublette County, WY.



Story Behind the Photo: Steely Reflections

It seems one should never see the reflection of a man behind a steel gate in the eye of a wild elk. There is undoubtedly fear and anxiety behind this elk's eye and it somehow takes away some of its wildness. I can assure you that the wildlife professionals who trapped this elk do not find pleasure in capturing this animal, and if they had their way they'd just as soon let this animal live out its life in the wild having never been handled by a human. But, unfortunately, it's not a perfect world and often times we need to apply stress on wild animals through capture for the greater good of the population.



This cow elk will carry a vaginal implant transmitter that will be expelled when she aborts or gives birth

from a few weeks to a few months from now, and these same biologists will go find the implant and log its location to help identify important characteristics of elk parturition sites and areas. The elk also will wear a GPS collar for a couple years to further provide fine-scale movement and distribution data so that wildlife managers can

make better, more informed decisions on how we will share the landscape and coexist with these animals.

A Tribute to Tom Easterly

Thomas Gerrard Easterly, 50, of Greybull died Feb. 20, 2014.

He was born to Bob and Connie Easterly on Oct. 16, 1963, in Pierre, S.D., the fifth of eight children. In 1981 he graduated from Raymond Central High School in Valparaiso, Neb. He then attended South Dakota State University, earning his bachelor's and master's degrees in wildlife science. In 1989 he began his career as a biologist working in western South Dakota and southern Wyoming. Tom worked in Casper and Laramie as a wildlife technician before moving to Greybull in 1992 as a wildlife biologist for the Wyoming Game and Fish Department. Throughout his career Tom focused on ensuring the area's native wildlife species were able to live in a sustainable habitat. Because of his commitment to the maintenance of wildlife populations, Tom served as a key figure in negotiations between landowners, private groups and government agencies. He played an integral role in several G&F projects in the area, including the release and reestablishment of the bighorn sheep population in Shell Canyon and on Little Mountain, and the introduction of Rio Grande wild turkeys in river drainages throughout the Big Horn Basin.



Tom Easterly, Greybull wildlife biologist for WGFD helps subdue a young bighorn ram.

Tom's leadership also was also key in the management of sage grouse. He was chair of the Big Horn Basin Sage Grouse Working Group, one of seven statewide groups initiated by the governor, and served as the liaison with University of Wyoming sage grouse researchers in the Big Horn Basin. Tom served as a member of Paintrock Basin's Coordinated Resource Management Group to improve forestry management throughout the county and on the Big Horn Forest Resource Advisory Council, which allocated federal funds for area forest improvement. Tom worked closely with local chapters of Pheasants Forever and the National Wild Turkey Federation to improve habitat for both species. He was one of two G&F biologists on the National Wild Turkey Federation's State Technical Committee.

Tom was a true outdoorsman and his passion and enthusiasm reached far beyond his career. He contributed to both community and regional outdoor education efforts by teaching annual hunter safety programs, led community forums to reinforce the need for habitat management, and volunteered on the Greybull and Shell volunteer fire departments. Tom was active in the Paintrock Hunter Mentor Program, and Worland Outdoor Education Day meeting annually with high school seniors to answer their questions about the wildlife biologist vocation.

Each spring and summer Tom directed several youth mountain biking clinics and performed regular maintenance on bike trails throughout the region as a member of the Wyoming State Trails Council. As the former Wyoming representative for the International Mountain Biking Association he promoted the sport's accessibility throughout the state. Tom was a longtime member of the Greybull Elks Lodge and held many offices in the organization. As part of the Greybull City Council, Tom was instrumental in the revitalization of City Park recreation facilities and athletic fields and the addition of a skate park. Additionally, his expertise and volunteerism was vital in developing the county's Wildfire Protection Plan.

There is no doubt that Tom, a friend to so many, led a full life in his 50 short years. His friendship was, at its essence, selfless, encouraging and unwavering. He was adventurous and always ready for a day outdoors with his buddies - whether mountain biking, skiing, hunting or hiking. Tom was soft-spoken, yet stubborn; an independent spirit, yet fiercely loyal to his friends. His many friends will find comfort in their fond memories of Tom that will allow his legacy to live on.

...Tribute to Tom Easterly, Continued



Tom is survived his parents of Haxtun, Colo., sisters Debra Easterly of Pocatello, Idaho, Diane Molloy of Lincoln, Neb., Cathy Josephson of Firestone, Colo., and Sue Johnson of Oak Harbor, Wash., brothers Bill Easterly of Loveland, Colo., Jim Easterly of Arvada, Colo., and Steve Easterly of Appleton, Wis., and many nieces and nephews. Contributions in memory of Tom can be sent to the Tom Easterly Memorial and Scholarship Fund, care of Big Horn Federal Savings Bank, P.O. Box 471, Greybull, 82426.

Tom Easterly and Breanne Thiel apply a radio-collar to a bighorn ewe.



Call for Papers: AAG Annual Meeting, 8-12 April 2014, Session Title: Paths Toward Sustainable Payments for Ecosystem Services Co-organizers: Li An, Conghe Song, Stephen Crook

Payments for ecosystem services (PES) are direct incentives paid to resource users to take actions (or to refrain from previous actions) to secure ecosystem services such as clean air and water, food, soil fertility, forest resources, and eco-tourism. Governments, the private sector, and many non-governmental organizations worldwide invest billions of dollars each year in PES programs. Despite reported successes in restoring and conserving ecosystems and their corresponding services, lack of sustainability has become a serious concern for many PES programs worldwide; one of the problems is that PES participants may return to their previous behavioral patterns when payments end.

This session will explore possible pathways toward PES sustainability, addressing the complex reciprocal relationships between PES programs and corresponding socioeconomic, demographic, and environmental systems. We particularly encourage review and research articles to address theoretical, methodological, and empirical issues related to (but not limited to) the following topics:

1. Potential mechanisms for successful (or unsuccessful) PES programs
2. Ecological effects of PES programs (e.g., wildlife habitat or behavioral change, biodiversity change)
3. Socioeconomic, demographic, and political consequences of PES programs
4. Methodological issues: collection of qualitative and quantitative data related to PES, data analysis and modeling, application of GIS techniques and spatial statistics, integration of multidisciplinary and multi-scale data, and addressing complexity in PES related coupled natural and human systems (CNH). Analyses using similar integrated frameworks including coupled human and natural systems (CHANS), social-ecological systems, or social-environmental systems are also welcome.

This session (sessions) is co-sponsored by the AAG Spatial Analysis and Modeling group, the Geographical Information Science and Systems group, and the Human Dimensions of Global Change group. To be considered for the sessions:

1. Please register and submit your abstract online following the AAG Guidelines (<http://www.aag.org/cs/annualmeeting>); and
2. Please send your paper title, PIN, and abstract no later than Tuesday, December 3 to Stephen Crook (scrook@gmail.com) and cc to Dr. Li An (lan@mail.sdsu.edu).

Conserving Our Future at the WY TWS 2013 Annual Meeting

This year's conference dubbed "Conserving our Future" was held in the gritty, rough-and-tumble town of Rock Springs. As a result of a Wyoming's predictably unpredictable weather, several board and general members arrived slightly late to the warm refuge of the Holiday Inn following a white-knuckled, turtle-slow drive on icy roads. Much of the morning's speedy board meeting revolved around the future of the Fellowship program, how to spend scholarship funds, the new Fiscal Manual, and increasing information flow from WYTWS to the parent chapter via the new Conservation Affairs Committee. Committee updates were brief, and of particular note was the need for a younger, new Nominations chair with Frank Blomquist bowing out.



President-elect Martin Grenier shoots from the hip with a serious opening speech.

As late registration and check-in ensued, several of us decided to sample the hotel's restaurant. What started out as a benign lunchtime experience with small talk turned into an endurance of the will as the entire table attempted to resolve the strangely sour mood of our waitress who had also seated us. No manner of pleasantries, even from the jovial Dan Stroud, could spark anything less than a charade smile. Maybe just an off day or a bit overworked? Speculation on this subsided as we paid our tabs and left the restaurant confused.



Amy Williams helps Dennis Saville and Nick Van Lanen understand flies and carotid worms at the poster session.

After roads thawed and mountain passes opened, attendees trickled in and settled down for the opening speech of President-elect Martin Grenier. Martin thanked the board for their help with organizing the conference, recounted the difficulty and setbacks manifesting in this year's conference as a result of the recent Federal Government furlough, and then asked the audience what they noticed that was different at this year's conference. After a brief silent pause, someone barked out that attendance appeared to be down from usual, and after agreeing with a nod and grimace, Martin further noted that our chapter membership is increasing in age and decreasing in participation and enthusiasm as evidenced by single-person ballots and defunct committees. Martin then reminded everyone that although times may be bad, don't forget the passion that we all have for the resources we manage and study, and get engaged in WYTWS.

Professional talks kicked off the afternoon, displaying several new models on factors influencing ungulate migration, brucellosis risk assessment, and grizzly bear expansion, while other presentations delved into non-game, cattle/grazing interactions, and the overall slow descent of antler and horn characteristics in trophy-class animals. Throughout the afternoon numerous late arrivals helped further elevate crowd size, need for more chairs, and conference spirits. Presentations ended, Martin made a few announcements, and big applause ended the day. While a few of us found dinner and a much more upbeat hostess and waiter than this morning at the hotel restaurant, many attendees tacked up posters and primed for the evening's social events.



"Old Timers" Reg Rothwell, Bill Rudd, and Bob Lanka contemplate a deep question and possible answers during the Quiz Bowl.

...2013 Annual Meeting, Continued

Enhanced explanations of posters and some embellished pouting from a few quiz bowl participants over questionable answers and judging made for an evening of learning and laughter. As usual, wisdom, patience, and the ability to answer more than one question per round dominated, and the self-titled team of the “Old Timers” (including Bill Rudd, Reg Rothwell, and Bob Lanka) claimed this year’s quiz bowl Stick of Knowledge. Even though we continued to fill the bartenders tip jar and hotel’s coffers with copious drink orders, we got the boot at 11:00 and the crowd dispersed quietly.

Day two started a bit foggy but after a brief jog, shower, and unanticipated rendezvous with Monteith, Jesmer, and Oates in the hallway, we funneled down into the hotel’s restaurant. Why not try it again? After all, we were in a good mood and this would surely infect anyone else. Discussing new ideas satiated minds but not appetites as the waitress/hostess from yesterday’s lunch continued to seat and serve other patrons while seemingly ignoring us. Filing out after a near 10-minute wait caught her attention, and the sound of silverware being thrown back into a basket caught our attention. Relocation to the friendlier breakfast accommodations of Burger King got us scheming on new research, WYTWS membership, and why the waitress/hostess was so angry. Maybe she’s also cooking the meals.

Back in the conference, student presentations comprised a lively morning session with projects spanning the gamut of charismatic mega and micro-fauna, indicator species, and habitats from wetland to alpine zones of Wyoming. The influences of energy development, habitat quality, predation, and environmental factors on body condition, survival, new sampling methods, and behavior of many species were recounted in numerous well-polished talks. The close of the morning session drew applause of appreciation from the crowd, and it was once again time to choose where to find a meal. For those in the mentoring program a grand lunch was close at hand. With time limited between morning and afternoon sessions and an impending lunch meeting, we decided to brave the hotel’s restaurant yet again. The food wasn’t bad, and with repeated sampling, this was turning into a sociological research project.

To no surprise, the now familiar waitress/hostess motioned us in from the door and asked for us to sit in a booth. Tablemates consisting of Kilpatrick, Vodehnal, Stroud, and myself became engrossed in discussing next year’s conference, and no sooner had our waitress handed us our menus than demanded our order. Not willing to challenge her impatience we made hasty choices based mostly on choices made yesterday. Scowling at us as we rattled off orders, Kilpatrick left us awed as he somehow managed to temper her attitude and draw a smile out of her with his simple selection from the menu. No matter, Kilpatrick’s order was botched and the waitress grumpily comp’d his salad. Again, we politely paid our tabs and left baffled about her mood but at least with a bit more progress toward next year’s WYTWS/CMPS conference. So why does the rest of the restaurant staff seem happy, but not her?



From top to bottom and more formal to festive, 2013 award recipients include Frank Bergquist (right) with Frank Blomquist; Gary Fralick (right) with Kevin Monteith; Anicka Kratina-Hathaway and Matt Hethcoat (left and right of Anna Chalfoun; and “V” (right) on behalf of Nick Scribner with Colonel Sanders.

...2013 Annual Meeting, Continued



Tony Mong presents Martin Grenier with the WY TWS President's Plaque.

The afternoon session jumped back into gear with the final round of student presentations, touching on issues of pronghorn survival, ferruginous hawk colonization, and the large spatial overlap of numerous SGCN with sage grouse. Final professional presentations on ferruginous hawks, sciurids and lagomorphs, and RMBO's new avian data center rounded out standard talks, and the day ultimately finished with an interesting plenary on novel advancements in management of wildlife diseases in Wyoming and beyond. With a large round of applause thanking all conference presenters, most folks collected their items and headed to groom or don costumes while a few of us hustled to the costume shop to make final essential purchases.

Never in the history of WYTWS had the conference banquet been coupled with a Halloween costume ball. Strolling in completely incognito made for funny looks and entertaining conversations with numerous other festive professionals and students, yet some masks and fake beards had to be removed temporarily to facilitate eating. After dinner, drinks, and a presentation by the 2013 Fellow, Patrick

Rodgers, Kevin Monteith bestowed Professional of the Year to long-time Game & Fish biologist and mule deer stalwart Gary Fralick. Frank Blomquist then called on Frank Bergquist who was awarded Citizen of the Year, and president Mong announced Anicka Kratina-Hathaway and Matt Hethcoat who took Best Student Poster and Oral Presentations to copious applause. In full costume as Colonel Sanders I was honored to present "V" (Dan Thompson) on behalf of Nick Scribner with the "Best Newsletter Article" award. Tony then provided a speech on his appreciation for WYTWS membership and need to further increase our chapter's relevancy, and after suggesting that, "you can go fast alone, but you can go farther with more help", Tony handed the President's Plaque to a smiling Martin Grenier.

Following Martin's somewhat emotional acceptance speech, Tony also became teary-eyed after Martin regained composure and presented Tony with an outgoing service award for his exceptional efforts and accomplishments as president. Taking the mood in a comedic direction, costumed solicitors then hustled attendees to buy raffle tickets and chances to win prizes with card and dice games. An impromptu live auction reinvigorated the crowd and kept folks entertained until the bar closed. While most folks headed for bed, some sampled the hotel's hot tub until the wee hours of the morning.

Seven bells came early and it was time to shower, pack, and check out. My roommate who indulged in that morning's hot-tubbing festivities groggily said goodbye and I slipped out quietly in the dark. At last it was time to once more sample the breakfast fare and atmosphere of our hotel's restaurant. The now familiar waitress/hostess met me alone at the door and said coldly that I could sit where I like. After ordering and consuming



Patrick Rodgers, 2013 WY TWS Fellow, provides a personal description of the Fellowship Program.



Dan Bjornlie lets his freak-flag fly with a wicked 80's glam-rock wig.

...2013 Annual Meeting, Continued

most of my meal, she quietly brought the check. I thanked her for the large breakfast, paid my tab, and with a poker face and no verbal response, she briskly turned and headed to the kitchen not to be seen again. Left only to wonder why she couldn't be friendly after repeated attempts to encourage a smile, I finished my coffee and headed to the conference hall. That morning's professional development sessions focused on the new WISDOM as well as RMBO's bird d-base websites. Both sessions were highly interactive with crowd participation and finished off the conference with fun and informative workshops on how to get the most from these web-based tools.



Happy Halloween from the motliest crew of Jesse, Clint, Colby, and Magilla Gorilla

An extended lunch of sushi and hot tea with past committee members and new friends sparked final conversations on WYTWS and other issues like agency-sponsored travel to next year's conference. After filling my truck and coffee cup and quietly rolling out of Rock Springs, I wrenched the steering wheel in a constant left-hand turn to compensate for the stiff west wind while heading north on Hwy 191 this blustery Halloween day. Mind racing and phone in hand, I continued to strategize and network for the 2014 WYTWS-CMPS conference. I'd verbally reserved a block of rooms at the Sheridan Holiday Inn and stared down the blacktop, wondering if the ballroom was still as glamorous as before, if our board and budding conference committee could actually pull off something spectacular, and if there really is always one rotten apple in every basket of restaurant staff. See you in Sheridan....

E. Maichak



Mark Gocke



markgocke.com



Mark Gocke

Apply Now to TWS Leadership Institute!

The Wildlife Society (TWS) is currently accepting applications for its Leadership Institute. The Institute's goal is to facilitate development of new leaders within TWS and the wildlife profession. The Institute will recruit 10-15 promising early-career professionals for a series of intensive activities and mentoring relationships. The focus will be on exposing the participants to the inner workings of TWS and increasing the number of active leaders in TWS and the wildlife profession.

From May until October, participants will engage in a series of activities to develop and expand their leadership skills. Institute members will attend the TWS Annual Conference in Pittsburgh (October 24-30, 2014) and participate in various activities, including mentoring and leadership workshop sessions. The Institute is free, and participants receive free registration and a travel grant for the conference.

Participation in the Institute is geared toward early-career professionals, individuals 2 to 3 years out of school (either undergraduate or graduate school), currently working full-time in a wildlife professional position, and with demonstrated evidence of their leadership potential. Also eligible are more recent graduates who have shown strong evidence of their leadership potential and those who are working while concurrently pursuing a graduate degree. All applicants must be dues-paying members of TWS and a Chapter or Section of TWS. The selection committee will be seeking to create a diverse group with participants of varying gender, ethnic, and regional diversity. Selection will be based upon:

- An excellent academic record
- Demonstrated leadership capability or potential
- Demonstrated level of excellence in current position
- Commitment to and involvement in TWS

Preference will be given to individuals who are certified as Associate Wildlife Biologists® or Certified Wildlife Biologists®, or who have submitted such an application to TWS.

Applicants must submit (in one PDF, excluding online application form and recommendation letters):

1. Application form (available at http://wildlife.org/dbadmin/Leadership_Institute_Application/index.cfm)
2. Cover letter with evidence of leadership capacity or potential, such as previous leadership positions held in TWS Chapters or Student Chapters or in other organizations
3. Résumé including a list of publications, awards, etc.
4. Academic transcript/s (scanned copy)
5. Two letters of recommendation from supervisors, academic advisors, professors, or others in leadership positions with whom you have worked and who are familiar with your leadership potential, commitment to TWS, and commitment to wildlife management and conservation. Letters should be emailed directly to: Laura Bies (laura@wildlife.org), subject line "Leadership Institute Recommendation for [applicant last name]"
6. An essay (1000 word limit), which succinctly summarizes (1) your concept of leadership, (2) your aspiration for your role within TWS in 5 to 10 years, and (3) why you are an ideal candidate for the Institute

Application deadline is March 21, 2014. Email all materials (except the application form, which is submitted online) in one PDF to: Laura Bies (laura@wildlife.org). Visit www.wildlife.org for more information (click on 'Professional Development' tab).

Please contact Laura Bies (laura@wildlife.org) with any questions.

WY TWS Membership Form

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New Member

Membership Renewal

NAME _____

AFFILIATION _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

E-MAIL ADDRESS: _____

WORK PHONE _____ HOME PHONE _____

ADDRESS CHANGE **Dues are \$10.00 per year or \$25.00 for 3 years.**

E-MAIL ADDRESS CHANGE Make checks payable to: **Wyoming Chapter-TWS**

MEMBERSHIP RENEWAL **NEW MEMBER**

I wish to receive the newsletter via E-MAIL or at the physical address listed above

**If you would like to receive your newsletter other than via e-mail or the web page,
please let Therese know.**

**Existing WY TWS members can log in and pay dues
on-line. Check out the WY TWS website at
<http://wildlife.org/Wyoming/>**

**If you are not an existing WY TWS member and pay dues on-line,
Please also complete this form and send to Therese Hartman**

Therese Hartman P.O. Box 850 Pinedale, WY 82941

Email: Therese.Hartman@wyo.gov

Fax: 307-367-4403

Please support your WY-TWS Chapter by paying your membership dues!

WY-TWS Nomination Form for Awards and Officers

It is not too early to start thinking about deserving nominees for our WY-TWS awards and officer positions. Please take a few minutes and give some thought about those who are working hard for wildlife and should be recognized for their efforts, as well as those who would make strong candidates for board members. Each year at the annual meeting, awards (Professional and Citizen of Year, Lifetime Achievement) are presented to recognize outstanding efforts by individuals in the state to conserve and manage wildlife and wildlife habitat. Successful candidates for officers are also announced at this time, and in autumn 2013, positions available will include President-elect, Secretary, and Board Member At-Large.

To submit a nomination, please fill out the biographical information listed on the form below and write up a short summary of the nominee's accomplishments in the wildlife conservation/management arena. Nominations can be mailed or e-mailed to the following:

WY TWS Awards and Nominations Committee Chair
Anna Chalfoun
University of Wyoming
Dept. 3166, 1000 East University Ave
Laramie, WY 82071
307-766-6966
achalfou@uwyo.edu

Nominee:

Award (circle one): Professional Citizen Lifetime Achievement

Officer (circle one): President-elect Secretary Board Member At-Large

Address:

Present Position (i.e., Specific Job Title):

Academic Background:

Professional Background:

Submitted By:

Address:

Phone:

Note from the Editor....

Another year has expired and Wyoming blows into 2014 as those of us indoors keep heaters cranked and fires crackling in response to the usual frosty temps and gnawing winds. In many parts of the state, a series of impressive storms has abruptly transformed a landscape that was devoid of snow to a sea of white following exceptional snowfall. Coupled with ambient temperatures undulating daily from well above to well below freezing, snow that was fluffy and gutless has disappeared thanks to rain or settled to rock-hard concrete depending where you live. Perhaps a bit forgetful, it seems that Old Man Winter's annual tests of endurance and adaptability for much of the wildlife of our state were merely delayed. Our wildlife must pass now those tests successfully, and so too must we.

As this season progresses, WYTWS continues to embrace the challenges of endurance and adaptability. Recruitment to revitalized committees and the Fellowship program, providing interagency 3rd-party assistance with special projects like the Sage Grouse Implementation Team and migration definition revision, as well as methodically preparing an action-packed WYTWS/CMPS conference are just a few of the ways that WYTWS continues to endure and adapt in what is often the frigid, unforgiving environment of the wildlife profession. So while you huddle in your climate-controlled office hovel and contemplate what you plan to achieve for the day, week, or even 2014, make sure those plans include a little something for WYTWS: help a committee, recruit one new member, assist the 2014 conference.

E. Maichak

More formally and specifically, we accept appropriate articles and information related to WYTWS, wildlife and habitat management, as well as conservation activities in Wyoming. Articles, photos, announcements, and other submissions can be sent to:

Eric Maichak
ERIC.MAICHAK@WYO.GOV

Nicole Cudworth
NICOLE.CUDWORTH@WYO.GOV

Ian Abernethy
FISHER@UWYO.EDU

markgocke.com

Newsletter deadlines for 2014:

February 15 (Winter Edition)

May 15 (Spring/Summer Edition)

September 15 (Autumn Edition)

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