

The Murreletter

Society for Northwestern Vertebrate Biology

Volume 17, No. 2

October 2009

President's Message

Happy autumn SNVBers!

I hope your summer was full of exciting work and play. It was a busy season for the SNVB board... planning the 2010 annual meeting in Medford, OR, learning about the business end of running a non-profit organization, updating our website, joining another high profile journal indexing database, and participating in the Joint Meeting of Ichthyologists and Herpetologists in Portland, OR.

Oregon VP Doug Degross and longtime member Dave Clayton are leading the planning efforts for the 2010 meeting. They already have a dynamic road ecology symposium organized and are working on other workshops and invited sessions. If you have ideas for a session or would like to volunteer to help with planning, please contact Doug.

The board recently met with a non-profit attorney to discuss our responsibilities and obligations as a 501(c)3 organization. It was very useful to learn about what we've been doing right and what business practices need improvement. One of the greatest benefits was discussing contracts and how we can protect our interests especially as we are signing more contracts with venues for our annual meeting, Allen Press, and database services.

If you have not visited www.snwvb.org recently, please do so pronto! Thanks to the coordinated efforts of board member Eric Lund and students at Clark College in Vancouver, WA we have a whole new look. Brian Biswell has for many years served as our faithful webmaster, and helped see this project through. Brian, who has been webmaster since we've had a web presence, has decided to pass the reigns to the next webmaster. We have been truly fortunate to have had Brian as our webmaster for so long. If you are interested in the job, please contact me as soon as possible.

Bob Hoffman, our ever talented journal editor, has done it again. In addition to being indexed through BioOne and JSTOR, Northwestern Naturalist will soon be available through two more full text databases, ProQuest Environmental Science Collection and ProQuest Science Journals. This is a great opportunity to increase the visibility of the journal and for SNVB to earn royalties as well. These royalties, while small, help offset the cost of publishing so we can keep our page fees down. Nice work, Bob!

One of the highlights for me this summer was representing SNVB at the Joint Meeting of Ichthyologists and Herpetologists in Portland, OR this July. Bruce Bury, the local host committee chair, invited SNVB to be a participating society. We helped with some of the behind the scenes work and received incredible visibility as a result. Our logo was prominently displayed in the program and on the meeting website, http://www.dce.k-state.edu/conf/jointmeeting/. It is my intention to increase SNVB's participation in larger conferences when they meet in our region so please notify your region VP if there is a meeting you think would benefit from our participation.

Hope to see you in Medford!

-Cheers, Tara



Society for Northwestern Vertebrate Biology

...the oldest scientific association devoted to the study of terrestrial vertebrates in the Pacific Northwest

-established 7 January 1920

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Who we are

The Society for Northwestern Vertebrate Biology was founded on 7 January 1920 as the Pacific Northwest Bird and Mammal Club. Long recognized as the pre-eminent union of ornithologists and mammalogists in the Pacific Northwest, the society adopted its current name in 1988 to reflect an expanded taxonomic scope that included amphibians and reptiles. The scope expanded again in 1999 to include fish. Today the society strives to promote close working relationships among ornithologists, mammalogists, herpetologists, and ichthyologists in our region; foster exchange of scientific information and interest in the study of vertebrates; and offer a forum for these activities through meetings and publications.

Membership

All persons or institutions interested in the study of birds, mammals, amphibians, reptiles, and fishes are eligible for membership. Individual members receive the Northwestern Naturalist and the Murreletter, our newsletter. Other SNVB publications, such as Northwest Fauna, are available at a reduced rate. Other privileges of membership include notification of all SNVB meetings, the right to vote in SNVB meetings and elections, and participation as a member of the SNVB board.

For more information or to become a member visit: www.snwvb.org

The Murreletter

The Murreletter is published three times yearly and is distributed to the members of the Society for Northwestern Vertebrate Biology. Submission of stories, meeting announcements, and other material of interest to members of the society is encouraged. Submissions should be sent to the Murreletter Editor, Eric Lund. To receive the Murreletter electronically, which is strongly encouraged, please provide your current address to the SNVB Treasurer, Tiffany Garcia.

Society for Northwestern Vertebrate Biology Annual Membership Renewal Information

Hello all SNVB members. I would like to encourage everyone to renew their membership in SNVB for 2010; and to remind everyone that receipt of the Northwestern Naturalist is one of the perks of membership in the Society. Please use the Membership Application and Renewal below for your membership renewal and mail the completed form and your payment (in US funds) to the Society Treasurer:

Tiffany Sacra Garcia
Department of Fisheries and Wildlife
104 Nash Hall
Oregon State University
Corvallis, OR 97331
tiffany.garcia@oregonstate.edu

Your membership in the Society is essential to the continued success of SNVB and it is greatly appreciated. I look forward to seeing you all at the SNVB 2010 Annual Meeting. Best regards: Robert Hoffman, Editor, Northwestern Naturalist.

Society for Northwestern Vertebrate Biology 2010 Membership Application

Name:		
Affiliation: _		
City:	State: Zip:	
Phone:	Fax:	
E-mail:		
	or New Member (check one)	
Area of Inter	rest/Expertise:	
Membership	Category (check one) RATES IN US DOLLARS	
Regula	ar Individual (\$25)	
Additic	onal family member (\$10)	
Studen	nt (\$15 annual dues)	
Contrib	buting Individual (\$35)	
Sustain	ning Individual (\$50)	
Life (\$	6325 one-time payment)	

Institutional (\$60)

Course Announcements



Wildlife Chemical Immobilization October 6-8, 2009 Helena, Montana

Dear Colleague,

I will be teaching a three day wildlife chemical immobilization course in Helena, Montana October 6-8, 2008. There will be labs every day and for the last lab, the students will anesthetize dogs and practice monitoring vital signs, collecting blood, etc. This course is the most field oriented of all wildlife handling courses in the U.S.

The course is limited to 25 participants so it is good to register early. People can register either on-line or by mail.

You can visit my new website for a course outline and more information. Feel free to contact me if you have any questions.

Mark R. Johnson DVM Global Wildlife Resources, Inc. P.O. Box 10248 Bozeman, MT 59715

Phone: 406.586.4624

Email: mjohnson@wildliferesources.org

http://wildliferesources.org/



Columbia Mountains Institute

Introduction to Bayesian Methods for Ecologists November 3-5, 2009 Revelstoke BC

This course will present an overview of the use of Bayesian methods in ecology. Bayesian methods supplement the standard analysis methods such as regression, ANOVA, and generalized linear models. They are helpful in two general situations: when information from a number of studies is to be merged together; and to handle certain problems that are "hard" to do using standard methods (for example, dealing with censored data in regression, or random effects in logistic regression).

Instructed by: Dr. Carl Schwarz from Simon Fraser University. Cost: \$600.00 plus GST.

Statistics for Biologists* – A Refresher Course October 20-22, 2009 Revelstoke BC

Many scientific studies are full of statistical jargon, tables of averages, and other statistics, and results of statistical tests which purport to prove a certain hypothesis. The purpose of this course is to review some of the basic sampling and experiment designs used by ecologists and to understand exactly what can and cannot be extracted from a set of data. With the advent of modern statistical packages, the analysis of data is fairly easy, but it is far too easy to get nonsense results. This course will also review common pitfalls in the analysis of data.

Instructed by: Dr. Carl Schwarz from Simon Fraser University. Cost: \$600.00 plus GST.

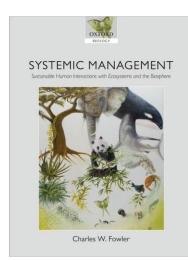
Details are at www.cmiae.org

*Not a biologist? Dr. Schwarz says "statistics is statistics" and non-biologists will also find this course a good refresher.

New Publication

Systemic Management: Sustainable Human Interactions with Ecosystems and the Biosphere Charles W. Fowler

For those of you who were able to attend this year's annual meeting in Stevenson WA, we had the pleasure of having Charles W. Fowler as one of our plenary speakers. Chuck lives in the Seattle area where he and his wife, Jean, share their love of and concern for nature with their two granddaughters. Chuck's wife Jean also attended. They fully



immersed themselves in the meeting, participating in the plenary and attending concurrent sessions and the banquet. In a follow up letter, Chuck expressed his gratitude for being invited to and made part of the meeting, indicating that: "It was a privilege to participate, to be involved in so many wonderful conversations, to meet so many wonderful people, and to cross paths with so many who I have had the pleasure of meeting (or working with) before."

Chuck's concern for nature has resulted in the writing of a book recently published by Oxford University Press:

Systemic Management: Sustainable Human Interactions with Ecosystems and the Biosphere.

Chuck is "quite proud to have this come out on the 200th anniversary of Darwin's birth, because one part of what I accomplish is bringing natural selection at the species level to the management process (to account for the risk of extinction)." For those of you who attended the plenary, much of what Chuck spoke of is addressed in his book.

The Oxford University website describes how Systemic Management:

- •Proposes "systemic management" as a fundamentally new concept, comparing and contrasting it with "conventional management"
- •Addresses an area of theoretical work on the processes that ultimately determine patterns among species, carrying these ideas through to their implications for how we manage our use of resources and ecosystems
- •Demonstrates how mimicking nature's empirical examples of sustainability circumvents anthropocentric tendencies to overuse/misuse human values in management
- •Emphasizes the crucial importance of a direct match between management question and guiding pattern

'Systemic management' describes a holistic, objective and universally applicable form of management, providing a framework for addressing environmental challenges such as global warming, emergent diseases, deforestation, overpopulation, the extinction crisis, pollution, over-fishing, and habitat destruction.

Its goals are the consistently sustainable relationships between humans and ecosystems, between humans and other species, and between humans and the biosphere. This book presents a convincing argument that these goals, and the means to achieve them, can be inferred from empirical information. It describes how comparisons between humans and other species reveal patterns that can serve to guide management toward true sustainability i.e. ways that are empirically observed to work in natural systems. This objective approach has rarely been possible in conventional management because sustainability is invariably undermined by conflicting human values.

'Systemic management' is presented as a specialized process of pattern-based decision-making that avoids the inconsistency, subjectivity and error in current management practice. It clearly demonstrates how mimicking nature's empirical examples of sustainability can circumvent anthropocentric tendencies to overuse/misuse human values in management, and illustrates the science best suited for achieving sustainability through examples of research that address specific management questions.

Oxford describes the readership as: students and researchers in the fields of ecosystem-based management and the regulation of resource use, as well as conservationists and NGOs concerned about the wide variety of environmental issues confronting mankind and anyone interested in applied human ecology.

Chuck earned his Ph.D. from the University of Washington in 1973, has taught at five universities, and currently serves as affiliate associate professor in the College of Ocean and Fishery Sciences at the University of Washington and at Seattle University, in addition to his position as Systemic Management Studies Program Leader at the National Marine Mammal Laboratory (part of NOAA). His 29 years with the National Marine Fisheries Service includes service as chief U.S. scientist to the North Pacific Fur Seal Commission, and as scientist on the Scientific Committee of the International Whaling Commission.

Chuck can be reached via email at Chuck can be reached via email at Charles.Fowler@noaa.gov

Other books by Chuck:

Dynamics of Large Mammal Populations \mid C. W. Fowler and T. D. Smith

THE NEWS TRIBUNE

Comments favor name proposal for 'Salish Sea'

DEAN KAHN; THE BELLINGHAM HERALD

Published: 09/17/09 12:05 am

Bellingham resident Bert Webber wants "Salish Sea" adopted as the overarching name for the inland marine waters of Western Washington and southern British Columbia.

The Washington Board of Geographic Names will consider his proposal Oct. 30.

"Cautiously optimistic," is how Webber described his mindset. "This is a bureaucratic process ... you just don't know."

Webber suggested the same idea 19 years ago, but officials then said there was little support for the notion and said Salish Sea wasn't a widely used term. This time, sentiment seems to be flowing in Webber's direction.

In recent years, marine scientists, Indian tribes, agencies and other people have begun using the term Salish Sea when referring to the waters of Puget Sound, the Strait of Georgia and the Strait of Juan de Fuca. And of the 36 comments sent to the state board, 29 support Webber.

A retired professor of marine ecology at Western Washington University, Webber says Puget Sound and the two straits are ecologically distinct from the ocean, and giving them a common name would highlight their connection.

A shared name would remind people of the need for crossborder approaches to marine issues, he says, and would acknowledge the Salish tribes who originally inhabited the inland waters.

Nine of the 29 comments in support came from Whatcom County residents.

"It fills a need for a catch-all term for the waters, replacing such awkward colloquialisms as 'North Puget Sound' commonly (but inaccurately) used to designate the waters around Bellingham," wrote Eric Bowen of Bellingham.

Valerie Partridge, who works in an environmental assessment program for the state Department of Ecology, also likes the idea.

"It would make my job easier and my reports more readable!" she wrote. "Instead of writing reports referring to the 'southern Strait of Georgia, eastern Strait of Juan de Fuca, and Puget Sound proper, 'I could refer to the 'Salish Sea.""

Attention Web Designers:

The Society is seeking an individual to manage the content of our website, www.snwvb.org.

Please contact Tara for more information: tarachestnut@gmail.com

American Institute Biological Sciences

From AIBS Public Policy Report, Volume 10, Issue 17, August 17, 2009

WHITE HOUSE SETS PRIORITIES FOR FEDERAL SCIENCE INVESTMENTS IN FY 2011 BUDGET

The White House has released its priorities for science and technology in fiscal year (FY) 2011. In a joint annual memo from the Office of Science and Technology Policy and the Office of Management and Budget, the White House has informed heads of all federal agencies to "build upon the science and technology priorities already reflected in the American Recovery and Reinvestment Act and the FY 2010 budget." Federal investments should focus on four practical challenges: economic recovery and growth, independence and mitigation of the impacts of climate change, improvement of human health, and defense technologies. To address these issues, agencies should increase productivity of research centers and non-government partners, strengthen science, technology, engineering, and math (STEM) education, improve infrastructure, and enhance space capabilities.

In addition, the memo outlines several guiding principles for science within the federal government. Agencies are to strive for transparency and scientific integrity, as well as to promote high-risk research. Additionally, agencies should strive "to take advantage of today's open innovation model-in which the whole chain from research to application does not have to take place within a single lab, agency or firm-and become highly open to ideas from many players, at all stages."

Member Photo



Sean Anderson photographed these Roosevelt Elk (*Cervus canadensis roosevelti*) crossing the Quinault River in the Enchanted Valley of the Olympic National Park, Washington, in September 2008.

This image was used in our new look website that was launched last month. Check out the site where you can find many great photographs from our members, information about all of our publications, and where we will soon have information about our upcoming meeting.

Remember to send your photo submissions to the Murreletter Editor, snvb.murreletter@gmail.com.

Mark Your Calendar

The 2010 SNVB meeting will be held in Medford, Oregon in the heart of the Rogue Valley.

When: February 23-26

Where: Red Lion Hotel Medford

Keep checking our website where we will soon have meeting and registration details.

In the meantime consider how you can help out at our annual conference which could not happen without the help of many volunteers.



Contact Doug Degross, ddegross@comcast.net, and ask how you can help!

Smithsonian.com

SURPRISING SCIENCE Ideas, innovations and discoveries from the world of science

September 3, 2009

Toad "Fraud" May Have Been Ahead of His Time

Before Charles Darwin, there was
Jean-Baptiste Lamarck, the French naturalist who proposed that an organism could pass to its offspring characteristics that it acquired during its lifetime. The classic example is the idea that giraffes got their long necks by



A male midwife toad carries fertilized eggs on his legs. (© blickwinkel / Alamy)

gradually stretching them over successive generations in response to the need to reach food high in the trees. Darwin's theory—which held, in contrast, that giraffes with the longest necks were more likely to survive and reproduce—eventually won out, though Lamarckism persisted well into the 20th century (particularly in the Soviet Union, where it was revived as Lysenkoism).

One proponent of Lamarckism in the 1920s was Austrian biologist Paul Kammerer, who undertook a series of experiments on amphibians, including the midwife toad. These toads are special because they copulate on land and then the male keeps the eggs out of the water by carrying them around, on land, stuck to his own legs.

By placing the toads in an arid, hot environment, Kammerer induced the toads to mate in the water. Under these conditions, the toads simply deposited the eggs into the water—the male did not carry them—and only a few hatched into tadpoles. But later generations who grew up under normal conditions preferred to copulate in the water, and some males developed a trait called "nuptial pads" on their forelimbs (black spots that are used for gripping females and are common on water-dwelling toads). Kammerer believed that this was evidence that Larmarckian evolution was real.

In 1926, however, a herpetologist determined that the nuptial pads on the only specimen remaining from Kammerer's experiment were simply black spots created by injections of India ink. And six weeks after the herpetologist's paper appeared in *Nature*, Kammerer killed himself.

Kammerer denied injecting the frog, but his experiments were never repeated and he is often held up as an example of Lamarckian fraud. Nothing was ever proven, though, and nuptial pads have since been found in a wild midwife frog, proving they are a possible trait. Now, in a new paper, University of Chile biologist Alexander Vargas argues that Kammerer's experiments produced intriguing evidence of epigenetics, in which a gene's expression can change but not its underlying sequence, years before scientists discovered this non-Mendelian form of inheritance.

In Kammerer's time, traits were thought to be inherited in a strict Mendelian fashion, in which genes obey statistical laws. We now know that genetics are far messier; the DNA sequence of a gene is only one part of the picture. For instance, with DNA methylation, a methyl group attaches to DNA resulting in less expression of the gene. Environmental factors can influence DNA methylation, and this can look something like Lamarckian evolution.

Vargas argues that moving the toad eggs from land to water changed their environment, and that change could have caused alterations in gene methylation. And epigenetic mechanisms are now known to influence some of the features that became altered in Kammerer's toads, such as adult body size and egg size. "Rather than committing fraud," Vargas writes, "it seems that Kammerer had the misfortune of stumbling upon non-Mendelian inheritance at a time in which Mendelian genetics itself was just becoming well accepted."

-Posted By: Sarah Zielinski

Save the Date for NW PARC in 2010!

Co-chairs: Elke Wind and David Pilliod

2010 annual meeting planning for the Northwest chapter of Partners in Amphibian and Reptile Conservation (NW PARC) is well underway. The joint meeting with the ID Chapter of the Wildlife Society and ID Chapter of PARC will be held in Boise, ID March 8-12, 2010.

Order the new 16-month 2009/2010 northwest herp calendar, generously developed by our new national co-chair Dede Olson, to *Save the Date*!

Contact Elke to place your calendar order (ewind@telus.net).



All proceeds support NW PARC annual meeting planning.

THE SPOKESMAN-REVIEW

September 9, 2009

Gray wolf hunts can continue, federal judge says

Associated Press

BILLINGS, Mont. — A federal judge said gray wolf hunts can go on for the first time in decades in the Northern Rockies, just months after the animals were removed from the endangered species list.

U.S. District Judge Donald Molloy denied a request by environmentalists and animal welfare groups to stop the hunts in Idaho and Montana, saying plans to kill more than 20 percent of the estimated 1,350 wolves in the two states would not cause long-term harm to the species.

The wolf population could sustain a hunting harvest in excess of 30 percent and still bounce back, Molloy said in his written ruling issued late Tuesday.

The ruling left unresolved the broader question of whether wolves should be returned to the endangered list.

However, Molloy said the U.S. Fish and Wildlife Service appeared to have violated the Endangered Species Act when it carved Wyoming out of its decision to lift protections in May for wolves elsewhere in the region.

That suggests environmentalists could prevail in their ongoing lawsuit seeking to restore protections for the predator.

"The service has distinguished a natural population of wolves based on a political line, not the best available science. That, by definition, seems arbitrary and capricious," Molloy wrote in his 14-page ruling.

Representatives of the Fish and Wildlife Service referred questions to the Department of Interior, which did not immediately respond to a request for comment.

Attorney Doug Honnold, who argued the case on behalf of groups opposed to the hunts, offered a mixed reaction to the ruling.

"If they violated the Endangered Species Act, then this population eventually is going have to go back on the (endangered) list," Honnold said.

He also said he was disappointed that the injunction request was denied and "took no comfort" in Molloy's statement that the population could withstand a hunt.

A decision on whether to appeal Molloy's ruling would be made within the next few days, he said.

Hunters in Idaho have so far reported the taking of three wolves since hunting opened there on Sept. 1. The state has a quota allowing as many as 220 wolves to be killed. Montana's season is set to begin Sept. 15, with a quota of 75 wolves.

Wolves once roamed North America but by the 1930s had been largely exterminated outside Alaska and Canada. An estimated 1,650 of the animals now live in the Northern Rockies — the result of a contentious \$30 million reintroduction program that began in 1995.

The population is now five times the original recovery goal set in the 1990s.

Hunt opponents say those gains could quickly be reversed in the absence of federal protections. But as wolf numbers have grown, so have attacks on domestic livestock, ratcheting up the pressure to keep the population in check.

Last month, a small pack of wolves in southwestern Montana killed 120 sheep in a single incident — one of the largest such attacks to date.

Montana Fish, Wildlife and Parks spokesman Tom Palmer said his agency will proceed with the hunt in that state and "show everyone that Montana can manage wolves just like it has managed other wildlife."

Jim Unsworth with Idaho Fish and Game said the hunt there has gone smoothly.

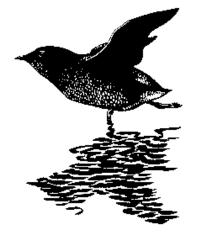
"Everything is working just like we planned, which shouldn't be a surprise since we've done this for years with other critters," Unsworth said.

Molloy sided with environmentalists in a similar case that arose last year, after the federal government first attempted to lift protection for the animals. In that case, the environmentalists successfully argued that a Wyoming law allowing wolves to be shot on sight across most of the state would put the population in peril again.

As a result, the government kept about 300 wolves in Wyoming on the endangered list when it ended that protection in Montana and Idaho this spring.



Previous issues of the Murreletter are archived in .pdf format on our website: www.snwvb.org/newsletter.html



For more information about the

Society for Northwestern Vertebrate Biology

check out our website:

www.snwvb.org