

1989 LITERATURE EXCHANGE FROM
THE UNITED STATES AQUACULTURE
PANEL, UJNR, TO THE JAPANESE
PANEL, UJNR

Prepared by:

Ben Drucker
National Marine Fisheries Service
National Oceanic and Atmospheric
Administration
U.S. Department of Commerce

September 12, 1989

1. Klar, G.T., N.C. Parker, and C.A. Goudie.
1988. Comparison of growth among families of channel catfish. *Prog. Fish Cult.* 50:173-178.
2. Parker, N.C.
1988. Aquaculture - Natural resource managers' ally? *Trans. 53rd N.A. Wildl. & Nat. Res. Conf.*, 584-593.
3. Parker, N.C.
1988. Fish culture in the United States. *In* C.J. Shephard and N.R. Bromage (editors). *Intensive Fish Farming*, p.268-373. BSP Professional Books, Oxford.
4. Parker, N.C.
1989. History, status, and future of aquaculture in the United States. *CRC, Crit. Rev. in Aquatic Sci.*, 1(1):97-109.
5. Parker, N.C.
1988. Floating raceway system can expand production of striped bass. *U.S. Dept. Inter., Fish and Wildl. Serv., Res. Info. Bull. No. 88-85*, 2 p.
6. U.S. Department of the Interior.
1989. Publications available from the U.S. Fish and Wildlife Service, Southeastern Fish Culture Laboratory, Marion, Alabama. 15 p.
7. Moore, B.J., S.S.O. Hung, and J.F. Medrano.
1988. Protein requirement of hatchery-produced juvenile white sturgeon (*Acipenser transmontanus*). *Aquaculture*, 71:235-245.
8. Griffin, F.J., K. Shigekawa, and W.H. Clark, Jr.
1988. Formation and structure of the acrosomal filament in the sperm of *Sicyonia ingentis*. *J. Exper.Zool.* 246:94-102.
9. Anchordoguy, T., J.H. Crowe, F.J. Griffin, and W.H. Clark, Jr.
1988. Cryopreservation of sperm from the marine shrimp *Sicyonia ingentis*. *Cryobiology* 25:238-243.
10. Young, G.
1988. Enhanced response of the interrenal of coho salmon (*Oncorhynchus kisutch*) to ACTH after growth hormone treatment *in vivo* and *in vitro*. *Genl and Comp. Endocrin.* 71:85-92.
11. Goudeau, M., P. Talbot, and R. Harper.
1987. Mechanism of egg attachment stalk formation in the lobster, *Homarus*. *Gamete Res.* 18:279-289.

12. Muralidharan, C.P., F.J. Griffin, and W.H. Clark, Jr.
1988. Induced spawning of the decapod crustacean Sicyonia ingentis. Biol. Bull. 174:181-185.
13. Shields, J.D., and A.M. Kuris.
1988. Temporal variation in abundance of the egg predator Carcinonemertes epialti (Nemertea) and its effect on egg mortality of its host, the shore crab, Hemigrapsus oregonensis. Hydrobiol. 156:31-38.
14. Young, P.S., S.D. McCormick, J.R. Demarest, R.J. Lin, R.S. Nishioka, and H. A. Bern.
1988. Effects of salinity, hypophysectomy, and prolactin on whole-animal transepithelial potential in the tilapia Oreochromis mossambicus. Genl and Comp. Endoc. 71:389-397.
15. Nelson, K., D. Hedgecock, and W. Borgeson.
1988. Effects of reproduction upon molting and growth in female American lobsters (Homarus americanus). Can. J. Fish. Aquatic Sci., 45(5):805-821.
16. Nelson, K., D. Hedgecock, and W. Borgeson.
1988. Factors influencing egg extrusion in the American lobster (Homarus americanus). Can. J. Fish. Aquatic Sci., 45(5):797-804.
17. Gleason, D.F., and G.M. Wellington.
1988. Food resources of postlarval brown shrimp (Penaeus aztecus) in a Texas salt marsh. Mar. Biol. 97:239-337.
18. Robertson, L., W. Bray, J. Leung-Trujillo, and A. Lawrence.
1987. Practical molt staging of Penaeus setiferus and Penaeus stylirostris. J. World Aqua. Soc. 18:180-185.
19. Wilson, E.A., M.E. White, and E.N. Powell.
1988. Patch formation by the ectoparasite snail Boonea impressa on its oyster host, Crassostrea virginica. The Veliger 31(1?2):101-110.
20. Craig, M.A., T.J. Bright, and S.R. Gittings.
1988. Growth of Mercenaria mercenaria and Mercenaria mercenaria texana seed clams planted in two Texas bays. Aquaculture 71:193-207.
21. White, M.E., E.N. Powell, S.M. Ray, E.A. Wilson, and C.E. Zastrow.
1988. Metabolic changes induced in oysters (Crassostrea virginica) by the parasitism of Boonea impressa (Gastropoda: Pyramidellidae). Comp. Biochem. Physiol. 90A(2):279-290.

22. Rice, M.A., and G.C. Stephens.
1988. Influx, net flux and transepithelial flux of amino acids in the hardshell clam Mercentaria mercenaria (Linne) : Influence of salinity. *Comp. Biochem. Physiol.* 89A(4):631-636.
23. Rice, M.A., and G.C. Stephens.
1988. Influx and the transepithelial flux of amino acids in the mussel, Mytilus edulis. *J. Exp. Biol.* 135:275-287.
24. Young, G., and R.J. Lin.
1988. Response of the interrenal to adrenocorticotropic hormone after short-term thyroxine treatment of coho salmon (Oncorhynchus kisutch). *J. Exper. Zool.* 245:53-58.
25. Malinowski, S., and R.B. Whitlatch.
1988. A theoretical evaluation of shellfish resource management. *J. Shellfish Res.* 7(1):95-100.
26. DuPaul, W.D., and M.J. Oesterling.
1988. Evaluation of a containerized system for the relaying of polluted clams (Mercentaria mercenaria). *Va. Sea Grant Coll. Prog.* VSG-88-73R.
27. Brown, J.W., J.E. Easley, Jr., and R.G. Hodson.
1988. Investment and production costs for the hybrid striped bass x white bass in North Carolina. *UNC Sea Grant College Program, Working Paper* 88-2.
28. Cline, G.B., M.E. Meade, and R.A. Angus.
1989. IEF analysis of soluble proteins during development of aquacultured zoeae of the stone crab (Menippe adina, M. mercenaria, and their hybrid). *Isozyme Bull.* 22(54):
29. Nosh, T.
1989. Small-scale oyster farming for pleasure and profit. *Wash. Sea Grant Mar. Advis. Serv.* WSG-AS-89-1, 12 p.
30. Wescott, W.
1988. Shedding soft crabs in a closed well-water system. *Blueprints, UNC Sea Grant, UNC-SG-BP-88-1*, 4 p.
31. Cline, G.B., M.E. Meade, and H.J. Cline.
1989. IEF analysis of polymorphic enzyme systems during development of aquacultured larvae of the Malaysian prawn, Macrobrachium rosenbergii. *Isozyme Bull.* 22(5).

32. Robertson, L., W.A. Bray, and A.L. Lawrence.
1987. Shipping of penaeid broodstock: Water quality limitations and control during 24 hour shipments. *J. World Aqua. Soc.*, 18(2):45-56.
33. Nelson, K., B. Heyer, E. Johnson, D. Hedgecock, and E.S. Chang
1988. Photoperiod-induced changes in hemolymph vitellogenins in female lobsters (Homarus americanus). *Comp. Biochem. Physiol.* 90(4):809-821.
34. Shields, J.D., and A.M. Kuris.
1988. An In vitro analysis of egg mortality in Cancer anthonyi: The role of symbionts and temperature. *Biol. Bull.* 174:267-275.
35. McEnroe, M., and J.. Cech, Jr.
1987. Osmoregulation in white sturgeon: Life history aspects. *Amer. Fish. Soc. Sympos.* 1:191-196.
36. Ruer, P.M., J.J. Cech, Jr., and S.I. Doroshov.
1987. Routine metabolism of the white sturgeon, Acipenser transmontanus: Effect of population density and hypoxia. *Aquacult.* 62:45-52.
37. Kope, R.G.
1987. Separable virtual population analysis of Pacific salmon with application to marked chinook salmon, Oncorhynchus tshawytscha, from California's Central Valley. *Can. J. Fish. Aquat. Sci.* 44:1213-1220
38. Tegner, M.J., and R.A. Butler.
1989. Abalone seeding. In K.O. Hahn(editor). *Handbook of culture of abalone and other marine gastropods*, p.157-181. CRC Press, Inc., Boca Raton, Fla.
39. Lin, R.J., T.F. Cross, C.P.R. Mills, R.S. Nishioka, E.G. Grau, and H.A. Bern.
1988. Changes in plasma thyroxine levels during smoltification in hatchery-reared one-year and two-year Atlantic salmon (Salmo salar). *Aquacult.* 74:369-378.
40. Sheridan, M.A.
1988. Exposure to seawater stimulates lipid mobilization from depot tissues of juvenile coho (Oncorhynchus kisutch) and chinook (Oncorhynchus tshawytscha) salmon. *Fish Physiol. Biochem.* 5(4):173-180.
41. Bjornsson, B.Th., T. Ogasawara, T. Hirano, J.P. Bolton, and H.A. Bern.
1988. Elevated growth hormone levels in stunted Atlantic salmon, Salmo salar. *Aquacult.* 73:275-281.

42. Brown, C.L., S.I. Doroshov, J.M. Nunez, C.H.J. Vaneenennaam, R.S. Nishioka, and H.A. Bern.
1988. Maternal triiodothyronine injections cause increases in swimbladder inflation and survival rates in larval striped bass, Morone saxatilis. J. Exper. Zool. 248:168-176.
43. Smith, D.W.
1988. Phytoplankton and catfish culture: a review. Aquacult. 74:167-189.
44. Pillai, .C., and W.H. Clark, Jr.
1988. Hatching envelope formation in shrimp (Sicyonia ingentis) ova: Origin and sequential exocytosis of cortical vesicles. Tissue and Cell 20(6):941-952.
45. Stuart, J.S., S.S.O. Hung.
1989. Growth of juvenile white sturgeon (Acipenser transmontanus) fed different proteins. Aquacult. 76:303-316.
46. Price, R.J., S.S.O. Hung, F.S. Conte, and E.M. Strange.
1989. Processing yields and proximate composition of cultured white sturgeon (Acipenser transmontanus). J. Food Sci. 54(1):216-217.
47. Chang, E.S.
1989. Endocrine regulation of molting in crustaceans. CRC Crit. Rev. in Aquatic Sci., 1(1):131-157.
48. Heffernan, P.B., and R.L. Walker.
1989. Quantitative image analysis methods for use in histological studies of bivalve reproduction. J. Moll. Stud. 55:135-137.
49. Karahadian, C., and R.C. Lindsay.
1989. Role of oxidative processes in the formation and stability of fish flavors. In R. Teranishi, R.G. Buttery, and F. Shahidi (editors). Flavor chemistry trends and developments, ACS Symposium Series 388, American Chemical Society.
50. Lubin, R.T., A.W. Rourke, and T.M. Bradley.
1989. Ultrastructural alterations in branchial chloride cells of Atlantic salmon, Salmo salar, during parr-smolt transformation and early development in sea water. J. Fish Biol. 34:259-272.
51. Erickson, D.L., M.J. Harris, and G.D. Grossman.
In press. Ovarian cycling of tilefish (Lopholatilus chamaeleonticeps), Goode and Bean) from the South Atlantic Bight, U.S.A., J. Fish. Biol.

52. Marshall, G.A., M.W. Moody, C.R. Hackney, and J.S. Godber.
1987. Effect of blanch time on the development of mushiness in ice-stored crawfish meat packed with adhering hepatopancreas. *J. Food Sci.* 52(6):1500-1503
53. Marshall, G.A., M.W. Moody, and C.R. Hackney.
1987. Differences in color, texture, and flavor of processed meat from red swamp crawfish (Procambarus clarkii) and white river crawfish P. acutus acutus). *J. Food Sci.* 52(5).
54. Hsieh, T.C.Y., U. Tanchotikul, and J.E. Matiella.
1988. Identification of geosmin as the major muddy off-flavor Louisiana brackish water clam (Rangia cuneata). *J. Food Sci.* 53(4):1228-1229.
55. Manthe, D.P., R.F. Malone, and S. Kumar.
1988. Submerged rock filter evaluation using an oxygen consumption criterion for closed recirculating systems. *Aquacult. Engin.* 7:97-111.
56. Keithly, Jr., W.R., and K.J. Roberts.
1988. The Louisiana oyster industry: Economic status and expansion prospects. *J. Shellfish Res.* 7(3):515-525.
57. Ketola, H.G., D. Longacre, A. Greulich, L. Phetterplace, and R. Lashomb.
1988. High calcium concentration in water increases mortality of salmon and trout eggs. *Prog. Fish Cult.* 50:129-135.
58. Ketola, H.G., R. Zitzow, and D.A. Edsall.
1989. Random sample diet test - Starter diets for lake trout, 1988. U.S. Dept. Inter., Fish and Wildl. Serv., Bozeman Infor. Leaf. No. 49, 10p.
59. Yacovissi, W.A., and J.W. Meade.
1988. The economics of profist maximization. *Salmonid XII*(3):11-12.
60. McAllister, E., and W.. Owens.
1988. Monoclonal antibody produced against Viral Hemorrhagic Septicemia Virus. *Amer. Fish. Soc., Fish Health Sect. Newsletter* 16(4):3.
61. Brunson, R., J. Yancey, and K. True.
1988. Polyethylene glycol use for viral assay in the diagnostic laboratory. *Amer. Fish Soc., Fish Health Sect. Newsletter* 16(4):3.

62. Hall, Jr., L.W., S.J. Bushong, M.C. Ziegenfuss, W.E. Johnson, R.L. Herman, and D.A. Wright.
1988. Chronic toxicity of tributyltin to Chesapeake Bay biota. *Water, Air, and Soil Pollution*, 39:365-376.
63. Herman, R.L.
1989. Systemic noninfectious granulomatoses of fishes. U.S. Dept. Inter., Fish and Wildl. Serv., Natl. Fish Health Res. Lab., Kearneysville, W. Va., Fish Dis. Leaflet 79. 4 p.
64. Anderson, D.P.
1988. Immunology in warmwater fish culture. In I. Abdurakhmanovich and O.N. Bauer (editors). *Diseases and parasites in warmwater fish culture. (Text in Russian with English abstract)*. p. 27-34. Donish Pub., No. 734029, Dushanbe, Tadzhik, U.S.S.R.
65. Funicelli, N.A., D.A. Meineke, H.E. Bryant, M.R. Dewey, G.M. Ludwig, and L.S. Mengel.
1989. Movements of striped mullet, Mugil cephalus, tagged in Everglades National Park, Florida. *Bull. Mar. Sci.* 44(1):171-178.
66. Hughes, S.G.
1989. Effect of dietary moisture level on responses to diet by Atlantic salmon. *Prog. Fish Cult.* 51:20-23.
67. Anonymous.
1988. Report of the EIFAC technical consultation on genetic broodstock management and breeding practices of finfish, London, UK, 12-14 April 1988. European Inland Fisheries Advisory Commission, Food and Agriculture Organization of the United Nations. 15 p.
68. Muncy, R.J., N.C. Parker, and H.A. Poston.
1987. Marking striped bass with rare earth elements. *Proc. Annual Conf. Southeast Assoc. Fish and Wildl. Agencies.* 41:244-250.
69. Lemm, C.A., D.V. Rottiers, D.S. Dropkin, and B.A. Dennison.
1988. Growth, composition, and fin quality of Atlantic salmon fed different diets at seasonal temperatures in a laboratory and hatchery. U.S. Dept. Inter., Fish and Wildl. Serv., Biol. Rept. 88(8), 12 p.
70. Anonymous.
1988. List of publications - January, 1987 - September, 1988. U.S. Dept. Inter., Fish and Wildl. Serv., Natl. Fish. Res. Cen. Kearneysville, W. Va. 20 p.

71. Henderson-Arzapalo, A., R.L. Colura, and A.F. Maciorowski.
1988. Temperature and photoperiod induced maturation of southern flounder. Texas Parks and Wildl. Dept., Coastal Fish. Branch, Manag. Data Ser. No. 154. 20 p.
72. McAllister, .E., and R.L. Herman.
1989. Epizootic mortality in hatchery-reared lake trout Salvelinus namaycush caused by a putative virus possibly of the herpesvirus group. Dis. Aquat. Org. 6:113-119.
73. Markiw, M.E.
1989. Salmonid whirling disease: myxosporean and actinosporean stages cross-react in direct fluorescent antibody test. J. Fish Dis. 12:137-141.
74. Cipriano, R.C., and J. Bertolini.
1988. Selection for virulence in the fish pathogen Aeromonas salmonicida, using coomassie brilliant blue agar. J. Wildl. Dis. 24(4):672-678.
75. Herman, R.L.
1988. Squamous cell carcinoma in rainbow smelt Osmerus mordax. Dis. Aquat. Ord. 5:71-73.
76. Markiw, M.E.
1989. Portals of entry for salmonid whirling disease in rainbow trout. Dis. Aquat. Org. 6:7-10.
77. Starliper, C.E., E.B. Shotts, Jr., T. Hsu, and W.B. Schill.
1988. Genetic relatedness of some gram-negative yellow pigmented bacteria from fishes and aquatic environments. Microbios. 56:181-198.
78. Krise, W.F., and R.L. Herman.
1989. Tolerance of lake trout, Salvelinus namaycush (Walbaum), sac fry to dissolved gas supersaturation. J. Fish Dis. 12:269-273.
79. Kincaid, H.L., and J.G. Stanley.
1989. Atlantic salmon brood stock management and breeding handbook. U.S. Dept. Inter., Fish and Wildl. Serv., Biol. Rept. 89(12). 42 p.
80. Bullock, G.L., and J.P. McCraren.
1989. Edwardsiella infections of fishes. U.S. Dept. Inter., Fish and Wildl. Serv., Fish Health Bull. No.1. 5 p.
81. U.S. Department of the Interior, and U.S. Department of Commerce.
1989. Emergency striped bass research study. Report for 1987. Washington, D.C. 61 p.

82. Malone, R.F., and D.G. Burden.
1988. Design of recirculating blue crab shedding systems. Louisiana Sea Grant College Program. 76 p.
83. Malison, J.A., T.B. Kayes, B.C. Wentworth, and C.H. Amundson.
1988. Growth and feeding responses of male versus female yellow perch (Perca flavescens) treated with estradiol-17B. Can. J. Fish. & Aquatic Sci. 45(11):1942-1948.
84. Borst, D.W., H. Laufer, M.Landau, E.S. Chang, W.A. Hertz, F.C. Baker, and D.A. Schooley.
1987. Methyl farnesoate and its role in crustacean reproduction and development. Insect Biochem. 17(7):1123-1127.
85. Young, G., R.S. Nishioka, and H.A. Bern
1989. Endocrine physiology of salmon development and seawater adaptation. In E. Ohnishi, Y. Nagahama, and H. Ishizaki (editors). Proceedings of the First Congress of the Asia and Oceania Society for Comparative Endocrinology (AOSCE), p.363-364. Nagoya University Corporation, Japan.
86. Griffin, F..
1987. Induction and control of the acrosome reaction in the sperm of Sicyonia ingentia. Doctoral dissertation, Univ. Calif., Davis, Calif. (Abstract).
87. Norman-Boudreau, K.
1986. Qualitative and quantitative requirements for protein in the diet of juvenile lobster, (Homarus sp.). Doctoral dissertation, Univ. Calif., Davis, Calif. (Abstract).
88. Tackett, D.L., R.R. Carter, and K.O. Allen
1988. Daily variation in feed consumption by channel catfish. Prog. Fish Cult. 50:107-110.
89. Mitchell, A.J., and C.E. Smith.
1988. Amphileptus branchiarum (Protozoa: Amphileptidae) in pond reared fish in Arkansas. J. Wildl. Dis. 24(4):642-646.
90. Collins, C.B.
1989. Some of the old and new in channel catfish farming. Aqua. Mag., 15(4);47-53.
91. Mitchell, A.J.
1989. Stress reduction during the harvesting and holding of fish. Aqua. Mag., 15(4):62-64.

92. Collins, C.B., and A.J. Mitchell.
1989. Summary of fish disease incidences reported in the southeastern United States from 1973 - 1987. *Aqua. Mag.*, 15(2): 62-64.
93. Mitchell, A.J., and F.P. Meyer.
1989. Treatment tips for fish producers. U.S. Dept. Inter., Fish and Wildl. Serv., Fish and Wildl. Leaflet. 15. 19 p.
94. Batts, W.N., and J.R. Winton.
1989. Concentrations of infectious hematopoietic necrosis virus from water samples by tangential flow filtration and polyethylene glycol precipitation. *Can. J. Fish. Aquatic Sci.*, 46(6):964-968.
95. Novotny, J.F., and T.L. Macy.
1989. Construction and emplacement of a large enclosure for rearing fish off-station. *Prog. Fish Cult.* 51:52-54.
96. Anonymous.
1987/1988. Tolerance of juvenile fall chinook salmon to selenium exposure from water and the food chain: Impacts on smoltification and early marine survival. U.S. Dept. Inter., Fish and Wildl. Serv., Nat'l Fish. Res. Center, Seattle, Washington. Biennial Rept. 11 p.
97. Ahne, W., and J.R. Winton.
1988. Advanced methods for prevention of infectious diseases in aquaculture. In E. Grimaldi and H. Rosenthal (editors). *Efficiency in aquaculture Production: Disease control*, p. 53-62. Proceedings of Acquacoltura '86, Verona, Italy. Edizioni del Sole 24 Ore, Milan, Italy.
98. Hoffman, R.J., and G.G. Scoppettone.
1988. Effect of water quality on survival of Lahontan cutthroat trout eggs in the Truckee River, West-Central Nevada and Eastern California. U.S. Dept. Inter., U.S. Geological Survey Water Supply Paper 2319. 21 p.
99. Leong, J.C., J.L. Fryer, and J.R. Winton.
1988. Vaccination against hematopoietic necrosis. In A.E. Ellis (editor). *Fish vaccination*, p. 193-203. Academic Press, London.
100. Pascho, R.J., D.G. Elliott, R.W. Mallett, and D. Mulcahy.
1988. Comparison of five techniques for the detection of Renibacterium salmoninarum in adult coho salmon. *Trans. Amer. Fish. Soc.* 116(6):882-890.

101. Rohovec, J.S., J.R. Winton, and J.L. Fryer.
1988. Potential hazard for spread of infectious disease by transplantation of fish. In W.J. McNeil (editor). Salmon production, management, and allocation. Biological, economic and policy issues. p. 171-175. Oregon State University Press, Corvallis, Oregon.
102. Winton, J.R., C.K. Arakawa, C.N. Lannan, and J.L. Fryer.
1988. Neutralizing monoclonal antibodies recognize antigenic variants among isolates of infectious hematopoietic necrosis virus. Dis. Aquat. Organ. 4:199-204.
103. Waples, R.S.
1989. A generalized approach for estimating effective population size from temporal changes in allele frequency. Genetic Soc. Amer. 121:379-391.
104. Waples, R.S.
1988. Estimation of allele frequencies at isoloci. Genetics Soc. Amer. 118:371-384.
105. Anderson, G.J., M.B. Miller, and K.K. Chew.
1982. A guide to Manila clam aquaculture in Puget Sound. Washington Sea Grant Program, College of Ocean and Fishery Sciences, University of Washington Technical Report WSG 82-4, 45p.
106. Sullivan, C.V., M.G. Bernard, A. Hara, and W.W. Dickhoff.
1989. Thyroid hormones in trout reproduction: Enhancement of gonadotropin-releasing hormone analogue and partially purified salmon gonadotropin-induced ovarian maturation in vivo and in vitro. J. Exper. Zool. 250:188-195.
107. Plisetskaya, E.M., P. Swanson, M.G. Bernard, and W.W. Dickhoff.
1988. Insulin in coho salmon (Oncorhynchus kisutch) during the parr to smolt transformation. Aquaculture 72:151-164.
108. Swanson, P., E.G. Grau, L.M.H. Helms, and W.W. Dickhoff.
1988. Thyrotropic activity of salmon pituitary glycoprotein hormones in the Hawaiian parrotfish thyroid in vitro. J. Exper. Zool. 245:194-199.
109. Swanson, P., and W.W. Dickhoff.
1987. Variation in thyroid response to thyroid-stimulating hormone in juvenile coho salmon (Oncorhynchus kisutch). Gen. and Comp. Endocrin. 68:473-485

110. Sullivan, C.V., D.S. Darling, and W.W. Dickhoff.
1987. Effects of triiodothyronine and propylthiouracil on thyroid function and smoltification of coho salmon (Oncorhynchus kisutch). *Fish Physiol. and Biochem.* 4(3):121-135.
111. Brown, C.L., C.V. Sullivan, H.A. Bern, and W.W. Dickhoff.
1987. Occurrence of thyroid hormones in early developmental stages of teleost fish. *Amer. Fish. Soc. Sympos.* 2:144-150.
112. Dickhoff, W.W., and C.V. Sullivan.
1987. Involvement of the thyroid gland in smoltification, with special reference to metabolic and developmental processes. *Amer. Fish. Soc. Sympos.* 1:197-210.
113. Swanson, P., W.W. Dickhoff, and A. Gorbman.
1987. Pituitary thyrotropin and gonadotropin of coho salmon (Oncorhynchus kisutch): Separation by chromatofocusing. *Genl. and Comp. Endocrin.* 65:269-287.
114. Sullivan, C.V., R.N. Iwamoto, and W.W. Dickhoff.
1987. Thyroid hormones in blood plasma of developing salmon embryos. *Genl. and Com. Endocrin.* 65:337-345.
115. Flagg, T.A., J.L. Mighell, E. Slatick, and L.W. Harrell.
1988. Cle Elum Lake sockeye salmon restoration feasibility study, 1987-1988. U.S. Dept. Commerce, Natl Oceanic and Atmospheric Admin., Natl. Mar. Fish. Serv., Northwest and Alaska Fish. Cent., Seattle, Wash., 34 p. (Report to Bonneville Power Administration, Contract No. DE-A179-BP64840, Project No. 86-45).
116. Prentice, E.F., D.L. Park, T.A. Flagg, and S. McCutcheon.
1986. A study to determine the biological feasibility of a new fish tagging system, 1985-1986. U.S. Dept. Commerce, Natl. Oceanic and Atmospheric Admin., Natl. Mar. Fish. Serv., Northwest and Alaska Fish. Cent., Seattle, Wash., 91 p. (Report to Bonneville Power Administration, Contract No. DE-A179-84BP11982, Project No. 83-319).
117. Prentice, E.F., and D.L. Park.
1984. A study to determine the biological feasibility of a new fish tagging system. U.S. Dept. Commerce, Natl. Oceanic and Atmospheric Admin., Natl. Mar. Fish.

Serv., Northwest and Alaska Fish. Cent., Seattle, Wash., 38 p. (Report to Bonneville Power Administration, Contract No. DE-A179-83BP11982, Project No. 83-19).

118. Prentice, E.F., C.W. Sims, and D.L. Park.
1985. A study to determine the biological feasibility of a new fish tagging system. U.S. Dept. Commerce, Natl. Oceanic and Atmospheric Admin., Natl. Mar. Fish. Serv., Northwest and Alaska Fish. Cent., Seattle, Wash., 36 p. (Report to Bonneville Power Administration, Contract No. DE-A179-84BP11982, Project No. 83-319).
119. Prentice, E.F., T.A. Flagg, and S. McCutcheon.
1987. A study to determine the biological feasibility of a new fish tagging system, 1986-1987. U.S. Dept. Commerce, Natl. Oceanic and Atmospheric Admin., Natl. Mar. Fish. Serv., Northwest and Alaska Fish. Cent., Seattle, Wash., 113 p. (Report to Bonneville Power Administration, Contract No. De-A179-84BP11982, Project No. 83-319).
120. Iwamoto, R.N., J.. Myers, and W.K. Hershberger.
1986. Genotype - Environment interactions for growth of rainbow trout, Salmo gairdneri. Aquaculture 57:153-161.
121. Sullivan, C.V., W.W. Dickhoff, C.V.W. Mahnken, and W.K. Hershberger.
1985. Changes in the hemoglobin system of the coho salmon Oncorhynchus kisutch during smoltification and triiodothyronine and propylthiouracil treatment. Comp. Biochem. Physiol. 81A(4):807-813.
122. Iwamoto, R.N., A.M. Saxton, and W.K. Hershberger.
1982. Genetic estimates for length and weight of coho salmon during freshwater rearing. J. Heredity 73:187-191.
123. Saxton, A.M., R.N. Iwamoto, and W.K. Hershberger.
1983. Smoltification in the net-pen culture of accelerated coho salmon, Oncorhynchus kisutch Walbaum: prediction of saltwater performance. J. Fish. Biol. 22:363-370.
124. Iwamoto, R.N., B.A. Alexander, and W.K. Hershberger.
1984. Genotype and environmental effects on the incidence of sexual precocity in coho salmon (Oncorhynchus kisutch). Aquaculture 43:105-121.

125. University of Washington.
1987. 1985-86 Research in Fisheries. Biennial Report
of the School of Fisheries 80 p.