



Dennis J. Snyder

Fisheries Biologist, Wenatchee Field Office

Mr. Dennis Snyder, a fisheries biologist, has a strong background in fish and habitat surveys, radiotelemetry, salmon spawning behavior, adult passage and juvenile survival in the mid-Columbia region. He has extensive experience in the setup and monitoring of radio telemetry systems and has researched many aspects of salmonid behavior in tributaries of the mid-Columbia River. He is also proficient in habitat and fisheries sampling techniques.

Experience and Expertise

- ◆ Fish identification
- ◆ Tagging techniques and various tags, e.g., surgical & gastric
- ◆ Habitat and fish population methodology
- ◆ Biological/invertebrate sampling
- ◆ Data management
- ◆ Rafting and power boat operations
- ◆ Radiotelemetry
- ◆ Snorkel, creel, habitat, electrofishing, and spawning surveys
- ◆ Fish passage/barrier assessment
- ◆ GPS techniques

Education

- ◆ B.S., 1992, Biology (Wildlife Management), Central Washington University
Minor in Environmental Science.

Special Studies

- ◆ Wildlife Management, Zoo Physiology, Zoology, Parasitology,
- ◆ Microbiology, Plant Taxonomy, Botany, Range Management, Ecology,
- ◆ Environmental Management, Environmental Policy Formation,
- ◆ Pacific Northwest Environments, Cartography, Computer Science

Additional Qualifications

- ◆ PADI Certified Scuba Diver
- ◆ Experience in supervising employees
- ◆ Assists in sampling of threatened and endangered species
- ◆ Logistics of onsite Studies

Professional Experience with BioAnalysts, Inc., 1994 - Present

Airport Communities Coalition

Field Supervisor, Assessment of Spawning and Habitat in Three Puget Sound Streams: 1999

As field supervisor, he conducted a study to examine the potential effects of the proposed construction of a third runway at Sea-Tac airport on fisheries resources in Miller, Walker, and Des Moines creeks. He documented existing habitat condition, abundance of salmon and trout redds, and collect information on spawned out salmon to describe the spawning population.

Chelan County Planning Department

Field Supervisor, Chelan County Fish Barrier Inventory: 2000

As a field supervisor, he collected information on road-stream crossing to assess potential barriers to salmonid migrations in Chelan County, Washington. We assessed road-stream culvert crossings according to the State of Washington's barrier assessment manual to determine barriers to salmonid migration. We used surveying, GPS equipment, and photographs to document the location and condition of each potential barrier.

Colville Confederated Tribes

Fisheries Biologist, Access the potential for aerial counts of steelhead spawning in the Okanogan basin: 2012

As a Fisheries Biologist, he advised Colville Biologists on how to conduct aerial surveys and recording of steelhead redds from a fixed-winged aircraft. Advised procedures for an aerial route and identification of redds within the Basin. His knowledge of aerial surveys is extensive from many years of conducting surveys for summer Chinook in the Okanogan Basin.

Homer Electric Association: Kenai Hydro

Fisheries Biologist, Grant Lake Hydroelectric Project feasibility Study: 2013

As a Fisheries Biologist, he was involved in assessing Grant Creek for possible hydro effects on fish populations. Captured and implanted radio telemetry transmitters in Rainbow trout using surgical techniques. Conducted extensive radio telemetry surveys to collect information on spawning, habitat use, and distribution of Rainbow trout. Installed and operated an Incline-plane juvenile trap to estimate abundance and populations of out-migrating salmonids and resident species. We used minnow traps, beach seine and hand dipping sampling techniques to assess distribution and abundance of resident fish species. Assisted in installing and monitoring a fish capture weir. Attended a bear awareness class, worked in extreme weather conditions.

Chelan County Public Utility District

Fisheries Biologist, Spawning Ground Surveys in the Okanogan and Methow Basins: 1994-1997 & 2006-Present, Chelan River 2012-Present, Wenatchee River 2012-2018

As field supervisor, he documented the abundance and distribution of redds, and time of spawning for summer/fall Chinook salmon in the Okanogan and Methow basins, Washington. In 2014 he began to document the distribution and timing of summer/fall Chinook spawning in the Chelan River. He also collected additional information to help describe the spawning population such as: origin (hatchery vs. wild), size at maturity, age at maturity, egg voidance and genetic samples. He has documented the location of redds and carcasses with GPS and prepared the information for inclusion into the WDFW database. He coordinates with agencies to assist in gathering data for additional research studies. He prepares documents for annual report submitted to HCP Hatchery Committee. In 2013, and in future years, the Okanogan Basin was surveyed by the Colville Confederated Tribes.

Field Biologist, Salmon and Trout Abundance Assessment: 1995-2018

As a field Biologist, he helped assess the abundance and distribution of salmonids in the Chiwawa River Basin as part of a hatchery evaluation program for spring Chinook in the Chiwawa River, WA.

Fisheries Biologist, Assessing the effects of using an Acoustic signal to alter behavior of Northern Pikeminnow: 2010

As a Fisheries Biologist, he helped document behavior of pikeminnow at different acoustic signatures. He was also responsible for testing acoustic signals on sockeye, steelhead and Chinook juvenile salmonids. He was responsible for installing and maintenance of acoustic equipment and with procuring fish for study subjects.

Fisheries Biologist, Bull Trout Movement Study: 2001-2008

As a Fisheries Biologist, he evaluated adult bull trout migratory behavior within the Mid-Columbia River using radio-telemetry techniques. Results from this research are being used to assess the potential delay of hydro-electric projects on the upstream migration of bull trout within the Mid-Columbia, as well as mortality associated with passage at Rocky Reach and Rock Island dams.

Field Biologist, Juvenile Fish Passage Efficiency Evaluation: 2003

As a field Biologist, he helped to assess juvenile salmon approach behavior and survival with radiotelemetry to evaluate bypass methods at Rocky Reach and Rock Island dams, Wenatchee, WA.

Field Supervisor, Sportsman Access on the Wenatchee River: 2000

As field supervisor, he provided a summary of information (GPS location, photographs, and access condition) of sportsman access along the Wenatchee River, WA.

Field Supervisor, Evaluation of Adult Pacific Lamprey Passage: 2004

As field supervisor, he was responsible for conducting a radiotelemetry project to assess adult lamprey passage through the fish ladder system at Rocky Reach Dam.

Grant County Public Utility District

Field Biologist, Juvenile Fish Passage Efficiency and Survival Evaluation, 2003

He participated in fish passage studies conducted for Grant County at Priest Rapids and Wanapum dams to evaluate upstream passage of adult Chinook salmon and downstream survival of juvenile steelhead using radiotelemetry.

Douglas County Public Utility District

Field Biologist, Aquatic Macroinvertebrate Inventory: 2006

He assisted in providing baseline inventory information on aquatic macroinvertebrates and mollusks living in the Wells Project Area. Samples were collected with Ekman grab sampler, deployed growth media and used an underwater suction dredge sampler to collect aquatic macroinvertebrates and mollusks.

Land and Water Fund & Idaho Watersheds Project

Fisheries Biologist, Irrigation Diversion Entrainment: 2001

Participated in a field investigation to document possible entrainment of ESA listed species into selected irrigation diversions in tributaries of the Salmon River drainage.

Maxim Technologies

Fisheries Biologist, Atlanta Gold Baseline Evaluation: 2003-2004

Mr. Snyder helped collect baseline information to describe fisheries and aquatic resources in the Middle and North Fork Boise River necessary for development of an EIS. Habitat surveys followed the protocols described in U.S. Environmental Protection Agency Environmental Monitoring and Assessment Program (EMAP) (Peck et al. 2001). The information was collected to describe habitat, channel, and riparian conditions. Data collection included: substrate composition, embeddedness, LWD, pool frequency, fish cover, off channel habitat, bankfull width, wetted width, width/depth ratio, bank stability, percent surface fines, and riparian structure and disturbance. In addition, we also classified channels according to their channel types (Rosgen 1996) and bed-form types (Bisson and Montgomery 1996). Fish abundance and diversity was assessed with removal-depletion electrofishing within small streams while snorkel surveys followed protocols identified in Dollof et al. (1996) for larger streams.

PacifiCorp

Field Biologist, Klamath River Project Relicensing: 2004

As a field Biologist, he evaluated potential salmonid reintroductions in the Klamath River by providing estimates of the migration rate, travel time, arrival distribution and migration success for Chinook and coho salmon through Copco and Irongate reservoirs using radiotelemetry.

Phelps Dodge Mining Company

Field Biologist, Assessment of Fish Populations in the Upper Blackfoot River Basin, 1996

As a fisheries biologist, he helped to collect information on baseline aquatic and fisheries resources for development of an EIS. The information documented the abundance, species richness, and distribution of fish, and stream habitat conditions in the upper Blackfoot River Basin, MT. Habitat condition were assessed to document baseline conditions. Several methods to describe habitat were used (Burns 1984; Hawkins et al. 1993; Platts et al. 1983; Platts et al. 1987). Habitat variables included habitat length, wetted width, maximum depth, embeddedness, sediment depth, percent surface fines, dominant riparian vegetation, and percent cover (woody debris, boulder cover, streambank undercut vegetation overhang, canopy cover). Snorkeling and electrofishing were used to describe the abundance and distribution of fish.

United States Fish and Wildlife Service

Field Biologist, Crab Creek Instream and Riparian Habitat Assessment: 2005

He assisted in providing a report to the USFWS on current instream and riparian habitat conditions of lower Crab Creek to evaluate potential restoration activities beneficial to native fish fauna. We described instream and riparian habitat conditions following the methods outlined in the U.S. Forest Service (USFS) Stream Inventory Handbook (USFS 2005). Habitat description included: channel unit type and form; streambed composition; wetted, bankfull, and floodprone widths; bankfull, maximum, and pool crest depths; stream bank stability; inner and outer riparian zone cover and class; LWD abundance; stream temperature and discharge; and fish passage conditions according to WDFW (2000) fish passage barrier assessment and prioritization manual.

Terrapin Environmental

Field Biologist, Stream Typing in S.W.WA. for Weyerhaeuser Timber: 2013-Present

Access Last fish in stream on Weyerhaeuser timber lands. Electro-fish using backpack electro-fishers. Describe habitat of streams using Clinometer, bankfull and wetted width measurements, substrate designations, and barrier assessment to classify waters. Measure lengths of different habitats units within streams using hip chain and GPS units. Submit forms, create maps that describe streams to Weyerhaeuser for evaluators to classify streams for timber harvest. Navigate timber lands using GPS and maps to locate streams needed for surveying.

Other Professional Experience

Fisheries Biologist, Chelan County Public Utility District, Wenatchee, WA: 1995

Lead biologist on Predator Removal Program. He served as a liaison between CPUD and contractor. The work involved supervision of sixteen technicians, implementation of sampling methods, purchasing and maintenance of equipment, estimates of populations and total catch, coordinating storage and disposal of samples, data analysis, and report writing.

Fisheries Technician, Mid-Columbia Consulting Inc., Wenatchee, WA: 1994

Assisted with a HI-Z-Turb-N-Tag study on the Lower Granite Hydro-Project. Operated a motor boat within tailrace area to retrieve tagged salmonids juveniles. Work also included evaluation of fish condition, tracking of radio-tagged fish, transportation of fish, and boat maintenance.

Fisheries Biologist, Washington Department of Fish and Wildlife: 1995-1995

Conducted sampling to assess an index of predatory fish from Priest Rapids tailrace to Chief Joseph tailrace. Assessed abundance and population dynamics of predators using gill nets and electrofishing gear. Processed and aged scales of predatory fish. Analyzed data and co-authored final report.

He also collected biological data from lakes and streams within Chelan and Kittitas Counties. Interviewed anglers and identified catch. He performed hook and line sampling to supplement low angler turnout. He also conducted spawning surveys in Southwest Washington to collect biological data on carcasses, live fish counts, and abundance of redds.

Supervised and operated a check station as part of the Northern Squawfish Sport Reward Program. Mr. Snyder was responsible for data collection, scheduling, and vehicle maintenance. Conducted angler interviews and issued vouchers for reward fish. He worked as a volunteer for the Species Interaction study assisting biologists in field studies. He helped assess interactions between resident fish and hatchery steelhead smolts. He conducted electrofishing surveys and operated fyke nets and downstream migrant traps and collected samples for genetic stock identification.

Select Publications and Reports

- Stevenson, J. R. D. J. Snyder, 2010. A Pilot Study to Assess the Efficacy of using an Acoustic Signal to Alter the Behavior of Northern Pikeminnow.
- Stevenson, J. R. D. J. Snyder and P. Westhagen, 2007. Movement of Radio-tagged Bull Trout through Rocky Reach and Rock Island Dams and Reservoirs.
- Stevenson, J. R., D. J. Snyder, and P. Westhagen. 2006. Bull Trout Radiotelemetry Monitoring Associated with up and downstream passage through Rocky Reach and Rock Island Dams and Reservoirs, 2006.
- Stevenson, J. R., D. J. Snyder, and Peter Westhagen. 2005. Bull Trout Radiotelemetry Monitoring Associated with up and downstream passage through Rocky Reach and Rock Island Dams and Reservoirs, 2005.
- Stevenson, J. R., P. Westhagen, Dennis J. Snyder, John R Skalski, and Albert E. Giorgi, 2004. Evaluation of Adult Pacific Lamprey at Rocky Reach Dam using Radiotelemetry Techniques, 2004.
- Stevenson, J. R., T. W. Hillman, M. D. Miller, and D. J. Snyder, 2004. Movement of bull trout within the mid-Columbia River and tributaries, 2001-2003.
- Stevenson, J. R., T. W. Hillman, M. D. Miller, and D. J. Snyder, 2003. Movement of radio-tagged bull trout within Priest Rapids and Wanapum reservoirs, 2001-2003.
- Stevenson, J. R., T. W. Hillman, M. D. Miller, and D. J. Snyder, 2003. Movement of radio-tagged bull trout within Priest Rapids and Wanapum reservoirs, 2001-2002.
- Miller, M., J. Stevenson, T. Hillman, and D. Snyder, 2002. Summary of bull trout suspected to have perished in fall, 2002. BioAnalysts, Inc. Report to Chelan, Douglas, and Grant County Public Utility Districts, Wenatchee, WA.
- Stevenson, J. R., T. W. Hillman, M. D. Miller, and D. J. Snyder, 2002. Movement of bull trout within the mid-Columbia River and tributaries, 2001-2002.
- Miller, M.D., D. W. Chapman, and D. J. Snyder, 2001. Field Investigation of Fish Entrainment and Diversion Structures in Selected Tributaries of the Salmon River Basin, Idaho, 2000. BioAnalysts, Inc., Boise, ID.
- Miller, M.D., D. Snyder, and T. W. Hillman, 2000. Sportsman's Access on the Wenatchee River-Final. Public Utility District No. 1 of Chelan County, Wenatchee, WA.
- Hillman, T., J. Stevenson, and D. Snyder, 1999. Assessment of spawning and habitat in three Puget Sound Streams, Washington. BioAnalysts, Inc., Boise, ID.

Welsh, T.L., S. G. Hays, and D. Snyder, 1994. Northern squawfish population reduction program: Rocky Reach Dam tailrace pilot project-1994. Thomas L. Welsh Bioconsultants and Don Chapman Consultants, Inc., Prepared for Chelan County Public Utility District, Boise, ID.