Curriculum Vitae

ZACHARY LUKE PENNEY
(Updated May 2016)

700 NE Multnomah Street
Suite 1200
Portland, OR 97232
Phone 503-238-0667
E-mail: zpenney@critfc.org

Education

Ph.D. Natural Resources, University of Idaho. December 2013. **Dissertation Title: Physiological and Energetic Constraints on Iteroparity in Steelhead Trout (*Oncorhynchus mykiss*).** GPA 3.92/4. Advisor: Dr. Christine Moffitt.

M.Sc. in Earth and Ocean Science, University of Victoria. 2007 **Thesis Title: Life History Reconstruction and Stock Identification of Sockeye Salmon (*Oncorhynchus nerka*) using otolith trace element chemistry.** GPA 3.5/4. Advisor: Dr. Kevin Telmer.

B.S. in Aquatic Resources, Sheldon Jackson College. 2004. **Senior Thesis Title: Age and Growth Structure of Coho Salmon (*Oncorhynchus kisutch*) in Klag Lake, Alaska.** GPA 3.81/4. Advisor: Dr. Molly Ahlgren

Formal Classroom & Special Training

Fisheries Biology and Management
Ichthyology
Fisheries Management
Reproductive Biology of Fishes
Advanced Fishery Management
Large River Fisheries Management
Fish Physiology
Wild and Hatchery Fish Interactions
Bioenergetic Modeling
Directed Study of the Geochemisty of Natural Waters and Relationship to Otoliths
Community Ecology
GIS Applications for Natural Resource Students
Marine Invertebrate Zoology
Salmonid Culture
Microbiology, Limnology
Fish Genetics and Health Management
Mariculture
Hatchery Practicum I & II
Marine Biology
Directed Study: Monitoring and Evaluation of a Salmon Stream.

Statistical Analysis
Elementary Statistical Methods
Statistical Methods
Non-Parametric Statistics
Applied Regression and Modeling
Multivariate Statistics

Other Coursework and Skills

Cell Biology- Microtechnique Methods - using SEM and EDS
Physics I & II
Chemistry I & II
Quantitative Chemical Analysis
Ecology
Global Biogeochemical Cycles
Natural Resources Policy and Analysis
Hydro-Litho Reactions
Oceanography

Professional Experience

Fishery Science Department Manager Columbia River Inter-Tribal Fish Commission (February 2015-Present)

As Fishery Science Department Manager, my responsibilities are to increase the visibility and credibility of tribal scientific accomplishments, as well as identify technical gaps, uncertainties and needs in tribal efforts to restore fish populations in the Columbia River Basin and for developing programs to meet those needs. I am responsible for leading the department staff in conducting activities that contribute to meeting CRITFC's strategic goals, stated department objectives, and various contract deliverables. I also represent CRITFC and CRITFC member tribes in a variety of forums/groups, such as the Independent Scientific Advisory Board and StreamNet Executive Committee. The Fishery Science Department is comprised of over 30 full-time employees in three separate locations and is the largest department at CRITFC.

SeaGrant Knauss Legislative Fellowship (February 2014 – February 2015)

One of 10 Marine policy fellows assigned to Legislative Branch for 2014. Serving in the office of Representative Jared Huffman (CA-2) / United States House of Representatives. I serve as staff to Representative Huffman on the House Natural Resources Committee by providing legislative research, technical summaries, talking points, and questions for legislative and oversight hearings. I also provide Representative Huffman with weekly summaries and recommendations to inform his decisions related to suspension votes on the House floor for Natural Resources and Science, Space, and Technology issues, as well as the FY15 Commerce, Justice, and Science Appropriation bill. Additionally, I communicate and regularly meet with constituents, non-profit organizations, and Federal agencies to discuss environmental and tribal issues. I identify and address environmental and tribal legislative priorities in California's 2nd District by drafting new legislation or maintain existing legislation through the legislative process.

University of Idaho, Ph.D. Fisheries Research Assistant (2009–2013).

I was part of a multiagency team to better understand the physiology of iteroparity in steelhead trout in the Snake River Subbasin. During my research I collaborated with scientists and staff from the Nez Perce Tribal Department of Fisheries Resource Management, Columbia River Inter-Tribal Fish Commission, United States Fish and Wildlife Service, Idaho Department of Fish and Game, Army Corps. of Engineers, and Alaska Department of Fish and Game. Pre- and post-spawn steelhead (kelts) was collected from a variety of sites within the Columbia River basin, as well as one site in Yakutat, Alaska. Research activities included

blood sampling, PIT-tagging, acoustic tag implant surgeries, clinical inspections via necropsy, otolith extraction, tissue collection and preparation for proximate and histological analysis. I performed all analysis and synthesis of my data via parametric and non-parametric statistical methods using SAS, SPSS, and R statistical software. I also provided aid and support in writing reports (annual, semi-annual, and personnel), permits, and directing work-study or technicians on my project. Additional experience gained in circular and raceway tank construction/plumbing at Dworshak National Fish Hatchery and Lower Granite Dam Juvenile Bypass Facility.

Nez Perce Tribe Department of Fisheries Resource Management (2007–2009) Coho Project Leader.

As Coho Project Leader, my duties entailed all primary and essential tasks involving management and maintenance of coho restoration in the Snake River Subbasin. I had complete direction over coho production (broodstock collection, spawning, incubation, early rearing, transport, and outplants) at Dworshak and Kooskia National Fish Hatcheries. I supervised and directed two full-time fish culturists, as well as additional part-time employees. For all production activities I maintained communications with regional state and federal fisheries managers in the Snake River Subbasin through monthly reports, as well as semi-annual and annual meetings. Additionally, I monitored subcontract work for the coho project in which I developed and implemented contracts, annual budgets, and reports (annual, semi-annual, and personnel). Furthermore, I was in charge of securing funding for the coho project via annual progress reports to the Scientific Review Panel for the Pacific Coastal Salmon Recovery Fund and Fish and Wildlife Committee for the Columbia River Inter-Tribal Fish Commission.

University of Victoria, M.Sc. Earth and Ocean Research Assistant (2004–2007).

For my M.Sc. research, I used Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICPMS) to analyze sockeye otoliths for trace element composition. As a research student, my duties included preparing samples via embedding, sectioning and polishing otoliths to the primordial core. For LA-ICP-MS analysis, I operated a Merchentek Mini-laze II 266nm ND-YAG laser using continuous line scans. All LA-ICPMS trace element data was then reduced, analyzed, and synthesized using univariate and multivariate statistical tests via SPSS statistical software. Chemical data was then interpreted and related to growth, migration, and physiology. Furthermore, I provided the Sitka Tribe of Alaska annual and semi-annual progress reports on my project. I was able to compliment my otolith research by completing an advanced cell biology micro-techniques course on the operation and optimization of scanning electron microscopes (SEM) and associated instrumentation, specifically energy dispersive spectroscopy.

Sitka Tribe of Alaska (STA) summers 2001–2006.
Fisheries Field Technician (2001), crew boss (2002–2004), and weir foreman (2005–2006).

From 2001 2006, I worked for the Sitka Tribe of Alaska from May to August at three remotes sites that included: Salmon Lake, Klag Bay, and Tumakof Lake. These projects were stock assessment studies on sockeye systems important to sport and subsistence users. The study was co-managed between the Sitka Tribe of Alaska, United States Forest Service, and Alaska Department of Fish and Game. My technical duties on the project were extensive and included: conducting creel census, collecting length, weight, sex, and scale sample data from sockeye and coho salmon, building/maintaining three large weirs in remote field camps for months at a time for mark/recapture estimates. Remote field sites often required 30-80 day shifts, and rifle training (375 H&H & 12 Gauge Shotguns), boat operation and safety training, wilderness and marine safety training. Later as weir foreman, I exclusively trained and supervised field crews in and out of the field, as well as analyzed and synthesized field data to write annual reports.

Sheldon Jackson Hatchery, 2000–2004. Work-study Employee

As an undergraduate student at Sheldon Jackson College I worked from August to April at Sheldon Jackson Hatchery. The salmon species raised at Sheldon Jackson hatchery included chum, pink, coho, and Chinook salmon. My duties as a work-study student entailed spawning broodstock, monitoring & rearing broodstock offspring (fry and smolts), diagnosing & treating fish diseases, data retrieval & entry, feeding, collecting monthly weights & lengths, and cleaning & maintaining facilities. I also received a boat training certificate for the operation of boats to commute to offshore marine net-pens.

Nez Perce Tribe Department of Fisheries Resource Management (1996–2000)
High School Summer Intern.

In high school, I interned for the Nez Perce Tribe's Department of Fisheries Resource Management. My experience as an intern entailed activities in both the research and production divisions. Duties included: rearing and monitoring juvenile Chinook and coho salmon and steelhead trout at various remote acclimation sites in Idaho and northeast Oregon. Production duties entailed feeding, collecting monthly weights, lengths, cleaning, maintaining facilities, and participating in truck and helicopter outplants. I also provided aid in monitoring and evaluation activities in Idaho and Oregon via snorkel surveys for juvenile and adult abundance. Additionally, I was stationed at remote sites in Idaho and Oregon to count and sample returning adults at rigid and video weirs, for length, sex, genetic samples, and scales for age and growth analysis. I have also maintained screw traps at remote sites and sampled juvenile fish for length, weight, pre-existing marks or tags, and abundance.

Fellowships and Grants Awarded

2014. John A. Knauss Marine Policy Fellowship. 1-year Legislative Position in Washington, D.C. Fellowship $52,500

Publications

Peer reviewed Journals and Book Chapters

Penney, Z. L., and C.M. Moffitt. 2016. Physiological comparisons of steelhead kelts emigrating from the Situk River, AK and Clearwater River, ID. Environmental Biology of Fishes.

Penney, Z. L., and C. M. Moffitt. 2015. Fatty acid consumption in white muscle and liver tissue of stream maturing steelhead during early migration and kelt emigration. Journal of Fish Biology.

Penney, Z. L. and C. M. Moffitt. 2014. Proximate composition and energy density of stream maturing adult steelhead during upstream migration, sexual maturity, and kelt emigration. Transactions of the American Fisheries Society 143:399-413

Penney, Z. L., and C. M. Moffitt. 2014. Histological assessment of organs in sexually mature and post-spawning steelhead trout and insights into iteroparity. Reviews in Fish Biology and Fisheries 24:781–801.

Penney, Z.P. (2014). 2013 AFS/Sea Grant Best Student Presentation Report. *Fisheries*, 38(12): 55

Moffitt, C. M., Z. L. Penney, and L. Cajas Cano 2014. Reconnecting people to their natural environment. Pp.185-192 *in* W. Taylor, A. Lynch, and N. Neonard, editors. The future of fisheries: perspectives for the next generation of professionals. American Fisheries Society. Bethesda, MD

Penney, Z.P. 2011. Live to spawn another day: Understanding the fuel efficiency of Snake River steelhead. *Fisheries*, 36(10): 508-508

Dissertation & Theses

Penney, Z.P. 2013. Physiological and Energetic Constraints on Iteroparity in Steelhead Trout (*Onchorhynchus mykiss*). Ph.D. Dissertation, University of Idaho Moscow, ID.

Penney, Z.P. 2007. Life History Reconstruction and Stock Identification of Sockeye Salmon (*Oncorhynchus nerka*) Using Otolith Trace Element Chemistry. Master's thesis. University of Victoria, Victoria, B.C. Canada

Reports and Contributed Works

Stahl, J.P., J.M. Conitz, M.A. Cartwright, Z. Penney, and J. Lorrigan. 2007. Klag Lake sockeye salmon (*Oncorhynchus nerka*) stock assessment 2004 Annual report. Alaska Department of Fish and Game Fishery Data Series No. 07-06, Anchorage

Penney, Z.P., 2007. Coho Salmon Production Project V. Pacific Coastal Salmon Recovery Fund. (November) Semi-Annual Report. Project Number 2007-1-01. P.O. Box 365, Lapwai, ID 83540

Penney, Z. P. 2008. Coho Salmon Production Project V. Pacific Coastal Salmon Recovery Fund. (April) Annual Report. Project Number 2007-1-01. P.O. Box 365, Lapwai, ID 83540

Awards and Scholarships

2014. Awarded travel award to attend the Annual Meeting of the Fisheries Society of the British Isles held in Hull, U.K. provided by the International Section of the American Fisheries Society. $2100

2013. Awarded *Overall Outstanding Fisheries Graduate Student* by the Fish and Wildlife Sciences faculty in the College of Natural Resources.

2013. Awarded *Outstanding Fisheries Graduate Student* by the Fish and Wildlife Sciences faculty in the College of Natural Resources.

2013. Winner for Best Student paper in the AFS/Sea Grant Best Student Presentation/Poster Symposium at the Annual American Fisheries Society Meeting in Little Rock, AR, September. $450

2013. Truman D. Picard Scholarship, Intertribal Timber Council, May: $2000

2013. Accepted as a finalist and presenter in the AFS/Sea Grant Best Student Presentation/Poster Symposium at the 143rd Annual American Fisheries Society Meeting in Little Rock, AR

2013. Nominated by Oregon Sea Grant for the John A. Knauss Marine Policy Fellowship

2012. University of Idaho Alumni Award of Excellence, December

2012. Kelly Creek Flycasters Scholarship, November: $1500

2012. Equal Opportunities Travel Award presented by the Equal Opportunities Section of the American Fisheries Society for travel to the 142nd Annual American Fisheries Society Meeting in St. Paul, MN, August

2012. Steven Douglas Shawley Scholarship, February & August: $438

2012. Outstanding Graduate Student Award by the Palouse Unit of the Idaho Chapter of the American Fisheries Society

2011. Delpha C. and Robert W. Colby Scholarship Endowment Fund. $200

2011. Theresa A. Mike Memorial Scholarship. $500

2011. Winner of the Best Abstract Award presented by the Fish Culture Section of the American Fisheries Society for travel to the Annual American Fisheries Society Meeting in Seattle, WA, September. $400

2011. First Prize, Student Essay Contest, 141st Annual Meeting of the American Fisheries Society, Seattle, WA, September. Title: "Live to spawn another day. Understanding the fuel efficiency of the Snake River steelhead"

2011. Graduate and Professional Student Association Travel Award to attend the141st Annual Meeting of the American Fisheries Society, Seattle, WA, September: $574

2011. Idaho State Council of Trout Unlimited Graduate Scholarship Fund, June: $850

2011. Steven Douglas Shawley Scholarship, February: $438

2011. American Indian Science and Engineering Columbia River Professional Chapter Scholarship, March: $1000

2010. Puget Sound Anglers Fidalgo Chapter Award, August: $4900

2010. Graduate and Professional Student Association Travel Award to attend the140th Annual Meeting of the American Fisheries Society, Pittsburgh, PA, September: $490

2010. Skinner Memorial Travel Award, American Fisheries Society, June: $800

2010. Bonneville Power Administration Tribal Scholarship, August: $2500

2010. Truman D. Picard Scholarship, Intertribal Timber Council, May: $2000

2010. Susan B. Martin Scholarship, Idaho Chapter of the American Fisheries Society, March: $1000

2007. Science Graduate Student Seminar Awarded as the "runner-up" presenter at the School of Earth and Ocean: "Life history reconstruction and stock identification of sockeye salmon via otolith trace element composition", University of Victoria, B.C., April: $75

2004-2005. University of Victoria Fellowship, July: $13,000.

2004. Native American Fish and Wildlife John Smith Scholarship, October: $1000

2004. Cultural Diversity Travel Award: Alaska Chapter of the American Fisheries Society Annual Meeting in Fairbanks, AK, November: All travel and lodging costs

2003-2004. Wayne Presbyterian Church Scholarship. Sheldon Jackson Founders Day, April: $1500.00

2001-2002. Wilson Family Scholarship. Sheldon Jackson Founders Day, April: $1500

2001-2002. Synod of the Sun Scholarship. Sheldon Jackson Founders Day, April: $1500

2001-2002. James A. Michener Scholarship. Sheldon Jackson Founders Day, April: $10,000

Presentations at Meetings, Workshops, Classroom - presenter indicated in bold

Invited

2013. **Penney, Z.** Anthropology 329. University of Idaho (Moscow, ID), February. Title: Native American fishing and fishing rights in the Northwest: More than just a tradition

2013. **Penney, Z.** Senior Fisheries Seminar Fish 494. University of Idaho (Moscow, ID), February. Title: Native American fishing and fishing rights in the Northwest: More than just a tradition

2012. **Penney, Z.** Kelly Creek Flycasters (Lewiston, ID), December. Title: Repeat spawning in Snake River steelhead or lack thereof

2012. **Penney, Z.** Fish Physiology 511. University of Idaho (Moscow, ID), November. Title: Fish reproduction and recovery

2012. **Penney, Z.** Cultural Interpretations of the Regional Landscape at Washington State University (Pullman, WA), September. Title: An introduction to salmon ecology and management in the Snake River Subbasin

2012. **Penney, Z**. Mrs. Pinkham's 5th grade class (Lapwai, ID), May. Title: Threatened and endangered species

2012. **Penney,** and C M. Moffitt. Idaho Cooperative Fish and Wildlife Research Unit 2012 Annual Cooperators Meeting (Moscow, ID), April. Title: Factors affecting iteroparity in Snake River steelhead trout

2012. **Penney, Z.** Senior Fisheries Seminar Fish 494. (Moscow, ID), February. Title: Native American fishing and fishing rights in the Northwest: More than just a tradition

2011. **Penney, Z.** and C. Moffitt. National Russian Science Academy delegates at the University of Idaho (Moscow, ID), November. Title: Energy expenditure in Snake River steelhead trout

2011. **Penney, Z.** and C. Moffitt University of Arkansas Pine Bluff Fish Physiology Class via video (Moscow, ID), November. Title: Modeling starvation in Snake River steelhead trout

2011. **Penney, Z**. Environmental Science 101 at the University of Idaho (Moscow, ID), May. Title: Salmon and dams in the Columbia and Snake River Basin

2011. **Penney, Z**. Kelly Creek Flycasters Meeting (Lewiston, ID), January. Title: Nez Perce Tribe Clearwater Coho Reintroduction Project (CCRP)

2010. **Penney, Z.** Clearwater Flycasters Meeting (Moscow, ID), November. Title: Nez Perce Tribe Clearwater coho reintroduction project

2011. **Penney, Z**. Senior Fisheries Seminar Fish 494. (Moscow, ID), February. Title: Native American fishing and fishing rights in the Northwest: More than just a tradition

2009. **Penney, Z**. Cultural Interpretations of the Regional Landscape at Washington State University (Pullman, WA), September. Title: An introduction to salmon ecology and management in the Snake River Subbasin

2006. P**enney, Z**. Sitka Tribe of Alaska at the Regional Advisory Council (Sitka, AK), October, Title: Klag Bay subsistence sockeye stock assessment project 2001-2006

Contributed Presentations at Scientific Meetings

2016. **Penney, Z.** 2016 Pacific Coast Steelhead Management Meeting. Title: Should we be managing for iteroparity?

2014. **Penney, Z**. 2014 Fisheries Society of the British Isles (Hull, U.K.). Title: Restoring Indigenous Fisheries in Nimiipuu Country: Balancing hatcheries, habitat, and harvest.

2013. **Penney, Z.** and C.M. Moffitt. 143rd Annual Meeting of the American Fisheries Society (Little Rock, AR). Title: Finding Death: The relationship between energy and iteroparity in steelhead trout.

2013. **Penney, Z.** and C.M. Moffitt. Annual Western Division and Idaho Chapter Meeting of the American Fisheries Society (Boise, ID). Title: Histological assessment of selected tissues in maturing and post-spawning Snake River steelhead.

2012. **Penney, Z.** and C.M. Moffitt. 142nd Annual Meeting of the American Fisheries Society (St. Paul, MN). Title: No guts, no glory: Assessing the capacity for post-reproductive recovery in Snake River steelhead kelts

2012. **Penney, Z.**, C.M. Moffitt, Marston, B., Woods, C., Jones, B., and Buelow, J. 49th Idaho Chapter of the American Fisheries Society Annual Meeting (Coeur d'alene, ID). Title: Nutritional and energetic status of kelts from the Snake River and Situk River, AK using blood chemistry

2011. **Penney, Z.**, C.M. Moffitt, J. Buelow, and B. Jones. 141st Annual American Fisheries Society Meeting (Seattle, WA). Title: Energy Expenditure in the Freshwater Spawning Cycle of Snake River Steelhead Trout

2011. **Penney, Z.**, C.M. Moffitt, J. Buelow, J. Plumb and W. Schrader. 48th Idaho Chapter of the American Fisheries Society Annual Meeting (Boise, ID). Title: Evaluating Energy Expenditure in Adult Snake River Steelhead Trout (*Oncorhynchus mykiss*)

2010. **Penney, Z.**, C.M. Moffitt, J. Buelow, A. Pape, and K. Hamilton. 140th Annual American Fisheries Society Meeting (Pittsburgh, PA). Title: Tissue Composition, Condition and Energy Storage of Sexually Mature Steelhead trout from the Snake River

2010. **Penney, Z.**, C.M. Moffitt, J. Buelow, A. Pape, and K. Hamilton. 47th Idaho Chapter of the American Fisheries Society Annual Meeting (Pocatello, ID). Tissue Composition and Condition of Sexually Mature Hatchery Origin Steelhead Trout from the Snake River

2008. **Penney, Z.** Native American Fish and Wildlife Conference (Yakima, WA), October. Title: Back to the Future: Reintroduction of Coho Salmon in the Clearwater River Subbasin

2008. **Penney, Z.** Western Division American Fisheries Society Conference (Portland, OR), May. Title: Back to the Future: Coho Restoration in the Clearwater River

Contributed Poster Presentations

2012. Hewett, H., **Penney, Z.**, and Moffitt, C.M. Otolith Aberrancy in juvenile Snake River steelhead trout. 2012 Idaho NSF EPSCor and Idaho NASA EPSCor Annual Meeting, (Boise, ID), October

2012. **Penney, Z.**, Moffitt, C.M., Marston, B., Woods, C., Jones, B., and Buelow, J. Nutritional and energetic status of inland Snake River and coastal Situk River kelts using blood plasma chemistry. 13th Annual Steelhead Management Meeting Pacific States Management Council, (Fort Worden, WA), March

2012. Hewett, H., **Penney, Z.**, and Moffitt, C.M. Otolith Aberrancy in juvenile Snake River steelhead trout. 49th Idaho Chapter of the American Fisheries Society Annual Meeting, (Coeur d'alene, ID), March

2011. **Penney, Z.**, Moffitt, C.M., Dorsey, V., Buelow, J., and Jones, B. Taking A Look Inside: Histological Changes In The Liver During The Freshwater Spawning Cycle Of Snake River Steelhead Trout. 141st Annual Meeting of the American Fisheries Society, (Seattle, WA), September

2011. Will Schrader, **Penney, Z.**, and Moffitt, C.M. White Muscle Energy Content Trends From Snake River Steelhead Kelts Sampled at Lower Granite Dam. 48th

Idaho Chapter of the American Fisheries Society Annual Meeting (Boise, ID), March

2007. Telmer, K. and **Z. Penney**, A. Hamilton, J. Hume, D. Lofthouse, and M. Sheng. Strontium Concentration Profiles in Reared Juvenile Sockeye Salmon Otoliths**.** Nez Perce Tribe Department of Fisheries Resource Annual Meeting (Lewiston, Idaho), September

2007. **Penney, Z**. E. Larson, L. Mitchell, and S. Coomer. Clearwater Coho (*Oncorhynchus kisutch*) Restoration Project Restoring an Extirpated Stock via Supplementation. Nez Perce Tribe Department of Fisheries Resource Annual Meeting (Lewiston, ID), September

2006. Telmer, K., **Z. Penney**, A. Hamilton, J. Hume, D. Lofthouse, and M. Sheng. Strontium Concentration Profiles in Reared Juvenile Sockeye Salmon Otoliths. 13th Ocean Sciences Meeting AGU-TOS -ASLO (Honolulu, HI), February

Interviews

Film

2011. "Interpreting the Landscape, A Nez Perce Perspective" Educational video for designers and architects working with the Nez Perce Tribe. (Lapwai, ID), October.

2011. Native American Science, Technology, Engineering, and Mathematical (STEM) Scholar for the Native STEM Scholar Video. University of Idaho, (Moscow, ID) September.

Mentoring

Summer 2011. Veatasha Dorsey, Research Experience for Undergraduates. Environmental Science Program. Project Title: Developing and testing an approach for assessing histological sections of the pyloric stomach in mature and kelt steelhead trout

Summer 2011. Heath Hewitt, Research Experience for Undergraduates. University of Idaho EPSCoR. Project Title: Examining the presence of otolith aberrancy in hatchery and natural Snake River steelhead trout

Summer 2011. Janae Crispin. Helping Orient Indian Students and Teachers. Poster Project Title: Comparing human and steelhead trout blood plasma factors: A comparison between a homeotherm and poikilotherm

Fall 2010 and Spring 2011. Will Schrader, Undergraduate senior thesis for Environmental Science Program. Project Title: An analysis of energy and proximate content compared to gender in a population of Snake River steelhead (*Oncorhynchus mykiss*) kelt

Summer 2010. Kousei Martin Perales, Research Experience for Undergraduates. CRISSP. Project Title: Exploring differences in lipid content between A and B run steelhead (*Oncorhynchus mykiss*)

Fall 2009 and Spring 2010. Chelsea Merrill, Undergraduate senior thesis for Environmental Science Program. Project Title: Examining marine growth differences between A- and B-run steelhead hatchery stocks in Snake River subbasin using otoliths

Summer 2009. Jon Megli, Research Experience for Undergraduates. Environmental Science Department. Project Title: Travel times for kelts in the Snake and Columbia River

Fall 2003 and Spring 2004. Mentor and Tutor at the Alaskan Native Student Center at Sheldon Jackson College.

Professional Societies and Positions Held

2014-President President-Elect of the Equal Opportunities Section of the American Fisheries Society (AFS).

2015-present. Chair of the International Fisheries Section of AFS Fellow Award.

2002-2004, 2009-present. American Fisheries Society (AFS). Member.

2009-2013. Palouse Unit of the American Fisheries Society (PUAFS). Member and Graduate Student Advisor 2010.

2000-2004, 2010-2012. American Indian Science and Engineering Society, (AISES). Member

2009-2013. University of Idaho Native America Student Association (NASA). Member

2007-2008. Native American Fish and Wildlife Society (NAFWS). Member

2002-2004. Alaska Chapter of the American Fisheries Society (ACAFS). Member.

2002-2004, Sheldon Jackson Student Sub-unit of the American Fisheries Society (SJAFS). President

Committees, Panels and Service

February 2015-Present: Independent Scientific Advisory Board, Northwest Power and Conservation Council. Tribal Ex-Officio Member

September 2014-2015, American Fisheries Society, International Fisheries Section (IFS) Selection Committee for the IFS Exchange Fellow Program. Committee Member

June 2014. Served on the Doris Duke Scholar Conservation week panel, National Conservation Training Center, Shephardstown West VA

October 2012 – May 2013. Student member on review committee for Population Ecologist position in the Department of Fish and Wildlife Sciences

September 2011. Interviewed as a Native American Science, Technology, Engineering, and mathematical (STEM) scholar for the Native STEM scholar video

May 2010. Served as student member on search committee for Research Scientist 3 position in the College of Natural Resources

April 2009. Served as a member on the Native American Graduate Student Panel. Indigenous Center for STEM Research and Graduate Education Workshop, (Moscow, ID)

Training and Certificates

2012. Hand and Power Tool Safety Training. University of Idaho, Online

2012. Laboratory Safety Training. University of Idaho, Online

2011. Defensive Driving Training. University of Idaho, Online

2011. R-Statistical Programming Workshop. University of Idaho.

2009. Animal Use and Care Training. University of Idaho, Online.

Other Skills and Experience

Proficient in Microsoft word, excel, powerpoint, sigmaplot, SAS statistical software, R-statistical software, and SYSTAT statistical software.

Other Awards and Recognition

2004. Class Speaker, Sheldon Jackson Commencement

2000-2004. Dean's List Fall and Spring Semesters

2002-2003. President of North Pacific Hall Honor Dormitory Sheldon Jackson College