Washington State Department of Natural Resources

## **Olympic Experimental State Forest**

# **CATALOG OF RESEARCH AND MONITORING**

### EFFECTS OF MANAGEMENT ON SPECIES POPULATIONS

June 2008



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#### **Effects of Management on Riparian Species Populations**

#### Federal Agencies

#### NOAA Fisheries, Northwest Fisheries Science Center

#### Response of Aquatic Species to Instream Restoration

Roni, P. 2001. Responses of fishes and salamanders to instream restoration efforts in western Oregon and Washington. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. Interagency Agreement No. 1422H952-A98-3007.

#### US Fish and Wildlife Service, Pacific Region

#### Effects of Fish Passage on Salmon Use

Zajac, D. 2002. An assessment of anadromous fish habitat use and fish passage above Makah national fish hatchery in the Sooes River. U.S. Department of Interior, Fish and Wildlife Service, Western Washington Fish and Wildlife Office, Division of Fisheries and Watershed Assessment. Unpublished report.

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#### Effects of Hatchery Supplementation

Hiss, J.M., R. Meyer, R. Boomer, and D. Cole. 1986. Hatchery winter steelhead contribution to the Hoh River fisheries and potential impacts on the native stock. U.S. Department of Interior, Fish and Wildlife Service, Fisheries Assistance Office. Unpublished report.

Peters, R.J., E. Knudsen, and G. Pauley. 1996. The effects of fry supplementation on the emigration of salmonids from tributaries of the Clearwater River, Washington. U.S. Department of Interior, Fish and Wildlife Service, Western Washington Fishery Resource Office. Unpublished report.

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#### US Forest Service, Regional Ecosystem Office

#### Synthesis of NWFP Research and Monitoring

Bormann, B.T., R.W. Haynes, and J.R. Martin. 2007. Adaptive management of forest ecosystems: some rubber hits the road?. Bioscience. 57(2): 186-191.

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Haynes, R. W., B.T. Bormann, D.C. Lee, and J.R. Martin. 2006. Northwest Forest Plan, the first 10 years (1994-2003), a synthesis of monitoring and research results. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. PNW-GTR-651.

Rapp, V. 2008. Northwest Forest Plan, the first 10 years (1994–2003), first-decade results of the Northwest Forest Plan. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. PNW-GTR-720.

#### State Agencies

#### Washingtion State Department of Natural Resources, Land Management Division

#### Salmon Validation Monitoring Assessments

Bocking, R. 2002. Clallam River coho salmon escapement enumeration, phase 1, feasibility assessment. LGL Limited. Unpublished report.

Dominguez, L.G. and D.A. Beauchamp. 2001. Validation monitoring, Olympic Experimental State Forest, riparian conservation strategy. Washington State Department of Natural Resources. Unpublished report.

#### Washington State Department of Fish and Wildlife

#### Intensively Monitored Watersheds Study

Washington State Department of Fish and Wildlife. 2007. Intensively monitored watersheds study. Washington State Department of Fish and Wildlife. Web site.

#### **Recovery of Riparian Communities in Headwaters**

Jackson, C.R. 2002. Recovery of amphibian and invertebrate communities in recently logged coastal range headwater streams. Washington State Department of Natural Resources. Unpublished report.

#### Academic Institutions

#### The Evergreen State College

#### Effects of Large Woody Debris Placement

Rudolph, J. 2002. The effects of large woody debris placement on the spawning distribution and physical habitat of chum salmon (Oncorhynchus keta). The Evergreen State College. Master's thesis.

#### Response to Wall-Based Channel Enhancement

Friesen, W. 1990. Winter dietary studies of juvenile coho salmon (Oncorhynchus kisutch) utilizing two enhanced wall-base channels along the Clearwater River in Jefferson County, Washington. The Evergreen State College. Master's thesis.

#### University of Chicago

#### Effects of Land Use on River Food Webs

Wootton, T. 1997. Running head: river response to land use effects of land use on river food webs: community- versus ecosystem-level responses. University of Chicago. Master's thesis.

#### University of Washington

#### Effects of Landslide Siltation on Trout Resources

Cederholm, C.J and E.O. Salo. 1979. Observations of the effects of landslide siltation on salmon and trout resources of the Clearwater River, Jefferson County, Washington, 1972-1978. University of Washington. Final report Part III, FRI-UW-7915.

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#### Effects of Logging on Cutthroat Trout

Martin, D.J., E.O. Salo, S.T. White, J.A. June, W.J. Foris, and G.L. Lucchetti. 1981. The impact of managed streamside timber removal on cutthroat trout (Salmo clarki) and the stream ecosystem. University of Washington. FRI-UW-8108.

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#### Effects of Organic Debris Removal

Lestelle, L.C. 1978. Effects of forest debris removal on a population of resident cutthroat trout in a small headwater stream. University of Washington. Master's thesis.

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#### Effects of Salmon Carcass Placement

Bilby, R.E. 1998. Response of juvenile coho salmon (Oncorhynchus kisutch) and steelhead (Oncorhynchus mykiss) to the addition of salmon carcasses to two streams in southwestern Washington, U.S.A. Canadian Journal of Fisheries and Aquatic Sciences. 55: 1909-1918.

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Ehinger, W. 2000. Effect of marine derived nutrients on insect production in salmon spawning streams. University of Washington. Unpublished report.

#### Effects on Coho Salmon in the Clearwater

Cederholm, C.J. and L.M. Reid. 1987. Impact of forest management on coho salmon (Oncorhynchus kisutch) populations of the Clearwater River, Washington: a project summary. University of Washington. Pages 373-398 in E.O. Salo and T.W. Cundy, editors. Streamside management: forestry and fishery interactions. University of Washington, Symposium, Seattle, Washington.

#### Effects on Sediment and Salmonid Populations

Bash, J., C. Berman, and S. Bolton. 2001. Effects of turbidity and suspended solids on salmonids. University of Washington. Unpublished report.

Cederholm, C.J. and E.O. Salo. 1979. Effects of logging road sedimentation on the salmonid populations and their habitats. University of Washington, Fisheries Research Institute. Unpublished report.

Fluharty, D. and W. Jaeger. 1995. Land use impacts on salmon abundance. University of Washington. Unpublished report.

Morrill, D. 1994. Spawning gravel quality, salmonid survival and watershed characteristics of five Olympic Peninsula watersheds. University of Washington. Master's thesis.

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Noggle, C.C. 1978. Behavioral, physiological, and lethal effects of suspended sediment on juvenile salmonids. University of Washington. Master's thesis.

#### Evaluation of Habitat Enhancement on Coho Salmon

Peters, R.J. 1996. An evaluation of habitat enhancement and wild fry supplementation as a means of increasing coho salmon production of the Clearwater River, Washington. University of Washington. Doctoral dissertation.

#### Monitoring Salmon Conservation and Restoration

Botkin, D.B, K. Cummins, P. Parker and M. J. Sobel. 1997. Monitoring and salmonid restoration on the Olympic Peninsula. University of Washington, Olympic Natural Resources Center. Unpublished report.

Botkin, D.B., D.L. Peterson, and J.M. Calhoun. 2000. The scientific basis for validation monitoring of salmon for conservation and restoration plans. University of Washington, Olympic Natural Resources Center. Unpublished report.

#### **River Ecology and Management**

Naiman, R. J., H. Décamps, and M. E. McClain. 2005. Riparia: Ecology, Conservation and Management of Streamside Communities. Elsevier/Academic Press. San Diego, CA, USA.

Naiman, R.J. 1998. Biotic stream classification. Pages 97-119, in R.J. Naiman and R.E. Bilby (editors). River Ecology and Management: Lessons from the Pacific Coastal Ecoregion. Springer-Verlag, New York.

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#### Effects of Management on Spotted Owl Populations

#### Federal Agencies

#### US Forest Service, Pacific Northwest Experiment Stations

#### Ecology and Management of Spotted Owls

Gutierrez, R.J. and A.B. Carey. 1984. Ecology and management of the spotted owl in the Pacific Northwest. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. PNW-GTR-185.

#### US Forest Service, Regional Ecosystem Office

#### Synthesis of NWFP Research and Monitoring

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Haynes, R. W., B.T. Bormann, D.C. Lee, and J.R. Martin. 2006. Northwest Forest Plan, the first 10 years (1994-2003), a synthesis of monitoring and research results. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. PNW-GTR-651.

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#### State Agencies

#### Washington State Department of Natural Resources, Olympic Region

#### Spotted Owl Validation Monitoring Plan

Horton, S. and J. Buchanan. 2000. A plan for validation monitoring, spotted owl conservation strategy for the Olympic Experimental State Forest. Washington State Department of Natural Resources. Unpublished report.

#### **Effects of Management on Marbled Murrelet Populations**

#### Federal Agencies

#### US Forest Service, Pacific Northwest Experiment Stations

#### Ecology and Conservation of Marbled Murrelet

Ralph, C.J., G.L. Hunt, Jr., M.G. Raphael, and J.F. Piatt. 1995. Ecology and conservation of the marbled murrelet. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. PSW-GTR-152.

#### US Forest Service, Regional Ecosystem Office

#### Synthesis of NWFP Research and Monitoring

Bormann, B.T., R.W. Haynes, and J.R. Martin. 2007. Adaptive management of forest ecosystems: some rubber hits the road?. Bioscience. 57(2): 186-191.

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#### Academic Institutions

#### University of Washington

Effects of Forest Fragmentation on Nest Predation

Bradley, J.E. and J.M. Marzluff. 2003. Rodents as nest predators: influences on predatory behavior and consequences to nesting birds. The Auk. 120(4): 1180-1187.

Luginbuhl, J.M., J.M. Marzluff, J.E. Bradley, M.G. Raphael, and D.E. Varland. 2001. Corvid survey techniques and the relationship between corvid relative abundance and nest predation. Journal of Field Ornithology. 72(4): 556-572.

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#### Effects of Management on Other Species Populations

#### State Agencies

#### Washington State Department of Natural Resources, Forest Practices Division

#### Landscape Use of Hairy Woodpeckers

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#### **Tribal Governments**

#### Northwest Indian Fisheries Commission

#### Effects on Roosevelt Elk Populations

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Storlie, J.T. 2006. Movements and habitat use of female Roosevelt elk in relation to human disturbance on the Hoko and Dickey game management units, Washington. Humboldt State University. Master's thesis.

#### **Private Timberlands**

#### Rayonier

#### Habitat Use by Hairy Woodpeckers in Managed Forests

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#### **Academic Institutions**

#### University of Washington

#### Effects of Forest Roads on Elk Habitat Use

Hansen, C.A. 1993. Habitat use by Roosevelt elk in relation to roads on the Olympic Peninsula. University of Washington. Master's thesis.